

CONTRACT NUMBER: DAAA15-90-D-0014
DELIVERY ORDER NO 012

FINAL REPORT
AIR POLLUTION EMISSION STATEMENT FOR
SENECA ARMY DEPOT ACTIVITY

NEW YORK

Volume II

SUBMITTED TO:

U.S. ARMY ENVIRONMENTAL CENTER
ABERDEEN PROVING GROUND, MARYLAND 21010-5401

SUBMITTED BY:

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GEOMET Report No. EA-2738

September 23, 1994

BOILERS/HEATERS

GENERAL INFORMATION

Installation Seneca Army Depot

SCC..... N/A Unit ID #..... 1 active unit

Location..... Bldg 6 Permit #.....

POC..... George Shadman Inventoried by..... T. Sletten

Phone..... (607) 869-1470 Inventory Date..... June 6-10, 1994

SOURCE INFORMATION

Manufacturer..... Fuel Type..... #2 Fuel Oil

Date Installed..... Annual Fuel Use..... (units)

Rated Capacity..... 350,000 Btu/hr Operating Schedule
(units) Hours/day.....
Max Heat Input..... Days/week.....
(units)

MONTHLY FUEL USE

19-- JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC

Indicate Units: _____

Total Annual Use: _____

FIRING CONFIGURATION

Tangentially Fired.....

Horizontally Fired.....

Vertically Fired.....

Pulverized Coal Fired

 Dry Bottom.....

 Wet Bottom.....

Cyclone Furnace.....

Spreader Stoker

 Uncontrolled.....

 Multiple Cyclone

 w/flyash reinjection.....

 wo/flyash reinjection.....

Overfeed Stoker

 Uncontrolled.....

Underfired Stoker

 Uncontrolled.....

 Multiple Cyclone.....

Handfired Units.....

Wet/Dry Bottom?.....

Other.._____

POLLUTION CONTROL EQUIPMENT

(enter control efficiency)

ESP.....

Baghouse.....

Wet Scrubber.....

Dry Scrubber.....

Spray Dryer.....

Cyclone.....

Other.._____

None?.....

FUEL ANALYSIS

Sulfur Content (S)..... %

Ash Content..... %

Nitrogen Content (N)..... %

Lead Content (Pb)..... %

Reference.._____

1. The first part of the document discusses the importance of maintaining accurate records of all transactions and activities. It emphasizes that this is crucial for ensuring transparency and accountability in the organization's operations.

2. The second part of the document outlines the various methods and tools used to collect and analyze data. It highlights the need for consistent and reliable data collection processes to support informed decision-making.

3. The third part of the document focuses on the role of technology in data management and analysis. It discusses how modern software solutions can streamline data collection, storage, and reporting, thereby improving efficiency and accuracy.

4. The fourth part of the document addresses the challenges associated with data management, such as data quality, security, and privacy. It provides strategies to mitigate these risks and ensure that data is used responsibly and ethically.

5. The final part of the document concludes by summarizing the key findings and recommendations. It stresses the importance of ongoing monitoring and evaluation to ensure that data management practices remain effective and aligned with the organization's goals.

BOILERS/HEATERS

GENERAL INFORMATION

Installation Seneca Army Depot

SCC.....N/A Unit ID #.....2 active units

Location.....Bldg 101 Permit #.....

POC.....George Shadman Inventoried by.....T. Sletten

Phone.....(607) 869-1470 Inventory Date.....June 6-10, 1994

SOURCE INFORMATION

Manufacturer..... Fuel Type.....#2 Fuel Oil

Date Installed..... Annual Fuel Use..... (units)

Rated Capacity.....150,000 Btu/hr Operating Schedule
(units) Hours/day.....
Max Heat Input..... Days/week.....
(units)

MONTHLY FUEL USE

| 19-- | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC |
|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ |

Indicate Units: _____ Total Annual Use: _____

FIRING CONFIGURATION

Tangentially Fired.....

Horizontally Fired.....

Vertically Fired.....

Pulverized Coal Fired
Dry Bottom.....
Wet Bottom.....

Cyclone Furnace.....

Spreader Stoker
Uncontrolled.....
Multiple Cyclone
w/flyash reinjection.....
wo/flyash reinjection.....

Overfeed Stoker
Uncontrolled.....

Underfired Stoker
Uncontrolled.....
Multiple Cyclone.....

Handfired Units.....

Wet/Dry Bottom?.....

Other.._____

POLLUTION CONTROL EQUIPMENT

(enter control efficiency)

ESP.....

Baghouse.....

Wet Scrubber.....

Dry Scrubber.....

Spray Dryer.....

Cyclone.....

Other.._____

None?.....

FUEL ANALYSIS

Sulfur Content (S)..... %

Ash Content..... %

Nitrogen Content (N)..... %

Lead Content (Pb)..... %

Reference.._____

BOILERS/HEATERS

GENERAL INFORMATION

Installation Seneca Army Depot

SCC..... N/A Unit ID #..... 1 active unit

Location..... Bldg 103 Permit #..... _____

POC..... George Shadman Inventoried by..... T. Sletten

Phone..... (607) 869-1470 Inventory Date..... June 6-10, 1994

SOURCE INFORMATION

Manufacturer..... _____ Fuel Type..... #2 Fuel Oil

Date Installed..... _____ Annual Fuel Use..... _____
(units)

Rated Capacity..... 350,000 Btu/hr Operating Schedule
(units) Hours/day..... _____

Max Heat Input..... _____ Days/week..... _____
(units)

| MONTHLY FUEL USE | | | | | | | | | | | | |
|-----------------------|-------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 19-- | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC |
| | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ |
| Indicate Units: _____ | Total Annual Use: _____ | | | | | | | | | | | |

FIRING CONFIGURATION

Tangentially Fired..... _____

Horizontally Fired..... _____

Vertically Fired..... _____

Pulverized Coal Fired
 Dry Bottom..... _____
 Wet Bottom..... _____

Cyclone Furnace..... _____

Spreader Stoker
 Uncontrolled..... _____
 Multiple Cyclone
 w/flyash reinjection..... _____
 wo/flyash reinjection..... _____

Overfeed Stoker
 Uncontrolled..... _____

Underfired Stoker
 Uncontrolled..... _____
 Multiple Cyclone..... _____

Handfired Units..... _____

Wet/Dry Bottom?..... _____

Other.. _____

POLLUTION CONTROL EQUIPMENT

(enter control efficiency)

ESP..... _____

Baghouse..... _____

Wet Scrubber..... _____

Dry Scrubber..... _____

Spray Dryer..... _____

Cyclone..... _____

Other.. _____

None?..... _____

FUEL ANALYSIS

Sulfur Content (S)..... _____ %

Ash Content..... _____ %

Nitrogen Content (N)..... _____ %

Lead Content (Pb)..... _____ %

Reference.. _____

BOILERS/HEATERS

GENERAL INFORMATION

Installation Seneca Army Depot

SCC..... N/A Unit ID #..... 1 active unit

Location..... Bldg 104 Permit #..... _____

POC..... George Shadman Inventoried by..... T. Sletten

Phone..... (607) 869-1470 Inventory Date..... June 6-10, 1994

SOURCE INFORMATION

Manufacturer..... _____ Fuel Type..... #2 Fuel Oil

Date Installed..... _____ Annual Fuel Use..... _____
(units)

Rated Capacity..... 80,000 Btu/hr Operating Schedule
(units) Hours/day..... _____

Max Heat Input..... _____ Days/week..... _____
(units)

MONTHLY FUEL USE

| | | | | | | | | | | | | |
|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 19-- | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC |
| | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ |

Indicate Units: _____ Total Annual Use: _____

FIRING CONFIGURATION

Tangentially Fired..... _____

Horizontally Fired..... _____

Vertically Fired..... _____

Pulverized Coal Fired
Dry Bottom..... _____

Wet Bottom..... _____

Cyclone Furnace..... _____

Spreader Stoker
Uncontrolled..... _____

Multiple Cyclone
w/flyash reinjection..... _____

wo/flyash reinjection..... _____

Overfeed Stoker
Uncontrolled..... _____

Underfired Stoker
Uncontrolled..... _____

Multiple Cyclone..... _____

Handfired Units..... _____

Wet/Dry Bottom?..... _____

Other.. _____

POLLUTION CONTROL EQUIPMENT

(enter control efficiency)

ESP..... _____

Baghouse..... _____

Wet Scrubber..... _____

Dry Scrubber..... _____

Spray Dryer..... _____

Cyclone..... _____

Other.. _____

None?..... _____

FUEL ANALYSIS

Sulfur Content (S)..... _____ %

Ash Content..... _____ %

Nitrogen Content (N)..... _____ %

Lead Content (Pb)..... _____ %

Reference.. _____

BOILERS/HEATERS

GENERAL INFORMATION

Installation Seneca Army Depot
SCC..... N/A
Location..... Bldg 106
POC..... George Shadman
Phone..... (607) 869-1470
Unit ID #..... 1 active unit
Permit #.....
Inventoried by..... T. Sletten
Inventory Date..... June 6-10, 1994

SOURCE INFORMATION

Manufacturer.....
Date Installed.....
Rated Capacity..... 250,000 Btu/hr (units)
Max Heat Input..... (units)
Fuel Type..... #2 Fuel Oil
Annual Fuel Use..... (units)
Operating Schedule
Hours/day.....
Days/week.....

MONTHLY FUEL USE

19-- JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC
indicate Units: _____ Total Annual Use: _____

FIRING CONFIGURATION

Tangentially Fired.....
Horizontally Fired.....
Vertically Fired.....
Pulverized Coal Fired
Dry Bottom.....
Wet Bottom.....
Cyclone Furnace.....
Spreader Stoker
Uncontrolled.....
Multiple Cyclone
w/flyash reinjection.....
wo/flyash reinjection.....
Overfeed Stoker
Uncontrolled.....
Underfired Stoker
Uncontrolled.....
Multiple Cyclone.....
Handfired Units.....
Wet/Dry Bottom?.....
Other..

POLLUTION CONTROL EQUIPMENT

(enter control efficiency)
ESP.....
Baghouse.....
Wet Scrubber.....
Dry Scrubber.....
Spray Dryer.....
Cyclone.....
Other..
None?.....

FUEL ANALYSIS

Sulfur Content (S)..... %
Ash Content..... %
Nitrogen Content (N)..... %
Lead Content (Pb)..... %
Reference..

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BOILERS/HEATERS

GENERAL INFORMATION

Installation Seneca Army Depot

SCC..... N/A Unit ID #..... 1 active unit

Location..... Bldg 106a Permit #..... _____

POC..... George Shadman Inventoried by..... T. Sletten

Phone..... (607) 869-1470 Inventory Date..... June 6-10, 1994

SOURCE INFORMATION

Manufacturer..... _____ Fuel Type..... #2 Fuel Oil

Date Installed..... _____ Annual Fuel Use..... _____ (units)

Rated Capacity..... 70,000 Btu/hr Operating Schedule
(units) Hours/day..... _____

Max Heat Input..... _____ Days/week..... _____
(units)

| MONTHLY FUEL USE | | | | | | | | | | | | |
|-----------------------|-------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 19-- | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC |
| | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ |
| Indicate Units: _____ | Total Annual Use: _____ | | | | | | | | | | | |

FIRING CONFIGURATION

Tangentially Fired..... _____

Horizontally Fired..... _____

Vertically Fired..... _____

Pulverized Coal Fired
Dry Bottom..... _____

Wet Bottom..... _____

Cyclone Furnace..... _____

Spreader Stoker
Uncontrolled..... _____

Multiple Cyclone
w/flyash reinjection..... _____

wo/flyash reinjection..... _____

Overfeed Stoker
Uncontrolled..... _____

Underfired Stoker
Uncontrolled..... _____

Multiple Cyclone..... _____

Handfired Units..... _____

Wet/Dry Bottom?..... _____

Other.. _____

POLLUTION CONTROL EQUIPMENT

(enter control efficiency)

ESP..... _____

Baghouse..... _____

Wet Scrubber..... _____

Dry Scrubber..... _____

Spray Dryer..... _____

Cyclone..... _____

Other.. _____

None?..... _____

FUEL ANALYSIS

Sulfur Content (S)..... _____ %

Ash Content..... _____ %

Nitrogen Content (N)..... _____ %

Lead Content (Pb)..... _____ %

Reference.. _____

BOILERS/HEATERS

GENERAL INFORMATION

Installation Seneca Army Depot

SCC..... N/A Unit ID #..... 1 active unit

Location..... Bldg 113 Permit #..... _____

POC..... George Shadman Inventoried by..... T. Sletten

Phone..... (607) 869-1470 Inventory Date..... June 6-10, 1994

SOURCE INFORMATION

Manufacturer..... _____ Fuel Type..... #2 Fuel Oil

Date Installed..... _____ Annual Fuel Use..... _____ (units)

Rated Capacity..... 250,000 Btu/hr Operating Schedule
(units) Hours/day..... _____

Max Heat Input..... _____ Days/week..... _____
(units)

| MONTHLY FUEL USE | | | | | | | | | | | | |
|-----------------------|-------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 19-- | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC |
| _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ |
| Indicate Units: _____ | Total Annual Use: _____ | | | | | | | | | | | |

FIRING CONFIGURATION

Tangentially Fired..... _____

Horizontally Fired..... _____

Vertically Fired..... _____

Pulverized Coal Fired
Dry Bottom..... _____

Wet Bottom..... _____

Cyclone Furnace..... _____

Spreader Stoker
Uncontrolled..... _____

Multiple Cyclone
w/flyash reinjection..... _____

wo/flyash reinjection..... _____

Overfeed Stoker
Uncontrolled..... _____

Underfired Stoker
Uncontrolled..... _____

Multiple Cyclone..... _____

Handfired Units..... _____

Wet/Dry Bottom?..... _____

Other.. _____

POLLUTION CONTROL EQUIPMENT

(enter control efficiency)

ESP..... _____

Baghouse..... _____

Wet Scrubber..... _____

Dry Scrubber..... _____

Spray Dryer..... _____

Cyclone..... _____

Other.. _____

None?..... _____

FUEL ANALYSIS

Sulfur Content (S)..... _____ %

Ash Content..... _____ %

Nitrogen Content (N)..... _____ %

Lead Content (Pb)..... _____ %

Reference.. _____

BOILERS/HEATERS

GENERAL INFORMATION

Installation Seneca Army Depot

SCC..... N/A Unit ID #..... 1 active unit

Location..... Bldg 114 Permit #..... _____

POC..... George Shadman Inventoried by..... T. Sletten

Phone..... (607) 869-1470 Inventory Date..... June 6-10, 1994

SOURCE INFORMATION

Manufacturer..... _____ Fuel Type..... #2 Fuel Oil

Date Installed..... _____ Annual Fuel Use..... _____ (units)

Rated Capacity..... 80,000 Btu/hr Operating Schedule
(units) Hours/day..... _____

Max Heat Input..... _____ Days/week..... _____
(units)

MONTHLY FUEL USE

| | | | | | | | | | | | | |
|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 19-- | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC |
| | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ |

Indicate Units: _____ Total Annual Use: _____

FIRING CONFIGURATION

Tangentially Fired..... _____

Horizontally Fired..... _____

Vertically Fired..... _____

Pulverized Coal Fired
Dry Bottom..... _____

Wet Bottom..... _____

Cyclone Furnace..... _____

Spreader Stoker
Uncontrolled..... _____

Multiple Cyclone
w/flyash reinjection..... _____

wo/flyash reinjection..... _____

Overfeed Stoker
Uncontrolled..... _____

Underfired Stoker
Uncontrolled..... _____

Multiple Cyclone..... _____

Handfired Units..... _____

Wet/Dry Bottom?..... _____

Other.. _____

POLLUTION CONTROL EQUIPMENT

(enter control efficiency)

ESP..... _____

Baghouse..... _____

Wet Scrubber..... _____

Dry Scrubber..... _____

Spray Dryer..... _____

Cyclone..... _____

Other.. _____

None?..... _____

FUEL ANALYSIS

Sulfur Content (S)..... _____ %

Ash Content..... _____ %

Nitrogen Content (N)..... _____ %

Lead Content (Pb)..... _____ %

Reference.. _____

BOILERS/HEATERS

GENERAL INFORMATION

Installation Seneca Army Depot

SCC..... N/A Unit ID #..... Steam Cleaner

Location..... Bldg 117 Permit #..... _____

POC..... Jack LaBour Inventoried by..... T. Sletten

Phone..... (607) 869-1396 Inventory Date..... June 6-10, 1994

SOURCE INFORMATION

Manufacturer..... _____ Fuel Type..... Diesel

Date Installed..... _____ Annual Fuel Use..... 60 gallons
(units)

Rated Capacity..... 70,000 - 420,000 Btu/hr Operating Schedule
(units) Hours/day..... 3 hr/wk

Max Heat Input..... _____ Days/week..... _____
(units)

MONTHLY FUEL USE

19__ JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC

Indicate Units: _____

Total Annual Use: _____

FIRING CONFIGURATION

Tangentially Fired..... _____

Horizontally Fired..... _____

Vertically Fired..... _____

Pulverized Coal Fired

 Dry Bottom..... _____

 Wet Bottom..... _____

Cyclone Furnace..... _____

Spreader Stoker

 Uncontrolled..... _____

 Multiple Cyclone

 w/flyash reinjection..... _____

 wo/flyash reinjection..... _____

Overfeed Stoker

 Uncontrolled..... _____

Underfired Stoker

 Uncontrolled..... _____

 Multiple Cyclone..... _____

Handfired Units..... _____

Wet/Dry Bottom?..... _____

Other.. _____

POLLUTION CONTROL EQUIPMENT

(enter control efficiency)

ESP..... _____

Baghouse..... _____

Wet Scrubber..... _____

Dry Scrubber..... _____

Spray Dryer..... _____

Cyclone..... _____

Other.. _____

None?..... _____

FUEL ANALYSIS

Sulfur Content (S)..... 1.5 %

Ash Content..... _____ %

Nitrogen Content (N)..... _____ %

Lead Content (Pb)..... _____ %

Reference.. _____

EMISSION RATE DETERMINATION METHOD

Stack Test Data _____ Emission Factor X Material Balance _____

Similar Unit Data _____ Other _____

Reference: AP-42 VOLUME 1, STATIONARY SOURCES AND L&E SERIES, TABLE 4-1

OZONE PRECURSOR EMISSIONS

Typical Ozone Season Emissions

VOC Emissions 0.0001162500 lb/day

NOx Emissions 0.0029347826 lb/day

CO Emissions 0.0008152174 lb/day

HAZARDOUS AIR POLLUTANTS

| HAP | CAS CODE | LB/YR |
|---------------------------|----------|--------------|
| NONE | | |
| Antimony Compounds | 0 | N/A |
| Arsenic Compounds | 0 | 0.0000352800 |
| Beryllium Compounds | 0 | 0.0000210000 |
| Cadmium Compounds | 0 | 0.0000924000 |
| Chromium Compounds | 0 | 0.0005628000 |
| Lead Compounds | 0 | 0.0000747600 |
| Mercury Compounds | 0 | 0.0000252000 |
| Manganese Compounds | 0 | 0.0001176000 |
| Nickel Compounds | 0 | 0.0014280000 |
| Polycyclic Organic Matter | 0 | N/A |
| Formaldehyde | 50-00-0 | N/A |
| Selenium Compounds | 0 | N/A |
| Cobalt Compounds | 0 | N/A |
| Copper Compounds* | 0 | 0.0023520000 |

CRITERIA POLLUTANT EMISSIONS

VOC Emissions 0.0000213900 ton/yr

NOx Emissions 0.0005400000 ton/yr

CO Emissions 0.0001500000 ton/yr

SO2 Emissions 0.0021300000 ton/yr

PM10 Emissions 0.0000412500 ton/yr

Total Particulate 0.0000750000 ton/yr

*New York State HAP
(use additional sheets if necessary)

STACK INFORMATION

Stack (release) Height _____ feet Stack Gas Velocity _____ ft/sec

Stack Diameter _____ inch Stack Gas Flow Rate _____ ascf/min

 Stack Gas Temperature _____ oF

Other sources that share this stack? _____

Stack Sampling report available? (Y/ N, results ?) _____

COMMENTS

EMISSIONS FOR FUEL OIL COMBUSTION

Federal and New York State Regulations

(Use only for FO #2 or FO #6)

| | | | |
|------------|--------------------------|-----------|----------------|
| Facility: | <u>Seneca Army Depot</u> | Date: | <u>9/14/94</u> |
| Location: | <u>Bldg 117</u> | Initials: | <u>MJO</u> |
| ID Number: | <u>Steam Cleaner</u> | SCC: | <u>N/A</u> |

INPUT DATA

| | | | |
|------------------------------|-------|----------------|---|
| SIZE OF BOILER | 0.245 | MMBTU/hr | |
| TOTAL FUEL USED | 60 | gal/year | |
| TOTAL OZONE SEASON FUEL USED | N/A | gal/year | (Enter N/A, if not known and zero, if no ozone season use [^]) |
| FUEL OIL GRADE | 2 | (#2 or #6 OIL) | |

ENTER ACTUAL SULFUR CONTENT, IF KNOWN, OR ELSE ENTER "X"

| | | |
|-----------------------|------------|------------------------|
| SULFUR CONTENT | 0.5 | ACTUAL % SULFUR |
|-----------------------|------------|------------------------|

| | | |
|----------------------|-------|-----------------------------|
| BOILER FIRING METHOD | OTHER | (TANGENTIAL/VERTICAL/OTHER) |
|----------------------|-------|-----------------------------|

SOLUTION

| | |
|----------------------------------|---------------|
| PARTICULATE EMISSIONS (TSP) | 0.15 lbs/year |
| PARTICULATE EMISSIONS (PM10) | 0.08 lbs/year |
| SULFUR DIOXIDE EMISSIONS | 4.26 lbs/year |
| CARBON MONOXIDE EMISSIONS | 0.30 lbs/year |
| VOC EMISSIONS (NON METHANE) | 0.04 lbs/year |
| NITROGEN OXIDE EMISSIONS(as NO2) | 1.08 lbs/year |

REFERENCES:

CRITERIA POLLUTANT EMISSION FACTORS WERE OBTAINED
FROM TABLES 1.3-2

NOTES:

N/A: NOT AVAILABLE

X: Default value of sulfur content of fuel. X = 1%, if default fuel oil grade is #2, and X = 4% if fuel oil grades are nos. 4,5 & 6. (AP-42 Appendix A)

DATA QUALITY: A

[^]: Ozone season usage, if not known, is assumed to be 25% of the total annual usage.

UTILITY BOILERS > 100 MMBTU/HR

INDUSTRIAL BOILER: 10-100 MMBTU/HR

COMMERCIAL BOILERS: 0.5-<10 MMBTU/HR

RESIDENTIAL FURNACES: <0.5 MMBTU/HR

:stillate Fuel is fuel oil #2, and Residual Fuels are Fuel Oil Nos 4, 5, & 6 (See AP-42)

SPECIATION OF EMISSIONS

TOTAL VOC EMISSIONS 0.04 Lbs/Yr
TOTAL AIR TOXIC EMISSIONS 0.00 Lbs/Yr

INDIVIDUAL AIR TOXIC EMISSIONS

| Chemical Name | CAS # | Emissions (Lbs/Yr) | Profile Data Quality |
|---------------------------|---------|-----------------------|-------------------------|
| Antimony Compounds | 0 | N/A | E |
| Arsenic Compounds | 0 | 3.53E-05 | E |
| Beryllium Compounds | 0 | 2.10E-05 | E |
| Cadmium Compounds | 0 | 9.24E-05 | E |
| Chromium Compounds | 0 | 5.63E-04 | E |
| Lead Compounds | 0 | 7.48E-05 | E |
| Mercury Compounds | 0 | 2.52E-05 | E |
| Manganese Compounds | 0 | 1.18E-04 | E |
| Nickel Compounds | 0 | 1.43E-03 | E |
| Polycyclic Organic Matter | 0 | N/A | E |
| Formaldehyde | 50-00-0 | N/A | E |
| Selenium Compounds | 0 | N/A | E |
| Copper compounds* | 0 | 2.35E-03 | E |
| Cobalt Compounds | 0 | N/A | E |

* New York State HAP

REFERENCES: HAZARDOUS AIR POLLUTION EMISSION FACTORS TAKEN

FROM TABLE 1.3-11 OF AP-42 (SUPPLEMENT F), EXCEPT FOR COPPER
WHICH WAS TAKEN FROM TABLE 4-1 OF "ESTIMATING AIR TOXIC EMISSIONS
FROM COAL AND OIL COMBUSTION SOURCES"

NOTES:

HEATING VALUES FOR RESIDUAL AND DISTILLATE FUEL OIL ARE TAKEN FROM AP-42
APPENDIX A. PAGE A-3. 150,000 BTU/GAL FOR RESIDUAL OIL AND 140,000 BTU/GAL
FOR DISTILLATE OIL

WHEN HAP EMISSION FACTORS WERE PRESENTED AS A RANGE , THE FACTOR WHICH
RESULTED IN THE HIGHEST HAP EMISSION WAS USED IN THE CALCULATION

BOILERS/HEATERS

GENERAL INFORMATION

Installation Seneca Army Depot

SCC..... N/A Unit ID #..... Steam Cleaner

Location..... Bldg 118 Permit #..... _____

POC..... Jack LaBour Inventoried by..... T. Sletten

Phone..... (607) 869-1396 Inventory Date..... June 6-10, 1994

SOURCE INFORMATION

Manufacturer..... _____ Fuel Type..... Diesel

Date Installed..... _____ Annual Fuel Use..... 60 gallons
(units)

Rated Capacity..... 70,000 - 420,000 Btu/hr Operating Schedule
(units) Hours/day..... 3 hr/wk

Max Heat Input..... _____ Days/week..... _____
(units)

MONTHLY FUEL USE

19__ JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC

Indicate Units: _____

Total Annual Use: _____

FIRING CONFIGURATION

Tangentially Fired..... _____

Horizontally Fired..... _____

Vertically Fired..... _____

Pulverized Coal Fired

Dry Bottom..... _____

Wet Bottom..... _____

Cyclone Furnace..... _____

Spreader Stoker

Uncontrolled..... _____

Multiple Cyclone

w/flyash reinjection..... _____

wo/flyash reinjection..... _____

Overfeed Stoker

Uncontrolled..... _____

Underfired Stoker

Uncontrolled..... _____

Multiple Cyclone..... _____

Handfired Units..... _____

Wet/Dry Bottom?..... _____

Other.. _____

POLLUTION CONTROL EQUIPMENT

(enter control efficiency)

ESP..... _____

Baghouse..... _____

Wet Scrubber..... _____

Dry Scrubber..... _____

Spray Dryer..... _____

Cyclone..... _____

Other.. _____

None?..... _____

FUEL ANALYSIS

Sulfur Content (S)..... 1.5 %

Ash Content..... _____ %

Nitrogen Content (N)..... _____ %

Lead Content (Pb)..... _____ %

Reference.. _____

EMISSION RATE DETERMINATION METHOD

Stack Test Data _____ Emission Factor X Material Balance _____

Similar Unit Data _____ Other _____

Reference: AP-42 VOLUME 1, STATIONARY SOURCES AND L&E SERIES, TABLE 4-1

OZONE PRECURSOR EMISSIONS

Typical Ozone Season Emissions

VOC Emissions 0.0001162500 lb/day

NOx Emissions 0.0029347826 lb/day

CO Emissions 0.0008152174 lb/day

HAZARDOUS AIR POLLUTANTS

| HAP | CAS CODE | LB/YR |
|---------------------------|----------|--------------|
| NONE | | |
| Antimony Compounds | 0 | N/A |
| Arsenic Compounds | 0 | 0.0000352800 |
| Beryllium Compounds | 0 | 0.0000210000 |
| Cadmium Compounds | 0 | 0.0000924000 |
| Chromium Compounds | 0 | 0.0005628000 |
| Lead Compounds | 0 | 0.0000747600 |
| Mercury Compounds | 0 | 0.0000252000 |
| Manganese Compounds | 0 | 0.0001176000 |
| Nickel Compounds | 0 | 0.0014280000 |
| Polycyclic Organic Matter | 0 | N/A |
| Formaldehyde | 50-00-0 | N/A |
| Selenium Compounds | 0 | N/A |
| Cobalt Compounds | 0 | N/A |
| Copper Compounds* | 0 | 0.0023520000 |

CRITERIA POLLUTANT EMISSIONS

VOC Emissions 0.0000213900 ton/yr

NOx Emissions 0.0005400000 ton/yr

CO Emissions 0.0001500000 ton/yr

SO2 Emissions 0.0021300000 ton/yr

PM10 Emissions 0.0000412500 ton/yr

Total Particulate 0.0000750000 ton/yr

*New York State HAP
(use additional sheets if necessary)

STACK INFORMATION

Stack (release) Height _____ feet Stack Gas Velocity _____ ft/sec

Stack Diameter _____ inch Stack Gas Flow Rate _____ ascf/min

Stack Gas Temperature _____ oF

Other sources that share this stack? _____

Stack Sampling report available? (Y/ N, results ?) _____

COMMENTS

EMISSIONS FOR FUEL OIL COMBUSTION

Federal and New York State Regulations

(Use only for FO #2 or FO #6)

| | | | |
|------------|--------------------------|-----------|----------------|
| Facility: | <u>Seneca Army Depot</u> | Date: | <u>9/14/94</u> |
| Location: | <u>Bldg 118</u> | Initials: | <u>MJO</u> |
| ID Number: | <u>Steam Cleaner</u> | SCC: | <u>N/A</u> |

INPUT DATA

| | | | |
|------------------------------|-------|----------------|---|
| SIZE OF BOILER | 0.245 | MMBTU/hr | |
| TOTAL FUEL USED | 60 | gal/year | |
| TOTAL OZONE SEASON FUEL USED | N/A | gal/year | (Enter N/A, if not known and zero, if no ozone season use^) |
| FUEL OIL GRADE | 2 | (#2 or #6 OIL) | |

ENTER ACTUAL SULFUR CONTENT, IF KNOWN, OR ELSE ENTER "X"

| | | |
|-----------------------|------------|------------------------|
| SULFUR CONTENT | 0.5 | ACTUAL % SULFUR |
|-----------------------|------------|------------------------|

| | | |
|----------------------|-------|-----------------------------|
| BOILER FIRING METHOD | OTHER | (TANGENTIAL/VERTICAL/OTHER) |
|----------------------|-------|-----------------------------|

SOLUTION

| | |
|----------------------------------|---------------|
| PARTICULATE EMISSIONS (TSP) | 0.15 lbs/year |
| PARTICULATE EMISSIONS (PM10) | 0.08 lbs/year |
| SULFUR DIOXIDE EMISSIONS | 4.26 lbs/year |
| CARBON MONOXIDE EMISSIONS | 0.30 lbs/year |
| VOC EMISSIONS (NON METHANE) | 0.04 lbs/year |
| NITROGEN OXIDE EMISSIONS(as NO2) | 1.08 lbs/year |

REFERENCES: CRITERIA POLLUTANT EMISSION FACTORS WERE OBTAINED FROM TABLES 1.3-2

NOTES:

N/A: NOT AVAILABLE

X: Default value of sulfur content of fuel. X = 1%, if default fuel oil grade is #2, and X = 4% if fuel oil grades are nos. 4,5 & 6. (AP-42 Appendix A)

DATA QUALITY: A

^: Ozone season usage, if not known, is assumed to be 25% of the total annual usage.

UTILITY BOILERS > 100 MMBTU/HR
 INDUSTRIAL BOILER: 10-100 MMBTU/HR
 COMMERCIAL BOILERS: 0.5-<10 MMBTU/HR
 RESIDENTIAL FURNACES: <0.5 MMBTU/HR

stillate Fuel is fuel oil #2, and Residual Fuels are Fuel Oil Nos 4, 5,& 6 (See AP-42)

SPECIATION OF EMISSIONS

| | | |
|---------------------------|------|--------|
| TOTAL VOC EMISSIONS | 0.04 | Lbs/Yr |
| TOTAL AIR TOXIC EMISSIONS | 0.00 | Lbs/Yr |

INDIVIDUAL AIR TOXIC EMISSIONS

| Chemical Name | CAS # | Emissions (Lbs/Yr) | Profile Data Quality |
|---------------------------|---------|-----------------------|-------------------------|
| Antimony Compounds | 0 | N/A | E |
| Arsenic Compounds | 0 | 3.53E-05 | E |
| Beryllium Compounds | 0 | 2.10E-05 | E |
| Cadmium Compounds | 0 | 9.24E-05 | E |
| Chromium Compounds | 0 | 5.63E-04 | E |
| Lead Compounds | 0 | 7.48E-05 | E |
| Mercury Compounds | 0 | 2.52E-05 | E |
| Manganese Compounds | 0 | 1.18E-04 | E |
| Nickel Compounds | 0 | 1.43E-03 | E |
| Polycyclic Organic Matter | 0 | N/A | E |
| Formaldehyde | 50-00-0 | N/A | E |
| Selenium Compounds | 0 | N/A | E |
| Copper compounds* | 0 | 2.35E-03 | |
| Cobalt Compounds | 0 | N/A | E |

* New York State HAP

REFERENCES: HAZARDOUS AIR POLLUTION EMISSION FACTORS TAKEN

FROM TABLE 1.3-11 OF AP-42 (SUPPLEMENT F), EXCEPT FOR COPPER WHICH WAS TAKEN FROM TABLE 4-1 OF "ESTIMATING AIR TOXIC EMISSIONS FROM COAL AND OIL COMBUSTION SOURCES"

NOTES:

HEATING VALUES FOR RESIDUAL AND DISTILLATE FUEL OIL ARE TAKEN FROM AP-42 APPENDIX A. PAGE A-3. 150,000 BTU/GAL FOR RESIDUAL OIL AND 140,000 BTU/GAL FOR DISTILLATE OIL

WHEN HAP EMISSION FACTORS WERE PRESENTED AS A RANGE, THE FACTOR WHICH RESULTED IN THE HIGHEST HAP EMISSION WAS USED IN THE CALCULATION

BOILERS/HEATERS

GENERAL INFORMATION

Installation Seneca Army Depot

SCC..... 1-03-004-02 Unit ID #..... 2 active units

Location..... Bldg 121 Permit #..... 00121

POC..... George Shadman Inventoried by..... T. Sletten

Phone..... (607) 869-1470 Inventory Date..... June 6-10, 1994

SOURCE INFORMATION

Manufacturer..... American Standard Kewanee Fuel Type..... #6 Fuel Oil

Date Installed..... _____ Annual Fuel Use..... See comments
(units) (units)

Rated Capacity..... 6,600,000 Btu/hr (each) Operating Schedule
(units) Hours/day..... 24

Max Heat Input..... _____ Days/week..... 212 days/yr
(units)

| MONTHLY FUEL USE | | | | | | | | | | | | |
|-----------------------|-------|-------|-------|-------|-------|-------------------------|-------|-------|-------|-------|-------|-------|
| 19__ | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC |
| _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ |
| Indicate Units: _____ | | | | | | Total Annual Use: _____ | | | | | | |

FIRING CONFIGURATION

Tangentially Fired..... _____

Horizontally Fired..... _____

Vertically Fired..... _____

Pulverized Coal Fired
 Dry Bottom..... _____
 Wet Bottom..... _____

Cyclone Furnace..... _____

Spreader Stoker
 Uncontrolled..... _____
 Multiple Cyclone
 w/flyash reinjection..... _____
 wo/flyash reinjection..... _____

Overfeed Stoker
 Uncontrolled..... _____

Underfired Stoker
 Uncontrolled..... _____
 Multiple Cyclone..... _____

Handfired Units..... _____

Wet/Dry Bottom?..... _____

Other.. _____

POLLUTION CONTROL EQUIPMENT

(enter control efficiency)

ESP..... _____

Baghouse..... _____

Wet Scrubber..... _____

Dry Scrubber..... _____

Spray Dryer..... _____

Cyclone..... _____

Other.. _____

None?..... _____

FUEL ANALYSIS

Sulfur Content (S)..... _____ %

Ash Content..... _____ %

Nitrogen Content (N)..... _____ %

Lead Content (Pb)..... _____ %

Reference.. _____

EMISSION RATE DETERMINATION METHOD

Stack Test Data _____ Emission Factor X Material Balance _____
 Similar Unit Data _____ Other _____

Reference: AP-42 VOLUME 1, STATIONARY SOURCES AND L&E SERIES, TABLE 4-1

OZONE PRECURSOR EMISSIONS

Typical Ozone Season Emissions
 VOC Emissions 0.1714345109 lb/day
 NOx Emissions 8.3441576087 lb/day
 CO Emissions 0.7585597826 lb/day

HAZARDOUS AIR POLLUTANTS

| HAP | CAS CODE | LB/YR |
|---------------------------|----------|---------------|
| NONE | | |
| Antimony Compounds | 0 | 0.3852270000 |
| Arsenic Compounds | 0 | 0.9546930000 |
| Beryllium Compounds | 0 | 0.0351729000 |
| Cadmium Compounds | 0 | 1.7670195000 |
| Chromium Compounds | 0 | 1.0719360000 |
| Lead Compounds | 0 | 1.6246530000 |
| Mercury Compounds | 0 | 0.2679840000 |
| Manganese Compounds | 0 | 0.6197130000 |
| Nickel Compounds | 0 | 19.5125850000 |
| Polycyclic Organic Matter | 0 | 0.0703458000 |
| Formaldehyde | 50-00-0 | 3.3916725000 |
| Selenium Compounds | 0 | 0.3182310000 |
| Cobalt Compounds | 0 | 1.0133145000 |
| Copper Compounds* | 0 | 2.3448600000 |

CRITERIA POLLUTANT EMISSIONS

VOC Emissions 0.0315439500 ton/yr
 NOx Emissions 1.5353250000 ton/yr
 CO Emissions 0.1395750000 ton/yr
 SO2 Emissions 6.5739825000 ton/yr
 PM10 Emissions 0.2943106365 ton/yr
 Total Particulate 0.4746945750 ton/yr

*New York State HAP
 (use additional sheets if necessary)

STACK INFORMATION

Stack (release) Heig 117.00 feet Stack Gas Velocity 3.1 ft/sec
 Stack Diameter 63 inch Stack Gas Flow Rate 4,000 ascf/min
 Stack Gas Temperature 350 oF

Other sources that share this stack? There are two identical boilers sharing the same stack.

Stack Sampling report available? (Y/ N, results ?) _____

COMMENTS

Annual Fuel Use: 38,955 Jan-May, 16,875 Oct-Dec, 55,830 Total Use

EMISSIONS FOR FUEL OIL COMBUSTION

Federal and New York State Regulations

(Use only for FO #2 or FO #6)

| | | | |
|------------|--------------------------|-----------|--------------------|
| Facility: | <u>Seneca Army Depot</u> | Date: | <u>8/16/94</u> |
| Location: | <u>Bldg 121</u> | Initials: | <u>DCP</u> |
| ID Number: | <u>2 active units</u> | SCC: | <u>1-03-004-01</u> |

INPUT DATA

| | | | |
|------------------------------|--------|----------------|---|
| SIZE OF BOILER | 6.6 | MMBTU/hr | |
| TOTAL FUEL USED | 55,830 | gal/year | |
| TOTAL OZONE SEASON FUEL USED | N/A | gal/year | (Enter N/A, if not known and zero, if no ozone season use^) |
| FUEL OIL GRADE | 6 | (#2 or #6 OIL) | |

| | | |
|---|------------|------------------------|
| ENTER ACTUAL SULFUR CONTENT, IF KNOWN, OR ELSE ENTER "X" | | |
| SULFUR CONTENT | 1.5 | ACTUAL % SULFUR |

| | | |
|----------------------|-------|-----------------------------|
| BOILER FIRING METHOD | OTHER | (TANGENTIAL/VERTICAL/OTHER) |
|----------------------|-------|-----------------------------|

SOLUTION

| | |
|----------------------------------|-------------------|
| PARTICULATE EMISSIONS (TSP) | 949.39 lbs/year |
| PARTICULATE EMISSIONS (PM10) | 588.62 lbs/year |
| SULFUR DIOXIDE EMISSIONS | 13147.97 lbs/year |
| CARBON MONOXIDE EMISSIONS | 279.15 lbs/year |
| VOC EMISSIONS (NON METHANE) | 63.09 lbs/year |
| NITROGEN OXIDE EMISSIONS(as NO2) | 3070.65 lbs/year |

REFERENCES:

CRITERIA POLLUTANT EMISSION FACTORS WERE OBTAINED FROM TABLES 1.3-2

NOTES:

N/A: NOT AVAILABLE

X: Default value of sulfur content of fuel. X=1%, if default fuel oil grade is #2, and X=4% if fuel oil grades are nos. 4,5 & 6. (AP-42 Appendix A)

DATA QUALITY: A

^: Ozone season usage, if not known, is assumed to be 25% of the total annual usage.

UTILITY BOILERS>100 MMBTU/HR

INDUSTRIAL BOILER:10-100 MMBTU/HR

COMMERCIAL BOILERS:0.5-<10 MMBTU/HR

RESIDENTIAL FURNACES:<0.5 MMBTU/HR

Distillate Fuel is fuel oil #2, and Residual Fuels are Fuel Oil Nos 4, 5, & 6 (See AP-42)

SPECIATION OF EMISSIONS

| | | |
|---------------------------|-------|--------|
| TOTAL VOC EMISSIONS | 63.09 | Lbs/Yr |
| TOTAL AIR TOXIC EMISSIONS | 33.38 | Lbs/Yr |

INDIVIDUAL AIR TOXIC EMISSIONS

| Chemical Name | CAS # | Emissions (Lbs/Yr) | Profile Data Quality |
|---------------------------|---------|-----------------------|-------------------------|
| Antimony Compounds | 0 | 3.85E-01 | E |
| Arsenic Compounds | 0 | 9.55E-01 | E |
| Beryllium Compounds | 0 | 3.52E-02 | E |
| Cadmium Compounds | 0 | 1.77E+00 | E |
| Chromium Compounds | 0 | 1.07E+00 | E |
| Lead Compounds | 0 | 1.62E+00 | E |
| Mercury Compounds | 0 | 2.68E-01 | E |
| Manganese Compounds | 0 | 6.20E-01 | E |
| Nickel Compounds | 0 | 1.95E+01 | E |
| Polycyclic Organic Matter | 0 | 7.03E-02 | E |
| Formaldehyde | 50-00-0 | 3.39E+00 | E |
| Selenium Compounds | 0 | 3.18E-01 | E |
| Copper compounds* | 0 | 2.34E+00 | E |
| Cobalt Compounds | 0 | 1.01E+00 | E |

* New York State HAP

REFERENCES: HAZARDOUS AIR POLLUTION EMISSION FACTORS TAKEN

FROM TABLE 1.3-11 OF AP-42 (SUPPLEMENT F), EXCEPT FOR COPPER WHICH WAS TAKEN FROM TABLE 4-1 OF "ESTIMATING AIR TOXIC EMISSIONS FROM COAL AND OIL COMBUSTION SOURCES"

NOTES:

HEATING VALUES FOR RESIDUAL AND DISTILLATE FUEL OIL ARE TAKEN FROM AP-42 APPENDIX A. PAGE A-3. 150,000 BTU/GAL FOR RESIDUAL OIL AND 140,000 BTU/GAL FOR DISTILLATE OIL

WHEN HAP EMISSION FACTORS WERE PRESENTED AS A RANGE , THE FACTOR WHICH RESULTED IN THE HIGHEST HAP EMISSION WAS USED IN THE CALCULATION

BOILERS/HEATERS

GENERAL INFORMATION

Installation Seneca Army Depot

SCC..... N/A Unit ID #..... 1 active unit

Location..... Bldg 126 Permit #.....

POC..... George Shadman Inventoried by..... T. Sletten

Phone..... (607) 869-1470 Inventory Date..... June 6-10, 1994

SOURCE INFORMATION

Manufacturer..... Fuel Type..... #2 Fuel Oil

Date Installed..... Annual Fuel Use..... (units)

Rated Capacity..... 80,000 Btu/hr Operating Schedule
(units) Hours/day.....

Max Heat Input..... Days/week.....
(units)

MONTHLY FUEL USE

19-- JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC

Indicate Units: _____ Total Annual Use: _____

FIRING CONFIGURATION

Tangentially Fired.....

Horizontally Fired.....

Vertically Fired.....

Pulverized Coal Fired
Dry Bottom.....

Wet Bottom.....

Cyclone Furnace.....

Spreader Stoker
Uncontrolled.....

Multiple Cyclone
w/flyash reinjection.....

wo/flyash reinjection.....

Overfeed Stoker
Uncontrolled.....

Underfired Stoker
Uncontrolled.....

Multiple Cyclone.....

Handfired Units.....

Wet/Dry Bottom?.....

Other.. _____

POLLUTION CONTROL EQUIPMENT

(enter control efficiency)

ESP.....

Baghouse.....

Wet Scrubber.....

Dry Scrubber.....

Spray Dryer.....

Cyclone.....

Other.. _____

None?.....

FUEL ANALYSIS

Sulfur Content (S)..... %

Ash Content..... %

Nitrogen Content (N)..... %

Lead Content (Pb)..... %

Reference.. _____

BOILERS/HEATERS

GENERAL INFORMATION

Installation Seneca Army Depot

SCC..... N/A Unit ID #..... 1 active unit

Location..... Bldg 138 Permit #..... _____

POC..... George Shadman Inventoried by..... T. Sletten

Phone..... (607) 869-1470 Inventory Date..... June 6-10, 1994

SOURCE INFORMATION

Manufacturer..... _____ Fuel Type..... Propane

Date Installed..... _____ Annual Fuel Use..... 2,640 gal
(units)

Rated Capacity..... 138,000 Btu/hr Operating Schedule
(units) Hours/day..... _____

Max Heat Input..... _____ Days/week..... _____
(units)

MONTHLY FUEL USE

| 1993 | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC |
|------|------------|------------|------------|------------|------------|-----------|-----------|-----------|----------|------------|------------|------------|
| | <u>341</u> | <u>616</u> | <u>484</u> | <u>230</u> | <u>183</u> | <u>54</u> | <u>15</u> | <u>30</u> | <u>0</u> | <u>214</u> | <u>311</u> | <u>162</u> |

Indicate Units: gal

Total Annual Use: 2,640

FIRING CONFIGURATION

Tangentially Fired..... _____

Horizontally Fired..... _____

Vertically Fired..... _____

Pulverized Coal Fired
 Dry Bottom..... _____
 Wet Bottom..... _____

Cyclone Furnace..... _____

Spreader Stoker
 Uncontrolled..... _____
 Multiple Cyclone
 w/flyash reinjection..... _____
 wo/flyash reinjection..... _____

Overfeed Stoker
 Uncontrolled..... _____

Underfired Stoker
 Uncontrolled..... _____
 Multiple Cyclone..... _____

Handfired Units..... _____

Wet/Dry Bottom?..... _____

Other.. _____

POLLUTION CONTROL EQUIPMENT

(enter control efficiency)

ESP..... _____

Baghouse..... _____

Wet Scrubber..... _____

Dry Scrubber..... _____

Spray Dryer..... _____

Cyclone..... _____

Other.. _____

None?..... _____

FUEL ANALYSIS

Sulfur Content (S)..... _____ %

Ash Content..... _____ %

Nitrogen Content (N)..... _____ %

Lead Content (Pb)..... _____ %

Reference.. _____

EMISSION RATE DETERMINATION METHOD

Stack Test Data _____ Emission Factor X Material Balance _____
 Similar Unit Data _____ Other _____

Reference: AP-42 VOLUME 1, STATIONARY SOURCES

OZONE PRECURSOR EMISSIONS

HAZARDOUS AIR POLLUTANTS

| Typical Ozone Season Emissions | HAP | CAS CODE | LB/YR |
|--|-------|----------|-------|
| VOC Emissions <u> 0.0005380435 </u> lb/day | _____ | _____ | _____ |
| NOx Emissions <u> 0.0150652174 </u> lb/day | _____ | _____ | _____ |
| CO Emissions <u> 0.0020445652 </u> lb/day | _____ | _____ | _____ |

CRITERIA POLLUTANT EMISSIONS

| | | | |
|--|-------|-------|-------|
| VOC Emissions <u> 0.0006600000 </u> ton/yr | _____ | _____ | _____ |
| NOx Emissions <u> 0.0184800000 </u> ton/yr | _____ | _____ | _____ |
| CO Emissions <u> 0.0025080000 </u> ton/yr | _____ | _____ | _____ |
| SO2 Emissions <u> 0.0019800000 </u> ton/yr | _____ | _____ | _____ |
| PM10 Emissions <u> - </u> ton/yr | _____ | _____ | _____ |
| Total Particulate <u> 0.0005280000 </u> ton/yr | _____ | _____ | _____ |

(use additional sheets if necessary)

STACK INFORMATION

| | |
|-----------------------------------|------------------------------------|
| Stack (release) Height _____ feet | Stack Gas Velocity _____ ft/sec |
| Stack Diameter _____ inch | Stack Gas Flow Rate _____ acsf/min |
| | Stack Gas Temperature _____ oF |

Other sources that share this stack? _____
 Stack Sampling Report Available? (Y/ N, results?) _____

COMMENTS

| EMISSIONS FOR LIQUIFIED PETROLEUM GAS COMBUSTION | | | |
|---|-------------------|-----------|---------|
| Federal and New York State Regulations | | | |
| Facility: | Seneca Army Depot | Date: | 8/25/94 |
| Location: | Bldg 138 | Initials: | DCP |
| ID Number: | 1 active unit | SCC: | N/A |

INPUT DATA

| | | | |
|-------------------------|-------|----------|---|
| SIZE OF BOILER | 0.138 | MMBTU/hr | |
| TOTAL FUEL USED | 2,640 | gal/year | |
| OZONE SEASON FUEL USAGE | 99 | gal/year | (Enter N/A if not known, and zero if no ozone season use) |

ENTER ACTUAL SULFUR CONTENT, IF KNOWN, OR ELSE ENTER "X"

| | | |
|-----------------------|----------|---|
| SULFUR CONTENT | x | Default Sulfur (15 Grains/100 cu ft) |
|-----------------------|----------|---|

FUEL TYPE propane (BUTANE/PROPANE)
 (Note if fuel type is not Butane or Propane further research is needed)

SOLUTION

| | |
|--|--------------|
| PARTICULATE EMISSIONS (TSP) | 1.06 LBS/YR |
| SULFUR OXIDE EMISSIONS (as SO ₂) | 3.96 LBS/YR |
| CARBON MONOXIDE EMISSIONS | 5.02 LBS/YR |
| VOC EMISSIONS | 1.32 LBS/YR |
| NITROGEN OXIDE EMISSIONS (as NO ₂) | 36.96 LBS/YR |

REFERENCES: Criteria Pollutant Emission Factors are from AP-42, Vol 1, Section 1.5, Table 1.5-1, dated 10/92.

SULFUR DEFAULT OF 15 GRAINS/100 CUBIC FT IS AN ASTM SPECIFICATION FROM AEHA

VOC emissions are reported as Total Organic Matter (TOM) in AP-42. TOM includes Methane and Non-methane

NOTES: Industrial Furnace > 10 MMBTU/hr
 Commercial & Domestic Boiler < 10 MMBTU/hr

* If ozone season usage is not known, it is assumed to be 25% of the total annual usage

| | | | |
|--------------------------------------|------------------------|-------------------------|--------------------------------|
| THE UNIVERSITY OF CHICAGO LIBRARY | | DATE 1964 | BY [Signature] |
| TITLE [Faint text] | AUTHOR [Faint text] | SUBJECT [Faint text] | CLASSIFICATION [Faint text] |

1964

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BOILERS/HEATERS

GENERAL INFORMATION

Installation Seneca Army Depot

SCC..... N/A Unit ID #..... 1 active unit

Location..... Bldg 142 Permit #..... _____

POC..... George Shadman Inventoried by..... T. Sletten

Phone..... (607) 869-1470 Inventory Date..... June 6-10, 1994

SOURCE INFORMATION

Manufacturer..... _____ Fuel Type..... #2 Fuel Oil

Date Installed..... _____ Annual Fuel Use..... _____ (units)

Rated Capacity..... 350,000 Btu/hr Operating Schedule
(units) Hours/day..... _____

Max Heat Input..... _____ Days/week..... _____
(units)

MONTHLY FUEL USE

19-- JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC

Indicate Units: _____

Total Annual Use: _____

FIRING CONFIGURATION

Tangentially Fired..... _____

Horizontally Fired..... _____

Vertically Fired..... _____

Pulverized Coal Fired
Dry Bottom..... _____

Wet Bottom..... _____

Cyclone Furnace..... _____

Spreader Stoker
Uncontrolled..... _____

Multiple Cyclone
w/flyash reinjection..... _____

wo/flyash reinjection..... _____

Overfeed Stoker
Uncontrolled..... _____

Underfired Stoker
Uncontrolled..... _____

Multiple Cyclone..... _____

Handfired Units..... _____

Wet/Dry Bottom?..... _____

Other.. _____

POLLUTION CONTROL EQUIPMENT

(enter control efficiency)

ESP..... _____

Baghouse..... _____

Wet Scrubber..... _____

Dry Scrubber..... _____

Spray Dryer..... _____

Cyclone..... _____

Other.. _____

None?..... _____

FUEL ANALYSIS

Sulfur Content (S)..... _____ %

Ash Content..... _____ %

Nitrogen Content (N)..... _____ %

Lead Content (Pb)..... _____ %

Reference.. _____

BOILERS/HEATERS

GENERAL INFORMATION

Installation Seneca Army Depot

SCC..... N/A Unit ID #..... 1 active unit

Location..... Bldg 308 Permit #..... _____

POC..... George Shadman Inventoried by..... T. Sletten

Phone..... (607) 869-1470 Inventory Date..... June 6-10, 1994

SOURCE INFORMATION

Manufacturer..... _____ Fuel Type..... #2 Fuel Oil

Date Installed..... _____ Annual Fuel Use..... _____ (units)

Rated Capacity..... 200,000 Btu/hr Operating Schedule
(units) Hours/day..... _____

Max Heat Input..... _____ Days/week..... _____
(units)

| MONTHLY FUEL USE | | | | | | | | | | | | |
|-----------------------|-------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 19-- | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC |
| | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ |
| Indicate Units: _____ | Total Annual Use: _____ | | | | | | | | | | | |

FIRING CONFIGURATION

Tangentially Fired..... _____

Horizontally Fired..... _____

Vertically Fired..... _____

Pulverized Coal Fired
Dry Bottom..... _____

Wet Bottom..... _____

Cyclone Furnace..... _____

Spreader Stoker
Uncontrolled..... _____

Multiple Cyclone
w/flyash reinjection..... _____

wo/flyash reinjection..... _____

Overfeed Stoker
Uncontrolled..... _____

Underfired Stoker
Uncontrolled..... _____

Multiple Cyclone..... _____

Handfired Units..... _____

Wet/Dry Bottom?..... _____

Other.. _____

POLLUTION CONTROL EQUIPMENT

(enter control efficiency)

ESP..... _____

Baghouse..... _____

Wet Scrubber..... _____

☐ Dry Scrubber..... _____

Spray Dryer..... _____

Cyclone..... _____

Other.. _____

None?..... _____

FUEL ANALYSIS

Sulfur Content (S)..... _____ %

Ash Content..... _____ %

Nitrogen Content (N)..... _____ %

Lead Content (Pb)..... _____ %

Reference.. _____

BOILERS/HEATERS

GENERAL INFORMATION

Installation Seneca Army Depot
 SCC..... 1-03-005-01 Unit ID #..... 1 active unit
 Location..... Bldg 309 Permit #.....
 POC..... George Shadman Inventoried by..... T. Sletten
 Phone..... (607) 869-1470 Inventory Date..... June 6-10, 1994

SOURCE INFORMATION

Manufacturer..... Fuel Type..... #2 Fuel Oil
 Date Installed..... Annual Fuel Use.....
 Rated Capacity..... 500,000 Btu/hr (units) Operating Schedule (units)
 Hours/day.....
 Max Heat Input..... (units) Days/week.....

MONTHLY FUEL USE

19-- JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC

 Indicate Units: _____ Total Annual Use: _____

FIRING CONFIGURATION

Tangentially Fired.....
 Horizontally Fired.....
 Vertically Fired.....
 Pulverized Coal Fired
 Dry Bottom.....
 Wet Bottom.....
 Cyclone Furnace.....
 Spreader Stoker
 Uncontrolled.....
 Multiple Cyclone
 w/flyash reinjection.....
 wo/flyash reinjection.....
 Overfeed Stoker
 Uncontrolled.....
 Underfired Stoker
 Uncontrolled.....
 Multiple Cyclone.....
 Handfired Units.....
 Wet/Dry Bottom?.....
 Other..

POLLUTION CONTROL EQUIPMENT

(enter control efficiency)
 ESP.....
 Baghouse.....
 Wet Scrubber.....
 Dry Scrubber.....
 Spray Dryer.....
 Cyclone.....
 Other..
 None?.....

FUEL ANALYSIS

Sulfur Content (S)..... %
 Ash Content..... %
 Nitrogen Content (N)..... %
 Lead Content (Pb)..... %
 Reference..

BOILERS/HEATERS

GENERAL INFORMATION

Installation Seneca Army Depot

SCC..... 1-02-004-02 Unit ID #..... 1 active unit

Location..... Bldg 319 Permit #..... 00319

POC..... George Shadman Inventoried by..... T. Sletten

Phone..... (607) 869-1470 Inventory Date..... June 6-10, 1994

SOURCE INFORMATION

Manufacturer.....International WT Type FD 18-356 Fuel Type..... No. 6 Fuel Oil

Date Installed..... _____ Annual Fuel Use..... See comments
(units)

Rated Capacity..... 12,000,000 Btu/hr Operating Schedule
(units) Hours/day..... 24

Max Heat Input..... _____ Days/week..... 212 days/yr
(units)

MONTHLY FUEL USE

19__ JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC

Indicate Units: _____

Total Annual Use: _____

FIRING CONFIGURATION

Tangentially Fired..... _____

Horizontally Fired..... _____

Vertically Fired..... _____

Pulverized Coal Fired

 Dry Bottom..... _____

 Wet Bottom..... _____

Cyclone Furnace..... _____

Spreader Stoker

 Uncontrolled..... _____

 Multiple Cyclone

 w/flyash reinjection..... _____

 wo/flyash reinjection..... _____

Overfeed Stoker

 Uncontrolled..... _____

Underfired Stoker

 Uncontrolled..... _____

 Multiple Cyclone..... _____

Handfired Units..... _____

Wet/Dry Bottom?..... _____

Other.. _____

POLLUTION CONTROL EQUIPMENT

(enter control efficiency).

ESP..... _____

Baghouse..... _____

Wet Scrubber..... _____

Dry Scrubber..... _____

Spray Dryer..... _____

Cyclone..... _____

Other.. _____

None?..... _____

FUEL ANALYSIS

Sulfur Content (S)..... _____ %

Ash Content..... _____ %

Nitrogen Content (N)..... _____ %

Lead Content (Pb)..... _____ %

Reference.. _____

EMISSION RATE DETERMINATION METHOD

Stack Test Data _____ Emission Factor X Material Balance _____

Similar Unit Data _____ Other _____

Reference: AP-42 VOLUME 1, STATIONARY SOURCES AND L&E SERIES, TABLE 4-1

OZONE PRECURSOR EMISSIONS

Typical Ozone Season Emissions

VOC Emissions 0.0386179348 lb/day

NOx Emissions 7.5856657609 lb/day

CO Emissions 0.6896059783 lb/day

CRITERIA POLLUTANT EMISSIONS

VOC Emissions 0.0071057000 ton/yr

NOx Emissions 1.3957625000 ton/yr

CO Emissions 0.1268875000 ton/yr

SO2 Emissions 5.9764012500 ton/yr

PM10 Emissions 0.3711281733 ton/yr

Total Particulate 0.4315443875 ton/yr

HAZARDOUS AIR POLLUTANTS

| HAP | CAS CODE | LB/YR |
|---------------------------|----------|---------------|
| NONE | | |
| Antimony Compounds | 0 | 0.3502095000 |
| Arsenic Compounds | 0 | 0.8679105000 |
| Beryllium Compounds | 0 | 0.0319756500 |
| Cadmium Compounds | 0 | 1.6063957500 |
| Chromium Compounds | 0 | 0.9744960000 |
| Lead Compounds | 0 | 1.4769705000 |
| Mercury Compounds | 0 | 0.2436240000 |
| Manganese Compounds | 0 | 0.5633805000 |
| Nickel Compounds | 0 | 17.7388725000 |
| Polycyclic Organic Matter | 0 | 0.0639513000 |
| Formaldehyde | 50-00-0 | 3.0833662500 |
| Selenium Compounds | 0 | 0.2893035000 |
| Cobalt Compounds | 0 | 0.9212032500 |
| Copper Compounds* | 0 | 2.1317100000 |

*New York State HAP
(use additional sheets if necessary)

STACK INFORMATION

Stack (release) Heig 90.00 feet Stack Gas Velocity 10.7 ft/sec

Stack Diameter 48 inch Stack Gas Flow Rate 8,050 ascf/min

Stack Gas Temperature 350 oF

Other sources that share this stack? Bldg 319 - 16,100,000 Btu/hr boiler

Stack Sampling report available? (Y/ N, results ?) _____

COMMENTS

Annual Fuel Use: 35,414 gal Jan-May, 15,341 gal Oct-Dec, 50,755 gal Total Use

EMISSIONS FOR FUEL OIL COMBUSTION

Federal and New York State Regulations

(Use only for FO #2 or FO #6)

| | | | |
|------------|--------------------------|-----------|--------------------|
| Facility: | <u>Seneca Army Depot</u> | Date: | <u>8/24/94</u> |
| Location: | <u>Bldg. 319</u> | Initials: | <u>DCP</u> |
| ID Number: | <u>1 active unit</u> | SCC: | <u>1-02-004-02</u> |

INPUT DATA

| | | | |
|------------------------------|--------|----------------|---|
| SIZE OF BOILER | 12 | MMBTU/hr | |
| TOTAL FUEL USED | 50,755 | gal/year | |
| TOTAL OZONE SEASON FUEL USED | N/A | gal/year | (Enter N/A, if not known and zero, if no ozone season use^) |
| FUEL OIL GRADE | 6 | (#2 or #6 OIL) | |

ENTER ACTUAL SULFUR CONTENT, IF KNOWN, OR ELSE ENTER "X"
SULFUR CONTENT **1.5** **ACTUAL % SULFUR**

BOILER FIRING METHOD OTHER (TANGENTIAL/VERTICAL/OTHER)

SOLUTION

| | |
|----------------------------------|-------------------|
| PARTICULATE EMISSIONS (TSP) | 863.09 lbs/year |
| PARTICULATE EMISSIONS (PM10) | 742.26 lbs/year |
| SULFUR DIOXIDE EMISSIONS | 11952.80 lbs/year |
| CARBON MONOXIDE EMISSIONS | 253.78 lbs/year |
| VOC EMISSIONS (NON METHANE) | 14.21 lbs/year |
| NITROGEN OXIDE EMISSIONS(as NO2) | 2791.53 lbs/year |

REFERENCES:

CRITERIA POLLUTANT EMISSION FACTORS WERE OBTAINED
FROM TABLES 1.3-2

NOTES:

N/A: NOT AVAILABLE

X: Default value of sulfur content of fuel. X=1%, if default fuel oil grade is #2, and X=4% if fuel oil grades are nos. 4,5 & 6. (AP-42 Appendix A)

DATA QUALITY: A

^: Ozone season usage, if not known, is assumed to be 25% of the total annual usage.

UTILITY BOILERS>100 MMBTU/HR

INDUSTRIAL BOILER:10-100 MMBTU/HR

COMMERCIAL BOILERS:0.5-<10 MMBTU/HR

RESIDENTIAL FURNACES:<0.5 MMBTU/HR

Distillate Fuel is fuel oil #2, and Residual Fuels are Fuel Oil Nos 4, 5,& 6 (See AP-42)

SPECIATION OF EMISSIONS

TOTAL VOC EMISSIONS 14.21 Lbs/Yr
 TOTAL AIR TOXIC EMISSIONS 30.34 Lbs/Yr

INDIVIDUAL AIR TOXIC EMISSIONS

| Chemical Name | CAS # | Emissions (Lbs/Yr) | Profile Data Quality |
|---------------------------|---------|-----------------------|-------------------------|
| Antimony Compounds | 0 | 3.50E-01 | E |
| Arsenic Compounds | 0 | 8.68E-01 | E |
| Beryllium Compounds | 0 | 3.20E-02 | E |
| Cadmium Compounds | 0 | 1.61E+00 | E |
| Chromium Compounds | 0 | 9.74E-01 | E |
| Lead Compounds | 0 | 1.48E+00 | E |
| Mercury Compounds | 0 | 2.44E-01 | E |
| Manganese Compounds | 0 | 5.63E-01 | E |
| Nickel Compounds | 0 | 1.77E+01 | E |
| Polycyclic Organic Matter | 0 | 6.40E-02 | E |
| Formaldehyde | 50-00-0 | 3.08E+00 | E |
| Selenium Compounds | 0 | 2.89E-01 | E |
| Copper compounds* | 0 | 2.13E+00 | E |
| Cobalt Compounds | 0 | 9.21E-01 | E |

* New York State HAP

REFERENCES: HAZARDOUS AIR POLLUTION EMISSION FACTORS TAKEN

FROM TABLE 1.3-11 OF AP-42 (SUPPLEMENT F), EXCEPT FOR COPPER WHICH WAS TAKEN FROM TABLE 4-1 OF "ESTIMATING AIR TOXIC EMISSIONS FROM COAL AND OIL COMBUSTION SOURCES"

NOTES:

HEATING VALUES FOR RESIDUAL AND DISTILLATE FUEL OIL ARE TAKEN FROM AP-42 APPENDIX A. PAGE A-3. 150,000 BTU/GAL FOR RESIDUAL OIL AND 140,000 BTU/GAL FOR DISTILLATE OIL

WHEN HAP EMISSION FACTORS WERE PRESENTED AS A RANGE , THE FACTOR WHICH RESULTED IN THE HIGHEST HAP EMISSION WAS USED IN THE CALCULATION

BOILERS/HEATERS

GENERAL INFORMATION

Installation Seneca Army Depot
SCC..... 1-02-004-02
Unit ID #..... 1 active unit
Location..... Bldg 319
Permit #.....00319
POC..... George Shadman
Inventoried by..... T. Sletten
Phone..... (607) 869-1470
Inventory Date..... June 6-10, 1994

SOURCE INFORMATION

Manufacturer.....Keeler Model DS-15 WT
Fuel Type..... No. 6 Fuel Oil
Date Installed.....
Annual Fuel Use..... See comments
Rated Capacity..... 16,100,000 Btu/hr
Operating Schedule
Hours/day..... 24
Max Heat Input.....
Days/week..... 212 days/yr

MONTHLY FUEL USE

19__ JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC

Indicate Units: _____

Total Annual Use: _____

FIRING CONFIGURATION

Tangentially Fired.....
Horizontally Fired.....
Vertically Fired.....
Pulverized Coal Fired
Dry Bottom.....
Wet Bottom.....
Cyclone Furnace.....
Spreader Stoker
Uncontrolled.....
Multiple Cyclone
w/flyash reinjection.....
wo/flyash reinjection.....
Overfeed Stoker
Uncontrolled.....
Underfired Stoker
Uncontrolled.....
Multiple Cyclone.....
Handfired Units.....
Wet/Dry Bottom?.....
Other..

POLLUTION CONTROL EQUIPMENT

(enter control efficiency)

ESP.....
Baghouse.....
Wet Scrubber.....
Dry Scrubber.....
Spray Dryer.....
Cyclone.....
Other..
None?.....

FUEL ANALYSIS

Sulfur Content (S)..... %
Ash Content..... %
Nitrogen Content (N)..... %
Lead Content (Pb)..... %
Reference..

EMISSION RATE DETERMINATION METHOD

Stack Test Data _____ Emission Factor X Material Balance _____
Similar Unit Data _____ Other _____

Reference: AP-42 VOLUME 1, STATIONARY SOURCES AND L&E SERIES, TABLE 4-1

OZONE PRECURSOR EMISSIONS

Typical Ozone Season Emissions
VOC Emissions 0.0386179348 lb/day
NOx Emissions 7.5856657609 lb/day
CO Emissions 0.6896059783 lb/day

CRITERIA POLLUTANT EMISSIONS

VOC Emissions 0.0071057000 ton/yr
NOx Emissions 1.3957625000 ton/yr
CO Emissions 0.1268875000 ton/yr
SO2 Emissions 5.9764012500 ton/yr
PM10 Emissions 0.3711281733 ton/yr
Total Particulate 0.4315443875 ton/yr

HAZARDOUS AIR POLLUTANTS

| HAP | CAS CODE | LB/YR |
|---------------------------|----------|---------------|
| NONE | | |
| Antimony Compounds | 0 | 0.3502095000 |
| Arsenic Compounds | 0 | 0.8679105000 |
| Beryllium Compounds | 0 | 0.0319756500 |
| Cadmium Compounds | 0 | 1.6063957500 |
| Chromium Compounds | 0 | 0.9744960000 |
| Lead Compounds | 0 | 1.4769705000 |
| Mercury Compounds | 0 | 0.2436240000 |
| Manganese Compounds | 0 | 0.5633805000 |
| Nickel Compounds | 0 | 17.7388725000 |
| Polycyclic Organic Matter | 0 | 0.0639513000 |
| Formaldehyde | 50-00-0 | 3.0833662500 |
| Selenium Compounds | 0 | 0.2893035000 |
| Cobalt Compounds | 0 | 0.9212032500 |
| Copper Compounds* | 0 | 2.1317100000 |

*New York State HAP
(use additional sheets if necessary)

STACK INFORMATION

Stack (release) Heig 90.00 feet Stack Gas Velocity 10.7 ft/sec
Stack Diameter 48 inch Stack Gas Flow Rate 8,050 ascf/min
Stack Gas Temperature 350 oF

Other sources that share this stack? Bldg 319 - 16,100,000 Btu/hr boiler
Stack Sampling report available? (Y/ N, results ?) _____

COMMENTS

Annual Fuel Use: 47,514 gal Jan-May, 20,582 gal Oct-Dec, 68,096 gal Total Use

EMISSIONS FOR FUEL OIL COMBUSTION

Federal and New York State Regulations

(Use only for FO #2 or FO #6)

| | | | |
|------------|--------------------------|-----------|--------------------|
| Facility: | <u>Seneca Army Depot</u> | Date: | <u>8/24/94</u> |
| Location: | <u>Bldg. 319</u> | Initials: | <u>DCP</u> |
| ID Number: | <u>1 active unit</u> | SCC: | <u>1-02-004-02</u> |

INPUT DATA

| | | | |
|------------------------------|--------|----------------|---|
| SIZE OF BOILER | 16.1 | MMBTU/hr | |
| TOTAL FUEL USED | 50,755 | gal/year | |
| TOTAL OZONE SEASON FUEL USED | N/A | gal/year | (Enter N/A, if not known and zero, if no ozone season use^) |
| FUEL OIL GRADE | 6 | (#2 or #6 OIL) | |

ENTER ACTUAL SULFUR CONTENT, IF KNOWN, OR ELSE ENTER "X"
SULFUR CONTENT **1.5** **ACTUAL % SULFUR**

BOILER FIRING METHOD OTHER (TANGENTIAL/VERTICAL/OTHER)

SOLUTION

| | |
|---|-------------------|
| PARTICULATE EMISSIONS (TSP) | 863.09 lbs/year |
| PARTICULATE EMISSIONS (PM10) | 742.26 lbs/year |
| SULFUR DIOXIDE EMISSIONS | 11952.80 lbs/year |
| CARBON MONOXIDE EMISSIONS | 253.78 lbs/year |
| VOC EMISSIONS (NON METHANE) | 14.21 lbs/year |
| NITROGEN OXIDE EMISSIONS(as NO ₂) | 2791.53 lbs/year |

REFERENCES:

CRITERIA POLLUTANT EMISSION FACTORS WERE OBTAINED
FROM TABLES 1.3-2

NOTES:

N/A: NOT AVAILABLE

X: Default value of sulfur content of fuel. X=1%, if default fuel oil grade is #2, and X=4% if fuel oil grades are nos. 4, 5 & 6. (AP-42 Appendix A)

DATA QUALITY: A

^: Ozone season usage, if not known, is assumed to be 25% of the total annual usage.

UTILITY BOILERS>100 MMBTU/HR

INDUSTRIAL BOILER:10-100 MMBTU/HR

COMMERCIAL BOILERS:0.5-<10 MMBTU/HR

RESIDENTIAL FURNACES:<0.5 MMBTU/HR

Distillate Fuel is fuel oil #2, and Residual Fuels are Fuel Oil Nos 4, 5, & 6 (See AP-42)

SPECIATION OF EMISSIONS

| | | |
|---------------------------|-------|--------|
| TOTAL VOC EMISSIONS | 14.21 | Lbs/Yr |
| TOTAL AIR TOXIC EMISSIONS | 30.34 | Lbs/Yr |

INDIVIDUAL AIR TOXIC EMISSIONS

| Chemical Name | CAS # | Emissions (Lbs/Yr) | Profile Data Quality |
|---------------------------|---------|-----------------------|-------------------------|
| Antimony Compounds | 0 | 3.50E-01 | E |
| Arsenic Compounds | 0 | 8.68E-01 | E |
| Beryllium Compounds | 0 | 3.20E-02 | E |
| Cadmium Compounds | 0 | 1.61E+00 | E |
| Chromium Compounds | 0 | 9.74E-01 | E |
| Lead Compounds | 0 | 1.48E+00 | E |
| Mercury Compounds | 0 | 2.44E-01 | E |
| Manganese Compounds | 0 | 5.63E-01 | E |
| Nickel Compounds | 0 | 1.77E+01 | E |
| Polycyclic Organic Matter | 0 | 6.40E-02 | E |
| Formaldehyde | 50-00-0 | 3.08E+00 | E |
| Selenium Compounds | 0 | 2.89E-01 | E |
| Copper compounds* | 0 | 2.13E+00 | |
| Cobalt Compounds | 0 | 9.21E-01 | E |

* New York State HAP

REFERENCES: HAZARDOUS AIR POLLUTION EMISSION FACTORS TAKEN

FROM TABLE 1.3-11 OF AP-42 (SUPPLEMENT F), EXCEPT FOR COPPER WHICH WAS TAKEN FROM TABLE 4-1 OF "ESTIMATING AIR TOXIC EMISSIONS FROM COAL AND OIL COMBUSTION SOURCES"

NOTES:

HEATING VALUES FOR RESIDUAL AND DISTILLATE FUEL OIL ARE TAKEN FROM AP-42 APPENDIX A. PAGE A-3. 150,000 BTU/GAL FOR RESIDUAL OIL AND 140,000 BTU/GAL FOR DISTILLATE OIL

WHEN HAP EMISSION FACTORS WERE PRESENTED AS A RANGE , THE FACTOR WHICH RESULTED IN THE HIGHEST HAP EMISSION WAS USED IN THE CALCULATION

BOILERS/HEATERS

GENERAL INFORMATION

Installation Seneca Army Depot

SCC..... N/A Unit ID #..... 1 active unit

Location..... Bldg 334 Permit #.....

POC..... George Shadman Inventoried by..... T. Sletten

Phone..... (607) 869-1470 Inventory Date..... June 6-10, 1994

SOURCE INFORMATION

Manufacturer..... Fuel Type..... #2 Fuel Oil

Date Installed..... Annual Fuel Use..... (units)

Rated Capacity..... 90,000 Btu/hr Operating Schedule (units)
Hours/day.....

Max Heat Input..... Days/week.....
(units)

MONTHLY FUEL USE

19-- JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC

Indicate Units: _____

Total Annual Use: _____

FIRING CONFIGURATION

Tangentially Fired.....

Horizontally Fired.....

Vertically Fired.....

Pulverized Coal Fired

 Dry Bottom.....

 Wet Bottom.....

Cyclone Furnace.....

Spreader Stoker

 Uncontrolled.....

 Multiple Cyclone

 w/flyash reinjection.....

 wo/flyash reinjection.....

Overfeed Stoker

 Uncontrolled.....

Underfired Stoker

 Uncontrolled.....

 Multiple Cyclone.....

Handfired Units.....

Wet/Dry Bottom?.....

Other.._____

POLLUTION CONTROL EQUIPMENT

(enter control efficiency)

ESP.....

Baghouse.....

Wet Scrubber.....

Dry Scrubber.....

Spray Dryer.....

Cyclone.....

Other.._____

None?.....

FUEL ANALYSIS

Sulfur Content (S)..... %

Ash Content..... %

Nitrogen Content (N)..... %

Lead Content (Pb)..... %

Reference.._____

BOILERS/HEATERS

GENERAL INFORMATION

Installation Seneca Army Depot

SCC..... N/A Unit ID #..... 1 active unit

Location..... Bldg 353 Permit #.....

POC..... George Shadman Inventoried by..... T. Sletten

Phone..... (607) 869-1470 Inventory Date..... June 6-10, 1994

SOURCE INFORMATION

Manufacturer..... Fuel Type..... #2 Fuel Oil

Date Installed..... Annual Fuel Use..... (units)

Rated Capacity..... 150,000 Btu/hr Operating Schedule
(units) Hours/day.....

Max Heat Input..... Days/week.....
(units)

MONTHLY FUEL USE

19-- JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC

Indicate Units: _____ Total Annual Use: _____

FIRING CONFIGURATION

Tangentially Fired.....

Horizontally Fired.....

Vertically Fired.....

Pulverized Coal Fired

 Dry Bottom.....

 Wet Bottom.....

Cyclone Furnace.....

Spreader Stoker

 Uncontrolled.....

 Multiple Cyclone

 w/flyash reinjection.....

 wo/flyash reinjection.....

Overfeed Stoker

 Uncontrolled.....

Underfired Stoker

 Uncontrolled.....

 Multiple Cyclone.....

Handfired Units.....

Wet/Dry Bottom?.....

Other.._____

POLLUTION CONTROL EQUIPMENT

(enter control efficiency)

ESP.....

Baghouse.....

Wet Scrubber.....

Dry Scrubber.....

Spray Dryer.....

Cyclone.....

Other.._____

None?.....

FUEL ANALYSIS

Sulfur Content (S)..... %

Ash Content..... %

Nitrogen Content (N)..... %

Lead Content (Pb)..... %

Reference.._____

BOILERS/HEATERS

GENERAL INFORMATION

Installation Seneca Army Depot

SCC..... N/A Unit ID #..... 1 active unit

Location..... Bldg 360 Permit #..... _____

POC..... George Shadman Inventoried by..... T. Sletten

Phone..... (607) 869-1470 Inventory Date..... June 6-10, 1994

SOURCE INFORMATION

Manufacturer..... _____ Fuel Type..... #2 Fuel Oil

Date Installed..... _____ Annual Fuel Use..... _____ (units)

Rated Capacity..... 90,000 Btu/hr Operating Schedule
(units) Hours/day..... _____

Max Heat Input..... _____ Days/week..... _____
(units)

MONTHLY FUEL USE

19-- JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC

Indicate Units: _____

Total Annual Use: _____

FIRING CONFIGURATION

Tangentially Fired..... _____

Horizontally Fired..... _____

Vertically Fired..... _____

Pulverized Coal Fired

 Dry Bottom..... _____

 Wet Bottom..... _____

Cyclone Furnace..... _____

Spreader Stoker

 Uncontrolled..... _____

 Multiple Cyclone

 w/flyash reinjection..... _____

 wo/flyash reinjection..... _____

Overfeed Stoker

 Uncontrolled..... _____

Underfired Stoker

 Uncontrolled..... _____

 Multiple Cyclone..... _____

Handfired Units..... _____

Wet/Dry Bottom?..... _____

Other.. _____

POLLUTION CONTROL EQUIPMENT

(enter control efficiency)

ESP..... _____

Baghouse..... _____

Wet Scrubber..... _____

Dry Scrubber..... _____

Spray Dryer..... _____

Cyclone..... _____

Other.. _____

None?..... _____

FUEL ANALYSIS

Sulfur Content (S)..... _____ %

Ash Content..... _____ %

Nitrogen Content (N)..... _____ %

Lead Content (Pb)..... _____ %

Reference.. _____

BOILERS/HEATERS

GENERAL INFORMATION

Installation Seneca Army Depot
 SCC..... N/A Unit ID #..... 1 active unit
 Location..... Bldg 606 Permit #.....
 POC..... George Shadman Inventoried by..... T. Sletten
 Phone..... (607) 869-1470 Inventory Date..... June 6-10, 1994

SOURCE INFORMATION

Manufacturer..... Fuel Type..... #2 Fuel Oil
 Date Installed..... Annual Fuel Use..... (units)
 Rated Capacity..... 150,000 Btu/hr Operating Schedule
 (units) Hours/day.....
 Max Heat Input..... Days/week.....
 (units)

| MONTHLY FUEL USE | | | | | | | | | | | | |
|-----------------------|-------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 19-- | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC |
| | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ |
| Indicate Units: _____ | Total Annual Use: _____ | | | | | | | | | | | |

FIRING CONFIGURATION

Tangentially Fired.....
 Horizontally Fired.....
 Vertically Fired.....
 Pulverized Coal Fired
 Dry Bottom.....
 Wet Bottom.....
 Cyclone Furnace.....
 Spreader Stoker
 Uncontrolled.....
 Multiple Cyclone
 w/flyash reinjection.....
 wo/flyash reinjection.....
 Overfeed Stoker
 Uncontrolled.....
 Underfired Stoker
 Uncontrolled.....
 Multiple Cyclone.....
 Handfired Units.....
 Wet/Dry Bottom?.....
 Other..

POLLUTION CONTROL EQUIPMENT

(enter control efficiency)

ESP.....
 Baghouse.....
 Wet Scrubber.....
 Dry Scrubber.....
 Spray Dryer.....
 Cyclone.....
 Other..
 None?.....

FUEL ANALYSIS

Sulfur Content (S)..... %
 Ash Content..... %
 Nitrogen Content (N)..... %
 Lead Content (Pb)..... %
 Reference..

BOILERS/HEATERS

GENERAL INFORMATION

Installation Seneca Army Depot
 SCC..... 1-03-005-01 Unit ID #..... 1 active unit
 Location..... Bldg 609 Permit #.....
 POC..... George Shadman Inventoried by..... T. Sletten
 Phone..... (607) 869-1470 Inventory Date..... June 6-10, 1994

SOURCE INFORMATION

Manufacturer..... Fuel Type..... #2 Fuel Oil
 Date Installed..... Annual Fuel Use..... (units)
 Rated Capacity..... 1,000,000 Btu/hr Operating Schedule
 (units) Hours/day.....
 Max Heat Input..... Days/week.....
 (units)

| MONTHLY FUEL USE | | | | | | | | | | | | |
|-----------------------|-------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 19-- | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC |
| | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ |
| Indicate Units: _____ | Total Annual Use: _____ | | | | | | | | | | | |

FIRING CONFIGURATION

Tangentially Fired.....
 Horizontally Fired.....
 Vertically Fired.....
 Pulverized Coal Fired
 Dry Bottom.....
 Wet Bottom.....
 Cyclone Furnace.....
 Spreader Stoker
 Uncontrolled.....
 Multiple Cyclone
 w/flyash reinjection.....
 wo/flyash reinjection.....
 Overfeed Stoker
 Uncontrolled.....
 Underfired Stoker
 Uncontrolled.....
 Multiple Cyclone.....
 Handfired Units.....
 Wet/Dry Bottom?.....
 Other..

POLLUTION CONTROL EQUIPMENT

(enter control efficiency)
 ESP.....
 Baghouse.....
 Wet Scrubber.....
 Dry Scrubber.....
 Spray Dryer.....
 Cyclone.....
 Other..
 None?.....

FUEL ANALYSIS

Sulfur Content (S)..... %
 Ash Content..... %
 Nitrogen Content (N)..... %
 Lead Content (Pb)..... %
 Reference..

BOILERS/HEATERS

GENERAL INFORMATION

Installation Seneca Army Depot

SCC..... 1-02-004-02 Unit ID #..... 3 active units
Jan-May 1993 only

Location..... Bldg 718 Permit #..... 0781, 0783, 07182

POC..... George Shadman Inventoried by..... T. Sletten

Phone..... (607) 869-1470 Inventory Date..... June 6-10, 1994

SOURCE INFORMATION

Manufacturer..... Kewanee Fuel Type..... No. 6 Oil

Date Installed..... _____ Annual Fuel Use..... 128,375 gal (Jan-May 1993)
(units)

Rated Capacity..... 14,500,000 Btu/hr (each) Operating Schedule
(units) Hours/day..... _____
 Max Heat Input..... _____ Days/week..... _____
(units)

MONTHLY FUEL USE

19__ JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC

Indicate Units: _____

Total Annual Use: _____

FIRING CONFIGURATION

Tangentially Fired..... _____

Horizontally Fired..... _____

Vertically Fired..... _____

Pulverized Coal Fired

 Dry Bottom..... _____

 Wet Bottom..... _____

Cyclone Furnace..... _____

Spreader Stoker

 Uncontrolled..... _____

 Multiple Cyclone

 w/flyash reinjection..... _____

 wo/flyash reinjection..... _____

Overfeed Stoker

 Uncontrolled..... _____

Underfired Stoker

 Uncontrolled..... _____

 Multiple Cyclone..... _____

Handfired Units..... _____

Wet/Dry Bottom?..... _____

Other.. _____

POLLUTION CONTROL EQUIPMENT

(enter control efficiency)

ESP..... _____

Baghouse..... _____

Wet Scrubber..... _____

Dry Scrubber..... _____

Spray Dryer..... _____

Cyclone..... _____

Other.. _____

None?..... _____

FUEL ANALYSIS

Sulfur Content (S)..... _____ %

Ash Content..... _____ %

Nitrogen Content (N)..... _____ %

Lead Content (Pb)..... _____ %

Reference.. _____

EMISSION RATE DETERMINATION METHOD

Stack Test Data _____ Emission Factor X Material Balance _____

Similar Unit Data _____ Other _____

Reference: AP-42 VOLUME 1, STATIONARY SOURCES AND L&E SERIES, TABLE 4-1

OZONE PRECURSOR EMISSIONS

Typical Ozone Season Emissions
 VOC Emissions 0.0976766304 lb/day
 NOx Emissions 19.1864809783 lb/day
 CO Emissions 1.7442255435 lb/day

CRITERIA POLLUTANT EMISSIONS

VOC Emissions 0.0179725000 ton/yr
 NOx Emissions 3.5303125000 ton/yr
 CO Emissions 0.3209375000 ton/yr
 SO2 Emissions 15.1161562500 ton/yr
 PM10 Emissions 0.9386972563 ton/yr
 Total Particulate 1.0915084375 ton/yr

HAZARDOUS AIR POLLUTANTS

| HAP | CAS CODE | LB/YR |
|---------------------------|----------|---------------|
| NONE | | |
| Antimony Compounds | 0 | 0.8857875000 |
| Arsenic Compounds | 0 | 2.1952125000 |
| Beryllium Compounds | 0 | 0.0808762500 |
| Cadmium Compounds | 0 | 4.0630687500 |
| Chromium Compounds | 0 | 2.4648000000 |
| Lead Compounds | 0 | 3.7357125000 |
| Mercury Compounds | 0 | 0.6162000000 |
| Manganese Compounds | 0 | 1.4249625000 |
| Nickel Compounds | 0 | 44.8670625000 |
| Polycyclic Organic Matter | 0 | 0.1617525000 |
| Formaldehyde | 50-00-0 | 7.7987812500 |
| Selenium Compounds | 0 | 0.7317375000 |
| Cobalt Compounds | 0 | 2.3300062500 |
| Copper Compounds* | 0 | 5.3917500000 |

*New York State HAP
 (use additional sheets if necessary)

STACK INFORMATION

Stack (release) Heig 32.00 feet Stack Gas Velocity 31.85 ft/sec
 Stack Diameter 24 inch Stack Gas Flow Rate 6,000 ascf/min
 Stack Gas Temperature 350 oF

Other sources that share this stack? _____
 Stack Sampling report available? (Y/ N, results ?) _____

COMMENTS

EMISSIONS FOR FUEL OIL COMBUSTION

Federal and New York State Regulations

(Use only for FO #2 or FO #6)

| | | | |
|------------|--------------------------|-----------|----------------|
| Facility: | <u>Seneca Army Depot</u> | Date: | <u>8/24/94</u> |
| Location: | <u>Bldg. 718</u> | Initials: | <u>DCP</u> |
| ID Number: | <u>3 active units</u> | SCC: | <u>N/A</u> |

INPUT DATA

| | | | |
|------------------------------|---------|----------------|---|
| SIZE OF BOILER | 14.5 | MMBTU/hr | |
| TOTAL FUEL USED | 128,375 | gal/year | |
| TOTAL OZONE SEASON FUEL USED | N/A | gal/year | (Enter N/A, if not known and zero, if no ozone season use^) |
| FUEL OIL GRADE | 6 | (#2 or #6 OIL) | |

ENTER ACTUAL SULFUR CONTENT, IF KNOWN, OR ELSE ENTER "X"

| | | |
|-----------------------|------------|------------------------|
| SULFUR CONTENT | 1.5 | ACTUAL % SULFUR |
|-----------------------|------------|------------------------|

| | | |
|----------------------|-------|-----------------------------|
| BOILER FIRING METHOD | OTHER | (TANGENTIAL/VERTICAL/OTHER) |
|----------------------|-------|-----------------------------|

SOLUTION

| | | |
|----------------------------------|----------|----------|
| PARTICULATE EMISSIONS (TSP) | 2183.02 | lbs/year |
| PARTICULATE EMISSIONS (PM10) | 1877.39 | lbs/year |
| SULFUR DIOXIDE EMISSIONS | 30232.31 | lbs/year |
| CARBON MONOXIDE EMISSIONS | 641.88 | lbs/year |
| VOC EMISSIONS (NON METHANE) | 35.95 | lbs/year |
| NITROGEN OXIDE EMISSIONS(as NO2) | 7060.63 | lbs/year |

REFERENCES:

CRITERIA POLLUTANT EMISSION FACTORS WERE OBTAINED FROM TABLES 1.3-2

NOTES:

N/A: NOT AVAILABLE

X: Default value of sulfur content of fuel. X=1%, if default fuel oil grade is #2, and X=4% if fuel oil grades are nos. 4,5 & 6. (AP-42 Appendix A)

DATA QUALITY: A

^: Ozone season usage, if not known, is assumed to be 25% of the total annual usage.

UTILITY BOILERS>100 MMBTU/HR

INDUSTRIAL BOILER:10-100 MMBTU/HR

COMMERCIAL BOILERS:0.5-<10 MMBTU/HR

RESIDENTIAL FURNACES:<0.5 MMBTU/HR

Distillate Fuel is fuel oil #2, and Residual Fuels are Fuel Oil Nos 4, 5,& 6 (See AP-42)

SPECIATION OF EMISSIONS

| | | |
|---------------------------|-------|--------|
| TOTAL VOC EMISSIONS | 35.95 | Lbs/Yr |
| TOTAL AIR TOXIC EMISSIONS | 76.75 | Lbs/Yr |

INDIVIDUAL AIR TOXIC EMISSIONS

| Chemical Name | CAS # | Emissions (Lbs/Yr) | Profile Data Quality |
|---------------------------|---------|-----------------------|-------------------------|
| Antimony Compounds | 0 | 8.86E-01 | E |
| Arsenic Compounds | 0 | 2.20E+00 | E |
| Beryllium Compounds | 0 | 8.09E-02 | E |
| Cadmium Compounds | 0 | 4.06E+00 | E |
| Chromium Compounds | 0 | 2.46E+00 | E |
| Lead Compounds | 0 | 3.74E+00 | E |
| Mercury Compounds | 0 | 6.16E-01 | E |
| Manganese Compounds | 0 | 1.42E+00 | E |
| Nickel Compounds | 0 | 4.49E+01 | E |
| Polycyclic Organic Matter | 0 | 1.62E-01 | E |
| Formaldehyde | 50-00-0 | 7.80E+00 | E |
| Selenium Compounds | 0 | 7.32E-01 | E |
| Copper compounds* | 0 | 5.39E+00 | E |
| Cobalt Compounds | 0 | 2.33E+00 | E |

* New York State HAP

REFERENCES: HAZARDOUS AIR POLLUTION EMISSION FACTORS TAKEN

FROM TABLE 1.3-11 OF AP-42 (SUPPLEMENT F), EXCEPT FOR COPPER WHICH WAS TAKEN FROM TABLE 4-1 OF "ESTIMATING AIR TOXIC EMISSIONS FROM COAL AND OIL COMBUSTION SOURCES"

NOTES:

HEATING VALUES FOR RESIDUAL AND DISTILLATE FUEL OIL ARE TAKEN FROM AP-42 APPENDIX A. PAGE A-3. 150,000 BTU/GAL FOR RESIDUAL OIL AND 140,000 BTU/GAL FOR DISTILLATE OIL

WHEN HAP EMISSION FACTORS WERE PRESENTED AS A RANGE, THE FACTOR WHICH RESULTED IN THE HIGHEST HAP EMISSION WAS USED IN THE CALCULATION

BOILERS/HEATERS

GENERAL INFORMATION

Installation Seneca Army Depot

SCC..... 1-03-005-01 Unit ID #..... 1 active unit

Location..... Bldg 2073 Permit #..... _____

POC..... George Shadman Inventoried by..... T. Sletten

Phone..... (607) 869-1470 Inventory Date..... June 6-10, 1994

SOURCE INFORMATION

Manufacturer..... _____ Fuel Type..... #2 Fuel Oil

Date Installed..... _____ Annual Fuel Use..... _____ (units)

Rated Capacity..... 1,000,000 Btu/hr Operating Schedule
(units) Hours/day..... _____

Max Heat Input..... _____ Days/week..... _____
(units)

| MONTHLY FUEL USE | | | | | | | | | | | | |
|-----------------------|-------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 19-- | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC |
| | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ |
| Indicate Units: _____ | Total Annual Use: _____ | | | | | | | | | | | |

FIRING CONFIGURATION

Tangentially Fired..... _____

Horizontally Fired..... _____

Vertically Fired..... _____

Pulverized Coal Fired
Dry Bottom..... _____

Wet Bottom..... _____

Cyclone Furnace..... _____

Spreader Stoker
Uncontrolled..... _____

Multiple Cyclone
w/flyash reinjection..... _____

wo/flyash reinjection..... _____

Overfeed Stoker
Uncontrolled..... _____

Underfired Stoker
Uncontrolled..... _____

Multiple Cyclone..... _____

Handfired Units..... _____

Wet/Dry Bottom?..... _____

Other.. _____

POLLUTION CONTROL EQUIPMENT

(enter control efficiency)

ESP..... _____

Baghouse..... _____

Wet Scrubber..... _____

Dry Scrubber..... _____

Spray Dryer..... _____

Cyclone..... _____

Other.. _____

None?..... _____

FUEL ANALYSIS

Sulfur Content (S)..... _____ %

Ash Content..... _____ %

Nitrogen Content (N)..... _____ %

Lead Content (Pb)..... _____ %

Reference.. _____

BOILERS/HEATERS

GENERAL INFORMATION

Installation Seneca Army Depot

SCC..... N/A Unit ID #..... 1 active unit

Location..... Bldg 2086 Permit #.....

POC..... George Shadman Inventoried by..... T. Sletten

Phone..... (607) 869-1470 Inventory Date..... June 6-10, 1994

SOURCE INFORMATION

Manufacturer..... Fuel Type..... #2 Fuel Oil

Date Installed..... Annual Fuel Use..... (units)

Rated Capacity..... 80,000 Btu/hr Operating Schedule
(units) Hours/day.....

Max Heat Input..... Days/week.....
(units)

MONTHLY FUEL USE

19-- JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC

Indicate Units: _____ Total Annual Use: _____

FIRING CONFIGURATION

Tangentially Fired.....

Horizontally Fired.....

Vertically Fired.....

Pulverized Coal Fired

 Dry Bottom.....

 Wet Bottom.....

Cyclone Furnace.....

Spreader Stoker

 Uncontrolled.....

 Multiple Cyclone

 w/flyash reinjection.....

 wo/flyash reinjection.....

Overfeed Stoker

 Uncontrolled.....

Underfired Stoker

 Uncontrolled.....

 Multiple Cyclone.....

Handfired Units.....

Wet/Dry Bottom?.....

Other.._____

POLLUTION CONTROL EQUIPMENT

(enter control efficiency)

ESP.....

Baghouse.....

Wet Scrubber.....

Dry Scrubber.....

Spray Dryer.....

Cyclone.....

Other.._____

None?.....

FUEL ANALYSIS

Sulfur Content (S)..... %

Ash Content..... %

Nitrogen Content (N)..... %

Lead Content (Pb)..... %

Reference.._____

BOILERS/HEATERS

GENERAL INFORMATION

Installation Seneca Army Depot

SCC..... N/A Unit ID #..... 1 active unit

Location..... Bldg 2104 Permit #..... _____

POC..... George Shadman Inventoried by..... T. Sletten

Phone..... (607) 869-1470 Inventory Date..... June 6-10, 1994

SOURCE INFORMATION

Manufacturer..... _____ Fuel Type..... #2 Fuel Oil

Date Installed..... _____ Annual Fuel Use..... _____ (units)

Rated Capacity..... 150,000 Btu/hr Operating Schedule
(units) Hours/day..... _____

Max Heat Input..... _____ Days/week..... _____
(units)

MONTHLY FUEL USE

19-- JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC

Indicate Units: _____

Total Annual Use: _____

FIRING CONFIGURATION

Tangentially Fired..... _____

Horizontally Fired..... _____

Vertically Fired..... _____

Pulverized Coal Fired
Dry Bottom..... _____

Wet Bottom..... _____

Cyclone Furnace..... _____

Spreader Stoker
Uncontrolled..... _____

Multiple Cyclone
w/flyash reinjection..... _____

wo/flyash reinjection..... _____

Overfeed Stoker
Uncontrolled..... _____

Underfired Stoker
Uncontrolled..... _____

Multiple Cyclone..... _____

Handfired Units..... _____

Wet/Dry Bottom?..... _____

Other.. _____

POLLUTION CONTROL EQUIPMENT

(enter control efficiency)

ESP..... _____

Baghouse..... _____

Wet Scrubber..... _____

Dry Scrubber..... _____

Spray Dryer..... _____

Cyclone..... _____

Other.. _____

None?..... _____

FUEL ANALYSIS

Sulfur Content (S)..... _____ %

Ash Content..... _____ %

Nitrogen Content (N)..... _____ %

Lead Content (Pb)..... _____ %

Reference.. _____

BOILERS/HEATERS

GENERAL INFORMATION

Installation Seneca Army Depot

SCC..... N/A Unit ID #..... 1 active unit

Location..... Bldg 2113 Permit #.....

POC..... George Shadman Inventoried by..... T. Sletten

Phone..... (607) 869-1470 Inventory Date..... June 6-10, 1994

SOURCE INFORMATION

Manufacturer..... Fuel Type..... #2 Fuel Oil

Date Installed..... Annual Fuel Use..... (units)

Rated Capacity..... 80,000 Btu/hr Operating Schedule (units)
(units) Hours/day.....

Max Heat Input..... Days/week.....
(units)

MONTHLY FUEL USE

19-- JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC

Indicate Units: _____ Total Annual Use: _____

FIRING CONFIGURATION

Tangentially Fired.....

Horizontally Fired.....

Vertically Fired.....

Pulverized Coal Fired

 Dry Bottom.....

 Wet Bottom.....

Cyclone Furnace.....

Spreader Stoker

 Uncontrolled.....

 Multiple Cyclone

 w/flyash reinjection.....

 wo/flyash reinjection.....

Overfeed Stoker

 Uncontrolled.....

Underfired Stoker

 Uncontrolled.....

 Multiple Cyclone.....

Handfired Units.....

Wet/Dry Bottom?.....

Other..

POLLUTION CONTROL EQUIPMENT

(enter control efficiency)

ESP.....

Baghouse.....

Wet Scrubber.....

Dry Scrubber.....

Spray Dryer.....

Cyclone.....

Other..

None?.....

FUEL ANALYSIS

Sulfur Content (S)..... %

Ash Content..... %

Nitrogen Content (N)..... %

Lead Content (Pb)..... %

Reference..

BOILERS/HEATERS

Page ___ of ___

GENERAL INFORMATION

Installation Seneca Army Depot

SCC..... N/A Unit ID #..... 1 active unit

Location..... Bldg 2301 Permit #..... _____

POC..... George Shadman Inventoried by..... T. Sletten

Phone..... (607) 869-1470 Inventory Date..... June 6-10, 1994

SOURCE INFORMATION

Manufacturer..... _____ Fuel Type..... #2 Fuel Oil

Date Installed..... _____ Annual Fuel Use..... _____
(units)

Rated Capacity..... 250,000 Btu/hr Operating Schedule
(units) Hours/day..... _____

Max Heat Input..... _____ Days/week..... _____
(units)

MONTHLY FUEL USE

| 19-- | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ |

Indicate Units: _____ Total Annual Use: _____

FIRING CONFIGURATION

Tangentially Fired..... _____

Horizontally Fired..... _____

Vertically Fired..... _____

Pulverized Coal Fired
Dry Bottom..... _____

Wet Bottom..... _____

Cyclone Furnace..... _____

Spreader Stoker
Uncontrolled..... _____

Multiple Cyclone
w/flyash reinjection..... _____

wo/flyash reinjection..... _____

Overfeed Stoker
Uncontrolled..... _____

Underfired Stoker
Uncontrolled..... _____

Multiple Cyclone..... _____

Handfired Units..... _____

Wet/Dry Bottom?..... _____

Other.. _____

POLLUTION CONTROL EQUIPMENT

(enter control efficiency)

ESP..... _____

Baghouse..... _____

Wet Scrubber..... _____

Dry Scrubber..... _____

Spray Dryer..... _____

Cyclone..... _____

Other.. _____

None?..... _____

FUEL ANALYSIS

Sulfur Content (S)..... _____ %

Ash Content..... _____ %

Nitrogen Content (N)..... _____ %

Lead Content (Pb)..... _____ %

Reference.. _____

BOILERS/HEATERS

GENERAL INFORMATION

Installation Seneca Army Depot
SCC..... 1-03-005-01
Unit ID #..... 1 active unit
Location..... Bldg 2305
Permit #.....
POC..... George Shadman
Inventoried by..... T. Sletten
Phone..... (607) 869-1470
Inventory Date..... June 6-10, 1994

SOURCE INFORMATION

Manufacturer.....
Fuel Type..... #2 Fuel Oil
Date Installed.....
Annual Fuel Use..... (units)
Rated Capacity..... 500,000 Btu/hr (units)
Operating Schedule
Hours/day.....
Days/week.....
Max Heat Input..... (units)

Table with 12 columns for months (JAN-DEC) and rows for monthly fuel use and total annual use.

FIRING CONFIGURATION

Tangentially Fired.....
Horizontally Fired.....
Vertically Fired.....
Pulverized Coal Fired
Dry Bottom.....
Wet Bottom.....
Cyclone Furnace.....
Spreader Stoker
Uncontrolled.....
Multiple Cyclone
w/flyash reinjection.....
wo/flyash reinjection.....
Overfeed Stoker
Uncontrolled.....
Underfired Stoker
Uncontrolled.....
Multiple Cyclone.....
Handfired Units.....
Wet/Dry Bottom?.....
Other..

POLLUTION CONTROL EQUIPMENT

(enter control efficiency)
ESP.....
Baghouse.....
Wet Scrubber.....
Dry Scrubber.....
Spray Dryer.....
Cyclone.....
Other..
None?.....

FUEL ANALYSIS

Sulfur Content (S)..... %
Ash Content..... %
Nitrogen Content (N)..... %
Lead Content (Pb)..... %
Reference..

BOILERS/HEATERS

GENERAL INFORMATION

Installation Seneca Army Depot

SCC..... N/A Unit ID #..... 1 active unit

Location..... Bldg 2306 Permit #..... _____

POC..... George Shadman Inventoried by..... T. Sletten

Phone..... (607) 869-1470 Inventory Date..... June 6-10, 1994

SOURCE INFORMATION

Manufacturer..... _____ Fuel Type..... #2 Fuel Oil

Date Installed..... _____ Annual Fuel Use..... _____ (units)

Rated Capacity..... 350,000 Btu/hr Operating Schedule (units)
 _____ (units) Hours/day..... _____

Max Heat Input..... _____ Days/week..... _____
 _____ (units)

MONTHLY FUEL USE

19-- JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC

Indicate Units: _____

Total Annual Use: _____

FIRING CONFIGURATION

Tangentially Fired..... _____

Horizontally Fired..... _____

Vertically Fired..... _____

Pulverized Coal Fired

 Dry Bottom..... _____

 Wet Bottom..... _____

Cyclone Furnace..... _____

Spreader Stoker

 Uncontrolled..... _____

 Multiple Cyclone

 w/flyash reinjection..... _____

 wo/flyash reinjection..... _____

Overfeed Stoker

 Uncontrolled..... _____

Underfired Stoker

 Uncontrolled..... _____

 Multiple Cyclone..... _____

Handfired Units..... _____

Wet/Dry Bottom?..... _____

Other.. _____

POLLUTION CONTROL EQUIPMENT

(enter control efficiency)

ESP..... _____

Baghouse..... _____

Wet Scrubber..... _____

Dry Scrubber..... _____

Spray Dryer..... _____

Cyclone..... _____

Other.. _____

None?..... _____

FUEL ANALYSIS

Sulfur Content (S)..... _____ %

Ash Content..... _____ %

Nitrogen Content (N)..... _____ %

Lead Content (Pb)..... _____ %

Reference.. _____

BOILERS/HEATERS

GENERAL INFORMATION

Installation Seneca Army Depot
SCC..... N/A
Location..... Bldg 2410
POC..... George Shadman
Phone..... (607) 869-1470
Unit ID #..... 1 active unit
Permit #.....
Inventoried by..... T. Sletten
Inventory Date..... June 6-10, 1994

SOURCE INFORMATION

Manufacturer.....
Date Installed.....
Rated Capacity..... 350,000 Btu/hr (units)
Max Heat Input..... (units)
Fuel Type..... #2 Fuel Oil
Annual Fuel Use..... (units)
Operating Schedule
Hours/day.....
Days/week.....

MONTHLY FUEL USE

19-- JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC

Indicate Units: _____

Total Annual Use: _____

FIRING CONFIGURATION

Tangentially Fired.....
Horizontally Fired.....
Vertically Fired.....
Pulverized Coal Fired
Dry Bottom.....
Wet Bottom.....
Cyclone Furnace.....
Spreader Stoker
Uncontrolled.....
Multiple Cyclone
w/flyash reinjection.....
wo/flyash reinjection.....
Overfeed Stoker
Uncontrolled.....
Underfired Stoker
Uncontrolled.....
Multiple Cyclone.....
Handfired Units.....
Wet/Dry Bottom?.....

POLLUTION CONTROL EQUIPMENT

(enter control efficiency)

ESP.....
Baghouse.....
Wet Scrubber.....
Dry Scrubber.....
Spray Dryer.....
Cyclone.....
Other..
None?.....

FUEL ANALYSIS

Sulfur Content (S)..... %
Ash Content..... %
Nitrogen Content (N)..... %
Lead Content (Pb)..... %
Reference..

Other..

BOILERS/HEATERS

GENERAL INFORMATION

Installation Seneca Army Depot

SCC..... N/A Unit ID #..... 1 active unit

Location..... Bldg 2411 Permit #..... _____

POC..... George Shadman Inventoried by..... T. Sletten

Phone..... (607) 869-1470 Inventory Date..... June 6-10, 1994

SOURCE INFORMATION

Manufacturer..... _____ Fuel Type..... #2 Fuel Oil

Date Installed..... _____ Annual Fuel Use..... _____ (units)

Rated Capacity..... 150,000 Btu/hr Operating Schedule _____ (units)
(units)

Max Heat Input..... _____ Hours/day..... _____
(units) Days/week..... _____

MONTHLY FUEL USE

19-- JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC

Indicate Units: _____

Total Annual Use: _____

FIRING CONFIGURATION

Tangentially Fired..... _____

Horizontally Fired..... _____

Vertically Fired..... _____

Pulverized Coal Fired

 Dry Bottom..... _____

 Wet Bottom..... _____

Cyclone Furnace..... _____

Spreader Stoker

 Uncontrolled..... _____

 Multiple Cyclone

 w/flyash reinjection..... _____

 wo/flyash reinjection..... _____

Overfeed Stoker

 Uncontrolled..... _____

Underfired Stoker

 Uncontrolled..... _____

 Multiple Cyclone..... _____

Handfired Units..... _____

Wet/Dry Bottom?..... _____

Other.. _____

POLLUTION CONTROL EQUIPMENT

(enter control efficiency)

ESP..... _____

Baghouse..... _____

Wet Scrubber..... _____

Dry Scrubber..... _____

Spray Dryer..... _____

Cyclone..... _____

Other.. _____

None?..... _____

FUEL ANALYSIS

Sulfur Content (S)..... _____ %

Ash Content..... _____ %

Nitrogen Content (N)..... _____ %

Lead Content (Pb)..... _____ %

Reference.. _____

BOILERS/HEATERS

GENERAL INFORMATION

Installation Seneca Army Depot
SCC..... N/A
Location..... Bldg 2485
POC..... George Shadman
Phone..... (607) 869-1470
Unit ID #..... 1 active unit
Permit #.....
Inventoried by..... T. Sletten
Inventory Date..... June 6-10, 1994

SOURCE INFORMATION

Manufacturer.....
Date Installed.....
Rated Capacity..... 175,000 Btu/hr
Max Heat Input.....
Fuel Type..... #2 Fuel Oil
Annual Fuel Use.....
Operating Schedule
Hours/day.....
Days/week.....

MONTHLY FUEL USE

19-- JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC
Indicate Units:
Total Annual Use:

FIRING CONFIGURATION

Tangentially Fired.....
Horizontally Fired.....
Vertically Fired.....
Pulverized Coal Fired
Dry Bottom.....
Wet Bottom.....
Cyclone Furnace.....
Spreader Stoker
Uncontrolled.....
Multiple Cyclone
w/flyash reinjection.....
wo/flyash reinjection.....
Overfeed Stoker
Uncontrolled.....
Underfired Stoker
Uncontrolled.....
Multiple Cyclone.....
Handfired Units.....
Wet/Dry Bottom?.....

POLLUTION CONTROL EQUIPMENT

(enter control efficiency)

ESP.....
Baghouse.....
Wet Scrubber.....
Dry Scrubber.....
Spray Dryer.....
Cyclone.....
Other..
None?.....

FUEL ANALYSIS

Sulfur Content (S)..... %
Ash Content..... %
Nitrogen Content (N)..... %
Lead Content (Pb)..... %
Reference..

Other..

BOILERS/HEATERS

GENERAL INFORMATION

Installation Seneca Army Depot

SCC..... N/A Unit ID #..... 1 active unit

Location..... Loran C - Coast Guard Permit #..... _____

POC..... George Shadman Inventoried by..... T. Sletten

Phone..... (607) 869-1470 Inventory Date..... June 6-10, 1994

SOURCE INFORMATION

Manufacturer..... _____ Fuel Type..... #2 Fuel Oil

Date Installed..... _____ Annual Fuel Use..... _____ (units)

Rated Capacity..... 100,000 Btu/hr Operating Schedule _____ (units)
(units)

Max Heat Input..... _____ Hours/day..... _____
(units) Days/week..... _____

MONTHLY FUEL USE

19-- JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC

Indicate Units: _____ Total Annual Use: _____

FIRING CONFIGURATION

Tangentially Fired..... _____

Horizontally Fired..... _____

Vertically Fired..... _____

Pulverized Coal Fired

 Dry Bottom..... _____

 Wet Bottom..... _____

Cyclone Furnace..... _____

Spreader Stoker

 Uncontrolled..... _____

 Multiple Cyclone

 w/flyash reinjection..... _____

 wo/flyash reinjection..... _____

Overfeed Stoker

 Uncontrolled..... _____

Underfired Stoker

 Uncontrolled..... _____

 Multiple Cyclone..... _____

Handfired Units..... _____

Wet/Dry Bottom?..... _____

Other.. _____

POLLUTION CONTROL EQUIPMENT

(enter control efficiency)

ESP..... _____

Baghouse..... _____

Wet Scrubber..... _____

Dry Scrubber..... _____

Spray Dryer..... _____

Cyclone..... _____

Other.. _____

None?..... _____

FUEL ANALYSIS

Sulfur Content (S)..... _____ %

Ash Content..... _____ %

Nitrogen Content (N)..... _____ %

Lead Content (Pb)..... _____ %

Reference.. _____

BOILERS/HEATERS

GENERAL INFORMATION

Installation Seneca Army Depot
SCC..... N/A
Unit ID #..... 4 of 17 active units
Location..... Family Housing - Lake Housing
Permit #.....
POC..... George Shadman
Inventoried by..... T. Sletten
Phone..... (607) 869-1470
Inventory Date..... June 6-10, 1994

SOURCE INFORMATION

Manufacturer.....
Fuel Type..... #2 Fuel Oil
Date Installed.....
Annual Fuel Use..... (units)
Rated Capacity..... 80,000 Btu/hr (units)
Operating Schedule
Hours/day.....
Max Heat Input..... (units)
Days/week.....

MONTHLY FUEL USE

19-- JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC
Indicate Units:
Total Annual Use:

FIRING CONFIGURATION

Tangentially Fired.....
Horizontally Fired.....
Vertically Fired.....
Pulverized Coal Fired
Dry Bottom.....
Wet Bottom.....
Cyclone Furnace.....
Spreader Stoker
Uncontrolled.....
Multiple Cyclone
w/flyash reinjection.....
wo/flyash reinjection.....
Overfeed Stoker
Uncontrolled.....
Underfired Stoker
Uncontrolled.....
Multiple Cyclone.....
Handfired Units.....
Wet/Dry Bottom?.....
Other..

POLLUTION CONTROL EQUIPMENT

(enter control efficiency)

ESP.....
Baghouse.....
Wet Scrubber.....
Dry Scrubber.....
Spray Dryer.....
Cyclone.....
Other..
None?.....

FUEL ANALYSIS

Sulfur Content (S)..... %
Ash Content..... %
Nitrogen Content (N)..... %
Lead Content (Pb)..... %
Reference..

BOILERS/HEATERS

GENERAL INFORMATION

Installation Seneca Army Depot

SCC..... N/A Unit ID #..... 31 active units

Location..... Family Housing - New Lake Housing Permit #..... _____

POC..... George Shadman Inventoried by..... T. Sletten

Phone..... (607) 869-1470 Inventory Date..... June 6-10, 1994

SOURCE INFORMATION

Manufacturer..... _____ Fuel Type..... #2 Fuel Oil

Date Installed..... _____ Annual Fuel Use..... _____ (units)

Rated Capacity..... 90,000 Btu/hr Operating Schedule _____ (units)
(units) Hours/day..... _____

Max Heat Input..... _____ Days/week..... _____
(units)

MONTHLY FUEL USE

19-- JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC

Indicate Units: _____ Total Annual Use: _____

FIRING CONFIGURATION

Tangentially Fired..... _____

Horizontally Fired..... _____

Vertically Fired..... _____

Pulverized Coal Fired

 Dry Bottom..... _____

 Wet Bottom..... _____

Cyclone Furnace..... _____

Spreader Stoker

 Uncontrolled..... _____

 Multiple Cyclone

 w/flyash reinjection..... _____

 wo/flyash reinjection..... _____

Overfeed Stoker

 Uncontrolled..... _____

Underfired Stoker

 Uncontrolled..... _____

 Multiple Cyclone..... _____

Handfired Units..... _____

Wet/Dry Bottom?..... _____

Other.. _____

POLLUTION CONTROL EQUIPMENT

(enter control efficiency)

ESP..... _____

Baghouse..... _____

Wet Scrubber..... _____

Dry Scrubber..... _____

Spray Dryer..... _____

Cyclone..... _____

Other.. _____

None?..... _____

FUEL ANALYSIS

Sulfur Content (S)..... _____ %

Ash Content..... _____ %

Nitrogen Content (N)..... _____ %

Lead Content (Pb)..... _____ %

Reference.. _____

BOILERS/HEATERS

GENERAL INFORMATION

Installation Seneca Army Depot

SCC..... N/A Unit ID #..... 47 of 69 active units

Location..... Family Housing - Eliot Acres Permit #..... _____

POC..... George Shadman Inventoried by..... T. Sletten

Phone..... (607) 869-1470 Inventory Date..... June 6-10, 1994

SOURCE INFORMATION

Manufacturer..... _____ Fuel Type..... #2 Fuel Oil

Date Installed..... _____ Annual Fuel Use..... _____ (units)

Rated Capacity..... 90,000 Btu/hr Operating Schedule (units)
 _____ (units) Hours/day..... _____

Max Heat Input..... _____ Days/week..... _____
 _____ (units)

MONTHLY FUEL USE

19-- JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC

Indicate Units: _____ Total Annual Use: _____

FIRING CONFIGURATION

Tangentially Fired..... _____

Horizontally Fired..... _____

Vertically Fired..... _____

Pulverized Coal Fired

 Dry Bottom..... _____

 Wet Bottom..... _____

Cyclone Furnace..... _____

Spreader Stoker

 Uncontrolled..... _____

 Multiple Cyclone

 w/flyash reinjection..... _____

 wo/flyash reinjection..... _____

Overfeed Stoker

 Uncontrolled..... _____

Underfired Stoker

 Uncontrolled..... _____

 Multiple Cyclone..... _____

Handfired Units..... _____

Wet/Dry Bottom?..... _____

Other.. _____

POLLUTION CONTROL EQUIPMENT

(enter control efficiency)

ESP..... _____

Baghouse..... _____

Wet Scrubber..... _____

Dry Scrubber..... _____

Spray Dryer..... _____

Cyclone..... _____

Other.. _____

None?..... _____

FUEL ANALYSIS

Sulfur Content (S)..... _____ %

Ash Content..... _____ %

Nitrogen Content (N)..... _____ %

Lead Content (Pb)..... _____ %

Reference.. _____

BOILERS/HEATERS

GENERAL INFORMATION

Installation Seneca Army Depot

SCC..... N/A Unit ID #..... 21 active units

Location..... Trailer Camp Permit #..... _____

POC..... George Shadman Inventoried by..... T. Sletten

Phone..... (607) 869-1470 Inventory Date..... June 6-10, 1994

SOURCE INFORMATION

Manufacturer..... _____ Fuel Type..... Propane

Date Installed..... _____ Annual Fuel Use..... 30,130 gal
(units)

Rated Capacity..... 75,000 Btu/hr Operating Schedule
(units) Hours/day..... _____

Max Heat Input..... _____ Days/week..... _____
(units)

MONTHLY FUEL USE

| 1993 | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC |
|------|--------------|--------------|--------------|--------------|--------------|------------|------------|------------|----------|--------------|--------------|--------------|
| | <u>3,893</u> | <u>7,036</u> | <u>5,524</u> | <u>2,625</u> | <u>2,093</u> | <u>616</u> | <u>176</u> | <u>341</u> | <u>0</u> | <u>2,441</u> | <u>3,547</u> | <u>1,838</u> |

Indicate Units: gal

Total Annual Use: 30,130

FIRING CONFIGURATION

Tangentially Fired..... _____

Horizontally Fired..... _____

Vertically Fired..... _____

Pulverized Coal Fired
Dry Bottom..... _____

Wet Bottom..... _____

Cyclone Furnace..... _____

Spreader Stoker
Uncontrolled..... _____

Multiple Cyclone
w/flyash reinjection..... _____

wo/flyash reinjection..... _____

Overfeed Stoker
Uncontrolled..... _____

Underfired Stoker
Uncontrolled..... _____

Multiple Cyclone..... _____

Handfired Units..... _____

Wet/Dry Bottom?..... _____

Other.. _____

POLLUTION CONTROL EQUIPMENT

(enter control efficiency)

ESP..... _____

Baghouse..... _____

Wet Scrubber..... _____

Dry Scrubber..... _____

Spray Dryer..... _____

Cyclone..... _____

Other.. _____

None?..... _____

FUEL ANALYSIS

Sulfur Content (S)..... _____ %

Ash Content..... _____ %

Nitrogen Content (N)..... _____ %

Lead Content (Pb)..... _____ %

Reference.. _____

EMISSION RATE DETERMINATION METHOD

Stack Test Data _____ Emission Factor X Material Balance _____

Similar Unit Data _____ Other _____

Reference: AP-42 VOLUME 1, STATIONARY SOURCES

OZONE PRECURSOR EMISSIONS

HAZARDOUS AIR POLLUTANTS

| Typical Ozone Season Emissions | HAP | CAS CODE | LB/YR |
|--|-------|----------|-------|
| VOC Emissions <u> 0.0061576087 </u> lb/day | _____ | _____ | _____ |
| NOx Emissions <u> 0.1724130435 </u> lb/day | _____ | _____ | _____ |
| CO Emissions <u> 0.0233989130 </u> lb/day | _____ | _____ | _____ |

CRITERIA POLLUTANT EMISSIONS

| | | | |
|--|-------|-------|-------|
| VOC Emissions <u> 0.0075325000 </u> ton/yr | _____ | _____ | _____ |
| NOx Emissions <u> 0.2109100000 </u> ton/yr | _____ | _____ | _____ |
| CO Emissions <u> 0.0286235000 </u> ton/yr | _____ | _____ | _____ |
| SO2 Emissions <u> 0.0225975000 </u> ton/yr | _____ | _____ | _____ |
| PM10 Emissions <u> - </u> ton/yr | _____ | _____ | _____ |
| Total Particulate <u> 0.0060260000 </u> ton/yr | _____ | _____ | _____ |

(use additional sheets if necessary)

STACK INFORMATION

| | |
|-----------------------------------|------------------------------------|
| Stack (release) Height _____ feet | Stack Gas Velocity _____ ft/sec |
| Stack Diameter _____ inch | Stack Gas Flow Rate _____ ascf/min |
| | Stack Gas Temperature _____ oF |

Other sources that share this stack? _____
 Stack Sampling Report Available? (Y/ N, results?) _____

COMMENTS

EMISSIONS FOR LIQUIFIED PETROLEUM GAS COMBUSTION

Federal and New York State Regulations

Facility: Seneca Army Depot
Location: Trailer Camp
ID Number: 21 active unitsDate: 8/25/94
Initials: DCP
SCC: N/AINPUT DATA

| | | | |
|-------------------------|--------|----------|---|
| SIZE OF BOILER | 0.075 | MMBTU/hr | |
| TOTAL FUEL USED | 30,130 | gal/year | |
| OZONE SEASON FUEL USAGE | 1,133 | gal/year | (Enter N/A if not known, and zero if no ozone season use) |

ENTER ACTUAL SULFUR CONTENT, IF KNOWN, OR ELSE ENTER "X"**SULFUR CONTENT** **x** **Default Sulfur (15 Grains/100 cu ft)**FUEL TYPE propane (BUTANE/PROPANE)
(Note if fuel type is not Butane or Propane further research is needed)SOLUTION

| | |
|--|---------------|
| PARTICULATE EMISSIONS (TSP) | 12.05 LBS/YR |
| SULFUR OXIDE EMISSIONS (as SO ₂) | 45.20 LBS/YR |
| CARBON MONOXIDE EMISSIONS | 57.25 LBS/YR |
| VOC EMISSIONS | 15.07 LBS/YR |
| NITROGEN OXIDE EMISSIONS (as NO ₂) | 421.82 LBS/YR |

REFERENCES: Criteria Pollutant Emission Factors are from AP-42, Vol 1, Section 1.5, Table 1.5-1, dated 10/92.

SULFUR DEFAULT OF 15 GRAINS/100 CUBIC FT IS AN ASTM SPECIFICATION FROM AEHA

VOC emissions are reported as Total Organic Matter (TOM) in AP-42. TOM includes Methane and Non-methane

NOTES: Industrial Furnace > 10 MMBTU/hr
Commercial & Domestic Boiler < 10 MMBTU/hr

* If ozone season usage is not known, it is assumed to be 25% of the total annual usage

BOILERS/HEATERS

GENERAL INFORMATION

Installation Seneca Army Depot

SCC..... N/A Unit ID #..... 107 Residential Boilers
Active Nov - Dec 1993

Location..... Various Permit #..... _____

POC..... George Shadman Inventoried by..... T. Sletten

Phone..... (607) 869-1470 Inventory Date..... June 6-10, 1994

SOURCE INFORMATION

Manufacturer..... _____ Fuel Type..... No. 2 Fuel Oil

Date Installed..... _____ Annual Fuel Use..... 19,287 gal (Nov-Dec)
 (units)

Rated Capacity..... <500,000 Btu/hr Operating Schedule
 (units) Hours/day..... _____

Max Heat Input..... _____ Days/week..... _____
 (units)

| MONTHLY FUEL USE | | | | | | | | | | | | |
|-----------------------|-------|-------|-------|-------|-------|-------------------------|-------|-------|-------|-------|-------|-------|
| 19__ | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC |
| _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ |
| Indicate Units: _____ | | | | | | Total Annual Use: _____ | | | | | | |

FIRING CONFIGURATION

Tangentially Fired..... _____

Horizontally Fired..... _____

Vertically Fired..... _____

Pulverized Coal Fired
 Dry Bottom..... _____

Wet Bottom..... _____

Cyclone Furnace..... _____

Spreader Stoker
 Uncontrolled..... _____

Multiple Cyclone
 w/flyash reinjection..... _____

wo/flyash reinjection..... _____

Overfeed Stoker
 Uncontrolled..... _____

Underfired Stoker
 Uncontrolled..... _____

Multiple Cyclone..... _____

Handfired Units..... _____

Wet/Dry Bottom?..... _____

Other.. _____

POLLUTION CONTROL EQUIPMENT

(enter control efficiency)

ESP..... _____

Baghouse..... _____

Wet Scrubber..... _____

Dry Scrubber..... _____

Spray Dryer..... _____

Cyclone..... _____

Other.. _____

None?..... _____

FUEL ANALYSIS

Sulfur Content (S)..... _____ %

Ash Content..... _____ %

Nitrogen Content (N)..... _____ %

Lead Content (Pb)..... _____ %

Reference.. _____

EMISSION RATE DETERMINATION METHOD

Stack Test Data _____ Emission Factor X Material Balance _____

Similar Unit Data _____ Other _____

Reference: AP-42 VOLUME 1, STATIONARY SOURCES AND L&E SERIES, TABLE 4-1

OZONE PRECURSOR EMISSIONS

Typical Ozone Season Emissions

VOC Emissions 0.0373685625 lb/day

NOx Emissions 0.9433858696 lb/day

CO Emissions 0.2620516304 lb/day

CRITERIA POLLUTANT EMISSIONS

VOC Emissions 0.0068758155 ton/yr

NOx Emissions 0.1735830000 ton/yr

CO Emissions 0.0482175000 ton/yr

SO2 Emissions 0.6846885000 ton/yr

PM10 Emissions 0.0132598125 ton/yr

Total Particulate 0.0241087500 ton/yr

HAZARDOUS AIR POLLUTANTS

| HAP | CAS CODE | LB/YR |
|---------------------------|----------|--------------|
| NONE | | |
| Antimony Compounds | 0 | N/A |
| Arsenic Compounds | 0 | 0.0113407560 |
| Beryllium Compounds | 0 | 0.0067504500 |
| Cadmium Compounds | 0 | 0.0297019800 |
| Chromium Compounds | 0 | 0.1809120600 |
| Lead Compounds | 0 | 0.0240316020 |
| Mercury Compounds | 0 | 0.0081005400 |
| Manganese Compounds | 0 | 0.0378025200 |
| Nickel Compounds | 0 | 0.4590306000 |
| Polycyclic Organic Matter | 0 | N/A |
| Formaldehyde | 50-00-0 | N/A |
| Selenium Compounds | 0 | N/A |
| Cobalt Compounds | 0 | N/A |
| Copper Compounds* | 0 | 0.7560504000 |

*New York State HAP
(use additional sheets if necessary)

STACK INFORMATION

Stack (release) Height _____ feet Stack Gas Velocity _____ ft/sec

Stack Diameter _____ inch Stack Gas Flow Rate _____ ascf/min

Other sources that share this stack? _____ oF

Stack Sampling report available? (Y/ N, results ?) _____

COMMENTS

EMISSIONS FOR FUEL OIL COMBUSTION

Federal and New York State Regulations

(Use only for FO #2 or FO #6)

| | | | |
|------------|--------------------------------|-----------|----------------|
| Facility: | <u>Seneca Army Depot</u> | Date: | <u>9/14/94</u> |
| Location: | <u>Various</u> | Initials: | <u>MJO</u> |
| ID Number: | <u>107 Residential Boilers</u> | SCC: | <u>N/A</u> |

INPUT DATA

| | | | |
|------------------------------|--------|----------------|--|
| SIZE OF BOILER | 0.49 | MMBTU/hr | |
| TOTAL FUEL USED | 19,287 | gal/year | |
| TOTAL OZONE SEASON FUEL USED | N/A | gal/year | (Enter N/A, if not known and zero, if no ozone season use^) |
| FUEL OIL GRADE | 2 | (#2 or #6 OIL) | |

ENTER ACTUAL SULFUR CONTENT, IF KNOWN, OR ELSE ENTER "X"

| | | |
|-----------------------|------------|------------------------|
| SULFUR CONTENT | 0.5 | ACTUAL % SULFUR |
|-----------------------|------------|------------------------|

| | | |
|----------------------|-------|-----------------------------|
| BOILER FIRING METHOD | OTHER | (TANGENTIAL/VERTICAL/OTHER) |
|----------------------|-------|-----------------------------|

SOLUTION

| | |
|----------------------------------|------------------|
| PARTICULATE EMISSIONS (TSP) | 48.22 lbs/year |
| PARTICULATE EMISSIONS (PM10) | 26.52 lbs/year |
| SULFUR DIOXIDE EMISSIONS | 1369.38 lbs/year |
| CARBON MONOXIDE EMISSIONS | 96.44 lbs/year |
| VOC EMISSIONS (NON METHANE) | 13.75 lbs/year |
| NITROGEN OXIDE EMISSIONS(as NO2) | 347.17 lbs/year |

REFERENCES:

CRITERIA POLLUTANT EMISSION FACTORS WERE OBTAINED
FROM TABLES 1.3-2

NOTES:

N/A: NOT AVAILABLE

X: Default value of sulfur content of fuel. X = 1%, if default fuel oil grade is #2, and X = 4% if fuel oil grades are nos. 4,5 & 6. (AP-42 Appendix A)

DATA QUALITY: A

^: Ozone season usage, if not known, is assumed to be 25% of the total annual usage.

UTILITY BOILERS > 100 MMBTU/HR

INDUSTRIAL BOILER: 10-100 MMBTU/HR

COMMERCIAL BOILERS: 0.5-<10 MMBTU/HR

RESIDENTIAL FURNACES: <0.5 MMBTU/HR

Distillate Fuel is fuel oil #2, and Residual Fuels are Fuel Oil Nos 4, 5, & 6 (See AP-42)

SPECIATION OF EMISSIONS

| | | |
|---------------------------|-------|--------|
| TOTAL VOC EMISSIONS | 13.75 | Lbs/Yr |
| TOTAL AIR TOXIC EMISSIONS | 1.51 | Lbs/Yr |

INDIVIDUAL AIR TOXIC EMISSIONS

| Chemical Name | CAS # | Emissions (Lbs/Yr) | Profile Data Quality |
|---------------------------|---------|-----------------------|-------------------------|
| Antimony Compounds | 0 | N/A | E |
| Arsenic Compounds | 0 | 1.13E-02 | E |
| Beryllium Compounds | 0 | 6.75E-03 | E |
| Cadmium Compounds | 0 | 2.97E-02 | E |
| Chromium Compounds | 0 | 1.81E-01 | E |
| Lead Compounds | 0 | 2.40E-02 | E |
| Mercury Compounds | 0 | 8.10E-03 | E |
| Manganese Compounds | 0 | 3.78E-02 | E |
| Nickel Compounds | 0 | 4.59E-01 | E |
| Polycyclic Organic Matter | 0 | N/A | E |
| Formaldehyde | 50-00-0 | N/A | E |
| Selenium Compounds | 0 | N/A | E |
| Copper compounds* | 0 | 7.56E-01 | E |
| Cobalt Compounds | 0 | N/A | E |

* New York State HAP

REFERENCES: HAZARDOUS AIR POLLUTION EMISSION FACTORS TAKEN

FROM TABLE 1.3-11 OF AP-42 (SUPPLEMENT F), EXCEPT FOR COPPER WHICH WAS TAKEN FROM TABLE 4-1 OF "ESTIMATING AIR TOXIC EMISSIONS FROM COAL AND OIL COMBUSTION SOURCES"

NOTES:

HEATING VALUES FOR RESIDUAL AND DISTILLATE FUEL OIL ARE TAKEN FROM AP-42 APPENDIX A. PAGE A-3. 150,000 BTU/GAL FOR RESIDUAL OIL AND 140,000 BTU/GAL FOR DISTILLATE OIL

WHEN HAP EMISSION FACTORS WERE PRESENTED AS A RANGE , THE FACTOR WHICH RESULTED IN THE HIGHEST HAP EMISSION WAS USED IN THE CALCULATION

BOILERS/HEATERS

GENERAL INFORMATION

Installation Seneca Army Depot

SCC..... N/A Unit ID #..... 158 Residential Boilers
 Location..... Various Permit #.....
 POC..... George Shadman Inventoried by..... T. Sletten
 Phone..... (607) 869-1470 Inventory Date..... June 6-10, 1994

SOURCE INFORMATION

Manufacturer..... Fuel Type..... No. 2 Fuel Oil

Date Installed..... Annual Fuel Use..... 107,333 gal (Jan-May)
 Rated Capacity..... < 500,000 Btu/hr Operating Schedule
 (units) Hours/day.....
 Max Heat Input..... Days/week.....
 (units)

MONTHLY FUEL USE

19__ JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC

Indicate Units: _____

Total Annual Use: _____

FIRING CONFIGURATION

POLLUTION CONTROL EQUIPMENT

(enter control efficiency)

Tangentially Fired.....
 Horizontally Fired.....
 Vertically Fired.....
 Pulverized Coal Fired
 Dry Bottom.....
 Wet Bottom.....
 Cyclone Furnace.....
 Spreader Stoker
 Uncontrolled.....
 Multiple Cyclone
 w/flyash reinjection.....
 wo/flyash reinjection.....
 Overfeed Stoker
 Uncontrolled.....
 Underfired Stoker
 Uncontrolled.....
 Multiple Cyclone.....
 Handfired Units.....
 Wet/Dry Bottom?.....
 Other..

ESP.....
 Baghouse.....
 Wet Scrubber.....
 Dry Scrubber.....
 Spray Dryer.....
 Cyclone.....
 Other..
 None?.....

FUEL ANALYSIS

Sulfur Content (S)..... %
 Ash Content..... %
 Nitrogen Content (N)..... %
 Lead Content (Pb)..... %
 Reference..

EMISSION RATE DETERMINATION METHOD

Stack Test Data _____ Emission Factor X Material Balance _____

Similar Unit Data _____ Other _____

Reference: AP-42 VOLUME 1, STATIONARY SOURCES AND L&E SERIES, TABLE 4-1

OZONE PRECURSOR EMISSIONS

Typical Ozone Season Emissions

VOC Emissions 0.2079576875 lb/day

NOx Emissions 5.2499836957 lb/day

CO Emissions 1.4583288043 lb/day

HAZARDOUS AIR POLLUTANTS

| HAP | CAS CODE | LB/YR |
|---------------------------|----------|--------------|
| NONE | | |
| Antimony Compounds | 0 | N/A |
| Arsenic Compounds | 0 | 0.0631118040 |
| Beryllium Compounds | 0 | 0.0375665500 |
| Cadmium Compounds | 0 | 0.1652928200 |
| Chromium Compounds | 0 | 1.0067835400 |
| Lead Compounds | 0 | 0.1337369180 |
| Mercury Compounds | 0 | 0.0450798600 |
| Manganese Compounds | 0 | 0.2103726800 |
| Nickel Compounds | 0 | 2.5545254000 |
| Polycyclic Organic Matter | 0 | N/A |
| Formaldehyde | 50-00-0 | N/A |
| Selenium Compounds | 0 | N/A |
| Cobalt Compounds | 0 | N/A |
| Copper Compounds* | 0 | 4.2074536000 |

CRITERIA POLLUTANT EMISSIONS

VOC Emissions 0.0382642145 ton/yr

NOx Emissions 0.9659970000 ton/yr

CO Emissions 0.2683325000 ton/yr

SO2 Emissions 3.8103215000 ton/yr

PM10 Emissions 0.0737914375 ton/yr

Total Particulate 0.1341662500 ton/yr

*New York State HAP
(use additional sheets if necessary)

STACK INFORMATION

Stack (release) Height _____ feet Stack Gas Velocity _____ ft/sec

Stack Diameter _____ inch Stack Gas Flow Rate _____ ascf/min

Stack Gas Temperature _____ oF

Other sources that share this stack? _____

Stack Sampling report available? (Y/ N, results ?) _____

COMMENTS

EMISSIONS FOR FUEL OIL COMBUSTION

Federal and New York State Regulations

(Use only for FO #2 or FO #6)

| | | | |
|------------|--------------------------------|-----------|----------------|
| Facility: | <u>Seneca Army Depot</u> | Date: | <u>9/14/94</u> |
| Location: | <u>Various</u> | Initials: | <u>MJO</u> |
| ID Number: | <u>158 Residential Boilers</u> | SCC: | <u>N/A</u> |

INPUT DATA

| | | | |
|------------------------------|---------|----------------|--|
| SIZE OF BOILER | 0.49 | MMBTU/hr | |
| TOTAL FUEL USED | 107,333 | gal/year | |
| TOTAL OZONE SEASON FUEL USED | N/A | gal/year | (Enter N/A, if not known and zero, if no ozone season use [^]) |
| FUEL OIL GRADE | 2 | (#2 or #6 OIL) | |

ENTER ACTUAL SULFUR CONTENT, IF KNOWN, OR ELSE ENTER "X"

| | | |
|-----------------------|------------|------------------------|
| SULFUR CONTENT | 0.5 | ACTUAL % SULFUR |
|-----------------------|------------|------------------------|

| | | |
|----------------------|-------|-----------------------------|
| BOILER FIRING METHOD | OTHER | (TANGENTIAL/VERTICAL/OTHER) |
|----------------------|-------|-----------------------------|

SOLUTION

| | |
|----------------------------------|------------------|
| PARTICULATE EMISSIONS (TSP) | 268.33 lbs/year |
| PARTICULATE EMISSIONS (PM10) | 147.58 lbs/year |
| SULFUR DIOXIDE EMISSIONS | 7620.64 lbs/year |
| CARBON MONOXIDE EMISSIONS | 536.67 lbs/year |
| VOC EMISSIONS (NON METHANE) | 76.53 lbs/year |
| NITROGEN OXIDE EMISSIONS(as NO2) | 1931.99 lbs/year |

REFERENCES: CRITERIA POLLUTANT EMISSION FACTORS WERE OBTAINED FROM TABLES 1.3-2

NOTES:

N/A: NOT AVAILABLE

X: Default value of sulfur content of fuel. X = 1%, if default fuel oil grade is #2, and X = 4% if fuel oil grades are nos. 4,5 & 6. (AP-42 Appendix A)

DATA QUALITY: A

[^]: Ozone season usage, if not known, is assumed to be 25% of the total annual usage.

UTILITY BOILERS > 100 MMBTU/HR
 INDUSTRIAL BOILER: 10-100 MMBTU/HR
 COMMERCIAL BOILERS: 0.5-<10 MMBTU/HR
 RESIDENTIAL FURNACES: <0.5 MMBTU/HR

stillate Fuel is fuel oil #2, and Residual Fuels are Fuel Oil Nos 4, 5, & 6 (See AP-42)

SPECIATION OF EMISSIONS

| | | |
|---------------------------|-------|--------|
| TOTAL VOC EMISSIONS | 76.53 | Lbs/Yr |
| TOTAL AIR TOXIC EMISSIONS | 8.42 | Lbs/Yr |

INDIVIDUAL AIR TOXIC EMISSIONS

| Chemical Name | CAS # | Emissions (Lbs/Yr) | Profile Data Quality |
|---------------------------|---------|-----------------------|-------------------------|
| Antimony Compounds | 0 | N/A | E |
| Arsenic Compounds | 0 | 6.31E-02 | E |
| Beryllium Compounds | 0 | 3.76E-02 | E |
| Cadmium Compounds | 0 | 1.65E-01 | E |
| Chromium Compounds | 0 | 1.01E+00 | E |
| Lead Compounds | 0 | 1.34E-01 | E |
| Mercury Compounds | 0 | 4.51E-02 | E |
| Manganese Compounds | 0 | 2.10E-01 | E |
| Nickel Compounds | 0 | 2.55E+00 | E |
| Polycyclic Organic Matter | 0 | N/A | E |
| Formaldehyde | 50-00-0 | N/A | E |
| Selenium Compounds | 0 | N/A | E |
| Copper compounds* | 0 | 4.21E+00 | E |
| Cobalt Compounds | 0 | N/A | E |

* New York State HAP

REFERENCES: HAZARDOUS AIR POLLUTION EMISSION FACTORS TAKEN

FROM TABLE 1.3-11 OF AP-42 (SUPPLEMENT F), EXCEPT FOR COPPER WHICH WAS TAKEN FROM TABLE 4-1 OF "ESTIMATING AIR TOXIC EMISSIONS FROM COAL AND OIL COMBUSTION SOURCES"

NOTES:

HEATING VALUES FOR RESIDUAL AND DISTILLATE FUEL OIL ARE TAKEN FROM AP-42 APPENDIX A. PAGE A-3. 150,000 BTU/GAL FOR RESIDUAL OIL AND 140,000 BTU/GAL FOR DISTILLATE OIL

WHEN HAP EMISSION FACTORS WERE PRESENTED AS A RANGE, THE FACTOR WHICH RESULTED IN THE HIGHEST HAP EMISSION WAS USED IN THE CALCULATION

BOILERS/HEATERS

GENERAL INFORMATION

Installation Seneca Army Depot

SCC..... 1-03-005-01 Unit ID #..... 4 Commercial Boilers
 Active Jan 1993 - May 1993

Location..... Various Permit #.....

POC..... George Shadman Inventoried by..... T. Sletten

Phone..... (607) 869-1470 Inventory Date..... June 6-10, 1994

SOURCE INFORMATION

Manufacturer..... Fuel Type..... No. 2 Fuel Oil

Date Installed..... Annual Fuel Use..... 4,877 gal (Nov-Dec 1993)
 (units)

Rated Capacity..... 500,000 - 1,000,000 Btu/hr Operating Schedule
 (units) Hours/day.....
 Max Heat Input..... Days/week.....
 (units)

MONTHLY FUEL USE

19__ JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC

Indicate Units: _____ Total Annual Use: _____

FIRING CONFIGURATION

Tangentially Fired.....

Horizontally Fired.....

Vertically Fired.....

Pulverized Coal Fired
 Dry Bottom.....
 Wet Bottom.....

Cyclone Furnace.....

Spreader Stoker
 Uncontrolled.....
 Multiple Cyclone
 w/flyash reinjection.....
 wo/flyash reinjection.....

Overfeed Stoker
 Uncontrolled.....

Underfired Stoker
 Uncontrolled.....
 Multiple Cyclone.....

Handfired Units.....

Wet/Dry Bottom?.....

Other..

POLLUTION CONTROL EQUIPMENT

(enter control efficiency)

ESP.....

Baghouse.....

Wet Scrubber.....

Dry Scrubber.....

Spray Dryer.....

Cyclone.....

Other..

None?.....

FUEL ANALYSIS

Sulfur Content (S)..... %

Ash Content..... %

Nitrogen Content (N)..... %

Lead Content (Pb)..... %

Reference..

EMISSION RATE DETERMINATION METHOD

Stack Test Data _____ Emission Factor X Material Balance _____
 Similar Unit Data _____ Other _____

Reference: AP-42 VOLUME 1, STATIONARY SOURCES AND L&E SERIES, TABLE 4-1

OZONE PRECURSOR EMISSIONS

Typical Ozone Season Emissions
 VOC Emissions 0.0045059239 lb/day
 NOx Emissions 0.2650543478 lb/day
 CO Emissions 0.0662635870 lb/day

HAZARDOUS AIR POLLUTANTS

| HAP | CAS CODE | LB/YR |
|---------------------------|----------|--------------|
| NONE | | |
| Antimony Compounds | 0 | N/A |
| Arsenic Compounds | 0 | 0.0028676760 |
| Beryllium Compounds | 0 | 0.0017069500 |
| Cadmium Compounds | 0 | 0.0075105800 |
| Chromium Compounds | 0 | 0.0457462600 |
| Lead Compounds | 0 | 0.0060767420 |
| Mercury Compounds | 0 | 0.0020483400 |
| Manganese Compounds | 0 | 0.0095589200 |
| Nickel Compounds | 0 | 0.1160726000 |
| Polycyclic Organic Matter | 0 | 0.0150211600 |
| Formaldehyde | 50-00-0 | 0.2765259000 |
| Selenium Compounds | 0 | N/A |
| Cobalt Compounds | 0 | N/A |
| Copper Compounds* | 0 | 0.1911784000 |

CRITERIA POLLUTANT EMISSIONS

VOC Emissions 0.0008290900 ton/yr
 NOx Emissions 0.0487700000 ton/yr
 CO Emissions 0.0121925000 ton/yr
 SO2 Emissions 0.1731335000 ton/yr
 PM10 Emissions 0.0026823500 ton/yr
 Total Particulate 0.0048770000 ton/yr

*New York State HAP
 (use additional sheets if necessary)

STACK INFORMATION

Stack (release) Height _____ feet Stack Gas Velocity _____ ft/sec
 Stack Diameter _____ inch Stack Gas Flow Rate _____ ascf/min
 Stack Gas Temperature _____ oF

Other sources that share this stack? _____
 Stack Sampling report available? (Y/ N, results ?) _____

COMMENTS

EMISSIONS FOR FUEL OIL COMBUSTION

Federal and New York State Regulations

(Use only for FO #2 or FO #6)

| | | | |
|------------|-----------------------------|-----------|--------------------|
| Facility: | <u>Seneca Army Depot</u> | Date: | <u>8/16/94</u> |
| Location: | <u>Various</u> | Initials: | <u>DCP</u> |
| ID Number: | <u>4 Commercial Boilers</u> | SCC: | <u>1-03-005-01</u> |

INPUT DATA

| | | | |
|------------------------------|-------|----------------|---|
| SIZE OF BOILER | 0.75 | MMBTU/hr | |
| TOTAL FUEL USED | 4,877 | gal/year | |
| TOTAL OZONE SEASON FUEL USED | N/A | gal/year | (Enter N/A, if not known and zero, if no ozone season use^) |
| FUEL OIL GRADE | 2 | (#2 or #6 OIL) | |

ENTER ACTUAL SULFUR CONTENT, IF KNOWN, OR ELSE ENTER "X"

| | | |
|-----------------------|------------|------------------------|
| SULFUR CONTENT | 0.5 | ACTUAL % SULFUR |
|-----------------------|------------|------------------------|

| | | |
|----------------------|-------|-----------------------------|
| BOILER FIRING METHOD | OTHER | (TANGENTIAL/VERTICAL/OTHER) |
|----------------------|-------|-----------------------------|

SOLUTION

| | |
|----------------------------------|-----------------|
| PARTICULATE EMISSIONS (TSP) | 9.75 lbs/year |
| PARTICULATE EMISSIONS (PM10) | 5.36 lbs/year |
| SULFUR DIOXIDE EMISSIONS | 346.27 lbs/year |
| CARBON MONOXIDE EMISSIONS | 24.39 lbs/year |
| VOC EMISSIONS (NON METHANE) | 1.66 lbs/year |
| NITROGEN OXIDE EMISSIONS(as NO2) | 97.54 lbs/year |

REFERENCES:

CRITERIA POLLUTANT EMISSION FACTORS WERE OBTAINED FROM TABLES 1.3-2

NOTES:

N/A: NOT AVAILABLE

X: Default value of sulfur content of fuel. X=1%, if default fuel oil grade is #2, and X=4% if fuel oil grades are nos. 4,5 & 6. (AP-42 Appendix A)

DATA QUALITY: A

^: Ozone season usage, if not known, is assumed to be 25% of the total annual usage.

UTILITY BOILERS>100 MMBTU/HR

INDUSTRIAL BOILER:10-100 MMBTU/HR

COMMERCIAL BOILERS:0.5-<10 MMBTU/HR

RESIDENTIAL FURNACES:<0.5 MMBTU/HR

Distillate Fuel is fuel oil #2, and Residual Fuels are Fuel Oil Nos 4, 5,& 6 (See AP-42)

SPECIATION OF EMISSIONS

| | | |
|---------------------------|------|--------|
| TOTAL VOC EMISSIONS | 1.66 | Lbs/Yr |
| TOTAL AIR TOXIC EMISSIONS | 0.67 | Lbs/Yr |

INDIVIDUAL AIR TOXIC EMISSIONS

| Chemical Name | CAS # | Emissions (Lbs/Yr) | Profile Data Quality |
|---------------------------|---------|-----------------------|-------------------------|
| Antimony Compounds | 0 | N/A | E |
| Arsenic Compounds | 0 | 2.87E-03 | E |
| Beryllium Compounds | 0 | 1.71E-03 | E |
| Cadmium Compounds | 0 | 7.51E-03 | E |
| Chromium Compounds | 0 | 4.57E-02 | E |
| Lead Compounds | 0 | 6.08E-03 | E |
| Mercury Compounds | 0 | 2.05E-03 | E |
| Manganese Compounds | 0 | 9.56E-03 | E |
| Nickel Compounds | 0 | 1.16E-01 | E |
| Polycyclic Organic Matter | 0 | 1.50E-02 | E |
| Formaldehyde | 50-00-0 | 2.77E-01 | E |
| Selenium Compounds | 0 | N/A | E |
| Copper compounds* | 0 | 1.91E-01 | E |
| Cobalt Compounds | 0 | N/A | E |

* New York State HAP

REFERENCES: HAZARDOUS AIR POLLUTION EMISSION FACTORS TAKEN

FROM TABLE 1.3-11 OF AP-42 (SUPPLEMENT F), EXCEPT FOR COPPER WHICH WAS TAKEN FROM TABLE 4-1 OF "ESTIMATING AIR TOXIC EMISSIONS FROM COAL AND OIL COMBUSTION SOURCES"

NOTES:

HEATING VALUES FOR RESIDUAL AND DISTILLATE FUEL OIL ARE TAKEN FROM AP-42 APPENDIX A. PAGE A-3. 150,000 BTU/GAL FOR RESIDUAL OIL AND 140,000 BTU/GAL FOR DISTILLATE OIL

WHEN HAP EMISSION FACTORS WERE PRESENTED AS A RANGE, THE FACTOR WHICH RESULTED IN THE HIGHEST HAP EMISSION WAS USED IN THE CALCULATION

BOILERS/HEATERS

GENERAL INFORMATION

Installation Seneca Army Depot

SCC..... 1-03-005-01 Unit ID #..... 12 Commercial Boilers
 Active Jan 1993 - May 1993

Location..... Various Permit #.....

POC..... George Shadman Inventoried by..... T. Sletten

Phone..... (607) 869-1470 Inventory Date..... June 6-10, 1994

SOURCE INFORMATION

Manufacturer..... Fuel Type..... No. 2 Fuel Oil

Date Installed..... Annual Fuel Use..... 72,267 gal (Jan-May)
 (units)

Rated Capacity..... 500,000 - 2,000,000 Btu/hr Operating Schedule
 (units) Hours/day.....

Max Heat Input..... Days/week.....
 (units)

MONTHLY FUEL USE

19__ JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC

Indicate Units: _____

Total Annual Use: _____

FIRING CONFIGURATION

Tangentially Fired.....

Horizontally Fired.....

Vertically Fired.....

Pulverized Coal Fired
 Dry Bottom.....
 Wet Bottom.....

Cyclone Furnace.....

Spreader Stoker
 Uncontrolled.....
 Multiple Cyclone
 w/flyash reinjection.....
 wo/flyash reinjection.....

Overfeed Stoker
 Uncontrolled.....

Underfired Stoker
 Uncontrolled.....
 Multiple Cyclone.....

Handfired Units.....

Wet/Dry Bottom?.....

Other.._____

POLLUTION CONTROL EQUIPMENT

(enter control efficiency)

ESP.....

Baghouse.....

Wet Scrubber.....

Dry Scrubber.....

Spray Dryer.....

Cyclone.....

Other.._____

None?.....

FUEL ANALYSIS

Sulfur Content (S)..... %

Ash Content..... %

Nitrogen Content (N)..... %

Lead Content (Pb)..... %

Reference.._____

EMISSION RATE DETERMINATION METHOD

Stack Test Data _____ Emission Factor X Material Balance _____

Similar Unit Data _____ Other _____

Reference: AP-42 VOLUME 1, STATIONARY SOURCES AND L&E SERIES, TABLE 4-1

OZONE PRECURSOR EMISSIONS

Typical Ozone Season Emissions

VOC Emissions 0.0667684239 lb/day

NOx Emissions 3.9275543478 lb/day

CO Emissions 0.9818885870 lb/day

CRITERIA POLLUTANT EMISSIONS

VOC Emissions 0.0122853900 ton/yr

NOx Emissions 0.7226700000 ton/yr

CO Emissions 0.1806675000 ton/yr

SO2 Emissions 2.5654785000 ton/yr

PM10 Emissions 0.0397468500 ton/yr

Total Particulate 0.0722670000 ton/yr

HAZARDOUS AIR POLLUTANTS

| HAP | CAS CODE | LB/YR |
|---------------------------|----------|--------------|
| NONE | | |
| Antimony Compounds | 0 | N/A |
| Arsenic Compounds | 0 | 0.0424929960 |
| Beryllium Compounds | 0 | 0.0252934500 |
| Cadmium Compounds | 0 | 0.1112911800 |
| Chromium Compounds | 0 | 0.6778644600 |
| Lead Compounds | 0 | 0.0900446820 |
| Mercury Compounds | 0 | 0.0303521400 |
| Manganese Compounds | 0 | 0.1416433200 |
| Nickel Compounds | 0 | 1.7199546000 |
| Polycyclic Organic Matter | 0 | 0.2225823600 |
| Formaldehyde | 50-00-0 | 4.0975389000 |
| Selenium Compounds | 0 | N/A |
| Cobalt Compounds | 0 | N/A |
| Copper Compounds* | 0 | 2.8328664000 |

*New York State HAP
(use additional sheets if necessary)

STACK INFORMATION

Stack (release) Height _____ feet Stack Gas Velocity _____ ft/sec

Stack Diameter _____ inch Stack Gas Flow Rate _____ ascf/min

Stack Gas Temperature _____ oF

Other sources that share this stack? _____

Stack Sampling report available? (Y/ N, results ?) _____

COMMENTS

EMISSIONS FOR FUEL OIL COMBUSTION

Federal and New York State Regulations

(Use only for FO #2 or FO #6)

| | | | |
|------------|------------------------------|-----------|--------------------|
| Facility: | <u>Seneca Army Depot</u> | Date: | <u>8/16/94</u> |
| Location: | <u>Various</u> | Initials: | <u>DCP</u> |
| ID Number: | <u>12 Commercial Boilers</u> | SCC: | <u>1-03-005-01</u> |

INPUT DATA

| | | | |
|------------------------------|--------|----------------|---|
| SIZE OF BOILER | 1.25 | MMBTU/hr | |
| TOTAL FUEL USED | 72,267 | gal/year | |
| TOTAL OZONE SEASON FUEL USED | N/A | gal/year | (Enter N/A, if not known and zero, if no ozone season use^) |
| FUEL OIL GRADE | 2 | (#2 or #6 OIL) | |

ENTER ACTUAL SULFUR CONTENT, IF KNOWN, OR ELSE ENTER "X"

| | | |
|-----------------------|------------|------------------------|
| SULFUR CONTENT | 0.5 | ACTUAL % SULFUR |
|-----------------------|------------|------------------------|

| | | |
|----------------------|-------|-----------------------------|
| BOILER FIRING METHOD | OTHER | (TANGENTIAL/VERTICAL/OTHER) |
|----------------------|-------|-----------------------------|

SOLUTION

| | |
|----------------------------------|------------------|
| PARTICULATE EMISSIONS (TSP) | 144.53 lbs/year |
| PARTICULATE EMISSIONS (PM10) | 79.49 lbs/year |
| SULFUR DIOXIDE EMISSIONS | 5130.96 lbs/year |
| CARBON MONOXIDE EMISSIONS | 361.34 lbs/year |
| VOC EMISSIONS (NON METHANE) | 24.57 lbs/year |
| NITROGEN OXIDE EMISSIONS(as NO2) | 1445.34 lbs/year |

REFERENCES:

CRITERIA POLLUTANT EMISSION FACTORS WERE OBTAINED FROM TABLES 1.3-2

NOTES:

N/A: NOT AVAILABLE

X: Default value of sulfur content of fuel. X=1%, if default fuel oil grade is #2, and X=4% if fuel oil grades are nos. 4,5 & 6. (AP-42 Appendix A)

DATA QUALITY: A

^: Ozone season usage, if not known, is assumed to be 25% of the total annual usage.

UTILITY BOILERS>100 MMBTU/HR

INDUSTRIAL BOILER:10-100 MMBTU/HR

COMMERCIAL BOILERS:0.5-<10 MMBTU/HR

RESIDENTIAL FURNACES:<0.5 MMBTU/HR

Distillate Fuel is fuel oil #2, and Residual Fuels are Fuel Oil Nos 4, 5, & 6 (See AP-42)

SPECIATION OF EMISSIONS

| | | |
|---------------------------|-------|--------|
| TOTAL VOC EMISSIONS | 24.57 | Lbs/Yr |
| TOTAL AIR TOXIC EMISSIONS | 9.99 | Lbs/Yr |

INDIVIDUAL AIR TOXIC EMISSIONS

| Chemical Name | CAS # | Emissions (Lbs/Yr) | Profile Data Quality |
|---------------------------|---------|-----------------------|-------------------------|
| Antimony Compounds | 0 | N/A | E |
| Arsenic Compounds | 0 | 4.25E-02 | E |
| Beryllium Compounds | 0 | 2.53E-02 | E |
| Cadmium Compounds | 0 | 1.11E-01 | E |
| Chromium Compounds | 0 | 6.78E-01 | E |
| Lead Compounds | 0 | 9.00E-02 | E |
| Mercury Compounds | 0 | 3.04E-02 | E |
| Manganese Compounds | 0 | 1.42E-01 | E |
| Nickel Compounds | 0 | 1.72E+00 | E |
| Polycyclic Organic Matter | 0 | 2.23E-01 | E |
| Formaldehyde | 50-00-0 | 4.10E+00 | E |
| Selenium Compounds | 0 | N/A | E |
| Copper compounds* | 0 | 2.83E+00 | E |
| Cobalt Compounds | 0 | N/A | E |

* New York State HAP

REFERENCES: HAZARDOUS AIR POLLUTION EMISSION FACTORS TAKEN

FROM TABLE 1.3-11 OF AP-42 (SUPPLEMENT F), EXCEPT FOR COPPER WHICH WAS TAKEN FROM TABLE 4-1 OF "ESTIMATING AIR TOXIC EMISSIONS FROM COAL AND OIL COMBUSTION SOURCES"

NOTES:

HEATING VALUES FOR RESIDUAL AND DISTILLATE FUEL OIL ARE TAKEN FROM AP-42 APPENDIX A, PAGE A-3. 150,000 BTU/GAL FOR RESIDUAL OIL AND 140,000 BTU/GAL FOR DISTILLATE OIL

WHEN HAP EMISSION FACTORS WERE PRESENTED AS A RANGE, THE FACTOR WHICH RESULTED IN THE HIGHEST HAP EMISSION WAS USED IN THE CALCULATION

GENERATORS

GENERAL INFORMATION

Installation Seneca Army Depot

SCC..... 2-02-001-02 Unit ID #..... 1 active generator

Location..... Bldg 4 Permit #..... _____

POC..... George Shadman Inventoried by..... T. Sletten

Phone..... (607) 869-1470 Inventory Date..... June 6-10, 1994

SOURCE INFORMATION

Manufacturer..... Kohler Fuel Type..... Diesel

Date Installed..... _____ Annual Fuel Use..... _____
(units)

Rated Capacity..... 260 kw Operating Schedule
(units) Hours/day..... 1 hr/2 wk

Max Heat Input..... _____ Days/week..... _____
(units)

Load Factor..... _____

MONTHLY FUEL USE

19__ JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC

Indicate Units: _____

Total Annual Use: _____

POLLUTION CONTROL EQUIPMENT

(enter control efficiency)

ESP..... _____

Baghouse..... _____

Wet Scrubber..... _____

Dry Scrubber..... _____

Spray Dryer..... _____

Cyclone..... _____

Other.. _____

None?..... _____

Other.. _____

FUEL ANALYSIS

Sulfur Content (S)..... _____ %

Lead Content (Pb)..... _____ %

Ash Content..... _____ %

Nitrogen Content (N)..... _____ %

Reference.. _____

EMISSION RATE DETERMINATION METHOD

Stack Test Data _____ Emission Factor X Material Balance _____
 Similar Unit Data _____ Other _____

Reference: AP-42 Vol 1, Stationary sources and EPA Air Emissions Species Manual, Vol 1. Profile No. 1101.

OZONE PRECURSOR EMISSIONS

Typical Ozone Season Emissions
 VOC Emissions 0.0618959584 lb/day
 NOx Emissions 0.7601258052 lb/day
 CO Emissions 0.1645129421 lb/day

HAZARDOUS AIR POLLUTANTS

| HAP | CAS CODE | LB/YR |
|------------------------|-----------|--------------|
| Benzene | 71-43-2 | 0.0215118151 |
| Toluene | 108-88-3 | 0.0094301526 |
| Xylenes (Isomers) | 1330-20-7 | 0.0065711332 |
| o-Xylene | 95-47-6 | N/A |
| p-Xylene | 106-42-3 | N/A |
| m-Xylene | 108-38-3 | N/A |
| Formaldehyde | 50-00-0 | 0.0272067972 |
| 1,3-Butadiene | 106-99-0 | 0.0009015134 |
| Acetaldehyde | 75-07-0 | 0.0176844182 |
| Acrolein | 107-02-8 | 0.0021327362 |
| Naphthalene | 91-20-3 | 0.0019552003 |
| Hexane | 110-54-3 | N/A |
| 2,2,4-Trimethylpentane | 540-84-1 | N/A |
| Propionaldehyde | 123-38-6 | N/A |
| Ethyl benzene | 100-41-4 | N/A |
| Cyclohexane* | 110-82-7 | N/A |
| n-Heptane* | 142-82-5 | N/A |

CRITERIA POLLUTANT EMISSIONS

VOC Emissions 0.0113888563 ton/yr
 NOx Emissions 0.1398631481 ton/yr
 CO Emissions 0.0302703813 ton/yr
 SO2 Emissions 0.0093008994 ton/yr
 PM10 Emissions - ton/yr
 Total Particulate 0.0099902249 ton/yr

* New York State HAP
 (use additional sheets if necessary)

STACK INFORMATION

| | |
|-----------------------------------|------------------------------------|
| Stack (release) Height _____ feet | Stack Gas Velocity _____ ft/sec |
| Stack Diameter _____ inch | Stack Gas Flow Rate _____ ascf/min |
| | Stack Gas Temperature _____ oF |

Other sources that share this stack? _____
 Stack Sampling Report Available? (Y/ N, results?) _____
 Describe in detail what the generators are used for:(ie., training, emergency power, etc.) _____

COMMENTS

EMISSIONS FOR GASOLINE AND DIESEL INDUSTRIAL ENGINES *

Federal and New York State Regulations

| | | | |
|------------|---------------------------|-----------|--------------------|
| Facility: | <u>Seneca Army Depot</u> | Date: | <u>8/16/94</u> |
| Location: | <u>Bldg 4</u> | Initials: | <u>DCP</u> |
| ID Number: | <u>1 active generator</u> | SCC: | <u>2-02-001-02</u> |

INPUT DATA

TOTAL HOURS ENGINE RUN 26 hrs/year

ENGINE POWER RATING 348.58 hp
(use only if power rating is less than 600 hp)

| | | |
|------------------|--------|--|
| FUEL TYPE | diesel | (GASOLINE/DIESEL) |
| FUEL USAGE (gal) | 0 | (Use only when you do not have engine power and hrs.) |

SOLUTION

| | | |
|-----------------------------|--------|----------|
| PARTICULATE EMISSIONS (TSP) | 19.98 | lbs/year |
| SULFUR OXIDE EMISSIONS | 18.60 | lbs/year |
| CARBON MONOXIDE EMISSIONS | 60.54 | lbs/year |
| NITROGEN OXIDE EMISSIONS | 279.73 | lbs/year |
| EXHAUST VOC EMISSIONS | 22.38 | lbs/year |
| EVAPORATIVE VOC EMISSIONS | 0.00 | lbs/year |
| CRANKCASE VOC EMISSIONS | 0.40 | lbs/year |
| REFUELING VOC EMISSIONS | 0.00 | lbs/year |

EMISSION FACTORS TAKEN FROM AP-42, SECTION 3.3, TABLE 3.3-1.

DATA QUALITY RATING D AND E.

BTU CONTENT OF THE FUELS TAKEN FROM AP-42 APPENDIX A.

*: Template used for heaters, pumps, air compressors, and generators.

SPECIATION OF EMISSIONS

| | | |
|-----------------------------|-------|--------|
| TOTAL VOC EMISSIONS | 22.78 | Lbs/Yr |
| TOTAL PARTICULATE EMISSIONS | 19.98 | Lbs/Yr |
| TOTAL AIR TOXIC EMISSIONS | 0.09 | Lbs/Yr |

INDIVIDUAL AIR TOXIC EMISSIONS

| Chemical Name | CAS # | Emissions (Lbs/Yr) | Profile Data Quality |
|------------------------|-----------|-----------------------|-------------------------|
| Benzene | 71-43-2 | 2.15E-02 | E |
| Toluene | 108-88-3 | 9.43E-03 | E |
| Xylenes (Isomers) | 1330-20-7 | 6.57E-03 | E |
| o-Xylene | 95-47-6 | N/A | E |
| p-Xylene | 106-42-3 | N/A | E |
| m-Xylene | 108-38-3 | N/A | E |
| Formaldehyde | 50-00-0 | 2.72E-02 | E |
| 1,3-Butadiene | 106-99-0 | 9.02E-04 | E |
| Acetaldehyde | 75-07-0 | 1.77E-02 | E |
| Acrolein | 107-02-8 | 2.13E-03 | E |
| Naphthalene | 91-20-3 | 1.96E-03 | E |
| Hexane | 110-54-3 | N/A | E |
| 2,2,4-Trimethylpentane | 540-84-1 | N/A | E |
| Propionaldehyde | 123-38-6 | N/A | E |
| Ethyl benzene | 100-41-4 | N/A | E |
| Cyclohexane* | 110-82-7 | N/A | E |
| n-Heptane* | 142-82-5 | N/A | E |

* New York State HAP

DATA QUALITY RATING "E" SPECIATION TAKEN FROM AP-42 SECTION 3.3, TABLE 3.3-3, PAGE 3.3-5

DATA RATING "B" TAKEN FROM AIR EMISSIONS SPECIATION MANUAL, PROFILE No. 1101

"N/A" STANDS FOR NOT APPLICABLE

GENERATORS

GENERAL INFORMATION

Installation Seneca Army Depot
 SCC..... 2-02-001-02 Unit ID #..... 1 active generator
 Location..... Bldg 101 Permit #.....
 POC..... George Shadman Inventoried by..... T. Sletten
 Phone..... (607) 869-1470 Inventory Date..... June 6-10, 1994

SOURCE INFORMATION

Manufacturer..... Kohler Fuel Type..... Diesel
 Date Installed..... Annual Fuel Use.....
 Rated Capacity..... 125 kw (units) Operating Schedule
 Hours/day..... 1 hr/2 wk
 Max Heat Input..... (units) Days/week.....
 Load Factor.....

MONTHLY FUEL USE

19__ JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC

Indicate Units: _____

Total Annual Use: _____

POLLUTION CONTROL EQUIPMENT

(enter control efficiency)

ESP.....
 Baghouse.....
 Wet Scrubber.....
 Dry Scrubber.....
 Spray Dryer.....
 Cyclone.....
 Other.....
 None?.....
 Other.....

FUEL ANALYSIS

Sulfur Content (S)..... %
 Lead Content (Pb)..... %
 Ash Content..... %
 Nitrogen Content (N)..... %
 Reference.....

EMISSION RATE DETERMINATION METHOD

Stack Test Data _____ Emission Factor X Material Balance _____
 Similar Unit Data _____ Other _____

Reference: AP-42 Vol 1, Stationary sources and EPA Air Emissions Species Manual, Vol 1. Profile No. 1101.

OZONE PRECURSOR EMISSIONS

HAZARDOUS AIR POLLUTANTS

| Typical Ozone Season Emissions | HAP | CAS CODE | LB/YR |
|--|------------------------|-----------|--------------|
| VOC Emissions <u>0.0297576723</u> lb/day | Benzene | 71-43-2 | 0.0103422188 |
| NOx Emissions <u>0.3654450986</u> lb/day | Toluene | 108-88-3 | 0.0045337272 |
| CO Emissions <u>0.0790927606</u> lb/day | Xylenes (Isomers) | 1330-20-7 | 0.0031591987 |
| | o-Xylene | 95-47-6 | N/A |
| | p-Xylene | 106-42-3 | N/A |
| | m-Xylene | 108-38-3 | N/A |
| | Formaldehyde | 50-00-0 | 0.0130801910 |
| | 1,3-Butadiene | 106-99-0 | 0.0004334199 |
| | Acetaldehyde | 75-07-0 | 0.0085021241 |
| VOC Emissions <u>0.0054754117</u> ton/yr | Acrolein | 107-02-8 | 0.0010253540 |
| NOx Emissions <u>0.0672418981</u> ton/yr | Naphthalene | 91-20-3 | 0.0009400002 |
| CO Emissions <u>0.0145530680</u> ton/yr | Hexane | 110-54-3 | N/A |
| SO2 Emissions <u>0.0044715862</u> ton/yr | 2,2,4-Trimethylpentane | 540-84-1 | N/A |
| PM10 Emissions <u>-</u> ton/yr | Propionaldehyde | 123-38-6 | N/A |
| Total Particulate <u>0.0048029927</u> ton/yr | Ethyl benzene | 100-41-4 | N/A |
| | Cyclohexane* | 110-82-7 | N/A |
| | n-Heptane* | 142-82-5 | N/A |

* New York State HAP
(use additional sheets if necessary)

STACK INFORMATION

Stack (release) Height _____ feet Stack Gas Velocity _____ ft/sec
 Stack Diameter _____ inch Stack Gas Flow Rate _____ ascf/min
 Stack Gas Temperature _____ oF

Other sources that share this stack? _____
 Stack Sampling Report Available? (Y/ N, results?) _____
 Describe in detail what the generators are used for:(ie., training, emergency power, etc.) _____

COMMENTS

EMISSIONS FOR GASOLINE AND DIESEL INDUSTRIAL ENGINES *

Federal and New York State Regulations

| | | | |
|------------|---------------------------|-----------|--------------------|
| Facility: | <u>Seneca Army Depot</u> | Date: | <u>8/16/94</u> |
| Location: | <u>Bldg 101</u> | Initials: | <u>DCP</u> |
| ID Number: | <u>1 active generator</u> | SCC: | <u>2-02-001-02</u> |

INPUT DATA

TOTAL HOURS ENGINE RUN 26 hrs/year

ENGINE POWER RATING 167.59 hp
(use only if power rating is less than 600 hp)

| | | |
|------------------|--------|--|
| FUEL TYPE | diesel | (GASOLINE/DIESEL) |
| FUEL USAGE (gal) | 0 | (Use only when you do not have engine power and hrs.) |

SOLUTION

| | | |
|-----------------------------|--------|----------|
| PARTICULATE EMISSIONS (TSP) | 9.61 | lbs/year |
| SULFUR OXIDE EMISSIONS | 8.94 | lbs/year |
| CARBON MONOXIDE EMISSIONS | 29.11 | lbs/year |
| NITROGEN OXIDE EMISSIONS | 134.48 | lbs/year |
| EXHAUST VOC EMISSIONS | 10.76 | lbs/year |
| EVAPORATIVE VOC EMISSIONS | 0.00 | lbs/year |
| CRANKCASE VOC EMISSIONS | 0.19 | lbs/year |
| REFUELING VOC EMISSIONS | 0.00 | lbs/year |

EMISSION FACTORS TAKEN FROM AP-42, SECTION 3.3, TABLE 3.3-1.

DATA QUALITY RATING D AND E.

BTU CONTENT OF THE FUELS TAKEN FROM AP-42 APPENDIX A.

*: Template used for heaters, pumps, air compressors, and generators.

SPECIATION OF EMISSIONS

| | | |
|-----------------------------|-------|--------|
| TOTAL VOC EMISSIONS | 10.95 | Lbs/Yr |
| TOTAL PARTICULATE EMISSIONS | 9.61 | Lbs/Yr |
| TOTAL AIR TOXIC EMISSIONS | 0.04 | Lbs/Yr |

INDIVIDUAL AIR TOXIC EMISSIONS

| Chemical Name | CAS # | Emissions (Lbs/Yr) | Profile Data Quality |
|------------------------|-----------|-----------------------|-------------------------|
| Benzene | 71-43-2 | 1.03E-02 | E |
| Toluene | 108-88-3 | 4.53E-03 | E |
| Xylenes (Isomers) | 1330-20-7 | 3.16E-03 | E |
| o-Xylene | 95-47-6 | N/A | E |
| p-Xylene | 106-42-3 | N/A | E |
| m-Xylene | 108-38-3 | N/A | E |
| Formaldehyde | 50-00-0 | 1.31E-02 | E |
| 1,3-Butadiene | 106-99-0 | 4.33E-04 | E |
| Acetaldehyde | 75-07-0 | 8.50E-03 | E |
| Acrolein | 107-02-8 | 1.03E-03 | E |
| Naphthalene | 91-20-3 | 9.40E-04 | E |
| Hexane | 110-54-3 | N/A | E |
| 2,2,4-Trimethylpentane | 540-84-1 | N/A | E |
| Propionaldehyde | 123-38-6 | N/A | E |
| Ethyl benzene | 100-41-4 | N/A | E |
| Cyclohexane* | 110-82-7 | N/A | E |
| n-Heptane* | 142-82-5 | N/A | E |

* New York State HAP

DATA QUALITY RATING "E" SPECIATION TAKEN FROM AP-42 SECTION 3.3, TABLE 3.3-3, PAGE 3.3-5

DATA RATING "B" TAKEN FROM AIR EMISSIONS SPECIATION MANUAL, PROFILE No. 1101

"N/A" STANDS FOR NOT APPLICABLE

GENERATORS

GENERAL INFORMATION

Installation Seneca Army Depot

SCC..... 2-02-003-01 Unit ID #..... 1 active generator

Location..... Bldg 102 Permit #..... _____

POC..... George Shadman Inventoried by..... T. Sletten

Phone..... (607) 869-1470 Inventory Date..... June 6-10, 1994

SOURCE INFORMATION

Manufacturer..... Onan Fuel Type..... Gasoline

Date Installed..... _____ Annual Fuel Use..... _____ (units)

Rated Capacity..... 30 kw Operating Schedule
 (units) Hours/day..... 1

Max Heat Input..... _____ Days/week..... 1
 (units) Load Factor..... _____

MONTHLY FUEL USE

19__ JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC

Indicate Units: _____

Total Annual Use: _____

POLLUTION CONTROL EQUIPMENT

(enter control efficiency)

ESP..... _____

Baghouse..... _____

Wet Scrubber..... _____

Dry Scrubber..... _____

Spray Dryer..... _____

Cyclone..... _____

Other.. _____

None?..... _____

Other.. _____

FUEL ANALYSIS

Sulfur Content (S)..... _____ %

Lead Content (Pb)..... _____ %

Ash Content..... _____ %

Nitrogen Content (N)..... _____ %

Reference.. _____

EMISSIONS FOR GASOLINE AND DIESEL INDUSTRIAL ENGINES *
Federal and New York State Regulations

| | | | |
|------------|---------------------------|-----------|--------------------|
| Facility: | <u>Seneca Army Depot</u> | Date: | <u>8/16/94</u> |
| Location: | <u>Bldg 4</u> | Initials: | <u>DCP</u> |
| ID Number: | <u>1 active generator</u> | SCC: | <u>2-02-003-01</u> |

INPUT DATA

TOTAL HOURS ENGINE RUN 52 hrs/year

ENGINE POWER RATING 40.22 hp
(use only if power rating is less than 600 hp)

| | | | |
|------------------|----------|------------|---|
| FUEL TYPE | gasoline | | (GASOLINE/DIESEL) |
| FUEL USAGE (gal) | 0 | gallons/yr | (Use only when you do not have engine power and hrs.) |

SOLUTION

| | | |
|-----------------------------|--------|----------|
| PARTICULATE EMISSIONS (TSP) | 1.51 | lbs/year |
| SULFUR OXIDE EMISSIONS | 1.24 | lbs/year |
| CARBON MONOXIDE EMISSIONS | 917.56 | lbs/year |
| NITROGEN OXIDE EMISSIONS | 23.79 | lbs/year |
| EXHAUST VOC EMISSIONS | 30.80 | lbs/year |
| EVAPORATIVE VOC EMISSIONS | 1.38 | lbs/year |
| CRANKCASE VOC EMISSIONS | 10.14 | lbs/year |
| REFUELING VOC EMISSIONS | 2.26 | lbs/year |

EMISSION FACTORS TAKEN FROM AP-42, SECTION 3.3, TABLE 3.3-1.

DATA QUALITY RATING D AND E.

BTU CONTENT OF THE FUELS TAKEN FROM AP-42 APPENDIX A.

*: Template used for heaters, pumps, air compressors, and generators.

SPECIATION OF EMISSIONS

| | | |
|-----------------------------|-------|--------|
| TOTAL VOC EMISSIONS | 44.59 | Lbs/Yr |
| TOTAL PARTICULATE EMISSIONS | 1.51 | Lbs/Yr |
| TOTAL AIR TOXIC EMISSIONS | 8.51 | Lbs/Yr |

INDIVIDUAL AIR TOXIC EMISSIONS

| Chemical Name | CAS # | Emissions (Lbs/Yr) | Profile Data Quality |
|------------------------|-----------|-----------------------|-------------------------|
| Benzene | 71-43-2 | 6.20E-01 | B |
| Toluene | 108-88-3 | 2.29E+00 | B |
| Xylenes (Isomers) | 1330-20-7 | N/A | B |
| o-Xylene | 95-47-6 | 6.96E-01 | B |
| p-Xylene | 106-42-3 | 1.14E+00 | B |
| m-Xylene | 108-38-3 | 0.00E+00 | B |
| Formaldehyde | 50-00-0 | 3.30E-01 | B |
| 1,3-Butadiene | 106-99-0 | 7.49E-01 | B |
| Acetaldehyde | 75-07-0 | 1.25E-01 | B |
| Acrolein | 107-02-8 | 2.68E-02 | B |
| Naphthalene | 91-20-3 | N/A | B |
| Hexane | 110-54-3 | 3.88E-01 | B |
| 2,2,4-Trimethylpentane | 540-84-1 | 8.78E-01 | B |
| Propionaldehyde | 123-38-6 | 8.92E-03 | B |
| Ethyl benzene | 100-41-4 | 3.43E-01 | B |
| Cyclohexane* | 110-82-7 | 6.24E-01 | B |
| n-Heptane* | 142-82-5 | 2.90E-01 | B |

* New York State HAP

DATA QUALITY RATING "E" SPECIATION TAKEN FROM AP-42 SECTION 3.3, TABLE 3.3-3, PAGE 3.3-5

DATA RATING "B" TAKEN FROM AIR EMISSIONS SPECIATION MANUAL, PROFILE No. 1101

"N/A" STANDS FOR NOT APPLICABLE

GENERATORS

GENERAL INFORMATION

Installation Seneca Army Depot
 SCC..... 2-02-001-02 Unit ID #..... 1 active generator
 Location..... Bldg 122 Permit #.....
 POC..... George Shadman Inventoried by..... T. Sletten
 Phone..... (607) 869-1470 Inventory Date..... June 6-10, 1994

SOURCE INFORMATION

Manufacturer..... Onan Fuel Type..... Diesel
 Date Installed..... Annual Fuel Use.....
 Rated Capacity..... 25 kw (units) Operating Schedule
 Hours/day..... 1 hr/2 wk
 Max Heat Input..... (units) Days/week.....
 Load Factor.....

MONTHLY FUEL USE

19__ JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC

Indicate Units: _____

Total Annual Use: _____

POLLUTION CONTROL EQUIPMENT

(enter control efficiency)

ESP.....
 Baghouse.....
 Wet Scrubber.....
 Dry Scrubber.....
 Spray Dryer.....
 Cyclone.....
 Other.....
 None?.....
 Other.....

FUEL ANALYSIS

Sulfur Content (S)..... %
 Lead Content (Pb)..... %
 Ash Content..... %
 Nitrogen Content (N)..... %
 Reference.....

EMISSION RATE DETERMINATION METHOD

Stack Test Data _____ Emission Factor X Material Balance _____
 Similar Unit Data _____ Other _____

Reference: AP-42 Vol 1, Stationary sources and EPA Air Emissions Species Manual, Vol 1. Profile No. 1101.

OZONE PRECURSOR EMISSIONS

Typical Ozone Season Emissions
 VOC Emissions 0.0059515345 lb/day
 NOx Emissions 0.0730890197 lb/day
 CO Emissions 0.0158185521 lb/day

HAZARDOUS AIR POLLUTANTS

| HAP | CAS CODE | LB/YR |
|------------------------|-----------|--------------|
| Benzene | 71-43-2 | 0.0020684438 |
| Toluene | 108-88-3 | 0.0009067454 |
| Xylenes (Isomers) | 1330-20-7 | 0.0006318397 |
| o-Xylene | 95-47-6 | N/A |
| p-Xylene | 106-42-3 | N/A |
| m-Xylene | 108-38-3 | N/A |
| Formaldehyde | 50-00-0 | 0.0026160382 |
| 1,3-Butadiene | 106-99-0 | 0.0000866840 |
| Acetaldehyde | 75-07-0 | 0.0017004248 |
| Acrolein | 107-02-8 | 0.0002050708 |
| Naphthalene | 91-20-3 | 0.0001880000 |
| Hexane | 110-54-3 | N/A |
| 2,2,4-Trimethylpentane | 540-84-1 | N/A |
| Propionaldehyde | 123-38-6 | N/A |
| Ethyl benzene | 100-41-4 | N/A |
| Cyclohexane* | 110-82-7 | N/A |
| n-Heptane* | 142-82-5 | N/A |

CRITERIA POLLUTANT EMISSIONS

VOC Emissions 0.0010950823 ton/yr
 NOx Emissions 0.0134483796 ton/yr
 CO Emissions 0.0029106136 ton/yr
 SO2 Emissions 0.0008943172 ton/yr
 PM10 Emissions - ton/yr
 Total Particulate 0.0009605985 ton/yr

* New York State HAP
 (use additional sheets if necessary)

STACK INFORMATION

Stack (release) Height _____ feet Stack Gas Velocity _____ ft/sec
 Stack Diameter _____ inch Stack Gas Flow Rate _____ ascf/min
 Stack Gas Temperature _____ oF

Other sources that share this stack? _____
 Stack Sampling Report Available? (Y/ N, results?) _____
 Describe in detail what the generators are used for:(ie., training, emergency power, etc.) _____

COMMENTS

EMISSIONS FOR GASOLINE AND DIESEL INDUSTRIAL ENGINES *

Federal and New York State Regulations

| | | | |
|------------|---------------------------|-----------|--------------------|
| Facility: | <u>Seneca Army Depot</u> | Date: | <u>8/16/94</u> |
| Location: | <u>Bldg 122</u> | Initials: | <u>DCP</u> |
| ID Number: | <u>1 active generator</u> | SCC: | <u>2-02-001-02</u> |

INPUT DATA

TOTAL HOURS ENGINE RUN 26 hrs/year

ENGINE POWER RATING 33.52 hp
(use only if power rating is less than 600 hp)

| | | |
|------------------|--------|---|
| FUEL TYPE | diesel | (GASOLINE/DIESEL) |
| FUEL USAGE (gal) | 0 | (Use only when you do not have engine power and hrs.) |

SOLUTION

| | | |
|-----------------------------|-------|----------|
| PARTICULATE EMISSIONS (TSP) | 1.92 | lbs/year |
| SULFUR OXIDE EMISSIONS | 1.79 | lbs/year |
| CARBON MONOXIDE EMISSIONS | 5.82 | lbs/year |
| NITROGEN OXIDE EMISSIONS | 26.90 | lbs/year |
| EXHAUST VOC EMISSIONS | 2.15 | lbs/year |
| EVAPORATIVE VOC EMISSIONS | 0.00 | lbs/year |
| CRANKCASE VOC EMISSIONS | 0.04 | lbs/year |
| REFUELING VOC EMISSIONS | 0.00 | lbs/year |

EMISSION FACTORS TAKEN FROM AP-42, SECTION 3.3, TABLE 3.3-1.

DATA QUALITY RATING D AND E.

BTU CONTENT OF THE FUELS TAKEN FROM AP-42 APPENDIX A.

*: Template used for heaters, pumps, air compressors, and generators.

SPECIATION OF EMISSIONS

| | | |
|-----------------------------|------|--------|
| TOTAL VOC EMISSIONS | 2.19 | Lbs/Yr |
| TOTAL PARTICULATE EMISSIONS | 1.92 | Lbs/Yr |
| TOTAL AIR TOXIC EMISSIONS | 0.01 | Lbs/Yr |

INDIVIDUAL AIR TOXIC EMISSIONS

| Chemical Name | CAS # | Emissions (Lbs/Yr) | Profile Data Quality |
|------------------------|-----------|-----------------------|-------------------------|
| Benzene | 71-43-2 | 2.07E-03 | E |
| Toluene | 108-88-3 | 9.07E-04 | E |
| Xylenes (Isomers) | 1330-20-7 | 6.32E-04 | E |
| o-Xylene | 95-47-6 | N/A | E |
| p-Xylene | 106-42-3 | N/A | E |
| m-Xylene | 108-38-3 | N/A | E |
| Formaldehyde | 50-00-0 | 2.62E-03 | E |
| 1,3-Butadiene | 106-99-0 | 8.67E-05 | E |
| Acetaldehyde | 75-07-0 | 1.70E-03 | E |
| Acrolein | 107-02-8 | 2.05E-04 | E |
| Naphthalene | 91-20-3 | 1.88E-04 | E |
| Hexane | 110-54-3 | N/A | E |
| 2,2,4-Trimethylpentane | 540-84-1 | N/A | E |
| Propionaldehyde | 123-38-6 | N/A | E |
| Ethyl benzene | 100-41-4 | N/A | E |
| Cyclohexane* | 110-82-7 | N/A | E |
| n-Heptane* | 142-82-5 | N/A | E |

* New York State HAP

DATA QUALITY RATING "E" SPECIATION TAKEN FROM AP-42 SECTION 3.3, TABLE 3.3-3, PAGE 3.3-5

DATA RATING "B" TAKEN FROM AIR EMISSIONS SPECIATION MANUAL, PROFILE No. 1101

"N/A" STANDS FOR NOT APPLICABLE

GENERATORS

GENERAL INFORMATION

Installation Seneca Army Depot

SCC..... N/A Unit ID #..... 1 active water pump

Location..... Bldg 334 Permit #..... _____

POC..... George Shadman Inventoried by..... T. Sletten

Phone..... (607) 869-1470 Inventory Date..... June 6-10, 1994

SOURCE INFORMATION

Manufacturer..... Ford Engine Fuel Type..... Gasoline

Date Installed..... _____ Annual Fuel Use..... _____ (units)

Rated Capacity..... 2.3 L 130 hp Operating Schedule
 (units) Hours/day..... 1 hr/mnth

Max Heat Input..... _____ Days/week..... _____
 (units) Load Factor..... _____

MONTHLY FUEL USE

19__ JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC

Indicate Units: _____

Total Annual Use: _____

POLLUTION CONTROL EQUIPMENT

(enter control efficiency)

ESP..... _____

Baghouse..... _____

Wet Scrubber..... _____

Dry Scrubber..... _____

Spray Dryer..... _____

Cyclone..... _____

Other.. _____

None?..... _____

Other.. _____

FUEL ANALYSIS

Sulfur Content (S)..... _____ %

Lead Content (Pb)..... _____ %

Ash Content..... _____ %

Nitrogen Content (N)..... _____ %

Reference.. _____

EMISSION RATE DETERMINATION METHOD

Stack Test Data _____ Emission Factor X Material Balance _____
 Similar Unit Data _____ Other _____

Reference: AP-42 Vol 1, Stationary sources and EPA Air Emissions Species Manual, Vol 1. Profile No. 1101.

OZONE PRECURSOR EMISSIONS

Typical Ozone Season Emissions
 VOC Emissions 0.0903712330 lb/day
 NOx Emissions 0.0482229124 lb/day
 CO Emissions 1.8597596043 lb/day

HAZARDOUS AIR POLLUTANTS

| | | HAP | CAS CODE | LB/YR |
|------------------------------|----------------------------|------------------------|-----------|--------------|
| VOC Emissions | <u>0.0903712330</u> lb/day | Benzene | 71-43-2 | 0.4622669312 |
| | | Toluene | 108-88-3 | 1.7093899471 |
| NOx Emissions | <u>0.0482229124</u> lb/day | Xylenes (Isomers) | 1330-20-7 | N/A |
| | | o-Xylene | 95-47-6 | 0.5188031746 |
| CO Emissions | <u>1.8597596043</u> lb/day | p-Xylene | 106-42-3 | 0.8513693122 |
| | | m-Xylene | 108-38-3 | 0.0000000000 |
| | | Formaldehyde | 50-00-0 | 0.2460989418 |
| | | 1,3-Butadiene | 106-99-0 | 0.5587111111 |
| | | Acetaldehyde | 75-07-0 | 0.0931185185 |
| CRITERIA POLLUTANT EMISSIONS | | Acrolein | 107-02-8 | 0.0199539683 |
| VOC Emissions | <u>0.0166283069</u> ton/yr | Naphthalene | 91-20-3 | N/A |
| NOx Emissions | <u>0.0088730159</u> ton/yr | Hexane | 110-54-3 | 0.2893325397 |
| | | 2,2,4-Trimethylpentane | 540-84-1 | 0.6551552910 |
| CO Emissions | <u>0.3421957672</u> ton/yr | Propionaldehyde | 123-38-6 | 0.0066513228 |
| | | Ethyl benzene | 100-41-4 | 0.2560759259 |
| SO2 Emissions | <u>0.0004608466</u> ton/yr | Cyclohexane* | 110-82-7 | 0.4655925926 |
| | | n-Heptane* | 142-82-5 | 0.2161679894 |
| PM10 Emissions | <u>-</u> ton/yr | | | |
| Total Particulate | <u>0.0005623016</u> ton/yr | | | |

* New York State HAP
 (use additional sheets if necessary)

STACK INFORMATION

Stack (release) Height _____ feet Stack Gas Velocity _____ ft/sec
 Stack Diameter _____ inch Stack Gas Flow Rate _____ acsf/min
 Stack Gas Temperature _____ oF

Other sources that share this stack? _____

Stack Sampling Report Available? (Y/ N, results?) _____

Describe in detail what the generators are used for:(ie., training, emergency power, etc.) _____

COMMENTS

EMISSIONS FOR GASOLINE AND DIESEL INDUSTRIAL ENGINES *

Federal and New York State Regulations

| | | | |
|------------|----------------------------|-----------|----------------|
| Facility: | <u>Seneca Army Depot</u> | Date: | <u>8/16/94</u> |
| Location: | <u>Bldg 334</u> | Initials: | <u>DCP</u> |
| ID Number: | <u>1 active water pump</u> | SCC: | <u>n/a</u> |

INPUT DATA

TOTAL HOURS ENGINE RUN 12 hrs/year

ENGINE POWER RATING 130.00 hp
(use only if power rating is less than 600 hp)

| | | |
|------------------|----------|--|
| FUEL TYPE | gasoline | (GASOLINE/DIESEL) |
| FUEL USAGE (gal) | 0 | (Use only when you do not have engine power and hrs.) |

SOLUTION

| | | |
|-----------------------------|--------|----------|
| PARTICULATE EMISSIONS (TSP) | 1.12 | lbs/year |
| SULFUR OXIDE EMISSIONS | 0.92 | lbs/year |
| CARBON MONOXIDE EMISSIONS | 684.39 | lbs/year |
| NITROGEN OXIDE EMISSIONS | 17.75 | lbs/year |
| EXHAUST VOC EMISSIONS | 22.97 | lbs/year |
| EVAPORATIVE VOC EMISSIONS | 1.03 | lbs/year |
| CRANKCASE VOC EMISSIONS | 7.57 | lbs/year |
| REFUELING VOC EMISSIONS | 1.69 | lbs/year |

EMISSION FACTORS TAKEN FROM AP-42, SECTION 3.3, TABLE 3.3-1.

DATA QUALITY RATING D AND E.

BTU CONTENT OF THE FUELS TAKEN FROM AP-42 APPENDIX A.

*: Template used for heaters, pumps, air compressors, and generators.

SPECIATION OF EMISSIONS

| | | |
|-----------------------------|-------|--------|
| TOTAL VOC EMISSIONS | 33.26 | Lbs/Yr |
| TOTAL PARTICULATE EMISSIONS | 1.12 | Lbs/Yr |
| TOTAL AIR TOXIC EMISSIONS | 6.35 | Lbs/Yr |

INDIVIDUAL AIR TOXIC EMISSIONS

| Chemical Name | CAS # | Emissions (Lbs/Yr) | Profile Data Quality |
|------------------------|-----------|-----------------------|-------------------------|
| Benzene | 71-43-2 | 4.62E-01 | B |
| Toluene | 108-88-3 | 1.71E+00 | B |
| Xylenes (Isomers) | 1330-20-7 | N/A | B |
| o-Xylene | 95-47-6 | 5.19E-01 | B |
| p-Xylene | 106-42-3 | 8.51E-01 | B |
| m-Xylene | 108-38-3 | 0.00E+00 | B |
| Formaldehyde | 50-00-0 | 2.46E-01 | B |
| 1,3-Butadiene | 106-99-0 | 5.59E-01 | B |
| Acetaldehyde | 75-07-0 | 9.31E-02 | B |
| Acrolein | 107-02-8 | 2.00E-02 | B |
| Naphthalene | 91-20-3 | N/A | B |
| Hexane | 110-54-3 | 2.89E-01 | B |
| 2,2,4-Trimethylpentane | 540-84-1 | 6.55E-01 | B |
| Propionaldehyde | 123-38-6 | 6.65E-03 | B |
| Ethyl benzene | 100-41-4 | 2.56E-01 | B |
| Cyclohexane* | 110-82-7 | 4.66E-01 | B |
| n-Heptane* | 142-82-5 | 2.16E-01 | B |

* New York State HAP

DATA QUALITY RATING "E" SPECIATION TAKEN FROM AP-42 SECTION 3.3, TABLE 3.3-3, PAGE 3.3-5

DATA RATING "B" TAKEN FROM AIR EMISSIONS SPECIATION MANUAL, PROFILE No. 1101

"N/A" STANDS FOR NOT APPLICABLE

GENERATORS

GENERAL INFORMATION

Installation Seneca Army Depot

SCC..... N/A Unit ID #..... 3 active water pumps

Location..... Bldg 353 Permit #..... _____

POC..... George Shadman Inventoried by..... T. Sletten

Phone..... (607) 869-1470 Inventory Date..... June 6-10, 1994

SOURCE INFORMATION

Manufacturer..... Waikeha Model 145 GK Fuel Type..... Gasoline

Date Installed..... _____ Annual Fuel Use..... _____ (units)

Rated Capacity..... 130 hp at 1750 RPM Operating Schedule
(units) Hours/day..... 1/ hr/month (each)

Max Heat Input..... _____ Days/week..... _____
(units) Load Factor..... _____

MONTHLY FUEL USE

19__ JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC

Indicate Units: _____

Total Annual Use: _____

POLLUTION CONTROL EQUIPMENT

(enter control efficiency)

ESP..... _____

Baghouse..... _____

Wet Scrubber..... _____

Dry Scrubber..... _____

Spray Dryer..... _____

Cyclone..... _____

Other.. _____

None?..... _____

Other.. _____

FUEL ANALYSIS

Sulfur Content (S)..... _____ %

Lead Content (Pb)..... _____ %

Ash Content..... _____ %

Nitrogen Content (N)..... _____ %

Reference.. _____

EMISSION RATE DETERMINATION METHOD

Stack Test Data _____ Emission Factor X Material Balance _____
 Similar Unit Data _____ Other _____

Reference: AP-42 Vol 1, Stationary sources and EPA Air Emissions Species Manual, Vol 1. Profile No. 1101.

OZONE PRECURSOR EMISSIONS

Typical Ozone Season Emissions
 VOC Emissions 0.2711136991 lb/day
 NOx Emissions 0.1446687371 lb/day
 CO Emissions 5.5792788130 lb/day

HAZARDOUS AIR POLLUTANTS

| HAP | CAS CODE | LB/YR |
|------------------------|-----------|--------------|
| Benzene | 71-43-2 | 1.3868007937 |
| Toluene | 108-88-3 | 5.1281698413 |
| Xylenes (Isomers) | 1330-20-7 | N/A |
| o-Xylene | 95-47-6 | 1.5564095238 |
| p-Xylene | 106-42-3 | 2.5541079365 |
| m-Xylene | 108-38-3 | 0.0000000000 |
| Formaldehyde | 50-00-0 | 0.7382968254 |
| 1,3-Butadiene | 106-99-0 | 1.6761333333 |
| Acetaldehyde | 75-07-0 | 0.2793555556 |
| Acrolein | 107-02-8 | 0.0598619048 |
| Naphthalene | 91-20-3 | N/A |
| Hexane | 110-54-3 | 0.8679976190 |
| 2,2,4-Trimethylpentane | 540-84-1 | 1.9654658730 |
| Propionaldehyde | 123-38-6 | 0.0199539683 |
| Ethyl benzene | 100-41-4 | 0.7682277778 |
| Cyclohexane* | 110-82-7 | 1.3967777778 |
| n-Heptane* | 142-82-5 | 0.6485039683 |

CRITERIA POLLUTANT EMISSIONS

VOC Emissions 0.0498849206 ton/yr
 NOx Emissions 0.0266190476 ton/yr
 CO Emissions 1.0265873016 ton/yr
 SO2 Emissions 0.0013825397 ton/yr
 PM10 Emissions - ton/yr
 Total Particulate 0.0016869048 ton/yr

* New York State HAP
 (use additional sheets if necessary)

STACK INFORMATION

Stack (release) Height _____ feet Stack Gas Velocity _____ ft/sec
 Stack Diameter _____ inch Stack Gas Flow Rate _____ ascf/min
 Stack Gas Temperature _____ oF

Other sources that share this stack? _____
 Stack Sampling Report Available? (Y/ N, results?) _____
 Describe in detail what the generators are used for:(ie., training, emergency power, etc.) _____

COMMENTS

EMISSIONS FOR GASOLINE AND DIESEL INDUSTRIAL ENGINES *

Federal and New York State Regulations

| | | | |
|------------|-----------------------------|-----------|----------------|
| Facility: | <u>Seneca Army Depot</u> | Date: | <u>8/16/94</u> |
| Location: | <u>Bldg 353</u> | Initials: | <u>DCP</u> |
| ID Number: | <u>3 active water pumps</u> | SCC: | <u>n/a</u> |

INPUT DATA

TOTAL HOURS ENGINE RUN 36 hrs/year

ENGINE POWER RATING 130.00 hp
(use only if power rating is less than 600 hp)

| | | |
|------------------|----------|--|
| FUEL TYPE | gasoline | (GASOLINE/DIESEL) |
| FUEL USAGE (gal) | 0 | gallons/yr (Use only when you do not have engine power and hrs.) |

SOLUTION

| | | |
|-----------------------------|----------|----------|
| PARTICULATE EMISSIONS (TSP) | 3.37 | lbs/year |
| SULFUR OXIDE EMISSIONS | 2.77 | lbs/year |
| CARBON MONOXIDE EMISSIONS | 2,053.17 | lbs/year |
| NITROGEN OXIDE EMISSIONS | 53.24 | lbs/year |
| EXHAUST VOC EMISSIONS | 68.92 | lbs/year |
| EVAPORATIVE VOC EMISSIONS | 3.10 | lbs/year |
| CRANKCASE VOC EMISSIONS | 22.70 | lbs/year |
| REFUELING VOC EMISSIONS | 5.06 | lbs/year |

EMISSION FACTORS TAKEN FROM AP-42, SECTION 3.3, TABLE 3.3-1.

DATA QUALITY RATING D AND E.

BTU CONTENT OF THE FUELS TAKEN FROM AP-42 APPENDIX A.

*: Template used for heaters, pumps, air compressors, and generators.

SPECIATION OF EMISSIONS

| | | |
|-----------------------------|-------|--------|
| TOTAL VOC EMISSIONS | 99.77 | Lbs/Yr |
| TOTAL PARTICULATE EMISSIONS | 3.37 | Lbs/Yr |
| TOTAL AIR TOXIC EMISSIONS | 19.05 | Lbs/Yr |

INDIVIDUAL AIR TOXIC EMISSIONS

| Chemical Name | CAS # | Emissions (Lbs/Yr) | Profile Data Quality |
|------------------------|-----------|-----------------------|-------------------------|
| Benzene | 71-43-2 | 1.39E+00 | B |
| Toluene | 108-88-3 | 5.13E+00 | B |
| Xylenes (Isomers) | 1330-20-7 | N/A | B |
| o-Xylene | 95-47-6 | 1.56E+00 | B |
| p-Xylene | 106-42-3 | 2.55E+00 | B |
| m-Xylene | 108-38-3 | 0.00E+00 | B |
| Formaldehyde | 50-00-0 | 7.38E-01 | B |
| 1,3-Butadiene | 106-99-0 | 1.68E+00 | B |
| Acetaldehyde | 75-07-0 | 2.79E-01 | B |
| Acrolein | 107-02-8 | 5.99E-02 | B |
| Naphthalene | 91-20-3 | N/A | B |
| Hexane | 110-54-3 | 8.68E-01 | B |
| 2,2,4-Trimethylpentane | 540-84-1 | 1.97E+00 | B |
| Propionaldehyde | 123-38-6 | 2.00E-02 | B |
| Ethyl benzene | 100-41-4 | 7.68E-01 | B |
| Cyclohexane* | 110-82-7 | 1.40E+00 | B |
| n-Heptane* | 142-82-5 | 6.49E-01 | B |

* New York State HAP

DATA QUALITY RATING "E" SPECIATION TAKEN FROM AP-42 SECTION 3.3, TABLE 3.3-3, PAGE 3.3-5

DATA RATING "B" TAKEN FROM AIR EMISSIONS SPECIATION MANUAL, PROFILE No. 1101

"N/A" STANDS FOR NOT APPLICABLE

GENERATORS

GENERAL INFORMATION

Installation Seneca Army Depot

SCC..... 2-02-001-02 Unit ID #..... 1 active generator

Location..... Bldg 701 Permit #..... _____

POC..... George Shadman Inventoried by..... T. Sletten

Phone..... (607) 869-1470 Inventory Date..... June 6-10, 1994

SOURCE INFORMATION

Manufacturer..... Onan Fuel Type..... Diesel

Date Installed..... _____ Annual Fuel Use..... _____
(units) (units)

Rated Capacity..... 40 kw Operating Schedule
(units) Hours/day..... 1 hr/2 wk

Max Heat Input..... _____ Days/week..... _____
(units)

Load Factor..... _____

MONTHLY FUEL USE

19__ JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC

Indicate Units: _____

Total Annual Use: _____

POLLUTION CONTROL EQUIPMENT

(enter control efficiency)

ESP..... _____

Baghouse..... _____

Wet Scrubber..... _____

Dry Scrubber..... _____

Spray Dryer..... _____

Cyclone..... _____

Other.. _____

None?..... _____

Other.. _____

FUEL ANALYSIS

Sulfur Content (S)..... _____ %

Lead Content (Pb)..... _____ %

Ash Content..... _____ %

Nitrogen Content (N)..... _____ %

Reference.. _____

EMISSION RATE DETERMINATION METHOD

Stack Test Data _____ Emission Factor X Material Balance _____

Similar Unit Data _____ Other _____

Reference: AP-42 Vol 1, Stationary sources and EPA Air Emissions Species Manual, Vol 1. Profile No. 1101.

OZONE PRECURSOR EMISSIONS

HAZARDOUS AIR POLLUTANTS

Typical Ozone Season Emissions

HAP CAS CODE LB/YR

VOC Emissions 0.0095224551 lb/day

Benzene 71-43-2 0.0033095100

NOx Emissions 0.1169424316 lb/day

Toluene 108-88-3 0.0014507927

CO Emissions 0.0253096834 lb/day

Xylenes (Isomers) 1330-20-7 0.0010109436

o-Xylene 95-47-6 N/A

p-Xylene 106-42-3 N/A

m-Xylene 108-38-3 N/A

CRITERIA POLLUTANT EMISSIONS

Formaldehyde 50-00-0 0.0041856611

VOC Emissions 0.0017521317 ton/yr

1,3-Butadiene 106-99-0 0.0001386944

NOx Emissions 0.0215174074 ton/yr

Acetaldehyde 75-07-0 0.0027206797

CO Emissions 0.0046569817 ton/yr

Acrolein 107-02-8 0.0003281133

SO2 Emissions 0.0014309076 ton/yr

Naphthalene 91-20-3 0.0003008001

PM10 Emissions - ton/yr

Hexane 110-54-3 N/A

Total Particulate 0.0015369577 ton/yr

2,2,4-Trimethylpentane 540-84-1 N/A

Propionaldehyde 123-38-6 N/A

Ethyl benzene 100-41-4 N/A

Cyclohexane* 110-82-7 N/A

n-Heptane* 142-82-5 N/A

* New York State HAP

(use additional sheets if necessary)

STACK INFORMATION

Stack (release) Height _____ feet

Stack Gas Velocity _____ ft/sec

Stack Diameter _____ inch

Stack Gas Flow Rate _____ ascf/min

Stack Gas Temperature _____ oF

Other sources that share this stack? _____

Stack Sampling Report Available? (Y/ N, results?) _____

Describe in detail what the generators are used for:(ie., training, emergency power, etc.) _____

COMMENTS

EMISSIONS FOR GASOLINE AND DIESEL INDUSTRIAL ENGINES *

Federal and New York State Regulations

| | | | |
|------------|---------------------------|-----------|--------------------|
| Facility: | <u>Seneca Army Depot</u> | Date: | <u>8/16/94</u> |
| Location: | <u>Bldg 701</u> | Initials: | <u>DCP</u> |
| ID Number: | <u>1 active generator</u> | SCC: | <u>2-02-001-02</u> |

INPUT DATA

TOTAL HOURS ENGINE RUN 26 hrs/year

ENGINE POWER RATING 53.63 hp
(use only if power rating is less than 600 hp)

| | | | |
|------------------|--------|------------|---|
| FUEL TYPE | diesel | | (GASOLINE/DIESEL) |
| FUEL USAGE (gal) | 0 | gallons/yr | (Use only when you do not have engine power and hrs.) |

SOLUTION

| | | |
|-----------------------------|-------|----------|
| PARTICULATE EMISSIONS (TSP) | 3.07 | lbs/year |
| SULFUR OXIDE EMISSIONS | 2.86 | lbs/year |
| CARBON MONOXIDE EMISSIONS | 9.31 | lbs/year |
| NITROGEN OXIDE EMISSIONS | 43.03 | lbs/year |
| EXHAUST VOC EMISSIONS | 3.44 | lbs/year |
| EVAPORATIVE VOC EMISSIONS | 0.00 | lbs/year |
| CRANKCASE VOC EMISSIONS | 0.06 | lbs/year |
| REFUELING VOC EMISSIONS | 0.00 | lbs/year |

EMISSION FACTORS TAKEN FROM AP-42, SECTION 3.3, TABLE 3.3-1.

DATA QUALITY RATING D AND E.

BTU CONTENT OF THE FUELS TAKEN FROM AP-42 APPENDIX A.

*: Template used for heaters, pumps, air compressors, and generators.

SPECIATION OF EMISSIONS

| | | |
|-----------------------------|------|--------|
| TOTAL VOC EMISSIONS | 3.50 | Lbs/Yr |
| TOTAL PARTICULATE EMISSIONS | 3.07 | Lbs/Yr |
| TOTAL AIR TOXIC EMISSIONS | 0.01 | Lbs/Yr |

INDIVIDUAL AIR TOXIC EMISSIONS

| Chemical Name | CAS # | Emissions (Lbs/Yr) | Profile Data Quality |
|------------------------|-----------|-----------------------|-------------------------|
| Benzene | 71-43-2 | 3.31E-03 | E |
| Toluene | 108-88-3 | 1.45E-03 | E |
| Xylenes (Isomers) | 1330-20-7 | 1.01E-03 | E |
| o-Xylene | 95-47-6 | N/A | E |
| p-Xylene | 106-42-3 | N/A | E |
| m-Xylene | 108-38-3 | N/A | E |
| Formaldehyde | 50-00-0 | 4.19E-03 | E |
| 1,3-Butadiene | 106-99-0 | 1.39E-04 | E |
| Acetaldehyde | 75-07-0 | 2.72E-03 | E |
| Acrolein | 107-02-8 | 3.28E-04 | E |
| Naphthalene | 91-20-3 | 3.01E-04 | E |
| Hexane | 110-54-3 | N/A | E |
| 2,2,4-Trimethylpentane | 540-84-1 | N/A | E |
| Propionaldehyde | 123-38-6 | N/A | E |
| Ethyl benzene | 100-41-4 | N/A | E |
| Cyclohexane* | 110-82-7 | N/A | E |
| n-Heptane* | 142-82-5 | N/A | E |

* New York State HAP

DATA QUALITY RATING "E" SPECIATION TAKEN FROM AP-42 SECTION 3.3, TABLE 3.3-3, PAGE 3.3-5

DATA RATING "B" TAKEN FROM AIR EMISSIONS SPECIATION MANUAL, PROFILE No. 1101

"N/A" STANDS FOR NOT APPLICABLE

GENERATORS

GENERAL INFORMATION

Installation Seneca Army Depot
 SCC..... 2-02-001-02 Unit ID #..... 1 active generator
 Location..... Bldg 715 Permit #.....
 POC..... George Shadman Inventoried by..... T. Sletten
 Phone..... (607) 869-1470 Inventory Date..... June 6-10, 1994

SOURCE INFORMATION

Manufacturer..... Kohler Fuel Type..... Diesel
 Date Installed..... Annual Fuel Use..... (units)
 Rated Capacity..... 45 kw Operating Schedule
 (units) Hours/day..... 1 hr/2 wk
 Max Heat Input..... Days/week.....
 (units) Load Factor.....

MONTHLY FUEL USE

19__ JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC

Indicate Units: _____

Total Annual Use: _____

POLLUTION CONTROL EQUIPMENT

(enter control efficiency)

ESP.....
 Baghouse.....
 Wet Scrubber.....
 Dry Scrubber.....
 Spray Dryer.....
 Cyclone.....
 Other.....
 None?.....
 Other.....

FUEL ANALYSIS

Sulfur Content (S)..... %
 Lead Content (Pb)..... %
 Ash Content..... %
 Nitrogen Content (N)..... %
 Reference.....

EMISSION RATE DETERMINATION METHOD

Stack Test Data _____ Emission Factor X Material Balance _____

Similar Unit Data _____ Other _____

Reference: AP-42 Vol 1, Stationary sources and EPA Air Emissions Species Manual, Vol 1. Profile No. 1101.

OZONE PRECURSOR EMISSIONS

Typical Ozone Season Emissions

VOC Emissions 0.0107127620 lb/dayNOx Emissions 0.1315602355 lb/dayCO Emissions 0.0284733938 lb/day

CRITERIA POLLUTANT EMISSIONS

VOC Emissions 0.0019711482 ton/yrNOx Emissions 0.0242070833 ton/yrCO Emissions 0.0052391045 ton/yrSO2 Emissions 0.0016097710 ton/yrPM10 Emissions - ton/yrTotal Particulate 0.0017290774 ton/yr

HAZARDOUS AIR POLLUTANTS

HAP

CAS CODE

LB/YR

Benzene 71-43-2 0.0037231988Toluene 108-88-3 0.0016321418Xylenes (Isomers) 1330-20-7 0.0011373115o-Xylene 95-47-6 N/Ap-Xylene 106-42-3 N/Am-Xylene 108-38-3 N/AFormaldehyde 50-00-0 0.00470886871,3-Butadiene 106-99-0 0.0001560312Acetaldehyde 75-07-0 0.0030607647Acrolein 107-02-8 0.0003691274Naphthalene 91-20-3 0.0003384001Hexane 110-54-3 N/A2,2,4-Trimethylpentane 540-84-1 N/APropionaldehyde 123-38-6 N/AEthyl benzene 100-41-4 N/ACyclohexane* 110-82-7 N/An-Heptane* 142-82-5 N/A

* New York State HAP

(use additional sheets if necessary)

STACK INFORMATION

Stack (release) Height _____ feet

Stack Diameter _____ inch

Stack Gas Velocity _____ ft/sec

Stack Gas Flow Rate _____ acsf/min

Stack Gas Temperature _____ oF

Other sources that share this stack? _____

Stack Sampling Report Available? (Y/ N, results?) _____

Describe in detail what the generators are used for:(ie., training, emergency power, etc.) _____

COMMENTS

EMISSIONS FOR GASOLINE AND DIESEL INDUSTRIAL ENGINES *

Federal and New York State Regulations

| | | | |
|------------|---------------------------|-----------|--------------------|
| Facility: | <u>Seneca Army Depot</u> | Date: | <u>8/16/94</u> |
| Location: | <u>Bldg 715</u> | Initials: | <u>DCP</u> |
| ID Number: | <u>1 active generator</u> | SCC: | <u>2-02-001-02</u> |

INPUT DATA

TOTAL HOURS ENGINE RUN 26 hrs/year

ENGINE POWER RATING 60.33 hp
(use only if power rating is less than 600 hp)

| | | |
|------------------|--------|---|
| FUEL TYPE | diesel | (GASOLINE/DIESEL) |
| FUEL USAGE (gal) | 0 | (Use only when you do not have engine power and hrs.) |

SOLUTION

| | | |
|-----------------------------|-------|----------|
| PARTICULATE EMISSIONS (TSP) | 3.46 | lbs/year |
| SULFUR OXIDE EMISSIONS | 3.22 | lbs/year |
| CARBON MONOXIDE EMISSIONS | 10.48 | lbs/year |
| NITROGEN OXIDE EMISSIONS | 48.41 | lbs/year |
| EXHAUST VOC EMISSIONS | 3.87 | lbs/year |
| EVAPORATIVE VOC EMISSIONS | 0.00 | lbs/year |
| CRANKCASE VOC EMISSIONS | 0.07 | lbs/year |
| REFUELING VOC EMISSIONS | 0.00 | lbs/year |

EMISSION FACTORS TAKEN FROM AP-42, SECTION 3.3, TABLE 3.3-1.

DATA QUALITY RATING D AND E.

BTU CONTENT OF THE FUELS TAKEN FROM AP-42 APPENDIX A.

*: Template used for heaters, pumps, air compressors, and generators.

SPECIATION OF EMISSIONS

| | | |
|-----------------------------|------|--------|
| TOTAL VOC EMISSIONS | 3.94 | Lbs/Yr |
| TOTAL PARTICULATE EMISSIONS | 3.46 | Lbs/Yr |
| TOTAL AIR TOXIC EMISSIONS | 0.02 | Lbs/Yr |

INDIVIDUAL AIR TOXIC EMISSIONS

| Chemical Name | CAS # | Emissions (Lbs/Yr) | Profile Data Quality |
|------------------------|-----------|-----------------------|-------------------------|
| Benzene | 71-43-2 | 3.72E-03 | E |
| Toluene | 108-88-3 | 1.63E-03 | E |
| Xylenes (Isomers) | 1330-20-7 | 1.14E-03 | E |
| o-Xylene | 95-47-6 | N/A | E |
| p-Xylene | 106-42-3 | N/A | E |
| m-Xylene | 108-38-3 | N/A | E |
| Formaldehyde | 50-00-0 | 4.71E-03 | E |
| 1,3-Butadiene | 106-99-0 | 1.56E-04 | E |
| Acetaldehyde | 75-07-0 | 3.06E-03 | E |
| Acrolein | 107-02-8 | 3.69E-04 | E |
| Naphthalene | 91-20-3 | 3.38E-04 | E |
| Hexane | 110-54-3 | N/A | E |
| 2,2,4-Trimethylpentane | 540-84-1 | N/A | E |
| Propionaldehyde | 123-38-6 | N/A | E |
| Ethyl benzene | 100-41-4 | N/A | E |
| Cyclohexane* | 110-82-7 | N/A | E |
| n-Heptane* | 142-82-5 | N/A | E |

* New York State HAP

DATA QUALITY RATING "E" SPECIATION TAKEN FROM AP-42 SECTION 3.3, TABLE 3.3-3, PAGE 3.3-5

DATA RATING "B" TAKEN FROM AIR EMISSIONS SPECIATION MANUAL, PROFILE No. 1101

"N/A" STANDS FOR NOT APPLICABLE

GENERATORS

GENERAL INFORMATION

Installation Seneca Army Depot

SCC..... 2-02-001-02 Unit ID #..... 1 active generator

Location..... Bldg 722 Fire Station Permit #..... _____

POC..... George Shadman Inventoried by..... T. Sletten

Phone..... (607) 869-1470 Inventory Date..... June 6-10, 1994

SOURCE INFORMATION

Manufacturer..... Military Fuel Type..... Diesel

Date Installed..... _____ Annual Fuel Use..... _____ (units)

Rated Capacity..... 60 kw Operating Schedule
(units) Hours/day..... 1 hr/mnth

Max Heat Input..... _____ Days/week..... _____
(units)

Load Factor..... _____

MONTHLY FUEL USE

19__ JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC

Indicate Units: _____

Total Annual Use: _____

POLLUTION CONTROL EQUIPMENT

(enter control efficiency)

ESP..... _____

Baghouse..... _____

Wet Scrubber..... _____

Dry Scrubber..... _____

Spray Dryer..... _____

Cyclone..... _____

Other.. _____

None?..... _____

Other.. _____

FUEL ANALYSIS

Sulfur Content (S)..... _____ %

Lead Content (Pb)..... _____ %

Ash Content..... _____ %

Nitrogen Content (N)..... _____ %

Reference.. _____

EMISSION RATE DETERMINATION METHOD

Stack Test Data _____ Emission Factor X Material Balance _____

Similar Unit Data _____ Other _____

Reference: AP-42 Vol 1, Stationary sources and EPA Air Emissions Species Manual, Vol 1. Profile No. 1101.

OZONE PRECURSOR EMISSIONS

Typical Ozone Season Emissions
 VOC Emissions 0.0065924689 lb/day
 NOx Emissions 0.0809601449 lb/day
 CO Emissions 0.0175220885 lb/day

HAZARDOUS AIR POLLUTANTS

| HAP | CAS CODE | LB/YR |
|------------------------|-----------|--------------|
| Benzene | 71-43-2 | 0.0022911992 |
| Toluene | 108-88-3 | 0.0010043950 |
| Xylenes (Isomers) | 1330-20-7 | 0.0006998840 |
| o-Xylene | 95-47-6 | N/A |
| p-Xylene | 106-42-3 | N/A |
| m-Xylene | 108-38-3 | N/A |
| Formaldehyde | 50-00-0 | 0.0028977654 |
| 1,3-Butadiene | 106-99-0 | 0.0000960192 |
| Acetaldehyde | 75-07-0 | 0.0018835475 |
| Acrolein | 107-02-8 | 0.0002271553 |
| Naphthalene | 91-20-3 | 0.0002082462 |
| Hexane | 110-54-3 | N/A |
| 2,2,4-Trimethylpentane | 540-84-1 | N/A |
| Propionaldehyde | 123-38-6 | N/A |
| Ethyl benzene | 100-41-4 | N/A |
| Cyclohexane* | 110-82-7 | N/A |
| n-Heptane* | 142-82-5 | N/A |

CRITERIA POLLUTANT EMISSIONS

VOC Emissions 0.0012130143 ton/yr
 NOx Emissions 0.0148966667 ton/yr
 CO Emissions 0.0032240643 ton/yr
 SO2 Emissions 0.0009906283 ton/yr
 PM10 Emissions - ton/yr
 Total Particulate 0.0010640476 ton/yr

* New York State HAP
 (use additional sheets if necessary)

STACK INFORMATION

| | |
|-----------------------------------|------------------------------------|
| Stack (release) Height _____ feet | Stack Gas Velocity _____ ft/sec |
| Stack Diameter _____ inch | Stack Gas Flow Rate _____ ascf/min |
| | Stack Gas Temperature _____ oF |

Other sources that share this stack? _____
 Stack Sampling Report Available? (Y/ N, results?) _____
 Describe in detail what the generators are used for:(ie., training, emergency power, etc.) _____

COMMENTS

EMISSIONS FOR GASOLINE AND DIESEL INDUSTRIAL ENGINES *

Federal and New York State Regulations

| | | | |
|------------|------------------------------|-----------|--------------------|
| Facility: | <u>Seneca Army Depot</u> | Date: | <u>8/16/94</u> |
| Location: | <u>Bldg 722 Fire Station</u> | Initials: | <u>DCP</u> |
| ID Number: | <u>1 active generator</u> | SCC: | <u>2-02-001-02</u> |

INPUT DATA

TOTAL HOURS ENGINE RUN 12 hrs/year

ENGINE POWER RATING 80.44 hp
(use only if power rating is less than 600 hp)

| | | |
|------------------|--------|--|
| FUEL TYPE | diesel | (GASOLINE/DIESEL) |
| FUEL USAGE (gal) | 0 | (Use only when you do not have engine power and hrs.) |

SOLUTION

| | | |
|-----------------------------|-------|----------|
| PARTICULATE EMISSIONS (TSP) | 2.13 | lbs/year |
| SULFUR OXIDE EMISSIONS | 1.98 | lbs/year |
| CARBON MONOXIDE EMISSIONS | 6.45 | lbs/year |
| NITROGEN OXIDE EMISSIONS | 29.79 | lbs/year |
| EXHAUST VOC EMISSIONS | 2.38 | lbs/year |
| EVAPORATIVE VOC EMISSIONS | 0.00 | lbs/year |
| CRANKCASE VOC EMISSIONS | 0.04 | lbs/year |
| REFUELING VOC EMISSIONS | 0.00 | lbs/year |

EMISSION FACTORS TAKEN FROM AP-42, SECTION 3.3, TABLE 3.3-1.

DATA QUALITY RATING D AND E.

BTU CONTENT OF THE FUELS TAKEN FROM AP-42 APPENDIX A.

*: Template used for heaters, pumps, air compressors, and generators.

SPECIATION OF EMISSIONS

| | | |
|-----------------------------|------|--------|
| TOTAL VOC EMISSIONS | 2.43 | Lbs/Yr |
| TOTAL PARTICULATE EMISSIONS | 2.13 | Lbs/Yr |
| TOTAL AIR TOXIC EMISSIONS | 0.01 | Lbs/Yr |

INDIVIDUAL AIR TOXIC EMISSIONS

| Chemical Name | CAS # | Emissions (Lbs/Yr) | Profile Data Quality |
|------------------------|-----------|-----------------------|-------------------------|
| Benzene | 71-43-2 | 2.29E-03 | E |
| Toluene | 108-88-3 | 1.00E-03 | E |
| Xylenes (Isomers) | 1330-20-7 | 7.00E-04 | E |
| o-Xylene | 95-47-6 | N/A | E |
| p-Xylene | 106-42-3 | N/A | E |
| m-Xylene | 108-38-3 | N/A | E |
| Formaldehyde | 50-00-0 | 2.90E-03 | E |
| 1,3-Butadiene | 106-99-0 | 9.60E-05 | E |
| Acetaldehyde | 75-07-0 | 1.88E-03 | E |
| Acrolein | 107-02-8 | 2.27E-04 | E |
| Naphthalene | 91-20-3 | 2.08E-04 | E |
| Hexane | 110-54-3 | N/A | E |
| 2,2,4-Trimethylpentane | 540-84-1 | N/A | E |
| Propionaldehyde | 123-38-6 | N/A | E |
| Ethyl benzene | 100-41-4 | N/A | E |
| Cyclohexane* | 110-82-7 | N/A | E |
| n-Heptane* | 142-82-5 | N/A | E |

* New York State HAP

DATA QUALITY RATING "E" SPECIATION TAKEN FROM AP-42 SECTION 3.3, TABLE 3.3-3, PAGE 3.3-5

DATA RATING "B" TAKEN FROM AIR EMISSIONS SPECIATION MANUAL, PROFILE No. 1101

"N/A" STANDS FOR NOT APPLICABLE

GENERATORS

GENERAL INFORMATION

Installation Seneca Army Depot
 SCC..... 2-02-001-02 Unit ID #..... 1 active generator
 Location..... Bldg 729 Permit #.....
 POC..... George Shadman Inventoried by..... T. Sletten
 Phone..... (607) 869-1470 Inventory Date..... June 6-10, 1994

SOURCE INFORMATION

Manufacturer..... Kohler Fuel Type..... Diesel
 Date Installed..... Annual Fuel Use..... (units)
 Rated Capacity..... 20 kw Operating Schedule
 (units) Hours/day..... 1
 Max Heat Input..... Days/week..... 1
 (units) Load Factor.....

MONTHLY FUEL USE

19__ JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC

Indicate Units: _____

Total Annual Use: _____

POLLUTION CONTROL EQUIPMENT

(enter control efficiency)

ESP.....
 Baghouse.....
 Wet Scrubber.....
 Dry Scrubber.....
 Spray Dryer.....
 Cyclone.....
 Other.....
 None?.....
 Other.....

FUEL ANALYSIS

Sulfur Content (S)..... %
 Lead Content (Pb)..... %
 Ash Content..... %
 Nitrogen Content (N)..... %
 Reference.....

EMISSION RATE DETERMINATION METHOD

Stack Test Data _____ Emission Factor X Material Balance _____

Similar Unit Data _____ Other _____

Reference: AP-42 Vol 1, Stationary sources and EPA Air Emissions Species Manual, Vol 1. Profile No. 1101.

OZONE PRECURSOR EMISSIONS

Typical Ozone Season Emissions
VOC Emissions 0.0087899586 lb/day
NOx Emissions 0.1079468599 lb/day
CO Emissions 0.0233627847 lb/day

HAZARDOUS AIR POLLUTANTS

| HAP | CAS CODE | LB/YR |
|------------------------|-----------|--------------|
| Benzene | 71-43-2 | 0.0030549323 |
| Toluene | 108-88-3 | 0.0013391933 |
| Xylenes (Isomers) | 1330-20-7 | 0.0009331787 |
| o-Xylene | 95-47-6 | N/A |
| p-Xylene | 106-42-3 | N/A |
| m-Xylene | 108-38-3 | N/A |
| Formaldehyde | 50-00-0 | 0.0038636872 |
| 1,3-Butadiene | 106-99-0 | 0.0001280256 |
| Acetaldehyde | 75-07-0 | 0.0025113967 |
| Acrolein | 107-02-8 | 0.0003028738 |
| Naphthalene | 91-20-3 | 0.0002776616 |
| Hexane | 110-54-3 | N/A |
| 2,2,4-Trimethylpentane | 540-84-1 | N/A |
| Propionaldehyde | 123-38-6 | N/A |
| Ethyl benzene | 100-41-4 | N/A |
| Cyclohexane* | 110-82-7 | N/A |
| n-Heptane* | 142-82-5 | N/A |

CRITERIA POLLUTANT EMISSIONS

VOC Emissions 0.0016173524 ton/yr
NOx Emissions 0.0198622222 ton/yr
CO Emissions 0.0042987524 ton/yr
SO2 Emissions 0.0013208378 ton/yr
PM10 Emissions - ton/yr
Total Particulate 0.0014187302 ton/yr

* New York State HAP
(use additional sheets if necessary)

STACK INFORMATION

Stack (release) Height _____ feet Stack Gas Velocity _____ ft/sec
Stack Diameter _____ inch Stack Gas Flow Rate _____ ascf/min
Stack Gas Temperature _____ oF

Other sources that share this stack? _____
Stack Sampling Report Available? (Y/ N, results?) _____
Describe in detail what the generators are used for:(ie., training, emergency power, etc.) _____

COMMENTS

EMISSIONS FOR GASOLINE AND DIESEL INDUSTRIAL ENGINES *

Federal and New York State Regulations

| | | | |
|------------|---------------------------|-----------|--------------------|
| Facility: | <u>Seneca Army Depot</u> | Date: | <u>8/16/94</u> |
| Location: | <u>Bldg 729</u> | Initials: | <u>DCP</u> |
| ID Number: | <u>1 active generator</u> | SCC: | <u>2-02-001-02</u> |

INPUT DATA

TOTAL HOURS ENGINE RUN 48 hrs/year

ENGINE POWER RATING 26.81 hp
(use only if power rating is less than 600 hp)

| | | |
|------------------|--------|---|
| FUEL TYPE | diesel | (GASOLINE/DIESEL) |
| FUEL USAGE (gal) | 0 | (Use only when you do not have engine power and hrs.) |

SOLUTION

| | | |
|-----------------------------|-------|----------|
| PARTICULATE EMISSIONS (TSP) | 2.84 | lbs/year |
| SULFUR OXIDE EMISSIONS | 2.64 | lbs/year |
| CARBON MONOXIDE EMISSIONS | 8.60 | lbs/year |
| NITROGEN OXIDE EMISSIONS | 39.72 | lbs/year |
| EXHAUST VOC EMISSIONS | 3.18 | lbs/year |
| EVAPORATIVE VOC EMISSIONS | 0.00 | lbs/year |
| CRANKCASE VOC EMISSIONS | 0.06 | lbs/year |
| REFUELING VOC EMISSIONS | 0.00 | lbs/year |

EMISSION FACTORS TAKEN FROM AP-42, SECTION 3.3, TABLE 3.3-1.

DATA QUALITY RATING D AND E.

BTU CONTENT OF THE FUELS TAKEN FROM AP-42 APPENDIX A.

*: Template used for heaters, pumps, air compressors, and generators.

SPECIATION OF EMISSIONS

| | | |
|-----------------------------|------|--------|
| TOTAL VOC EMISSIONS | 3.23 | Lbs/Yr |
| TOTAL PARTICULATE EMISSIONS | 2.84 | Lbs/Yr |
| TOTAL AIR TOXIC EMISSIONS | 0.01 | Lbs/Yr |

INDIVIDUAL AIR TOXIC EMISSIONS

| Chemical Name | CAS # | Emissions (Lbs/Yr) | Profile Data Quality |
|------------------------|-----------|-----------------------|-------------------------|
| Benzene | 71-43-2 | 3.05E-03 | E |
| Toluene | 108-88-3 | 1.34E-03 | E |
| Xylenes (Isomers) | 1330-20-7 | 9.33E-04 | E |
| o-Xylene | 95-47-6 | N/A | E |
| p-Xylene | 106-42-3 | N/A | E |
| m-Xylene | 108-38-3 | N/A | E |
| Formaldehyde | 50-00-0 | 3.86E-03 | E |
| 1,3-Butadiene | 106-99-0 | 1.28E-04 | E |
| Acetaldehyde | 75-07-0 | 2.51E-03 | E |
| Acrolein | 107-02-8 | 3.03E-04 | E |
| Naphthalene | 91-20-3 | 2.78E-04 | E |
| Hexane | 110-54-3 | N/A | E |
| 2,2,4-Trimethylpentane | 540-84-1 | N/A | E |
| Propionaldehyde | 123-38-6 | N/A | E |
| Ethyl benzene | 100-41-4 | N/A | E |
| Cyclohexane* | 110-82-7 | N/A | E |
| n-Heptane* | 142-82-5 | N/A | E |

* New York State HAP

DATA QUALITY RATING "E" SPECIATION TAKEN FROM AP-42 SECTION 3.3, TABLE 3.3-3, PAGE 3.3-5

DATA RATING "B" TAKEN FROM AIR EMISSIONS SPECIATION MANUAL, PROFILE No. 1101

"N/A" STANDS FOR NOT APPLICABLE

GENERATORS

GENERAL INFORMATION

Installation Seneca Army Depot
 SCC..... 2-02-004-01 Unit ID #..... 1 active generator
 Location..... Bldg 819 Permit #.....
 POC..... George Shadman Inventoried by..... T. Sletten
 Phone..... (607) 869-1470 Inventory Date..... June 6-10, 1994

SOURCE INFORMATION

Manufacturer..... Fuel Type..... Diesel
 Date Installed..... Annual Fuel Use..... (units)
 Rated Capacity..... 850 kw (units) Operating Schedule
 Hours/day..... 1 hr/mnth
 Max Heat Input..... (units) Days/week.....
 Load Factor.....

MONTHLY FUEL USE

19__ JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC

Indicate Units: _____

Total Annual Use: _____

POLLUTION CONTROL EQUIPMENT

(enter control efficiency)

ESP.....
 Baghouse.....
 Wet Scrubber.....
 Dry Scrubber.....
 Spray Dryer.....
 Cyclone.....
 Other.....
 None?.....
 Other.....

FUEL ANALYSIS

Sulfur Content (S)..... %
 Lead Content (Pb)..... %
 Ash Content..... %
 Nitrogen Content (N)..... %
 Reference.....

EMISSION RATE DETERMINATION METHOD

Stack Test Data _____ Emission Factor X Material Balance _____

Similar Unit Data _____ Other _____

Reference: AP-42 VOL 1, SECTION 3.3, TABLES 3.3-1, 3.3-2 & 3.3-3 AND EPA AIR EMISSIONS SPECIES MANUAL

VOL 1, PROFILE NO 1101

OZONE PRECURSOR EMISSIONS

Typical Ozone Season Emissions
 VOC Emissions 0.0270349055 lb/day
 NOx Emissions 0.9011635179 lb/day
 CO Emissions 0.1966174948 lb/day

HAZARDOUS AIR POLLUTANTS

| HAP | CAS CODE | LB/YR |
|-------------------|-----------|--------------|
| Benzene | 71-43-2 | 0.0269807777 |
| Toluene | 108-88-3 | 0.0097701012 |
| Xylenes (Isomers) | 1330-20-7 | 0.0067104254 |
| Formaldehyde | 50-00-0 | 0.0027432775 |
| Acetaldehyde | 75-07-0 | 0.0008761799 |
| Acrolein | 107-02-8 | 0.0002739801 |
| Naphthalene | 91-20-3 | 0.0045199756 |

CRITERIA POLLUTANT EMISSIONS

VOC Emissions 0.0049744226 ton/yr
 NOx Emissions 0.1658140873 ton/yr
 CO Emissions 0.0361776190 ton/yr
 SO2 Emissions 0.0221286437 ton/yr
 PM10 Emissions 0.0023786785 ton/yr
 Total Particulate 0.0036569543 ton/yr

(use additional sheets if necessary)

STACK INFORMATION

Stack Ht. _____ feet
 Stack Diameter _____ inch
 Stack Gas Velocity _____ ft/sec
 Stack Gas Flow Rate _____ ascf/min
 Stack Gas Temperature _____ oF

Other sources that share this stack? _____

COMMENTS

EMISSIONS FOR LARGE DIESEL INDUSTRIAL ENGINES (>600 KW)
Federal and New York State Regulations

| | | | |
|------------|---------------------------|-----------|--------------------|
| Facility: | <u>Seneca Army Depot</u> | Date: | <u>8/25/94</u> |
| Location: | <u>Bldg 819</u> | Initials: | <u>DCP</u> |
| ID Number: | <u>1 active generator</u> | SCC # | <u>2-02-004-01</u> |

INPUT DATA

| | | | |
|---|----------|-------------|---|
| TOTAL HOURS ENGINE RUN | 12 | hrs/year | |
| ENGINE POWER RATING | 1,139.60 | hp | |
| FUEL TYPE | diesel | | |
| FUEL USAGE (gal) | | gallons/yr | (Use only when you do not have engine power and hrs.) |
| Sulfur content in diesel fuel (% by weight) | 0.4 | % by weight | (default is 0.4 %) |

SOLUTION

| | | | Data Quality |
|-----------------------------|--------|----------|--------------|
| PARTICULATE EMISSIONS (TSP) | 7.31 | lbs/year | E |
| SULFUR OXIDE EMISSIONS | 44.26 | lbs/year | B |
| CARBON MONOXIDE EMISSIONS | 72.36 | lbs/year | C |
| NITROGEN OXIDE EMISSIONS | 331.63 | lbs/year | C |
| VOC EMISSIONS | 9.95 | lbs/year | E |
| PM10 EMISSIONS | 4.76 | lbs/year | E |

EMISSION FACTORS TAKEN FROM AP-42, SECTION 3.4, TABLE 3.4-1.

Btu CONTENT OF THE FUELS TAKEN FROM AP-42 APPENDIX A.

SPECIATION OF EMISSIONS

| | | |
|-----------------------------|------|--------|
| TOTAL VOC EMISSIONS | 9.95 | Lbs/Yr |
| TOTAL PARTICULATE EMISSIONS | 7.31 | Lbs/Yr |
| TOTAL AIR TOXIC EMISSIONS | 0.05 | Lbs/Yr |

INDIVIDUAL AIR TOXIC EMISSIONS

| Chemical Name | CAS # | Emissions (Lbs/Yr) | Profile Data Quality |
|-------------------|-----------|-----------------------|-------------------------|
| Benzene | 71-43-2 | 2.70E-02 | E |
| Toluene | 108-88-3 | 9.77E-03 | E |
| Xylenes (Isomers) | 1330-20-7 | 6.71E-03 | E |
| Formaldehyde | 50-00-0 | 2.74E-03 | E |
| Acetaldehyde | 75-07-0 | 8.76E-04 | E |
| Acrolein | 107-02-8 | 2.74E-04 | E |
| Naphthalene | 91-20-3 | 4.52E-03 | E |

GENERATORS

GENERAL INFORMATION

Installation Seneca Army Depot

SCC..... 2-02-001-02 Unit ID #..... 1 active generator

Location..... Bldg 2304 Permit #..... _____

POC..... George Shadman Inventoried by..... T. Sletten

Phone..... (607) 869-1470 Inventory Date..... June 6-10, 1994

SOURCE INFORMATION

Manufacturer..... Kato Fuel Type..... Diesel

Date Installed..... _____ Annual Fuel Use..... _____ (units)

Rated Capacity..... 150 kw Operating Schedule
(units) Hours/day..... 1 hr/ 2 wk

Max Heat Input..... _____ Days/week..... _____
(units) Load Factor..... _____

MONTHLY FUEL USE

19__ JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC

Indicate Units: _____

Total Annual Use: _____

POLLUTION CONTROL EQUIPMENT

(enter control efficiency)

FUEL ANALYSIS

ESP..... _____

Baghouse..... _____

Wet Scrubber..... _____

Dry Scrubber..... _____

Spray Dryer..... _____

Cyclone..... _____

Other.. _____

None?..... _____

Other.. _____

Sulfur Content (S)..... _____ %

Lead Content (Pb)..... _____ %

Ash Content..... _____ %

Nitrogen Content (N)..... _____ %

Reference.. _____

EMISSION RATE DETERMINATION METHOD

Stack Test Data _____ Emission Factor X Material Balance _____
 Similar Unit Data _____ Other _____

Reference: AP-42 Vol 1, Stationary sources and EPA Air Emissions Species Manual, Vol 1. Profile No. 1101.

OZONE PRECURSOR EMISSIONS

Typical Ozone Season Emissions

VOC Emissions 0.0357092068 lb/dayNOx Emissions 0.4385341184 lb/dayCO Emissions 0.0949113128 lb/day

CRITERIA POLLUTANT EMISSIONS

VOC Emissions 0.0065704940 ton/yrNOx Emissions 0.0806902778 ton/yrCO Emissions 0.0174636815 ton/yrSO2 Emissions 0.0053659035 ton/yrPM10 Emissions - ton/yrTotal Particulate 0.0057635913 ton/yr

HAZARDOUS AIR POLLUTANTS

HAP

CAS CODE

LB/YR

| | | |
|------------------------|-----------|--------------|
| Benzene | 71-43-2 | 0.0124106625 |
| Toluene | 108-88-3 | 0.0054404727 |
| Xylenes (Isomers) | 1330-20-7 | 0.0037910384 |
| o-Xylene | 95-47-6 | N/A |
| p-Xylene | 106-42-3 | N/A |
| m-Xylene | 108-38-3 | N/A |
| Formaldehyde | 50-00-0 | 0.0156962292 |
| 1,3-Butadiene | 106-99-0 | 0.0005201039 |
| Acetaldehyde | 75-07-0 | 0.0102025490 |
| Acrolein | 107-02-8 | 0.0012304247 |
| Naphthalene | 91-20-3 | 0.0011280002 |
| Hexane | 110-54-3 | N/A |
| 2,2,4-Trimethylpentane | 540-84-1 | N/A |
| Propionaldehyde | 123-38-6 | N/A |
| Ethyl benzene | 100-41-4 | N/A |
| Cyclohexane* | 110-82-7 | N/A |
| n-Heptane* | 142-82-5 | N/A |

* New York State HAP
(use additional sheets if necessary)

STACK INFORMATION

Stack (release) Height _____ feet

Stack Diameter _____ inch

Stack Gas Velocity _____ ft/sec

Stack Gas Flow Rate _____ acsf/min

Stack Gas Temperature _____ oF

Other sources that share this stack? _____

Stack Sampling Report Available? (Y/ N, results?) _____

Describe in detail what the generators are used for:(ie., training, emergency power, etc.) _____

COMMENTS

EMISSIONS FOR GASOLINE AND DIESEL INDUSTRIAL ENGINES *

Federal and New York State Regulations

| | | | |
|------------|---------------------------|-----------|--------------------|
| Facility: | <u>Seneca Army Depot</u> | Date: | <u>8/16/94</u> |
| Location: | <u>Bldg 2304</u> | Initials: | <u>DCP</u> |
| ID Number: | <u>1 active generator</u> | SCC: | <u>2-02-001-02</u> |

INPUT DATA

TOTAL HOURS ENGINE RUN 26 hrs/year

ENGINE POWER RATING 201.11 hp
(use only if power rating is less than 600 hp)

| | | |
|------------------|--------|--|
| FUEL TYPE | diesel | (GASOLINE/DIESEL) |
| FUEL USAGE (gal) | 0 | (Use only when you do not have engine power and hrs.) |

SOLUTION

| | | |
|-----------------------------|--------|----------|
| PARTICULATE EMISSIONS (TSP) | 11.53 | lbs/year |
| SULFUR OXIDE EMISSIONS | 10.73 | lbs/year |
| CARBON MONOXIDE EMISSIONS | 34.93 | lbs/year |
| NITROGEN OXIDE EMISSIONS | 161.38 | lbs/year |
| EXHAUST VOC EMISSIONS | 12.91 | lbs/year |
| EVAPORATIVE VOC EMISSIONS | 0.00 | lbs/year |
| CRANKCASE VOC EMISSIONS | 0.23 | lbs/year |
| REFUELING VOC EMISSIONS | 0.00 | lbs/year |

EMISSION FACTORS TAKEN FROM AP-42, SECTION 3.3, TABLE 3.3-1.

DATA QUALITY RATING D AND E.

BTU CONTENT OF THE FUELS TAKEN FROM AP-42 APPENDIX A.

*: Template used for heaters, pumps, air compressors, and generators.

SPECIATION OF EMISSIONS

| | | |
|-----------------------------|-------|--------|
| TOTAL VOC EMISSIONS | 13.14 | Lbs/Yr |
| TOTAL PARTICULATE EMISSIONS | 11.53 | Lbs/Yr |
| TOTAL AIR TOXIC EMISSIONS | 0.05 | Lbs/Yr |

INDIVIDUAL AIR TOXIC EMISSIONS

| Chemical Name | CAS # | Emissions (Lbs/Yr) | Profile Data Quality |
|------------------------|-----------|-----------------------|-------------------------|
| Benzene | 71-43-2 | 1.24E-02 | E |
| Toluene | 108-88-3 | 5.44E-03 | E |
| Xylenes (Isomers) | 1330-20-7 | 3.79E-03 | E |
| o-Xylene | 95-47-6 | N/A | E |
| p-Xylene | 106-42-3 | N/A | E |
| m-Xylene | 108-38-3 | N/A | E |
| Formaldehyde | 50-00-0 | 1.57E-02 | E |
| 1,3-Butadiene | 106-99-0 | 5.20E-04 | E |
| Acetaldehyde | 75-07-0 | 1.02E-02 | E |
| Acrolein | 107-02-8 | 1.23E-03 | E |
| Naphthalene | 91-20-3 | 1.13E-03 | E |
| Hexane | 110-54-3 | N/A | E |
| 2,2,4-Trimethylpentane | 540-84-1 | N/A | E |
| Propionaldehyde | 123-38-6 | N/A | E |
| Ethyl benzene | 100-41-4 | N/A | E |
| Cyclohexane* | 110-82-7 | N/A | E |
| n-Heptane* | 142-82-5 | N/A | E |

* New York State HAP

DATA QUALITY RATING "E" SPECIATION TAKEN FROM AP-42 SECTION 3.3, TABLE 3.3-3, PAGE 3.3-5

DATA RATING "B" TAKEN FROM AIR EMISSIONS SPECIATION MANUAL, PROFILE No. 1101

"N/A" STANDS FOR NOT APPLICABLE

GENERATORS

GENERAL INFORMATION

Installation Seneca Army Depot

SCC..... 2-02-001-02 Unit ID #..... 2 active generators

Location..... Bldg 2411 Permit #..... _____

POC..... George Shadman Inventoried by..... T. Sletten

Phone..... (607) 869-1470 Inventory Date..... June 6-10, 1994

SOURCE INFORMATION

Manufacturer..... Onan Fuel Type..... Diesel

Date Installed..... _____ Annual Fuel Use..... _____
(units)

Rated Capacity..... 250 kw Operating Schedule
(units) Hours/day..... 1 hr/mnth

Max Heat Input..... _____ Days/week..... _____
(units)

Load Factor..... _____

MONTHLY FUEL USE

19__ JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC

Indicate Units: _____

Total Annual Use: _____

POLLUTION CONTROL EQUIPMENT

(enter control efficiency)

ESP..... _____

Baghouse..... _____

Wet Scrubber..... _____

Dry Scrubber..... _____

Spray Dryer..... _____

Cyclone..... _____

Other.. _____

None?..... _____

Other.. _____

FUEL ANALYSIS

Sulfur Content (S)..... _____ %

Lead Content (Pb)..... _____ %

Ash Content..... _____ %

Nitrogen Content (N)..... _____ %

Reference.. _____

EMISSION RATE DETERMINATION METHOD

Stack Test Data _____ Emission Factor X Material Balance _____

Similar Unit Data _____ Other _____

Reference: AP-42 Vol 1, Stationary sources and EPA Air Emissions Species Manual, Vol 1. Profile No. 1101.

OZONE PRECURSOR EMISSIONS

Typical Ozone Season Emissions

VOC Emissions 0.0549372412 lb/dayNOx Emissions 0.6746678744 lb/dayCO Emissions 0.1460174042 lb/day

CRITERIA POLLUTANT EMISSIONS

VOC Emissions 0.0101084524 ton/yrNOx Emissions 0.1241388889 ton/yrCO Emissions 0.0268672024 ton/yrSO2 Emissions 0.0082552361 ton/yrPM10 Emissions - ton/yrTotal Particulate 0.0088670635 ton/yr

HAZARDOUS AIR POLLUTANTS

HAP

CAS CODE

LB/YR

| | | |
|------------------------|-----------|--------------|
| Benzene | 71-43-2 | 0.0190933270 |
| Toluene | 108-88-3 | 0.0083699579 |
| Xylenes (Isomers) | 1330-20-7 | 0.0058323668 |
| o-Xylene | 95-47-6 | N/A |
| p-Xylene | 106-42-3 | N/A |
| m-Xylene | 108-38-3 | N/A |
| Formaldehyde | 50-00-0 | 0.0241480449 |
| 1,3-Butadiene | 106-99-0 | 0.0008001598 |
| Acetaldehyde | 75-07-0 | 0.0156962292 |
| Acrolein | 107-02-8 | 0.0018929611 |
| Naphthalene | 91-20-3 | 0.0017353849 |
| Hexane | 110-54-3 | N/A |
| 2,2,4-Trimethylpentane | 540-84-1 | N/A |
| Propionaldehyde | 123-38-6 | N/A |
| Ethyl benzene | 100-41-4 | N/A |
| Cyclohexane* | 110-82-7 | N/A |
| n-Heptane* | 142-82-5 | N/A |

* New York State HAP
(use additional sheets if necessary)

STACK INFORMATION

Stack (release) Height _____ feet

Stack Diameter _____ inch

Stack Gas Velocity _____ ft/sec

Stack Gas Flow Rate _____ acsf/min

Stack Gas Temperature _____ oF

Other sources that share this stack? _____

Stack Sampling Report Available? (Y/ N, results?) _____

Describe in detail what the generators are used for:(ie., training, emergency power, etc.) _____

COMMENTS

EMISSIONS FOR GASOLINE AND DIESEL INDUSTRIAL ENGINES *

Federal and New York State Regulations

| | | | |
|------------|----------------------------|-----------|--------------------|
| Facility: | <u>Seneca Army Depot</u> | Date: | <u>8/16/94</u> |
| Location: | <u>Bldg 2411</u> | Initials: | <u>DCP</u> |
| ID Number: | <u>2 active generators</u> | SCC: | <u>2-02-001-02</u> |

INPUT DATA

TOTAL HOURS ENGINE RUN 24 hrs/year

ENGINE POWER RATING 335.18 hp
(use only if power rating is less than 600 hp)

| | | |
|------------------|--------|---|
| FUEL TYPE | diesel | (GASOLINE/DIESEL) |
| FUEL USAGE (gal) | 0 | (Use only when you do not have engine power and hrs.) |

SOLUTION

| | | |
|-----------------------------|--------|----------|
| PARTICULATE EMISSIONS (TSP) | 17.73 | lbs/year |
| SULFUR OXIDE EMISSIONS | 16.51 | lbs/year |
| CARBON MONOXIDE EMISSIONS | 53.73 | lbs/year |
| NITROGEN OXIDE EMISSIONS | 248.28 | lbs/year |
| EXHAUST VOC EMISSIONS | 19.86 | lbs/year |
| EVAPORATIVE VOC EMISSIONS | 0.00 | lbs/year |
| CRANKCASE VOC EMISSIONS | 0.35 | lbs/year |
| REFUELING VOC EMISSIONS | 0.00 | lbs/year |

EMISSION FACTORS TAKEN FROM AP-42, SECTION 3.3, TABLE 3.3-1.

DATA QUALITY RATING D AND E.

BTU CONTENT OF THE FUELS TAKEN FROM AP-42 APPENDIX A.

*: Template used for heaters, pumps, air compressors, and generators.

SPECIATION OF EMISSIONS

| | | |
|-----------------------------|-------|--------|
| TOTAL VOC EMISSIONS | 20.22 | Lbs/Yr |
| TOTAL PARTICULATE EMISSIONS | 17.73 | Lbs/Yr |
| TOTAL AIR TOXIC EMISSIONS | 0.08 | Lbs/Yr |

INDIVIDUAL AIR TOXIC EMISSIONS

| Chemical Name | CAS # | Emissions (Lbs/Yr) | Profile Data Quality |
|------------------------|-----------|-----------------------|-------------------------|
| Benzene | 71-43-2 | 1.91E-02 | E |
| Toluene | 108-88-3 | 8.37E-03 | E |
| Xylenes (Isomers) | 1330-20-7 | 5.83E-03 | E |
| o-Xylene | 95-47-6 | N/A | E |
| p-Xylene | 106-42-3 | N/A | E |
| m-Xylene | 108-38-3 | N/A | E |
| Formaldehyde | 50-00-0 | 2.41E-02 | E |
| 1,3-Butadiene | 106-99-0 | 8.00E-04 | E |
| Acetaldehyde | 75-07-0 | 1.57E-02 | E |
| Acrolein | 107-02-8 | 1.89E-03 | E |
| Naphthalene | 91-20-3 | 1.74E-03 | E |
| Hexane | 110-54-3 | N/A | E |
| 2,2,4-Trimethylpentane | 540-84-1 | N/A | E |
| Propionaldehyde | 123-38-6 | N/A | E |
| Ethyl benzene | 100-41-4 | N/A | E |
| Cyclohexane* | 110-82-7 | N/A | E |
| n-Heptane* | 142-82-5 | N/A | E |

* New York State HAP

DATA QUALITY RATING "E" SPECIATION TAKEN FROM AP-42 SECTION 3.3, TABLE 3.3-3, PAGE 3.3-5

DATA RATING "B" TAKEN FROM AIR EMISSIONS SPECIATION MANUAL, PROFILE No. 1101

"N/A" STANDS FOR NOT APPLICABLE

GENERATORS

GENERAL INFORMATION

Installation Seneca Army Depot
 SCC..... 2-02-001-04 Unit ID #..... 1 active water pump
 Location..... Bldg 2411 Permit #.....
 POC..... George Shadman Inventoried by..... T. Sletten
 Phone..... (607) 869-1470 Inventory Date..... June 6-10, 1994

SOURCE INFORMATION

Manufacturer..... General Motors Model 60310 Fuel Type..... Diesel
 Date Installed..... Annual Fuel Use..... (units)
 Rated Capacity..... 130 hp at 1600 RPM Operating Schedule
 (units) Hours/day..... 1 hr/month
 Max Heat Input..... Days/week.....
 (units) Load Factor.....

MONTHLY FUEL USE

19__ JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC

Indicate Units: _____

Total Annual Use: _____

POLLUTION CONTROL EQUIPMENT
 (enter control efficiency)

ESP.....
 Baghouse.....
 Wet Scrubber.....
 Dry Scrubber.....
 Spray Dryer.....
 Cyclone.....
 Other.....
 None?.....
 Other.....

FUEL ANALYSIS

Sulfur Content (S)..... %
 Lead Content (Pb)..... %
 Ash Content..... %
 Nitrogen Content (N)..... %
 Reference.....

EMISSION RATE DETERMINATION METHOD

Stack Test Data _____ Emission Factor X Material Balance _____
 Similar Unit Data _____ Other _____

Reference: AP-42 Vol 1, Stationary sources and EPA Air Emissions Species Manual, Vol 1. Profile No. 1101.

OZONE PRECURSOR EMISSIONS

Typical Ozone Season Emissions

VOC Emissions 0.0106538992 lb/day
 NOx Emissions 0.1308373591 lb/day
 CO Emissions 0.0283169427 lb/day

CRITERIA POLLUTANT EMISSIONS

VOC Emissions 0.0019603175 ton/yr
 NOx Emissions 0.0240740741 ton/yr
 CO Emissions 0.0052103175 ton/yr
 SO2 Emissions 0.0016009259 ton/yr
 PM10 Emissions - ton/yr
 Total Particulate 0.0017195767 ton/yr

HAZARDOUS AIR POLLUTANTS

| HAP | CAS CODE | LB/YR |
|------------------------|-----------|--------------|
| Benzene | 71-43-2 | 0.0037027411 |
| Toluene | 108-88-3 | 0.0016231738 |
| Xylenes (Isomers) | 1330-20-7 | 0.0011310624 |
| o-Xylene | 95-47-6 | N/A |
| p-Xylene | 106-42-3 | N/A |
| m-Xylene | 108-38-3 | N/A |
| Formaldehyde | 50-00-0 | 0.0046829952 |
| 1,3-Butadiene | 106-99-0 | 0.0001551738 |
| Acetaldehyde | 75-07-0 | 0.0030439469 |
| Acrolein | 107-02-8 | 0.0003670992 |
| Naphthalene | 91-20-3 | 0.0003365407 |
| Hexane | 110-54-3 | N/A |
| 2,2,4-Trimethylpentane | 540-84-1 | N/A |
| Propionaldehyde | 123-38-6 | N/A |
| Ethyl benzene | 100-41-4 | N/A |
| Cyclohexane* | 110-82-7 | N/A |
| n-Heptane* | 142-82-5 | N/A |

* New York State HAP
(use additional sheets if necessary)

STACK INFORMATION

Stack (release) Height _____ feet Stack Gas Velocity _____ ft/sec
 Stack Diameter _____ inch Stack Gas Flow Rate _____ acsf/min
 Stack Gas Temperature _____ oF

Other sources that share this stack? _____

Stack Sampling Report Available? (Y/ N, results?) _____

Describe in detail what the generators are used for:(ie., training, emergency power, etc.) _____

COMMENTS

EMISSIONS FOR GASOLINE AND DIESEL INDUSTRIAL ENGINES *

Federal and New York State Regulations

| | | | |
|------------|----------------------------|-----------|----------------|
| Facility: | <u>Seneca Army Depot</u> | Date: | <u>8/16/94</u> |
| Location: | <u>Bldg 2411</u> | Initials: | <u>DCP</u> |
| ID Number: | <u>1 active water pump</u> | SCC: | <u>n/a</u> |

INPUT DATA

TOTAL HOURS ENGINE RUN 12 hrs/year

ENGINE POWER RATING 130.00 hp
(use only if power rating is less than 600 hp)

| | | |
|------------------|--------|---|
| FUEL TYPE | diesel | (GASOLINE/DIESEL) |
| FUEL USAGE (gal) | 0 | (Use only when you do not have engine power and hrs.) |

SOLUTION

| | | |
|-----------------------------|-------|----------|
| PARTICULATE EMISSIONS (TSP) | 3.44 | lbs/year |
| SULFUR OXIDE EMISSIONS | 3.20 | lbs/year |
| CARBON MONOXIDE EMISSIONS | 10.42 | lbs/year |
| NITROGEN OXIDE EMISSIONS | 48.15 | lbs/year |
| EXHAUST VOC EMISSIONS | 3.85 | lbs/year |
| EVAPORATIVE VOC EMISSIONS | 0.00 | lbs/year |
| CRANKCASE VOC EMISSIONS | 0.07 | lbs/year |
| REFUELING VOC EMISSIONS | 0.00 | lbs/year |

EMISSION FACTORS TAKEN FROM AP-42, SECTION 3.3, TABLE 3.3-1.

DATA QUALITY RATING D AND E.

BTU CONTENT OF THE FUELS TAKEN FROM AP-42 APPENDIX A.

*: Template used for heaters, pumps, air compressors, and generators.

SPECIATION OF EMISSIONS

| | | |
|-----------------------------|------|--------|
| TOTAL VOC EMISSIONS | 3.92 | Lbs/Yr |
| TOTAL PARTICULATE EMISSIONS | 3.44 | Lbs/Yr |
| TOTAL AIR TOXIC EMISSIONS | 0.02 | Lbs/Yr |

INDIVIDUAL AIR TOXIC EMISSIONS

| Chemical Name | CAS # | Emissions (Lbs/Yr) | Profile Data Quality |
|------------------------|-----------|-----------------------|-------------------------|
| Benzene | 71-43-2 | 3.70E-03 | E |
| Toluene | 108-88-3 | 1.62E-03 | E |
| Xylenes (Isomers) | 1330-20-7 | 1.13E-03 | E |
| o-Xylene | 95-47-6 | N/A | E |
| p-Xylene | 106-42-3 | N/A | E |
| m-Xylene | 108-38-3 | N/A | E |
| Formaldehyde | 50-00-0 | 4.68E-03 | E |
| 1,3-Butadiene | 106-99-0 | 1.55E-04 | E |
| Acetaldehyde | 75-07-0 | 3.04E-03 | E |
| Acrolein | 107-02-8 | 3.67E-04 | E |
| Naphthalene | 91-20-3 | 3.37E-04 | E |
| Hexane | 110-54-3 | N/A | E |
| 2,2,4-Trimethylpentane | 540-84-1 | N/A | E |
| Propionaldehyde | 123-38-6 | N/A | E |
| Ethyl benzene | 100-41-4 | N/A | E |
| Cyclohexane* | 110-82-7 | N/A | E |
| n-Heptane* | 142-82-5 | N/A | E |

* New York State HAP

DATA QUALITY RATING "E" SPECIATION TAKEN FROM AP-42 SECTION 3.3, TABLE 3.3-3, PAGE 3.3-5

DATA RATING "B" TAKEN FROM AIR EMISSIONS SPECIATION MANUAL, PROFILE No. 1101

"N/A" STANDS FOR NOT APPLICABLE

GENERATORS

GENERAL INFORMATION

Installation Seneca Army Depot

SCC..... 2-02-001-02 Unit ID #..... 2 active generators

Location..... Loran C Permit #..... _____

POC..... Commandor Allen Inventoried by..... T. Sletten

Phone..... (607) 869-5393 Inventory Date..... June 6-10, 1994

SOURCE INFORMATION

Manufacturer..... _____ Fuel Type..... Diesel

Date Installed..... _____ Annual Fuel Use..... 2,000 gal/yr
(units)

Rated Capacity..... 330 kw Operating Schedule
(units) Hours/day..... 26 hr/yr

Max Heat Input..... _____ Days/week..... _____
(units)

Load Factor..... _____

MONTHLY FUEL USE

19__ JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC

Indicate Units: _____

Total Annual Use: _____

POLLUTION CONTROL EQUIPMENT

(enter control efficiency)

ESP..... _____

Baghouse..... _____

Wet Scrubber..... _____

Dry Scrubber..... _____

Spray Dryer..... _____

Cyclone..... _____

Other.. _____

None?..... _____

Other.. _____

FUEL ANALYSIS

Sulfur Content (S)..... _____ %

Lead Content (Pb)..... _____ %

Ash Content..... _____ %

Nitrogen Content (N)..... _____ %

Reference.. _____

EMISSION RATE DETERMINATION METHOD

Stack Test Data _____ Emission Factor X Material Balance _____

Similar Unit Data _____ Other _____

Reference: AP-42 Vol 1, Stationary sources and EPA Air Emissions Species Manual, Vol 1. Profile No. 1101.

OZONE PRECURSOR EMISSIONS

Typical Ozone Season Emissions

VOC Emissions 0.1571205098 lb/dayNOx Emissions 1.9295501208 lb/dayCO Emissions 0.4176097761 lb/day

CRITERIA POLLUTANT EMISSIONS

VOC Emissions 0.0289101738 ton/yrNOx Emissions 0.3550372222 ton/yrCO Emissions 0.0768401988 ton/yrSO2 Emissions 0.0236099753 ton/yrPM10 Emissions - ton/yrTotal Particulate 0.0253598016 ton/yr

HAZARDOUS AIR POLLUTANTS

HAP

CAS CODE

LB/YR

| | | |
|------------------------|-----------|--------------|
| Benzene | 71-43-2 | 0.0546069152 |
| Toluene | 108-88-3 | 0.0239380797 |
| Xylenes (Isomers) | 1330-20-7 | 0.0166805690 |
| o-Xylene | 95-47-6 | N/A |
| p-Xylene | 106-42-3 | N/A |
| m-Xylene | 108-38-3 | N/A |
| Formaldehyde | 50-00-0 | 0.0690634083 |
| 1,3-Butadiene | 106-99-0 | 0.0022884570 |
| Acetaldehyde | 75-07-0 | 0.0448912154 |
| Acrolein | 107-02-8 | 0.0054138689 |
| Naphthalene | 91-20-3 | 0.0049632009 |
| Hexane | 110-54-3 | N/A |
| 2,2,4-Trimethylpentane | 540-84-1 | N/A |
| Propionaldehyde | 123-38-6 | N/A |
| Ethyl benzene | 100-41-4 | N/A |
| Cyclohexane* | 110-82-7 | N/A |
| n-Heptane* | 142-82-5 | N/A |

* New York State HAP
(use additional sheets if necessary)

STACK INFORMATION

Stack (release) Height _____ feet

Stack Diameter _____ inch

Stack Gas Velocity _____ ft/sec

Stack Gas Flow Rate _____ acsf/min

Stack Gas Temperature _____ oF

Other sources that share this stack? _____

Stack Sampling Report Available? (Y/ N, results?) _____

Describe in detail what the generators are used for:(ie., training, emergency power, etc.) _____

COMMENTS

EMISSIONS FOR GASOLINE AND DIESEL INDUSTRIAL ENGINES *

Federal and New York State Regulations

| | | | |
|------------|----------------------------|-----------|--------------------|
| Facility: | <u>Seneca Army Depot</u> | Date: | <u>8/16/94</u> |
| Location: | <u>Loran C</u> | Initials: | <u>DCP</u> |
| ID Number: | <u>2 active generators</u> | SCC: | <u>2-02-001-02</u> |

INPUT DATA

TOTAL HOURS ENGINE RUN 52 hrs/year

ENGINE POWER RATING 442.43 hp
(use only if power rating is less than 600 hp)

| | | |
|------------------|--------|--|
| FUEL TYPE | diesel | (GASOLINE/DIESEL) |
| FUEL USAGE (gal) | 0 | (Use only when you do not have engine power and hrs.) |

SOLUTION

| | | |
|-----------------------------|--------|----------|
| PARTICULATE EMISSIONS (TSP) | 50.72 | lbs/year |
| SULFUR OXIDE EMISSIONS | 47.22 | lbs/year |
| CARBON MONOXIDE EMISSIONS | 153.68 | lbs/year |
| NITROGEN OXIDE EMISSIONS | 710.07 | lbs/year |
| EXHAUST VOC EMISSIONS | 56.81 | lbs/year |
| EVAPORATIVE VOC EMISSIONS | 0.00 | lbs/year |
| CRANKCASE VOC EMISSIONS | 1.01 | lbs/year |
| REFUELING VOC EMISSIONS | 0.00 | lbs/year |

EMISSION FACTORS TAKEN FROM AP-42, SECTION 3.3, TABLE 3.3-1.

DATA QUALITY RATING D AND E.

BTU CONTENT OF THE FUELS TAKEN FROM AP-42 APPENDIX A.

*: Template used for heaters, pumps, air compressors, and generators.

SPECIATION OF EMISSIONS

| | | |
|-----------------------------|-------|--------|
| TOTAL VOC EMISSIONS | 57.82 | Lbs/Yr |
| TOTAL PARTICULATE EMISSIONS | 50.72 | Lbs/Yr |
| TOTAL AIR TOXIC EMISSIONS | 0.22 | Lbs/Yr |

INDIVIDUAL AIR TOXIC EMISSIONS

| Chemical Name | CAS # | Emissions (Lbs/Yr) | Profile Data Quality |
|------------------------|-----------|-----------------------|-------------------------|
| Benzene | 71-43-2 | 5.46E-02 | E |
| Toluene | 108-88-3 | 2.39E-02 | E |
| Xylenes (Isomers) | 1330-20-7 | 1.67E-02 | E |
| o-Xylene | 95-47-6 | N/A | E |
| p-Xylene | 106-42-3 | N/A | E |
| m-Xylene | 108-38-3 | N/A | E |
| Formaldehyde | 50-00-0 | 6.91E-02 | E |
| 1,3-Butadiene | 106-99-0 | 2.29E-03 | E |
| Acetaldehyde | 75-07-0 | 4.49E-02 | E |
| Acrolein | 107-02-8 | 5.41E-03 | E |
| Naphthalene | 91-20-3 | 4.96E-03 | E |
| Hexane | 110-54-3 | N/A | E |
| 2,2,4-Trimethylpentane | 540-84-1 | N/A | E |
| Propionaldehyde | 123-38-6 | N/A | E |
| Ethyl benzene | 100-41-4 | N/A | E |
| Cyclohexane* | 110-82-7 | N/A | E |
| n-Heptane* | 142-82-5 | N/A | E |

* New York State HAP

DATA QUALITY RATING "E" SPECIATION TAKEN FROM AP-42 SECTION 3.3, TABLE 3.3-3, PAGE 3.3-5

DATA RATING "B" TAKEN FROM AIR EMISSIONS SPECIATION MANUAL, PROFILE No. 1101

"N/A" STANDS FOR NOT APPLICABLE

GENERATORS

GENERAL INFORMATION

Installation Seneca Army Depot

SCC..... 2-02-001-02 Unit ID #..... 1 active generator

Location..... Portable Permit #..... _____

POC..... George Shadman Inventoried by..... T. Sletten

Phone..... (607) 869-1470 Inventory Date..... June 6-10, 1994

SOURCE INFORMATION

Manufacturer..... John Deere Fuel Type..... Diesel

Date Installed..... _____ Annual Fuel Use..... _____ (units)

Rated Capacity..... 50 kw Operating Schedule
(units) Hours/day..... 1 hr/mnth

Max Heat Input..... _____ Days/week..... _____
(units)

Load Factor..... _____

MONTHLY FUEL USE

19__ JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC

Indicate Units: _____

Total Annual Use: _____

POLLUTION CONTROL EQUIPMENT

(enter control efficiency)

ESP..... _____

Baghouse..... _____

Wet Scrubber..... _____

Dry Scrubber..... _____

Spray Dryer..... _____

Cyclone..... _____

Other.. _____

None?..... _____

Other.. _____

FUEL ANALYSIS

Sulfur Content (S)..... _____ %

Lead Content (Pb)..... _____ %

Ash Content..... _____ %

Nitrogen Content (N)..... _____ %

Reference.. _____

EMISSION RATE DETERMINATION METHOD

Stack Test Data _____ Emission Factor X Material Balance _____
 Similar Unit Data _____ Other _____

Reference: AP-42 Vol 1, Stationary sources and EPA Air Emissions Species Manual, Vol 1. Profile No. 1101.

OZONE PRECURSOR EMISSIONS

Typical Ozone Season Emissions

VOC Emissions 0.0054937241 lb/dayNOx Emissions 0.0674667874 lb/dayCO Emissions 0.0146017404 lb/day

HAZARDOUS AIR POLLUTANTS

HAP

CAS CODE

LB/YR

Benzene 71-43-2 0.0019093327Toluene 108-88-3 0.0008369958Xylenes (Isomers) 1330-20-7 0.0005832367o-Xylene 95-47-6 N/Ap-Xylene 106-42-3 N/Am-Xylene 108-38-3 N/AFormaldehyde 50-00-0 0.00241480451,3-Butadiene 106-99-0 0.0000800160Acetaldehyde 75-07-0 0.0015696229Acrolein 107-02-8 0.0001892961Naphthalene 91-20-3 0.0001735385Hexane 110-54-3 N/A2,2,4-Trimethylpentane 540-84-1 N/APropionaldehyde 123-38-6 N/AEthyl benzene 100-41-4 N/ACyclohexane* 110-82-7 N/An-Heptane* 142-82-5 N/A

CRITERIA POLLUTANT EMISSIONS

VOC Emissions 0.0010108452 ton/yrNOx Emissions 0.0124138889 ton/yrCO Emissions 0.0026867202 ton/yrSO2 Emissions 0.0008255236 ton/yrPM10 Emissions - ton/yrTotal Particulate 0.0008867063 ton/yr

* New York State HAP

(use additional sheets if necessary)

STACK INFORMATION

Stack (release) Height _____ feet

Stack Diameter _____ inch

Stack Gas Velocity _____ ft/sec

Stack Gas Flow Rate _____ acsf/min

Stack Gas Temperature _____ oF

Other sources that share this stack? _____

Stack Sampling Report Available? (Y/ N, results?) _____

Describe in detail what the generators are used for:(ie., training, emergency power, etc.) _____

COMMENTS

EMISSIONS FOR GASOLINE AND DIESEL INDUSTRIAL ENGINES *

Federal and New York State Regulations

| | | | |
|------------|---------------------------|-----------|--------------------|
| Facility: | <u>Seneca Army Depot</u> | Date: | <u>8/16/94</u> |
| Location: | <u>Portable</u> | Initials: | <u>DCP</u> |
| ID Number: | <u>1 active generator</u> | SCC: | <u>2-02-001-02</u> |

INPUT DATA

TOTAL HOURS ENGINE RUN 12 hrs/year

ENGINE POWER RATING 67.04 hp
(use only if power rating is less than 600 hp)

| | | |
|------------------|--------|--|
| FUEL TYPE | diesel | (GASOLINE/DIESEL) |
| FUEL USAGE (gal) | 0 | (Use only when you do not have engine power and hrs.) |

SOLUTION

| | | |
|-----------------------------|-------|----------|
| PARTICULATE EMISSIONS (TSP) | 1.77 | lbs/year |
| SULFUR OXIDE EMISSIONS | 1.65 | lbs/year |
| CARBON MONOXIDE EMISSIONS | 5.37 | lbs/year |
| NITROGEN OXIDE EMISSIONS | 24.83 | lbs/year |
| EXHAUST VOC EMISSIONS | 1.99 | lbs/year |
| EVAPORATIVE VOC EMISSIONS | 0.00 | lbs/year |
| CRANKCASE VOC EMISSIONS | 0.04 | lbs/year |
| REFUELING VOC EMISSIONS | 0.00 | lbs/year |

EMISSION FACTORS TAKEN FROM AP-42, SECTION 3.3, TABLE 3.3-1.

DATA QUALITY RATING D AND E.

BTU CONTENT OF THE FUELS TAKEN FROM AP-42 APPENDIX A.

*: Template used for heaters, pumps, air compressors, and generators.

SPECIATION OF EMISSIONS

| | | |
|-----------------------------|------|--------|
| TOTAL VOC EMISSIONS | 2.02 | Lbs/Yr |
| TOTAL PARTICULATE EMISSIONS | 1.77 | Lbs/Yr |
| TOTAL AIR TOXIC EMISSIONS | 0.01 | Lbs/Yr |

INDIVIDUAL AIR TOXIC EMISSIONS

| Chemical Name | CAS # | Emissions (Lbs/Yr) | Profile Data Quality |
|------------------------|-----------|-----------------------|-------------------------|
| Benzene | 71-43-2 | 1.91E-03 | E |
| Toluene | 108-88-3 | 8.37E-04 | E |
| Xylenes (Isomers) | 1330-20-7 | 5.83E-04 | E |
| o-Xylene | 95-47-6 | N/A | E |
| p-Xylene | 106-42-3 | N/A | E |
| m-Xylene | 108-38-3 | N/A | E |
| Formaldehyde | 50-00-0 | 2.41E-03 | E |
| 1,3-Butadiene | 106-99-0 | 8.00E-05 | E |
| Acetaldehyde | 75-07-0 | 1.57E-03 | E |
| Acrolein | 107-02-8 | 1.89E-04 | E |
| Naphthalene | 91-20-3 | 1.74E-04 | E |
| Hexane | 110-54-3 | N/A | E |
| 2,2,4-Trimethylpentane | 540-84-1 | N/A | E |
| Propionaldehyde | 123-38-6 | N/A | E |
| Ethyl benzene | 100-41-4 | N/A | E |
| Cyclohexane* | 110-82-7 | N/A | E |
| n-Heptane* | 142-82-5 | N/A | E |

* New York State HAP

DATA QUALITY RATING "E" SPECIATION TAKEN FROM AP-42 SECTION 3.3, TABLE 3.3-3, PAGE 3.3-5

DATA RATING "B" TAKEN FROM AIR EMISSIONS SPECIATION MANUAL, PROFILE No. 1101

"N/A" STANDS FOR NOT APPLICABLE

GENERATORS

GENERAL INFORMATION

Installation Seneca Army Depot

SCC..... 2-02-001-02 Unit ID #..... 1 active generator

Location..... Portable Permit #..... _____

POC..... George Shadman Inventoried by..... T. Sletten

Phone..... (607) 869-1470 Inventory Date..... June 6-10, 1994

SOURCE INFORMATION

Manufacturer..... _____ Fuel Type..... Diesel

Date Installed..... _____ Annual Fuel Use..... _____ (units)

Rated Capacity..... 300 kw (units) Operating Schedule
Hours/day..... 1 hr/mnth
Days/week..... _____

Max Heat Input..... _____ (units) Load Factor..... _____

MONTHLY FUEL USE

19__ JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC

Indicate Units: _____

Total Annual Use: _____

POLLUTION CONTROL EQUIPMENT

(enter control efficiency)

FUEL ANALYSIS

ESP..... _____

Baghouse..... _____

Wet Scrubber..... _____

Dry Scrubber..... _____

Spray Dryer..... _____

Cyclone..... _____

Other.. _____

None?..... _____

Other.. _____

Sulfur Content (S)..... _____ %

Lead Content (Pb)..... _____ %

Ash Content..... _____ %

Nitrogen Content (N)..... _____ %

Reference.. _____

EMISSION RATE DETERMINATION METHOD

Stack Test Data _____ Emission Factor X Material Balance _____

Similar Unit Data _____ Other _____

Reference: AP-42 Vol 1, Stationary sources and EPA Air Emissions Species Manual, Vol 1. Profile No. 1101.

OZONE PRECURSOR EMISSIONS

Typical Ozone Season Emissions

VOC Emissions 0.0329623447 lb/dayNOx Emissions 0.4048007246 lb/dayCO Emissions 0.0876104425 lb/day

CRITERIA POLLUTANT EMISSIONS

VOC Emissions 0.0060650714 ton/yrNOx Emissions 0.0744833333 ton/yrCO Emissions 0.0161203214 ton/yrSO2 Emissions 0.0049531417 ton/yrPM10 Emissions - ton/yrTotal Particulate 0.0053202381 ton/yr

HAZARDOUS AIR POLLUTANTS

HAP

CAS CODE

LB/YR

Benzene 71-43-2 0.0114559962Toluene 108-88-3 0.0050219748Xylenes (Isomers) 1330-20-7 0.0034994201o-Xylene 95-47-6 N/Ap-Xylene 106-42-3 N/Am-Xylene 108-38-3 N/AFormaldehyde 50-00-0 0.01448882691,3-Butadiene 106-99-0 0.0004800959Acetaldehyde 75-07-0 0.0094177375Acrolein 107-02-8 0.0011357767Naphthalene 91-20-3 0.0010412310Hexane 110-54-3 N/A2,2,4-Trimethylpentane 540-84-1 N/APropionaldehyde 123-38-6 N/AEthyl benzene 100-41-4 N/ACyclohexane* 110-82-7 N/An-Heptane* 142-82-5 N/A* New York State HAP
(use additional sheets if necessary)

STACK INFORMATION

Stack (release) Height _____ feet

Stack Diameter _____ inch

Stack Gas Velocity _____ ft/sec

Stack Gas Flow Rate _____ ascf/min

Stack Gas Temperature _____ oF

Other sources that share this stack? _____

Stack Sampling Report Available? (Y/ N, results?) _____

Describe in detail what the generators are used for:(ie., training, emergency power, etc.) _____

COMMENTS

EMISSIONS FOR GASOLINE AND DIESEL INDUSTRIAL ENGINES *

Federal and New York State Regulations

| | | | |
|------------|---------------------------|-----------|--------------------|
| Facility: | <u>Seneca Army Depot</u> | Date: | <u>8/16/94</u> |
| Location: | <u>Portable</u> | Initials: | <u>DCP</u> |
| ID Number: | <u>1 active generator</u> | SCC: | <u>2-02-001-02</u> |

INPUT DATA

TOTAL HOURS ENGINE RUN 12 hrs/year

ENGINE POWER RATING 402.21 hp
(use only if power rating is less than 600 hp)

| | | |
|------------------|--------|--|
| FUEL TYPE | diesel | (GASOLINE/DIESEL) |
| FUEL USAGE (gal) | 0 | (Use only when you do not have engine power and hrs.) |

SOLUTION

| | | |
|-----------------------------|--------|----------|
| PARTICULATE EMISSIONS (TSP) | 10.64 | lbs/year |
| SULFUR OXIDE EMISSIONS | 9.91 | lbs/year |
| CARBON MONOXIDE EMISSIONS | 32.24 | lbs/year |
| NITROGEN OXIDE EMISSIONS | 148.97 | lbs/year |
| EXHAUST VOC EMISSIONS | 11.92 | lbs/year |
| EVAPORATIVE VOC EMISSIONS | 0.00 | lbs/year |
| CRANKCASE VOC EMISSIONS | 0.21 | lbs/year |
| REFUELING VOC EMISSIONS | 0.00 | lbs/year |

EMISSION FACTORS TAKEN FROM AP-42, SECTION 3.3, TABLE 3.3-1.

DATA QUALITY RATING D AND E.

BTU CONTENT OF THE FUELS TAKEN FROM AP-42 APPENDIX A.

*: Template used for heaters, pumps, air compressors, and generators.

SPECIATION OF EMISSIONS

| | | |
|-----------------------------|-------|--------|
| TOTAL VOC EMISSIONS | 12.13 | Lbs/Yr |
| TOTAL PARTICULATE EMISSIONS | 10.64 | Lbs/Yr |
| TOTAL AIR TOXIC EMISSIONS | 0.05 | Lbs/Yr |

INDIVIDUAL AIR TOXIC EMISSIONS

| Chemical Name | CAS # | Emissions (Lbs/Yr) | Profile Data Quality |
|------------------------|-----------|-----------------------|-------------------------|
| Benzene | 71-43-2 | 1.15E-02 | E |
| Toluene | 108-88-3 | 5.02E-03 | E |
| Xylenes (Isomers) | 1330-20-7 | 3.50E-03 | E |
| o-Xylene | 95-47-6 | N/A | E |
| p-Xylene | 106-42-3 | N/A | E |
| m-Xylene | 108-38-3 | N/A | E |
| Formaldehyde | 50-00-0 | 1.45E-02 | E |
| 1,3-Butadiene | 106-99-0 | 4.80E-04 | E |
| Acetaldehyde | 75-07-0 | 9.42E-03 | E |
| Acrolein | 107-02-8 | 1.14E-03 | E |
| Naphthalene | 91-20-3 | 1.04E-03 | E |
| Hexane | 110-54-3 | N/A | E |
| 2,2,4-Trimethylpentane | 540-84-1 | N/A | E |
| Propionaldehyde | 123-38-6 | N/A | E |
| Ethyl benzene | 100-41-4 | N/A | E |
| Cyclohexane* | 110-82-7 | N/A | E |
| n-Heptane* | 142-82-5 | N/A | E |

* New York State HAP

DATA QUALITY RATING "E" SPECIATION TAKEN FROM AP-42 SECTION 3.3, TABLE 3.3-3, PAGE 3.3-5

DATA RATING "B" TAKEN FROM AIR EMISSIONS SPECIATION MANUAL, PROFILE No. 1101

"N/A" STANDS FOR NOT APPLICABLE

UNDERGROUND STORAGE TANKS

Page of

GENERAL INFORMATION

Installation Seneca Army Depot

SCC..... 4-04-004-98 Unit ID #..... 2 active tanks

Location..... Bldg 117; 355A Permit #.....

POC..... Thomas Grasek Inventoried by..... T. Sletten

Phone..... (607) 869-1450 Inventory Date..... June 6-10, 1994

LIQUID PRODUCT INFORMATION

Stored Product Waste Oil *Liq Density..(W_L) lb/gal

*Molec Weight (M_V) lb/lb-mol *Vapor Pressure (P_{VA}) psia

TANK INFORMATION

Tank Size 2,005 gal Turnover Factor (K_N)....

Annual Net Thruput.(Q)... N/A gal/yr *Tank Max Liq Vol (V_{LX}).. ft²

*Turnovers/year (N)..... *Product Factor (K_p).....

Crude Oil = 0.75

Organic Liquid = 1.00

Tank Orientation..... horizontal Tank Diameter (D)..... 5.3 ft

Tank Length (L)..... 12 ft

THROUGHPUT INFORMATION

| MONTH | gal | MONTH | gal |
|-------|-------|----------------|-------|
| _____ | _____ | _____ | _____ |
| _____ | _____ | _____ | _____ |
| _____ | _____ | _____ | _____ |
| _____ | _____ | _____ | _____ |
| _____ | _____ | _____ | _____ |
| _____ | _____ | _____ | _____ |
| _____ | _____ | ANNUAL TOTALS: | _____ |

AP-42 References:
 (M_V) (W_L) (P_{VA}) - Tables 12.3-2, 12.3-3
 (K_N) - Pg 12-31 / (H_{LX}) = Diameter of Tank

UNDERGROUND STORAGE TANKS

GENERAL INFORMATION

Installation Seneca Army Depot

SCC..... 4-04-004-14 Unit ID #..... 5 active tanks

Location..... Bldg 6; 106A; 353; 3605 Permit #..... _____

POC..... Thomas Grasek Inventoried by..... T. Sletten

Phone..... (607) 869-1450 Inventory Date..... June 6-10, 1994

LIQUID PRODUCT INFORMATION

Stored Product Fuel Oil #2 *Liq Density..(W_L) 6.1 lb/gal

*Molec Weight (M_V) 130 lb/lb-mol *Vapor Pressure (P_{V,A}) 0.0074 at 60°F psia

TANK INFORMATION

Tank Size 500 gal Turnover Factor (K_N).... _____

Annual Net Thruput.(Q)... 2,535 gal/yr *Tank Max Liq Vol (V_{LX}).. _____ ft²

*Turnovers/year (N)..... _____ *Product Factor (K_P)..... _____
 Crude Oil = 0.75
 Organic Liquid = 1.00

Tank Orientation..... horizontal Tank Diameter (D)..... 4 ft

Tank Length (L)..... 5.5 ft

THROUGHPUT INFORMATION

| MONTH | gal | MONTH | gal |
|-------|-------|-----------------------|-------|
| _____ | _____ | _____ | _____ |
| _____ | _____ | _____ | _____ |
| _____ | _____ | _____ | _____ |
| _____ | _____ | _____ | _____ |
| _____ | _____ | _____ | _____ |
| _____ | _____ | _____ | _____ |
| | | ANNUAL TOTALS: | _____ |

AP-42 References:
 (M_V) (W_L) (P_{V,A}) - Tables 12.3-2, 12.3-3
 (K_N) - Pg 12-31 / (H_{LX}) = Diameter of Tank

EMISSION RATE DETERMINATION METHOD

Stack Test Data _____ Emission Factor X Material Balance _____

Similar Unit Data _____ Other _____

Reference: AP-42, VOLUME 1, SECTION 12.3 AND EPA AIR EMISSIONS SPECIES MANUAL, VOL 1,
PROFILE NO 1190, AND INSTALLATION RESTORATION TOXICOLOGY GUIDE

OZONE PRECURSOR EMISSIONS

Typical Ozone Season Emissions
 VOC Emissions 0.0000000000 lb/day
 NOx Emissions _____ lb/day
 CO Emissions _____ lb/day

HAZARDOUS AIR POLLUTANTS

| | HAP | CAS CODE | LB/YR |
|--|-----------------|----------|-------|
| | Hexane | 110-54-3 | N/A |
| | Cumene | 98-82-8 | N/A |
| | Benzene | 71-43-2 | N/A |
| | Toluene | 108-88-3 | N/A |
| | Ethylbenzene | 100-41-4 | N/A |
| | o-Xylene | 95-47-6 | N/A |
| | p-Xylene | 106-42-3 | N/A |
| | m-xylene | 108-38-3 | N/A |
| | Styrene | 100-42-5 | N/A |
| | Chlorobenzene | 108-90-7 | N/A |
| | Napthalene | 91-20-3 | N/A |
| | Xylenes (M & P) | - | N/A |
| | Heptane* | 142-82-5 | N/A |
| | Cyclohexane* | 110-82-7 | N/A |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

CRITERIA POLLUTANT EMISSIONS

VOC Emissions 0.0000290318 ton/yr
 NOx Emissions _____ ton/yr
 CO Emissions _____ ton/yr
 SO2 Emissions _____ ton/yr
 PM10 Emissions _____ ton/yr
 Total Particulate _____ ton/yr

* New York State HAP
 (use additional sheets if necessary)

REMARKS

**EMISSIONS FOR UNDERGROUND STORAGE TANKS
(FIXED ROOF STORAGE TANK)
Federal and New York State Regulations**

| | | | |
|------------|-----------------------------|-----------|--------------------|
| Facility: | <u>Seneca Army Depot</u> | Date: | <u>8/15/94</u> |
| Location: | <u>Bldg 6;106A;353;3605</u> | Initials: | <u>DCP</u> |
| ID Number: | <u>5 active tanks</u> | SCC: | <u>4-04-004-14</u> |

| | | |
|---|---------|---|
| CRUDE OIL STORED | no | (YES / NO) |
| TANK DIAMETER (D) | 4 | Ft (see table of standard dimensions, if dimensions are unknown) |
| TANK LENGTH (L) | 6 | Ft |
| ANNUAL THROUGHPUT (Q) | 2,535 | Gal/yr |
| OZONE SEASON THROUGHPUT | 0 | Gal/Yr (Enter N/A, if unknown and zero, if no O3 season use) |
| MOLECULAR WEIGHT OF LIQUID (See Enclosed Charts) | 130 | Lb / Lb * mole |
| TRUE VAPOR PRESSURE (PVA) (See Enclosed Charts) | 0.00740 | psia at 60 degrees F <i>(Note if you have another fuel stored that is not listed make sure you use the right lb/lb mole and psia for the stored product)</i> |
| Gasoline 62AMU, 6.9 psia | | |
| Jet naphtha (JP-4) 80AMU, 1.3 psia | | |
| Fuel Oil#2 130AMU, .0074 psia | | |
| I Oil#6 190AMU, 0.00004 psia | | |
| J. -8 130AMU, 0.0085 psia | | |

| | |
|---------------------|------------|
| TOTAL VOC EMISSIONS | 0.06 lb/yr |
|---------------------|------------|

NOTE:

All emissions from the storage of liquids in a underground storage tank are working losses only, there are no breathing losses assumed.
Emission factors are obtained from section 12.3 of AP-42, page 12-31 the working loss equation.
All fuels AMU and psia are taken from table 12.3-2, section 12.3 of AP-42 (JP-8 was assumed to be similar to jet kerosene).

SPECIATION OF EMISSIONS

| | | |
|---------------------------|------|--|
| TYPE OF LIQUID STORED | C | A - GASOLINE B - JET NAPHTHA (JP-4) C - FUEL OIL #2 (DIESEL) D - FUEL OIL #6 E - JP-8 F - OTHER |
| TOTAL VOC EMISSIONS | 0.06 | Lbs/Yr |
| TOTAL AIR TOXIC EMISSIONS | 0.00 | Lbs/Yr |

INDIVIDUAL AIR TOXIC EMISSIONS

| Chemical Name | CAS # | Emissions (Lbs/Yr) | Profile Data Quality |
|-----------------|----------|-----------------------|-------------------------|
| Hexane | 110-54-3 | N/A | N/A |
| Cumene | 98-82-8 | N/A | N/A |
| Benzene | 71-43-2 | N/A | N/A |
| Toluene | 108-88-3 | N/A | N/A |
| Ethylbenzene | 100-41-4 | N/A | N/A |
| O-Xylene | 95-47-6 | N/A | N/A |
| P-Xylene | 106-42-3 | N/A | N/A |
| M-xylene | 108-38-3 | N/A | N/A |
| Styrene | 100-42-5 | N/A | N/A |
| Chlorobenzene | 108-90-7 | N/A | N/A |
| Napthalene | 91-20-3 | N/A | N/A |
| Xylenes (M & P) | | N/A | N/A |
| Heptane* | 142-82-5 | N/A | N/A |
| Cyclohexane* | 110-82-7 | N/A | N/A |

* New York State HAP

SPECIATION FACTORS FOR GASOLINE OBTAINED FROM EPA AIR EMISSIONS SPECIES MANUAL
PROFILE # 1190SPECIATION FACTORS FOR JP-4 ARE FROM THE INSTALLATION RESTORATION
TOXICOLOGY GUIDE

DATA QUALITY RATING "AEHA" STANDS FOR AN APPROVED FUEL SPECIATION METHODOLOGY.

UNDERGROUND STORAGE TANKS

GENERAL INFORMATION

Installation Seneca Army Depot

SCC..... 4-04-004-14 Unit ID #..... 4 active tanks

Location..... Bldg 101; 609; 816; 819 Permit #..... _____

POC..... Thomas Grasek Inventoried by..... T. Sletten

Phone..... (607) 869-1450 Inventory Date..... June 6-10, 1994

LIQUID PRODUCT INFORMATION

Stored Product Fuel Oil #2 *Liq Density..(W_L) 6.1 lb/gal

*Molec Weight (M_v) 130 lb/lb-mol *Vapor Pressure (P_{VA}) 0.0074 at 60°F psia

TANK INFORMATION

Tank Size 3,000 gal Turnover Factor (K_N).... _____

Annual Net Thruput.(Q)... 12,166 gal/yr *Tank Max Liq Vol (V_{LX}).. _____ ft²

*Turnovers/year (N)..... _____ *Product Factor (K_p)..... _____
 Crude Oil = 0.75
 Organic Liquid = 1.00

Tank Orientation..... horizontal Tank Diameter (D)..... 5.3 ft

Tank Length (L)..... 18 ft

THROUGHPUT INFORMATION

| MONTH | gal | MONTH | gal |
|-------|-------|----------------|-------|
| _____ | _____ | _____ | _____ |
| _____ | _____ | _____ | _____ |
| _____ | _____ | _____ | _____ |
| _____ | _____ | _____ | _____ |
| _____ | _____ | _____ | _____ |
| _____ | _____ | _____ | _____ |
| | | ANNUAL TOTALS: | _____ |

AP-42 References:
 (M_v) (W_L) (P_{VA}) - Tables 12.3-2, 12.3-3
 (K_N) - Pg 12-31 / (H_{LX}) = Diameter of Tank

EMISSION RATE DETERMINATION METHOD

Stack Test Data _____ Emission Factor X Material Balance _____

Similar Unit Data _____ Other _____

Reference: AP-42, VOLUME 1, SECTION 12.3 AND EPA AIR EMISSIONS SPECIES MANUAL, VOL 1,
PROFILE NO 1190, AND INSTALLATION RESTORATION TOXICOLOGY GUIDE

OZONE PRECURSOR EMISSIONS

HAZARDOUS AIR POLLUTANTS

| Typical Ozone Season Emissions | HAP | CAS CODE | LB/YR |
|--|-----------------|----------|-------|
| VOC Emissions <u>0.0000000000</u> lb/day | Hexane | 110-54-3 | N/A |
| | Cumene | 98-82-8 | N/A |
| NOx Emissions _____ lb/day | Benzene | 71-43-2 | N/A |
| | Toluene | 108-88-3 | N/A |
| CO Emissions _____ lb/day | Ethylbenzene | 100-41-4 | N/A |
| | o-Xylene | 95-47-6 | N/A |
| | p-Xylene | 106-42-3 | N/A |
| | m-xylene | 108-38-3 | N/A |
| | Styrene | 100-42-5 | N/A |
| CRITERIA POLLUTANT EMISSIONS | Chlorobenzene | 108-90-7 | N/A |
| VOC Emissions <u>0.0001393297</u> ton/yr | Napthalene | 91-20-3 | N/A |
| | Xylenes (M & P) | - | N/A |
| NOx Emissions _____ ton/yr | Heptane* | 142-82-5 | N/A |
| | Cyclohexane* | 110-82-7 | N/A |
| CO Emissions _____ ton/yr | | | |
| SO2 Emissions _____ ton/yr | | | |
| PM10 Emissions _____ ton/yr | | | |
| Total Particulate _____ ton/yr | | | |

* New York State HAP
(use additional sheets if necessary)

REMARKS

**EMISSIONS FOR UNDERGROUND STORAGE TANKS
(FIXED ROOF STORAGE TANK)
Federal and New York State Regulations**

| | | | |
|------------|-----------------------------|-----------|--------------------|
| Facility: | <u>Seneca Army Depot</u> | Date: | <u>8/15/94</u> |
| Location: | <u>Bldg 101:609;816:819</u> | Initials: | <u>DCP</u> |
| ID Number: | <u>4 active tanks</u> | SCC: | <u>4-04-004-14</u> |

| | | |
|---|---------|---|
| CRUDE OIL STORED | no | (YES / NO) |
| TANK DIAMETER (D) | 5 | Ft (see table of standard dimensions, if dimensions are unknown) |
| TANK LENGTH (L) | 18 | Ft |
| ANNUAL THROUGHPUT (Q) | 12,166 | Gal/yr |
| OZONE SEASON THROUGHPUT | 0 | Gal/Yr (Enter N/A, if unknown and zero, if no O3 season use) |
| MOLECULAR WEIGHT OF LIQUID (See Enclosed Charts) | 130 | Lb / Lb * mole |
| TRUE VAPOR PRESSURE (PVA) (See Enclosed Charts) | 0.00740 | psia at 60 degrees F <i>(Note if you have another fuel stored that is not listed make sure you use the right lb/lb mole and psia for the stored product)</i> |
| Gasoline 62AMU, 6.9 psia | | |
| Jet naphtha (JP-4) 80AMU, 1.3 psia | | |
| Fuel Oil#2 130AMU, .0074 psia | | |
| 1 Oil#6 190AMU, 0.00004 psia | | |
| 8 130AMU, 0.0085 psia | | |

| | |
|---------------------|------------|
| TOTAL VOC EMISSIONS | 0.28 lb/yr |
|---------------------|------------|

NOTE:

All emissions from the storage of liquids in a underground storage tank are working losses only, there are no breathing losses assumed.
Emission factors are obtained from section 12.3 of AP-42, page 12-31 the working loss equation.
All fuels AMU and psia are taken from table 12.3-2, section 12.3 of AP-42 (JP-8 was assumed to be similar to jet kerosene).

SPECIATION OF EMISSIONS

| | | |
|---------------------------|------|--|
| TYPE OF LIQUID STORED | C | A - GASOLINE B - JET NAPHTHA (JP-4) C - FUEL OIL #2 (DIESEL) D - FUEL OIL #6 E - JP-8 F - OTHER |
| TOTAL VOC EMISSIONS | 0.28 | Lbs/Yr |
| TOTAL AIR TOXIC EMISSIONS | 0.00 | Lbs/Yr |

INDIVIDUAL AIR TOXIC EMISSIONS

| Chemical Name | CAS # | Emissions (Lbs/Yr) | Profile Data Quality |
|-----------------|----------|-----------------------|-------------------------|
| Hexane | 110-54-3 | N/A | N/A |
| Cumene | 98-82-8 | N/A | N/A |
| Benzene | 71-43-2 | N/A | N/A |
| Toluene | 108-88-3 | N/A | N/A |
| Ethylbenzene | 100-41-4 | N/A | N/A |
| O-Xylene | 95-47-6 | N/A | N/A |
| P-Xylene | 106-42-3 | N/A | N/A |
| M-xylene | 108-38-3 | N/A | N/A |
| Styrene | 100-42-5 | N/A | N/A |
| Chlorobenzene | 108-90-7 | N/A | N/A |
| Napthalene | 91-20-3 | N/A | N/A |
| Xylenes (M & P) | | N/A | N/A |
| Heptane* | 142-82-5 | N/A | N/A |
| Cyclohexane* | 110-82-7 | N/A | N/A |

* New York State HAP

SPECIATION FACTORS FOR GASOLINE OBTAINED FROM EPA AIR EMISSIONS SPECIES MANUAL
PROFILE # 1190

SPECIATION FACTORS FOR JP-4 ARE FROM THE INSTALLATION RESTORATION
TOXICOLOGY GUIDE

DATA QUALITY RATING "AEHA" STANDS FOR AN APPROVED FUEL SPECIATION METHODOLOGY.

UNDERGROUND STORAGE TANKS

GENERAL INFORMATION

Installation Seneca Army Depot

SCC..... 4-04-004-14 Unit ID #..... 2 active tanks

Location..... Bldg 103; 813 Permit #..... _____

POC..... Thomas Grasek Inventoried by..... T. Sletten

Phone..... (607) 869-1450 Inventory Date..... June 6-10, 1994

LIQUID PRODUCT INFORMATION

Stored Product Fuel Oil #2 *Liq Density..(W_L) 6.1 lb/gal

*Molec Weight (M_v) 130 lb/lb-mol *Vapor Pressure (P_{vA}) 0.0074 at 60°F psia

TANK INFORMATION

Tank Size 2,500 gal Turnover Factor (K_N).... _____

Annual Net Thruput.(Q)... 5,069 gal/yr *Tank Max Liq Vol (V_{LX}).. _____ ft²

*Turnovers/year (N)..... _____ *Product Factor (K_p)..... _____
 Crude Oil = 0.75
 Organic Liquid = 1.00

Tank Orientation..... horizontal Tank Diameter (D)..... 5.3 ft

Tank Length (L)..... 15 ft

THROUGHPUT INFORMATION

| MONTH | gal | MONTH | gal |
|-------|-------|-----------------------|-------|
| _____ | _____ | _____ | _____ |
| _____ | _____ | _____ | _____ |
| _____ | _____ | _____ | _____ |
| _____ | _____ | _____ | _____ |
| _____ | _____ | _____ | _____ |
| _____ | _____ | _____ | _____ |
| | | ANNUAL TOTALS: | _____ |

AP-42 References:
 (M_v) (W_L) (P_{vA}) - Tables 12.3-2, 12.3-3
 (K_N) - Pg 12-31 / (H_{LX}) = Diameter of Tank

EMISSION RATE DETERMINATION METHOD

Stack Test Data _____ Emission Factor X Material Balance _____

Similar Unit Data _____ Other _____

Reference: AP-42, VOLUME 1, SECTION 12.3 AND EPA AIR EMISSIONS SPECIES MANUAL, VOL 1,

PROFILE NO 1190, AND INSTALLATION RESTORATION TOXICOLOGY GUIDE

OZONE PRECURSOR EMISSIONS

HAZARDOUS AIR POLLUTANTS

Typical Ozone Season Emissions

VOC Emissions 0.0000000000 lb/day

NOx Emissions _____ lb/day

CO Emissions _____ lb/day

CRITERIA POLLUTANT EMISSIONS

VOC Emissions 0.0000580521 ton/yr

NOx Emissions _____ ton/yr

CO Emissions _____ ton/yr

SO2 Emissions _____ ton/yr

PM10 Emissions _____ ton/yr

Total Particulate _____ ton/yr

HAP

CAS CODE

LB/YR

| | | |
|-----------------|----------|-----|
| Hexane | 110-54-3 | N/A |
| Cumene | 98-82-8 | N/A |
| Benzene | 71-43-2 | N/A |
| Toluene | 108-88-3 | N/A |
| Ethylbenzene | 100-41-4 | N/A |
| o-Xylene | 95-47-6 | N/A |
| p-Xylene | 106-42-3 | N/A |
| m-xylene | 108-38-3 | N/A |
| Styrene | 100-42-5 | N/A |
| Chlorobenzene | 108-90-7 | N/A |
| Napthalene | 91-20-3 | N/A |
| Xylenes (M & P) | - | N/A |
| Heptane* | 142-82-5 | N/A |
| Cyclohexane* | 110-82-7 | N/A |

* New York State HAP
(use additional sheets if necessary)

REMARKS

**EMISSIONS FOR UNDERGROUND STORAGE TANKS
(FIXED ROOF STORAGE TANK)
Federal and New York State Regulations**

| | | | |
|------------|--------------------------|-----------|--------------------|
| Facility: | <u>Seneca Army Depot</u> | Date: | <u>8/15/94</u> |
| Location: | <u>Bldg 103:813</u> | Initials: | <u>DCP</u> |
| ID Number: | <u>2 active tank</u> | SCC: | <u>4-04-004-14</u> |

| | | |
|---|---------|---|
| CRUDE OIL STORED | no | (YES / NO) |
| TANK DIAMETER (D) | 5 | Ft (see table of standard dimensions, if dimensions are unknown) |
| TANK LENGTH (L) | 15 | Ft |
| ANNUAL THROUGHPUT (Q) | 5,069 | Gal/yr |
| OZONE SEASON THROUGHPUT | 0 | Gal/Yr (Enter N/A, if unknown and zero, if no O3 season use) |
| MOLECULAR WEIGHT OF LIQUID (See Enclosed Charts) | 130 | Lb / Lb * mole |
| TRUE VAPOR PRESSURE (PVA) (See Enclosed Charts) | 0.00740 | psia at 60 degrees F <i>(Note if you have another fuel stored that is not listed make sure you use the right lb/lb mole and psia for the stored product)</i> |
| Gasoline 62AMU, 6.9 psia | | |
| Jet naptha (JP-4) 80AMU, 1.3 psia | | |
| Fuel Oil#2 130AMU, .0074 psia | | |
| I Oil#6 190AMU, 0.00004 psia | | |
| -8 130AMU, 0.0085 psia | | |

| | |
|---------------------|------------|
| TOTAL VOC EMISSIONS | 0.12 lb/yr |
|---------------------|------------|

NOTE:
All emissions from the storage of liquids in a underground storage tank are working losses only, there are no breathing losses assumed.
Emission factors are obtained from section 12.3 of AP-42, page 12-31 the working loss equation.
All fuels AMU and psia are taken from table 12.3-2, section 12.3 of AP-42 (JP-8 was assumed to be similar to jet kerosene).

SPECIATION OF EMISSIONS

| | | |
|---------------------------|------|--|
| TYPE OF LIQUID STORED | C | A - GASOLINE B - JET NAPHTHA (JP-4) C - FUEL OIL #2 (DIESEL) D - FUEL OIL #6 E - JP-8 F - OTHER |
| TOTAL VOC EMISSIONS | 0.12 | Lbs/Yr |
| TOTAL AIR TOXIC EMISSIONS | 0.00 | Lbs/Yr |

INDIVIDUAL AIR TOXIC EMISSIONS

| Chemical Name | CAS # | Emissions (Lbs/Yr) | Profile Data Quality |
|-----------------|----------|-----------------------|-------------------------|
| Hexane | 110-54-3 | N/A | N/A |
| Cumene | 98-82-8 | N/A | N/A |
| Benzene | 71-43-2 | N/A | N/A |
| Toluene | 108-88-3 | N/A | N/A |
| Ethylbenzene | 100-41-4 | N/A | N/A |
| O-Xylene | 95-47-6 | N/A | N/A |
| P-Xylene | 106-42-3 | N/A | N/A |
| M-xylene | 108-38-3 | N/A | N/A |
| Styrene | 100-42-5 | N/A | N/A |
| Chlorobenzene | 108-90-7 | N/A | N/A |
| Napthalene | 91-20-3 | N/A | N/A |
| Xylenes (M & P) | | N/A | N/A |
| Heptane* | 142-82-5 | N/A | N/A |
| Cyclohexane* | 110-82-7 | N/A | N/A |

* New York State HAP

SPECIATION FACTORS FOR GASOLINE OBTAINED FROM EPA AIR EMISSIONS SPECIES MANUAL
PROFILE # 1190SPECIATION FACTORS FOR JP-4 ARE FROM THE INSTALLATION RESTORATION
TOXICOLOGY GUIDE

DATA QUALITY RATING "AEHA" STANDS FOR AN APPROVED FUEL SPECIATION METHODOLOGY.

UNDERGROUND STORAGE TANKS

GENERAL INFORMATION

Installation Seneca Army Depot

SCC..... 4-04-004-14 Unit ID #..... 1 active tank

Location..... Bldg 106 Permit #.....

POC..... Thomas Grasek Inventoried by..... T. Sletten

Phone..... (607) 869-1450 Inventory Date..... June 6-10, 1994

LIQUID PRODUCT INFORMATION

Stored Product Fuel Oil #2 *Liq Density..(W_L) 6.1 lb/gal

*Molec Weight (M_v) 130 lb/lb-mol *Vapor Pressure (P_{vA}) 0.0074 at 60°F psia

TANK INFORMATION

Tank Size 5,000 gal Turnover Factor (K_N)....

Annual Net Thruput.(Q)... 5,069 gal/yr *Tank Max Liq Vol (V_{LX}).. ft²

*Turnovers/year (N)..... Crude Oil = 0.75
Organic Liquid = 1.00

Tank Orientation..... horizontal Tank Diameter (D)..... 8 ft

Tank Length (L)..... 13.4 ft

THROUGHPUT INFORMATION

| MONTH | gal | MONTH | gal |
|-------|-------|----------------|-------|
| _____ | _____ | _____ | _____ |
| _____ | _____ | _____ | _____ |
| _____ | _____ | _____ | _____ |
| _____ | _____ | _____ | _____ |
| _____ | _____ | _____ | _____ |
| _____ | _____ | _____ | _____ |
| _____ | _____ | _____ | _____ |
| _____ | _____ | _____ | _____ |
| | | ANNUAL TOTALS: | _____ |

AP-42 References:
(M_v) (W_L) (P_{vA}) - Tables 12.3-2, 12.3-3
(K_N) - Pg 12-31 / (H_{LX}) = Diameter of Tank

EMISSION RATE DETERMINATION METHOD

Stack Test Data _____ Emission Factor _____ X _____ Material Balance _____

Similar Unit Data _____ Other _____

Reference: AP-42, VOLUME 1, SECTION 12.3 AND EPA AIR EMISSIONS SPECIES MANUAL, VOL 1, PROFILE NO 1190, AND INSTALLATION RESTORATION TOXICOLOGY GUIDE

OZONE PRECURSOR EMISSIONS

HAZARDOUS AIR POLLUTANTS

| Typical Ozone Season Emissions | HAP | CAS CODE | LB/YR |
|--|-----------------|----------|-------|
| VOC Emissions <u>0.0000000000</u> lb/day | Hexane | 110-54-3 | N/A |
| | Cumene | 98-82-8 | N/A |
| NOx Emissions _____ lb/day | Benzene | 71-43-2 | N/A |
| | Toluene | 108-88-3 | N/A |
| CO Emissions _____ lb/day | Ethylbenzene | 100-41-4 | N/A |
| | o-Xylene | 95-47-6 | N/A |
| | p-Xylene | 106-42-3 | N/A |
| | m-xylene | 108-38-3 | N/A |
| | Styrene | 100-42-5 | N/A |
| CRITERIA POLLUTANT EMISSIONS | Chlorobenzene | 108-90-7 | N/A |
| VOC Emissions <u>0.0000580521</u> ton/yr | Napthalene | 91-20-3 | N/A |
| | Xylenes (M & P) | - | N/A |
| NOx Emissions _____ ton/yr | Heptane* | 142-82-5 | N/A |
| | Cyclohexane* | 110-82-7 | N/A |
| CO Emissions _____ ton/yr | | | |
| SO2 Emissions _____ ton/yr | | | |
| PM10 Emissions _____ ton/yr | | | |
| Total Particulate _____ ton/yr | | | |

* New York State HAP
(use additional sheets if necessary)

REMARKS

**EMISSIONS FOR UNDERGROUND STORAGE TANKS
(FIXED ROOF STORAGE TANK)
Federal and New York State Regulations**

| | | | |
|------------|--------------------------|-----------|--------------------|
| Facility: | <u>Seneca Army Depot</u> | Date: | <u>8/15/94</u> |
| Location: | <u>Bldg 106</u> | Initials: | <u>DCP</u> |
| ID Number: | <u>1 active tank</u> | SCC: | <u>4-04-004-14</u> |

| | | | |
|---|---------|----------------------|---|
| CRUDE OIL STORED | no | (YES / NO) | |
| TANK DIAMETER (D) | 8 | Ft | <i>(see table of standard dimensions, if dimensions are unknown)</i> |
| TANK LENGTH (L) | 13 | Ft | |
| ANNUAL THROUGHPUT (Q) | 5,069 | Gal/yr | |
| OZONE SEASON THROUGHPUT | 0 | Gal/Yr | <i>(Enter N/A, if unknown and zero, if no O3 season use)</i> |
| MOLECULAR WEIGHT OF LIQUID (See Enclosed Charts) | 130 | Lb / Lb * mole | |
| TRUE VAPOR PRESSURE (PVA) (See Enclosed Charts) | 0.00740 | psia at 60 degrees F | <i>(Note if you have another fuel stored that is not listed make sure you use the right lb/lb mole and psia for the stored product)</i> |
| Gasoline 62AMU, 6.9 psia | | | |
| Jet naptha (JP-4) 80AMU, 1.3 psia | | | |
| Fuel Oil#2 130AMU, .0074 psia | | | |
| 1 Oil#6 190AMU, 0.00004 psia | | | |
| 8 130AMU, 0.0085 psia | | | |

| | |
|---------------------|------------|
| TOTAL VOC EMISSIONS | 0.12 lb/yr |
|---------------------|------------|

NOTE:

All emissions from the storage of liquids in a underground storage tank are working losses only, there are no breathing losses assumed.
Emission factors are obtained from section 12.3 of AP-42, page 12-31 the working loss equation.
All fuels AMU and psia are taken from table 12.3-2, section 12.3 of AP-42 (JP-8 was assumed to be similar to jet kerosene).

SPECIATION OF EMISSIONS

| | | |
|---------------------------|------|--|
| TYPE OF LIQUID STORED | C | A - GASOLINE B - JET NAPHTHA (JP-4) C - FUEL OIL #2 (DIESEL) D - FUEL OIL #6 E - JP-8 F - OTHER |
| TOTAL VOC EMISSIONS | 0.12 | Lbs/Yr |
| TOTAL AIR TOXIC EMISSIONS | 0.00 | Lbs/Yr |

INDIVIDUAL AIR TOXIC EMISSIONS

| Chemical Name | CAS # | Emissions (Lbs/Yr) | Profile Data Quality |
|-----------------|----------|-----------------------|-------------------------|
| Hexane | 110-54-3 | N/A | N/A |
| Cumene | 98-82-8 | N/A | N/A |
| Benzene | 71-43-2 | N/A | N/A |
| Toluene | 108-88-3 | N/A | N/A |
| Ethylbenzene | 100-41-4 | N/A | N/A |
| O-Xylene | 95-47-6 | N/A | N/A |
| P-Xylene | 106-42-3 | N/A | N/A |
| M-xylene | 108-38-3 | N/A | N/A |
| Styrene | 100-42-5 | N/A | N/A |
| Chlorobenzene | 108-90-7 | N/A | N/A |
| Napthalene | 91-20-3 | N/A | N/A |
| Xylenes (M & P) | | N/A | N/A |
| Heptane* | 142-82-5 | N/A | N/A |
| Cyclohexane* | 110-82-7 | N/A | N/A |

* New York State HAP

SPECIATION FACTORS FOR GASOLINE OBTAINED FROM EPA AIR EMISSIONS SPECIES MANUAL
PROFILE # 1190SPECIATION FACTORS FOR JP-4 ARE FROM THE INSTALLATION RESTORATION
TOXICOLOGY GUIDE

DATA QUALITY RATING "AEHA" STANDS FOR AN APPROVED FUEL SPECIATION METHODOLOGY.

UNDERGROUND STORAGE TANKS

GENERAL INFORMATION

Installation Seneca Army Depot

SCC..... 4-04-004-14 Unit ID #..... 2 active tanks

Location..... Bldg 113; 606 Permit #..... _____

POC..... Thomas Grasek Inventoried by..... T. Sletten

Phone..... (607) 869-1450 Inventory Date..... June 6-10, 1994

LIQUID PRODUCT INFORMATION

Stored Product Fuel Oil #2 *Liq Density..(W_L) 6.1 lb/gal

*Molec Weight (M_V) 130 lb/lb-mol *Vapor Pressure (P_{VA}) 0.0074 at 60°F psia

TANK INFORMATION

Tank Size 2,000 gal Turnover Factor (K_N).... _____

Annual Net Thruput.(Q)... 4,056 gal/yr *Tank Max Liq Vol (V_{LX}).. _____ ft²

*Turnovers/year (N)..... _____ *Product Factor (K_p)..... _____
 Crude Oil = 0.75
 Organic Liquid = 1.00

Tank Orientation..... horizontal Tank Diameter (D)..... 5.3 ft

Tank Length (L)..... 12 ft

THROUGHPUT INFORMATION

| MONTH | gal | MONTH | gal |
|-------|-------|-----------------------|-------|
| _____ | _____ | _____ | _____ |
| _____ | _____ | _____ | _____ |
| _____ | _____ | _____ | _____ |
| _____ | _____ | _____ | _____ |
| _____ | _____ | _____ | _____ |
| _____ | _____ | _____ | _____ |
| | | ANNUAL TOTALS: | _____ |

AP-42 References:
 (M_V) (W_L) (P_{VA}) - Tables 12.3-2, 12.3-3
 (K_N) - Pg 12-31 / (H_{LX}) = Diameter of Tank

EMISSION RATE DETERMINATION METHOD

Stack Test Data _____ Emission Factor X Material Balance _____

Similar Unit Data _____ Other _____

Reference: AP-42, VOLUME 1, SECTION 12.3 AND EPA AIR EMISSIONS SPECIES MANUAL, VOL 1,
PROFILE NO 1190, AND INSTALLATION RESTORATION TOXICOLOGY GUIDE

OZONE PRECURSOR EMISSIONS

Typical Ozone Season Emissions
 VOC Emissions 0.0000000000 lb/day
 NOx Emissions _____ lb/day
 CO Emissions _____ lb/day

HAZARDOUS AIR POLLUTANTS

| Typical Ozone Season Emissions | HAP | CAS CODE | LB/YR |
|--|-----------------|----------|-------|
| VOC Emissions <u>0.0000000000</u> lb/day | Hexane | 110-54-3 | N/A |
| | Cumene | 98-82-8 | N/A |
| NOx Emissions _____ lb/day | Benzene | 71-43-2 | N/A |
| | Toluene | 108-88-3 | N/A |
| CO Emissions _____ lb/day | Ethylbenzene | 100-41-4 | N/A |
| | o-Xylene | 95-47-6 | N/A |
| | p-Xylene | 106-42-3 | N/A |
| CRITERIA POLLUTANT EMISSIONS | m-xylene | 108-38-3 | N/A |
| VOC Emissions <u>0.0000464509</u> ton/yr | Styrene | 100-42-5 | N/A |
| | Chlorobenzene | 108-90-7 | N/A |
| NOx Emissions _____ ton/yr | Napthalene | 91-20-3 | N/A |
| | Xylenes (M & P) | - | N/A |
| CO Emissions _____ ton/yr | Heptane* | 142-82-5 | N/A |
| | Cyclohexane* | 110-82-7 | N/A |
| SO2 Emissions _____ ton/yr | | | |
| PM10 Emissions _____ ton/yr | | | |
| Total Particulate _____ ton/yr | | | |

* New York State HAP
 (use additional sheets if necessary)

REMARKS

**EMISSIONS FOR UNDERGROUND STORAGE TANKS
(FIXED ROOF STORAGE TANK)
Federal and New York State Regulations**

| | | | |
|------------|--------------------------|-----------|--------------------|
| Facility: | <u>Seneca Army Depot</u> | Date: | <u>8/15/94</u> |
| Location: | <u>Bldg 113:606</u> | Initials: | <u>DCP</u> |
| ID Number: | <u>1 active tank</u> | SCC: | <u>4-04-004-14</u> |

| | | | |
|---|---------|----------------------|---|
| CRUDE OIL STORED | no | (YES / NO) | |
| TANK DIAMETER (D) | 5 | Ft | <i>(see table of standard dimensions,</i> |
| TANK LENGTH (L) | 12 | Ft | <i>if dimensions are unknown)</i> |
| ANNUAL THROUGHPUT (Q) | 4,056 | Gal/yr | |
| OZONE SEASON THROUGHPUT | 0 | Gal/Yr | <i>(Enter N/A, if unknown and zero, if no O3 season use)</i> |
| MOLECULAR WEIGHT OF LIQUID (See Enclosed Charts) | 130 | Lb / Lb * mole | |
| TRUE VAPOR PRESSURE (PVA) (See Enclosed Charts) | 0.00740 | psia at 60 degrees F | |
| | | | <i>(Note if you have another fuel stored that is not listed make sure you use the right lb/lb mole and psia for the stored product)</i> |
| Gasoline 62AMU, 6.9 psia | | | |
| Jet naphtha (JP-4) 80AMU, 1.3 psia | | | |
| Fuel Oil#2 130AMU, .0074 psia | | | |
| Oil#6 190AMU, 0.00004 psia | | | |
| -8 130AMU, 0.0085 psia | | | |

| | |
|---------------------|------------|
| TOTAL VOC EMISSIONS | 0.09 lb/yr |
|---------------------|------------|

NOTE:

All emissions from the storage of liquids in a underground storage tank are working losses only, there are no breathing losses assumed.
Emission factors are obtained from section 12.3 of AP-42, page 12-31 the working loss equation.
All fuels AMU and psia are taken from table 12.3-2, section 12.3 of AP-42 (JP-8 was assumed to be similar to jet kerosene).

SPECIATION OF EMISSIONS

| | | |
|---------------------------|------|--|
| TYPE OF LIQUID STORED | C | A - GASOLINE B - JET NAPHTHA (JP-4) C - FUEL OIL #2 (DIESEL) D - FUEL OIL #6 E - JP-8 F - OTHER |
| TOTAL VOC EMISSIONS | 0.09 | Lbs/Yr |
| TOTAL AIR TOXIC EMISSIONS | 0.00 | Lbs/Yr |

INDIVIDUAL AIR TOXIC EMISSIONS

| Chemical Name | CAS # | Emissions (Lbs/Yr) | Profile Data Quality |
|-----------------|----------|-----------------------|-------------------------|
| Hexane | 110-54-3 | N/A | N/A |
| Cumene | 98-82-8 | N/A | N/A |
| Benzene | 71-43-2 | N/A | N/A |
| Toluene | 108-88-3 | N/A | N/A |
| Ethylbenzene | 100-41-4 | N/A | N/A |
| O-Xylene | 95-47-6 | N/A | N/A |
| P-Xylene | 106-42-3 | N/A | N/A |
| M-xylene | 108-38-3 | N/A | N/A |
| Styrene | 100-42-5 | N/A | N/A |
| Chlorobenzene | 108-90-7 | N/A | N/A |
| Napthalene | 91-20-3 | N/A | N/A |
| Xylenes (M & P) | | N/A | N/A |
| Heptane* | 142-82-5 | N/A | N/A |
| Cyclohexane* | 110-82-7 | N/A | N/A |

* New York State HAP

SPECIATION FACTORS FOR GASOLINE OBTAINED FROM EPA AIR EMISSIONS SPECIES MANUAL
PROFILE # 1190

SPECIATION FACTORS FOR JP-4 ARE FROM THE INSTALLATION RESTORATION
TOXICOLOGY GUIDE

DATA QUALITY RATING "AEHA" STANDS FOR AN APPROVED FUEL SPECIATION METHODOLOGY.

UNDERGROUND STORAGE TANKS

Page__ of __

GENERAL INFORMATION

Installation Seneca Army Depot

SCC..... 4-04-004-14 Unit ID #..... 1 active tank

Location.. Bldg 120 (Public Works Fueling Site) Permit #.....

POC..... Thomas Grasek Inventoried by..... T. Sletten

Phone..... (607) 869-1450 Inventory Date..... June 6-10, 1994

LIQUID PRODUCT INFORMATION

Stored Product Diesel Fuel *Liq Density..(W_L) 6.1 lb/gal

*Molec Weight (M_v) 130 lb/lb-mol *Vapor Pressure (P_{VA}) 0.0074 at 60°F psia

TANK INFORMATION

Tank Size 10,000 gal Turnover Factor (K_N)....

Annual Net Thruput.(Q)... 31,707 gal/yr *Tank Max Liq Vol (V_{LX}).. ft²

*Turnovers/year (N)..... *Product Factor (K_p).....

Crude Oil = 0.75

Organic Liquid = 1.00

Tank Orientation..... horizontal Tank Diameter (D)..... 8 ft

Tank Length (L)..... 26.75 ft

THROUGHPUT INFORMATION

| MONTH | gal | MONTH | gal |
|--------|-------|----------------|--------|
| Oct 92 | 3,975 | Apr | 2,412 |
| Nov | 3,071 | May | 2,759 |
| Dec | 3,138 | Jun | 981 |
| Jan 93 | 2,345 | Jul | 1,212 |
| Feb | 3,164 | Aug | 2,734 |
| Mar | 3,797 | Sep | 2,119 |
| | | ANNUAL TOTALS: | 31,707 |

AP-42 References:

(M_v) (W_L) (P_{VA}) - Tables 12.3-2, 12.3-3
 (K_N) - Pg 12-31 / (H_{LX}) = Diameter of Tank

EMISSION RATE DETERMINATION METHOD

Stack Test Data _____ Emission Factor X Material Balance _____

Similar Unit Data _____ Other _____

Reference: AP-42, VOLUME 1, SECTION 12.3 AND EPA AIR EMISSIONS SPECIES MANUAL, VOL 1,
PROFILE NO 1190, AND INSTALLATION RESTORATION TOXICOLOGY GUIDE

OZONE PRECURSOR EMISSIONS

HAZARDOUS AIR POLLUTANTS

| Typical Ozone Season Emissions | HAP | CAS CODE | LB/YR |
|--|-----------------|----------|-------|
| VOC Emissions <u>0.0012266496</u> lb/day | Hexane | 110-54-3 | N/A |
| | Cumene | 98-82-8 | N/A |
| NOx Emissions _____ lb/day | Benzene | 71-43-2 | N/A |
| | Toluene | 108-88-3 | N/A |
| CO Emissions _____ lb/day | Ethylbenzene | 100-41-4 | N/A |
| | o-Xylene | 95-47-6 | N/A |
| | p-Xylene | 106-42-3 | N/A |
| | m-xylene | 108-38-3 | N/A |
| | Styrene | 100-42-5 | N/A |
| CRITERIA POLLUTANT EMISSIONS | Chlorobenzene | 108-90-7 | N/A |
| VOC Emissions <u>0.0003631206</u> ton/yr | Napthalene | 91-20-3 | N/A |
| NOx Emissions _____ ton/yr | Xylenes (M & P) | - | N/A |
| | Heptane* | 142-82-5 | N/A |
| CO Emissions _____ ton/yr | Cyclohexane* | 110-82-7 | N/A |
| SO2 Emissions _____ ton/yr | | | |
| PM10 Emissions _____ ton/yr | | | |
| Total Particulate _____ ton/yr | | | |

* New York State HAP
 (use additional sheets if necessary)

REMARKS

**EMISSIONS FOR UNDERGROUND STORAGE TANKS
(FIXED ROOF STORAGE TANK)
Federal and New York State Regulations**

| | | | |
|------------|---|-----------|--------------------|
| Facility: | <u>Seneca Army Depot</u> | Date: | <u>8/15/94</u> |
| Location: | <u>Bldg 120 (Public Works Fueling Site)</u> | Initials: | <u>DCP</u> |
| ID Number: | <u>1 active tank</u> | SCC: | <u>4-04-004-14</u> |

| | | |
|---|---------|--|
| CRUDE OIL STORED | no | (YES / NO) |
| TANK DIAMETER (D) | 8 | Ft (see table of standard dimensions, if dimensions are unknown) |
| TANK LENGTH (L) | 27 | Ft |
| ANNUAL THROUGHPUT (Q) | 31,707 | Gal/yr |
| OZONE SEASON THROUGHPUT | 4,927 | Gal/Yr (Enter N/A, if unknown and zero, if no O3 season use) |
| MOLECULAR WEIGHT OF LIQUID (See Enclosed Charts) | 130 | Lb / Lb * mole |
| TRUE VAPOR PRESSURE (PVA) (See Enclosed Charts) | 0.00740 | psia at 60 degrees F (Note if you have another fuel stored that is not listed make sure you use the right lb/lb mole and psia for the stored product) |
| Gasoline 62AMU, 6.9 psia | | |
| Jet naptha (JP-4) 80AMU, 1.3 psia | | |
| Fuel Oil#2 130AMU, .0074 psia | | |
| Oil#6 190AMU, 0.00004 psia | | |
| -8 130AMU, 0.0085 psia | | |

| | |
|---------------------|------------|
| TOTAL VOC EMISSIONS | 0.73 lb/yr |
|---------------------|------------|

NOTE:

All emissions from the storage of liquids in a underground storage tank are working losses only, there are no breathing losses assumed.
Emission factors are obtained from section 12.3 of AP-42, page 12-31 the working loss equation.
All fuels AMU and psia are taken from table 12.3-2, section 12.3 of AP-42 (JP-8 was assumed to be similar to jet kerosene).

SPECIATION OF EMISSIONS

| | | |
|---------------------------|------|--|
| TYPE OF LIQUID STORED | C | A - GASOLINE B - JET NAPHTHA (JP-4) C - FUEL OIL #2 (DIESEL) D - FUEL OIL #6 E - JP-8 F - OTHER |
| TOTAL VOC EMISSIONS | 0.73 | Lbs/Yr |
| TOTAL AIR TOXIC EMISSIONS | 0.00 | Lbs/Yr |

INDIVIDUAL AIR TOXIC EMISSIONS

| Chemical Name | CAS # | Emissions (Lbs/Yr) | Profile Data Quality |
|-----------------|----------|-----------------------|-------------------------|
| Hexane | 110-54-3 | N/A | N/A |
| Cumene | 98-82-8 | N/A | N/A |
| Benzene | 71-43-2 | N/A | N/A |
| Toluene | 108-88-3 | N/A | N/A |
| Ethylbenzene | 100-41-4 | N/A | N/A |
| O-Xylene | 95-47-6 | N/A | N/A |
| P-Xylene | 106-42-3 | N/A | N/A |
| M-xylene | 108-38-3 | N/A | N/A |
| Styrene | 100-42-5 | N/A | N/A |
| Chlorobenzene | 108-90-7 | N/A | N/A |
| Napthalene | 91-20-3 | N/A | N/A |
| Xylenes (M & P) | | N/A | N/A |
| Heptane* | 142-82-5 | N/A | N/A |
| Cyclohexane* | 110-82-7 | N/A | N/A |

* New York State HAP

SPECIATION FACTORS FOR GASOLINE OBTAINED FROM EPA AIR EMISSIONS SPECIES MANUAL
PROFILE # 1190

SPECIATION FACTORS FOR JP-4 ARE FROM THE INSTALLATION RESTORATION
TOXICOLOGY GUIDE

DATA QUALITY RATING "AEHA" STANDS FOR AN APPROVED FUEL SPECIATION METHODOLOGY.

EMISSION RATE DETERMINATION METHOD

Stack Test Data _____ Emission Factor X Material Balance _____

Similar Unit Data _____ Other _____

Reference: AP-42, VOLUME 1, SECTION 12.3 AND EPA AIR EMISSIONS SPECIES MANUAL, VOL 1,

PROFILE NO 1190, AND INSTALLATION RESTORATION TOXICOLOGY GUIDE

OZONE PRECURSOR EMISSIONS

HAZARDOUS AIR POLLUTANTS

Typical Ozone Season Emissions

HAP

CAS CODE

LB/YR

VOC Emissions 0.0000000000 lb/day

Hexane 110-54-3 N/A

Cumene 98-82-8 N/A

NOx Emissions _____ lb/day

Benzene 71-43-2 N/A

Toluene 108-88-3 N/A

CO Emissions _____ lb/day

Ethylbenzene 100-41-4 N/A

o-Xylene 95-47-6 N/A

p-Xylene 106-42-3 N/A

m-xylene 108-38-3 N/A

CRITERIA POLLUTANT EMISSIONS

Styrene 100-42-5 N/A

VOC Emissions 0.0000117512 ton/yr

Chlorobenzene 108-90-7 N/A

Napthalene 91-20-3 N/A

NOx Emissions _____ ton/yr

Xylenes (M & P) - N/A

Heptane* 142-82-5 N/A

CO Emissions _____ ton/yr

Cyclohexane* 110-82-7 N/A

SO2 Emissions _____ ton/yr

PM10 Emissions _____ ton/yr

Total Particulate _____ ton/yr

* New York State HAP
(use additional sheets if necessary)

REMARKS

**EMISSIONS FOR UNDERGROUND STORAGE TANKS
(FIXED ROOF STORAGE TANK)
Federal and New York State Regulations**

Facility: Seneca Army Depot
 Location: Bldg 121; 319
 ID Number: 2 active tanks

Date: 8/15/94
 Initials: DCP
 SCC: 4-04-004-98

CRUDE OIL STORED no (YES / NO)

TANK DIAMETER (D) 11 Ft (see table of standard dimensions,
 TANK LENGTH (L) 47 Ft if dimensions are unknown)

ANNUAL THROUGHPUT (Q) 129,882 Gal/yr
 OZONE SEASON THROUGHPUT 0 Gal/Yr (Enter N/A, if unknown and zero, if no O3 season use)
 MOLECULAR WEIGHT OF LIQUID 190 Lb / Lb * mole
 (See Enclosed Charts)

TRUE VAPOR PRESSURE (PVA) 0.00004 psia at 60 degrees F
 (See Enclosed Charts) (Note if you have another fuel stored that is not listed
 make sure you use the right lb/lb mole and psia for the
 stored product)

Gasoline 62AMU, 6.9 psia
 Jet naptha (JP-4) 80AMU, 1.3 psia
 Fuel Oil#2 130AMU, .0074 psia
 I Oil#6 190AMU, 0.00004 psia
 . -8 130AMU, 0.0085 psia

| | |
|---------------------|------------|
| TOTAL VOC EMISSIONS | 0.02 lb/yr |
|---------------------|------------|

NOTE:

All emissions from the storage of liquids in a underground storage tank are working losses only, there are no breathing losses assumed.
 Emission factors are obtained from section 12.3 of AP-42, page 12-31 the working loss equation.
 All fuels AMU and psia are taken from table 12.3-2, section 12.3 of AP-42 (JP-8 was assumed to be similar to jet kerosene).

SPECIATION OF EMISSIONS

| | | |
|---------------------------|------|--|
| TYPE OF LIQUID STORED | D | A - GASOLINE B - JET NAPHTHA (JP-4) C - FUEL OIL #2 (DIESEL) D - FUEL OIL #6 E - JP-8 F - OTHER |
| TOTAL VOC EMISSIONS | 0.02 | Lbs/Yr |
| TOTAL AIR TOXIC EMISSIONS | 0.00 | Lbs/Yr |

INDIVIDUAL AIR TOXIC EMISSIONS

| Chemical Name | CAS # | Emissions (Lbs/Yr) | Profile Data Quality |
|-----------------|----------|-----------------------|-------------------------|
| Hexane | 110-54-3 | N/A | N/A |
| Cumene | 98-82-8 | N/A | N/A |
| Benzene | 71-43-2 | N/A | N/A |
| Toluene | 108-88-3 | N/A | N/A |
| Ethylbenzene | 100-41-4 | N/A | N/A |
| O-Xylene | 95-47-6 | N/A | N/A |
| P-Xylene | 106-42-3 | N/A | N/A |
| M-xylene | 108-38-3 | N/A | N/A |
| Styrene | 100-42-5 | N/A | N/A |
| Chlorobenzene | 108-90-7 | N/A | N/A |
| Napthalene | 91-20-3 | N/A | N/A |
| Xylenes (M & P) | | N/A | N/A |
| Heptane* | 142-82-5 | N/A | N/A |
| Cyclohexane* | 110-82-7 | N/A | N/A |

* New York State HAP

SPECIATION FACTORS FOR GASOLINE OBTAINED FROM EPA AIR EMISSIONS SPECIES MANUAL
PROFILE # 1190SPECIATION FACTORS FOR JP-4 ARE FROM THE INSTALLATION RESTORATION
TOXICOLOGY GUIDE

DATA QUALITY RATING "AEHA" STANDS FOR AN APPROVED FUEL SPECIATION METHODOLOGY.

UNDERGROUND STORAGE TANKS

GENERAL INFORMATION

Installation Seneca Army Depot

SCC..... 4-04-004-14 Unit ID #..... 1 active tank

Location..... Bldg 127 Permit #..... _____

POC..... Thomas Grasek Inventoried by..... T. Sletten

Phone..... (607) 869-1450 Inventory Date..... June 6-10, 1994

LIQUID PRODUCT INFORMATION

Stored Product Fuel Oil #2 *Liq Density..(W_L) 6.1 lb/gal

*Molec Weight (M_V) 130 lb/lb-mol *Vapor Pressure (P_{VA}) 0.0074 at 60°F psia

TANK INFORMATION

Tank Size 12,000 gal Turnover Factor (K_N).... _____

Annual Net Thruput.(Q)... 12,166 gal/yr *Tank Max Liq Vol (V_{LX}).. _____ ft²

*Turnovers/year (N)..... _____ *Product Factor (K_p)..... _____
 Crude Oil = 0.75
 Organic Liquid = 1.00

Tank Orientation..... horizontal Tank Diameter (D)..... 8 ft

Tank Length (L)..... 32 ft

THROUGHPUT INFORMATION

| MONTH | gal | MONTH | gal |
|-------|-------|-----------------------|-------|
| _____ | _____ | _____ | _____ |
| _____ | _____ | _____ | _____ |
| _____ | _____ | _____ | _____ |
| _____ | _____ | _____ | _____ |
| _____ | _____ | _____ | _____ |
| _____ | _____ | _____ | _____ |
| | | ANNUAL TOTALS: | _____ |

AP-42 References:
 (M_V) (W_L) (P_{VA}) - Tables 12.3-2, 12.3-3
 (K_N) - Pg 12-31 / (H_{LX}) = Diameter of Tank

EMISSION RATE DETERMINATION METHOD

Stack Test Data _____ Emission Factor X Material Balance _____

Similar Unit Data _____ Other _____

Reference: AP-42, VOLUME 1, SECTION 12.3 AND EPA AIR EMISSIONS SPECIES MANUAL, VOL 1,

PROFILE NO 1190, AND INSTALLATION RESTORATION TOXICOLOGY GUIDE

OZONE PRECURSOR EMISSIONS

Typical Ozone Season Emissions
 VOC Emissions 0.0000000000 lb/day
 NOx Emissions _____ lb/day
 CO Emissions _____ lb/day

HAZARDOUS AIR POLLUTANTS

| HAP | CAS CODE | LB/YR |
|-----------------|----------|-------|
| Hexane | 110-54-3 | N/A |
| Cumene | 98-82-8 | N/A |
| Benzene | 71-43-2 | N/A |
| Toluene | 108-88-3 | N/A |
| Ethylbenzene | 100-41-4 | N/A |
| o-Xylene | 95-47-6 | N/A |
| p-Xylene | 106-42-3 | N/A |
| m-xylene | 108-38-3 | N/A |
| Styrene | 100-42-5 | N/A |
| Chlorobenzene | 108-90-7 | N/A |
| Napthalene | 91-20-3 | N/A |
| Xylenes (M & P) | - | N/A |
| Heptane* | 142-82-5 | N/A |
| Cyclohexane* | 110-82-7 | N/A |

CRITERIA POLLUTANT EMISSIONS

VOC Emissions 0.0001393297 ton/yr
 NOx Emissions _____ ton/yr
 CO Emissions _____ ton/yr
 SO2 Emissions _____ ton/yr
 PM10 Emissions _____ ton/yr
 Total Particulate _____ ton/yr

* New York State HAP
 (use additional sheets if necessary)

REMARKS

**EMISSIONS FOR UNDERGROUND STORAGE TANKS
(FIXED ROOF STORAGE TANK)
Federal and New York State Regulations**

| | | | |
|------------|--------------------------|-----------|--------------------|
| Facility: | <u>Seneca Army Depot</u> | Date: | <u>8/15/94</u> |
| Location: | <u>Bldg 127</u> | Initials: | <u>DCP</u> |
| ID Number: | <u>1 active tank</u> | SCC: | <u>4-04-004-14</u> |

| | | |
|---|---------|---|
| CRUDE OIL STORED | no | (YES / NO) |
| TANK DIAMETER (D) | 8 | Ft <i>(see table of standard dimensions, if dimensions are unknown)</i> |
| TANK LENGTH (L) | 32 | Ft <i>(see table of standard dimensions, if dimensions are unknown)</i> |
| ANNUAL THROUGHPUT (Q) | 12,166 | Gal/yr |
| OZONE SEASON THROUGHPUT | 0 | Gal/Yr <i>(Enter N/A, if unknown and zero, if no O3 season use)</i> |
| MOLECULAR WEIGHT OF LIQUID (See Enclosed Charts) | 130 | Lb / Lb * mole |
| TRUE VAPOR PRESSURE (PVA) (See Enclosed Charts) | 0.00740 | psia at 60 degrees F <i>(Note if you have another fuel stored that is not listed make sure you use the right lb/lb mole and psia for the stored product)</i> |
| Gasoline 62AMU, 6.9 psia | | |
| Jet naptha (JP-4) 80AMU, 1.3 psia | | |
| Fuel Oil#2 130AMU, .0074 psia | | |
| I Oil#6 190AMU, 0.00004 psia | | |
| J -8 130AMU, 0.0085 psia | | |

| | |
|---------------------|------------|
| TOTAL VOC EMISSIONS | 0.28 lb/yr |
|---------------------|------------|

NOTE:
 All emissions from the storage of liquids in a underground storage tank are working losses only, there are no breathing losses assumed.
 Emission factors are obtained from section 12.3 of AP-42, page 12-31 the working loss equation.
 All fuels AMU and psia are taken from table 12.3-2, section 12.3 of AP-42 (JP-8 was assumed to be similar to jet kerosene).

SPECIATION OF EMISSIONS

| | | |
|---------------------------|------|--|
| TYPE OF LIQUID STORED | C | A - GASOLINE B - JET NAPHTHA (JP-4) C - FUEL OIL #2 (DIESEL) D - FUEL OIL #6 E - JP-8 F - OTHER |
| TOTAL VOC EMISSIONS | 0.28 | Lbs/Yr |
| TOTAL AIR TOXIC EMISSIONS | 0.00 | Lbs/Yr |

INDIVIDUAL AIR TOXIC EMISSIONS

| Chemical Name | CAS # | Emissions (Lbs/Yr) | Profile Data Quality |
|-----------------|----------|-----------------------|-------------------------|
| Hexane | 110-54-3 | N/A | N/A |
| Cumene | 98-82-8 | N/A | N/A |
| Benzene | 71-43-2 | N/A | N/A |
| Toluene | 108-88-3 | N/A | N/A |
| Ethylbenzene | 100-41-4 | N/A | N/A |
| O-Xylene | 95-47-6 | N/A | N/A |
| P-Xylene | 106-42-3 | N/A | N/A |
| M-xylene | 108-38-3 | N/A | N/A |
| Styrene | 100-42-5 | N/A | N/A |
| Chlorobenzene | 108-90-7 | N/A | N/A |
| Napthalene | 91-20-3 | N/A | N/A |
| Xylenes (M & P) | | N/A | N/A |
| Heptane* | 142-82-5 | N/A | N/A |
| Cyclohexane* | 110-82-7 | N/A | N/A |

* New York State HAP

SPECIATION FACTORS FOR GASOLINE OBTAINED FROM EPA AIR EMISSIONS SPECIES MANUAL
PROFILE # 1190

SPECIATION FACTORS FOR JP-4 ARE FROM THE INSTALLATION RESTORATION
TOXICOLOGY GUIDE

DATA QUALITY RATING "AEHA" STANDS FOR AN APPROVED FUEL SPECIATION METHODOLOGY.

UNDERGROUND STORAGE TANKS

GENERAL INFORMATION

Installation Seneca Army Depot
 SCC..... 4-04-004-98 Unit ID #..... 2 active tanks
 Location..... Bldg 319; 718 Permit #..... _____
 POC..... Thomas Grasek Inventoried by..... T. Sletten
 Phone..... (607) 869-1450 Inventory Date..... June 6-10, 1994

LIQUID PRODUCT INFORMATION

Stored Product Fuel Oil #6 *Liq Density..(W_L) 6.4 lb/gal
 *Molec Weight (M_v) 190 lb/lb-mol *Vapor Pressure (P_{vA}) 0.00004 at 60°F psia

TANK INFORMATION

Tank Size 20,000 gal Turnover Factor (K_N).... _____
 Annual Net Thruput.(Q)... 86,587 gal/yr *Tank Max Liq Vol (V_{LX}).. _____ ft²
 *Turnovers/year (N)..... _____ *Product Factor (K_p)..... _____
 Crude Oil = 0.75
 Organic Liquid = 1.00
 Tank Orientation..... horizontal Tank Diameter (D)..... _____
 Tank Length (L)..... _____ ft

THROUGHPUT INFORMATION

| MONTH | gal | MONTH | gal |
|-------|-------|-----------------------|-------|
| _____ | _____ | _____ | _____ |
| _____ | _____ | _____ | _____ |
| _____ | _____ | _____ | _____ |
| _____ | _____ | _____ | _____ |
| _____ | _____ | _____ | _____ |
| _____ | _____ | _____ | _____ |
| _____ | _____ | _____ | _____ |
| _____ | _____ | _____ | _____ |
| | | ANNUAL TOTALS: | _____ |

AP-42 References:
 (M_v) (W_L) (P_{vA}) - Tables 12.3-2, 12.3-3
 (K_N) - Pg 12-31 / (H_{LX}) = Diameter of Tank

EMISSION RATE DETERMINATION METHOD

Stack Test Data _____ Emission Factor X Material Balance _____

Similar Unit Data _____ Other _____

Reference: AP-42, VOLUME 1, SECTION 12.3 AND EPA AIR EMISSIONS SPECIES MANUAL, VOL 1,
PROFILE NO 1190, AND INSTALLATION RESTORATION TOXICOLOGY GUIDE

OZONE PRECURSOR EMISSIONS

HAZARDOUS AIR POLLUTANTS

Typical Ozone Season Emissions
VOC Emissions 0.0000000000 lb/day
NOx Emissions _____ lb/day
CO Emissions _____ lb/day

CRITERIA POLLUTANT EMISSIONS

VOC Emissions 0.0000078341 ton/yr
NOx Emissions _____ ton/yr
CO Emissions _____ ton/yr
SO2 Emissions _____ ton/yr
PM10 Emissions _____ ton/yr
Total Particulate _____ ton/yr

| HAP | CAS CODE | LB/YR |
|-----------------|----------|-------|
| Hexane | 110-54-3 | N/A |
| Cumene | 98-82-8 | N/A |
| Benzene | 71-43-2 | N/A |
| Toluene | 108-88-3 | N/A |
| Ethylbenzene | 100-41-4 | N/A |
| o-Xylene | 95-47-6 | N/A |
| p-Xylene | 106-42-3 | N/A |
| m-xylene | 108-38-3 | N/A |
| Styrene | 100-42-5 | N/A |
| Chlorobenzene | 108-90-7 | N/A |
| Napthalene | 91-20-3 | N/A |
| Xylenes (M & P) | - | N/A |
| Heptane* | 142-82-5 | N/A |
| Cyclohexane* | 110-82-7 | N/A |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |

* New York State HAP
(use additional sheets if necessary)

REMARKS

**EMISSIONS FOR UNDERGROUND STORAGE TANKS
(FIXED ROOF STORAGE TANK)**

Federal and New York State Regulations

| | | | |
|------------|--------------------------|-----------|--------------------|
| Facility: | <u>Seneca Army Depot</u> | Date: | <u>8/15/94</u> |
| Location: | <u>Bldg 319; 718</u> | Initials: | <u>DCP</u> |
| ID Number: | <u>2 active tanks</u> | SCC: | <u>4-04-004-98</u> |

| | | |
|---|---------|--|
| CRUDE OIL STORED | no | (YES / NO) |
| TANK DIAMETER (D) | 11 | Ft (see table of standard dimensions, if dimensions are unknown) |
| TANK LENGTH (L) | 38 | Ft |
| ANNUAL THROUGHPUT (Q) | 86,587 | Gal/yr |
| OZONE SEASON THROUGHPUT | 0 | Gal/Yr (Enter N/A, if unknown and zero, if no O3 season use) |
| MOLECULAR WEIGHT OF LIQUID (See Enclosed Charts) | 190 | Lb / Lb * mole |
| TRUE VAPOR PRESSURE (PVA) (See Enclosed Charts) | 0.00004 | psia at 60 degrees F (Note if you have another fuel stored that is not listed make sure you use the right lb/lb mole and psia for the stored product) |
| Gasoline 62AMU, 6.9 psia | | |
| Jet naptha (JP-4) 80AMU, 1.3 psia | | |
| Fuel Oil#2 130AMU, .0074 psia | | |
| Oil#6 190AMU, 0.00004 psia | | |
| Oil#8 130AMU, 0.0085 psia | | |

TOTAL VOC EMISSIONS

0.02 lb/yr

NOTE:

All emissions from the storage of liquids in a underground storage tank are working losses only, there are no breathing losses assumed.
Emission factors are obtained from section 12.3 of AP-42, page 12-31 the working loss equation.
All fuels AMU and psia are taken from table 12.3-2, section 12.3 of AP-42 (JP-8 was assumed to be similar to jet kerosene).

SPECIATION OF EMISSIONS

| | | |
|---------------------------|------|--|
| TYPE OF LIQUID STORED | D | A - GASOLINE B - JET NAPHTHA (JP-4) C - FUEL OIL #2 (DIESEL) D - FUEL OIL #6 E - JP-8 F - OTHER |
| TOTAL VOC EMISSIONS | 0.02 | Lbs/Yr |
| TOTAL AIR TOXIC EMISSIONS | 0.00 | Lbs/Yr |

INDIVIDUAL AIR TOXIC EMISSIONS

| Chemical Name | CAS # | Emissions (Lbs/Yr) | Profile Data Quality |
|-----------------|----------|-----------------------|-------------------------|
| Hexane | 110-54-3 | N/A | N/A |
| Cumene | 98-82-8 | N/A | N/A |
| Benzene | 71-43-2 | N/A | N/A |
| Toluene | 108-88-3 | N/A | N/A |
| Ethylbenzene | 100-41-4 | N/A | N/A |
| O-Xylene | 95-47-6 | N/A | N/A |
| P-Xylene | 106-42-3 | N/A | N/A |
| M-xylene | 108-38-3 | N/A | N/A |
| Styrene | 100-42-5 | N/A | N/A |
| Chlorobenzene | 108-90-7 | N/A | N/A |
| Napthalene | 91-20-3 | N/A | N/A |
| Xylenes (M & P) | | N/A | N/A |
| Heptane* | 142-82-5 | N/A | N/A |
| Cyclohexane* | 110-82-7 | N/A | N/A |

* New York State HAP

SPECIATION FACTORS FOR GASOLINE OBTAINED FROM EPA AIR EMISSIONS SPECIES MANUAL
PROFILE # 1190SPECIATION FACTORS FOR JP-4 ARE FROM THE INSTALLATION RESTORATION
TOXICOLOGY GUIDE

DATA QUALITY RATING "AEHA" STANDS FOR AN APPROVED FUEL SPECIATION METHODOLOGY.

**EMISSIONS FOR UNDERGROUND STORAGE TANKS
(FIXED ROOF STORAGE TANK)**

Federal and New York State Regulations

| | | | |
|------------|--------------------------|-----------|--------------------|
| Facility: | <u>Seneca Army Depot</u> | Date: | <u>8/15/94</u> |
| Location: | <u>Bldg 718</u> | Initials: | <u>DCP</u> |
| ID Number: | <u>1 active tanks</u> | SCC: | <u>4-04-004-98</u> |

| | | |
|---|---------|---|
| CRUDE OIL STORED | no | (YES / NO) |
| TANK DIAMETER (D) | 12 | Ft (see table of standard dimensions, |
| TANK LENGTH (L) | 48 | Ft if dimensions are unknown) |
| ANNUAL THROUGHPUT (Q) | 86,587 | Gal/yr |
| OZONE SEASON THROUGHPUT | 0 | Gal/Yr (Enter N/A, if unknown and zero, if no O3 season use) |
| MOLECULAR WEIGHT OF LIQUID (See Enclosed Charts) | 190 | Lb / Lb * mole |
| TRUE VAPOR PRESSURE (PVA) (See Enclosed Charts) | 0.00004 | psia at 60 degrees F <i>(Note if you have another fuel stored that is not listed make sure you use the right lb/lb mole and psia for the stored product)</i> |
| Gasoline 62AMU, 6.9 psia | | |
| Jet naphtha (JP-4) 80AMU, 1.3 psia | | |
| Fuel Oil#2 130AMU, .0074 psia | | |
| Oil#6 190AMU, 0.00004 psia | | |
| -8 130AMU, 0.0085 psia | | |

TOTAL VOC EMISSIONS

0.02 lb/yr

NOTE:

All emissions from the storage of liquids in a underground storage tank are working losses only, there are no breathing losses assumed.
Emission factors are obtained from section 12.3 of AP-42, page 12-31 the working loss equation.
All fuels AMU and psia are taken from table 12.3-2, section 12.3 of AP-42 (JP-8 was assumed to be similar to jet kerosene).

SPECIATION OF EMISSIONS

| | | |
|---------------------------|------|--|
| TYPE OF LIQUID STORED | D | A - GASOLINE B - JET NAPHTHA (JP-4) C - FUEL OIL #2 (DIESEL) D - FUEL OIL #6 E - JP-8 F - OTHER |
| TOTAL VOC EMISSIONS | 0.02 | Lbs/Yr |
| TOTAL AIR TOXIC EMISSIONS | 0.00 | Lbs/Yr |

INDIVIDUAL AIR TOXIC EMISSIONS

| Chemical Name | CAS # | Emissions (Lbs/Yr) | Profile Data Quality |
|-----------------|----------|-----------------------|-------------------------|
| Hexane | 110-54-3 | N/A | N/A |
| Cumene | 98-82-8 | N/A | N/A |
| Benzene | 71-43-2 | N/A | N/A |
| Toluene | 108-88-3 | N/A | N/A |
| Ethylbenzene | 100-41-4 | N/A | N/A |
| O-Xylene | 95-47-6 | N/A | N/A |
| P-Xylene | 106-42-3 | N/A | N/A |
| M-xylene | 108-38-3 | N/A | N/A |
| Styrene | 100-42-5 | N/A | N/A |
| Chlorobenzene | 108-90-7 | N/A | N/A |
| Napthalene | 91-20-3 | N/A | N/A |
| Xylenes (M & P) | | N/A | N/A |
| Heptane* | 142-82-5 | N/A | N/A |
| Cyclohexane* | 110-82-7 | N/A | N/A |

* New York State HAP

SPECIATION FACTORS FOR GASOLINE OBTAINED FROM EPA AIR EMISSIONS SPECIES MANUAL
PROFILE # 1190SPECIATION FACTORS FOR JP-4 ARE FROM THE INSTALLATION RESTORATION
TOXICOLOGY GUIDE

DATA QUALITY RATING "AEHA" STANDS FOR AN APPROVED FUEL SPECIATION METHODOLOGY.

EMISSION RATE DETERMINATION METHOD

Stack Test Data _____ Emission Factor X Material Balance _____

Similar Unit Data _____ Other _____

Reference: AP-42, VOLUME 1, SECTION 12.3 AND EPA AIR EMISSIONS SPECIES MANUAL, VOL 1,
PROFILE NO 1190, AND INSTALLATION RESTORATION TOXICOLOGY GUIDE

OZONE PRECURSOR EMISSIONS

HAZARDOUS AIR POLLUTANTS

Typical Ozone Season Emissions

HAP

CAS CODE

LB/YR

VOC Emissions 0.0000000000 lb/day
 NOx Emissions _____ lb/day
 CO Emissions _____ lb/day

CRITERIA POLLUTANT EMISSIONS

VOC Emissions 0.0000127694 ton/yr
 NOx Emissions _____ ton/yr
 CO Emissions _____ ton/yr
 SO2 Emissions _____ ton/yr
 PM10 Emissions _____ ton/yr
 Total Particulate _____ ton/yr

| | | |
|-----------------|----------|-----|
| Hexane | 110-54-3 | N/A |
| Cumene | 98-82-8 | N/A |
| Benzene | 71-43-2 | N/A |
| Toluene | 108-88-3 | N/A |
| Ethylbenzene | 100-41-4 | N/A |
| o-Xylene | 95-47-6 | N/A |
| p-Xylene | 106-42-3 | N/A |
| m-xylene | 108-38-3 | N/A |
| Styrene | 100-42-5 | N/A |
| Chlorobenzene | 108-90-7 | N/A |
| Napthalene | 91-20-3 | N/A |
| Xylenes (M & P) | - | N/A |
| Heptane* | 142-82-5 | N/A |
| Cyclohexane* | 110-82-7 | N/A |

* New York State HAP
 (use additional sheets if necessary)

REMARKS

**EMISSIONS FOR UNDERGROUND STORAGE TANKS
(FIXED ROOF STORAGE TANK)**

Federal and New York State Regulations

| | | | |
|------------|--------------------------|-----------|--------------------|
| Facility: | <u>Seneca Army Depot</u> | Date: | <u>8/15/94</u> |
| Location: | <u>Bldg 729</u> | Initials: | <u>DCP</u> |
| ID Number: | <u>2 active tanks</u> | SCC: | <u>4-04-004-14</u> |

| | | | |
|---|---------|----------------------|---|
| CRUDE OIL STORED | no | (YES / NO) | |
| TANK DIAMETER (D) | 4 | Ft | <i>(see table of standard dimensions,</i> |
| TANK LENGTH (L) | 6 | Ft | <i>if dimensions are unknown)</i> |
| ANNUAL THROUGHPUT (Q) | 1,115 | Gal/yr | |
| OZONE SEASON THROUGHPUT | 0 | Gal/Yr | <i>(Enter N/A, if unknown and zero, if no O3 season use)</i> |
| MOLECULAR WEIGHT OF LIQUID (See Enclosed Charts) | 130 | Lb / Lb * mole | |
| TRUE VAPOR PRESSURE (PVA) (See Enclosed Charts) | 0.00740 | psia at 60 degrees F | <i>(Note if you have another fuel stored that is not listed make sure you use the right lb/lb mole and psia for the stored product)</i> |
| Gasoline 62AMU, 6.9 psia | | | |
| Jet naptha (JP-4) 80AMU, 1.3 psia | | | |
| Fuel Oil#2 130AMU, .0074 psia | | | |
| Oil#6 190AMU, 0.00004 psia | | | |
| Oil#8 130AMU, 0.0085 psia | | | |

| | |
|---------------------|------------|
| TOTAL VOC EMISSIONS | 0.03 lb/yr |
|---------------------|------------|

NOTE:

All emissions from the storage of liquids in a underground storage tank are working losses only, there are no breathing losses assumed.
Emission factors are obtained from section 12.3 of AP-42, page 12-31 the working loss equation.
All fuels AMU and psia are taken from table 12.3-2, section 12.3 of AP-42 (JP-8 was assumed to be similar to jet kerosene).

SPECIATION OF EMISSIONS

| | | |
|---------------------------|------|--|
| TYPE OF LIQUID STORED | C | A - GASOLINE B - JET NAPHTHA (JP-4) C - FUEL OIL #2 (DIESEL) D - FUEL OIL #6 E - JP-8 F - OTHER |
| TOTAL VOC EMISSIONS | 0.03 | Lbs/Yr |
| TOTAL AIR TOXIC EMISSIONS | 0.00 | Lbs/Yr |

INDIVIDUAL AIR TOXIC EMISSIONS

| Chemical Name | CAS # | Emissions (Lbs/Yr) | Profile Data Quality |
|-----------------|----------|-----------------------|-------------------------|
| Hexane | 110-54-3 | N/A | N/A |
| Cumene | 98-82-8 | N/A | N/A |
| Benzene | 71-43-2 | N/A | N/A |
| Toluene | 108-88-3 | N/A | N/A |
| Ethylbenzene | 100-41-4 | N/A | N/A |
| O-Xylene | 95-47-6 | N/A | N/A |
| P-Xylene | 106-42-3 | N/A | N/A |
| M-xylene | 108-38-3 | N/A | N/A |
| Styrene | 100-42-5 | N/A | N/A |
| Chlorobenzene | 108-90-7 | N/A | N/A |
| Napthalene | 91-20-3 | N/A | N/A |
| Xylenes (M & P) | | N/A | N/A |
| Heptane* | 142-82-5 | N/A | N/A |
| Cyclohexane* | 110-82-7 | N/A | N/A |

* New York State HAP

SPECIATION FACTORS FOR GASOLINE OBTAINED FROM EPA AIR EMISSIONS SPECIES MANUAL
PROFILE # 1190SPECIATION FACTORS FOR JP-4 ARE FROM THE INSTALLATION RESTORATION
TOXICOLOGY GUIDE

DATA QUALITY RATING "AEHA" STANDS FOR AN APPROVED FUEL SPECIATION METHODOLOGY.

EMISSION RATE DETERMINATION METHOD

Stack Test Data _____ Emission Factor X Material Balance _____

Similar Unit Data _____ Other _____

Reference: AP-42, VOLUME 1, SECTION 12.3 AND EPA AIR EMISSIONS SPECIES MANUAL, VOL 1,

PROFILE NO 1190, AND INSTALLATION RESTORATION TOXICOLOGY GUIDE

OZONE PRECURSOR EMISSIONS

Typical Ozone Season Emissions

VOC Emissions 0.0000000000 lb/day

NOx Emissions _____ lb/day

CO Emissions _____ lb/day

CRITERIA POLLUTANT EMISSIONS

VOC Emissions 0.0000348267 ton/yr

NOx Emissions _____ ton/yr

CO Emissions _____ ton/yr

SO2 Emissions _____ ton/yr

PM10 Emissions _____ ton/yr

Total Particulate _____ ton/yr

HAZARDOUS AIR POLLUTANTS

| HAP | CAS CODE | LB/YR |
|-----------------|----------|-------|
| Hexane | 110-54-3 | N/A |
| Cumene | 98-82-8 | N/A |
| Benzene | 71-43-2 | N/A |
| Toluene | 108-88-3 | N/A |
| Ethylbenzene | 100-41-4 | N/A |
| o-Xylene | 95-47-6 | N/A |
| p-Xylene | 106-42-3 | N/A |
| m-xylene | 108-38-3 | N/A |
| Styrene | 100-42-5 | N/A |
| Chlorobenzene | 108-90-7 | N/A |
| Napthalene | 91-20-3 | N/A |
| Xylenes (M & P) | - | N/A |
| Heptane* | 142-82-5 | N/A |
| Cyclohexane* | 110-82-7 | N/A |

* New York State HAP
(use additional sheets if necessary)

REMARKS

**EMISSIONS FOR UNDERGROUND STORAGE TANKS
(FIXED ROOF STORAGE TANK)**

Federal and New York State Regulations

| | | | |
|------------|--------------------------|-----------|--------------------|
| Facility: | <u>Seneca Army Depot</u> | Date: | <u>8/15/94</u> |
| Location: | <u>Bldg 815</u> | Initials: | <u>DCP</u> |
| ID Number: | <u>1 active tanks</u> | SCC: | <u>4-04-004-14</u> |

| | | | |
|---|---------|---|--|
| CRUDE OIL STORED | no | (YES / NO) | |
| TANK DIAMETER (D) | 5 | Ft | <i>(see table of standard dimensions,</i> |
| TANK LENGTH (L) | 18 | Ft | <i>if dimensions are unknown)</i> |
| ANNUAL THROUGHPUT (Q) | 3,041 | Gal/yr | |
| OZONE SEASON THROUGHPUT | 0 | Gal/Yr | <i>(Enter N/A, if unknown and zero, if no O3 season use)</i> |
| MOLECULAR WEIGHT OF LIQUID (See Enclosed Charts) | 130 | Lb / Lb * mole | |
| TRUE VAPOR PRESSURE (PVA) (See Enclosed Charts) | 0.00740 | psia at 60 degrees F | |
| | | <i>(Note if you have another fuel stored that is not listed make sure you use the right lb/lb mole and psia for the stored product)</i> | |
| Gasoline 62AMU, 6.9 psia | | | |
| Jet naphtha (JP-4) 80AMU, 1.3 psia | | | |
| Fuel Oil#2 130AMU, .0074 psia | | | |
| I Oil#6 190AMU, 0.00004 psia | | | |
| -8 130AMU, 0.0085 psia | | | |

| | |
|---------------------|------------|
| TOTAL VOC EMISSIONS | 0.07 lb/yr |
|---------------------|------------|

NOTE:

All emissions from the storage of liquids in a underground storage tank are working losses only, there are no breathing losses assumed.

Emission factors are obtained from section 12.3 of AP-42, page 12-31 the working loss equation.

All fuels AMU and psia are taken from table 12.3-2, section 12.3 of AP-42 (JP-8 was assumed to be similar to jet kerosene).

**EMISSIONS FOR UNDERGROUND STORAGE TANKS
(FIXED ROOF STORAGE TANK)
Federal and New York State Regulations**

| | | | |
|------------|--------------------------|-----------|--------------------|
| Facility: | <u>Seneca Army Depot</u> | Date: | <u>8/15/94</u> |
| Location: | <u>Bldg 819</u> | Initials: | <u>DCP</u> |
| ID Number: | <u>1 active tanks</u> | SCC: | <u>4-04-004-14</u> |

| | | |
|---|---------|---|
| CRUDE OIL STORED | no | (YES / NO) |
| TANK DIAMETER (D) | 8 | Ft <i>(see table of standard dimensions, if dimensions are unknown)</i> |
| TANK LENGTH (L) | 27 | Ft |
| ANNUAL THROUGHPUT (Q) | 10,138 | Gal/yr |
| OZONE SEASON THROUGHPUT | 0 | Gal/Yr <i>(Enter N/A, if unknown and zero, if no O3 season use)</i> |
| MOLECULAR WEIGHT OF LIQUID (See Enclosed Charts) | 130 | Lb / Lb * mole |
| TRUE VAPOR PRESSURE (PVA) (See Enclosed Charts) | 0.00740 | psia at 60 degrees F <i>(Note if you have another fuel stored that is not listed make sure you use the right lb/lb mole and psia for the stored product)</i> |
| Gasoline 62AMU, 6.9 psia | | |
| Jet naphtha (JP-4) 80AMU, 1.3 psia | | |
| Fuel Oil#2 130AMU, .0074 psia | | |
| Oil#6 190AMU, 0.00004 psia | | |
| Oil#8 130AMU, 0.0085 psia | | |

| | |
|---------------------|------------|
| TOTAL VOC EMISSIONS | 0.23 lb/yr |
|---------------------|------------|

NOTE:

All emissions from the storage of liquids in a underground storage tank are working losses only, there are no breathing losses assumed.
Emission factors are obtained from section 12.3 of AP-42, page 12-31 the working loss equation.
All fuels AMU and psia are taken from table 12.3-2, section 12.3 of AP-42 (JP-8 was assumed to be similar to jet kerosene).

SPECIATION OF EMISSIONS

| | | |
|---------------------------|------|--|
| TYPE OF LIQUID STORED | C | A - GASOLINE B - JET NAPHTHA (JP-4) C - FUEL OIL #2 (DIESEL) D - FUEL OIL #6 E - JP-8 F - OTHER |
| TOTAL VOC EMISSIONS | 0.23 | Lbs/Yr |
| TOTAL AIR TOXIC EMISSIONS | 0.00 | Lbs/Yr |

INDIVIDUAL AIR TOXIC EMISSIONS

| Chemical Name | CAS # | Emissions (Lbs/Yr) | Profile Data Quality |
|-----------------|----------|-----------------------|-------------------------|
| Hexane | 110-54-3 | N/A | N/A |
| Cumene | 98-82-8 | N/A | N/A |
| Benzene | 71-43-2 | N/A | N/A |
| Toluene | 108-88-3 | N/A | N/A |
| Ethylbenzene | 100-41-4 | N/A | N/A |
| O-Xylene | 95-47-6 | N/A | N/A |
| P-Xylene | 106-42-3 | N/A | N/A |
| M-xylene | 108-38-3 | N/A | N/A |
| Styrene | 100-42-5 | N/A | N/A |
| Chlorobenzene | 108-90-7 | N/A | N/A |
| Napthalene | 91-20-3 | N/A | N/A |
| Xylenes (M & P) | | N/A | N/A |
| Heptane* | 142-82-5 | N/A | N/A |
| Cyclohexane* | 110-82-7 | N/A | N/A |

* New York State HAP

SPECIATION FACTORS FOR GASOLINE OBTAINED FROM EPA AIR EMISSIONS SPECIES MANUAL
PROFILE # 1190

SPECIATION FACTORS FOR JP-4 ARE FROM THE INSTALLATION RESTORATION
TOXICOLOGY GUIDE

DATA QUALITY RATING "AEHA" STANDS FOR AN APPROVED FUEL SPECIATION METHODOLOGY.

UNDERGROUND STORAGE TANKS

Page__ of __

GENERAL INFORMATION

Installation Seneca Army Depot

SCC..... 4-04-004-10 Unit ID #..... 1 active tank

Location..... Air Field Permit #.....

POC..... Thomas Grasek Inventoried by..... T. Sletten

Phone..... (607) 869-1450 Inventory Date..... June 6-10, 1994

LIQUID PRODUCT INFORMATION

Stored Product JP-4 *Liq Density..(W_L) _____ lb/gal

*Molec Weight (M_V) _____ lb/lb-mol *Vapor Pressure (P_{VA}) _____ psia

TANK INFORMATION

Tank Size 30,000 gal Turnover Factor (K_N).... _____

Annual Net Thruput.(Q)... 25,813 gal/yr *Tank Max Liq Vol (V_{LX}).. _____ ft²

*Turnovers/year (N)..... _____ *Product Factor (K_P)..... _____

Crude Oil = 0.75

Organic Liquid = 1.00

Tank Orientation..... horizontal Tank Diameter (D)..... 10.5 ft

Tank Length (L)..... 46.5 ft

THROUGHPUT INFORMATION

| MONTH | gal | MONTH | gal |
|--------|-------|----------------|--------|
| Oct 92 | 4,603 | Apr | 947 |
| Nov | 1,404 | May | 281 |
| Dec | 706 | Jun | 0 |
| Jan 93 | 245 | Jul | 231 |
| Feb | 396 | Aug | 4,078 |
| Mar | 570 | Sep | 12,352 |
| | | ANNUAL TOTALS: | 25,813 |

AP-42 References:

(M_V) (W_L) (P_{VA}) - Tables 12.3-2, 12.3-3
 (K_N) - Pg 12-31 / (H_{LX}) = Diameter of Tank

EMISSION RATE DETERMINATION METHOD

Stack Test Data _____ Emission Factor X Material Balance _____

Similar Unit Data _____ Other _____

Reference: AP-42, VOLUME 1, SECTION 12.3 AND EPA AIR EMISSIONS SPECIES MANUAL, VOL 1,
PROFILE NO 1190, AND INSTALLATION RESTORATION TOXICOLOGY GUIDE

OZONE PRECURSOR EMISSIONS

Typical Ozone Season Emissions
 VOC Emissions 0.1159772257 lb/day
 NOx Emissions _____ lb/day
 CO Emissions _____ lb/day

HAZARDOUS AIR POLLUTANTS

| HAP | CAS CODE | LB/YR |
|-----------------|----------|--------------|
| Hexane | 110-54-3 | 1.4125856952 |
| Cumene | 98-82-8 | N/A |
| Benzene | 71-43-2 | 0.3195895238 |
| Toluene | 108-88-3 | 0.8501081333 |
| Ethylbenzene | 100-41-4 | 0.2364962476 |
| o-Xylene | 95-47-6 | 0.6455708381 |
| p-Xylene | 106-42-3 | 0.2237126667 |
| m-xylene | 108-38-3 | 0.6136118857 |
| Styrene | 100-42-5 | N/A |
| Chlorobenzene | 108-90-7 | N/A |
| Napthalene | 91-20-3 | 0.3195895238 |
| Xylenes (M & P) | - | N/A |
| Heptane* | 142-82-5 | 2.3457871048 |
| Cyclohexane* | 110-82-7 | 0.7925820190 |

CRITERIA POLLUTANT EMISSIONS

VOC Emissions 0.0319589524 ton/yr
 NOx Emissions _____ ton/yr
 CO Emissions _____ ton/yr
 SO2 Emissions _____ ton/yr
 PM10 Emissions _____ ton/yr
 Total Particulate _____ ton/yr

* New York State HAP
 (use additional sheets if necessary)

REMARKS

EMISSIONS FOR UNDERGROUND STORAGE TANKS**(FIXED ROOF STORAGE TANK)**

Federal and New York State Regulations

| | | | |
|------------|--------------------------|-----------|--------------------|
| Facility: | <u>Seneca Army Depot</u> | Date: | <u>8/15/94</u> |
| Location: | <u>Air Field</u> | Initials: | <u>DCP</u> |
| ID Number: | <u>1 active tank</u> | SCC: | <u>4-04-004-10</u> |

| | | | |
|---|---------|----------------------|---|
| CRUDE OIL STORED | no | (YES / NO) | |
| TANK DIAMETER (D) | 11 | Ft | <i>(see table of standard dimensions,</i> |
| TANK LENGTH (L) | 47 | Ft | <i>if dimensions are unknown)</i> |
| ANNUAL THROUGHPUT (Q) | 25,813 | Gal/yr | |
| OZONE SEASON THROUGHPUT | 4,309 | Gal/Yr | <i>(Enter N/A, if unknown and zero, if no O3 season use)</i> |
| MOLECULAR WEIGHT OF LIQUID (See Enclosed Charts) | 80 | Lb / Lb * mole | |
| TRUE VAPOR PRESSURE (PVA) (See Enclosed Charts) | 1.30000 | psia at 60 degrees F | <i>(Note if you have another fuel stored that is not listed make sure you use the right lb/lb mole and psia for the stored product)</i> |
| Gasoline 62AMU, 6.9 psia | | | |
| Jet naphtha (JP-4) 80AMU, 1.3 psia | | | |
| Fuel Oil#2 130AMU, .0074 psia | | | |
| ! Oil#6 190AMU, 0.00004 psia | | | |
| . 8 130AMU, 0.0085 psia | | | |

| | |
|---------------------|-------------|
| TOTAL VOC EMISSIONS | 63.92 lb/yr |
|---------------------|-------------|

NOTE:

All emissions from the storage of liquids in a underground storage tank are working losses only, there are no breathing losses assumed.

Emission factors are obtained from section 12.3 of AP-42, page 12-31 the working loss equation.

All fuels AMU and psia are taken from table 12.3-2, section 12.3 of AP-42 (JP-8 was assumed to be similar to jet kerosene).

SPECIATION OF EMISSIONS

| | | |
|---------------------------|-------|--|
| TYPE OF LIQUID STORED | B | A - GASOLINE B - JET NAPHTHA (JP-4) C - FUEL OIL #2 (DIESEL) D - FUEL OIL #6 E - JP-8 F - OTHER |
| TOTAL VOC EMISSIONS | 63.92 | Lbs/Yr |
| TOTAL AIR TOXIC EMISSIONS | 7.76 | Lbs/Yr |

INDIVIDUAL AIR TOXIC EMISSIONS

| Chemical Name | CAS # | Emissions (Lbs/Yr) | Profile Data Quality |
|-----------------|----------|-----------------------|-------------------------|
| Hexane | 110-54-3 | 1.41E+00 | AEHA |
| Cumene | 98-82-8 | N/A | AEHA |
| Benzene | 71-43-2 | 3.20E-01 | AEHA |
| Toluene | 108-88-3 | 8.50E-01 | AEHA |
| Ethylbenzene | 100-41-4 | 2.36E-01 | AEHA |
| O-Xylene | 95-47-6 | 6.46E-01 | AEHA |
| P-Xylene | 106-42-3 | 2.24E-01 | AEHA |
| M-xylene | 108-38-3 | 6.14E-01 | AEHA |
| Styrene | 100-42-5 | N/A | AEHA |
| Chlorobenzene | 108-90-7 | N/A | AEHA |
| Napthalene | 91-20-3 | 3.20E-01 | AEHA |
| Xylenes (M & P) | | N/A | AEHA |
| Heptane* | 142-82-5 | 2.35E+00 | AEHA |
| Cyclohexane* | 110-82-7 | 7.93E-01 | AEHA |

* New York State HAP

SPECIATION FACTORS FOR GASOLINE OBTAINED FROM EPA AIR EMISSIONS SPECIES MANUAL
PROFILE # 1190SPECIATION FACTORS FOR JP-4 ARE FROM THE INSTALLATION RESTORATION
TOXICOLOGY GUIDE

DATA QUALITY RATING "AEHA" STANDS FOR AN APPROVED FUEL SPECIATION METHODOLOGY.

EMISSION RATE DETERMINATION METHOD

Stack Test Data _____ Emission Factor X Material Balance _____

Similar Unit Data _____ Other _____

Reference: AP-42, VOLUME 1, SECTION 12.3 AND EPA AIR EMISSIONS SPECIES MANUAL, VOL 1,

PROFILE NO 1190, AND INSTALLATION RESTORATION TOXICOLOGY GUIDE

OZONE PRECURSOR EMISSIONS

HAZARDOUS AIR POLLUTANTS

Typical Ozone Season Emissions

VOC Emissions 0.0000000000 lb/day
 NOx Emissions _____ lb/day
 CO Emissions _____ lb/day

CRITERIA POLLUTANT EMISSIONS

VOC Emissions 0.0000812775 ton/yr
 NOx Emissions _____ ton/yr
 CO Emissions _____ ton/yr
 SO2 Emissions _____ ton/yr
 PM10 Emissions _____ ton/yr
 Total Particulate _____ ton/yr

| HAP | CAS CODE | LB/YR |
|-----------------|----------|-------|
| Hexane | 110-54-3 | N/A |
| Cumene | 98-82-8 | N/A |
| Benzene | 71-43-2 | N/A |
| Toluene | 108-88-3 | N/A |
| Ethylbenzene | 100-41-4 | N/A |
| o-Xylene | 95-47-6 | N/A |
| p-Xylene | 106-42-3 | N/A |
| m-xylene | 108-38-3 | N/A |
| Styrene | 100-42-5 | N/A |
| Chlorobenzene | 108-90-7 | N/A |
| Napthalene | 91-20-3 | N/A |
| Xylenes (M & P) | - | N/A |
| Heptane* | 142-82-5 | N/A |
| Cyclohexane* | 110-82-7 | N/A |

* New York State HAP
 (use additional sheets if necessary)

REMARKS

**EMISSIONS FOR UNDERGROUND STORAGE TANKS
(FIXED ROOF STORAGE TANK)**

Federal and New York State Regulations

| | | | |
|------------|--------------------------|-----------|--------------------|
| Facility: | <u>Seneca Army Depot</u> | Date: | <u>8/15/94</u> |
| Location: | <u>Various</u> | Initials: | <u>DCP</u> |
| ID Number: | <u>7 active tanks</u> | SCC: | <u>4-04-004-14</u> |

| | | | |
|---|---------|----------------------|---|
| CRUDE OIL STORED | no | (YES / NO) | |
| TANK DIAMETER (D) | 5 | Ft | <i>(see table of standard dimensions,</i> |
| TANK LENGTH (L) | 6 | Ft | <i>if dimensions are unknown)</i> |
| ANNUAL THROUGHPUT (Q) | 7,097 | Gal/yr | |
| OZONE SEASON THROUGHPUT | 0 | Gal/Yr | <i>(Enter N/A, if unknown and zero, if no O3 season use)</i> |
| MOLECULAR WEIGHT OF LIQUID (See Enclosed Charts) | 130 | Lb / Lb * mole | |
| TRUE VAPOR PRESSURE (PVA) (See Enclosed Charts) | 0.00740 | psia at 60 degrees F | <i>(Note if you have another fuel stored that is not listed make sure you use the right lb/lb mole and psia for the stored product)</i> |
| Gasoline 62AMU, 6.9 psia | | | |
| Jet naptha (JP-4) 80AMU, 1.3 psia | | | |
| Fuel Oil#2 130AMU, .0074 psia | | | |
| Oil#6 190AMU, 0.00004 psia | | | |
| Oil#8 130AMU, 0.0085 psia | | | |

| | |
|---------------------|------------|
| TOTAL VOC EMISSIONS | 0.16 lb/yr |
|---------------------|------------|

NOTE:

All emissions from the storage of liquids in a underground storage tank are working losses only, there are no breathing losses assumed.
Emission factors are obtained from section 12.3 of AP-42, page 12-31 the working loss equation.
All fuels AMU and psia are taken from table 12.3-2, section 12.3 of AP-42 (JP-8 was assumed to be similar to jet kerosene).

SPECIATION OF EMISSIONS

| | | |
|---------------------------|------|--|
| TYPE OF LIQUID STORED | C | A - GASOLINE B - JET NAPHTHA (JP-4) C - FUEL OIL #2 (DIESEL) D - FUEL OIL #6 E - JP-8 F - OTHER |
| TOTAL VOC EMISSIONS | 0.16 | Lbs/Yr |
| TOTAL AIR TOXIC EMISSIONS | 0.00 | Lbs/Yr |

INDIVIDUAL AIR TOXIC EMISSIONS

| Chemical Name | CAS # | Emissions (Lbs/Yr) | Profile Data Quality |
|-----------------|----------|-----------------------|-------------------------|
| Hexane | 110-54-3 | N/A | N/A |
| Cumene | 98-82-8 | N/A | N/A |
| Benzene | 71-43-2 | N/A | N/A |
| Toluene | 108-88-3 | N/A | N/A |
| Ethylbenzene | 100-41-4 | N/A | N/A |
| O-Xylene | 95-47-6 | N/A | N/A |
| P-Xylene | 106-42-3 | N/A | N/A |
| M-xylene | 108-38-3 | N/A | N/A |
| Styrene | 100-42-5 | N/A | N/A |
| Chlorobenzene | 108-90-7 | N/A | N/A |
| Napthalene | 91-20-3 | N/A | N/A |
| Xylenes (M & P) | | N/A | N/A |
| Heptane* | 142-82-5 | N/A | N/A |
| Cyclohexane* | 110-82-7 | N/A | N/A |

* New York State HAP

SPECIATION FACTORS FOR GASOLINE OBTAINED FROM EPA AIR EMISSIONS SPECIES MANUAL
PROFILE # 1190SPECIATION FACTORS FOR JP-4 ARE FROM THE INSTALLATION RESTORATION
TOXICOLOGY GUIDE

DATA QUALITY RATING "AEHA" STANDS FOR AN APPROVED FUEL SPECIATION METHODOLOGY.

UNDERGROUND STORAGE TANKS

GENERAL INFORMATION

Installation Seneca Army Depot

SCC..... 4-04-004-14 Unit ID #..... 23 active tanks

Location..... Various Permit #..... _____

POC..... Thomas Grasek Inventoried by..... T. Sletten

Phone..... (607) 869-1450 Inventory Date..... June 6-10, 1994

LIQUID PRODUCT INFORMATION

Stored Product Fuel Oil #2 *Liq Density..(W_L) 6.1 lb/gal

*Molec Weight (M_V) 130 lb/lb-mol *Vapor Pressure (P_{VA}) 0.0074 at 60°F psia

TANK INFORMATION

Tank Size 550 gal Turnover Factor (K_N).... _____

Annual Net Thruput.(Q)... 12,825 gal/yr *Tank Max Liq Vol (V_{LX}).. _____ ft²

*Turnovers/year (N)..... _____ *Product Factor (K_P)..... _____

Crude Oil = 0.75

Organic Liquid = 1.00

Tank Orientation..... horizontal Tank Diameter (D)..... 4.125 ft

Tank Length (L)..... 5.6 ft

THROUGHPUT INFORMATION

| MONTH | gal | MONTH | gal |
|-------|-------|----------------|-------|
| _____ | _____ | _____ | _____ |
| _____ | _____ | _____ | _____ |
| _____ | _____ | _____ | _____ |
| _____ | _____ | _____ | _____ |
| _____ | _____ | _____ | _____ |
| _____ | _____ | _____ | _____ |
| _____ | _____ | _____ | _____ |
| | | ANNUAL TOTALS: | _____ |

AP-42 References:
(M_V) (W_L) (P_{VA}) - Tables 12.3-2, 12.3-3
(K_N) - Pg 12-31 / (H_{LX}) = Diameter of Tank

EMISSION RATE DETERMINATION METHOD

Stack Test Data _____ Emission Factor X Material Balance _____

Similar Unit Data _____ Other _____

Reference: AP-42, VOLUME 1, SECTION 12.3 AND EPA AIR EMISSIONS SPECIES MANUAL, VOL 1,

PROFILE NO 1190, AND INSTALLATION RESTORATION TOXICOLOGY GUIDE

OZONE PRECURSOR EMISSIONS

HAZARDOUS AIR POLLUTANTS

Typical Ozone Season Emissions

VOC Emissions 0.0000000000 lb/day

NOx Emissions _____ lb/day

CO Emissions _____ lb/day

CRITERIA POLLUTANT EMISSIONS

VOC Emissions 0.0001468768 ton/yr

NOx Emissions _____ ton/yr

CO Emissions _____ ton/yr

SO2 Emissions _____ ton/yr

PM10 Emissions _____ ton/yr

Total Particulate _____ ton/yr

HAP

CAS CODE

LB/YR

| | | |
|-----------------|----------|-----|
| Hexane | 110-54-3 | N/A |
| Cumene | 98-82-8 | N/A |
| Benzene | 71-43-2 | N/A |
| Toluene | 108-88-3 | N/A |
| Ethylbenzene | 100-41-4 | N/A |
| o-Xylene | 95-47-6 | N/A |
| p-Xylene | 106-42-3 | N/A |
| m-xylene | 108-38-3 | N/A |
| Styrene | 100-42-5 | N/A |
| Chlorobenzene | 108-90-7 | N/A |
| Napthalene | 91-20-3 | N/A |
| Xylenes (M & P) | - | N/A |
| Heptane* | 142-82-5 | N/A |
| Cyclohexane* | 110-82-7 | N/A |

* New York State HAP
(use additional sheets if necessary)

REMARKS

EMISSIONS FOR UNDERGROUND STORAGE TANKS
(FIXED ROOF STORAGE TANK)
 Federal and New York State Regulations

| | | | |
|------------|--------------------------|-----------|--------------------|
| Facility: | <u>Seneca Army Depot</u> | Date: | <u>8/15/94</u> |
| Location: | <u>Various</u> | Initials: | <u>DCP</u> |
| ID Number: | <u>23 active tanks</u> | SCC: | <u>4-04-004-14</u> |

| | | | |
|---|---------|----------------------|---|
| CRUDE OIL STORED | no | (YES / NO) | |
| TANK DIAMETER (D) | 4 | Ft | <i>(see table of standard dimensions, if dimensions are unknown)</i> |
| TANK LENGTH (L) | 6 | Ft | |
| ANNUAL THROUGHPUT (Q) | 12,825 | Gal/yr | |
| OZONE SEASON THROUGHPUT | 0 | Gal/Yr | <i>(Enter N/A, if unknown and zero, if no O3 season use)</i> |
| MOLECULAR WEIGHT OF LIQUID (See Enclosed Charts) | 130 | Lb / Lb * mole | |
| TRUE VAPOR PRESSURE (PVA) (See Enclosed Charts) | 0.00740 | psia at 60 degrees F | <i>(Note if you have another fuel stored that is not listed make sure you use the right lb/lb mole and psia for the stored product)</i> |
| Gasoline 62AMU, 6.9 psia | | | |
| Jet naphtha (JP-4) 80AMU, 1.3 psia | | | |
| Fuel Oil#2 130AMU, .0074 psia | | | |
| Oil#6 190AMU, 0.00004 psia | | | |
| ... -8 130AMU, 0.0085 psia | | | |

TOTAL VOC EMISSIONS

0.29 lb/yr

NOTE:

All emissions from the storage of liquids in a underground storage tank are working losses only, there are no breathing losses assumed.
 Emission factors are obtained from section 12.3 of AP-42, page 12-31 the working loss equation.
 All fuels AMU and psia are taken from table 12.3-2, section 12.3 of AP-42 (JP-8 was assumed to be similar to jet kerosene).

SPECIATION OF EMISSIONS

| | | |
|---------------------------|------|--|
| TYPE OF LIQUID STORED | C | A - GASOLINE B - JET NAPHTHA (JP-4) C - FUEL OIL #2 (DIESEL) D - FUEL OIL #6 E - JP-8 F - OTHER |
| TOTAL VOC EMISSIONS | 0.29 | Lbs/Yr |
| TOTAL AIR TOXIC EMISSIONS | 0.00 | Lbs/Yr |

INDIVIDUAL AIR TOXIC EMISSIONS

| Chemical Name | CAS # | Emissions (Lbs/Yr) | Profile Data Quality |
|-----------------|----------|-----------------------|-------------------------|
| Hexane | 110-54-3 | N/A | N/A |
| Cumene | 98-82-8 | N/A | N/A |
| Benzene | 71-43-2 | N/A | N/A |
| Toluene | 108-88-3 | N/A | N/A |
| Ethylbenzene | 100-41-4 | N/A | N/A |
| O-Xylene | 95-47-6 | N/A | N/A |
| P-Xylene | 106-42-3 | N/A | N/A |
| M-xylene | 108-38-3 | N/A | N/A |
| Styrene | 100-42-5 | N/A | N/A |
| Chlorobenzene | 108-90-7 | N/A | N/A |
| Napthalene | 91-20-3 | N/A | N/A |
| Xylenes (M & P) | | N/A | N/A |
| Heptane* | 142-82-5 | N/A | N/A |
| Cyclohexane* | 110-82-7 | N/A | N/A |

* New York State HAP

SPECIATION FACTORS FOR GASOLINE OBTAINED FROM EPA AIR EMISSIONS SPECIES MANUAL PROFILE # 1190

SPECIATION FACTORS FOR JP-4 ARE FROM THE INSTALLATION RESTORATION TOXICOLOGY GUIDE

DATA QUALITY RATING "AEHA" STANDS FOR AN APPROVED FUEL SPECIATION METHODOLOGY.

ABOVEGROUND STORAGE TANKS -- HORIZONTAL FIXED ROOF

GENERAL INFORMATION

Installation Seneca Army Depot

SCC..... 4-03-001-03 Unit ID #..... 1 active tank

Location..... Bldg 102 Permit #..... _____

POC..... Thomas Grasek Inventoried by..... T. Sletten

Phone..... (607) 869-1450 Inventory Date..... June 6-10, 1994

LIQUID PRODUCT INFORMATION

Stored Product Gasoline *Liq Density..(W_L) 4.9 lb/gal

*Molec Weight (M_v) 62 at 60°F lb/lb-mol *Vapor Pressure (P_{VA}) 6.9 at 60°F psia

TANK INFORMATION

Tank Size 275 gal *Average Wind Speed (V).... _____ mph

Annual Net Thruput.(Q)..... 250 gal/yr *Tank Diameter (D)..... 3 ft

*Shell Clingage Factor (C)..... _____ bbl/1000 ft²

*Product Factor (K_C) *Wind Speed Exponent (n).... _____
 Crude Oil = 0.40
 Organic Liquid = 1.00

*Rim-Seal Loss Factor (K_R)..... _____ lb-mole/(mph)³ft.yr

Atmospheric Press(P_a)... _____ psia *Vapor Press Function (P*) _____

Color of Paint..... White Condition of Paint: Good _____
 Poor _____ (check one)

*Paint Factor (a)..... _____

Shell Condition..... Lt Rust _____ *MAX Ambient Temp (T_{AX})... _____ °R
 Dense Rust _____ *MIN Ambient Temp (T_{AN}).... _____ °R
 Gunite Lining _____

*Avg Liquid Surface Temp (T_{LA})..... _____ °R *Solar Isolation Factor (I)..... _____
 btu/ft²day

THROUGHPUT INFORMATION

| MONTH | gal | MONTH | gal |
|-------|-------|----------------|-------|
| _____ | _____ | _____ | _____ |
| _____ | _____ | _____ | _____ |
| _____ | _____ | _____ | _____ |
| _____ | _____ | _____ | _____ |
| _____ | _____ | _____ | _____ |
| _____ | _____ | _____ | _____ |
| | | ANNUAL TOTALS: | _____ |

EMISSION RATE DETERMINATION METHOD

Stack Test Data _____ Emission Facto X Material Balance _____

Similar Unit Data _____ Other _____

Reference: AP-42 , VOLUME 1, SECTION 12.3 AND EPA AIR EMISSIONS SPECIES MANUAL, VOL1,

PROFILE NO 1190.

OZONE PRECURSOR EMISSIONS

HAZARDOUS AIR POLLUTANTS

Typical Ozone Season Emissions

HAP

CAS CODE

LB/YR

VOC Emissions 0.3716229343 lb/day

Hexane 110-54-3 1.8538760364

Cumene 98-82-8 0.156465241

NOx Emissions _____ lb/day

Benzene 71-43-2 1.540945555

Toluene 108-88-3 7.216366566

CO Emissions _____ lb/day

Ethylbenzene 100-41-4 1.929737971

O-Xylene 95-47-6 3.039218771

P-Xylene 106-42-3 N/A

CRITERIA POLLUTANT EMISSIONS

M-xylene 108-38-3 N/A

Styrene 100-42-5 0.080603306

VOC Emissions 0.0237068547 ton/yr

Chlorobenzene 108-90-7 0.014224113

Napthalene 91-20-3 0.379309675

NOx Emissions _____ ton/yr

Xylenes (M & P) _____ 7.244814792

Heptane* 142-82-5 0.872412252

CO Emissions _____ ton/yr

Cyclohexane* 110-82-7 N/A

SO2 Emissions _____ ton/yr

PM10 Emissions _____ ton/yr

Total Particulate _____ ton/yr

* New York State HAP
(use additional sheets if necessary)

STACK INFORMATION

Stack (release) Height _____ feet

Stack Gas Velocity _____ ft/sec

Stack Diameter _____ inch

Stack Gas Flow Rate _____ ascf/min

Stack Gas Temperature _____ oF

Other sources that share this stack? _____

COMMENTS

**EMISSIONS FOR ABOVEGROUND STORAGE TANKS
(FIXED ROOF STORAGE TANK)
Federal and New York State Regulations**

| | | | |
|------------|--------------------------|-----------|--------------------|
| Facility: | <u>Seneca Army Depot</u> | Date: | <u>8/23/94</u> |
| Location: | <u>Bldg 102</u> | Initials: | <u>DCP</u> |
| ID Number: | <u>1 active tank</u> | SCC # | <u>4-03-001-03</u> |

| | | |
|--|-----------------------|-----------------------------|
| CRUDE OIL STORED | no | (YES / NO) |
| ORIENTATION OF TANK | horizontal | (HORIZONTAL / VERTICAL) |
| TANK DIAMETER (D) | 3 | Ft |
| TANK LENGTH / HEIGHT (L / H) | 5 | Ft |
| ANNUAL THROUGHPUT (Q) | 250 | Gal / Yr |
| MOLECULAR WEIGHT OF LIQUID (Mv) (See Enclosed Charts) | 62 | Lb / Lb * mole |
| TRUE VAPOR PRESSURE (psia) (See Enclosed Charts) | 6.90000 | psia |
| | <u>Annual Average</u> | |
| DAILY MAX AMBIENT TEMP (Tax) | 55.8 | Fahrenheit |
| DAILY MIN AMBIENT TEMP (Tan) | 39.3 | Fahrenheit |
| TANK PAINT SOLAR ABSORBANCE (a) | 0.17 | -- |
| DAILY SOLAR INSOLATION FACTOR (I) (See Enclosed Charts) | 1034 | Btu / Ft ² * Day |

Gasoline RVP13 62AMU, 6.9 psia
Fuel oil #2 130AMU, .0074 psia
Fuel oil #6 190AMU, .00004 psia
JP-4 80AMU, 1.3 psia
JP-8 130AMU, 0.0085 psia

FOR VERTICAL TANKS ONLY

| | |
|--|------|
| SHAPE OF TANK ROOF | FLAT |
| HEIGHT OF LIQUID IN TANK (HL) (If not known enter 1/2 the value of tank height) (this template for flat roof tanks only) | 3 Ft |

| | |
|---------------------------------|-------------|
| STANDING STORAGE LOSS EMISSIONS | 45.35 lb/yr |
| WORKING LOSS EMISSIONS | 2.06 lb/yr |
| TOTAL VOC EMISSIONS | 47.41 lb/yr |

NOTE:

The tank height does not include the roof height for tanks which do not have a flat roof
Molecular weights and psia taken from AP-42 section 12.3 table 12.3-2 at 60 degrees fahrenheit
Emission factors obtained from AP-42 section 12.3.

OZONE SEASON DATA

| | June | July | August |
|-----------------------------------|------|------|--------|
| Daily Max Ambient Temp (°F) (Tax) | 75.6 | 80.2 | 78.2 |
| Daily Min Ambient Temp (°F) (Tan) | 56.4 | 61.2 | 59.6 |
| Daily Solar Insolation Factor (l) | 1804 | 1776 | 1513 |

(See Enclosed Charts)

SPECIATION OF EMISSIONS

| | | |
|---------------------------|-------|--|
| TYPE OF LIQUID STORED | A | A - GASOLINE B - JET NAPHTHA (JP-4) C - JP-8 D - FUEL OIL #2/DIESEL E - FUEL OIL #6 F - OTHER |
| TOTAL VOC EMISSIONS | 47.41 | Lbs/Yr |
| TOTAL AIR TOXIC EMISSIONS | 24.33 | Lbs/Yr |

INDIVIDUAL AIR TOXIC EMISSIONS

| Chemical Name | CAS # | Emissions (Lbs/Yr) | Profile Data Quality |
|-----------------|----------|-----------------------|-------------------------|
| Hexane | 110-54-3 | 1.85E+00 | B |
| Cumene | 98-82-8 | 1.56E-01 | B |
| Benzene | 71-43-2 | 1.54E+00 | B |
| Toluene | 108-88-3 | 7.22E+00 | B |
| Ethylbenzene | 100-41-4 | 1.93E+00 | B |
| O-Xylene | 95-47-6 | 3.04E+00 | B |
| P-Xylene | 106-42-3 | N/A | B |
| M-xylene | 108-38-3 | N/A | B |
| Styrene | 100-42-5 | 8.06E-02 | B |
| Chlorobenzene | 108-90-7 | 1.42E-02 | B |
| Napthalene | 91-20-3 | 3.79E-01 | B |
| Xylenes (M & P) | | 7.24E+00 | B |
| Heptane* | 142-82-5 | 8.72E-01 | B |
| Cyclohexane* | 110-82-7 | N/A | B |

*New York State HAP

SPECIATION FACTORS FOR GASOLINE OBTAINED FROM EPA AIR EMISSIONS SPECIES MANUAL PROFILE # 1190

SPECIATION FACTORS FOR JP-4 ARE FROM THE INSTALLATION RESTORATION TOXICOLOGY GUIDE

DATA QUALITY RATING "AEHA" STANDS FOR AN APPROVED FUEL SPECIATION METHODOLOGY.

EMISSION RATE DETERMINATION METHOD

Stack Test Data _____ Emission Factor X Material Balance _____

Similar Unit Data _____ Other _____

Reference: AP-42 , VOLUME 1, SECTION 12.3 AND EPA AIR EMISSIONS SPECIES MANUAL, VOL1,

PROFILE NO 1190.

OZONE PRECURSOR EMISSIONS

HAZARDOUS AIR POLLUTANTS

Typical Ozone Season Emissions

HAP

CAS CODE

LB/YR

VOC Emissions 0.5779088110 lb/day

Hexane 110-54-3 2.9396056871

Cumene 98-82-8 0.248099713

NOx Emissions _____ lb/day

Benzene 71-43-2 2.443406262

Toluene 108-88-3 11.44265948

CO Emissions _____ lb/day

Ethylbenzene 100-41-4 3.059896457

O-Xylene 95-47-6 4.819148965

P-Xylene 106-42-3 N/A

CRITERIA POLLUTANT EMISSIONS

M-xylene 108-38-3 N/A

Styrene 100-42-5 0.127808943

VOC Emissions 0.0375908656 ton/yr

Chlorobenzene 108-90-7 0.022554519

Napthalene 91-20-3 0.601453849

NOx Emissions _____ ton/yr

Xylenes (M & P) 11.48776852

Heptane* 142-82-5 1.383343853

CO Emissions _____ ton/yr

Cyclohexane* 110-82-7 N/A

SO2 Emissions _____ ton/yr

PM10 Emissions _____ ton/yr

Total Particulate _____ ton/yr

* New York State HAP
(use additional sheets if necessary)

STACK INFORMATION

Stack (release) Height _____ feet

Stack Gas Velocity _____ ft/sec

Stack Diameter _____ inch

Stack Gas Flow Rate _____ ascf/min

Stack Gas Temperature _____ oF

Other sources that share this stack? _____

COMMENTS

**EMISSIONS FOR ABOVEGROUND STORAGE TANKS
(FIXED ROOF STORAGE TANK)**

Federal and New York State Regulations

| | | | |
|------------|--------------------------|-----------|--------------------|
| Facility: | <u>Seneca Army Depot</u> | Date: | <u>8/23/94</u> |
| Location: | <u>Bldg 334</u> | Initials: | <u>DCP</u> |
| ID Number: | <u>1 active tank</u> | SCC # | <u>4-03-001-03</u> |

| | | |
|--|-----------------------|---|
| CRUDE OIL STORED | no | (YES / NO) |
| ORIENTATION OF TANK | horizontal | (HORIZONTAL / VERTICAL) |
| TANK DIAMETER (D) | 4 | Ft |
| TANK LENGTH / HEIGHT (L / H) | 5 | Ft |
| ANNUAL THROUGHPUT (Q) | 250 | Gal / Yr |
| MOLECULAR WEIGHT OF LIQUID (Mv) (See Enclosed Charts) | 62 | Lb / Lb * mole Gasoline RVP13 62AMU, 6.9 psia Fuel oil #2 130AMU, .0074 psia |
| TRUE VAPOR PRESSURE (psia) (See Enclosed Charts) | 6.90000 | psia Fuel oil #6 190AMU, .00004 psia JP-4 80AMU, 1.3 psia JP-8 130AMU, 0.0085 psia |
| | <u>Annual Average</u> | |
| DAILY MAX AMBIENT TEMP (T _{ax}) | 55.8 | Fahrenheit |
| DAILY MIN AMBIENT TEMP (T _{an}) | 39.3 | Fahrenheit |
| TANK PAINT SOLAR ABSORBANCE (a) | 0.17 | -- |
| DAILY SOLAR INSOLATION FACTOR (I) (See Enclosed Charts) | 1034 | Btu / Ft ² * Day |

FOR VERTICAL TANKS ONLY

| | |
|--|------|
| SHAPE OF TANK ROOF | FLAT |
| HEIGHT OF LIQUID IN TANK (HL) (If not known enter 1/2 the value of tank height) (this template for flat roof tanks only) | 3 Ft |

| | |
|---------------------------------|-------------|
| STANDING STORAGE LOSS EMISSIONS | 73.12 lb/yr |
| WORKING LOSS EMISSIONS | 2.06 lb/yr |
| TOTAL VOC EMISSIONS | 75.18 lb/yr |

NOTE:

The tank height does not include the roof height for tanks which do not have a flat roof
Molecular weights and psia taken from AP-42 section 12.3 table 12.3-2 at 60 degrees fahrenheit
Emission factors obtained from AP-42 section 12.3.

OZONE SEASON DATA

| | June | July | August |
|-----------------------------------|------|------|--------|
| Daily Max Ambient Temp (°F) (Tax) | 75.6 | 80.2 | 78.2 |
| Daily Min Ambient Temp (°F) (Tan) | 56.4 | 61.2 | 59.6 |
| Daily Solar Insolation Factor (l) | 1804 | 1776 | 1513 |

(See Enclosed Charts)

SPECIATION OF EMISSIONS

| | | |
|---------------------------|-------|--|
| TYPE OF LIQUID STORED | A | A - GASOLINE B - JET NAPHTHA (JP-4) C - JP-8 D - FUEL OIL #2/DIESEL E - FUEL OIL #6 F - OTHER |
| TOTAL VOC EMISSIONS | 75.18 | Lbs/Yr |
| TOTAL AIR TOXIC EMISSIONS | 38.58 | Lbs/Yr |

INDIVIDUAL AIR TOXIC EMISSIONS

| Chemical Name | CAS # | Emissions (Lbs/Yr) | Profile Data Quality |
|-----------------|----------|-----------------------|-------------------------|
| Hexane | 110-54-3 | 2.94E+00 | B |
| Cumene | 98-82-8 | 2.48E-01 | B |
| Benzene | 71-43-2 | 2.44E+00 | B |
| Toluene | 108-88-3 | 1.14E+01 | B |
| Ethylbenzene | 100-41-4 | 3.06E+00 | B |
| O-Xylene | 95-47-6 | 4.82E+00 | B |
| P-Xylene | 106-42-3 | N/A | B |
| M-xylene | 108-38-3 | N/A | B |
| Styrene | 100-42-5 | 1.28E-01 | B |
| Chlorobenzene | 108-90-7 | 2.26E-02 | B |
| Napthalene | 91-20-3 | 6.01E-01 | B |
| Xylenes (M & P) | | 1.15E+01 | B |
| Heptane* | 142-82-5 | 1.38E+00 | B |
| Cyclohexane* | 110-82-7 | N/A | B |

*New York State HAP

SPECIATION FACTORS FOR GASOLINE OBTAINED FROM EPA AIR EMISSIONS SPECIES MANUAL PROFILE # 1190

SPECIATION FACTORS FOR JP-4 ARE FROM THE INSTALLATION RESTORATION TOXICOLOGY GUIDE

DATA QUALITY RATING "AEHA" STANDS FOR AN APPROVED FUEL SPECIATION METHODOLOGY.

ABOVEGROUND STORAGE TANKS -- HORIZONTAL FIXED ROOF

GENERAL INFORMATION

Installation Seneca Army Depot
 SCC..... 4-03-010-21 Unit ID #..... 3 active tanks
 Location..... Bldg 4; 715; 2304 Permit #.....
 POC..... Thomas Grasek Inventoried by..... T. Sletten
 Phone..... (607) 869-1450 Inventory Date..... June 6-10, 1994

LIQUID PRODUCT INFORMATION

Stored Product Diesel Fuel *Liq Density..(W_L) 6.1 lb/gal
 *Molec Weight (M_v) 130 lb/lb-mol *Vapor Pressure (P_{VA}) 0.0074 at 60°F psia

TANK INFORMATION

Tank Size 275 gal *Average Wind Speed (V).... _____ mph
 Annual Net Thruput.(Q)..... 836 gal/yr *Tank Diameter (D)..... 3 ft
 *Shell Clingage Factor (C)..... _____ bbl/1000 ft²
 *Product Factor (K_C) *Wind Speed Exponent (n).... _____
 Crude Oil = 0.40 *Roof Fitting Loss Factor(F_r).. _____
 Organic Liquid = 1.00
 *Rim-Seal Loss Factor (K_R)..... _____ lb-mole/(mph)ⁿft.yr
 Atmospheric Press(P_a)... _____ psia *Vapor Press Function (P*) _____
 Color of Paint..... White Condition of Paint: Good _____
 Poor _____
 *Paint Factor (a)..... _____ (check one)
 Shell Condition..... Lt Rust _____ *MAX Ambient Temp (T_{AX})... _____ °R
 Dense Rust _____ *MIN Ambient Temp (T_{AN}).... _____ °R
 Gunite Lining _____
 *Avg Liquid Surface Temp (T_{LA})..... _____ °R *Solar Isolation Factor (I)..... _____
 btu/ft²day

THROUGHPUT INFORMATION

| MONTH | gal | MONTH | gal |
|-------|-------|-----------------------|-------|
| _____ | _____ | _____ | _____ |
| _____ | _____ | _____ | _____ |
| _____ | _____ | _____ | _____ |
| _____ | _____ | _____ | _____ |
| _____ | _____ | _____ | _____ |
| _____ | _____ | _____ | _____ |
| | | ANNUAL TOTALS: | _____ |

EMISSION RATE DETERMINATION METHOD

Stack Test Data _____ Emission Facto X Material Balance _____

Similar Unit Data _____ Other _____

Reference: AP-42 , VOLUME 1, SECTION 12.3 AND EPA AIR EMISSIONS SPECIES MANUAL, VOL1,

PROFILE NO 1190.

OZONE PRECURSOR EMISSIONS

HAZARDOUS AIR POLLUTANTS

Typical Ozone Season Emissions

HAP

CAS CODE

LB/YR

VOC Emissions 0.0001755528 lb/day

Hexane 110-54-3 N/A

Cumene 98-82-8 N/A

NOx Emissions _____ lb/day

Benzene 71-43-2 N/A

Toluene 108-88-3 N/A

CO Emissions _____ lb/day

Ethylbenzene 100-41-4 N/A

O-Xylene 95-47-6 N/A

P-Xylene 106-42-3 N/A

CRITERIA POLLUTANT EMISSIONS

M-xylene 108-38-3 N/A

Styrene 100-42-5 N/A

VOC Emissions 0.0000179840 ton/yr

Chlorobenzene 108-90-7 N/A

Napthalene 91-20-3 N/A

NOx Emissions _____ ton/yr

Xylenes (M & P) N/A

Heptane* 142-82-5 N/A

CO Emissions _____ ton/yr

Cyclohexane* 110-82-7 N/A

SO2 Emissions _____ ton/yr

PM10 Emissions _____ ton/yr

Total Particulate _____ ton/yr

* New York State HAP
(use additional sheets if necessary)

STACK INFORMATION

Stack (release) Height _____ feet

Stack Gas Velocity _____ ft/sec

Stack Diameter _____ inch

Stack Gas Flow Rate _____ ascf/min

Stack Gas Temperature _____ oF

Other sources that share this stack? _____

COMMENTS

**EMISSIONS FOR ABOVEGROUND STORAGE TANKS
(FIXED ROOF STORAGE TANK)
Federal and New York State Regulations**

| | | | |
|------------|--------------------------|-----------|--------------------|
| Facility: | <u>Seneca Army Depot</u> | Date: | <u>8/15/94</u> |
| Location: | <u>Bldg 4; 715; 2304</u> | Initials: | <u>DCP</u> |
| ID Number: | <u>3 active tanks</u> | SCC # | <u>4-03-010-21</u> |

| | | |
|--|-----------------------|---|
| CRUDE OIL STORED | no | (YES / NO) |
| ORIENTATION OF TANK | horizontal | (HORIZONTAL / VERTICAL) |
| TANK DIAMETER (D) | 3 | Ft |
| TANK LENGTH / HEIGHT (L / H) | 5 | Ft |
| ANNUAL THROUGHPUT (Q) | 836 | Gal / Yr |
| MOLECULAR WEIGHT OF LIQUID (Mv) (See Enclosed Charts) | 130 | Lb / Lb * mole Gasoline RVP13 62AMU, 6.9 psia Fuel oil #2 130AMU, .0074 psia |
| TRUE VAPOR PRESSURE (psia) (See Enclosed Charts) | 0.00740 | psia Fuel oil #6 190AMU, .00004 psia JP-4 80AMU, 1.3 psia JP-8 130AMU, 0.0085 psia |
| | <u>Annual Average</u> | |
| DAILY MAX AMBIENT TEMP (T _{ax}) | 55.8 | Fahrenheit |
| DAILY MIN AMBIENT TEMP (T _{an}) | 39.3 | Fahrenheit |
| TANK PAINT SOLAR ABSORBANCE (a) | 0.17 | -- |
| DAILY SOLAR INSOLATION FACTOR (I) (See Enclosed Charts) | 1034 | Btu / Ft ² * Day |

FOR VERTICAL TANKS ONLY

| | |
|--|------|
| SHAPE OF TANK ROOF | FLAT |
| HEIGHT OF LIQUID IN TANK (HL) (If not known enter 1/2 the value of tank height) (this template for flat roof tanks only) | 3 Ft |

| | |
|---------------------------------|------------|
| STANDING STORAGE LOSS EMISSIONS | 0.02 lb/yr |
| WORKING LOSS EMISSIONS | 0.01 lb/yr |
| TOTAL VOC EMISSIONS | 0.04 lb/yr |

NOTE:

The tank height does not include the roof height for tanks which do not have a flat roof
Molecular weights and psia taken from AP-42 section 12.3 table 12.3-2 at 60 degrees fahrenheit
Emission factors obtained from AP-42 section 12.3.

OZONE SEASON DATA

| | June | July | August |
|-----------------------------------|------|------|--------|
| Daily Max Ambient Temp (°F) (Tax) | 75.6 | 80.2 | 78.2 |
| Daily Min Ambient Temp (°F) (Tan) | 56.4 | 61.2 | 59.6 |
| Daily Solar Insolation Factor (l) | 1804 | 1776 | 1513 |

(See Enclosed Charts)

SPECIATION OF EMISSIONS

| | | |
|---------------------------|------|--|
| TYPE OF LIQUID STORED | D | A - GASOLINE B - JET NAPHTHA (JP-4) C - JP-8 D - FUEL OIL #2/DIESEL E - FUEL OIL #6 F - OTHER |
| TOTAL VOC EMISSIONS | 0.04 | Lbs/Yr |
| TOTAL AIR TOXIC EMISSIONS | 0.00 | Lbs/Yr |

INDIVIDUAL AIR TOXIC EMISSIONS

| Chemical Name | CAS # | Emissions (Lbs/Yr) | Profile Data Quality |
|-----------------|----------|-----------------------|-------------------------|
| Hexane | 110-54-3 | N/A | N/A |
| Cumene | 98-82-8 | N/A | N/A |
| Benzene | 71-43-2 | N/A | N/A |
| Toluene | 108-88-3 | N/A | N/A |
| Ethylbenzene | 100-41-4 | N/A | N/A |
| O-Xylene | 95-47-6 | N/A | N/A |
| P-Xylene | 106-42-3 | N/A | N/A |
| M-xylene | 108-38-3 | N/A | N/A |
| Styrene | 100-42-5 | N/A | N/A |
| Chlorobenzene | 108-90-7 | N/A | N/A |
| Napthalene | 91-20-3 | N/A | N/A |
| Xylenes (M & P) | | N/A | N/A |
| Heptane* | 142-82-5 | N/A | N/A |
| Cyclohexane* | 110-82-7 | N/A | N/A |

*New York State HAP

SPECIATION FACTORS FOR GASOLINE OBTAINED FROM EPA AIR EMISSIONS SPECIES MANUAL PROFILE # 1190

SPECIATION FACTORS FOR JP-4 ARE FROM THE INSTALLATION RESTORATION TOXICOLOGY GUIDE

DATA QUALITY RATING "AEHA" STANDS FOR AN APPROVED FUEL SPECIATION METHODOLOGY.

EMISSION RATE DETERMINATION METHOD

Stack Test Data _____ Emission Facto X Material Balance _____

Similar Unit Data _____ Other _____

Reference: AP-42 , VOLUME 1, SECTION 12.3 AND EPA AIR EMISSIONS SPECIES MANUAL, VOL1,

PROFILE NO 1190.

OZONE PRECURSOR EMISSIONS

HAZARDOUS AIR POLLUTANTS

Typical Ozone Season Emissions

HAP

CAS CODE

LB/YR

VOC Emissions 0.000140422 lb/day

Hexane 110-54-3 N/A

Cumene 98-82-8 N/A

NOx Emissions _____ lb/day

Benzene 71-43-2 N/A

Toluene 108-88-3 N/A

CO Emissions _____ lb/day

Ethylbenzene 100-41-4 N/A

O-Xylene 95-47-6 N/A

P-Xylene 106-42-3 N/A

CRITERIA POLLUTANT EMISSIONS

M-xylene 108-38-3 N/A

Styrene 100-42-5 N/A

VOC Emissions 0.0000111481 ton/yr

Chlorobenzene 108-90-7 N/A

Napthalene 91-20-3 N/A

NOx Emissions _____ ton/yr

Xylenes (M & P) N/A

Heptane* 142-82-5 N/A

CO Emissions _____ ton/yr

Cyclohexane* 110-82-7 N/A

SO2 Emissions _____ ton/yr

PM10 Emissions _____ ton/yr

Total Particulate _____ ton/yr

* New York State HAP
(use additional sheets if necessary)

STACK INFORMATION

Stack (release) Height _____ feet

Stack Gas Velocity _____ ft/sec

Stack Diameter _____ inch

Stack Gas Flow Rate _____ ascf/min

Stack Gas Temperature _____ oF

Other sources that share this stack? _____

COMMENTS

**EMISSIONS FOR ABOVEGROUND STORAGE TANKS
(FIXED ROOF STORAGE TANK)**

Federal and New York State Regulations

| | | | |
|------------|--------------------------|-----------|--------------------|
| Facility: | <u>Seneca Army Depot</u> | Date: | <u>8/15/94</u> |
| Location: | <u>Bldg 104</u> | Initials: | <u>DCP</u> |
| ID Number: | <u>1 active tank</u> | SCC # | <u>4-03-010-21</u> |

| | | |
|--|-----------------------|---|
| CRUDE OIL STORED | no | (YES / NO) |
| ORIENTATION OF TANK | horizontal | (HORIZONTAL / VERTICAL) |
| TANK DIAMETER (D) | 3 | Ft |
| TANK LENGTH / HEIGHT (L / H) | 4 | Ft |
| ANNUAL THROUGHPUT (Q) | 188 | Gal / Yr |
| MOLECULAR WEIGHT OF LIQUID (Mv) (See Enclosed Charts) | 130 | Lb / Lb * mole Gasoline RVP13 62AMU, 6.9 psia Fuel oil #2 130AMU, .0074 psia Fuel oil #6 190AMU, .00004 psia JP-4 80AMU, 1.3 psia JP-8 130AMU, 0.0085 psia |
| TRUE VAPOR PRESSURE (psia) (See Enclosed Charts) | 0.00740 | psia |
| | <u>Annual Average</u> | |
| DAILY MAX AMBIENT TEMP (T _{ax}) | 55.8 | Fahrenheit |
| DAILY MIN AMBIENT TEMP (T _{an}) | 39.3 | Fahrenheit |
| TANK PAINT SOLAR ABSORBANCE (a) | 0.17 | -- |
| DAILY SOLAR INSOLATION FACTOR (I) (See Enclosed Charts) | 1034 | Btu / Ft ² * Day |

FOR VERTICAL TANKS ONLY

| | |
|--|------|
| SHAPE OF TANK ROOF | FLAT |
| HEIGHT OF LIQUID IN TANK (HL) (If not known enter 1/2 the value of tank height) (this template for flat roof tanks only) | 3 Ft |

| | |
|---------------------------------|------------|
| STANDING STORAGE LOSS EMISSIONS | 0.02 lb/yr |
| WORKING LOSS EMISSIONS | 0.00 lb/yr |
| TOTAL VOC EMISSIONS | 0.02 lb/yr |

NOTE:

The tank height does not include the roof height for tanks which do not have a flat roof
Molecular weights and psia taken from AP-42 section 12.3 table 12.3-2 at 60 degrees fahrenheit
Emission factors obtained from AP-42 section 12.3.

OZONE SEASON DATA

| | June | July | August |
|-----------------------------------|------|------|--------|
| Daily Max Ambient Temp (°F) (Tax) | 75.6 | 80.2 | 78.2 |
| Daily Min Ambient Temp (°F) (Tan) | 56.4 | 61.2 | 59.6 |
| Daily Solar Insolation Factor (l) | 1804 | 1776 | 1513 |

(See Enclosed Charts)

SPECIATION OF EMISSIONS

| | | |
|---------------------------|------|--|
| TYPE OF LIQUID STORED | D | A - GASOLINE B - JET NAPHTHA (JP-4) C - JP-8 D - FUEL OIL #2/DIESEL E - FUEL OIL #6 F - OTHER |
| TOTAL VOC EMISSIONS | 0.02 | Lbs/Yr |
| TOTAL AIR TOXIC EMISSIONS | 0.00 | Lbs/Yr |

INDIVIDUAL AIR TOXIC EMISSIONS

| Chemical Name | CAS # | Emissions (Lbs/Yr) | Profile Data Quality |
|-----------------|----------|-----------------------|-------------------------|
| Hexane | 110-54-3 | N/A | N/A |
| Cumene | 98-82-8 | N/A | N/A |
| Benzene | 71-43-2 | N/A | N/A |
| Toluene | 108-88-3 | N/A | N/A |
| Ethylbenzene | 100-41-4 | N/A | N/A |
| O-Xylene | 95-47-6 | N/A | N/A |
| P-Xylene | 106-42-3 | N/A | N/A |
| M-xylene | 108-38-3 | N/A | N/A |
| Styrene | 100-42-5 | N/A | N/A |
| Chlorobenzene | 108-90-7 | N/A | N/A |
| Napthalene | 91-20-3 | N/A | N/A |
| Xylenes (M & P) | | N/A | N/A |
| Heptane* | 142-82-5 | N/A | N/A |
| Cyclohexane* | 110-82-7 | N/A | N/A |

*New York State HAP

SPECIATION FACTORS FOR GASOLINE OBTAINED FROM EPA AIR EMISSIONS SPECIES MANUAL PROFILE # 1190

SPECIATION FACTORS FOR JP-4 ARE FROM THE INSTALLATION RESTORATION TOXICOLOGY GUIDE

DATA QUALITY RATING "AEHA" STANDS FOR AN APPROVED FUEL SPECIATION METHODOLOGY.

ABOVEGROUND STORAGE TANKS -- HORIZONTAL FIXED ROOF

GENERAL INFORMATION

Installation Seneca Army Depot

SCC..... 4-03-010-21 Unit ID #..... 1 active tank

Location..... Bldg 106G Permit #..... _____

POC..... Thomas Grasek Inventoried by..... T. Sletten

Phone..... (607) 869-1450 Inventory Date..... June 6-10, 1994

LIQUID PRODUCT INFORMATION

Stored Product Diesel Fuel *Liq Density..(W_L) 6.1 lb/gal

*Molec Weight (M_v) 130 lb/lb-mol *Vapor Pressure (P_{VA}) 0.0074 at 60°F psia

TANK INFORMATION

Tank Size 550 gal *Average Wind Speed (V).... _____ mph

Annual Net Thruput.(Q)..... 557 gal/yr *Tank Diameter (D)..... 4.125 ft

*Shell Clingage Factor (C). _____ bbl/1000 ft²

*Product Factor (K_C) _____ *Wind Speed Exponent (n).... _____
 Crude Oil = 0.40
 Organic Liquid = 1.00

*Rim-Seal Loss Factor (K_R) _____ lb-mole/(mph)ⁿft.yr

Atmospheric Press(P_a)... _____ psia *Vapor Press Function (P*) _____

Color of Paint..... White Condition of Paint: Good _____
 Poor _____
 (check one)

*Paint Factor (a)..... _____

Shell Condition.....Lt Rust _____ *MAX Ambient Temp (T_{AX})... _____ °R
 Dense Rust _____ *MIN Ambient Temp (T_{AN}).... _____ °R
 Gunitite Lining _____

*Avg Liquid Surface Temp (T_{LA}) _____ °R *Solar Isolation Factor (I)..... _____
 btu/ft²day

THROUGHPUT INFORMATION

| MONTH | gal | MONTH | gal |
|-------|-------|-----------------------|-------|
| _____ | _____ | _____ | _____ |
| _____ | _____ | _____ | _____ |
| _____ | _____ | _____ | _____ |
| _____ | _____ | _____ | _____ |
| _____ | _____ | _____ | _____ |
| _____ | _____ | _____ | _____ |
| | | ANNUAL TOTALS: | _____ |

EMISSION RATE DETERMINATION METHOD

Stack Test Data _____ Emission Factor X Material Balance _____

Similar Unit Data _____ Other _____

Reference: AP-42 , VOLUME 1, SECTION 12.3 AND EPA AIR EMISSIONS SPECIES MANUAL, VOL1,

PROFILE NO 1190.

OZONE PRECURSOR EMISSIONS

HAZARDOUS AIR POLLUTANTS

Typical Ozone Season Emissions

HAP

CAS CODE

LB/YR

VOC Emissions 0.0003981757 lb/day

Hexane 110-54-3 N/A

Cumene 98-82-8 N/A

NOx Emissions _____ lb/day

Benzene 71-43-2 N/A

Toluene 108-88-3 N/A

CO Emissions _____ lb/day

Ethylbenzene 100-41-4 N/A

O-Xylene 95-47-6 N/A

P-Xylene 106-42-3 N/A

CRITERIA POLLUTANT EMISSIONS

M-xylene 108-38-3 N/A

Styrene 100-42-5 N/A

VOC Emissions 0.0000317724 ton/yr

Chlorobenzene 108-90-7 N/A

Napthalene 91-20-3 N/A

NOx Emissions _____ ton/yr

Xylenes (M & P) _____ N/A

Heptane* 142-82-5 N/A

CO Emissions _____ ton/yr

Cyclohexane* 110-82-7 N/A

SO2 Emissions _____ ton/yr

PM10 Emissions _____ ton/yr

Total Particulate _____ ton/yr

* New York State HAP
(use additional sheets if necessary)

STACK INFORMATION

Stack (release) Height _____ feet

Stack Gas Velocity _____ ft/sec

Stack Diameter _____ inch

Stack Gas Flow Rate _____ acsf/min

Stack Gas Temperature _____ oF

Other sources that share this stack? _____

COMMENTS

**EMISSIONS FOR ABOVEGROUND STORAGE TANKS
(FIXED ROOF STORAGE TANK)
Federal and New York State Regulations**

| | | | |
|------------|--------------------------|-----------|--------------------|
| Facility: | <u>Seneca Army Depot</u> | Date: | <u>8/15/94</u> |
| Location: | <u>Bldg 106G</u> | Initials: | <u>DCP</u> |
| ID Number: | <u>1 active tank</u> | SCC # | <u>4-03-010-21</u> |

| | | |
|--|-----------------------|---|
| CRUDE OIL STORED | no | (YES / NO) |
| ORIENTATION OF TANK | horizontal | (HORIZONTAL / VERTICAL) |
| TANK DIAMETER (D) | 4 | Ft |
| TANK LENGTH / HEIGHT (L / H) | 6 | Ft |
| ANNUAL THROUGHPUT (Q) | 557 | Gal / Yr |
| MOLECULAR WEIGHT OF LIQUID (Mv) (See Enclosed Charts) | 130 | Lb / Lb * mole Gasoline RVP13 62AMU, 6.9 psia Fuel oil #2 130AMU, .0074 psia |
| TRUE VAPOR PRESSURE (psia) (See Enclosed Charts) | 0.00740 | psia Fuel oil #6 190AMU, .00004 psia JP-4 80AMU, 1.3 psia JP-8 130AMU, 0.0085 psia |
| | <u>Annual Average</u> | |
| DAILY MAX AMBIENT TEMP (T _{ax}) | 55.8 | Fahrenheit |
| DAILY MIN AMBIENT TEMP (T _{an}) | 39.3 | Fahrenheit |
| TANK PAINT SOLAR ABSORBANCE (a) | 0.17 | -- |
| DAILY SOLAR INSOLATION FACTOR (I) (See Enclosed Charts) | 1034 | Btu / Ft ² * Day |

FOR VERTICAL TANKS ONLY

| | |
|--|------|
| SHAPE OF TANK ROOF | FLAT |
| HEIGHT OF LIQUID IN TANK (HL) (If not known enter 1/2 the value of tank height) (this template for flat roof tanks only) | 3 Ft |

| | |
|---------------------------------|------------|
| STANDING STORAGE LOSS EMISSIONS | 0.06 lb/yr |
| WORKING LOSS EMISSIONS | 0.01 lb/yr |
| TOTAL VOC EMISSIONS | 0.06 lb/yr |

NOTE:

The tank height does not include the roof height for tanks which do not have a flat roof
Molecular weights and psia taken from AP-42 section 12.3 table 12.3-2 at 60 degrees fahrenheit
Emission factors obtained from AP-42 section 12.3.

EMISSION RATE DETERMINATION METHOD

Stack Test Data _____ Emission Facto X Material Balance _____

Similar Unit Data _____ Other _____

Reference: AP-42 , VOLUME 1, SECTION 12.3 AND EPA AIR EMISSIONS SPECIES MANUAL, VOL1,

PROFILE NO 1190.

OZONE PRECURSOR EMISSIONS

HAZARDOUS AIR POLLUTANTS

Typical Ozone Season Emissions

HAP

CAS CODE

LB/YR

VOC Emissions 0.0377806315 lb/day

Hexane 110-54-3 N/A

Cumene 98-82-8 N/A

NOx Emissions _____ lb/day

Benzene 71-43-2 N/A

Toluene 108-88-3 N/A

CO Emissions _____ lb/day

Ethylbenzene 100-41-4 N/A

O-Xylene 95-47-6 N/A

P-Xylene 106-42-3 N/A

CRITERIA POLLUTANT EMISSIONS

M-xylene 108-38-3 N/A

Styrene 100-42-5 N/A

VOC Emissions 0.0030732272 ton/yr

Chlorobenzene 108-90-7 N/A

Napthalene 91-20-3 N/A

NOx Emissions _____ ton/yr

Xylenes (M & P) N/A

Heptane* 142-82-5 N/A

CO Emissions _____ ton/yr

Cyclohexane* 110-82-7 N/A

SO2 Emissions _____ ton/yr

PM10 Emissions _____ ton/yr

Total Particulate _____ ton/yr

* New York State HAP
(use additional sheets if necessary)

STACK INFORMATION

Stack (release) Height _____ feet

Stack Gas Velocity _____ ft/sec

Stack Diameter _____ inch

Stack Gas Flow Rate _____ ascf/min

Stack Gas Temperature _____ oF

Other sources that share this stack? _____

COMMENTS

**EMISSIONS FOR ABOVEGROUND STORAGE TANKS
(FIXED ROOF STORAGE TANK)**

Federal and New York State Regulations

| | | | |
|------------|--------------------------|-----------|--------------------|
| Facility: | <u>Seneca Army Depot</u> | Date: | <u>8/15/94</u> |
| Location: | <u>Bldg 129</u> | Initials: | <u>DCP</u> |
| ID Number: | <u>1 active tank</u> | SCC # | <u>4-03-010-21</u> |

| | | |
|--|-----------------------|---|
| CRUDE OIL STORED | no | (YES / NO) |
| ORIENTATION OF TANK | horizontal | (HORIZONTAL / VERTICAL) |
| TANK DIAMETER (D) | 18 | Ft |
| TANK LENGTH / HEIGHT (L / H) | 30 | Ft |
| ANNUAL THROUGHPUT (Q) | 60,830 | Gal / Yr |
| MOLECULAR WEIGHT OF LIQUID (Mv) (See Enclosed Charts) | 130 | Lb / Lb * mole Gasoline RVP13 62AMU, 6.9 psia Fuel oil #2 130AMU, .0074 psia |
| TRUE VAPOR PRESSURE (psia) (See Enclosed Charts) | 0.00740 | psia Fuel oil #6 190AMU, .00004 psia JP-4 80AMU, 1.3 psia JP-8 130AMU, 0.0085 psia |
| | <u>Annual Average</u> | |
| DAILY MAX AMBIENT TEMP (T _{ax}) | 55.8 | Fahrenheit |
| DAILY MIN AMBIENT TEMP (T _{an}) | 39.3 | Fahrenheit |
| TANK PAINT SOLAR ABSORBANCE (a) | 0.17 | -- |
| DAILY SOLAR INSOLATION FACTOR (I) (See Enclosed Charts) | 1034 | Btu / Ft ² * Day |

FOR VERTICAL TANKS ONLY

| | |
|--|------|
| SHAPE OF TANK ROOF | FLAT |
| HEIGHT OF LIQUID IN TANK (HL) (If not known enter 1/2 the value of tank height) (this template for flat roof tanks only) | 3 Ft |

| | |
|---------------------------------|------------|
| STANDING STORAGE LOSS EMISSIONS | 5.33 lb/yr |
| WORKING LOSS EMISSIONS | 0.82 lb/yr |
| TOTAL VOC EMISSIONS | 6.15 lb/yr |

NOTE:

The tank height does not include the roof height for tanks which do not have a flat roof
Molecular weights and psia taken from AP-42 section 12.3 table 12.3-2 at 60 degrees fahrenheit
Emission factors obtained from AP-42 section 12.3.

EMISSION RATE DETERMINATION METHOD

Stack Test Data _____ Emission Facto X Material Balance _____

Similar Unit Data _____ Other _____

Reference: AP-42 , VOLUME 1, SECTION 12.3 AND EPA AIR EMISSIONS SPECIES MANUAL, VOL1,

PROFILE NO 1190.

OZONE PRECURSOR EMISSIONS

HAZARDOUS AIR POLLUTANTS

| Typical Ozone Season Emissions | | HAP | CAS CODE | LB/YR |
|--------------------------------|------------------------------|-----------------|----------|-------|
| VOC Emissions | <u> 0.0003120175 </u> lb/day | Hexane | 110-54-3 | N/A |
| | | Cumene | 98-82-8 | N/A |
| NOx Emissions | _____ lb/day | Benzene | 71-43-2 | N/A |
| | | Toluene | 108-88-3 | N/A |
| CO Emissions | _____ lb/day | Ethylbenzene | 100-41-4 | N/A |
| | | O-Xylene | 95-47-6 | N/A |
| | | P-Xylene | 106-42-3 | N/A |
| | | M-xylene | 108-38-3 | N/A |
| | | Styrene | 100-42-5 | N/A |
| CRITERIA POLLUTANT EMISSIONS | | Chlorobenzene | 108-90-7 | N/A |
| VOC Emissions | <u> 0.0000287877 </u> ton/yr | Napthalene | 91-20-3 | N/A |
| NOx Emissions | _____ ton/yr | Xylenes (M & P) | | N/A |
| | | Heptane* | 142-82-5 | N/A |
| CO Emissions | _____ ton/yr | Cyclohexane* | 110-82-7 | N/A |
| | | | | |
| SO2 Emissions | _____ ton/yr | | | |
| | | | | |
| PM10 Emissions | _____ ton/yr | | | |
| | | | | |
| Total Particulate | _____ ton/yr | | | |
| | | | | |

* New York State HAP
(use additional sheets if necessary)

STACK INFORMATION

Stack (release) Height _____ feet Stack Gas Velocity _____ ft/sec
 Stack Diameter _____ inch Stack Gas Flow Rate _____ ascf/min
 Stack Gas Temperature _____ oF

Other sources that share this stack? _____

COMMENTS

**EMISSIONS FOR ABOVEGROUND STORAGE TANKS
(FIXED ROOF STORAGE TANK)**

Federal and New York State Regulations

| | | | |
|------------|--------------------------|-----------|--------------------|
| Facility: | <u>Seneca Army Depot</u> | Date: | <u>8/15/94</u> |
| Location: | <u>Bldg 138; 2113</u> | Initials: | <u>DCP</u> |
| ID Number: | <u>2 active tanks</u> | SCC # | <u>4-03-010-21</u> |

| | | |
|--|-----------------------|---|
| CRUDE OIL STORED | no | (YES / NO) |
| ORIENTATION OF TANK | horizontal | (HORIZONTAL / VERTICAL) |
| TANK DIAMETER (D) | 4 | Ft |
| TANK LENGTH / HEIGHT (L / H) | 5 | Ft |
| ANNUAL THROUGHPUT (Q) | 1,014 | Gal / Yr |
| MOLECULAR WEIGHT OF LIQUID (Mv) (See Enclosed Charts) | 130 | Lb / Lb * mole Gasoline RVP13 62AMU, 6.9 psia Fuel oil #2 130AMU, .0074 psia |
| TRUE VAPOR PRESSURE (psia) (See Enclosed Charts) | 0.00740 | psia Fuel oil #6 190AMU, .00004 psia JP-4 80AMU, 1.3 psia JP-8 130AMU, 0.0085 psia |
| | <u>Annual Average</u> | |
| DAILY MAX AMBIENT TEMP (Tax) | 55.8 | Fahrenheit |
| DAILY MIN AMBIENT TEMP (Tan) | 39.3 | Fahrenheit |
| TANK PAINT SOLAR ABSORBANCE (a) | 0.17 | -- |
| DAILY SOLAR INSOLATION FACTOR (I) (See Enclosed Charts) | 1034 | Btu / Ft ² * Day |

FOR VERTICAL TANKS ONLY

| | |
|--|------|
| SHAPE OF TANK ROOF | FLAT |
| HEIGHT OF LIQUID IN TANK (HL) (If not known enter 1/2 the value of tank height) (this template for flat roof tanks only) | 3 Ft |

| | |
|---------------------------------|------------|
| STANDING STORAGE LOSS EMISSIONS | 0.04 lb/yr |
| WORKING LOSS EMISSIONS | 0.01 lb/yr |
| TOTAL VOC EMISSIONS | 0.06 lb/yr |

NOTE:

The tank height does not include the roof height for tanks which do not have a flat roof
Molecular weights and psia taken from AP-42 section 12.3 table 12.3-2 at 60 degrees fahrenheit
Emission factors obtained from AP-42 section 12.3.

OZONE SEASON DATA

| | June | July | August |
|-----------------------------------|------|------|--------|
| Daily Max Ambient Temp (°F) (Tax) | 75.6 | 80.2 | 78.2 |
| Daily Min Ambient Temp (°F) (Tan) | 56.4 | 61.2 | 59.6 |
| Daily Solar Insolation Factor (l) | 1804 | 1776 | 1513 |

(See Enclosed Charts)

SPECIATION OF EMISSIONS

| | | |
|---------------------------|------|--|
| TYPE OF LIQUID STORED | D | A - GASOLINE B - JET NAPHTHA (JP-4) C - JP-8 D - FUEL OIL #2/DIESEL E - FUEL OIL #6 F - OTHER |
| TOTAL VOC EMISSIONS | 0.06 | Lbs/Yr |
| TOTAL AIR TOXIC EMISSIONS | 0.00 | Lbs/Yr |

INDIVIDUAL AIR TOXIC EMISSIONS

| Chemical Name | CAS # | Emissions (Lbs/Yr) | Profile Data Quality |
|-----------------|----------|-----------------------|-------------------------|
| Hexane | 110-54-3 | N/A | N/A |
| Cumene | 98-82-8 | N/A | N/A |
| Benzene | 71-43-2 | N/A | N/A |
| Toluene | 108-88-3 | N/A | N/A |
| Ethylbenzene | 100-41-4 | N/A | N/A |
| O-Xylene | 95-47-6 | N/A | N/A |
| P-Xylene | 106-42-3 | N/A | N/A |
| M-xylene | 108-38-3 | N/A | N/A |
| Styrene | 100-42-5 | N/A | N/A |
| Chlorobenzene | 108-90-7 | N/A | N/A |
| Napthalene | 91-20-3 | N/A | N/A |
| Xylenes (M & P) | | N/A | N/A |
| Heptane* | 142-82-5 | N/A | N/A |
| Cyclohexane* | 110-82-7 | N/A | N/A |

*New York State HAP

SPECIATION FACTORS FOR GASOLINE OBTAINED FROM EPA AIR EMISSIONS SPECIES MANUAL PROFILE # 1190

SPECIATION FACTORS FOR JP-4 ARE FROM THE INSTALLATION RESTORATION TOXICOLOGY GUIDE

DATA QUALITY RATING "AEHA" STANDS FOR AN APPROVED FUEL SPECIATION METHODOLOGY.

EMISSION RATE DETERMINATION METHOD

Stack Test Data _____ Emission Facto X Material Balance _____

Similar Unit Data _____ Other _____

Reference: AP-42 , VOLUME 1, SECTION 12.3 AND EPA AIR EMISSIONS SPECIES MANUAL, VOL1,

PROFILE NO 1190.

OZONE PRECURSOR EMISSIONS

HAZARDOUS AIR POLLUTANTS

Typical Ozone Season Emissions

VOC Emissions 0.0013142673 lb/day

NOx Emissions _____ lb/day

CO Emissions _____ lb/day

CRITERIA POLLUTANT EMISSIONS

VOC Emissions 0.0001061625 ton/yr

NOx Emissions _____ ton/yr

CO Emissions _____ ton/yr

SO2 Emissions _____ ton/yr

PM10 Emissions _____ ton/yr

Total Particulate _____ ton/yr

HAP

CAS CODE

LB/YR

| | | |
|-----------------|----------|-----|
| Hexane | 110-54-3 | N/A |
| Cumene | 98-82-8 | N/A |
| Benzene | 71-43-2 | N/A |
| Toluene | 108-88-3 | N/A |
| Ethylbenzene | 100-41-4 | N/A |
| O-Xylene | 95-47-6 | N/A |
| P-Xylene | 106-42-3 | N/A |
| M-xylene | 108-38-3 | N/A |
| Styrene | 100-42-5 | N/A |
| Chlorobenzene | 108-90-7 | N/A |
| Napthalene | 91-20-3 | N/A |
| Xylenes (M & P) | | N/A |
| Heptane* | 142-82-5 | N/A |
| Cyclohexane* | 110-82-7 | N/A |

* New York State HAP
(use additional sheets if necessary)

STACK INFORMATION

Stack (release) Height _____ feet

Stack Diameter _____ inch

Stack Gas Velocity _____ ft/sec

Stack Gas Flow Rate _____ ascf/min

Stack Gas Temperature _____ oF

Other sources that share this stack? _____

COMMENTS

**EMISSIONS FOR ABOVEGROUND STORAGE TANKS
(FIXED ROOF STORAGE TANK)**

Federal and New York State Regulations

| | | | |
|------------|--------------------------|-----------|--------------------|
| Facility: | <u>Seneca Army Depot</u> | Date: | <u>8/15/94</u> |
| Location: | <u>Bldg 2411</u> | Initials: | <u>DCP</u> |
| ID Number: | <u>1 active tank</u> | SCC # | <u>4-03-010-21</u> |

| | | |
|--|-----------------------|---|
| CRUDE OIL STORED | no | (YES / NO) |
| ORIENTATION OF TANK | horizontal | (HORIZONTAL / VERTICAL) |
| TANK DIAMETER (D) | 5 | Ft |
| TANK LENGTH / HEIGHT (L / H) | 12 | Ft |
| ANNUAL THROUGHPUT (Q) | 2,028 | Gal / Yr |
| MOLECULAR WEIGHT OF LIQUID (Mv) (See Enclosed Charts) | 130 | Lb / Lb * mole Gasoline RVP13 62AMU, 6.9 psia Fuel oil #2 130AMU, .0074 psia Fuel oil #6 190AMU, .00004 psia JP-4 80AMU, 1.3 psia JP-8 130AMU, 0.0085 psia |
| TRUE VAPOR PRESSURE (psia) (See Enclosed Charts) | 0.00740 | psia |
| | <u>Annual Average</u> | |
| DAILY MAX AMBIENT TEMP (Tax) | 55.8 | Fahrenheit |
| DAILY MIN AMBIENT TEMP (Tan) | 39.3 | Fahrenheit |
| TANK PAINT SOLAR ABSORBANCE (a) | 0.17 | -- |
| DAILY SOLAR INSOLATION FACTOR (I) (See Enclosed Charts) | 1034 | Btu / Ft ² * Day |

FOR VERTICAL TANKS ONLY

| | |
|--|------|
| SHAPE OF TANK ROOF | FLAT |
| HEIGHT OF LIQUID IN TANK (HL) (If not known enter 1/2 the value of tank height) (this template for flat roof tanks only) | 3 Ft |

| | |
|---------------------------------|------------|
| STANDING STORAGE LOSS EMISSIONS | 0.19 lb/yr |
| WORKING LOSS EMISSIONS | 0.03 lb/yr |
| TOTAL VOC EMISSIONS | 0.21 lb/yr |

NOTE:

The tank height does not include the roof height for tanks which do not have a flat roof
Molecular weights and psia taken from AP-42 section 12.3 table 12.3-2 at 60 degrees fahrenheit
Emission factors obtained from AP-42 section 12.3.

OZONE SEASON DATA

| | June | July | August |
|-----------------------------------|------|------|--------|
| Daily Max Ambient Temp (°F) (Tax) | 75.6 | 80.2 | 78.2 |
| Daily Min Ambient Temp (°F) (Tan) | 56.4 | 61.2 | 59.6 |
| Daily Solar Insolation Factor (l) | 1804 | 1776 | 1513 |

(See Enclosed Charts)

SPECIATION OF EMISSIONS

| | | |
|---------------------------|------|--|
| TYPE OF LIQUID STORED | D | A - GASOLINE B - JET NAPHTHA (JP-4) C - JP-8 D - FUEL OIL #2/DIESEL E - FUEL OIL #6 F - OTHER |
| TOTAL VOC EMISSIONS | 0.21 | Lbs/Yr |
| TOTAL AIR TOXIC EMISSIONS | 0.00 | Lbs/Yr |

INDIVIDUAL AIR TOXIC EMISSIONS

| Chemical Name | CAS # | Emissions (Lbs/Yr) | Profile Data Quality |
|-----------------|----------|-----------------------|-------------------------|
| Hexane | 110-54-3 | N/A | N/A |
| Cumene | 98-82-8 | N/A | N/A |
| Benzene | 71-43-2 | N/A | N/A |
| Toluene | 108-88-3 | N/A | N/A |
| Ethylbenzene | 100-41-4 | N/A | N/A |
| O-Xylene | 95-47-6 | N/A | N/A |
| P-Xylene | 106-42-3 | N/A | N/A |
| M-xylene | 108-38-3 | N/A | N/A |
| Styrene | 100-42-5 | N/A | N/A |
| Chlorobenzene | 108-90-7 | N/A | N/A |
| Napthalene | 91-20-3 | N/A | N/A |
| Xylenes (M & P) | | N/A | N/A |
| Heptane* | 142-82-5 | N/A | N/A |
| Cyclohexane* | 110-82-7 | N/A | N/A |

*New York State HAP

SPECIATION FACTORS FOR GASOLINE OBTAINED FROM EPA AIR EMISSIONS SPECIES MANUAL PROFILE # 1190

SPECIATION FACTORS FOR JP-4 ARE FROM THE INSTALLATION RESTORATION TOXICOLOGY GUIDE

DATA QUALITY RATING "AEHA" STANDS FOR AN APPROVED FUEL SPECIATION METHODOLOGY.

EMISSION RATE DETERMINATION METHOD

Stack Test Data _____ Emission Facto X Material Balance _____

Similar Unit Data _____ Other _____

Reference: AP-42 , VOLUME 1, SECTION 12.3 AND EPA AIR EMISSIONS SPECIES MANUAL, VOL1,

PROFILE NO 1190.

OZONE PRECURSOR EMISSIONS

HAZARDOUS AIR POLLUTANTS

Typical Ozone Season Emissions

HAP

CAS CODE

LB/YR

VOC Emissions 0.0013291781 lb/day

Hexane 110-54-3 N/A

NOx Emissions _____ lb/day

Cumene 98-82-8 N/A

Benzene 71-43-2 N/A

CO Emissions _____ lb/day

Toluene 108-88-3 N/A

Ethylbenzene 100-41-4 N/A

O-Xylene 95-47-6 N/A

P-Xylene 106-42-3 N/A

CRITERIA POLLUTANT EMISSIONS

M-xylene 108-38-3 N/A

Styrene 100-42-5 N/A

VOC Emissions 0.0001072056 ton/yr

Chlorobenzene 108-90-7 N/A

NOx Emissions _____ ton/yr

Napthalene 91-20-3 N/A

Xylenes (M & P) _____ N/A

CO Emissions _____ ton/yr

Heptane* 142-82-5 N/A

Cyclohexane* 110-82-7 N/A

SO2 Emissions _____ ton/yr

PM10 Emissions _____ ton/yr

Total Particulate _____ ton/yr

* New York State HAP
(use additional sheets if necessary)

STACK INFORMATION

Stack (release) Height _____ feet

Stack Gas Velocity _____ ft/sec

Stack Diameter _____ inch

Stack Gas Flow Rate _____ ascf/min

Stack Gas Temperature _____ oF

Other sources that share this stack? _____

COMMENTS

**EMISSIONS FOR ABOVEGROUND STORAGE TANKS
(FIXED ROOF STORAGE TANK)**

Federal and New York State Regulations

| | | | |
|------------|--------------------------|-----------|--------------------|
| Facility: | <u>Seneca Army Depot</u> | Date: | <u>8/15/94</u> |
| Location: | <u>Bldg 367</u> | Initials: | <u>DCP</u> |
| ID Number: | <u>1 active tank</u> | SCC # | <u>4-03-010-21</u> |

| | | |
|--|-----------------------|---|
| CRUDE OIL STORED | no | (YES / NO) |
| ORIENTATION OF TANK | horizontal | (HORIZONTAL / VERTICAL) |
| TANK DIAMETER (D) | 5 | Ft |
| TANK LENGTH / HEIGHT (L / H) | 12 | Ft |
| ANNUAL THROUGHPUT (Q) | 2,027 | Gal / Yr |
| MOLECULAR WEIGHT OF LIQUID (Mv) (See Enclosed Charts) | 130 | Lb / Lb * mole |
| TRUE VAPOR PRESSURE (psia) (See Enclosed Charts) | 0.00740 | psia |
| | <u>Annual Average</u> | |
| DAILY MAX AMBIENT TEMP (Tax) | 55.8 | Fahrenheit |
| DAILY MIN AMBIENT TEMP (Tan) | 39.3 | Fahrenheit |
| TANK PAINT SOLAR ABSORBANCE (a) | 0.17 | - - |
| DAILY SOLAR INSOLATION FACTOR (I) (See Enclosed Charts) | 1034 | Btu / Ft ² * Day |
| | | Gasoline RVP13 62AMU, 6.9 psia Fuel oil #2 130AMU, .0074 psia Fuel oil #6 190AMU, .00004 psia JP-4 80AMU, 1.3 psia JP-8 130AMU, 0.0085 psia |

FOR VERTICAL TANKS ONLY

| | |
|--|------|
| SHAPE OF TANK ROOF | FLAT |
| HEIGHT OF LIQUID IN TANK (HL) (If not known enter 1/2 the value of tank height) (this template for flat roof tanks only) | 3 Ft |

| | |
|---------------------------------|------------|
| STANDING STORAGE LOSS EMISSIONS | 0.19 lb/yr |
| WORKING LOSS EMISSIONS | 0.03 lb/yr |
| TOTAL VOC EMISSIONS | 0.21 lb/yr |

NOTE:

The tank height does not include the roof height for tanks which do not have a flat roof
Molecular weights and psia taken from AP-42 section 12.3 table 12.3-2 at 60 degrees fahrenheit
Emission factors obtained from AP-42 section 12.3.

OZONE SEASON DATA

| | June | July | August |
|-----------------------------------|------|------|--------|
| Daily Max Ambient Temp (°F) (Tax) | 75.6 | 80.2 | 78.2 |
| Daily Min Ambient Temp (°F) (Tan) | 56.4 | 61.2 | 59.6 |
| Daily Solar Insolation Factor (I) | 1804 | 1776 | 1513 |

(See Enclosed Charts)

SPECIATION OF EMISSIONS

| | | |
|---------------------------|------|--|
| TYPE OF LIQUID STORED | D | A - GASOLINE B - JET NAPHTHA (JP-4) C - JP-8 D - FUEL OIL #2/DIESEL E - FUEL OIL #6 F - OTHER |
| TOTAL VOC EMISSIONS | 0.21 | Lbs/Yr |
| TOTAL AIR TOXIC EMISSIONS | 0.00 | Lbs/Yr |

INDIVIDUAL AIR TOXIC EMISSIONS

| Chemical Name | CAS # | Emissions (Lbs/Yr) | Profile Data Quality |
|-----------------|----------|-----------------------|-------------------------|
| Hexane | 110-54-3 | N/A | N/A |
| Cumene | 98-82-8 | N/A | N/A |
| Benzene | 71-43-2 | N/A | N/A |
| Toluene | 108-88-3 | N/A | N/A |
| Ethylbenzene | 100-41-4 | N/A | N/A |
| O-Xylene | 95-47-6 | N/A | N/A |
| P-Xylene | 106-42-3 | N/A | N/A |
| M-xylene | 108-38-3 | N/A | N/A |
| Styrene | 100-42-5 | N/A | N/A |
| Chlorobenzene | 108-90-7 | N/A | N/A |
| Napthalene | 91-20-3 | N/A | N/A |
| Xylenes (M & P) | | N/A | N/A |
| Heptane* | 142-82-5 | N/A | N/A |
| Cyclohexane* | 110-82-7 | N/A | N/A |

*New York State HAP

SPECIATION FACTORS FOR GASOLINE OBTAINED FROM EPA AIR EMISSIONS SPECIES MANUAL PROFILE # 1190

SPECIATION FACTORS FOR JP-4 ARE FROM THE INSTALLATION RESTORATION TOXICOLOGY GUIDE

DATA QUALITY RATING "AEHA" STANDS FOR AN APPROVED FUEL SPECIATION METHODOLOGY.

EMISSION RATE DETERMINATION METHOD

Stack Test Data _____ Emission Facto X Material Balance _____

Similar Unit Data _____ Other _____

Reference: AP-42 , VOLUME 1, SECTION 12.3 AND EPA AIR EMISSIONS SPECIES MANUAL, VOL1,

PROFILE NO 1190.

OZONE PRECURSOR EMISSIONS

HAZARDOUS AIR POLLUTANTS

Typical Ozone Season Emissions

HAP

CAS CODE

LB/YR

VOC Emissions 0.0004738185 lb/day

Hexane 110-54-3 N/A

Cumene 98-82-8 N/A

NOx Emissions _____ lb/day

Benzene 71-43-2 N/A

Toluene 108-88-3 N/A

CO Emissions _____ lb/day

Ethylbenzene 100-41-4 N/A

O-Xylene 95-47-6 N/A

P-Xylene 106-42-3 N/A

CRITERIA POLLUTANT EMISSIONS

M-xylene 108-38-3 N/A

Styrene 100-42-5 N/A

VOC Emissions 0.0000401758 ton/yr

Chlorobenzene 108-90-7 N/A

Napthalene 91-20-3 N/A

NOx Emissions _____ ton/yr

Xylenes (M & P) _____ N/A

Heptane* 142-82-5 N/A

CO Emissions _____ ton/yr

Cyclohexane* 110-82-7 N/A

SO2 Emissions _____ ton/yr

PM10 Emissions _____ ton/yr

Total Particulate _____ ton/yr

* New York State HAP
(use additional sheets if necessary)

STACK INFORMATION

Stack (release) Height _____ feet

Stack Gas Velocity _____ ft/sec

Stack Diameter _____ inch

Stack Gas Flow Rate _____ ascf/min

Stack Gas Temperature _____ oF

Other sources that share this stack? _____

COMMENTS

**EMISSIONS FOR ABOVEGROUND STORAGE TANKS
(FIXED ROOF STORAGE TANK)**

Federal and New York State Regulations

| | | | |
|------------|--------------------------|-----------|--------------------|
| Facility: | <u>Seneca Army Depot</u> | Date: | <u>8/15/94</u> |
| Location: | <u>Bldg 609</u> | Initials: | <u>DCP</u> |
| ID Number: | <u>1 active tank</u> | SCC # | <u>4-03-010-21</u> |

| | | |
|--|-----------------------|---|
| CRUDE OIL STORED | no | (YES / NO) |
| ORIENTATION OF TANK | horizontal | (HORIZONTAL / VERTICAL) |
| TANK DIAMETER (D) | 5 | Ft |
| TANK LENGTH / HEIGHT (L / H) | 6 | Ft |
| ANNUAL THROUGHPUT (Q) | 1,014 | Gal / Yr |
| MOLECULAR WEIGHT OF LIQUID (Mv) (See Enclosed Charts) | 130 | Lb / Lb * mole Gasoline RVP13 62AMU, 6.9 psia Fuel oil #2 130AMU, .0074 psia Fuel oil #6 190AMU, .00004 psia JP-4 80AMU, 1.3 psia JP-8 130AMU, 0.0085 psia |
| TRUE VAPOR PRESSURE (psia) (See Enclosed Charts) | 0.00740 | psia |
| | <u>Annual Average</u> | |
| DAILY MAX AMBIENT TEMP (Tax) | 55.8 | Fahrenheit |
| DAILY MIN AMBIENT TEMP (Tan) | 39.3 | Fahrenheit |
| TANK PAINT SOLAR ABSORBANCE (a) | 0.17 | -- |
| DAILY SOLAR INSOLATION FACTOR (I) (See Enclosed Charts) | 1034 | Btu / Ft ² * Day |

FOR VERTICAL TANKS ONLY

| | |
|--|------|
| SHAPE OF TANK ROOF | FLAT |
| HEIGHT OF LIQUID IN TANK (HL) (If not known enter 1/2 the value of tank height) (this template for flat roof tanks only) | 3 Ft |

| | |
|---------------------------------|------------|
| STANDING STORAGE LOSS EMISSIONS | 0.07 lb/yr |
| WORKING LOSS EMISSIONS | 0.01 lb/yr |
| TOTAL VOC EMISSIONS | 0.08 lb/yr |

NOTE:

The tank height does not include the roof height for tanks which do not have a flat roof
Molecular weights and psia taken from AP-42 section 12.3 table 12.3-2 at 60 degrees fahrenheit
Emission factors obtained from AP-42 section 12.3.

OZONE SEASON DATA

| | June | July | August |
|-----------------------------------|------|------|--------|
| Daily Max Ambient Temp (°F) (Tax) | 75.6 | 80.2 | 78.2 |
| Daily Min Ambient Temp (°F) (Tan) | 56.4 | 61.2 | 59.6 |
| Daily Solar Insolation Factor (I) | 1804 | 1776 | 1513 |

(See Enclosed Charts)

SPECIATION OF EMISSIONS

| | | |
|---------------------------|------|--|
| TYPE OF LIQUID STORED | D | A - GASOLINE B - JET NAPHTHA (JP-4) C - JP-8 D - FUEL OIL #2/DIESEL E - FUEL OIL #6 F - OTHER |
| TOTAL VOC EMISSIONS | 0.08 | Lbs/Yr |
| TOTAL AIR TOXIC EMISSIONS | 0.00 | Lbs/Yr |

INDIVIDUAL AIR TOXIC EMISSIONS

| Chemical Name | CAS # | Emissions (Lbs/Yr) | Profile Data Quality |
|-----------------|----------|-----------------------|-------------------------|
| Hexane | 110-54-3 | N/A | N/A |
| Cumene | 98-82-8 | N/A | N/A |
| Benzene | 71-43-2 | N/A | N/A |
| Toluene | 108-88-3 | N/A | N/A |
| Ethylbenzene | 100-41-4 | N/A | N/A |
| O-Xylene | 95-47-6 | N/A | N/A |
| P-Xylene | 106-42-3 | N/A | N/A |
| M-xylene | 108-38-3 | N/A | N/A |
| Styrene | 100-42-5 | N/A | N/A |
| Chlorobenzene | 108-90-7 | N/A | N/A |
| Napthalene | 91-20-3 | N/A | N/A |
| Xylenes (M & P) | | N/A | N/A |
| Heptane* | 142-82-5 | N/A | N/A |
| Cyclohexane* | 110-82-7 | N/A | N/A |

*New York State HAP

SPECIATION FACTORS FOR GASOLINE OBTAINED FROM EPA AIR EMISSIONS SPECIES MANUAL PROFILE # 1190

SPECIATION FACTORS FOR JP-4 ARE FROM THE INSTALLATION RESTORATION TOXICOLOGY GUIDE

DATA QUALITY RATING "AEHA" STANDS FOR AN APPROVED FUEL SPECIATION METHODOLOGY.

EMISSION RATE DETERMINATION METHOD

Stack Test Data _____ Emission Factor X Material Balance _____

Similar Unit Data _____ Other _____

Reference: AP-42 , VOLUME 1, SECTION 12.3 AND EPA AIR EMISSIONS SPECIES MANUAL, VOL1,

PROFILE NO 1190.

OZONE PRECURSOR EMISSIONS

HAZARDOUS AIR POLLUTANTS

Typical Ozone Season Emissions

HAP

CAS CODE

LB/YR

VOC Emissions 0.0251870877 lb/day

Hexane 110-54-3 N/A

Cumene 98-82-8 N/A

NOx Emissions _____ lb/day

Benzene 71-43-2 N/A

Toluene 108-88-3 N/A

CO Emissions _____ lb/day

Ethylbenzene 100-41-4 N/A

O-Xylene 95-47-6 N/A

P-Xylene 106-42-3 N/A

CRITERIA POLLUTANT EMISSIONS

M-xylene 108-38-3 N/A

Styrene 100-42-5 N/A

VOC Emissions 0.0020529118 ton/yr

Chlorobenzene 108-90-7 N/A

Napthalene 91-20-3 N/A

NOx Emissions _____ ton/yr

Xylenes (M & P) N/A

Heptane* 142-82-5 N/A

CO Emissions _____ ton/yr

Cyclohexane* 110-82-7 N/A

SO2 Emissions _____ ton/yr

PM10 Emissions _____ ton/yr

Total Particulate _____ ton/yr

* New York State HAP
(use additional sheets if necessary)

STACK INFORMATION

Stack (release) Height _____ feet

Stack Gas Velocity _____ ft/sec

Stack Diameter _____ inch

Stack Gas Flow Rate _____ ascf/min

Stack Gas Temperature _____ oF

Other sources that share this stack? _____

COMMENTS

**EMISSIONS FOR ABOVEGROUND STORAGE TANKS
(FIXED ROOF STORAGE TANK)**

Federal and New York State Regulations

| | | | |
|------------|--------------------------|-----------|--------------------|
| Facility: | <u>Seneca Army Depot</u> | Date: | <u>8/15/94</u> |
| Location: | <u>Bldg 717</u> | Initials: | <u>DCP</u> |
| ID Number: | <u>1 active tank</u> | SCC # | <u>4-03-010-21</u> |

| | | |
|--|-----------------------|---|
| CRUDE OIL STORED | no | (YES / NO) |
| ORIENTATION OF TANK | horizontal | (HORIZONTAL / VERTICAL) |
| TANK DIAMETER (D) | 18 | Ft |
| TANK LENGTH / HEIGHT (L / H) | 20 | Ft |
| ANNUAL THROUGHPUT (Q) | 41,161 | Gal / Yr |
| MOLECULAR WEIGHT OF LIQUID (Mv) (See Enclosed Charts) | 130 | Lb / Lb * mole Gasoline RVP13 62AMU, 6.9 psia Fuel oil #2 130AMU, .0074 psia |
| TRUE VAPOR PRESSURE (psia) (See Enclosed Charts) | 0.00740 | psia Fuel oil #6 190AMU, .00004 psia JP-4 80AMU, 1.3 psia JP-8 130AMU, 0.0085 psia |
| | <u>Annual Average</u> | |
| DAILY MAX AMBIENT TEMP (T _{ax}) | 55.8 | Fahrenheit |
| DAILY MIN AMBIENT TEMP (T _{an}) | 39.3 | Fahrenheit |
| TANK PAINT SOLAR ABSORBANCE (a) | 0.17 | -- |
| DAILY SOLAR INSOLATION FACTOR (I) (See Enclosed Charts) | 1034 | Btu / Ft ² * Day |

FOR VERTICAL TANKS ONLY

| | |
|--|------|
| SHAPE OF TANK ROOF | FLAT |
| HEIGHT OF LIQUID IN TANK (HL) (If not known enter 1/2 the value of tank height) (this template for flat roof tanks only) | 3 Ft |

| | |
|---------------------------------|------------|
| STANDING STORAGE LOSS EMISSIONS | 3.55 lb/yr |
| WORKING LOSS EMISSIONS | 0.55 lb/yr |
| TOTAL VOC EMISSIONS | 4.11 lb/yr |

NOTE:

The tank height does not include the roof height for tanks which do not have a flat roof
Molecular weights and psia taken from AP-42 section 12.3 table 12.3-2 at 60 degrees fahrenheit
Emission factors obtained from AP-42 section 12.3.

OZONE SEASON DATA

| | June | July | August |
|-----------------------------------|------|------|--------|
| Daily Max Ambient Temp (°F) (Tax) | 75.6 | 80.2 | 78.2 |
| Daily Min Ambient Temp (°F) (Tan) | 56.4 | 61.2 | 59.6 |
| Daily Solar Insolation Factor (l) | 1804 | 1776 | 1513 |

(See Enclosed Charts)

SPECIATION OF EMISSIONS

| | | |
|---------------------------|------|--|
| TYPE OF LIQUID STORED | D | A - GASOLINE B - JET NAPHTHA (JP-4) C - JP-8 D - FUEL OIL #2/DIESEL E - FUEL OIL #6 F - OTHER |
| TOTAL VOC EMISSIONS | 4.11 | Lbs/Yr |
| TOTAL AIR TOXIC EMISSIONS | 0.00 | Lbs/Yr |

INDIVIDUAL AIR TOXIC EMISSIONS

| Chemical Name | CAS # | Emissions (Lbs/Yr) | Profile Data Quality |
|-----------------|----------|-----------------------|-------------------------|
| Hexane | 110-54-3 | N/A | N/A |
| Cumene | 98-82-8 | N/A | N/A |
| Benzene | 71-43-2 | N/A | N/A |
| Toluene | 108-88-3 | N/A | N/A |
| Ethylbenzene | 100-41-4 | N/A | N/A |
| O-Xylene | 95-47-6 | N/A | N/A |
| P-Xylene | 106-42-3 | N/A | N/A |
| M-xylene | 108-38-3 | N/A | N/A |
| Styrene | 100-42-5 | N/A | N/A |
| Chlorobenzene | 108-90-7 | N/A | N/A |
| Napthalene | 91-20-3 | N/A | N/A |
| Xylenes (M & P) | | N/A | N/A |
| Heptane* | 142-82-5 | N/A | N/A |
| Cyclohexane* | 110-82-7 | N/A | N/A |

*New York State HAP

SPECIATION FACTORS FOR GASOLINE OBTAINED FROM EPA AIR EMISSIONS SPECIES MANUAL PROFILE # 1190

SPECIATION FACTORS FOR JP-4 ARE FROM THE INSTALLATION RESTORATION TOXICOLOGY GUIDE

DATA QUALITY RATING "AEHA" STANDS FOR AN APPROVED FUEL SPECIATION METHODOLOGY.

EMISSION RATE DETERMINATION METHOD

Stack Test Data _____ Emission Facto X Material Balance _____

Similar Unit Data _____ Other _____

Reference: AP-42 , VOLUME 1, SECTION 12.3 AND EPA AIR EMISSIONS SPECIES MANUAL, VOL1,

PROFILE NO 1190.

OZONE PRECURSOR EMISSIONS

HAZARDOUS AIR POLLUTANTS

Typical Ozone Season Emissions

HAP

CAS CODE

LB/YR

VOC Emissions 0.0003782669 lb/day

Hexane 110-54-3 N/A

Cumene 98-82-8 N/A

NOx Emissions _____ lb/day

Benzene 71-43-2 N/A

Toluene 108-88-3 N/A

CO Emissions _____ lb/day

Ethylbenzene 100-41-4 N/A

O-Xylene 95-47-6 N/A

P-Xylene 106-42-3 N/A

CRITERIA POLLUTANT EMISSIONS

M-xylene 108-38-3 N/A

Styrene 100-42-5 N/A

VOC Emissions 0.0000303781 ton/yr

Chlorobenzene 108-90-7 N/A

Napthalene 91-20-3 N/A

NOx Emissions _____ ton/yr

Xylenes (M & P) _____ N/A

Heptane* 142-82-5 N/A

CO Emissions _____ ton/yr

Cyclohexane* 110-82-7 N/A

SO2 Emissions _____ ton/yr

PM10 Emissions _____ ton/yr

Total Particulate _____ ton/yr

* New York State HAP
(use additional sheets if necessary)

STACK INFORMATION

Stack (release) Height _____ feet

Stack Gas Velocity _____ ft/sec

Stack Diameter _____ inch

Stack Gas Flow Rate _____ ascf/min

Stack Gas Temperature _____ oF

Other sources that share this stack? _____

COMMENTS

**EMISSIONS FOR ABOVEGROUND STORAGE TANKS
(FIXED ROOF STORAGE TANK)
Federal and New York State Regulations**

| | | | |
|------------|--------------------------|-----------|--------------------|
| Facility: | <u>Seneca Army Depot</u> | Date: | <u>8/15/94</u> |
| Location: | <u>Field</u> | Initials: | <u>DCP</u> |
| ID Number: | <u>1 active tank</u> | SCC # | <u>4-03-010-21</u> |

| | | |
|--|-----------------------|---|
| CRUDE OIL STORED | no | (YES / NO) |
| ORIENTATION OF TANK | horizontal | (HORIZONTAL / VERTICAL) |
| TANK DIAMETER (D) | 4 | Ft |
| TANK LENGTH / HEIGHT (L / H) | 6 | Ft |
| ANNUAL THROUGHPUT (Q) | 558 | Gal / Yr |
| MOLECULAR WEIGHT OF LIQUID (Mv) (See Enclosed Charts) | 130 | Lb / Lb * mole Gasoline RVP13 62AMU, 6.9 psia Fuel oil #2 130AMU, .0074 psia |
| TRUE VAPOR PRESSURE (psia) (See Enclosed Charts) | 0.00740 | psia Fuel oil #6 190AMU, .00004 psia JP-4 80AMU, 1.3 psia JP-8 130AMU, 0.0085 psia |
| | <u>Annual Average</u> | |
| DAILY MAX AMBIENT TEMP (T _{ax}) | 55.8 | Fahrenheit |
| DAILY MIN AMBIENT TEMP (T _{an}) | 39.3 | Fahrenheit |
| TANK PAINT SOLAR ABSORBANCE (a) | 0.17 | -- |
| DAILY SOLAR INSOLATION FACTOR (I) (See Enclosed Charts) | 1034 | Btu / Ft ² * Day |

FOR VERTICAL TANKS ONLY

| | |
|--|------|
| SHAPE OF TANK ROOF | FLAT |
| HEIGHT OF LIQUID IN TANK (HL) (If not known enter 1/2 the value of tank height) (this template for flat roof tanks only) | 3 Ft |

| | |
|---------------------------------|------------|
| STANDING STORAGE LOSS EMISSIONS | 0.05 lb/yr |
| WORKING LOSS EMISSIONS | 0.01 lb/yr |
| TOTAL VOC EMISSIONS | 0.06 lb/yr |

NOTE:

The tank height does not include the roof height for tanks which do not have a flat roof
Molecular weights and psia taken from AP-42 section 12.3 table 12.3-2 at 60 degrees fahrenheit
Emission factors obtained from AP-42 section 12.3.

OZONE SEASON DATA

| | June | July | August |
|-----------------------------------|------|------|--------|
| Daily Max Ambient Temp (°F) (Tax) | 75.6 | 80.2 | 78.2 |
| Daily Min Ambient Temp (°F) (Tan) | 56.4 | 61.2 | 59.6 |
| Daily Solar Insolation Factor (l) | 1804 | 1776 | 1513 |

(See Enclosed Charts)

SPECIATION OF EMISSIONS

| | | |
|---------------------------|------|--|
| TYPE OF LIQUID STORED | D | A - GASOLINE B - JET NAPHTHA (JP-4) C - JP-8 D - FUEL OIL #2/DIESEL E - FUEL OIL #6 F - OTHER |
| TOTAL VOC EMISSIONS | 0.06 | Lbs/Yr |
| TOTAL AIR TOXIC EMISSIONS | 0.00 | Lbs/Yr |

INDIVIDUAL AIR TOXIC EMISSIONS

| Chemical Name | CAS # | Emissions (Lbs/Yr) | Profile Data Quality |
|-----------------|----------|-----------------------|-------------------------|
| Hexane | 110-54-3 | N/A | N/A |
| Cumene | 98-82-8 | N/A | N/A |
| Benzene | 71-43-2 | N/A | N/A |
| Toluene | 108-88-3 | N/A | N/A |
| Ethylbenzene | 100-41-4 | N/A | N/A |
| O-Xylene | 95-47-6 | N/A | N/A |
| P-Xylene | 106-42-3 | N/A | N/A |
| M-xylene | 108-38-3 | N/A | N/A |
| Styrene | 100-42-5 | N/A | N/A |
| Chlorobenzene | 108-90-7 | N/A | N/A |
| Napthalene | 91-20-3 | N/A | N/A |
| Xylenes (M & P) | | N/A | N/A |
| Heptane* | 142-82-5 | N/A | N/A |
| Cyclohexane* | 110-82-7 | N/A | N/A |

*New York State HAP

SPECIATION FACTORS FOR GASOLINE OBTAINED FROM EPA AIR EMISSIONS SPECIES MANUAL PROFILE # 1190

SPECIATION FACTORS FOR JP-4 ARE FROM THE INSTALLATION RESTORATION TOXICOLOGY GUIDE

DATA QUALITY RATING "AEHA" STANDS FOR AN APPROVED FUEL SPECIATION METHODOLOGY.

EMISSION RATE DETERMINATION METHOD

Stack Test Data _____ Emission Factor X Material Balance _____

Similar Unit Data _____ Other _____

Reference: AP-42 , VOLUME 1, SECTION 12.3 AND EPA AIR EMISSIONS SPECIES MANUAL, VOL1,

PROFILE NO 1190.

OZONE PRECURSOR EMISSIONS

HAZARDOUS AIR POLLUTANTS

Typical Ozone Season Emissions

HAP

CAS CODE

LB/YR

VOC Emissions 0.0022594602 lb/day

Hexane 110-54-3 N/A

Cumene 98-82-8 N/A

NOx Emissions _____ lb/day

Benzene 71-43-2 N/A

Toluene 108-88-3 N/A

CO Emissions _____ lb/day

Ethylbenzene 100-41-4 N/A

O-Xylene 95-47-6 N/A

P-Xylene 106-42-3 N/A

CRITERIA POLLUTANT EMISSIONS

M-xylene 108-38-3 N/A

Styrene 100-42-5 N/A

VOC Emissions 0.0002000187 ton/yr

Chlorobenzene 108-90-7 N/A

Napthalene 91-20-3 N/A

NOx Emissions _____ ton/yr

Xylenes (M & P) N/A

Heptane* 142-82-5 N/A

CO Emissions _____ ton/yr

Cyclohexane* 110-82-7 N/A

SO2 Emissions _____ ton/yr

PM10 Emissions _____ ton/yr

Total Particulate _____ ton/yr

* New York State HAP
(use additional sheets if necessary)

STACK INFORMATION

Stack (release) Height _____ feet

Stack Gas Velocity _____ ft/sec

Stack Diameter _____ inch

Stack Gas Flow Rate _____ ascf/min

Stack Gas Temperature _____ oF

Other sources that share this stack? _____

COMMENTS

**EMISSIONS FOR ABOVEGROUND STORAGE TANKS
(FIXED ROOF STORAGE TANK)**

Federal and New York State Regulations

| | | | |
|------------|--------------------------|-----------|--------------------|
| Facility: | <u>Seneca Army Depot</u> | Date: | <u>8/15/94</u> |
| Location: | <u>Loran C</u> | Initials: | <u>DCP</u> |
| ID Number: | <u>1 active tank</u> | SCC # | <u>4-03-010-21</u> |

| | | |
|--|-----------------------|---|
| CRUDE OIL STORED | no | (YES / NO) |
| ORIENTATION OF TANK | horizontal | (HORIZONTAL / VERTICAL) |
| TANK DIAMETER (D) | 6 | Ft |
| TANK LENGTH / HEIGHT (L / H) | 16 | Ft |
| ANNUAL THROUGHPUT (Q) | 6,083 | Gal / Yr |
| MOLECULAR WEIGHT OF LIQUID (Mv) (See Enclosed Charts) | 130 | Lb / Lb * mole Gasoline RVP13 62AMU, 6.9 psia Fuel oil #2 130AMU, .0074 psia |
| TRUE VAPOR PRESSURE (psia) (See Enclosed Charts) | 0.00740 | psia Fuel oil #6 190AMU, .00004 psia JP-4 80AMU, 1.3 psia JP-8 130AMU, 0.0085 psia |
| | <u>Annual Average</u> | |
| DAILY MAX AMBIENT TEMP (T _{ax}) | 55.8 | Fahrenheit |
| DAILY MIN AMBIENT TEMP (T _{an}) | 39.3 | Fahrenheit |
| TANK PAINT SOLAR ABSORBANCE (a) | 0.17 | -- |
| DAILY SOLAR INSOLATION FACTOR (I) (See Enclosed Charts) | 1034 | Btu / Ft ² * Day |

FOR VERTICAL TANKS ONLY

| | |
|--|------|
| SHAPE OF TANK ROOF | FLAT |
| HEIGHT OF LIQUID IN TANK (HL) (If not known enter 1/2 the value of tank height) (this template for flat roof tanks only) | 3 Ft |

| | |
|---------------------------------|------------|
| STANDING STORAGE LOSS EMISSIONS | 0.32 lb/yr |
| WORKING LOSS EMISSIONS | 0.08 lb/yr |
| TOTAL VOC EMISSIONS | 0.40 lb/yr |

NOTE:

The tank height does not include the roof height for tanks which do not have a flat roof
Molecular weights and psia taken from AP-42 section 12.3 table 12.3-2 at 60 degrees fahrenheit
Emission factors obtained from AP-42 section 12.3.

OZONE SEASON DATA

| | June | July | August |
|-----------------------------------|------|------|--------|
| Daily Max Ambient Temp (°F) (Tax) | 75.6 | 80.2 | 78.2 |
| Daily Min Ambient Temp (°F) (Tan) | 56.4 | 61.2 | 59.6 |
| Daily Solar Insolation Factor (l) | 1804 | 1776 | 1513 |

(See Enclosed Charts)

SPECIATION OF EMISSIONS

| | | |
|---------------------------|------|--|
| TYPE OF LIQUID STORED | D | A - GASOLINE B - JET NAPHTHA (JP-4) C - JP-8 D - FUEL OIL #2/DIESEL E - FUEL OIL #6 F - OTHER |
| TOTAL VOC EMISSIONS | 0.40 | Lbs/Yr |
| TOTAL AIR TOXIC EMISSIONS | 0.00 | Lbs/Yr |

INDIVIDUAL AIR TOXIC EMISSIONS

| Chemical Name | CAS # | Emissions (Lbs/Yr) | Profile Data Quality |
|-----------------|----------|-----------------------|-------------------------|
| Hexane | 110-54-3 | N/A | N/A |
| Cumene | 98-82-8 | N/A | N/A |
| Benzene | 71-43-2 | N/A | N/A |
| Toluene | 108-88-3 | N/A | N/A |
| Ethylbenzene | 100-41-4 | N/A | N/A |
| O-Xylene | 95-47-6 | N/A | N/A |
| P-Xylene | 106-42-3 | N/A | N/A |
| M-xylene | 108-38-3 | N/A | N/A |
| Styrene | 100-42-5 | N/A | N/A |
| Chlorobenzene | 108-90-7 | N/A | N/A |
| Napthalene | 91-20-3 | N/A | N/A |
| Xylenes (M & P) | | N/A | N/A |
| Heptane* | 142-82-5 | N/A | N/A |
| Cyclohexane* | 110-82-7 | N/A | N/A |

*New York State HAP

SPECIATION FACTORS FOR GASOLINE OBTAINED FROM EPA AIR EMISSIONS SPECIES MANUAL
PROFILE # 1190

SPECIATION FACTORS FOR JP-4 ARE FROM THE INSTALLATION RESTORATION
TOXICOLOGY GUIDE

DATA QUALITY RATING "AEHA" STANDS FOR AN APPROVED FUEL SPECIATION METHODOLOGY.

EMISSION RATE DETERMINATION METHOD

Stack Test Data _____ Emission Facto X Material Balance _____

Similar Unit Data _____ Other _____

Reference: AP-42 , VOLUME 1, SECTION 12.3 AND EPA AIR EMISSIONS SPECIES MANUAL, VOL1,

PROFILE NO 1190.

OZONE PRECURSOR EMISSIONS

HAZARDOUS AIR POLLUTANTS

| Typical Ozone Season Emissions | | HAP | CAS CODE | LB/YR |
|--------------------------------|------------------------------|-----------------|----------|-------|
| VOC Emissions | <u> 0.0001404422 </u> lb/day | Hexane | 110-54-3 | N/A |
| | | Cumene | 98-82-8 | N/A |
| NOx Emissions | _____ lb/day | Benzene | 71-43-2 | N/A |
| | | Toluene | 108-88-3 | N/A |
| CO Emissions | _____ lb/day | Ethylbenzene | 100-41-4 | N/A |
| | | O-Xylene | 95-47-6 | N/A |
| | | P-Xylene | 106-42-3 | N/A |
| | | M-xylene | 108-38-3 | N/A |
| | | Styrene | 100-42-5 | N/A |
| CRITERIA POLLUTANT EMISSIONS | | Chlorobenzene | 108-90-7 | N/A |
| VOC Emissions | <u> 0.0000112492 </u> ton/yr | Napthalene | 91-20-3 | N/A |
| NOx Emissions | _____ ton/yr | Xylenes (M & P) | | N/A |
| | | Heptane* | 142-82-5 | N/A |
| CO Emissions | _____ ton/yr | Cyclohexane* | 110-82-7 | N/A |
| SO2 Emissions | _____ ton/yr | | | |
| PM10 Emissions | _____ ton/yr | | | |
| Total Particulate | _____ ton/yr | | | |

* New York State HAP
(use additional sheets if necessary)

STACK INFORMATION

| | |
|-----------------------------------|------------------------------------|
| Stack (release) Height _____ feet | Stack Gas Velocity _____ ft/sec |
| Stack Diameter _____ inch | Stack Gas Flow Rate _____ ascf/min |
| | Stack Gas Temperature _____ oF |

Other sources that share this stack? _____

COMMENTS

**EMISSIONS FOR ABOVEGROUND STORAGE TANKS
(FIXED ROOF STORAGE TANK)**

Federal and New York State Regulations

| | | | |
|------------|--------------------------|-----------|--------------------|
| Facility: | <u>Seneca Army Depot</u> | Date: | <u>8/15/94</u> |
| Location: | <u>Bldg T137</u> | Initials: | <u>DCP</u> |
| ID Number: | <u>1 active tank</u> | SCC # | <u>4-03-010-21</u> |

| | | |
|--|-----------------------|---|
| CRUDE OIL STORED | no | (YES / NO) |
| ORIENTATION OF TANK | horizontal | (HORIZONTAL / VERTICAL) |
| TANK DIAMETER (D) | 3 | Ft |
| TANK LENGTH / HEIGHT (L / H) | 4 | Ft |
| ANNUAL THROUGHPUT (Q) | 203 | Gal / Yr |
| MOLECULAR WEIGHT OF LIQUID (Mv) (See Enclosed Charts) | 130 | Lb / Lb * mole Gasoline RVP13 62AMU, 6.9 psia Fuel oil #2 130AMU, .0074 psia |
| TRUE VAPOR PRESSURE (psia) (See Enclosed Charts) | 0.00740 | psia Fuel oil #6 190AMU, .00004 psia JP-4 80AMU, 1.3 psia JP-8 130AMU, 0.0085 psia |
| | <u>Annual Average</u> | |
| DAILY MAX AMBIENT TEMP (T _{ax}) | 55.8 | Fahrenheit |
| DAILY MIN AMBIENT TEMP (T _{an}) | 39.3 | Fahrenheit |
| TANK PAINT SOLAR ABSORBANCE (a) | 0.17 | -- |
| DAILY SOLAR INSOLATION FACTOR (I) (See Enclosed Charts) | 1034 | Btu / Ft ² * Day |

FOR VERTICAL TANKS ONLY

| | |
|--|------|
| SHAPE OF TANK ROOF | FLAT |
| HEIGHT OF LIQUID IN TANK (HL) (If not known enter 1/2 the value of tank height) (this template for flat roof tanks only) | 3 Ft |

| | |
|---------------------------------|------------|
| STANDING STORAGE LOSS EMISSIONS | 0.02 lb/yr |
| WORKING LOSS EMISSIONS | 0.00 lb/yr |
| TOTAL VOC EMISSIONS | 0.02 lb/yr |

NOTE:

The tank height does not include the roof height for tanks which do not have a flat roof
Molecular weights and psia taken from AP-42 section 12.3 table 12.3-2 at 60 degrees fahrenheit
Emission factors obtained from AP-42 section 12.3.

OZONE SEASON DATA

| | June | July | August |
|-----------------------------------|------|------|--------|
| Daily Max Ambient Temp (°F) (Tax) | 75.6 | 80.2 | 78.2 |
| Daily Min Ambient Temp (°F) (Tan) | 56.4 | 61.2 | 59.6 |
| Daily Solar Insolation Factor (I) | 1804 | 1776 | 1513 |

(See Enclosed Charts)

SPECIATION OF EMISSIONS

| | | |
|---------------------------|------|--|
| TYPE OF LIQUID STORED | D | A - GASOLINE B - JET NAPHTHA (JP-4) C - JP-8 D - FUEL OIL #2/DIESEL E - FUEL OIL #6 F - OTHER |
| TOTAL VOC EMISSIONS | 0.02 | Lbs/Yr |
| TOTAL AIR TOXIC EMISSIONS | 0.00 | Lbs/Yr |

INDIVIDUAL AIR TOXIC EMISSIONS

| Chemical Name | CAS # | Emissions (Lbs/Yr) | Profile Data Quality |
|-----------------|----------|-----------------------|-------------------------|
| Hexane | 110-54-3 | N/A | N/A |
| Cumene | 98-82-8 | N/A | N/A |
| Benzene | 71-43-2 | N/A | N/A |
| Toluene | 108-88-3 | N/A | N/A |
| Ethylbenzene | 100-41-4 | N/A | N/A |
| O-Xylene | 95-47-6 | N/A | N/A |
| P-Xylene | 106-42-3 | N/A | N/A |
| M-xylene | 108-38-3 | N/A | N/A |
| Styrene | 100-42-5 | N/A | N/A |
| Chlorobenzene | 108-90-7 | N/A | N/A |
| Napthalene | 91-20-3 | N/A | N/A |
| Xylenes (M & P) | | N/A | N/A |
| Heptane* | 142-82-5 | N/A | N/A |
| Cyclohexane* | 110-82-7 | N/A | N/A |

*New York State HAP

SPECIATION FACTORS FOR GASOLINE OBTAINED FROM EPA AIR EMISSIONS SPECIES MANUAL
PROFILE # 1190

SPECIATION FACTORS FOR JP-4 ARE FROM THE INSTALLATION RESTORATION
TOXICOLOGY GUIDE

DATA QUALITY RATING "AEHA" STANDS FOR AN APPROVED FUEL SPECIATION METHODOLOGY.

EMISSION RATE DETERMINATION METHOD

Stack Test Data _____ Emission Factor X Material Balance _____

Similar Unit Data _____ Other _____

Reference: AP-42 , VOLUME 1, SECTION 12.3 AND EPA AIR EMISSIONS SPECIES MANUAL, VOL1,

PROFILE NO 1190.

OZONE PRECURSOR EMISSIONS

HAZARDOUS AIR POLLUTANTS

| Typical Ozone Season Emissions | | HAP | CAS CODE | LB/YR |
|--------------------------------|----------------------------|-----------------|----------|-------|
| VOC Emissions | <u>0.0001755528</u> lb/day | Hexane | 110-54-3 | N/A |
| | | Cumene | 98-82-8 | N/A |
| NOx Emissions | _____ lb/day | Benzene | 71-43-2 | N/A |
| | | Toluene | 108-88-3 | N/A |
| CO Emissions | _____ lb/day | Ethylbenzene | 100-41-4 | N/A |
| | | O-Xylene | 95-47-6 | N/A |
| | | P-Xylene | 106-42-3 | N/A |
| | | M-xylene | 108-38-3 | N/A |
| | | Styrene | 100-42-5 | N/A |
| CRITERIA POLLUTANT EMISSIONS | | Chlorobenzene | 108-90-7 | N/A |
| VOC Emissions | <u>0.0000792503</u> ton/yr | Napthalene | 91-20-3 | N/A |
| NOx Emissions | _____ ton/yr | Xylenes (M & P) | | N/A |
| | | Heptane* | 142-82-5 | N/A |
| CO Emissions | _____ ton/yr | Cyclohexane* | 110-82-7 | N/A |
| | | | | |
| SO2 Emissions | _____ ton/yr | | | |
| | | | | |
| PM10 Emissions | _____ ton/yr | | | |
| | | | | |
| Total Particulate | _____ ton/yr | | | |
| | | | | |

* New York State HAP
(use additional sheets if necessary)

STACK INFORMATION

| | | | |
|------------------------|------------|-----------------------|----------------|
| Stack (release) Height | _____ feet | Stack Gas Velocity | _____ ft/sec |
| Stack Diameter | _____ inch | Stack Gas Flow Rate | _____ ascf/min |
| | | Stack Gas Temperature | _____ oF |

Other sources that share this stack? _____

COMMENTS

**EMISSIONS FOR ABOVEGROUND STORAGE TANKS
(FIXED ROOF STORAGE TANK)
Federal and New York State Regulations**

| | | | |
|------------|--------------------------|-----------|--------------------|
| Facility: | <u>Seneca Army Depot</u> | Date: | <u>8/15/94</u> |
| Location: | <u>Various</u> | Initials: | <u>DCP</u> |
| ID Number: | <u>43 active tanks</u> | SCC # | <u>4-03-010-21</u> |

| | | |
|--|-----------------------|---|
| CRUDE OIL STORED | no | (YES / NO) |
| ORIENTATION OF TANK | horizontal | (HORIZONTAL / VERTICAL) |
| TANK DIAMETER (D) | 3 | Ft |
| TANK LENGTH / HEIGHT (L / H) | 5 | Ft |
| ANNUAL THROUGHPUT (Q) | 11,988 | Gal / Yr |
| MOLECULAR WEIGHT OF LIQUID (Mv) (See Enclosed Charts) | 130 | Lb / Lb * mole Gasoline RVP13 62AMU, 6.9 psia Fuel oil #2 130AMU, .0074 psia |
| TRUE VAPOR PRESSURE (psia) (See Enclosed Charts) | 0.00740 | psia Fuel oil #6 190AMU, .00004 psia JP-4 80AMU, 1.3 psia JP-8 130AMU, 0.0085 psia |
| | <u>Annual Average</u> | |
| DAILY MAX AMBIENT TEMP (Tax) | 55.8 | Fahrenheit |
| DAILY MIN AMBIENT TEMP (Tan) | 39.3 | Fahrenheit |
| TANK PAINT SOLAR ABSORBANCE (a) | 0.17 | -- |
| DAILY SOLAR INSOLATION FACTOR (I) (See Enclosed Charts) | 1034 | Btu / Ft ² * Day |

FOR VERTICAL TANKS ONLY

| | |
|--|------|
| SHAPE OF TANK ROOF | FLAT |
| HEIGHT OF LIQUID IN TANK (HL) (If not known enter 1/2 the value of tank height) (this template for flat roof tanks only) | 3 Ft |

| | |
|---------------------------------|------------|
| STANDING STORAGE LOSS EMISSIONS | 0.02 lb/yr |
| WORKING LOSS EMISSIONS | 0.13 lb/yr |
| TOTAL VOC EMISSIONS | 0.16 lb/yr |

NOTE:

The tank height does not include the roof height for tanks which do not have a flat roof
Molecular weights and psia taken from AP-42 section 12.3 table 12.3-2 at 60 degrees fahrenheit
Emission factors obtained from AP-42 section 12.3.

DEGREASING OPERATIONS

GENERAL INFORMATION

Installation Seneca Army Depot
 SCC..... 4-01-003-35 Unit ID #..... 2 active degreasers
 Location..... Bldg 117 Permit #.....
 POC..... Jack LaBour Inventoried by..... T. Sletten
 Phone..... (607) 869-1396 Inventory Date..... June 6-10, 1994

DEGREASING SOLVENT DATA

| Solvent Type | NSN/MILSPEC | Quantity Used (gal/mon) | Quantity Used (gal/yr) | Quantity Disposed (gal/yr) | %VO (lb/gal) |
|--------------------------|-------------|-------------------------|------------------------|----------------------------|--------------|
| Safety Kleen 105 Solvent | | | | | |
| | | | | | |
| | | | | | |

DEGREASING UNIT DESIGN

EMISSION CONTROL

No. of Tanks..... 2
 Tank Size..... Safety Kleen Model 30.3
 Cold Cleaner.....
 Vapor Degreaser.....
 Solvent Temperature..... (°F)
 Dispensing Nozzle (check all appropriate)
 Solid Stream.....
 Dispersed Stream.....
 Interior Drain Rack.....
 Solvent Recycle Reservoir....
 Tank Dimensions: Length.... 3'
 Depth..... 2'
 Height.... 6"

Lid or Cover present?..... or N
 Open or Closed?..... or
 Manually operated.....
 Automatically operated...
 Thermostat Cutoff Switch.. Y or N
 (for heated solvent)
 Chiller Temperature.....
 Freeboard Height.....
 Carbon Absorption?.....
 Incineration?.....

OPERATING PRACTICES

CONTRACTOR INFORMATION

Materials Degreased:

 Frequency/Operating Practices:
Operated: 1 hr/mnth each

Contractor Safety Kleen
 Contractor POC _____
 Phone No. _____
 Contracting Officer's Representative

 COR Phone Number _____

SOLUTION

VOC EMISSIONS

8.25

Lbs/Yr

REFERENCES:

Emission Calculations based on AP-42 Emission Factors, section 4.6, Table 4.6-2 and Table 4.6-3 and
 Mass Balance
 AP-42 Data Quality: C

SPECIATION OF EMISSIONS

TOTAL VOC EMISSIONS 8.25 Lbs/Yr

TOTAL AIR TOXIC EMISSIONS 0.25 Lbs/Yr

INDIVIDUAL AIR TOXIC EMISSIONS

| Chemical Name | CAS # | Emissions (Lbs/Yr) | Profile Data Quality |
|-------------------------|-----------|-----------------------|-------------------------|
| 1,1,2 - Trichloroethane | 79-00-5 | N/A | E |
| Toluene | 108-88-3 | 4.15E-02 | E/B/* |
| Methylene Chloride | 75-09-2 | N/A | E |
| Trichloroethylene | 79-01-6 | N/A | E |
| Hexane | 110-54-3 | N/A | B |
| o-Xylenes | 95-47-6 | N/A | B |
| Cumene | 98-82-8 | N/A | B |
| Naphthalene | 91-20-3 | N/A | B |
| m&p-Xylenes | | N/A | B |
| Xylenes(Isomers) | 1330-20-7 | 8.29E-02 | * |
| Ethyl benzene | 100-41-4 | 4.15E-02 | * |
| Tetrachloroethylene | 127-18-4 | 4.15E-02 | * |
| Methyl chloroform | 71-55-6 | 4.15E-02 | * |

^New York State HAP

* Emission Factors obtained from Safety-Kleen 105 MSDS

** SPECIATION FACTORS OBTAINED FROM EPA AIR EMISSIONS SPECIES MANUAL

DEGREASING OPERATIONS

GENERAL INFORMATION

Installation Seneca Army Depot

SCC..... 4-01-003-35 Unit ID #..... 3 active degreasers

Location..... Bldg 118 Permit #..... _____

POC..... Jack LaBour Inventoried by..... T. Sletten

Phone..... (607) 869-1396 Inventory Date..... June 6-10, 1994

DEGREASING SOLVENT DATA

| Solvent Type | NSN/MILSPEC | Quantity Used (gal/mon) | Quantity Used (gal/yr) | Quantity Disposed (gal/yr) | %VO (lb/gal) |
|--------------------|-------------|-------------------------|------------------------|----------------------------|--------------|
| <u>Solvent 105</u> | _____ | _____ | _____ | _____ | _____ |
| _____ | _____ | _____ | _____ | _____ | _____ |
| _____ | _____ | _____ | _____ | _____ | _____ |

DEGREASING UNIT DESIGN

EMISSION CONTROL

No. of Tanks..... 3

Tank Size..... Safety Kleen Model 30.3R

Cold Cleaner..... _____

Vapor Degreaser..... _____

Solvent Temperature..... _____ (°F)

Dispensing Nozzle (check all appropriate)
 Solid Stream..... _____
 Dispersed Stream..... _____

Interior Drain Rack..... _____

Solvent Recycle Reservoir.... _____

Tank Dimensions: Length.... 3'
 Depth..... 2'
 Height.... 6"

Lid or Cover present?..... or N _____

Open or Closed?..... or _____

Manually operated..... _____

Automatically operated... _____

Thermostat Cutoff Switch.. Y or N
 (for heated solvent)

Chiller Temperature..... _____

Freeboard Height..... _____

Carbon Absorption?..... _____

Incineration?..... _____

OPERATING PRACTICES

CONTRACTOR INFORMATION

Materials Degreased:

Frequency/Operating Practices:
Usage 1 hr/wk

Changed: Once every 2 months

Contractor Safety Kleen

Contractor POC _____

Phone No. _____

Contracting Officer's Representative

COR Phone Number _____

SOLUTION

| | | |
|---------------|-------|--------|
| VOC EMISSIONS | 53.64 | Lbs/Yr |
|---------------|-------|--------|

REFERENCES:

Emission Calculations based on AP-42 Emission Factors, section 4.6, Table 4.6-2 and Table 4.6-3 and
 Mass Balance
 AP-42 Data Quality: C

SPECIATION OF EMISSIONS

TOTAL VOC EMISSIONS 53.64 Lbs/Yr

TOTAL AIR TOXIC EMISSIONS 1.62 Lbs/Yr

INDIVIDUAL AIR TOXIC EMISSIONS

| Chemical Name | CAS # | Emissions (Lbs/Yr) | Profile Data Quality |
|-------------------------|-----------|-----------------------|-------------------------|
| 1,1,2 - Trichloroethane | 79-00-5 | N/A | E |
| Toluene | 108-88-3 | 2.70E-01 | E/B/* |
| Methylene Chloride | 75-09-2 | N/A | E |
| Trichloroethylene | 79-01-6 | N/A | E |
| Hexane | 110-54-3 | N/A | B |
| o-Xylenes | 95-47-6 | N/A | B |
| Cumene | 98-82-8 | N/A | B |
| Naphthalene | 91-20-3 | N/A | B |
| m&p-Xylenes | | N/A | B |
| Xylenes(Isomers) | 1330-20-7 | 5.39E-01 | * |
| Ethyl benzene | 100-41-4 | 2.70E-01 | * |
| Tetrachloroethylene | 127-18-4 | 2.70E-01 | * |
| Methyl chloroform | 71-55-6 | 2.70E-01 | * |

^New York State HAP

* Emission Factors obtained from Safety-Kleen 105 MSDS

** SPECIATION FACTORS OBTAINED FROM EPA AIR EMISSIONS SPECIES MANUAL

EMISSION RATE DETERMINATION METHOD

Stack Test Data _____ Emission Factor X Material Balance _____

Similar Unit Data _____ Other _____

Reference: AP-42, VOLUME 1, SECTION 4.6 AND EPA AIR EMISSIONS SPECIES MANUAL AND SAFETY KLEEN

MSDS

OZONE PRECURSOR EMISSIONS

Typical Ozone Season Emissions
 VOC Emissions 0.1121321739 lb/day
 NOx Emissions _____ lb/day
 CO Emissions _____ lb/day

HAZARDOUS AIR POLLUTANTS

| HAP | CAS CODE | LB/YR |
|-------------------------|-----------|--------------|
| 1,1,2 - Trichloroethane | 79-00-5 | N/A |
| Toluene | 108-88-3 | 0.2073600000 |
| Methylene Chloride | 75-09-2 | N/A |
| Trichloroethylene | 79-01-6 | N/A |
| Hexane | 110-54-3 | N/A |
| o-Xylenes | 95-47-6 | N/A |
| Cumene | 98-82-8 | N/A |
| Naphthalene | 91-20-3 | N/A |
| m&p-Xylenes | | N/A |
| Xylenes(Isomers) | 1330-20-7 | 0.4147200000 |
| Ethyl benzene | 100-41-4 | 0.2073600000 |
| Tetrachloroethylene | 127-18-4 | 0.2073600000 |
| Methyl chloroform | 71-55-6 | 0.2073600000 |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |

CRITERIA POLLUTANT EMISSIONS

VOC Emissions 0.0206323200 ton/yr

^New York State HAP
 (use additional sheets if necessary)

VENTILATION INFORMATION

Capture Device Present? _____ (Y or N)
 Stack (release) Height _____ feet Stack Gas Velocity _____ ft/sec
 Stack Diameter _____ inch Stack Gas Flow Rate _____ ascf/min
 Stack Gas Temperature _____ oF

COMMENTS

SOLUTION

VOC EMISSIONS

41.26

Lbs/Yr

REFERENCES:

Emission Calculations based on AP-42 Emission Factors, section 4.6, Table 4.6-2 and Table 4.6-3 and
 Mass Balance
 AP-42 Data Quality: C

SPECIATION OF EMISSIONS

TOTAL VOC EMISSIONS 41.26 Lbs/Yr
 TOTAL AIR TOXIC EMISSIONS 1.24 Lbs/Yr

INDIVIDUAL AIR TOXIC EMISSIONS

| Chemical Name | CAS # | Emissions (Lbs/Yr) | Profile Data Quality |
|-------------------------|-----------|-----------------------|-------------------------|
| 1,1,2 - Trichloroethane | 79-00-5 | N/A | E |
| Toluene | 108-88-3 | 2.07E-01 | E/B/* |
| Methylene Chloride | 75-09-2 | N/A | E |
| Trichloroethylene | 79-01-6 | N/A | E |
| Hexane | 110-54-3 | N/A | B |
| o-Xylenes | 95-47-6 | N/A | B |
| Cumene | 98-82-8 | N/A | B |
| Naphthalene | 91-20-3 | N/A | B |
| m&p-Xylenes | | N/A | B |
| Xylenes(Isomers) | 1330-20-7 | 4.15E-01 | * |
| Ethyl benzene | 100-41-4 | 2.07E-01 | * |
| Tetrachloroethylene | 127-18-4 | 2.07E-01 | * |
| Methyl chloroform | 71-55-6 | 2.07E-01 | * |

^New York State HAP

* Emission Factors obtained from Safety-Kleen 105 MSDS

** SPECIATION FACTORS OBTAINED FROM EPA AIR EMISSIONS SPECIES MANUAL

DEGREASING OPERATIONS

GENERAL INFORMATION

Installation Seneca Army Depot

SCC..... 4-01-003-35 Unit ID #.....

Location..... Bldg 122 Permit #.....

POC..... Fred Kaufman Inventoried by..... T. Sletten

Phone..... (607) 869-1456 Inventory Date..... June 6-10, 1994

DEGREASING SOLVENT DATA

| Solvent Type | NSN/MILSPEC | Quantity Used (gal/mon) | Quantity Used (gal/yr) | Quantity Disposed (gal/yr) | %VO (lb/gal) |
|--------------------------|-------------|-------------------------|------------------------|----------------------------|--------------|
| Safety Kleen 105 Solvent | | | | | |
| | | | | | |
| | | | | | |

DEGREASING UNIT DESIGN

EMISSION CONTROL

No. of Tanks..... 1

Tank Size..... Safety Kleen Model 30.3R

Cold Cleaner.....

Vapor Degreaser.....

Solvent Temperature..... (°F)

Dispensing Nozzle (check all appropriate)
 Solid Stream.....
 Dispersed Stream.....

Interior Drain Rack.....

Solvent Recycle Reservoir....

Tank Dimensions: Length.... 3'
 Depth..... 2'
 Height.... 6"

Lid or Cover present?..... or N

Open or Closed?..... or

Manually operated.....

Automatically operated... ..

Thermostat Cutoff Switch.. Y or N
 (for heated solvent)

Chiller Temperature.....

Freeboard Height.....

Carbon Absorption?.....

Incineration?.....

OPERATING PRACTICES

CONTRACTOR INFORMATION

Materials Degreased:

.....

.....

Frequency/Operating Practices:

Operated: 3 hr/wk

.....

Contractor Safety Kleen

Contractor POC

Phone No.

Contracting Officer's Representative

.....

COR Phone Number

EMISSIONS FOR SOLVENT DEGREASING OPERATIONS

Federal and New York State Regulations

| | | | |
|------------|-----------------------------|-----------|--------------------|
| Facility: | <u>Seneca Army Depot</u> | Date: | <u>8/16/94</u> |
| Location: | <u>Bldg 122</u> | Initials: | <u>DCP</u> |
| ID Number: | <u> </u> | SCC: | <u>4-01-003-35</u> |

INPUT DATA

| | | | |
|---|--------|--------|---|
| Number of Degreasing Units | 1 | | |
| Amount of Solvent used/unit (If not known enter "0") | 0 | Gal/Yr | ** If the amount of solvent used/unit AND disposed/unit is not known then the volatile % by weight must be entered, otherwise the program will use surface area and operation time of the degreaser to calculate emissions. |
| Amount of Solvent Disposed/unit (If not known enter "0") | 0 | Gal/Yr | |
| Density (calculated based on solvent type) | 6.6552 | lb/gal | |
| Volatile Fraction by Weight (calculated based on solvent type) | 0.995 | | |
| Surface Area of Degreaser (If not known enter "0") | 6.00 | Ft^2 | |
| Operation of Degreaser (If not known enter "0") | 156 | Hrs/Yr | |
| Type of Degreaser | a | | A - COLD DEGREASER (closed top) B - VAPOR DEGREASER C - CONVEYORIZED DEGREASER (Vapor) D - CONVEYORIZED (Non-Boiling) |
| TYPE OF SOLVENT USED | a | | A - SAFETY-KLEEN 105 SOLVENT-MS B - 1,1,1-TRICHLOROETHANE C - TRICHLOROFLUOROMETHANE (FREON 11) D - 1,1,2-TRICHLOROETHANE E - TOLUENE F - METHYLENE CHLORIDE G - TRICHLORETHYLENE H - TRICHLOROTRIFLUOROETHANE (FREON 113) I - CHLOROSOLVE J - STODDARD SOLVENT K - OTHER |

SOLUTION

VOC EMISSIONS

53.64

Lbs/Yr

REFERENCES:

Emission Calculations based on AP-42 Emission Factors, section 4.6, Table 4.6-2 and Table 4.6-3 and

Mass Balance

AP-42 Data Quality: C

SPECIATION OF EMISSIONS

TOTAL VOC EMISSIONS 53.64 Lbs/Yr

TOTAL AIR TOXIC EMISSIONS 1.62 Lbs/Yr

INDIVIDUAL AIR TOXIC EMISSIONS

| Chemical Name | CAS # | Emissions (Lbs/Yr) | Profile Data Quality |
|-------------------------|-----------|-----------------------|-------------------------|
| 1,1,2 - Trichloroethane | 79-00-5 | N/A | E |
| Toluene | 108-88-3 | 2.70E-01 | E/B/* |
| Methylene Chloride | 75-09-2 | N/A | E |
| Trichloroethylene | 79-01-6 | N/A | E |
| Hexane | 110-54-3 | N/A | B |
| o-Xylenes | 95-47-6 | N/A | B |
| Cumene | 98-82-8 | N/A | B |
| Naphthalene | 91-20-3 | N/A | B |
| m&p-Xylenes | | N/A | B |
| Xylenes(Isomers) | 1330-20-7 | 5.39E-01 | * |
| Ethyl benzene | 100-41-4 | 2.70E-01 | * |
| Tetrachloroethylene | 127-18-4 | 2.70E-01 | * |
| Methyl chloroform | 71-55-6 | 2.70E-01 | * |

^New York State HAP

* Emission Factors obtained from Safety-Kleen 105 MSDS

** SPECIATION FACTORS OBTAINED FROM EPA AIR EMISSIONS SPECIES MANUAL

DEGREASING OPERATIONS

Page__ of __

GENERAL INFORMATION

Installation Seneca Army Depot

SCC..... 4-01-003-35 Unit ID #.....

Location..... Bldg 317 (COMIS) Permit #.....

POC..... David Nichols Inventoried by..... T. Sletten

Phone..... (607) 869-1525 Inventory Date..... June 6-10, 1994

DEGREASING SOLVENT DATA

| Solvent Type | NSN/MILSPEC | Quantity Used (gal/mon) | Quantity Used (gal/yr) | Quantity Disposed (gal/yr) | %VO (lb/gal) |
|----------------------------|-------------|-------------------------|------------------------|----------------------------|--------------|
| Heavy Duty Lacquer Thinner | 6782 | 6.6 | 80 | **60 | |
| | | | | | |
| | | | | | |

DEGREASING UNIT DESIGN

No. of Tanks..... 1

Tank Size..... Safety Kleen Model 107

Cold Cleaner.....

Vapor Degreaser.....

Solvent Temperature..... (°F)

Dispensing Nozzle (check all appropriate)
 Solid Stream.....
 Dispersed Stream.....

Interior Drain Rack.....

Solvent Recycle Reservoir....

Tank Dimensions: Length.... 2' diameter
 Depth..... 10"
 Height....

EMISSION CONTROL

Lid or Cover present?..... Y or N

Open or Closed?..... O or C

Manually operated.....

Automatically operated... ..

Thermostat Cutoff Switch.. Y or N
 (for heated solvent)

Chiller Temperature.....

Freeboard Height.....

Carbon Absorption?.....

Incineration?.....

OPERATING PRACTICES

Materials Degreased:

Gun & Equipment Cleaner

Frequency/Operating Practices:

Operated: 3 hr/mnth

Changed: Once every 6 weeks

CONTRACTOR INFORMATION

Contractor

Contractor POC

Phone No.

Contracting Officer's Representative

COR Phone Number

**Most thinner recovered although exact amount is unknown. Assumed they recovered 75% of the 80 gallons.

SOLUTION

VOC EMISSIONS

135.24

Lbs/Yr

REFERENCES:

Emission Calculations based on AP-42 Emission Factors, section 4.6, Table 4.6-2 and Table 4.6-3 and
 Mass Balance
 AP-42 Data Quality: C

SPECIATION OF EMISSIONS

TOTAL VOC EMISSIONS 135.24 Lbs/Yr
 TOTAL AIR TOXIC EMISSIONS 347.48 Lbs/Yr

INDIVIDUAL AIR TOXIC EMISSIONS

| Chemical Name | CAS # | Emissions (Lbs/Yr) | Profile Data Quality |
|------------------------|-----------|-----------------------|-------------------------|
| Toluene | 108-88-3 | 8.65E+01 | * |
| Methylene Chloride | 75-09-2 | 1.38E+00 | * |
| Methanol | 67-56-1 | 4.00E+00 | * |
| Methyl ethyl ketone | 78-93-3 | 5.42E+01 | * |
| Methyl isobutyl ketone | 108-10-1 | 4.07E+01 | * |
| Xylenes(Isomers) | 1330-20-7 | 1.44E+01 | * |
| Ethyl benzene | 100-41-4 | 1.44E+01 | * |
| Tetrachloroethylene | 127-18-4 | 1.38E+00 | * |
| Methyl chloroform | 71-55-6 | 1.38E+00 | * |
| Acetone^ | 67-64-1 | 2.65E+01 | * |
| Ethyl acetate^ | 141-78-6 | 2.54E+01 | * |
| Isobutyl acetate^ | 110-19-0 | 2.54E+01 | * |
| N-Butyl acetate^ | 123-86-4 | 2.54E+01 | * |
| Isopropyl alcohol^ | 67-63-0 | 1.32E+01 | * |
| N-Butyl alcohol^ | 71-36-3 | 1.32E+01 | * |

^New York State HAP

* Emission Factors obtained from Heavy Duty Lacquer Thinner MSDS.

DEGREASING OPERATIONS

GENERAL INFORMATION

Installation Seneca Army Depot
 SCC..... 4-01-003-35 Unit ID #.....
 Location..... Bldg 317 (COMIS) Permit #.....
 POC..... David Nichols Inventoried by..... T. Sletten
 Phone..... (607) 869-1525 Inventory Date..... June 6-10, 1994

DEGREASING SOLVENT DATA

| Solvent Type | NSN/MILSPEC | Quantity Used (gal/mon) | Quantity Used (gal/yr) | Quantity Disposed (gal/yr) | %VO (lb/gal) |
|--------------------------|-------------|-------------------------|------------------------|----------------------------|--------------|
| Safety Kleen 105 Solvent | | | | | |
| | | | | | |
| | | | | | |

DEGREASING UNIT DESIGN

EMISSION CONTROL

No. of Tanks..... 4
 Tank Size..... Safety Kleen Model 30.3
 Cold Cleaner.....
 Vapor Degreaser.....
 Solvent Temperature..... (°F)
 Dispensing Nozzle (check all appropriate)
 Solid Stream.....
 Dispersed Stream.....
 Interior Drain Rack.....
 Solvent Recycle Reservoir....
 Tank Dimensions: Length.... 3'
 Depth..... 2'
 Height.... 6"

Lid or Cover present?..... or N
 Open or Closed?..... or
 Manually operated.....
 Automatically operated...
 Thermostat Cutoff Switch.. Y or N
 (for heated solvent)
 Chiller Temperature.....
 Freeboard Height.....
 Carbon Absorption?.....
 Incineration?.....

OPERATING PRACTICES

CONTRACTOR INFORMATION

Materials Degreased:

 Frequency/Operating Practices:
 Operated: 15 hr/mnth

Contractor Safety Kleen
 Contractor POC _____
 Phone No. _____
 Contracting Officer's Representative

 COR Phone Number _____

SOLUTION

| | | |
|---------------|-------|--------|
| VOC EMISSIONS | 20.63 | Lbs/Yr |
|---------------|-------|--------|

REFERENCES:

Emission Calculations based on AP-42 Emission Factors, section 4.6, Table 4.6-2 and Table 4.6-3 and

Mass Balance

AP-42 Data Quality: C

SPECIATION OF EMISSIONS

| | | |
|---------------------------|-------|--------|
| TOTAL VOC EMISSIONS | 20.63 | Lbs/Yr |
| TOTAL AIR TOXIC EMISSIONS | 0.62 | Lbs/Yr |

INDIVIDUAL AIR TOXIC EMISSIONS

| Chemical Name | CAS # | Emissions (Lbs/Yr) | Profile Data Quality |
|-------------------------|-----------|-----------------------|-------------------------|
| 1,1,2 - Trichloroethane | 79-00-5 | N/A | E |
| Toluene | 108-88-3 | 1.04E-01 | E/B/* |
| Methylene Chloride | 75-09-2 | N/A | E |
| Trichloroethylene | 79-01-6 | N/A | E |
| Hexane | 110-54-3 | N/A | B |
| o-Xylenes | 95-47-6 | N/A | B |
| Cumene | 98-82-8 | N/A | B |
| Naphthalene | 91-20-3 | N/A | B |
| m&p-Xylenes | | N/A | B |
| Xylenes(Isomers) | 1330-20-7 | 2.07E-01 | * |
| Ethyl benzene | 100-41-4 | 1.04E-01 | * |
| Tetrachloroethylene | 127-18-4 | 1.04E-01 | * |
| Methyl chloroform | 71-55-6 | 1.04E-01 | * |

^New York State HAP

* Emission Factors obtained from Safety-Kleen 105 MSDS

** SPECIATION FACTORS OBTAINED FROM EPA AIR EMISSIONS SPECIES MANUAL

EMISSION RATE DETERMINATION METHOD

Stack Test Data _____ Emission Factor X Material Balance _____

Similar Unit Data _____ Other _____

Reference: AP-42, VOLUME 1, SECTION 4.6 AND EPA AIR EMISSIONS SPECIES MANUAL AND SAFETY KLEEN

MSDS

OZONE PRECURSOR EMISSIONS

Typical Ozone Season Emissions
 VOC Emissions 0.0533328652 lb/day
 NOx Emissions _____ lb/day
 CO Emissions _____ lb/day

HAZARDOUS AIR POLLUTANTS

| HAP | CAS CODE | LB/YR |
|-------------------------|-----------|--------------|
| 1,1,2 - Trichloroethane | 79-00-5 | N/A |
| Toluene | 108-88-3 | 0.0986256000 |
| Methylene Chloride | 75-09-2 | N/A |
| Trichloroethylene | 79-01-6 | N/A |
| Hexane | 110-54-3 | N/A |
| o-Xylenes | 95-47-6 | N/A |
| Cumene | 98-82-8 | N/A |
| Naphthalene | 91-20-3 | N/A |
| m&p-Xylenes | | N/A |
| Xylenes(Isomers) | 1330-20-7 | 0.1972512000 |
| Ethyl benzene | 100-41-4 | 0.0986256000 |
| Tetrachloroethylene | 127-18-4 | 0.0986256000 |
| Methyl chloroform | 71-55-6 | 0.0986256000 |

CRITERIA POLLUTANT EMISSIONS

VOC Emissions 0.0098132472 ton/yr

^New York State HAP
 (use additional sheets if necessary)

VENTILATION INFORMATION

Capture Device Present? _____ (Y or N)
 Stack (release) Height _____ feet Stack Gas Velocity _____ ft/sec
 Stack Diameter _____ inch Stack Gas Flow Rate _____ ascf/min
 Stack Gas Temperature _____ oF

COMMENTS

SOLUTION

VOC EMISSIONS

19.63

Lbs/Yr

REFERENCES:

Emission Calculations based on AP-42 Emission Factors, section 4.6, Table 4.6-2 and Table 4.6-3 and
 Mass Balance
 AP-42 Data Quality: C

SPECIATION OF EMISSIONS

TOTAL VOC EMISSIONS 19.63 Lbs/Yr

TOTAL AIR TOXIC EMISSIONS 0.59 Lbs/Yr

INDIVIDUAL AIR TOXIC EMISSIONS

| Chemical Name | CAS # | Emissions (Lbs/Yr) | Profile Data Quality |
|-------------------------|-----------|-----------------------|-------------------------|
| 1,1,2 - Trichloroethane | 79-00-5 | N/A | E |
| Toluene | 108-88-3 | 9.86E-02 | E/B/* |
| Methylene Chloride | 75-09-2 | N/A | E |
| Trichloroethylene | 79-01-6 | N/A | E |
| Hexane | 110-54-3 | N/A | B |
| o-Xylenes | 95-47-6 | N/A | B |
| Cumene | 98-82-8 | N/A | B |
| Naphthalene | 91-20-3 | N/A | B |
| m&p-Xylenes | | N/A | B |
| Xylenes(Isomers) | 1330-20-7 | 1.97E-01 | * |
| Ethyl benzene | 100-41-4 | 9.86E-02 | * |
| Tetrachloroethylene | 127-18-4 | 9.86E-02 | * |
| Methyl chloroform | 71-55-6 | 9.86E-02 | * |

^New York State HAP

* Emission Factors obtained from Safety-Kleen 105 MSDS

** SPECIATION FACTORS OBTAINED FROM EPA AIR EMISSIONS SPECIES MANUAL

DEGREASING OPERATIONS

Page ___ of ___

GENERAL INFORMATION

Installation Seneca Army Depot

SCC..... 4-01-003-35 Unit ID #..... _____

Location..... Bldg 319 Permit #..... _____

POC..... George Shadman Inventoried by..... T. Sletten

Phone..... (607) 869-1470 Inventory Date..... June 6-10, 1994

DEGREASING SOLVENT DATA

| Solvent Type | NSN/MILSPEC | Quantity Used (gal/mon) | Quantity Used (gal/yr) | Quantity Disposed (gal/yr) | %VO (lb/gal) |
|--------------------------|-------------|-------------------------|------------------------|----------------------------|--------------|
| Safety Kleen 105 Solvent | _____ | _____ | _____ | _____ | _____ |
| _____ | _____ | _____ | _____ | _____ | _____ |
| _____ | _____ | _____ | _____ | _____ | _____ |

DEGREASING UNIT DESIGN

No. of Tanks..... 1

Tank Size..... Safety Kleen Model 30.3

Cold Cleaner..... _____

Vapor Degreaser..... _____

Solvent Temperature..... _____ (°F)

Dispensing Nozzle (check all appropriate)
 Solid Stream..... _____
 Dispersed Stream..... _____

Interior Drain Rack..... _____

Solvent Recycle Reservoir..... _____

Tank Dimensions: Length.... 3'
 Depth..... 2'
 Height.... 6"

EMISSION CONTROL

Lid or Cover present?..... Y or N _____

Open or Closed?..... O or C _____

Manually operated..... _____

Automatically operated... _____

Thermostat Cutoff Switch.. Y or N
 (for heated solvent)

Chiller Temperature..... _____

Freeboard Height..... _____

Carbon Absorption?..... _____

Incineration?..... _____

OPERATING PRACTICES

Materials Degreased:

Frequency/Operating Practices:

Operated: 10 hr/mnth

CONTRACTOR INFORMATION

Contractor Safety Kleen

Contractor POC _____

Phone No. _____

Contracting Officer's Representative

COR Phone Number _____

EMISSIONS FOR SOLVENT DEGREASING OPERATIONS

Federal and New York State Regulations

| | | | |
|------------|-----------------------------|-----------|--------------------|
| Facility: | <u>Seneca Army Depot</u> | Date: | <u>8/16/94</u> |
| Location: | <u>Bldg 319</u> | Initials: | <u>DCP</u> |
| ID Number: | <u> </u> | SCC: | <u>4-01-003-35</u> |

INPUT DATA

| | | | |
|---|--------|-----------------|--|
| Number of Degreasing Units | 1 | | |
| Amount of Solvent used/unit (If not known enter "0") | 0 | Gal/Yr | ** If the amount of solvent used/unit AND disposed/unit is not known then the volatile % by weight must be entered, otherwise the program will use surface area and operation time of the degreaser to calculate emissions. |
| Amount of Solvent Disposed/unit (If not known enter "0") | 0 | Gal/Yr | |
| Density (calculated based on solvent type) | 6.6552 | lb/gal | |
| Volatile Fraction by Weight (calculated based on solvent type) | 0.995 | | |
| Surface Area of Degreaser (If not known enter "0") | 6.00 | Ft ² | |
| Operation of Degreaser (If not known enter "0") | 120 | Hrs/Yr | |
| Type of Degreaser | a | | A - COLD DEGREASER (closed top) B - VAPOR DEGREASER C - CONVEYORIZED DEGREASER (Vapor) D - CONVEYORIZED (Non-Boiling) |
| TYPE OF SOLVENT USED | a | | A - SAFETY-KLEEN 105 SOLVENT-MS B - 1,1,1-TRICHLOROETHANE C - TRICHLOROFLUOROMETHANE (FREON 11) D - 1,1,2-TRICHLOROETHANE E - TOLUENE F - METHYLENE CHLORIDE G - TRICHLOROETHYLENE H - TRICHLOROTRIFLUOROETHANE (FREON 113) I - CHLOROSOLVE J - STODDARD SOLVENT K - OTHER |

SOLUTION

| | | |
|---------------|-------|--------|
| VOC EMISSIONS | 41.26 | Lbs/Yr |
|---------------|-------|--------|

REFERENCES:

Emission Calculations based on AP-42 Emission Factors, section 4.6, Table 4.6-2 and Table 4.6-3 and
 Mass Balance
 AP-42 Data Quality: C

SPECIATION OF EMISSIONS

| | | |
|---------------------------|-------|--------|
| TOTAL VOC EMISSIONS | 41.26 | Lbs/Yr |
| TOTAL AIR TOXIC EMISSIONS | 1.24 | Lbs/Yr |

INDIVIDUAL AIR TOXIC EMISSIONS

| Chemical Name | CAS # | Emissions (Lbs/Yr) | Profile Data Quality |
|-------------------------|-----------|-----------------------|-------------------------|
| 1,1,2 - Trichloroethane | 79-00-5 | N/A | E |
| Toluene | 108-88-3 | 2.07E-01 | E/B/* |
| Methylene Chloride | 75-09-2 | N/A | E |
| Trichloroethylene | 79-01-6 | N/A | E |
| Hexane | 110-54-3 | N/A | B |
| o-Xylenes | 95-47-6 | N/A | B |
| Cumene | 98-82-8 | N/A | B |
| Naphthalene | 91-20-3 | N/A | B |
| m&p-Xylenes | | N/A | B |
| Xylenes(Isomers) | 1330-20-7 | 4.15E-01 | * |
| Ethyl benzene | 100-41-4 | 2.07E-01 | * |
| Tetrachloroethylene | 127-18-4 | 2.07E-01 | * |
| Methyl chloroform | 71-55-6 | 2.07E-01 | * |

^New York State HAP

* Emission Factors obtained from Safety-Kleen 105 MSDS

** SPECIATION FACTORS OBTAINED FROM EPA AIR EMISSIONS SPECIES MANUAL

SOLUTION

VOC EMISSIONS

19.85

Lbs/Yr

REFERENCES:

Emission Calculations based on AP-42 Emission Factors, section 4.6, Table 4.6-2 and Table 4.6-3 and
 Mass Balance
 AP-42 Data Quality: C

SPECIATION OF EMISSIONS

TOTAL VOC EMISSIONS 19.85 Lbs/Yr

TOTAL AIR TOXIC EMISSIONS 0.60 Lbs/Yr

INDIVIDUAL AIR TOXIC EMISSIONS

| Chemical Name | CAS # | Emissions (Lbs/Yr) | Profile Data Quality |
|-------------------------|-----------|-----------------------|-------------------------|
| 1,1,2 - Trichloroethane | 79-00-5 | N/A | E |
| Toluene | 108-88-3 | 9.97E-02 | E/B/* |
| Methylene Chloride | 75-09-2 | N/A | E |
| Trichloroethylene | 79-01-6 | N/A | E |
| Hexane | 110-54-3 | N/A | B |
| o-Xylenes | 95-47-6 | N/A | B |
| Cumene | 98-82-8 | N/A | B |
| Naphthalene | 91-20-3 | N/A | B |
| m&p-Xylenes | | N/A | B |
| Xylenes(Isomers) | 1330-20-7 | 1.99E-01 | * |
| Ethyl benzene | 100-41-4 | 9.97E-02 | * |
| Tetrachloroethylene | 127-18-4 | 9.97E-02 | * |
| Methyl chloroform | 71-55-6 | 9.97E-02 | * |

^New York State HAP

* Emission Factors obtained from Safety-Kleen 105 MSDS

** SPECIATION FACTORS OBTAINED FROM EPA AIR EMISSIONS SPECIES MANUAL

DEGREASING OPERATIONS

GENERAL INFORMATION

Installation Seneca Army Depot

SCC..... 4-01-003-35 Unit ID #..... _____

Location..... Bldg 321 (TMDE) Permit #..... _____

POC..... Clint Kunkk Inventoried by..... T. Sletten

Phone..... (607) 869-1385 Inventory Date..... June 6-10, 1994

DEGREASING SOLVENT DATA

| Solvent Type | NSN/MILSPEC | Quantity Used (gal/mon) | Quantity Used (gal/yr) | Quantity Disposed (gal/yr) | %VO (lb/gal) |
|--------------------------|-------------|-------------------------|------------------------|----------------------------|--------------|
| Safety Kleen 105 Solvent | _____ | _____ | _____ | _____ | _____ |
| _____ | _____ | _____ | _____ | _____ | _____ |
| _____ | _____ | _____ | _____ | _____ | _____ |

DEGREASING UNIT DESIGN

EMISSION CONTROL

No. of Tanks..... 2

Tank Size..... Safety Kleen Model 30.3R

Cold Cleaner..... _____

Vapor Degreaser..... _____

Solvent Temperature..... _____ (°F)

Dispensing Nozzle (check all appropriate)
 Solid Stream..... _____
 Dispersed Stream..... _____

Interior Drain Rack..... _____

Solvent Recycle Reservoir.... _____

Tank Dimensions: Length.... 3'
 Depth..... 2'
 Height.... 6"

Lid or Cover present?..... Y or N _____

Open or Closed?..... O or C _____

Manually operated..... _____

Automatically operated... _____

Thermostat Cutoff Switch.. Y or N _____
 (for heated solvent)

Chiller Temperature..... _____

Freeboard Height..... _____

Carbon Absorption?..... _____

Incineration?..... _____

OPERATING PRACTICES

CONTRACTOR INFORMATION

Materials Degreased:

Frequency/Operating Practices:
 Operated 44 hr before (total)

Removed in June 93

Contractor _____

Contractor POC _____

Phone No. _____

Contracting Officer's Representative

COR Phone Number _____

EMISSION RATE DETERMINATION METHOD

Stack Test Data _____ Emission Factor X Material Balance _____

Similar Unit Data _____ Other _____

Reference: AP-42, VOLUME 1, SECTION 4.6 AND EPA AIR EMISSIONS SPECIES MANUAL AND SAFETY KLEEN

MSDS

OZONE PRECURSOR EMISSIONS

Typical Ozone Season Emissions
 VOC Emissions 0.0411151304 lb/day
 NOx Emissions _____ lb/day
 CO Emissions _____ lb/day

HAZARDOUS AIR POLLUTANTS

| HAP | CAS CODE | LB/YR |
|-------------------------|-----------|--------------|
| 1,1,2 - Trichloroethane | 79-00-5 | N/A |
| Toluene | 108-88-3 | 0.0760320000 |
| Methylene Chloride | 75-09-2 | N/A |
| Trichloroethylene | 79-01-6 | N/A |
| Hexane | 110-54-3 | N/A |
| o-Xylenes | 95-47-6 | N/A |
| Cumene | 98-82-8 | N/A |
| Naphthalene | 91-20-3 | N/A |
| m&p-Xylenes | | N/A |
| Xylenes(Isomers) | 1330-20-7 | 0.1520640000 |
| Ethyl benzene | 100-41-4 | 0.0760320000 |
| Tetrachloroethylene | 127-18-4 | 0.0760320000 |
| Methyl chloroform | 71-55-6 | 0.0760320000 |

CRITERIA POLLUTANT EMISSIONS

VOC Emissions 0.0075651840 ton/yr

^New York State HAP
 (use additional sheets if necessary)

VENTILATION INFORMATION

Capture Device Present? _____ (Y or N)
 Stack (release) Height _____ feet Stack Gas Velocity _____ ft/sec
 Stack Diameter _____ inch Stack Gas Flow Rate _____ ascf/min
 Stack Gas Temperature _____ oF

COMMENTS

| EMISSIONS FOR SOLVENT DEGREASING OPERATIONS | | | |
|--|--------------------------|-----------|--------------------|
| Federal and New York State Regulations | | | |
| Facility: | <u>Seneca Army Depot</u> | Date: | <u>8/16/94</u> |
| Location: | <u>Bldg 321 (TMDE)</u> | Initials: | <u>DCP</u> |
| ID Number: | _____ | SCC: | <u>4-01-003-35</u> |

INPUT DATA

| | | | |
|---|--------|--------|---|
| Number of Degreasing Units | 2 | | |
| Amount of Solvent used/unit (If not known enter "0") | 0 | Gal/Yr | ** If the amount of solvent used/unit AND disposed/unit is not known then the volatile % by weight must be entered, otherwise the program will use surface area and operation time of the degreaser to calculate emissions. |
| Amount of Solvent Disposed/unit (If not known enter "0") | 0 | Gal/Yr | |
| Density (calculated based on solvent type) | 6.6552 | lb/gal | |
| Volatile Fraction by Weight (calculated based on solvent type) | 0.995 | | |
| Surface Area of Degreaser (If not known enter "0") | 6.00 | Ft^2 | |
| Operation of Degreaser (If not known enter "0") | 22 | Hrs/Yr | |
| Type of Degreaser | a | | A - COLD DEGREASER (closed top) B - VAPOR DEGREASER C - CONVEYORIZED DEGREASER (Vapor) D - CONVEYORIZED (Non-Boiling) |
| TYPE OF SOLVENT USED | a | | A - SAFETY-KLEEN 105 SOLVENT-MS B - 1,1,1-TRICHLOROETHANE C - TRICHLOROFLUOROMETHANE (FREON 11) D - 1,1,2-TRICHLOROETHANE E - TOLUENE F - METHYLENE CHLORIDE G - TRICHLORETHYLENE H - TRICHLOROTRIFLUOROETHANE (FREON 113) I - CHLOROSOLVE J - STODDARD SOLVENT K - OTHER |

SOLUTION

VOC EMISSIONS

15.13

Lbs/Yr

REFERENCES:

Emission Calculations based on AP-42 Emission Factors, section 4.6, Table 4.6-2 and Table 4.6-3 and
 Mass Balance
 AP-42 Data Quality: C

SPECIATION OF EMISSIONS

TOTAL VOC EMISSIONS 15.13 Lbs/Yr

TOTAL AIR TOXIC EMISSIONS 0.46 Lbs/Yr

INDIVIDUAL AIR TOXIC EMISSIONS

| Chemical Name | CAS # | Emissions (Lbs/Yr) | Profile Data Quality |
|-------------------------|-----------|-----------------------|-------------------------|
| 1,1,2 - Trichloroethane | 79-00-5 | N/A | E |
| Toluene | 108-88-3 | 7.60E-02 | E/B/* |
| Methylene Chloride | 75-09-2 | N/A | E |
| Trichloroethylene | 79-01-6 | N/A | E |
| Hexane | 110-54-3 | N/A | B |
| o-Xylenes | 95-47-6 | N/A | B |
| Cumene | 98-82-8 | N/A | B |
| Naphthalene | 91-20-3 | N/A | B |
| m&p-Xylenes | | N/A | B |
| Xylenes(Isomers) | 1330-20-7 | 1.52E-01 | * |
| Ethyl benzene | 100-41-4 | 7.60E-02 | * |
| Tetrachloroethylene | 127-18-4 | 7.60E-02 | * |
| Methyl chloroform | 71-55-6 | 7.60E-02 | * |

^New York State HAP

* Emission Factors obtained from Safety-Kleen 105 MSDS

** SPECIATION FACTORS OBTAINED FROM EPA AIR EMISSIONS SPECIES MANUAL

DEGREASING OPERATIONS

Page ___ of ___

GENERAL INFORMATION

Installation Seneca Army DepotSCC..... 4-01-003-35

Unit ID #.....

Location..... Bldg 323 (Shipping)

Permit #.....

POC..... Roy WildeInventoried by..... T. SlettenPhone..... (607) 869-1677Inventory Date..... June 6-10, 1994

DEGREASING SOLVENT DATA

| Solvent Type | NSN/MILSPEC | Quantity Used (gal/mon) | Quantity Used (gal/yr) | Quantity Disposed (gal/yr) | %VO (lb/gal) |
|--------------------------|-------------|-------------------------|------------------------|----------------------------|--------------|
| Safety Kleen 105 Solvent | | | | | |
| | | | | | |
| | | | | | |

DEGREASING UNIT DESIGN

EMISSION CONTROL

No. of Tanks..... 2

Tank Size.....

Cold Cleaner.....

Vapor Degreaser.....

Solvent Temperature..... (°F)

Dispensing Nozzle (check all appropriate)

Solid Stream.....

Dispersed Stream.....

Interior Drain Rack.....

Solvent Recycle Reservoir.... Tank Dimensions: Length.... 40"Depth.... 24"Height.... 24"

OPERATING PRACTICES

Materials Degreased:

Frequency/Operating Practices:

Operated: 2 hr/yrLid or Cover present?..... or NOpen or Closed?..... or

Manually operated.....

Automatically operated....

Thermostat Cutoff Switch.. Y or N

(for heated solvent)

Chiller Temperature.....

Freeboard Height.....

Carbon Absorption?.....

Incineration?.....

CONTRACTOR INFORMATION

Contractor Safety Kleen

Contractor POC

Phone No.

Contracting Officer's Representative

COR Phone Number

EMISSION RATE DETERMINATION METHOD

Stack Test Data _____ Emission Factor X Material Balance _____

Similar Unit Data _____ Other _____

Reference: AP-42, VOLUME 1, SECTION 4.6 AND EPA AIR EMISSIONS SPECIES MANUAL AND SAFETY KLEEN

MSDS

OZONE PRECURSOR EMISSIONS

Typical Ozone Season Emissions
 VOC Emissions 0.0041488904 lb/day
 NOx Emissions _____ lb/day
 CO Emissions _____ lb/day

HAZARDOUS AIR POLLUTANTS

| HAP | CAS CODE | LB/YR |
|-------------------------|-----------|--------------|
| 1,1,2 - Trichloroethane | 79-00-5 | N/A |
| Toluene | 108-88-3 | 0.0076723200 |
| Methylene Chloride | 75-09-2 | N/A |
| Trichloroethylene | 79-01-6 | N/A |
| Hexane | 110-54-3 | N/A |
| o-Xylenes | 95-47-6 | N/A |
| Cumene | 98-82-8 | N/A |
| Naphthalene | 91-20-3 | N/A |
| m&p-Xylenes | | N/A |
| Xylenes(Isomers) | 1330-20-7 | 0.0153446400 |
| Ethyl benzene | 100-41-4 | 0.0076723200 |
| Tetrachloroethylene | 127-18-4 | 0.0076723200 |
| Methyl chloroform | 71-55-6 | 0.0076723200 |

CRITERIA POLLUTANT EMISSIONS

VOC Emissions 0.0007633958 ton/yr

^New York State HAP
 (use additional sheets if necessary)

VENTILATION INFORMATION

Capture Device Present? _____ (Y or N)
 Stack (release) Height _____ feet Stack Gas Velocity _____ ft/sec
 Stack Diameter _____ inch Stack Gas Flow Rate _____ ascf/min
 Stack Gas Temperature _____ oF

COMMENTS

EMISSIONS FOR SOLVENT DEGREASING OPERATIONS

Federal and New York State Regulations

| | | | |
|------------|----------------------------|-----------|--------------------|
| Facility: | <u>Seneca Army Depot</u> | Date: | <u>8/16/94</u> |
| Location: | <u>Bldg 323 (Shipping)</u> | Initials: | <u>DCP</u> |
| ID Number: | _____ | SCC: | <u>4-01-003-35</u> |

INPUT DATA

| | | | |
|---|--------|--|---|
| Number of Degreasing Units | 2 | | |
| Amount of Solvent used/unit (If not known enter "0") | 0 | Gal/Yr | ** If the amount of solvent used/unit AND disposed/unit is not known then the volatile % by weight must be entered, otherwise the program will use surface area and operation time of the degreaser to calculate emissions. |
| Amount of Solvent Disposed/unit (If not known enter "0") | 0 | Gal/Yr | |
| Density (calculated based on solvent type) | 6.6552 | lb/gal | |
| Volatile Fraction by Weight (calculated based on solvent type) | 0.995 | | |
| Surface Area of Degreaser (If not known enter "0") | 6.66 | Ft^2 | |
| Operation of Degreaser (If not known enter "0") | 2 | Hrs/Yr | |
| Type of Degreaser | a | A - COLD DEGREASER (closed top) B - VAPOR DEGREASER C - CONVEYORIZED DEGREASER (Vapor) D - CONVEYORIZED (Non-Boiling) | |
| TYPE OF SOLVENT USED | a | A - SAFETY-KLEEN 105 SOLVENT-MS B - 1,1,1-TRICHLOROETHANE C - TRICHLOROFLUOROMETHANE (FREON 11) D - 1,1,2-TRICHLOROETHANE E - TOLUENE F - METHYLENE CHLORIDE G - TRICHLOROETHYLENE H - TRICHLOROTRIFLUOROETHANE (FREON 113) I - CHLOROSOLVE J - STODDARD SOLVENT K - OTHER | |

SOLUTION

VOC EMISSIONS

1.53

Lbs/Yr

REFERENCES:

Emission Calculations based on AP-42 Emission Factors, section 4.6, Table 4.6-2 and Table 4.6-3 and
 Mass Balance
 AP-42 Data Quality: C

SPECIATION OF EMISSIONS

TOTAL VOC EMISSIONS 1.53 Lbs/Yr

TOTAL AIR TOXIC EMISSIONS 0.05 Lbs/Yr

INDIVIDUAL AIR TOXIC EMISSIONS

| Chemical Name | CAS # | Emissions (Lbs/Yr) | Profile Data Quality |
|-------------------------|-----------|-----------------------|-------------------------|
| 1,1,2 - Trichloroethane | 79-00-5 | N/A | E |
| Toluene | 108-88-3 | 7.67E-03 | E/B/* |
| Methylene Chloride | 75-09-2 | N/A | E |
| Trichloroethylene | 79-01-6 | N/A | E |
| Hexane | 110-54-3 | N/A | B |
| o-Xylenes | 95-47-6 | N/A | B |
| Cumene | 98-82-8 | N/A | B |
| Naphthalene | 91-20-3 | N/A | B |
| m&p-Xylenes | | N/A | B |
| Xylenes(Isomers) | 1330-20-7 | 1.53E-02 | * |
| Ethyl benzene | 100-41-4 | 7.67E-03 | * |
| Tetrachloroethylene | 127-18-4 | 7.67E-03 | * |
| Methyl chloroform | 71-55-6 | 7.67E-03 | * |

^New York State HAP

* Emission Factors obtained from Safety-Kleen 105 MSDS

** SPECIATION FACTORS OBTAINED FROM EPA AIR EMISSIONS SPECIES MANUAL

DEGREASING OPERATIONS

Page ___ of ___

GENERAL INFORMATION

Installation Seneca Army Depot

SCC..... 4-01-003-35 Unit ID #..... _____

Location..... Bldg 718 Permit #..... _____

POC..... George Shadman Inventoried by..... T. Sletten

Phone..... (607) 869-1470 Inventory Date..... June 6-10, 1994

DEGREASING SOLVENT DATA

| Solvent Type | NSN/MILSPEC | Quantity Used (gal/mon) | Quantity Used (gal/yr) | Quantity Disposed (gal/yr) | %VO (lb/gal) |
|--------------------------|-------------|-------------------------|------------------------|----------------------------|--------------|
| Safety Kleen 105 Solvent | _____ | _____ | _____ | _____ | _____ |
| _____ | _____ | _____ | _____ | _____ | _____ |
| _____ | _____ | _____ | _____ | _____ | _____ |

DEGREASING UNIT DESIGN

No. of Tanks..... 1

Tank Size..... Safety Kleen Model 30.3

Cold Cleaner..... _____

Vapor Degreaser..... _____

Solvent Temperature..... _____ (°F)

Dispensing Nozzle (check all appropriate)

Solid Stream..... _____

Dispersed Stream..... _____

Interior Drain Rack..... _____

Solvent Recycle Reservoir.... _____

Tank Dimensions: Length.... 3'

Depth..... 2'

Height.... 6"

EMISSION CONTROL

Lid or Cover present?..... or N _____

Open or Closed?..... or _____

Manually operated..... _____

Automatically operated... _____

Thermostat Cutoff Switch.. Y or N _____
(for heated solvent)

Chiller Temperature..... _____

Freeboard Height..... _____

Carbon Absorption?..... _____

Incineration?..... _____

OPERATING PRACTICES

Materials Degreased:

Frequency/Operating Practices:

Operated: 10 hr/mnth Used only Jan-Apr in

1993 Degreaser out of service since May 1993

CONTRACTOR INFORMATION

Contractor Safety Kleen

Contractor POC _____

Phone No. _____

Contracting Officer's Representative

COR Phone Number _____

EMISSION RATE DETERMINATION METHOD

Stack Test Data _____ Emission Factor X Material Balance _____

Similar Unit Data _____ Other _____

Reference: AP-42, VOLUME 1, SECTION 4.6 AND EPA AIR EMISSIONS SPECIES MANUAL AND SAFETY KLEEN

MSDS

OZONE PRECURSOR EMISSIONS

Typical Ozone Season Emissions
 VOC Emissions 0.0373773913 lb/day
 NOx Emissions _____ lb/day
 CO Emissions _____ lb/day

HAZARDOUS AIR POLLUTANTS

| HAP | CAS CODE | LB/YR |
|-------------------------|-----------|--------------|
| 1,1,2 - Trichloroethane | 79-00-5 | N/A |
| Toluene | 108-88-3 | 0.0691200000 |
| Methylene Chloride | 75-09-2 | N/A |
| Trichloroethylene | 79-01-6 | N/A |
| Hexane | 110-54-3 | N/A |
| o-Xylenes | 95-47-6 | N/A |
| Cumene | 98-82-8 | N/A |
| Naphthalene | 91-20-3 | N/A |
| m&p-Xylenes | | N/A |
| Xylenes(Isomers) | 1330-20-7 | 0.1382400000 |
| Ethyl benzene | 100-41-4 | 0.0691200000 |
| Tetrachloroethylene | 127-18-4 | 0.0691200000 |
| Methyl chloroform | 71-55-6 | 0.0691200000 |

CRITERIA POLLUTANT EMISSIONS

VOC Emissions 0.0068774400 ton/yr

^New York State HAP
 (use additional sheets if necessary)

VENTILATION INFORMATION

Capture Device Present? _____ (Y or N)
 Stack (release) Height _____ feet Stack Gas Velocity _____ ft/sec
 Stack Diameter _____ inch Stack Gas Flow Rate _____ ascf/min
 Stack Gas Temperature _____ oF

COMMENTS

EMISSIONS FOR SOLVENT DEGREASING OPERATIONS

Federal and New York State Regulations

| | | | |
|------------|-----------------------------|-----------|--------------------|
| Facility: | <u>Seneca Army Depot</u> | Date: | <u>8/16/94</u> |
| Location: | <u>Bldg 718</u> | Initials: | <u>DCP</u> |
| ID Number: | <u> </u> | SCC: | <u>4-01-003-35</u> |

INPUT DATA

| | | | |
|---|--------|-----------------|---|
| Number of Degreasing Units | 1 | | |
| Amount of Solvent used/unit (If not known enter "0") | 0 | Gal/Yr | ** If the amount of solvent used/unit AND disposed/unit is not known then the volatile % by weight must be entered, otherwise the program will use surface area and operation time of the degreaser to calculate emissions. |
| Amount of Solvent Disposed/unit (If not known enter "0") | 0 | Gal/Yr | |
| Density (calculated based on solvent type) | 6.6552 | lb/gal | |
| Volatile Fraction by Weight (calculated based on solvent type) | 0.995 | | |
| Surface Area of Degreaser (If not known enter "0") | 6.00 | Ft ² | |
| Operation of Degreaser (If not known enter "0") | 40 | Hrs/Yr | |
| Type of Degreaser | a | | A - COLD DEGREASER (closed top) B - VAPOR DEGREASER C - CONVEYORIZED DEGREASER (Vapor) D - CONVEYORIZED (Non-Boiling) |
| TYPE OF SOLVENT USED | a | | A - SAFETY-KLEEN 105 SOLVENT-MS B - 1,1,1-TRICHLOROETHANE C - TRICHLOROFLUOROMETHANE (FREON 11) D - 1,1,2-TRICHLOROETHANE E - TOLUENE F - METHYLENE CHLORIDE G - TRICHLORETHYLENE H - TRICHLOROTRIFLUOROETHANE (FREON 113) I - CHLOROSOLVE J - STODDARD SOLVENT K - OTHER |

SOLUTION

| | | |
|---------------|-------|--------|
| VOC EMISSIONS | 13.75 | Lbs/Yr |
|---------------|-------|--------|

REFERENCES:

Emission Calculations based on AP-42 Emission Factors, section 4.6, Table 4.6-2 and Table 4.6-3 and
 Mass Balance
 AP-42 Data Quality: C

SPECIATION OF EMISSIONS

| | | |
|---------------------------|-------|--------|
| TOTAL VOC EMISSIONS | 13.75 | Lbs/Yr |
| TOTAL AIR TOXIC EMISSIONS | 0.41 | Lbs/Yr |

INDIVIDUAL AIR TOXIC EMISSIONS

| Chemical Name | CAS # | Emissions (Lbs/Yr) | Profile Data Quality |
|-------------------------|-----------|-----------------------|-------------------------|
| 1,1,2 - Trichloroethane | 79-00-5 | N/A | E |
| Toluene | 108-88-3 | 6.91E-02 | E/B/* |
| Methylene Chloride | 75-09-2 | N/A | E |
| Trichloroethylene | 79-01-6 | N/A | E |
| Hexane | 110-54-3 | N/A | B |
| o-Xylenes | 95-47-6 | N/A | B |
| Cumene | 98-82-8 | N/A | B |
| Naphthalene | 91-20-3 | N/A | B |
| m&p-Xylenes | | N/A | B |
| Xylenes(Isomers) | 1330-20-7 | 1.38E-01 | * |
| Ethyl benzene | 100-41-4 | 6.91E-02 | * |
| Tetrachloroethylene | 127-18-4 | 6.91E-02 | * |
| Methyl chloroform | 71-55-6 | 6.91E-02 | * |

^New York State HAP

* Emission Factors obtained from Safety-Kleen 105 MSDS

** SPECIATION FACTORS OBTAINED FROM EPA AIR EMISSIONS SPECIES MANUAL

GASOLINE SERVICE STATIONS

GENERAL INFORMATION

Installation Seneca Army Depot
 SCC..... listed below Unit ID #..... Public Works Gas Station
 Location..... Bldg 120 Permit #.....
 POC..... Thomas Grasek Inventoried by..... T. Sletten
 Phone..... (607) 869-1450 Inventory Date..... June 6-10, 1994

LIQUID PRODUCT INFORMATION

Stored Product Mogas - UST *Liq Density..(W_L) 4.9 lb/gal
 *Molec Weight (M_v) 62 at 60°F *Vapor Pressure (P_{VA}) 6.9 at 60°F psia

TANK INFORMATION

Tank Size 20,000 gal Annual Net Thruput..(Q) 136,314 gal

EVAPORATIVE EMISSIONS FROM GASOLINE SERVICE STATION OPERATIONS

Loading underground tank

(check one)
 Submerged filling _____ lb/10³ gal
 Splash filling _____ lb/10³ gal 4-06-003-06 Note: 2 Mogas Pumps
 Balanced submerged filling ✓ lb/10³ gal 2 Nozzles Each
 Stage I

Underground Breathing and Emptying 1.0 lb/10³ gal 4-06-003-07

Vehicle fueling operations

(check one)
 Displacement losses - uncontrolled ✓ lb/10³ gal 4-06-004-01
 Displacement losses - controlled _____ lb/10³ gal

Spillage - .7 lb/10³ gal 4-06-004-02

THROUGHPUT INFORMATION (bbI)

| MONTH | gal | MONTH | gal |
|----------------|--------|-------|---------|
| Oct 1992 | 10,064 | Apr | 8,945 |
| Nov | 11,241 | May | 13,629 |
| Dec | 12,108 | Jun | 18,417 |
| Jan 1993 | 11,584 | Jul | 6,229 |
| Feb | 11,654 | Aug | 10,905 |
| Mar | 11,051 | Sep | 10,487 |
| ANNUAL TOTALS: | | | 136,314 |

MOGAS Loading Losses..... VOC Emissions tpy
 MOGAS Breathing Losses..... VOC Emissions tpy
 MOGAS Displacement Losses..... VOC Emissions tpy
 SPILLAGE Losses..... VOC Emissions tpy

EMISSION RATE DETERMINATION METHOD

Stack Test Data _____ Emission Factor X Material Balance _____

Similar Unit Data _____ Other _____

Reference: AP-42, VOLUME 1, SECTION 4.4, TABLE 4.4-7 AND EPA AIR EMISSIONS SPECIES MANUAL, VOL1,

PROFILE NO 1190

OZONE PRECURSOR EMISSIONS

Typical Ozone Season Emissions
 VOC Emissions 4.9302281370 lb/day
 NOx Emissions _____ lb/day
 CO Emissions _____ lb/day

HAZARDOUS AIR POLLUTANTS

| HAP | CAS CODE | LB/YR |
|---------------|----------|----------------|
| Hexane | 110-54-3 | 68.0017737956 |
| Cumene | 98-82-8 | 5.7392801413 |
| Benzene | 71-43-2 | 56.5232135130 |
| Toluene | 108-88-3 | 264.7025568209 |
| Ethylbenzene | 100-41-4 | 70.7844550763 |
| o-Xylenes | 95-47-6 | 111.4811688056 |
| Styrene | 100-42-5 | 2.9565988607 |
| Chlorobenzene | 108-90-7 | 0.5217527401 |
| Naphthalene | 91-20-3 | 13.9134064032 |
| Xylenes(M&P) | | 265.7460623011 |
| Heptane* | 142-82-5 | 32.0008347274 |

CRITERIA POLLUTANT EMISSIONS

VOC Emissions 0.8695879002 ton/yr
 NOx Emissions _____ ton/yr
 CO Emissions _____ ton/yr
 SO2 Emissions _____ ton/yr
 PM10 Emissions _____ ton/yr
 Total Particulate _____ ton/yr

* New York State HAP
 (use additional sheets if necessary)

COMMENTS

EMISSIONS FROM SERVICE STATION OPERATIONS
Federal and New York State Regulations

Facility: Seneca Army Depot Date: 8/17/94
 Location: Bldg 120 Initials: DCP
 ID Number: _____

(1) FILLING UNDERGROUND TANK

UNDERGROUND FILLING METHOD submerged (SUBMERGED/SPLASH)
 STAGE I VAPOR CONTROL yes (YES/NO)

(2) VEHICLE REFUELING OPERATIONS

(Enter N/A, if ozone season use is unknown and zero, if no ozone season use)

TOTAL THROUGHPUT 136,314 gal/year
 OZONE SEASON THROUGHPUT 35,551 gal/year
 STAGE II VAPOR CONTROL no (YES/NO)

ENTER REFUELING EMISSION FACTOR FOR THE INSTALLATION

(See table 3-6 for factors)

1290 mg/liter

ENTER EFFICIENCY OF STAGE II VAPOR RECOVERY SYSTEM

(See table 4-2 for efficiency's, use 90% if efficiency is not known)

90 % (use whole number)

| SCC | Type of Loss | VOC EMISSIONS |
|-------------|-------------------------------|-------------------------|
| 4-06-003-06 | Filling UST Losses | 40.89 lbs/year |
| 4-06-003-07 | UST Beathing/ Emptying losses | 136.314 lbs/year |
| 4-06-004-01 | Vehicle refueling losses | 1466.55 lbs/year |
| 4-06-004-02 | Spillage losses | 95.4198 lbs/year |
| | TOTAL VOC EMISSIONS | 1739.18 lbs/year |

** EMISSION FACTORS OBTAINED FROM AP-42, SECTION 4.4, TABLE 4.4-7

** VEHICLE REFUELING EMISSION FACTORS TAKEN FROM EPA TECHNICAL GUIDANCE-
 STAGE II VAPOR RECOVERY SYSTEMS FOR CONTROL OF VEHICLE REFUELING EMISSIONS AT
 GASOLINE DISPENSING FACILITIES, VOLUME 1: EPA-40/3-91-022a

SPECIATION OF EMISSIONS

TOTAL VOC EMISSIONS 1,739.18 Lbs/Yr
 TOTAL AIR TOXIC EMISSIONS 892.37 Lbs/Yr

INDIVIDUAL AIR TOXIC EMISSIONS

| Chemical Name | CAS # | Emissions (Lbs/Yr) | Profile Data Quality |
|-----------------|----------|-----------------------|-------------------------|
| Hexane | 110-54-3 | 6.80E+01 | B |
| Cumene | 98-82-8 | 5.74E+00 | B |
| Benzene | 71-43-2 | 5.65E+01 | B |
| Toluene | 108-88-3 | 2.65E+02 | B |
| Ethylbenzene | 100-41-4 | 7.08E+01 | B |
| o-Xylene | 95-47-6 | 1.11E+02 | B |
| Styrene | 100-42-5 | 2.96E+00 | B |
| Chlorobenzene | 108-90-7 | 5.22E-01 | B |
| Napthalene | 91-20-3 | 1.39E+01 | B |
| Xylenes (M & P) | | 2.66E+02 | B |
| Heptane* | 142-82-5 | 3.20E+01 | B |

*New York State HAP

SPECIATION FACTORS FOR GASOLINE OBTAINED FROM EPA AIR EMISSIONS SPECIES MANUAL
 PROFILE #

GASOLINE SERVICE STATIONS

GENERAL INFORMATION

Installation Seneca Army Depot
 SCC..... listed below Unit ID #..... Lake Boat House
 Location..... Bldg 2456 Permit #.....
 POC..... Thomas Grasek Inventoried by..... T. Sletten
 Phone..... (607) 869-1450 Inventory Date..... June 6-10, 1994

LIQUID PRODUCT INFORMATION

Stored Product Gasoline - AST *Liq Density..(W_L) 4.9 lb/gal
 *Molec Weight (M_w) 62 at 60°F *Vapor Pressure (P_{VA}) 6.9 at 60°F psia
 Tank Color - White

TANK INFORMATION

Tank Size 550 gal Annual Net Thruput..(Q) 500 gal

EVAPORATIVE EMISSIONS FROM GASOLINE SERVICE STATION OPERATIONS

Loading aboveground tank

(check one)
 Submerged filling _____ lb/10³ gal
 Splash filling ✓ lb/10³ gal 4-06-010-07
 Balanced submerged filling _____ lb/10³ gal

Aboveground Breathing and Emptying _____ lb/10³ gal 4-03-001-01

Vehicle fueling operations

(check one)
 Displacement losses - uncontrolled ✓ lb/10³ gal 4-06-004-01
 Displacement losses - controlled _____ lb/10³ gal

Spillage - .7 lb/10³ gal 4-06-004-02

THROUGHPUT INFORMATION (bbl)

| MONTH | gal | MONTH | gal |
|----------------|-------|-------|-------|
| Jan | _____ | Jul | 100 |
| Feb | _____ | Aug | 100 |
| Mar | _____ | Sep | 100 |
| Apr | _____ | Oct | _____ |
| May | 100 | Nov | _____ |
| Jun | 100 | Dec | _____ |
| ANNUAL TOTALS: | | | 500 |

MOGAS Loading Losses..... VOC Emissions tpy
 MOGAS Breathing Losses..... VOC Emissions tpy
 MOGAS Displacement Losses..... VOC Emissions tpy
 SPILLAGE Losses..... VOC Emissions tpy

EMISSION RATE DETERMINATION METHOD

Stack Test Data _____ Emission Factor X Material Balance _____
 Similar Unit Data _____ Other _____

Reference: AP-42 , VOLUME 1, SECTION 12.3 AND EPA AIR EMISSIONS SPECIES MANUAL, VOL1,

PROFILE NO 1190.

OZONE PRECURSOR EMISSIONS

HAZARDOUS AIR POLLUTANTS

Typical Ozone Season Emissions

HAP

CAS CODE

LB/YR

VOC Emissions 0.758303 lb/day

Hexane 110-54-3 3.811616113

NOx Emissions _____ lb/day

Napthalene 91-20-3 0.779870304

CO Emissions _____ lb/day

Xylenes (M & P) _____ 14.89552281

Benzene 71-43-2 3.168223112

Toluene 108-88-3 14.83703254

Ethyl benzene 100-41-4 3.967590174

o-Xylenes 95-47-6 6.248710814

CRITERIA POLLUTANT EMISSIONS

Styrene 100-42-5 0.16572244

VOC Emissions 0.0487419 ton/yr

Cumene 98-82-8 0.321696501

NOx Emissions _____ ton/yr

Chlorobenzene 108-90-7 0.029245136

CO Emissions _____ ton/yr

Heptane* 142-82-5 1.7937017

SO2 Emissions _____ ton/yr

PM10 Emissions _____ ton/yr

Total Particulate _____ ton/yr

*New York State HAP
(use additional sheets if necessary)

STACK INFORMATION

Stack (release) Height _____ feet
 Stack Diameter _____ inch

Stack Gas Velocity _____ ft/sec
 Stack Gas Flow Rate _____ ascf/min
 Stack Gas Temperature _____ oF

Other sources that share this stack? _____

COMMENTS

**EMISSIONS FOR ABOVEGROUND GASOLINE SERVICE STATIONS
(FIXED ROOF STORAGE TANK)**

Federal and New York State Regulations

| | | | |
|------------|--------------------------|-----------|------------------|
| Facility: | <u>Seneca Army Depot</u> | Date: | <u>8/28/94</u> |
| Location: | <u>Bldg 2456</u> | Initials: | <u>LLN</u> |
| ID Number: | <u>Lake Boat House</u> | SCC # | <u>see below</u> |

| | | |
|-----------------------------------|-----------------------|---|
| CRUDE OIL STORED | no | (YES / NO) |
| ORIENTATION OF TANK | horizontal | (HORIZONTAL / VERTICAL) |
| TANK DIAMETER (D) | 4 | Ft |
| TANK LENGTH / HEIGHT (L / H) | 6 | Ft |
| ANNUAL THROUGHPUT (Q) | 500 | Gal / Yr |
| OZONE SEASON THRUPUT (Q) | 300 | Gal |
| MOLECULAR WEIGHT OF LIQUID (Mv) | 62 | Lb / Lb * mole |
| (See Enclosed Charts) | | Gasoline RVP13 62AMU, 6.9 psia Fuel oil #2 130AMU, .0074 psia Fuel oil #6 190AMU, .00004 psia JP-4 80AMU, 1.3 psia JP-8 130AMU, 0.0085 psia |
| TRUE VAPOR PRESSURE (psia) | 6.90000 | psia |
| (See Enclosed Charts) | | |
| | <u>Annual Average</u> | |
| DAILY MAX AMBIENT TEMP (Tax) | 55.8 | Fahrenheit |
| DAILY MIN AMBIENT TEMP (Tan) | 39.3 | Fahrenheit |
| TANK PAINT SOLAR ABSORBANCE (a) | 0.17 | -- |
| DAILY SOLAR INSOLATION FACTOR (I) | 1034 | Btu / Ft ² * Day |
| (See Enclosed Charts) | | |

FOR VERTICAL TANKS ONLY

| | |
|--|---------|
| SHAPE OF TANK ROOF | FLAT |
| HEIGHT OF LIQUID IN TANK (HL) (If not known enter 1/2 the value of tank height) (this template for flat roof tanks only) | 2.85 Ft |

ENTER EFFICIENCY OF STAGE II VAPOR RECOVERY SYSTEM

0 %

ENTER STATE VEHICLE REFUELING EMISSION FACTOR

1290 mg/liter

| SCC | TYPE OF LOSS | EMISSION RATE |
|-------------|---------------------------------|--------------------|
| 4-03-001-01 | STANDING STORAGE LOSS EMISSIONS | 87.62 lb/yr |
| 4-06-010-07 | WORKING LOSS EMISSIONS | 4.13 lb/yr |
| 4-06-004-01 | VEHICLE REFUELING LOSSES | 5.38 lb/yr |
| 4-06-004-02 | SPILLAGE LOSSES | 0.35 lb/yr |
| | TOTAL VOC EMISSIONS | 97.48 lb/yr |

NOTE:

The tank height does not include the roof height for tanks which do not have a flat roof. Molecular weights and psia taken from AP-42 section 12.3 table 12.3-2 at 60 degrees fahrenheit. EF's for standing and working losses obtained from AP-42 section 12.3. Emission factors for spillage losses taken from AP-42 section 4.4. EF's for vehicle refueling taken from EPA Technical Guidance-Stage II vapor recovery systems for control of vehicle refueling emissions at gasoline service stations.

| Ozone Season Data | June | July | August |
|-----------------------------------|------|------|--------|
| Daily Max Ambient Temp (°F) (Tax) | 75.6 | 80.2 | 78.2 |

| | | | |
|-----------------------------------|------|------|------|
| Daily Min Ambient Temp (°F) (Tan) | 56.4 | 61.2 | 59.6 |
| Daily Solar Insolation Factor (l) | 1804 | 1776 | 1513 |

(See Enclosed Charts)

The nearest location to Seneca listed on the charts was Buffalo, New York.

SPECIATION OF EMISSIONS

| | | |
|---------------------------|-------|--|
| TYPE OF LIQUID STORED | A | A - GASOLINE B - JET NAPHTHA (JP-4) C - JP-8 D - FUEL OIL #2/DIESEL E - FUEL OIL #6 F - OTHER |
| TOTAL VOC EMISSIONS | 97.48 | Lbs/Yr |
| TOTAL AIR TOXIC EMISSIONS | 50.02 | Lbs/Yr |

INDIVIDUAL AIR TOXIC EMISSIONS

| Chemical Name | CAS # | Emissions (Lbs/Yr) | Profile Data Quality |
|-----------------|----------|-----------------------|-------------------------|
| Hexane | 110-54-3 | 3.81E+00 | B |
| Cumene | 98-82-8 | 3.22E-01 | B |
| Benzene | 71-43-2 | 3.17E+00 | B |
| Toluene | 108-88-3 | 1.48E+01 | B |
| Ethylbenzene | 100-41-4 | 3.97E+00 | B |
| o-Xylene | 95-47-6 | 6.25E+00 | B |
| p-Xylene | 106-42-3 | N/A | B |
| m-xylene | 108-38-3 | N/A | B |
| Styrene | 100-42-5 | 1.66E-01 | B |
| Chlorobenzene | 108-90-7 | 2.92E-02 | B |
| Napthalene | 91-20-3 | 7.80E-01 | B |
| Xylenes (m & p) | | 1.49E+01 | B |
| Heptane* | 142-82-5 | 1.79E+00 | B |

*:New York State HAP

SPECIATION FACTORS FOR GASOLINE OBTAINED FROM EPA AIR EMISSIONS SPECIES MANUAL
PROFILE # 1190SPECIATION FACTORS FOR JP-4 ARE FROM THE INSTALLATION RESTORATION
TOXICOLOGY GUIDE

DATA QUALITY RATING "AEHA" STANDS FOR AN APPROVED FUEL SPECIATION METHODOLOGY.

AIRCRAFT TAKE-OFF/LANDING EMISSIONS

GENERAL INFORMATION

Installation Seneca Army Depot GEOMET Rep.....T. Sletten

Calendar Year Data Represents.....94

SCC.....2-75-020-11 Bldg/Area No.....Airfield

Date.....June 6-10, 1994 Unit ID Number...

POC.....Jon Vanderhoot Phone No.....

Type of Aircraft (i.e., Combat, Bomber, Helicopter)...Aircraft

DOD Designation (i.e., A-4, F-14).....C-141

Name (i.e., Skyhawk, Tomcat)...Starlifter Manufacturer (i.e., Boeing)...

Power Plant (engine) type (i.e., Turbo Prop, Turbo Fan, Turbo Shaft)...

Number of Power Plants (engines)...4

Power Plant Manufacturer (i.e., G.E.)...

Power Plant Designation (i.e., J52, J65, F100)...TF33

Number of Take-offs and Landings per year...12

Typical Duration for Landing/Take-off Cycle:

Idle: _____ min.

Take-off: _____ min.

Climbout: _____ min.

Approach: _____ min.

EMISSION RATE DETERMINATION METHOD

Stack Test Data _____ Emission Factor X Material Balance _____

Similar Unit Data _____ Other _____

Reference: AP-42, VOLUME 2, TABLE II-1-10. SPECIATION PROFILES FROM AIR EMISSIONS SPECIES MANUAL, VOLUME 1, PROFILE NO 1097.

OZONE PRECURSOR EMISSIONS

Typical Ozone Season Emissions

VOC Emissions 2.8591304348 lb/day

NOx Emissions 0.6260869565 lb/day

CO Emissions 3.0130434783 lb/day

HAZARDOUS AIR POLLUTANTS

| HAP | CAS CODE | LB/YR |
|-----------------------|----------|----------------|
| 1,3,Butadiene | 106-99-0 | 19.8858240000 |
| Formaldehyde | 50-00-0 | 162.8743680000 |
| Acetaldehyde | 75-07-0 | 50.8193280000 |
| Propionaldehyde | 123-38-6 | 10.3111680000 |
| Acrolein | 107-02-8 | 25.0414080000 |
| Benzene | 71-43-2 | 21.2536320000 |
| Toluene | 108-88-3 | 5.7868800000 |
| Ethylbenzene | 100-41-4 | 1.8938880000 |
| o-xylene | 95-47-6 | 2.1043200000 |
| Styrene | 100-42-5 | 4.3138560000 |
| Phenol | 108-95-2 | 2.7356160000 |
| Naphthalene | 91-12-3 | 6.3129600000 |
| m-Xylene and p-Xylene | - | 3.1564800000 |
| Heptane* | 142-82-5 | 0.7365120000 |
| Acetone* | 67-64-1 | 25.3570560000 |

CRITERIA POLLUTANT EMISSIONS

VOC Emissions 0.5260800000 ton/yr

NOx Emissions 0.1152000000 ton/yr

CO Emissions 0.5544000000 ton/yr

SO2 Emissions 0.0180000000 ton/yr

PM10 Emissions - ton/yr

Total Particulate 0.1980000000 ton/yr

* New York State HAP
(use additional sheets if necessary)

REMARKS

**Emissions For Aircraft Take-Offs and Landings
Federal and New York State Regulations**

Facility: Seneca Army Depot Date: 8/23/94
 Location: Airfield Initials: MJO
 SCC: 2-75-020-11

TYPE OF AIRCRAFT C-141
 AIRCRAFT ALPHANUMERIC CODE C-141 (See AP-42, Vol. 2, Table II-1-10)
 NOTES: Starlifter

NUMBER OF LANDING - TAKE-OFF CYCLES 12 PER YEAR

EMISSION FACTORS:

| | |
|-----|---------------------------|
| CO | <u>92.4</u> lb/LTO cycle |
| NOx | <u>19.2</u> lb/LTO cycle |
| SOx | <u>3</u> lb/LTO cycle |
| VOC | <u>87.68</u> lb/LTO cycle |
| TSP | <u>33.00</u> lb/LTO cycle |

SOLUTION

| | | |
|-----------------------------|----------|----------|
| CARBON MONOXIDE (CO) | 1,108.80 | lbs/year |
| NITROGEN OXIDE (NOx) | 230.40 | lbs/year |
| SULFUR OXIDE (SOX) | 36.00 | lbs/year |
| VOC(as hydrocarbon) | 1,052.16 | lbs/year |
| PARTICULATE EMISSIONS (TSP) | 396.00 | lbs/year |

NOTES:

Criteria pollutant emissions factors are from AP-42, Volume 2, Table II-1-10 dated 2/80.
 Data Rating not available.

TOTAL VOC EMISSIONS = 1052.16 lbs/year
 TOTAL PARTICULATE EMISSIONS = 396.00 lbs/year
 TOTAL AIR TOXIC EMISSIONS = 342.5833 lbs/year

HAP EMISSIONS

| POLLUTANT | CAS No. | EMISSIONS (LBS/YR) | RATING |
|-----------------------|----------|--------------------|--------|
| 1,3,Butadiene | 106-99-0 | 19.88582 | B |
| Formaldehyde | 50-00-0 | 162.8744 | B |
| Acetaldehyde | 75-07-0 | 50.81933 | B |
| Propionaldehyde | 123-38-6 | 10.31117 | B |
| Acrolein | 107-02-8 | 25.04141 | B |
| Benzene | 71-43-2 | 21.25363 | B |
| Toluene | 108-88-3 | 5.78688 | B |
| Ethylbenzene | 100-41-4 | 1.893888 | B |
| o-xylene | 95-47-6 | 2.10432 | B |
| Styrene | 100-42-5 | 4.313856 | B |
| Phenol | 108-95-2 | 2.735616 | B |
| Naphthalene | 91-12-3 | 6.31296 | B |
| m-Xylene and p-Xylene | | 3.15648 | B |
| Heptane* | 142-82-5 | 0.736512 | B |
| Acetone* | 67-64-1 | 25.35706 | B |

* New York State HAP

NOTES

HAP emissions factors are from EPA Air Emissions Species Manual, Volume 1, Profile Number 1097.

AIRCRAFT TAKE-OFF/LANDING EMISSIONS

GENERAL INFORMATION

Installation Seneca Army Depot GEOMET Rep..... T. Sletten
 Calendar Year Data Represents..... 93
 SCC..... 2-75-020-11 Bldg/Area No..... Airfield
 Date..... June 6-10, 1994 Unit ID Number...
 POC..... Jon Vanderhoot Phone No.....

Type of Aircraft (i.e., Combat, Bomber, Helicopter)... Aircraft

DOD Designation (i.e., A-4, F-14)..... C-12

Name (i.e., Skyhawk, Tomcat)... _____ Manufacturer (i.e., Boeing)...

Power Plant (engine) type (i.e., Turbo Prop, Turbo Fan, Turbo Shaft)... Turbo prop.

Number of Power Plants (engines)... 2

Power Plant Manufacturer (i.e., G.E.)... Pratt and Whitney

Power Plant Designation (i.e., J52, J65, F100)... PT600

Number of Take-offs and Landings per year... 34

Typical Duration for Landing/Take-off Cycle:

Idle: _____ min.
 Take-off: _____ min.
 Climbout: _____ min.
 Approach: _____ min.

EMISSION RATE DETERMINATION METHOD

Stack Test Data _____ Emission Factor X Material Balance _____

Similar Unit Data _____ Other _____

Reference: AP-42, VOLUME 2, TABLE II-1-10. SPECIATION PROFILES FROM AIR EMISSIONS SPECIES MANUAL, VOLUME 1, PROFILE NO 1097.

OZONE PRECURSOR EMISSIONS

HAZARDOUS AIR POLLUTANTS

Typical Ozone Season Emissions

HAP

CAS CODE

LB/YR

VOC Emissions 0.1173369565 lb/day

 1,3,Butadiene 106-99-0 0.8161020000

 Formaldehyde 50-00-0 6.6842640000

NOx Emissions 0.0138586957 lb/day

 Acetaldehyde 75-07-0 2.0855940000

 Propionaldehyde 123-38-6 0.4231640000

CO Emissions 0.1598369565 lb/day

 Acrolein 107-02-8 1.0276840000

 Benzene 71-43-2 0.8722360000

 Toluene 108-88-3 0.2374900000

CRITERIA POLLUTANT EMISSIONS

 Ethylbenzene 100-41-4 0.0777240000

 o-xylene 95-47-6 0.0863600000

VOC Emissions 0.0215900000 ton/yr

 Styrene 100-42-5 0.1770380000

 Phenol 108-95-2 0.1122680000

NOx Emissions 0.0025500000 ton/yr

 Naphthalene 91-12-3 0.2590800000

 m-Xylene and p-Xylene - 0.1295400000

CO Emissions 0.0294100000 ton/yr

 Heptane* 142-82-5 0.0302260000

 Acetone* 67-64-1 1.0406380000

SO2 Emissions 0.0005100000 ton/yr

PM10 Emissions - ton/yr

Total Particulate 0.0000000000 ton/yr

* New York State HAP
(use additional sheets if necessary)

REMARKS

**Emissions For Aircraft Take-Offs and Landings
Federal and New York State Regulations**

Facility: Seneca Army Depot
 Location: Airfield
 SCC: 2-75-02-11

Date: 8/23/94
 Initials: MJO

TYPE OF AIRCRAFT

C-12

AIRCRAFT ALPHANUMERIC CODE

T-34C

(See AP-42, Vol. 2, Table II-1-10)

NOTES: _____

NUMBER OF LANDING - TAKE-OFF CYCLES

34 PER YEAR

EMISSION FACTORS:

CO 1.73 lb/LTO cycleNOx 0.15 lb/LTO cycleSOx 0.03 lb/LTO cycleVOC 1.27 lb/LTO cycleTSP 0.00 lb/LTO cycle**SOLUTION**

| | | |
|------------------------------------|--------------|-----------------|
| CARBON MONOXIDE (CO) | 58.82 | lbs/year |
| NITROGEN OXIDE (NOx) | 5.10 | lbs/year |
| SULFUR OXIDE (SOX) | 1.02 | lbs/year |
| VOC(as hydrocarbon) | 43.18 | lbs/year |
| PARTICULATE EMISSIONS (TSP) | 0.00 | lbs/year |

NOTES:

Criteria pollutant emissions factors are from AP-42, Volume 2, Table II-1-10 dated 2/80.
 Data Rating not available.

TOTAL VOC EMISSIONS = 43.18 lbs/year
 TOTAL PARTICULATE EMISSIONS = 0.00 lbs/year
 TOTAL AIR TOXIC EMISSIONS = 14.05941 lbs/year

HAP EMISSIONS

| POLLUTANT | CAS No. | EMISSIONS (LBS/YR) | RATING |
|-----------------------|----------|--------------------|--------|
| 1,3,Butadiene | 106-99-0 | 0.816102 | B |
| Formaldehyde | 50-00-0 | 6.684264 | B |
| Acetaldehyde | 75-07-0 | 2.085594 | B |
| Propionaldehyde | 123-38-6 | 0.423164 | B |
| Acrolein | 107-02-8 | 1.027684 | B |
| Benzene | 71-43-2 | 0.872236 | B |
| Toluene | 108-88-3 | 0.23749 | B |
| Ethylbenzene | 100-41-4 | 0.077724 | B |
| o-xylene | 95-47-6 | 0.08636 | B |
| Styrene | 100-42-5 | 0.177038 | B |
| Phenol | 108-95-2 | 0.112268 | B |
| Naphthalene | 91-12-3 | 0.25908 | B |
| m-Xylene and p-Xylene | | 0.12954 | B |
| Heptane* | 142-82-5 | 0.030226 | B |
| Acetone* | 67-64-1 | 1.040638 | B |

* New York State HAP

NOTES

HAP emissions factors are from EPA Air Emissions Species Manual, Volume 1, Profile Number 1097.

AIRCRAFT TAKE-OFF/LANDING EMISSIONS

GENERAL INFORMATION

Installation Seneca Army Depot GEOMET Rep..... T. Sletten
Calendar Year Data Represents..... 93
SCC..... 2-75-620-11 Bldg/Area No..... Airfield
Date..... June 6-10, 1994 Unit ID Number...
POC..... Jon Vanderhoot Phone No.....

Type of Aircraft (i.e., Combat, Bomber, Helicopter)... Utility Plane

DOD Designation (i.e., A-4, F-14)..... U-21

Name (i.e., Skyhawk, Tomcat)... _____ Manufacturer (i.e., Boeing)...

Power Plant (engine) type (i.e., Turbo Prop, Turbo Fan, Turbo Shaft)... Turbo prop.

Number of Power Plants (engines)... 2

Power Plant Manufacturer (i.e., G.E.)... Pratt and Whitney

Power Plant Designation (i.e., J52, J65, F100)... PT60

Number of Take-offs and Landings per year... 28

Typical Duration for Landing/Take-off Cycle:

Idle: _____ min.
Take-off: _____ min.
Climbout: _____ min.
Approach: _____ min.

EMISSION RATE DETERMINATION METHOD

Stack Test Data _____ Emission Factor X Material Balance _____

Similar Unit Data _____ Other _____

Reference: AP-42, VOLUME 2, TABLE II-1-10. SPECIATION PROFILES FROM AIR EMISSIONS SPECIES MANUAL, VOLUME 1, PROFILE NO 1097.

OZONE PRECURSOR EMISSIONS

HAZARDOUS AIR POLLUTANTS

Typical Ozone Season Emissions

VOC Emissions 0.0966304348 lb/day
 NOx Emissions 0.0114130435 lb/day
 CO Emissions 0.1316304348 lb/day

| HAP | CAS CODE | LB/YR |
|-----------------------|----------|--------------|
| 1,3,Butadiene | 106-99-0 | 0.6720840000 |
| Formaldehyde | 50-00-0 | 5.5046880000 |
| Acetaldehyde | 75-07-0 | 1.7175480000 |
| Propionaldehyde | 123-38-6 | 0.3484880000 |
| Acrolein | 107-02-8 | 0.8463280000 |
| Benzene | 71-43-2 | 0.7183120000 |
| Toluene | 108-88-3 | 0.1955800000 |
| Ethylbenzene | 100-41-4 | 0.0640080000 |
| o-xylene | 95-47-6 | 0.0711200000 |
| Styrene | 100-42-5 | 0.1457960000 |
| Phenol | 108-95-2 | 0.0924560000 |
| Naphthalene | 91-12-3 | 0.2133600000 |
| m-Xylene and p-Xylene | - | 0.1066800000 |
| Heptane* | 142-82-5 | 0.0248920000 |
| Acetone* | 67-64-1 | 0.8569960000 |

CRITERIA POLLUTANT EMISSIONS

VOC Emissions 0.0177800000 ton/yr
 NOx Emissions 0.0021000000 ton/yr
 CO Emissions 0.0242200000 ton/yr
 SO2 Emissions 0.0004200000 ton/yr
 PM10 Emissions - ton/yr
 Total Particulate 0.0000000000 ton/yr

* New York State HAP
 (use additional sheets if necessary)

REMARKS

**Emissions For Aircraft Take-Offs and Landings
Federal and New York State Regulations**

Facility: Seneca Army Depot
 Location: Airfield
 SCC: 2-75-020-11

Date: 8/23/94
 Initials: MJO

TYPE OF AIRCRAFT

U-21

AIRCRAFT ALPHANUMERIC CODE

T-34C

(See AP-42, Vol. 2, Table II-1-10)

NOTES: _____

NUMBER OF LANDING - TAKE-OFF CYCLES

28 PER YEAR

EMISSION FACTORS:

| | |
|-----------------|--------------------------|
| CO | <u>1.73</u> lb/LTO cycle |
| NO _x | <u>0.15</u> lb/LTO cycle |
| SO _x | <u>0.03</u> lb/LTO cycle |
| VOC | <u>1.27</u> lb/LTO cycle |
| TSP | <u>0.00</u> lb/LTO cycle |

SOLUTION

| | | |
|--|--------------|-----------------|
| CARBON MONOXIDE (CO) | 48.44 | lbs/year |
| NITROGEN OXIDE (NO_x) | 4.20 | lbs/year |
| SULFUR OXIDE (SOX) | 0.84 | lbs/year |
| VOC(as hydrocarbon) | 35.56 | lbs/year |
| PARTICULATE EMISSIONS (TSP) | 0.00 | lbs/year |

NOTES:

Criteria pollutant emissions factors are from AP-42, Volume 2, Table II-1-10 dated 2/80.
 Data Rating not available.

TOTAL VOC EMISSIONS = 35.56 lbs/year
 TOTAL PARTICULATE EMISSIONS = 0.00 lbs/year
 TOTAL AIR TOXIC EMISSIONS = 11.57834 lbs/year

HAP EMISSIONS

| POLLUTANT | CAS No. | EMISSIONS (LBS/YR) | RATING |
|-----------------------|----------|--------------------|--------|
| 1,3,Butadiene | 106-99-0 | 0.672084 | B |
| Formaldehyde | 50-00-0 | 5.504688 | B |
| Acetaldehyde | 75-07-0 | 1.717548 | B |
| Propionaldehyde | 123-38-6 | 0.348488 | B |
| Acrolein | 107-02-8 | 0.846328 | B |
| Benzene | 71-43-2 | 0.718312 | B |
| Toluene | 108-88-3 | 0.19558 | B |
| Ethylbenzene | 100-41-4 | 0.064008 | B |
| o-xylene | 95-47-6 | 0.07112 | B |
| Styrene | 100-42-5 | 0.145796 | B |
| Phenol | 108-95-2 | 0.092456 | B |
| Naphthalene | 91-12-3 | 0.21336 | B |
| m-Xylene and p-Xylene | | 0.10668 | B |
| Heptane* | 142-82-5 | 0.024892 | B |
| Acetone* | 67-64-1 | 0.856996 | B |

* New York State HAP

NOTES

HAP emissions factors are from EPA Air Emissions Species Manual, Volume 1, Profile Number 1097.

AIRCRAFT TAKE-OFF/LANDING EMISSIONS

GENERAL INFORMATION

Installation Seneca Army Depot GEOMET Rep..... T. Sletten
 Calendar Year Data Represents..... 94
 SCC..... 2-75-020-11 Bldg/Area No..... Airfield
 Date..... June 6-10, 1994 Unit ID Number... _____
 POC..... Jon Vanderhoot Phone No..... _____

Type of Aircraft (i.e., Combat, Bomber, Helicopter)... Aircraft

DOD Designation (i.e., A-4, F-14)..... C-5A

Name (i.e., Skyhawk, Tomcat)... Galaxy Manufacturer (i.e., Boeing)... _____

Power Plant (engine) type (i.e., Turbo Prop, Turbo Fan, Turbo Shaft)... _____

Number of Power Plants (engines)... 4

Power Plant Manufacturer (i.e., G.E.)... G.E.

Power Plant Designation (i.e., J52, J65, F100)... TF39

Number of Take-offs and Landings per year... 12

Typical Duration for Landing/Take-off Cycle:

Idle: _____ min.
 Take-off: _____ min.
 Climbout: _____ min.
 Approach: _____ min.

EMISSION RATE DETERMINATION METHOD

Stack Test Data _____ Emission Factor X Material Balance _____

Similar Unit Data _____ Other _____

Reference: AP-42, VOLUME 2, TABLE II-1-10. SPECIATION PROFILES FROM AIR EMISSIONS SPECIES MANUAL, VOLUME 1, PROFILE NO 1097.

OZONE PRECURSOR EMISSIONS

HAZARDOUS AIR POLLUTANTS

Typical Ozone Season Emissions

HAP

CAS CODE

LB/YR

VOC Emissions 0.9156521739 lb/day
 NOx Emissions 2.5956521739 lb/day
 CO Emissions 2.6778260870 lb/day

| | | |
|-----------------------|----------|---------------|
| 1,3,Butadiene | 106-99-0 | 6.3685440000 |
| Formaldehyde | 50-00-0 | 52.1614080000 |
| Acetaldehyde | 75-07-0 | 16.2751680000 |
| Propionaldehyde | 123-38-6 | 3.3022080000 |
| Acrolein | 107-02-8 | 8.0196480000 |
| Benzene | 71-43-2 | 6.8065920000 |
| Toluene | 108-88-3 | 1.8532800000 |
| Ethylbenzene | 100-41-4 | 0.6065280000 |
| o-xylene | 95-47-6 | 0.6739200000 |
| Styrene | 100-42-5 | 1.3815360000 |
| Phenol | 108-95-2 | 0.8760960000 |
| Naphthalene | 91-12-3 | 2.0217600000 |
| m-Xylene and p-Xylene | - | 1.0108800000 |
| Heptane* | 142-82-5 | 0.2358720000 |
| Acetone* | 67-64-1 | 8.1207360000 |

CRITERIA POLLUTANT EMISSIONS

VOC Emissions 0.1684800000 ton/yr
 NOx Emissions 0.4776000000 ton/yr
 CO Emissions 0.4927200000 ton/yr
 SO2 Emissions 0.0230400000 ton/yr
 PM10 Emissions - ton/yr
 Total Particulate 0.0247200000 ton/yr

* New York State HAP
 (use additional sheets if necessary)

REMARKS

**Emissions For Aircraft Take-Offs and Landings
Federal and New York State Regulations**

| | | | |
|-----------|--------------------------|-----------|----------------|
| Facility: | <u>Seneca Army Depot</u> | Date: | <u>8/23/94</u> |
| Location: | <u>Airfield</u> | Initials: | <u>MJO</u> |
| SCC: | <u>2-75-020-11</u> | | |

TYPE OF AIRCRAFT

C-5A

AIRCRAFT ALPHANUMERIC CODE

C-5A

(See AP-42, Vol. 2, Table II-1-10)

NOTES: Galaxy

NUMBER OF LANDING - TAKE-OFF CYCLES

12 PER YEAR

EMISSION FACTORS:

CO 82.12 lb/LTO cycleNOx 79.6 lb/LTO cycleSOx 3.84 lb/LTO cycleVOC 28.08 lb/LTO cycleTSP 4.12 lb/LTO cycle**SOLUTION**

| | | |
|------------------------------------|---------------|-----------------|
| CARBON MONOXIDE (CO) | 985.44 | lbs/year |
| NITROGEN OXIDE (NOx) | 955.20 | lbs/year |
| SULFUR OXIDE (SOX) | 46.08 | lbs/year |
| VOC(as hydrocarbon) | 336.96 | lbs/year |
| PARTICULATE EMISSIONS (TSP) | 49.44 | lbs/year |

NOTES:

Criteria pollutant emissions factors are from AP-42, Volume 2, Table II-1-10 dated 2/80.
Data Rating not available.

TOTAL VOC EMISSIONS = 336.96 lbs/year
 TOTAL PARTICULATE EMISSIONS = 49.44 lbs/year
 TOTAL AIR TOXIC EMISSIONS = 109.7142 lbs/year

HAP EMISSIONS

| POLLUTANT | CAS No. | EMISSIONS (LBS/YR) | RATING |
|-----------------------|----------|--------------------|--------|
| 1,3,Butadiene | 106-99-0 | 6.368544 | B |
| Formaldehyde | 50-00-0 | 52.16141 | B |
| Acetaldehyde | 75-07-0 | 16.27517 | B |
| Propionaldehyde | 123-38-6 | 3.302208 | B |
| Acrolein | 107-02-8 | 8.019648 | B |
| Benzene | 71-43-2 | 6.806592 | B |
| Toluene | 108-88-3 | 1.85328 | B |
| Ethylbenzene | 100-41-4 | 0.606528 | B |
| o-xylene | 95-47-6 | 0.67392 | B |
| Styrene | 100-42-5 | 1.381536 | B |
| Phenol | 108-95-2 | 0.876096 | B |
| Naphthalene | 91-12-3 | 2.02176 | B |
| m-Xylene and p-Xylene | | 1.01088 | B |
| Heptane* | 142-82-5 | 0.235872 | B |
| Acetone* | 67-64-1 | 8.120736 | B |

* New York State HAP

NOTES

HAP emissions factors are from EPA Air Emissions Species Manual, Volume 1, Profile Number 1097.

AIRCRAFT TAKE-OFF/LANDING EMISSIONS

GENERAL INFORMATION

Installation Seneca Army Depot GEOMET Rep.....T. Sletten
 Calendar Year Data Represents.....94
 SCC.....2-76-010-14 Bldg/Area No.....Airfield
 Date.....June 6-10, 1994 Unit ID Number...
 POC.....Jon Vanderhoot Phone No.....

Type of Aircraft (i.e., Combat, Bomber, Helicopter)...Helicopter

DOD Designation (i.e., A-4, F-14).....UH-60

Name (i.e., Skyhawk, Tomcat)...Black Hawk Manufacturer (i.e., Boeing)...

Power Plant (engine) type (i.e., Turbo Prop, Turbo Fan, Turbo Shaft)...Turbo prop.

Number of Power Plants (engines)...2

Power Plant Manufacturer (i.e., G.E.)...G.E

Power Plant Designation (i.e., J52, J65, F100)...T700

Number of Take-offs and Landings per year...2

Typical Duration for Landing/Take-off Cycle:

Idle: 15.0 min.
 Take-off: min.
 Climbout: 6.8 min.
 Approach: 6.8 min.

EMISSION RATE DETERMINATION METHOD

Stack Test Data _____ Emission Factor X Material Balance _____

Similar Unit Data _____ Other _____

Reference: AP-42, VOLUME 2, TABLE II-1-10. SPECIATION PROFILES FROM AIR EMISSIONS SPECIES MANUAL, VOLUME 1, PROFILE NO 1097.

OZONE PRECURSOR EMISSIONS

HAZARDOUS AIR POLLUTANTS

Typical Ozone Season Emissions

HAP

CAS CODE

LB/YR

VOC Emissions 0.0368478261 lb/day
 NOx Emissions 0.0164130435 lb/day
 CO Emissions 0.0735869565 lb/day

| | | |
|-----------------------|----------|--------------|
| 1,3,Butadiene | 106-99-0 | 0.2562840000 |
| Formaldehyde | 50-00-0 | 2.0990880000 |
| Acetaldehyde | 75-07-0 | 0.6549480000 |
| Propionaldehyde | 123-38-6 | 0.1328880000 |
| Acrolein | 107-02-8 | 0.3227280000 |
| Benzene | 71-43-2 | 0.2739120000 |
| Toluene | 108-88-3 | 0.0745800000 |
| Ethylbenzene | 100-41-4 | 0.0244080000 |
| o-xylene | 95-47-6 | 0.0271200000 |
| Styrene | 100-42-5 | 0.0555960000 |
| Phenol | 108-95-2 | 0.0352560000 |
| Naphthalene | 91-12-3 | 0.0813600000 |
| m-Xylene and p-Xylene | - | 0.0406800000 |
| Heptane* | 142-82-5 | 0.0094920000 |
| Acetone* | 67-64-1 | 0.3267960000 |

CRITERIA POLLUTANT EMISSIONS

VOC Emissions 0.0067800000 ton/yr
 NOx Emissions 0.0030200000 ton/yr
 CO Emissions 0.0135400000 ton/yr
 SO2 Emissions 0.0004400000 ton/yr
 PM10 Emissions - ton/yr
 Total Particulate 0.0004000000 ton/yr

* New York State HAP
 (use additional sheets if necessary)

REMARKS

**Emissions For Aircraft Take-Offs and Landings
Federal and New York State Regulations**

Facility: Seneca Army Depot
 Location: Airfield
 SCC: 2-76-010-14

Date: 8/23/94
 Initials: MJO

TYPE OF AIRCRAFT

UH-60

AIRCRAFT ALPHANUMERIC CODE

HH-3

(See AP-42, Vol. 2, Table II-1-10)

NOTES: Blackhawk

NUMBER OF LANDING - TAKE-OFF CYCLES

2 PER YEAR

EMISSION FACTORS:

CO 13.54 lb/LTO cycleNO_x 3.02 lb/LTO cycleSO_x 0.44 lb/LTO cycleVOC 6.78 lb/LTO cycleTSP 0.40 lb/LTO cycle**SOLUTION**

| | | |
|--|--------------|-----------------|
| CARBON MONOXIDE (CO) | 27.08 | lbs/year |
| NITROGEN OXIDE (NO_x) | 6.04 | lbs/year |
| SULFUR OXIDE (SOX) | 0.88 | lbs/year |
| VOC(as hydrocarbon) | 13.56 | lbs/year |
| PARTICULATE EMISSIONS (TSP) | 0.80 | lbs/year |

NOTES:

Criteria pollutant emissions factors are from AP-42, Volume 2, Table II-1-10 dated 2/80.

Data Rating not available.

TOTAL VOC EMISSIONS = 13.56 lbs/year
 TOTAL PARTICULATE EMISSIONS = 0.80 lbs/year
 TOTAL AIR TOXIC EMISSIONS = 4.415136 lbs/year

HAP EMISSIONS

| POLLUTANT | CAS No. | EMISSIONS (LBS/YR) | RATING |
|-----------------------|----------|--------------------|--------|
| 1,3,Butadiene | 106-99-0 | 0.256284 | B |
| Formaldehyde | 50-00-0 | 2.099088 | B |
| Acetaldehyde | 75-07-0 | 0.654948 | B |
| Propionaldehyde | 123-38-6 | 0.132888 | B |
| Acrolein | 107-02-8 | 0.322728 | B |
| Benzene | 71-43-2 | 0.273912 | B |
| Toluene | 108-88-3 | 0.07458 | B |
| Ethylbenzene | 100-41-4 | 0.024408 | B |
| o-xylene | 95-47-6 | 0.02712 | B |
| Styrene | 100-42-5 | 0.055596 | B |
| Phenol | 108-95-2 | 0.035256 | B |
| Naphthalene | 91-12-3 | 0.08136 | B |
| m-Xylene and p-Xylene | | 0.04068 | B |
| Heptane* | 142-82-5 | 0.009492 | B |
| Acetone* | 67-64-1 | 0.326796 | B |

* New York State HAP

NOTES

HAP emissions factors are from EPA Air Emissions Species Manual, Volume 1, Profile Number 1097.

AIRCRAFT TAKE-OFF/LANDING EMISSIONS

GENERAL INFORMATION

Installation Seneca Army Depot GEOMET Rep.....T. Sletten
 Calendar Year Data Represents.....93
 SCC.....2-75-020-11 Bldg/Area No.....Airfield
2-76-010-14
 Date.....June 6-10, 1994 Unit ID Number...
 POC.....Jon Vanderhoot Phone No.....

Type of Aircraft (i.e., Combat, Bomber, Helicopter)...Various (C-23, C-26, EH-60, G-1, OH-58
P-3, UH-1)

DOD Designation (i.e., A-4, F-14)..... See attached list for assumed information

Name (i.e., Skyhawk, Tomcat)... Manufacturer (i.e., Boeing)...

Power Plant (engine) type (i.e., Turbo Prop, Turbo Fan, Turbo Shaft)...

Number of Power Plants (engines)...

Power Plant Manufacturer (i.e., G.E.)...

Power Plant Designation (i.e., J52, J65, F100)...

Number of Take-offs and Landings per year...

Typical Duration for Landing/Take-off Cycle:

Idle: min.
 Take-off: min.
 Climbout: min.
 Approach: min.

SENECA.LTO

Seneca Army Depot: Aircraft LTO

| Aircraft Type | Aircraft Type Assumed Most Similar | Assumed Aircraft Power Plant Type (Model/Series) | LTO Cycles |
|---------------|------------------------------------|--|------------|
| C-23 | Fairchild F27/FH227 | R.Da.7 | 2 |
| C-26 | Fairchild F27/FH227 | R.Da.7 | 2 |
| EH-60 | UH-60 Black Hawk (Turbo Shaft) | (2) T700-GE | 8 |
| G-1 | Fairchild F27/FH227 | R.Da.7 | 2 |
| OH-58 | UH-1H Iroquois/Huey (Turbo Shaft) | (1) T53-L-11D | 4 |
| P-3 | E-3A Sentry | TF33-PW-100 | 12 |
| UH-1 | UH-1H Iroquois/Huey (Turbo Shaft) | T53-L-11D | 190 |
| TOTAL | | | 220 |

Note: Nitrogen oxides reported as NO2

Note: VOCs reported as total hydrocarbons. Volatile organics include unburned hydrocarbons and organic pyroly

Note: Sulfur oxides and sulfuric acid reported as SO2

**Emissions For Commercial Aircraft Take-Offs and Landings
Federal and New York State Regulations**

Facility: Seneca Army Depot
 Location: Airfield
 SCC: 2-75-020-11

Date: 8/23/94
 Initials: MJO

TYPE OF AIRCRAFT

C-23

AIRCRAFT ALPHANUMERIC CODE

R.Da.7

(See AP-42, Vol. 2, Table II-1-9)

NOTES: _____

NUMBER OF LANDING - TAKE-OFF CYCLES

2 PER YEAR

EMISSION FACTORS:

| | |
|-----------------|---------------------------|
| CO | <u>36.26</u> lb/LTO cycle |
| NO _x | <u>0.92</u> lb/LTO cycle |
| SO _x | <u>0.58</u> lb/LTO cycle |
| VOC | <u>22.42</u> lb/LTO cycle |
| TSP | <u>0</u> lb/LTO cycle |

SOLUTION

| | | |
|--|--------------|-----------------|
| CARBON MONOXIDE (CO) | 72.52 | lbs/year |
| NITROGEN OXIDE (NO_x) | 1.84 | lbs/year |
| SULFUR OXIDE (SOX) | 1.16 | lbs/year |
| VOC(as hydrocarbon) | 44.84 | lbs/year |
| PARTICULATE EMISSIONS (TSP) | 0.00 | lbs/year |

NOTES:

Criteria pollutant emissions factors are from AP-42, Volume 2, Table II-1-9 dated 2/80.
 Data Rating not available.

TOTAL VOC EMISSIONS = 44.84 lbs/year
 TOTAL PARTICULATE EMISSIONS = 0.00 lbs/year
 TOTAL AIR TOXIC EMISSIONS = 14.1246 lbs/year

HAP EMISSIONS

| POLLUTANT | CAS No. | EMISSIONS (LBS/YR) | RATING |
|-----------------------|----------|--------------------|--------|
| 1,3,Butadiene | 106-99-0 | 0.80712 | B |
| Formaldehyde | 50-00-0 | 6.730484 | B |
| Acetaldehyde | 75-07-0 | 2.08506 | B |
| Propionaldehyde | 123-38-6 | 0.42598 | B |
| Acrolein | 107-02-8 | 1.017868 | B |
| Benzene | 71-43-2 | 0.869896 | B |
| Toluene | 108-88-3 | 0.233168 | B |
| Ethylbenzene | 100-41-4 | 0.076228 | B |
| o-xylene | 95-47-6 | 0.085196 | B |
| Styrene | 100-42-5 | 0.174876 | B |
| Phenol | 108-95-2 | 0.107616 | B |
| Naphthalene | 91-12-3 | 0.255588 | B |
| m-Xylene and p-Xylene | | 0.130036 | B |
| Heptane* | 142-82-5 | 0.026904 | B |
| Acetone* | 67-64-1 | 1.09858 | B |

*New York State HAP

NOTES

HAP emissions factors are from EPA Air Emissions Species Manual, Volume 1, Profile Number 1098.

EMISSION RATE DETERMINATION METHOD

Stack Test Data _____ Emission Factor X Material Balance _____

Similar Unit Data _____ Other _____

Reference: AP-42, VOLUME 2, TABLE II-1-9. SPECIATION PROFILES FROM AIR EMISSIONS SPECIES MANUAL, VOLUME 1, PROFILE NO 1098.

OZONE PRECURSOR EMISSIONS

HAZARDOUS AIR POLLUTANTS

| Typical Ozone Season Emissions | | HAP | CAS CODE | LB/YR |
|--------------------------------|----------------------------|-----------------------|----------|--------------|
| VOC Emissions | <u>0.1218478261</u> lb/day | 1,3,Butadiene | 106-99-0 | 0.8071200000 |
| | | Formaldehyde | 50-00-0 | 6.7304840000 |
| NOx Emissions | <u>0.0050000000</u> lb/day | Acetaldehyde | 75-07-0 | 2.0850600000 |
| | | Propionaldehyde | 123-38-6 | 0.4259800000 |
| CO Emissions | <u>0.1970652174</u> lb/day | Acrolein | 107-02-8 | 1.0178680000 |
| | | Benzene | 71-43-2 | 0.8698960000 |
| | | Toluene | 108-88-3 | 0.2331680000 |
| CRITERIA POLLUTANT EMISSIONS | | Ethylbenzene | 100-41-4 | 0.0762280000 |
| VOC Emissions | <u>0.0224200000</u> ton/yr | o-xylene | 95-47-6 | 0.0851960000 |
| | | Styrene | 100-42-5 | 0.1748760000 |
| SO2 Emissions | <u>0.0009200000</u> ton/yr | Phenol | 108-95-2 | 0.1076160000 |
| | | Naphthalene | 91-12-3 | 0.2555880000 |
| CO Emissions | <u>0.0362600000</u> ton/yr | m-Xylene and p-Xylene | - | 0.1300360000 |
| | | Heptane* | 142-82-5 | 0.0269040000 |
| SO2 Emissions | <u>0.0005800000</u> ton/yr | Acetone* | 67-64-1 | 1.0985800000 |
| PM10 Emissions | <u>-</u> ton/yr | | | |
| Total Particulate | <u>0.0000000000</u> ton/yr | | | |

*Virginia State HAP
(use additional sheets if necessary)

REMARKS

**Emissions For Commercial Aircraft Take-Offs and Landings
Federal and New York State Regulations**

| | | | |
|-----------|--------------------------|-----------|----------------|
| Facility: | <u>Seneca Army Depot</u> | Date: | <u>8/23/94</u> |
| Location: | <u>Airfield</u> | Initials: | <u>MJO</u> |
| SCC: | <u>2-75-02c-11</u> | | |

TYPE OF AIRCRAFT

C-26

AIRCRAFT ALPHANUMERIC CODE

R.Da.7

(See AP-42, Vol. 2, Table II-1-9)

NOTES: _____

NUMBER OF LANDING - TAKE-OFF CYCLES

2 PER YEAR

EMISSION FACTORS:

| | |
|-----|---------------------------|
| CO | <u>36.26</u> lb/LTO cycle |
| NOx | <u>0.92</u> lb/LTO cycle |
| SOx | <u>0.58</u> lb/LTO cycle |
| VOC | <u>22.42</u> lb/LTO cycle |
| TSP | <u>0</u> lb/LTO cycle |

SOLUTION

| | | |
|------------------------------------|--------------|-----------------|
| CARBON MONOXIDE (CO) | 72.52 | lbs/year |
| NITROGEN OXIDE (NOx) | 1.84 | lbs/year |
| SULFUR OXIDE (SOX) | 1.16 | lbs/year |
| VOC(as hydrocarbon) | 44.84 | lbs/year |
| PARTICULATE EMISSIONS (TSP) | 0.00 | lbs/year |

NOTES:

Criteria pollutant emissions factors are from AP-42, Volume 2, Table II-1-9 dated 2/80.
Data Rating not available.

TOTAL VOC EMISSIONS = 44.84 lbs/year
 TOTAL PARTICULATE EMISSIONS = 0.00 lbs/year
 TOTAL AIR TOXIC EMISSIONS = 14.1246 lbs/year

HAP EMISSIONS

| POLLUTANT | CAS No. | EMISSIONS (LBS/YR) | RATING |
|-----------------------|----------|--------------------|--------|
| 1,3,Butadiene | 106-99-0 | 0.80712 | B |
| Formaldehyde | 50-00-0 | 6.730484 | B |
| Acetaldehyde | 75-07-0 | 2.08506 | B |
| Propionaldehyde | 123-38-6 | 0.42598 | B |
| Acrolein | 107-02-8 | 1.017868 | B |
| Benzene | 71-43-2 | 0.869896 | B |
| Toluene | 108-88-3 | 0.233168 | B |
| Ethylbenzene | 100-41-4 | 0.076228 | B |
| o-xylene | 95-47-6 | 0.085196 | B |
| Styrene | 100-42-5 | 0.174876 | B |
| Phenol | 108-95-2 | 0.107616 | B |
| Naphthalene | 91-12-3 | 0.255588 | B |
| m-Xylene and p-Xylene | | 0.130036 | B |
| Heptane* | 142-82-5 | 0.026904 | B |
| Acetone* | 67-64-1 | 1.09858 | B |

*New York State HAP

NOTES

HAP emissions factors are from EPA Air Emissions Species Manual, Volume 1, Profile Number 1098.

EMISSION RATE DETERMINATION METHOD

Check Test Data _____ Emission Factor X Material Balance _____

Similar Unit Data _____ Other _____

Reference: AP-42, VOLUME 2, TABLE II-1-9. SPECIATION PROFILES FROM AIR EMISSIONS SPECIES MANUAL,
 VOLUME 1, PROFILE NO 1098.

OZONE PRECURSOR EMISSIONS

HAZARDOUS AIR POLLUTANTS

| Typical Ozone Season Emissions | | HAP | CAS CODE | LB/YR |
|--------------------------------|----------------------------|-----------------------|----------|--------------|
| VOC Emissions | <u>0.1218478261</u> lb/day | 1,3,Butadiene | 106-99-0 | 0.8071200000 |
| | | Formaldehyde | 50-00-0 | 6.7304840000 |
| NOx Emissions | <u>0.0050000000</u> lb/day | Acetaldehyde | 75-07-0 | 2.0850600000 |
| | | Propionaldehyde | 123-38-6 | 0.4259800000 |
| CO Emissions | <u>0.1970652174</u> lb/day | Acrolein | 107-02-8 | 1.0178680000 |
| | | Benzene | 71-43-2 | 0.8698960000 |
| | | Toluene | 108-88-3 | 0.2331680000 |
| CRITERIA POLLUTANT EMISSIONS | | Ethylbenzene | 100-41-4 | 0.0762280000 |
| VOC Emissions | <u>0.0224200000</u> ton/yr | o-xylene | 95-47-6 | 0.0851960000 |
| | | Styrene | 100-42-5 | 0.1748760000 |
| SO ₂ Emissions | <u>0.0009200000</u> ton/yr | Phenol | 108-95-2 | 0.1076160000 |
| | | Naphthalene | 91-12-3 | 0.2555880000 |
| CO Emissions | <u>0.0362600000</u> ton/yr | m-Xylene and p-Xylene | - | 0.1300360000 |
| | | Heptane* | 142-82-5 | 0.0269040000 |
| SO ₂ Emissions | <u>0.0005800000</u> ton/yr | Acetone* | 67-64-1 | 1.0985800000 |
| PM ₁₀ Emissions | <u>-</u> ton/yr | | | |
| Total Particulate | <u>0.0000000000</u> ton/yr | | | |

*Virginia State HAP
 (use additional sheets if necessary)

REMARKS

**Emissions For Aircraft Take-Offs and Landings
Federal and New York State Regulations**

Facility: Seneca Army Depot
 Location: Airfield
 SCC: 2-76-010-14

Date: 8/23/94
 Initials: MJO

TYPE OF AIRCRAFT

EH-60

AIRCRAFT ALPHANUMERIC CODE

HH-3

(See AP-42, Vol. 2, Table II-1-10)

NOTES: _____

NUMBER OF LANDING - TAKE-OFF CYCLES

8 PER YEAR

EMISSION FACTORS:

CO 13.54 lb/LTO cycleNOx 3.02 lb/LTO cycleSOx 0.44 lb/LTO cycleVOC 6.78 lb/LTO cycleTSP 0.40 lb/LTO cycle**SOLUTION**

| | | |
|------------------------------------|---------------|-----------------|
| CARBON MONOXIDE (CO) | 108.32 | lbs/year |
| NITROGEN OXIDE (NOx) | 24.16 | lbs/year |
| SULFUR OXIDE (SOX) | 3.52 | lbs/year |
| VOC(as hydrocarbon) | 54.24 | lbs/year |
| PARTICULATE EMISSIONS (TSP) | 3.20 | lbs/year |

NOTES:

Criteria pollutant emissions factors are from AP-42, Volume 2, Table II-1-10 dated 2/80.
 Data Rating not available.

TOTAL VOC EMISSIONS = 54.24 lbs/year
 TOTAL PARTICULATE EMISSIONS = 3.20 lbs/year
 TOTAL AIR TOXIC EMISSIONS = 17.66054 lbs/year

HAP EMISSIONS

| POLLUTANT | CAS No. | EMISSIONS (LBS/YR) | RATING |
|-----------------------|----------|--------------------|--------|
| 1,3,Butadiene | 106-99-0 | 1.025136 | B |
| Formaldehyde | 50-00-0 | 8.396352 | B |
| Acetaldehyde | 75-07-0 | 2.619792 | B |
| Propionaldehyde | 123-38-6 | 0.531552 | B |
| Acrolein | 107-02-8 | 1.290912 | B |
| Benzene | 71-43-2 | 1.095648 | B |
| Toluene | 108-88-3 | 0.29832 | B |
| Ethylbenzene | 100-41-4 | 0.097632 | B |
| o-xylene | 95-47-6 | 0.10848 | B |
| Styrene | 100-42-5 | 0.222384 | B |
| Phenol | 108-95-2 | 0.141024 | B |
| Naphthalene | 91-12-3 | 0.32544 | B |
| m-Xylene and p-Xylene | | 0.16272 | B |
| Heptane* | 142-82-5 | 0.037968 | B |
| Acetone* | 67-64-1 | 1.307184 | B |

* New York State HAP

NOTES

HAP emissions factors are from EPA Air Emissions Species Manual, Volume 1, Profile Number 1097.

EMISSION RATE DETERMINATION METHOD

Stack Test Data _____ Emission Factor X Material Balance _____

Similar Unit Data _____ Other _____

Reference: AP-42, VOLUME 2, TABLE II-1-10. SPECIATION PROFILES FROM AIR EMISSIONS SPECIES MANUAL, VOLUME 1, PROFILE NO 1097.

OZONE PRECURSOR EMISSIONS

HAZARDOUS AIR POLLUTANTS

| Typical Ozone Season Emissions | | HAP | CAS CODE | LB/YR |
|--------------------------------|----------------------------|-----------------------|----------|--------------|
| VOC Emissions | <u>0.1473913043</u> lb/day | 1,3,Butadiene | 106-99-0 | 1.0251360000 |
| | | Formaldehyde | 50-00-0 | 8.3963520000 |
| NOx Emissions | <u>0.0656521739</u> lb/day | Acetaldehyde | 75-07-0 | 2.6197920000 |
| | | Propionaldehyde | 123-38-6 | 0.5315520000 |
| CO Emissions | <u>0.2943478261</u> lb/day | Acrolein | 107-02-8 | 1.2909120000 |
| | | Benzene | 71-43-2 | 1.0956480000 |
| | | Toluene | 108-88-3 | 0.2983200000 |
| | | Ethylbenzene | 100-41-4 | 0.0976320000 |
| | | o-xylene | 95-47-6 | 0.1084800000 |
| CRITERIA POLLUTANT EMISSIONS | | Styrene | 100-42-5 | 0.2223840000 |
| VOC Emissions | <u>0.0271200000</u> ton/yr | Phenol | 108-95-2 | 0.1410240000 |
| SO _x Emissions | <u>0.0120800000</u> ton/yr | Naphthalene | 91-12-3 | 0.3254400000 |
| | | m-Xylene and p-Xylene | - | 0.1627200000 |
| CO Emissions | <u>0.0541600000</u> ton/yr | Heptane* | 142-82-5 | 0.0379680000 |
| | | Acetone* | 67-64-1 | 1.3071840000 |
| SO ₂ Emissions | <u>0.0017600000</u> ton/yr | | | |
| PM ₁₀ Emissions | <u>-</u> ton/yr | | | |
| Total Particulate | <u>0.0016000000</u> ton/yr | | | |

* New York State HAP
(use additional sheets if necessary)

REMARKS

**Emissions For Commercial Aircraft Take-Offs and Landings
Federal and New York State Regulations**

Facility: Seneca Army Depot Date: 8/23/94
 Location: Airfield Initials: MJO
 SCC: 2-75-020-11

TYPE OF AIRCRAFT

G-1

AIRCRAFT ALPHANUMERIC CODE

R.Da.7

(See AP-42, Vol. 2, Table II-1-9)

NOTES:

NUMBER OF LANDING - TAKE-OFF CYCLES

2 PER YEAR

EMISSION FACTORS:

CO 36.26 lb/LTO cycle

NOx 0.92 lb/LTO cycle

SOx 0.58 lb/LTO cycle

VOC 22.42 lb/LTO cycle

TSP 0 lb/LTO cycle

SOLUTION

| | | |
|------------------------------------|--------------|-----------------|
| CARBON MONOXIDE (CO) | 72.52 | lbs/year |
| NITROGEN OXIDE (NOx) | 1.84 | lbs/year |
| SULFUR OXIDE (SOX) | 1.16 | lbs/year |
| VOC(as hydrocarbon) | 44.84 | lbs/year |
| PARTICULATE EMISSIONS (TSP) | 0.00 | lbs/year |

NOTES:

Criteria pollutant emissions factors are from AP-42, Volume 2, Table II-1-9 dated 2/80.
 Data Rating not available.

TOTAL VOC EMISSIONS = 44.84 lbs/year
 TOTAL PARTICULATE EMISSIONS = 0.00 lbs/year
 TOTAL AIR TOXIC EMISSIONS = 14.1246 lbs/year

HAP EMISSIONS

| POLLUTANT | CAS No. | EMISSIONS (LBS/YR) | RATING |
|-----------------------|----------|--------------------|--------|
| 1,3,Butadiene | 106-99-0 | 0.80712 | B |
| Formaldehyde | 50-00-0 | 6.730484 | B |
| Acetaldehyde | 75-07-0 | 2.08506 | B |
| Propionaldehyde | 123-38-6 | 0.42598 | B |
| Acrolein | 107-02-8 | 1.017868 | B |
| Benzene | 71-43-2 | 0.869896 | B |
| Toluene | 108-88-3 | 0.233168 | B |
| Ethylbenzene | 100-41-4 | 0.076228 | B |
| o-xylene | 95-47-6 | 0.085196 | B |
| Styrene | 100-42-5 | 0.174876 | B |
| Phenol | 108-95-2 | 0.107616 | B |
| Naphthalene | 91-12-3 | 0.255588 | B |
| m-Xylene and p-Xylene | | 0.130036 | B |
| Heptane* | 142-82-5 | 0.026904 | B |
| Acetone* | 67-64-1 | 1.09858 | B |

*New York State HAP

NOTES

HAP emissions factors are from EPA Air Emissions Species Manual, Volume 1, Profile Number 1098.

EMISSION RATE DETERMINATION METHOD

Stack Test Data _____ Emission Factor X Material Balance _____

Similar Unit Data _____ Other _____

Reference: AP-42, VOLUME 2, TABLE II-1-9. SPECIATION PROFILES FROM AIR EMISSIONS SPECIES MANUAL, VOLUME 1, PROFILE NO 1098.

OZONE PRECURSOR EMISSIONS

HAZARDOUS AIR POLLUTANTS

Typical Ozone Season Emissions

HAP

CAS CODE

LB/YR

VOC Emissions 0.1218478261 lb/day
 NOx Emissions 0.0050000000 lb/day
 CO Emissions 0.1970652174 lb/day

| | | |
|-----------------------|----------|--------------|
| 1,3,Butadiene | 106-99-0 | 0.8071200000 |
| Formaldehyde | 50-00-0 | 6.7304840000 |
| Acetaldehyde | 75-07-0 | 2.0850600000 |
| Propionaldehyde | 123-38-6 | 0.4259800000 |
| Acrolein | 107-02-8 | 1.0178680000 |
| Benzene | 71-43-2 | 0.8698960000 |
| Toluene | 108-88-3 | 0.2331680000 |
| Ethylbenzene | 100-41-4 | 0.0762280000 |
| o-xylene | 95-47-6 | 0.0851960000 |
| Styrene | 100-42-5 | 0.1748760000 |
| Phenol | 108-95-2 | 0.1076160000 |
| Naphthalene | 91-12-3 | 0.2555880000 |
| m-Xylene and p-Xylene | - | 0.1300360000 |
| Heptane* | 142-82-5 | 0.0269040000 |
| Acetone* | 67-64-1 | 1.0985800000 |

CRITERIA POLLUTANT EMISSIONS

VOC Emissions 0.0224200000 ton/yr
 NOx Emissions 0.0009200000 ton/yr
 CO Emissions 0.0362600000 ton/yr
 SO2 Emissions 0.0005800000 ton/yr
 PM10 Emissions - ton/yr
 Total Particulate 0.0000000000 ton/yr

*Virginia State HAP
 (use additional sheets if necessary)

REMARKS

**Emissions For Aircraft Take-Offs and Landings
Federal and New York State Regulations**

Facility: Seneca Army Depot
 Location: Airfield
 SCC: 2-76-010-14

Date: 8/23/94
 Initials: MJO

TYPE OF AIRCRAFT

OH-58

AIRCRAFT ALPHANUMERIC CODE

UH-1H

(See AP-42, Vol. 2, Table II-1-10)

NOTES: _____

NUMBER OF LANDING - TAKE-OFF CYCLES

4 PER YEAR

EMISSION FACTORS:

CO 1.55 lb/LTO cycleNOx 1.19 lb/LTO cycleSOx 0.2 lb/LTO cycleVOC 2.53 lb/LTO cycleTSP 0.00 lb/LTO cycleSOLUTION

| | | |
|------------------------------------|--------------|-----------------|
| CARBON MONOXIDE (CO) | 6.20 | lbs/year |
| NITROGEN OXIDE (NOx) | 4.76 | lbs/year |
| SULFUR OXIDE (SOX) | 0.80 | lbs/year |
| VOC(as hydrocarbon) | 10.12 | lbs/year |
| PARTICULATE EMISSIONS (TSP) | 0.00 | lbs/year |

NOTES:

Criteria pollutant emissions factors are from AP-42, Volume 2, Table II-1-10 dated 2/80.
 Data Rating not available.

TOTAL VOC EMISSIONS = 10.12 lbs/year
 TOTAL PARTICULATE EMISSIONS = 0.00 lbs/year
 TOTAL AIR TOXIC EMISSIONS = 3.295072 lbs/year

HAP EMISSIONS

| POLLUTANT | CAS No. | EMISSIONS (LBS/YR) | RATING |
|-----------------------|----------|--------------------|--------|
| 1,3,Butadiene | 106-99-0 | 0.191268 | B |
| Formaldehyde | 50-00-0 | 1.566576 | B |
| Acetaldehyde | 75-07-0 | 0.488796 | B |
| Propionaldehyde | 123-38-6 | 0.099176 | B |
| Acrolein | 107-02-8 | 0.240856 | B |
| Benzene | 71-43-2 | 0.204424 | B |
| Toluene | 108-88-3 | 0.05566 | B |
| Ethylbenzene | 100-41-4 | 0.018216 | B |
| o-xylene | 95-47-6 | 0.02024 | B |
| Styrene | 100-42-5 | 0.041492 | B |
| Phenol | 108-95-2 | 0.026312 | B |
| Naphthalene | 91-12-3 | 0.06072 | B |
| m-Xylene and p-Xylene | | 0.03036 | B |
| Heptane* | 142-82-5 | 0.007084 | B |
| Acetone* | 67-64-1 | 0.243892 | B |

* New York State HAP

NOTES

HAP emissions factors are from EPA Air Emissions Species Manual, Volume 1, Profile Number 1097.

EMISSION RATE DETERMINATION METHOD

ack Test Data _____ Emission Factor X Material Balance _____

Similar Unit Data _____ Other _____

Reference: AP-42, VOLUME 2, TABLE II-1-10. SPECIATION PROFILES FROM AIR EMISSIONS SPECIES MANUAL, VOLUME 1, PROFILE NO 1097.

OZONE PRECURSOR EMISSIONS

HAZARDOUS AIR POLLUTANTS

| Typical Ozone Season Emissions | | HAP | CAS CODE | LB/YR |
|--------------------------------|----------------------------|-----------------------|----------|--------------|
| VOC Emissions | <u>0.0275000000</u> lb/day | 1,3,Butadiene | 106-99-0 | 0.1912680000 |
| | | Formaldehyde | 50-00-0 | 1.5665760000 |
| NOx Emissions | <u>0.0129347826</u> lb/day | Acetaldehyde | 75-07-0 | 0.4887960000 |
| | | Propionaldehyde | 123-38-6 | 0.0991760000 |
| CO Emissions | <u>0.0168478261</u> lb/day | Acrolein | 107-02-8 | 0.2408560000 |
| | | Benzene | 71-43-2 | 0.2044240000 |
| | | Toluene | 108-88-3 | 0.0556600000 |
| CRITERIA POLLUTANT EMISSIONS | | Ethylbenzene | 100-41-4 | 0.0182160000 |
| | | o-xylene | 95-47-6 | 0.0202400000 |
| VOC Emissions | <u>0.0050600000</u> ton/yr | Styrene | 100-42-5 | 0.0414920000 |
| | | Phenol | 108-95-2 | 0.0263120000 |
| x Emissions | <u>0.0023800000</u> ton/yr | Naphthalene | 91-12-3 | 0.0607200000 |
| | | m-Xylene and p-Xylene | - | 0.0303600000 |
| CO Emissions | <u>0.0031000000</u> ton/yr | Heptane* | 142-82-5 | 0.0070840000 |
| | | Acetone* | 67-64-1 | 0.2438920000 |
| SO2 Emissions | <u>0.0004000000</u> ton/yr | | | |
| PM10 Emissions | <u>-</u> ton/yr | | | |
| Total Particulate | <u>0.0000000000</u> ton/yr | | | |

* New York State HAP
(use additional sheets if necessary)

REMARKS

**Emissions For Aircraft Take-Offs and Landings
Federal and New York State Regulations**

Facility: Seneca Army Depot
 Location: Airfield
 SCC: 2-76-010-14

Date: 8/23/94
 Initials: MJO

TYPE OF AIRCRAFT

UH-1

AIRCRAFT ALPHANUMERIC CODE

UH-1H

(See AP-42, Vol. 2, Table II-1-10)

NOTES: _____

NUMBER OF LANDING - TAKE-OFF CYCLES

190 PER YEAR

EMISSION FACTORS:

CO 1.55 lb/LTO cycleNOx 1.19 lb/LTO cycleSOx 0.2 lb/LTO cycleVOC 2.53 lb/LTO cycleTSP 0.00 lb/LTO cycle**SOLUTION**

| | | |
|------------------------------------|---------------|-----------------|
| CARBON MONOXIDE (CO) | 294.50 | lbs/year |
| NITROGEN OXIDE (NOx) | 226.10 | lbs/year |
| SULFUR OXIDE (SOX) | 38.00 | lbs/year |
| VOC(as hydrocarbon) | 480.70 | lbs/year |
| PARTICULATE EMISSIONS (TSP) | 0.00 | lbs/year |

NOTES:

Criteria pollutant emissions factors are from AP-42, Volume 2, Table II-1-10 dated 2/80.
 Data Rating not available.

TOTAL VOC EMISSIONS = 480.70 lbs/year
 TOTAL PARTICULATE EMISSIONS = 0.00 lbs/year
 TOTAL AIR TOXIC EMISSIONS = 156.5159 lbs/year

HAP EMISSIONS

| POLLUTANT | CAS No. | EMISSIONS (LBS/YR) | RATING |
|-----------------------|----------|--------------------|--------|
| 1,3,Butadiene | 106-99-0 | 9.08523 | B |
| Formaldehyde | 50-00-0 | 74.41236 | B |
| Acetaldehyde | 75-07-0 | 23.21781 | B |
| Propionaldehyde | 123-38-6 | 4.71086 | B |
| Acrolein | 107-02-8 | 11.44066 | B |
| Benzene | 71-43-2 | 9.71014 | B |
| Toluene | 108-88-3 | 2.64385 | B |
| Ethylbenzene | 100-41-4 | 0.86526 | B |
| o-xylene | 95-47-6 | 0.9614 | B |
| Styrene | 100-42-5 | 1.97087 | B |
| Phenol | 108-95-2 | 1.24982 | B |
| Naphthalene | 91-12-3 | 2.8842 | B |
| m-Xylene and p-Xylene | | 1.4421 | B |
| Heptane* | 142-82-5 | 0.33649 | B |
| Acetone* | 67-64-1 | 11.58487 | B |

* New York State HAP

NOTES

HAP emissions factors are from EPA Air Emissions Species Manual, Volume 1, Profile Number 1097.

EMISSION RATE DETERMINATION METHOD

Stack Test Data _____ Emission Factor X Material Balance _____

Similar Unit Data _____ Other _____

Reference: AP-42, VOLUME 2, TABLE II-1-10. SPECIATION PROFILES FROM AIR EMISSIONS SPECIES MANUAL, VOLUME 1, PROFILE NO 1097.

OZONE PRECURSOR EMISSIONS

HAZARDOUS AIR POLLUTANTS

Typical Ozone Season Emissions

HAP

CAS CODE

LB/YR

VOC Emissions 1.3062500000 lb/day
 NOx Emissions 0.6144021739 lb/day
 CO Emissions 0.8002717391 lb/day

| | | |
|-----------------------|----------|---------------|
| 1,3,Butadiene | 106-99-0 | 9.0852300000 |
| Formaldehyde | 50-00-0 | 74.4123600000 |
| Acetaldehyde | 75-07-0 | 23.2178100000 |
| Propionaldehyde | 123-38-6 | 4.7108600000 |
| Acrolein | 107-02-8 | 11.4406600000 |
| Benzene | 71-43-2 | 9.7101400000 |
| Toluene | 108-88-3 | 2.6438500000 |
| Ethylbenzene | 100-41-4 | 0.8652600000 |
| o-xylene | 95-47-6 | 0.9614000000 |
| Styrene | 100-42-5 | 1.9708700000 |
| Phenol | 108-95-2 | 1.2498200000 |
| Naphthalene | 91-12-3 | 2.8842000000 |
| m-Xylene and p-Xylene | - | 1.4421000000 |
| Heptane* | 142-82-5 | 0.3364900000 |
| Acetone* | 67-64-1 | 11.5848700000 |

CRITERIA POLLUTANT EMISSIONS

VOC Emissions 0.2403500000 ton/yr
 NOx Emissions 0.1130500000 ton/yr
 CO Emissions 0.1472500000 ton/yr
 SO2 Emissions 0.0190000000 ton/yr
 PM10 Emissions - ton/yr
 Total Particulate 0.0000000000 ton/yr

* New York State HAP
 (use additional sheets if necessary)

REMARKS

WELDING OPERATIONS

GENERAL INFORMATION

Installation Seneca Army Depot GEOMET Rep..... T. Sletten
 Calendar Year Data Represents..... 94
 SCC..... 3-09-999-99 Building No..... 118 - GSA Auto Equip Shop
 Date..... June 6-10, 1994 Unit ID Number... _____
 POC..... Jack LaBour Phone No..... (607) 869-1396

SOURCE INFORMATION

Welding Medium (Electrode)

Operating Schedule

| <u>Type</u> | <u>Amount</u> | <u>Hours/day..... 3 hr/yr</u> |
|-----------------|---------------|-------------------------------|
| Super Blue X | 10 lb/yr | <u>Days/week.....</u> |
| American Alloys | _____ | |
| Welding Rod | _____ | |
| _____ | _____ | |
| _____ | _____ | |
| _____ | _____ | |
| _____ | _____ | |
| _____ | _____ | |
| _____ | _____ | |

Note: Welding vent is present

**Emissions For Welding Operations
Federal and New York State Regulations**

Facility: Seneca Army Depot
 Location: Bldg 118 GSA Auto Equip. Shop
 SCC: 3-09-999-99

Date: 8/16/94
 Initials: DCP

Comment: This template should be used for each type of welding rod at an installation.
 Be sure to enter information into each cell below. When making assumptions for
 the "best fit" or "most similar" rod type, state them in the spaces provided.

Welding Rod Information:

Rod type: Alloy Welding Rod (Type of the actual rod used)

alpha/numeric code: Haynes C-276

*(Choose alpha numeric code only from list provided. Enter the name
 (including the spaces in the name) EXACTLY as it appears on the list.
 Also see note below)*

Notes/Assumptions: _____

Annual consumption: 10.0 Lbs/yr

Fume generation rate: 14.2 g/kg

Percentage of metal in fumes

| Metal Element | Metal Composition (%) | Emissions (lb/yr) |
|---------------------|-----------------------|-------------------|
| Cobalt | N/A | N/A |
| Barium | N/A | N/A |
| Vanadium | N/A | N/A |
| Zinc | N/A | N/A |
| Iron | 2 | 0.00 |
| Magnesium | 1.4 | 0.00 |
| Silicon | N/A | N/A |
| Fluorine | 5.9 | 0.01 |
| Molybdenum | 8.4 | 0.01 |
| Copper | N/A % | N/A |
| Manganese Compounds | 0.70 % | 0.00 |
| Chromium Compounds | 5.40 % | 0.01 |
| Nickel Compounds | 16.80 % | 0.02 |
| Aluminum | 0.70 % | 0.00 |

TSP Emissions = 0.142 Lbs/yr 0.000 Ton/yr

PM-10 Emissions = 0.142 Lbs/yr 0.000 Ton/yr

| HAP Emissions | | |
|---------------------|-------|-----------------------|
| HAP Name | CAS # | Emissions (Lbs/yr) |
| Cobalt Compounds | 0 | N/A |
| Manganese Compounds | 0 | 0.00 |
| Chromium Compounds | 0 | 0.01 |
| Nickel Compounds | 0 | 0.02 |
| Barium* | 0 | N/A |
| Copper* | 0 | N/A |
| | | |
| | | |

* New York State HAP

References: Section 313 Reporting Issue Paper; Clarification and Guidance for the Metal Fabrication Industry; "Emission Factors for Arc Welding", R. Gerstle, et al., and "Fumes and Gases in the Welding Environment," American Welding Society.

Note: When using data for rod types Inconel 625, Haynes C-276 and Haynes 25 refer to the above the reference, to check the actual electrode type, before entering the data.

EMISSION RATE DETERMINATION METHOD

Stack Test Data _____ Emission Fact X Material Balance _____

Similar Unit Data _____ Other _____

Reference: Section 313 Reporting Issue Paper; Clarification and Guidance for the Metal Fabrication Industry,

14 & 15

OZONE PRECURSOR EMISSIONS

HAZARDOUS AIR POLLUTANTS

Typical Ozone Season Emissions

HAP

CAS CODE

LB/YR

VOC Emissions _____ lb/day

Cobalt Compounds 0 N/A

NOx Emissions _____ lb/day

Manganese Compounds 0 0.0009960718

CO Emissions _____ lb/day

Chromium Compounds 0 0.0076839827

Nickel Compounds 0 0.0239057239

Barium* N/A

Copper* N/A

CRITERIA POLLUTANT EMISSIONS

VOC Emissions _____ ton/yr

NOx Emissions _____ ton/yr

CO Emissions _____ ton/yr

SO2 Emissions _____ ton/yr

PM10 Emissions 0.0000711480 ton/yr

Total Particulate 0.0000711480 ton/yr

*New York State HAP
(use additional sheets if necessary)

REMARKS

WELDING OPERATIONS

GENERAL INFORMATION

Installation Seneca Army Depot GEOMET Rep.....T. Sletten
Calendar Year Data Represents.....93
SCC.....3-09-999-99 Building No.....117
Date.....June 6-10, 1994 Unit ID Number...
POC.....Jack LaBour Phone No.....(607) 869-1396

SOURCE INFORMATION

Welding Medium (Electrode)

Operating Schedule

| Type | Amount | Hours/day..... | Days/week..... |
|-----------------------------|-----------------------------|-----------------|-----------------------------|
| Certanium Part No. 702 | 10 lb/yr | <u>10 hr/yr</u> | <u> </u> |
| Certanium Part No. 247 | 10 lb/yr | | |
| <u> </u> | <u> </u> | | |
| <u> </u> | <u> </u> | | |
| <u> </u> | <u> </u> | | |
| <u> </u> | <u> </u> | | |
| <u> </u> | <u> </u> | | |
| <u> </u> | <u> </u> | | |
| <u> </u> | <u> </u> | | |

No vent

**Emissions For Welding Operations
Federal and New York State Regulations**

Facility: Seneca Army Depot
 Location: Bldg 117
 SCC: 3-09-999-99

Date: 8/16/94
 Initials: DCP

Comment: This template should be used for each type of welding rod at an installation.
 Be sure to enter information into each cell below. When making assumptions for
 the "best fit" or "most similar" rod type, state them in the spaces provided.

Welding Rod Information:

Rod type: Certanium Pt No. 702 (Type of the actual rod used)

alpha/numeric code: E70T-1

*(Choose alpha numeric code only from list provided. Enter the name
 (including the spaces in the name) EXACTLY as it appears on the list.
 Also see note below)*

Notes/Assumptions: _____

Annual consumption: 10.0 Lbs/yr

Fume generation rate: 12.1 g/kg

Percentage of metal in fumes

| Metal Element | Metal Composition (%) | Emissions (lb/yr) |
|---------------------|-----------------------|-------------------|
| Cobalt | 0.0022 | 0.00 |
| Barium | 0.0018 | 0.00 |
| Vanadium | 0.0045 | 0.00 |
| Zinc | 0.065 | 0.00 |
| Iron | 36.4 | 0.04 |
| Magnesium | N/A | N/A |
| Silicon | 4.2 | 0.01 |
| Fluorine | 2.6 | 0.00 |
| Molybdenum | N/A | N/A |
| Copper | 0.02 % | 0.00 |
| Manganese Compounds | 9.20 % | 0.01 |
| Chromium Compounds | 0.01 % | 0.00 |
| Nickel Compounds | 0.01 % | 0.00 |
| Aluminum | 0.11 % | 0.00 |

TSP Emissions = 0.121 Lbs/yr 0.000 Ton/yr
 PM-10 Emissions = 0.121 Lbs/yr 0.000 Ton/yr

| HAP Emissions | | |
|---------------------|-------|-----------------------|
| HAP Name | CAS # | Emissions (Lbs/yr) |
| Cobalt Compounds | 0 | 0.00 |
| Manganese Compounds | 0 | 0.01 |
| Chromium Compounds | 0 | 0.00 |
| Nickel Compounds | 0 | 0.00 |
| Barium* | 0 | 0.00 |
| Copper* | 0 | 0.00 |
| | | |
| | | |

* New York State HAP

References: Section 313 Reporting Issue Paper; Clarification and Guidance for the Metal Fabrication Industry; "Emission Factors for Arc Welding", R. Gerstle, et al., and "Fumes and Gases in the Welding Environment," American Welding Society.

Note: When using data for rod types Inconel 625, Haynes C-276 and Haynes 25 refer to the above the reference, to check the actual electrode type, before entering the data.

EMISSION RATE DETERMINATION METHOD

Stack Test Data _____ Emission Fact X Material Balance _____

Similar Unit Data _____ Other _____

Reference: Section 313 Reporting Issue Paper; Clarification and Guidance for the Metal Fabrication Industry,
14 & 15

OZONE PRECURSOR EMISSIONS

HAZARDOUS AIR POLLUTANTS

Typical Ozone Season Emissions

HAP

CAS CODE

LB/YR

VOC Emissions _____ lb/day

Cobalt Compounds 0 0.0000026675

Manganese Compounds 0 0.0111552028

NOx Emissions _____ lb/day

Chromium Compounds 0 0.0000157628

Nickel Compounds 0 0.0000070326

CO Emissions _____ lb/day

Barium* 0.0000021825

Copper* 0.0000194004

CRITERIA POLLUTANT EMISSIONS

VOC Emissions _____ ton/yr

NOx Emissions _____ ton/yr

CO Emissions _____ ton/yr

SO2 Emissions _____ ton/yr

PM10 Emissions 0.0000606261 ton/yr

Total Particulate 0.0000606261 ton/yr

*New York State HAP
 (use additional sheets if necessary)

REMARKS

**Emissions For Welding Operations
Federal and New York State Regulations**

Facility: Seneca Army Depot
 Location: Bldg 117
 SCC: 3-09-999-99

Date: 8/16/94
 Initials: DCP

Comment: This template should be used for each type of welding rod at an installation.
 Be sure to enter information into each cell below. When making assumptions for
 the "best fit" or "most similar" rod type, state them in the spaces provided.

Welding Rod Information:

Rod type: Certanium Pt No. 247 (Type of the actual rod used)

alpha/numeric code: E70T-1

*(Choose alpha numeric code only from list provided. Enter the name
 (including the spaces in the name) EXACTLY as it appears on the list.
 Also see note below)*

Notes/Assumptions: _____

Annual consumption: 10.0 Lbs/yr

Fume generation rate: 12.1 g/kg

Percentage of metal in fumes

| Metal Element | Metal Composition (%) | Emissions (lb/yr) |
|---------------------|-----------------------|-------------------|
| Cobalt | 0.0022 | 0.00 |
| Barium | 0.0018 | 0.00 |
| Vanadium | 0.0045 | 0.00 |
| Zinc | 0.065 | 0.00 |
| Iron | 36.4 | 0.04 |
| Magnesium | N/A | N/A |
| Silicon | 4.2 | 0.01 |
| Fluorine | 2.6 | 0.00 |
| Molybdenum | N/A | N/A |
| Copper | 0.02 % | 0.00 |
| Manganese Compounds | 9.20 % | 0.01 |
| Chromium Compounds | 0.01 % | 0.00 |
| Nickel Compounds | 0.01 % | 0.00 |
| Aluminum | 0.11 % | 0.00 |

TSP Emissions = 0.121 Lbs/yr 0.000 Ton/yr
 PM-10 Emissions = 0.121 Lbs/yr 0.000 Ton/yr

| HAP Emissions | | |
|---------------------|-------|-----------------------|
| HAP Name | CAS # | Emissions (Lbs/yr) |
| Cobalt Compounds | 0 | 0.00 |
| Manganese Compounds | 0 | 0.01 |
| Chromium Compounds | 0 | 0.00 |
| Nickel Compounds | 0 | 0.00 |
| Barium* | 0 | 0.00 |
| Copper* | 0 | 0.00 |
| | | |
| | | |

* New York State HAP

References: Section 313 Reporting Issue Paper; Clarification and Guidance for the Metal Fabrication Industry; "Emission Factors for Arc Welding", R. Gerstle, et al., and "Fumes and Gases in the Welding Environment," American Welding Society.

Note: When using data for rod types Inconel 625, Haynes C-276 and Haynes 25 refer to the above the reference, to check the actual electrode type, before entering the data.

EMISSION RATE DETERMINATION METHOD

Stack Test Data _____ Emission Fact X Material Balance _____

Similar Unit Data _____ Other _____

Reference: Section 313 Reporting Issue Paper; Clarification and Guidance for the Metal Fabrication Industry,
14 & 15

OZONE PRECURSOR EMISSIONS

HAZARDOUS AIR POLLUTANTS

Typical Ozone Season Emissions

HAP

CAS CODE

LB/YR

VOC Emissions _____ lb/day

Cobalt Compounds 0 0.0000026675

Manganese Compounds 0 0.0111552028

NOx Emissions _____ lb/day

Chromium Compounds 0 0.0000157628

Nickel Compounds 0 0.0000070326

CO Emissions _____ lb/day

Barium* 0.0000021825

Copper* 0.0000194004

CRITERIA POLLUTANT EMISSIONS

VOC Emissions _____ ton/yr

NOx Emissions _____ ton/yr

CO Emissions _____ ton/yr

SO2 Emissions _____ ton/yr

PM10 Emissions 0.0000606261 ton/yr

Total Particulate 0.0000606261 ton/yr

*New York State HAP
 (use additional sheets if necessary)

REMARKS

WELDING OPERATIONS

GENERAL INFORMATION

Installation Seneca Army Depot GEOMET Rep.....T. Sletten
 Calendar Year Data Represents.....93
 SCC.....3-09-999-99 Building No.....320
 Date.....June 6-10, 1994 Unit ID Number...
 POC.....Jim Lavoier Phone No.....(607) 869-1434

SOURCE INFORMATION

Welding Medium (Electrode)

Operating Schedule

| <u>Type</u> | <u>Amount</u> |
|----------------|---------------|
| 6013 | 50 lb/yr |
| 7024 | 20 lb/yr |
| 7018 | 100 lb/yr |
| Aluminum Stick | 5 lb/yr |
| Wire | 20 lb/yr |
| Brazing Rod | 3 lb/yr |
| Silver Solder | 0.25 lb/yr |
| | |
| | |

Hours/day.....

Days/week.....

**Emissions For Welding Operations
Federal and New York State Regulations**

Facility: Seneca Army Depot
 Location: Bldg 320
 SCC: 3-09-999-99

Date: 8/16/94
 Initials: DCP

Comment: This template should be used for each type of welding rod at an installation.
 Be sure to enter information into each cell below. When making assumptions for
 the "best fit" or "most similar" rod type, state them in the spaces provided.

Welding Rod Information:

Rod type: Silver Solder (Type of the actual rod used)

alpha/numeric code: E6010

*(Choose alpha numeric code only from list provided. Enter the name
 (including the spaces in the name) EXACTLY as it appears on the list.
 Also see note below)*

Notes/Assumptions: _____

Annual consumption: 0.3 Lbs/yr

Fume generation rate: 35.9 g/kg

Percentage of metal in fumes

| Metal Element | Metal Composition (%) | Emissions (lb/yr) |
|---------------------|-----------------------|-------------------|
| Cobalt | 0.0029 | 0.00 |
| Barium | 0.001 | 0.00 |
| Vanadium | 0.0027 | 0.00 |
| Zinc | 0.029 | 0.00 |
| Iron | 46.2 | 0.00 |
| Magnesium | N/A | N/A |
| Silicon | 5.3 | 0.00 |
| Fluorine | N/A | N/A |
| Molybdenum | N/A | N/A |
| Copper | 0.15 % | 0.00 |
| Manganese Compounds | 4.20 % | 0.00 |
| Chromium Compounds | 0.02 % | 0.00 |
| Nickel Compounds | 0.02 % | 0.00 |
| Aluminum | 0.03 % | 0.00 |

TSP Emissions = 0.009 Lbs/yr 0.000 Ton/yr
 PM-10 Emissions = 0.009 Lbs/yr 0.000 Ton/yr

| HAP Emissions | | |
|---------------------|-------|--------------------|
| HAP Name | CAS # | Emissions (Lbs/yr) |
| Cobalt Compounds | 0 | 0.00 |
| Manganese Compounds | 0 | 0.00 |
| Chromium Compounds | 0 | 0.00 |
| Nickel Compounds | 0 | 0.00 |
| Barium* | 0 | 0.00 |
| Copper* | 0 | 0.00 |
| | | |
| | | |

* New York State HAP

References: Section 313 Reporting Issue Paper; Clarification and Guidance for the Metal Fabrication Industry; "Emission Factors for Arc Welding", R. Gerstle, et al., and "Fumes and Gases in the Welding Environment," American Welding Society.

Note: When using data for rod types Inconel 625, Haynes C-276 and Haynes 25 refer to the above the reference, to check the actual electrode type, before entering the data.

EMISSION RATE DETERMINATION METHOD

Stack Test Data _____ Emission Fact X Material Balance _____

Similar Unit Data _____ Other _____

Reference: Section 313 Reporting Issue Paper; Clarification and Guidance for the Metal Fabrication Industry,

14 & 15

OZONE PRECURSOR EMISSIONS

HAZARDOUS AIR POLLUTANTS

Typical Ozone Season Emissions

HAP

CAS CODE

LB/YR

VOC Emissions _____ lb/day

Cobalt Compounds 0 0.0000002608

NOx Emissions _____ lb/day

Manganese Compounds 0 0.0003777357

CO Emissions _____ lb/day

Chromium Compounds 0 0.0000013491

Nickel Compounds 0 0.0000015289

Barium* 0.0000000899

Copper* 0.0000132207

CRITERIA POLLUTANT EMISSIONS

VOC Emissions _____ ton/yr

NOx Emissions _____ ton/yr

CO Emissions _____ ton/yr

SO2 Emissions _____ ton/yr

PM10 Emissions 0.0000044969 ton/yr

Total Particulate 0.0000044969 ton/yr

*New York State HAP
(use additional sheets if necessary)

REMARKS

**Emissions For Welding Operations
Federal and New York State Regulations**

Facility: Seneca Army Depot
 Location: Bldg 320
 SCC: 3-09-999-99

Date: 8/16/94
 Initials: DCP

Comment: This template should be used for each type of welding rod at an installation.
 Be sure to enter information into each cell below. When making assumptions for
 the "best fit" or "most similar" rod type, state them in the spaces provided.

Welding Rod Information:

Rod type: 6013 (Type of the actual rod used)

alpha/numeric code: E6013

*(Choose alpha numeric code only from list provided. Enter the name
 (including the spaces in the name) EXACTLY as it appears on the list.
 Also see note below)*

Notes/Assumptions: _____

Annual consumption: 50.0 Lbs/yr

Fume generation rate: 20 g/kg

Percentage of metal in fumes

| Metal Element | Metal Composition (%) | Emissions (lb/yr) |
|---------------------|-----------------------|-------------------|
| Cobalt | 0.003 | 0.00 |
| Barium | 0.00097 | 0.00 |
| Vanadium | 0.012 | 0.00 |
| Zinc | 12 | 0.12 |
| Iron | 56.2 | 0.56 |
| Magnesium | N/A | N/A |
| Silicon | 12.8 | 0.13 |
| Fluorine | N/A | N/A |
| Molybdenum | N/A | N/A |
| Copper | 0.16 % | 0.00 |
| Manganese Compounds | 4.90 % | 0.05 |
| Chromium Compounds | 0.03 % | 0.00 |
| Nickel Compounds | 0.02 % | 0.00 |
| Aluminum | 0.18 % | 0.00 |

TSP Emissions = 1.002 Lbs/yr 0.001 Ton/yr
 PM-10 Emissions = 1.002 Lbs/yr 0.001 Ton/yr

| HAP Emissions | | |
|---------------------|-------|-----------------------|
| HAP Name | CAS # | Emissions (Lbs/yr) |
| Cobalt Compounds | 0 | 0.00 |
| Manganese Compounds | 0 | 0.05 |
| Chromium Compounds | 0 | 0.00 |
| Nickel Compounds | 0 | 0.00 |
| Barium* | 0 | 0.00 |
| Copper* | 0 | 0.00 |
| | | |
| | | |
| | | |

* New York State HAP

References: Section 313 Reporting Issue Paper; Clarification and Guidance for the Metal Fabrication Industry; "Emission Factors for Arc Welding", R. Gerstle, et al., and "Fumes and Gases in the Welding Environment," American Welding Society.

Note: When using data for rod types Inconel 625, Haynes C-276 and Haynes 25 refer to the above the reference, to check the actual electrode type, before entering the data.

EMISSION RATE DETERMINATION METHOD

Stack Test Data _____ Emission Fact X Material Balance _____

Similar Unit Data _____ Other _____

Reference: Section 313 Reporting Issue Paper; Clarification and Guidance for the Metal Fabrication Industry,

14 & 15

OZONE PRECURSOR EMISSIONS

HAZARDOUS AIR POLLUTANTS

Typical Ozone Season Emissions

HAP

CAS CODE

LB/YR

VOC Emissions _____ lb/day

Cobalt Compounds 0 0.0000300625

Manganese Compounds 0 0.0491021324

NOx Emissions _____ lb/day

Chromium Compounds 0 0.0003006253

Nickel Compounds 0 0.0001803752

CO Emissions _____ lb/day

Barium* 0.0000097202

Copper* 0.0016033349

CRITERIA POLLUTANT EMISSIONS

VOC Emissions _____ ton/yr

NOx Emissions _____ ton/yr

CO Emissions _____ ton/yr

SO2 Emissions _____ ton/yr

PM10 Emissions 0.0005010422 ton/yr

Total Particulate 0.0005010422 ton/yr

*New York State HAP
(use additional sheets if necessary)

REMARKS

**Emissions For Welding Operations
Federal and New York State Regulations**

Facility: Seneca Army Depot
 Location: Bldg 320
 SCC: 3-09-999-99

Date: 8/16/94
 Initials: DCP

Comment: This template should be used for each type of welding rod at an installation.
 Be sure to enter information into each cell below. When making assumptions for
 the "best fit" or "most similar" rod type, state them in the spaces provided.

Welding Rod Information:

Rod type: 7024 (Type of the actual rod used)

alpha/numeric code: E7018

*(Choose alpha numeric code only from list provided. Enter the name
 (including the spaces in the name) EXACTLY as it appears on the list.
 Also see note below)*

Notes/Assumptions: _____

Annual consumption: 20.0 Lbs/yr

Fume generation rate: 21.1 g/kg

Percentage of metal in fumes

| Metal Element | Metal Composition (%) | Emissions (lb/yr) |
|---------------------|-----------------------|-------------------|
| Cobalt | 0.0016 | 0.00 |
| Barium | 0.042 | 0.00 |
| Vanadium | 0.0007 | 0.00 |
| Zinc | 0.12 | 0.00 |
| Iron | 26.7 | 0.11 |
| Magnesium | N/A | N/A |
| Silicon | 0.2 | 0.00 |
| Fluorine | 13.7 | 0.06 |
| Molybdenum | N/A | N/A |
| Copper | 0.07 % | 0.00 |
| Manganese Compounds | 4.10 % | 0.02 |
| Chromium Compounds | 0.02 % | 0.00 |
| Nickel Compounds | 0.01 % | 0.00 |
| Aluminum | 1.30 % | 0.01 |

TSP Emissions = 0.423 Lbs/yr 0.000 Ton/yr
 PM-10 Emissions = 0.423 Lbs/yr 0.000 Ton/yr

| HAP Emissions | | |
|---------------------|-------|-----------------------|
| HAP Name | CAS # | Emissions (Lbs/yr) |
| Cobalt Compounds | 0 | 0.00 |
| Manganese Compounds | 0 | 0.02 |
| Chromium Compounds | 0 | 0.00 |
| Nickel Compounds | 0 | 0.00 |
| Barium* | 0 | 0.00 |
| Copper* | 0 | 0.00 |
| | | |
| | | |
| | | |

* New York State HAP

References: Section 313 Reporting Issue Paper; Clarification and Guidance for the Metal Fabrication Industry; "Emission Factors for Arc Welding", R. Gerstle, et al., and "Fumes and Gases in the Welding Environment," American Welding Society.

Note: When using data for rod types Inconel 625, Haynes C-276 and Haynes 25 refer to the above the reference, to check the actual electrode type, before entering the data.

EMISSION RATE DETERMINATION METHOD

Stack Test Data _____ Emission Fact X Material Balance _____

Similar Unit Data _____ Other _____

Reference: Section 313 Reporting Issue Paper; Clarification and Guidance for the Metal Fabrication Industry,
14 & 15

OZONE PRECURSOR EMISSIONS

HAZARDOUS AIR POLLUTANTS

Typical Ozone Season Emissions

VOC Emissions _____ lb/day

NOx Emissions _____ lb/day

CO Emissions _____ lb/day

| HAP | CAS CODE | LB/YR |
|---------------------|----------|--------------|
| Cobalt Compounds | 0 | 0.0000067661 |
| Manganese Compounds | 0 | 0.0173380632 |
| Chromium Compounds | 0 | 0.0001014911 |
| Nickel Compounds | 0 | 0.0000507456 |
| Barium* | | 0.0001776094 |
| Copper* | | 0.0003044733 |

CRITERIA POLLUTANT EMISSIONS

VOC Emissions _____ ton/yr

NOx Emissions _____ ton/yr

CO Emissions _____ ton/yr

SO2 Emissions _____ ton/yr

PM10 Emissions 0.0002114398 ton/yr

Total Particulate 0.0002114398 ton/yr

*New York State HAP
 (use additional sheets if necessary)

REMARKS

**Emissions For Welding Operations
Federal and New York State Regulations**

Facility: Seneca Army Depot
 Location: Bldg 320
 SCC: 3-09-999-99

Date: 8/16/94
 Initials: DCP

Comment: This template should be used for each type of welding rod at an installation.
 Be sure to enter information into each cell below. When making assumptions for
 the "best fit" or "most similar" rod type, state them in the spaces provided.

Welding Rod Information:

Rod type: 7018 (Type of the actual rod used)

alpha/numeric code: E7018

*(Choose alpha numeric code only from list provided. Enter the name
 (including the spaces in the name) EXACTLY as it appears on the list.
 Also see note below)*

Notes/Assumptions: _____

Annual consumption: 100.0 Lbs/yr

Fume generation rate: 21.1 g/kg

Percentage of metal in fumes

| Metal Element | Metal Composition (%) | Emissions (lb/yr) |
|---------------------|-----------------------|-------------------|
| Cobalt | 0.0016 | 0.00 |
| Barium | 0.042 | 0.00 |
| Vanadium | 0.0007 | 0.00 |
| Zinc | 0.12 | 0.00 |
| Iron | 26.7 | 0.56 |
| Magnesium | N/A | N/A |
| Silicon | 0.2 | 0.00 |
| Fluorine | 13.7 | 0.29 |
| Molybdenum | N/A | N/A |
| Copper | 0.07 % | 0.00 |
| Manganese Compounds | 4.10 % | 0.09 |
| Chromium Compounds | 0.02 % | 0.00 |
| Nickel Compounds | 0.01 % | 0.00 |
| Aluminum | 1.30 % | 0.03 |

TSP Emissions = 2.114 Lbs/yr 0.001 Ton/yr
 PM-10 Emissions = 2.114 Lbs/yr 0.001 Ton/yr

| HAP Emissions | | |
|---------------------|-------|--------------------|
| HAP Name | CAS # | Emissions (Lbs/yr) |
| Cobalt Compounds | 0 | 0.00 |
| Manganese Compounds | 0 | 0.09 |
| Chromium Compounds | 0 | 0.00 |
| Nickel Compounds | 0 | 0.00 |
| Barium* | 0 | 0.00 |
| Copper* | 0 | 0.00 |
| | | |
| | | |

* New York State HAP

References: Section 313 Reporting Issue Paper; Clarification and Guidance for the Metal Fabrication Industry; "Emission Factors for Arc Welding", R. Gerstle, et al., and "Fumes and Gases in the Welding Environment," American Welding Society.

Note: When using data for rod types Inconel 625, Haynes C-276 and Haynes 25 refer to the above the reference, to check the actual electrode type, before entering the data.

EMISSION RATE DETERMINATION METHOD

Stack Test Data _____ Emission Fact X Material Balance _____

Similar Unit Data _____ Other _____

Reference: Section 313 Reporting Issue Paper; Clarification and Guidance for the Metal Fabrication Industry,

14 & 15

OZONE PRECURSOR EMISSIONS

HAZARDOUS AIR POLLUTANTS

Typical Ozone Season Emissions

HAP

CAS CODE

LB/YR

VOC Emissions _____ lb/day

Cobalt Compounds 0 0.0000338304

Manganese Compounds 0 0.0866903159

NOx Emissions _____ lb/day

Chromium Compounds 0 0.0005074555

Nickel Compounds 0 0.0002537278

CO Emissions _____ lb/day

Barium* 0.0008880471

Copper* 0.0015223665

CRITERIA POLLUTANT EMISSIONS

VOC Emissions _____ ton/yr

NOx Emissions _____ ton/yr

CO Emissions _____ ton/yr

SO2 Emissions _____ ton/yr

PM10 Emissions 0.0010571990 ton/yr

Total Particulate 0.0010571990 ton/yr

*New York State HAP
(use additional sheets if necessary)

REMARKS

**Emissions For Welding Operations
Federal and New York State Regulations**

Facility: Seneca Army Depot
 Location: Bldg 320
 SCC: 3-09-999-99

Date: 8/16/94
 Initials: DCP

Comment: This template should be used for each type of welding rod at an installation.
 Be sure to enter information into each cell below. When making assumptions for
 the "best fit" or "most similar" rod type, state them in the spaces provided.

Welding Rod Information:

Rod type: Aluminum stick (Type of the actual rod used)

alpha/numeric code: ER5356

*(Choose alpha numeric code only from list provided. Enter the name
 (including the spaces in the name) EXACTLY as it appears on the list.
 Also see note below)*

Notes/Assumptions: _____

Annual consumption: 5.0 Lbs/yr

Fume generation rate: 72.3 g/kg

Percentage of metal in fumes

| Metal Element | Metal Composition (%) | Emissions (lb/yr) |
|---------------------|-----------------------|-------------------|
| Cobalt | N/A | N/A |
| Barium | N/A | N/A |
| Vanadium | N/A | N/A |
| Zinc | N/A | N/A |
| Iron | N/A | N/A |
| Magnesium | 3.8 | 0.01 |
| Silicon | N/A | N/A |
| Fluorine | N/A | N/A |
| Molybdenum | N/A | N/A |
| Copper | N/A % | N/A |
| Manganese Compounds | N/A % | N/A |
| Chromium Compounds | N/A % | N/A |
| Nickel Compounds | N/A % | N/A |
| Aluminum | 38.00 % | 0.14 |

TSP Emissions = 0.362 Lbs/yr 0.000 Ton/yr
 PM-10 Emissions = 0.362 Lbs/yr 0.000 Ton/yr

| HAP Emissions | | |
|---------------------|-------|-----------------------|
| HAP Name | CAS # | Emissions (Lbs/yr) |
| Cobalt Compounds | 0 | N/A |
| Manganese Compounds | 0 | N/A |
| Chromium Compounds | 0 | N/A |
| Nickel Compounds | 0 | N/A |
| Barium* | 0 | N/A |
| Copper* | 0 | N/A |
| | | |
| | | |
| | | |

* New York State HAP

References: Section 313 Reporting Issue Paper; Clarification and Guidance for the Metal Fabrication Industry; "Emission Factors for Arc Welding", R. Gerstle, et al., and "Fumes and Gases in the Welding Environment," American Welding Society.

Note: When using data for rod types Inconel 625, Haynes C-276 and Haynes 25 refer to the above the reference, to check the actual electrode type, before entering the data.

EMISSION RATE DETERMINATION METHOD

Stack Test Data _____ Emission Fact X Material Balance _____

Similar Unit Data _____ Other _____

Reference: Section 313 Reporting Issue Paper; Clarification and Guidance for the Metal Fabrication Industry,

14 & 15

OZONE PRECURSOR EMISSIONS

HAZARDOUS AIR POLLUTANTS

Typical Ozone Season Emissions

HAP

CAS CODE

LB/YR

VOC Emissions _____ lb/day

Cobalt Compounds 0 N/A

NOx Emissions _____ lb/day

Manganese Compounds 0 N/A

CO Emissions _____ lb/day

Chromium Compounds 0 N/A

Nickel Compounds 0 N/A

Barium* N/A

Copper* N/A

CRITERIA POLLUTANT EMISSIONS

VOC Emissions _____ ton/yr

NOx Emissions _____ ton/yr

CO Emissions _____ ton/yr

SO2 Emissions _____ ton/yr

PM10 Emissions 0.0001811267 ton/yr

Total Particulate 0.0001811267 ton/yr

*New York State HAP
(use additional sheets if necessary)

REMARKS

**Emissions For Welding Operations
Federal and New York State Regulations**

Facility: Seneca Army Depot
 Location: Bldg 320
 SCC: 3-09-999-99

Date: 8/16/94
 Initials: DCP

Comment: This template should be used for each type of welding rod at an installation.
 Be sure to enter information into each cell below. When making assumptions for
 the "best fit" or "most similar" rod type, state them in the spaces provided.

Welding Rod Information:

Rod type: Wire (Type of the actual rod used)

alpha/numeric code: E70T-5

*(Choose alpha numeric code only from list provided. Enter the name
 (including the spaces in the name) EXACTLY as it appears on the list.
 Also see note below)*

Notes/Assumptions: _____

Annual consumption: 20.0 Lbs/yr

Fume generation rate: 21 g/kg

Percentage of metal in fumes

| Metal Element | Metal Composition (%) | Emissions (lb/yr) |
|---------------------|-----------------------|-------------------|
| Cobalt | N/A | N/A |
| Barium | N/A | N/A |
| Vanadium | N/A | N/A |
| Zinc | N/A | N/A |
| Iron | 27.95 | 0.12 |
| Magnesium | N/A | N/A |
| Silicon | 0.1 | 0.00 |
| Fluorine | 3.7 | 0.02 |
| Molybdenum | N/A | N/A |
| Copper | N/A % | N/A |
| Manganese Compounds | 11.10 % | 0.05 |
| Chromium Compounds | N/A % | N/A |
| Nickel Compounds | N/A % | N/A |
| Aluminum | N/A % | N/A |

TSP Emissions = 0.421 Lbs/yr 0.000 Ton/yr
 PM-10 Emissions = 0.421 Lbs/yr 0.000 Ton/yr

| HAP Emissions | | |
|---------------------|-------|-----------------------|
| HAP Name | CAS # | Emissions (Lbs/yr) |
| Cobalt Compounds | 0 | N/A |
| Manganese Compounds | 0 | 0.05 |
| Chromium Compounds | 0 | N/A |
| Nickel Compounds | 0 | N/A |
| Barium* | 0 | N/A |
| Copper* | 0 | N/A |
| | | |
| | | |

* New York State HAP

References: Section 313 Reporting Issue Paper; Clarification and Guidance for the Metal Fabrication Industry; "Emission Factors for Arc Welding", R. Gerstle, et al., and "Fumes and Gases in the Welding Environment," American Welding Society.

Note: When using data for rod types Inconel 625, Haynes C-276 and Haynes 25 refer to the above the reference, to check the actual electrode type, before entering the data.

EMISSION RATE DETERMINATION METHOD

Stack Test Data _____ Emission Fact X Material Balance _____

Similar Unit Data _____ Other _____

Reference: Section 313 Reporting Issue Paper; Clarification and Guidance for the Metal Fabrication Industry,

14 & 15

OZONE PRECURSOR EMISSIONS

HAZARDOUS AIR POLLUTANTS

Typical Ozone Season Emissions

HAP

CAS CODE

LB/YR

VOC Emissions _____ lb/day

Cobalt Compounds 0 N/A

Manganese Compounds 0 0.0467171717

NOx Emissions _____ lb/day

Chromium Compounds 0 N/A

Nickel Compounds 0 N/A

CO Emissions _____ lb/day

Barium* N/A

Copper* N/A

CRITERIA POLLUTANT EMISSIONS

VOC Emissions _____ ton/yr

NOx Emissions _____ ton/yr

CO Emissions _____ ton/yr

SO2 Emissions _____ ton/yr

PM10 Emissions 0.0002104377 ton/yr

Total Particulate 0.0002104377 ton/yr

*New York State HAP
(use additional sheets if necessary)

REMARKS

**Emissions For Welding Operations
Federal and New York State Regulations**

Facility: Seneca Army Depot
 Location: Bldg 320
 SCC: 3-09-999-99

Date: 8/16/94
 Initials: DCP

Comment: This template should be used for each type of welding rod at an installation.
 Be sure to enter information into each cell below. When making assumptions for
 the "best fit" or "most similar" rod type, state them in the spaces provided.

Welding Rod Information:

Rod type: Brazing rod (Type of the actual rod used)

alpha/numeric code: Haynes C-276

*(Choose alpha numeric code only from list provided. Enter the name
 (including the spaces in the name) EXACTLY as it appears on the list.
 Also see note below)*

Notes/Assumptions: _____

Annual consumption: 3.0 Lbs/yr

Fume generation rate: 14.2 g/kg

Percentage of metal in fumes

| Metal Element | Metal Composition (%) | Emissions (lb/yr) |
|---------------------|-----------------------|-------------------|
| Cobalt | N/A | N/A |
| Barium | N/A | N/A |
| Vanadium | N/A | N/A |
| Zinc | N/A | N/A |
| Iron | 2 | 0.00 |
| Magnesium | 1.4 | 0.00 |
| Silicon | N/A | N/A |
| Fluorine | 5.9 | 0.00 |
| Molybdenum | 8.4 | 0.00 |
| Copper | N/A % | N/A |
| Manganese Compounds | 0.70 % | 0.00 |
| Chromium Compounds | 5.40 % | 0.00 |
| Nickel Compounds | 16.80 % | 0.01 |
| Aluminum | 0.70 % | 0.00 |

TSP Emissions = 0.043 Lbs/yr 0.000 Ton/yr
 PM-10 Emissions = 0.043 Lbs/yr 0.000 Ton/yr

| HAP Emissions | | |
|---------------------|-------|--------------------|
| HAP Name | CAS # | Emissions (Lbs/yr) |
| Cobalt Compounds | 0 | N/A |
| Manganese Compounds | 0 | 0.00 |
| Chromium Compounds | 0 | 0.00 |
| Nickel Compounds | 0 | 0.01 |
| Barium* | 0 | N/A |
| Copper* | 0 | N/A |
| | | |
| | | |
| | | |

* New York State HAP

References: Section 313 Reporting Issue Paper; Clarification and Guidance for the Metal Fabrication Industry; "Emission Factors for Arc Welding", R. Gerstle, et al., and "Fumes and Gases in the Welding Environment," American Welding Society.

Note: When using data for rod types Inconel 625, Haynes C-276 and Haynes 25 refer to the above the reference, to check the actual electrode type, before entering the data.

EMISSION RATE DETERMINATION METHOD

Stack Test Data _____ Emission Fact X Material Balance _____

Similar Unit Data _____ Other _____

Reference: Section 313 Reporting Issue Paper; Clarification and Guidance for the Metal Fabrication Industry,
14 & 15

OZONE PRECURSOR EMISSIONS

HAZARDOUS AIR POLLUTANTS

Typical Ozone Season Emissions

HAP

CAS CODE

LB/YR

VOC Emissions _____ lb/day

Cobalt Compounds 0 N/A

NOx Emissions _____ lb/day

Manganese Compounds 0 0.0002988215

CO Emissions _____ lb/day

Chromium Compounds 0 0.0023051948

Nickel Compounds 0 0.0071717172

Barium* N/A

Copper* N/A

CRITERIA POLLUTANT EMISSIONS

VOC Emissions _____ ton/yr

NOx Emissions _____ ton/yr

CO Emissions _____ ton/yr

SO2 Emissions _____ ton/yr

PM10 Emissions 0.0000213444 ton/yr

Total Particulate 0.0000213444 ton/yr

*New York State HAP
 (use additional sheets if necessary)

REMARKS

ABRASIVE BLASTING

GENERAL INFORMATION

Installation Seneca Army Depot

SCC..... A2309100200 Unit ID #.....

Location..... Bldg 317 Permit #..... 03171

POC..... David Nichols Inventoried by..... T. Sletten

Phone..... (607) 869-1525 Operating Schedule
Hours/day..... 3 hr/mo
Inventory Date..... June 6-10, 1994 Days/week.....

OPERATING INFORMATION

Booth Manufacturer: Wheelabrator Blast Nozzles:
Stationary.....
Hand-Held.....

Booth Model No.:..... 66" American Wheelabrator

Dimensions: L 15' W 8' H 8' Automatic Recycle
or Diameter _____ Through cyclone

Items Blasted (Check All Applicable):
Painted Parts... Rusted Parts...
Clean Metal..... Other.....

Purpose of blasting..... Remove rust and paint

BLAST MEDIA INFORMATION

Blast Media Used (Check One):
Walnut _____ Steel Shot _____ Plastic Glass _____

Amount of Blast Media Added Annually:..... 80 (lb/yr)
Frequency of Blast Media Additions..... 2 (times/yr)
Annual Amount of Blast Media Disposed of as Waste..... (lb/yr)
Capacity of media feed hopper..... 115 (lb)
NOTE: Uses plastic abrasive size 40-60-Type II Media

PARTICULATE CONTROL EQUIPMENT

Control Device Used (Check All that Apply):

| | Control Efficiency |
|--|--------------------|
| ESP..... | _____ |
| Baghouse..... | _____ |
| Cyclone..... <input checked="" type="checkbox"/> | _____ |
| Other..... | _____ |

Stack Test Data _____ Emission Factor X Material Balance _____

Similar Unit Data _____ Other _____

Reference: AIR QUALITY PERMITS, VOL 1, SECTION 2

OZONE PRECURSOR EMISSIONS

Typical Ozone Season Emissions

VOC Emissions _____ lb/day

NOx Emissions _____ lb/day

CO Emissions _____ lb/day

CRITERIA POLLUTANT EMISSIONS

VOC Emissions _____ ton/yr

NOx Emissions _____ ton/yr

CO Emissions _____ ton/yr

SO2 Emissions _____ ton/yr

PM10 Emissions 0.0002800000 ton/yr

Total Particulate 0.0004000000 ton/yr

HAZARDOUS AIR POLLUTANTS

| HAP | CAS CODE | LB/YR |
|-------|----------|-------|
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |

(use additional sheets if necessary)

STACK INFORMATION

Stack (release) Ht. 25 feet
 Stack Diameter 36 inch

Stack Gas Velocity 5.30 ft/sec
 Stack Gas Flow Rate 2,250 ascf/min
 Stack Gas Temperature 65 oF

Other sources that share this stack? Shares stack with glove Box Unit

COMMENTS

EMISSIONS FROM UNCONFINED ABRASIVE BLASTING
Federal and New York State Regulations

| | |
|------------------------------------|-------------------------|
| Facility: <u>Seneca Army Depot</u> | Date: <u>8/17/94</u> |
| Location: <u>Bldg 317</u> | Initials: <u>DCP</u> |
| ID Number: _____ | SCC: <u>A2309100200</u> |

INPUT DATA

| | | |
|-------------------------|----|---|
| ABRASIVE | D | A = SAND B = GRIT C = STEEL SHOT D = OTHER |
| AMOUNT OF ABRASIVE USED | 80 | Lbs/Yr |

SOLUTION

| | |
|--------------------------------|-------------|
| PARTICULATE EMISSIONS (TSP)** | 0.80 Lbs/Yr |
| PARTICULATE EMISSIONS (PM10)** | 0.56 Lbs/Yr |

** EMISSION FACTORS OBTAINED FROM AIR QUALITY PERMITS, Vol I., Section 2.3.1, Table 2-2.

ABRASIVE BLASTING

Page__ of __

GENERAL INFORMATION

Installation Seneca Army Depot

SCC..... A2309100200 Unit ID #.....

Location..... Bldg 360 Permit #..... 03602

POC..... David Nichols Inventoried by..... T. Sletten

Phone..... (607) 869-1525 Operating Schedule
Hours/day..... used 5 hr since Feb 1993,
Inventory Date..... June 6-10, 1994 Days/week..... Inactive now

OPERATING INFORMATION

Booth Manufacturer: Wheelabrator Blast Nozzles:
Stationary.....
Booth Model No.:..... Hand-Held.....

Dimensions: L 15' W 8' H 8' Automatic Recycle
or Diameter _____ Through cyclone

Items Blasted (Check All Applicable):

Painted Parts... _____ Rusted Parts... _____
Clean Metal.... _____ Other..... _____

Purpose of blasting..... Clean Fenders

BLAST MEDIA INFORMATION

Blast Media Used (Check One):

Walnut _____ Steel Shot _____ Plastic _____ Glass _____

Amount of Blast Media Added Annually:..... Not available (lb/yr)

Frequency of Blast Media Additions..... (times/yr)

Annual Amount of Blast Media Disposed of as Waste..... (lb/yr)

Capacity of media feed hopper..... (lb)

PARTICULATE CONTROL EQUIPMENT

Control Device Used (Check All that Apply):

| | Control Efficiency |
|--|--------------------|
| ESP..... | _____ |
| Baghouse..... | _____ |
| Cyclone..... <input checked="" type="checkbox"/> | _____ |
| Other..... | _____ |

ABRASIVE BLASTING (Continued)

EMISSION RATE DETERMINATION METHOD

Stack Test Data _____ Emission Factor _____ Material Balance _____

Similar Unit Data _____ Other _____ (specify)

Reference: _____

OZONE PRECURSOR EMISSIONS

HAZARDOUS AIR POLLUTANTS

| Typical Ozone Season Emissions | HAP | CAS Code | lb/yr |
|--|-------|----------|-------|
| VOC Emissions _____ lb/day | _____ | _____ | _____ |
| NO _x Emissions _____ lb/day | _____ | _____ | _____ |
| CO Emissions _____ lb/day | _____ | _____ | _____ |

CRITERIA POLLUTANT EMISSIONS

| | |
|---|--------------------------------------|
| VOC Emissions _____ ton/yr | _____ |
| NO _x Emissions _____ ton/yr | _____ |
| CO Emissions _____ ton/yr | _____ |
| SO ₂ Emissions _____ ton/yr | _____ |
| PM ₁₀ Emissions _____ ton/yr | _____ |
| Total Particulate _____ ton/yr | (use additional sheets if necessary) |

STACK INFORMATION

Stack (Release) Height 18 (feet) Stack Gas Velocity 37.5 (ft/sec)

Stack Diameter 12 (inch) Stack Gas Flow Rate 2,250 (acsf/min)

Stack Gas Temperature 65 (°F)

Other sources that share this stack ? _____

COMMENTS

Painting Operations VOC Emissions
for Building Number 317

| NSN | Solvent | Use gal/yr | VOC Content (%) | VOC Emissions (lb/yr) | VOC Emissions (ton/yr) |
|------------------|------------------------------|---------------|--------------------|--------------------------|---------------------------|
| 8010-00-159-4518 | Enamel Primer | 20.00 | 83.69 | 132.00 | 0.07 |
| 8010-00-597-7854 | Lacquer Primer | 20.00 | 48.38 | 95.79 | 0.05 |
| 8010-00-082-2450 | Epoxy Primer - Part A | 10.00 | 39.55 | 43.43 | 0.02 |
| 8010-00-082-2450 | Epoxy Primer - Part B | 10.00 | 82.90 | 57.17 | 0.03 |
| 8010-00-899-8825 | So-Sure Zinc Chromate Primer | 20.00 | 94.79 | 170.64 | 0.09 |
| 8010-00-527-0216 | Enamel Topcoat | 30.00 | 32.87 | 98.71 | 0.05 |
| 8010-00-584-3149 | Lacquer Topcoat | 30.00 | 84.05 | 197.81 | 0.10 |
| 8010-00-160-5794 | Lacquer Thinner | 30.00 | 100.00 | 199.66 | 0.10 |
| 8010-00-160-5794 | Enamel Thinner | 30.00 | 100.00 | 195.66 | 0.10 |
| N/A | Mineral Spirits | 30.00 | 100.00 | 198.91 | 0.10 |
| N/A | Aliphatic Thinner | 30.00 | 100.00 | 212.14 | 0.11 |

Ozone Season Daily Painting Operations Emissions
for Building Number 317

| Pollutant | Emissions (lb) | aily Emission (lb) | Daily Emissions (tons) |
|-----------|-------------------|-----------------------|---------------------------|
| VOC | 1601.92 | 4.35 | <0.01 |

Painting Operations HAP Emissions
for Building Number 317

| NSN | Solvent | Use (gal/yr) | HAP Content (lbs/gal) | HAP Emissions (lb/yr) | HAP Emissions (ton/yr) |
|------------------|------------------------------|-----------------|--------------------------|--------------------------|---------------------------|
| 8010-00-159-4518 | Enamel Primer | 20.00 | 4.02 | 80.33 | 0.04 |
| 8010-00-597-7854 | Lacquer Primer | 20.00 | 3.96 | 79.20 | 0.04 |
| 8010-00-082-2450 | Epoxy Primer - Part A | 10.00 | 2.75 | 27.45 | 0.01 |
| 8010-00-082-2450 | Epoxy Primer - Part B | 10.00 | 3.10 | 31.03 | 0.02 |
| 8010-00-899-8825 | So-Sure Zinc Chromate Primer | 20.00 | 5.58 | 111.51 | 0.06 |
| 8010-00-527-0216 | Enamel Topcoat | 30.00 | 0.50 | 15.02 | 0.01 |
| 8010-00-584-3149 | Lacquer Topcoat | 30.00 | 3.82 | 114.50 | 0.06 |
| 8010-00-160-5794 | Lacquer Thinner | 30.00 | 5.72 | 171.70 | 0.09 |
| 8010-00-160-5794 | Enamel Thinner | 30.00 | 2.09 | 62.61 | 0.03 |
| N/A | Aliphatic Thinner | 30.00 | 4.17 | 125.16 | 0.06 |

Painting Operations HAP Emissions
for Building Number 317

| NSN | Solvent | Use (gal/yr) | HAP Toluene (%) | HAP Xylene (%) | HAP Ethylbenzene* | HAP Acetone* |
|------------------|------------------------------|--------------|-----------------|----------------|-------------------|--------------|
| 8010-00-159-4518 | Enamel Primer | 20.00 | 18.29 | 12.68 | | 18.15 |
| 8010-00-597-7854 | Lacquer Primer | 20.00 | 5.00 | 5.00 | 5.00 | |
| 8010-00-082-2450 | Epoxy Primer - Part A | 10.00 | 5.00 | | | |
| 8010-00-082-2450 | Epoxy Primer - Part B | 10.00 | 15.00 | | | |
| 8010-00-899-8825 | So-Sure Zinc Chromate Primer | 20.00 | 15.83 | | | 6.18 |
| 8010-00-527-0216 | Enamel Topcoat | 30.00 | 5.00 | | | |
| 8010-00-584-3149 | Lacquer Topcoat | 30.00 | 26.76 | 1.60 | 1.60 | 17.09 |
| 8010-00-160-5794 | Lacquer Thinner | 30.00 | 15.00 | | | |
| N/A | Enamel Thinner | 30.00 | 11.00 | | | |
| N/A | Aliphatic Thinner | 30.00 | 10.50 | 7.00 | | |

| NSN | Solvent | Use (gal/yr) | HAP Chromium Compounds (%) | HAP Butyl Benzyl Phthalate* (%) | HAP Isobutyl Acetate* (%) | HAP Isopropyl Alcohol* (%) |
|------------------|------------------------------|--------------|----------------------------|---------------------------------|---------------------------|----------------------------|
| 8010-00-159-4518 | Enamel Primer | 20.00 | | 1.81 | | |
| 8010-00-597-7854 | Lacquer Primer | 20.00 | | | 20.00 | 5.00 |
| 8010-00-082-2450 | Epoxy Primer - Part A | 10.00 | 20.00 | | | |
| 8010-00-082-2450 | Epoxy Primer - Part B | 10.00 | | | | 20.00 |
| 8010-00-899-8825 | So-Sure Zinc Chromate Primer | 20.00 | 6.53 | | 2.61 | |
| 8010-00-160-5794 | Lacquer Thinner | 30.00 | | | 40.00 | 5.00 |

| NSN | Solvent | Use (gal/yr) | HAP Methyl Ethyl Ketone (%) | HAP Glycol Ethers (%) | HAP Methylene Chloride (%) | HAP n-Butyl Alcohol* (%) |
|------------------|------------------------------|--------------|-----------------------------|-----------------------|----------------------------|--------------------------|
| 8010-00-082-2450 | Epoxy Primer - Part B | 10.00 | 10.00 | | | |
| 8010-00-899-8825 | So-Sure Zinc Chromate Primer | 20.00 | | 2.61 | 28.18 | |
| 8010-00-584-3149 | Lacquer Topcoat | 30.00 | | | | 1.60 |
| 8010-00-160-5794 | Lacquer Thinner | 30.00 | 10.00 | | | |
| N/A | Enamel Thinner | 30.00 | | | | 21.00 |
| N/A | Aliphatic Thinner | 30.00 | 30.50 | | | |

| NSN | Solvent | Use (gal/yr) | HAP N-Butyl Acetate* (%) | HAP n-Heptane* (%) | HAP Cyclohexane* (%) | HAP Hexane (%) |
|------------------|-----------------|-----------------|-----------------------------------|--------------------------|----------------------------|----------------------|
| 8010-00-584-3149 | Lacquer Topcoat | 30.00 | 11.00 | | | |
| 8010-00-160-5794 | Lacquer Thinner | 30.00 | | 10.00 | 5.00 | 1.00 |

* New York State HAP

PAINTING OPERATIONS

GENERAL INFORMATION

Installation Seneca Army Depot

Data Collected By... T. Sletten Data Collected..... June 6-10, 1994

SCC..... 4-02-001-10 Building No..... 317 (COMIS)

Permit No./Expires..... 03172 Unit ID Number..... _____

POC..... David Nichols Painting Schedule:
 Hours/day..... 4-6 hr/day
 Days/week..... 5 day/mnth

Phone..... (607) 869-1525

TYPE OF PAINTING

APPLICATION METHOD

(Check all that apply)

Metal Parts..... _____

Furniture..... _____

Vehicle..... _____

Aircraft..... _____

Drums..... _____

Architecture..... _____

Road Striping..... _____

Brush..... _____

Spray Can..... _____

Dip Coat..... _____

Flow Coat..... _____

Electrodeposition _____

Electrostatic
 Rotating Head..... _____

Nonrotational Head.. _____

Manual..... _____

Mechanical Spray
 Air Atomized..... _____

Airless..... _____

Spray Gun Manufacturer: _____

Spray Gun Model No.:..... _____

PAINTING AREA

POLLUTION CONTROL EQUIPMENT

Paint Spray Booth
 Walk-in..... * _____

Drive Through... _____

Open Air
 Indoor..... _____

Outdoor..... _____

(Enter control efficiency)

Dry Filter..... _____

Waterfall..... _____

Incinerator.... _____

Carbon/UV..... _____

Other: _____

PAINT TYPE/USAGE INFORMATION (INCLUDE PAINT/PRIMER/THINNER/LACQUERS)

| PAINT TYPE | NSN/MILSPEC | ANNUAL USE (gal/yr) | DENSITY (lb/gal) | VOC CONTENT (%) | SOLIDS CONTENT (%) |
|------------------------------|------------------|---------------------|------------------|-----------------|--------------------|
| Enamel Primer | | 20 | | | |
| Lacquer Primer | 8010-00-597-7854 | 20 | | | |
| Epoxy Primer | | 20 | | | |
| So Sure Zinc Chromate Primer | 8010-00-899-8825 | 20 | | | |
| Enamel Topcoat | 8010-00-527-0216 | 30 | | | |
| Lacquer Topcoat | 8010-00-584-3149 | 30 | | | |
| Lacquer Thinner | 8010-00-160-5794 | 30 | | | |
| Enamel Thinner | 8010-00-160-5794 | 30 | | | |

* Paint Spray Booth: 10'D x 10'W x 8'H

PAINTING OPERATIONS (Continued)

GENERAL INFORMATION

Installation Seneca Army Depot

Data Collected By... T. Sletten Data Collected..... June 6-10, 1994

SCC..... 4-02-001-10 Building No..... 317 (COMIS)

Permit No./Expires..... 03172 Unit ID Number.....

POC..... David Nichols Painting Schedule:

Phone..... (607) 869-1525 Hours/day..... 4-6 hr/day

Days/week..... 5 day/mnth

PAINT TYPE/USAGE INFORMATION (INCLUDE PAINT/PRIMER/THINNER/LACQUERS)

| PAINT TYPE | NSN/MILSPEC | ANNUAL USE (gal/yr) | DENSITY (lb/gal) | VOC CONTENT (%) | SOLIDS CONTENT (%) |
|-------------------|-------------|---------------------|------------------|-----------------|--------------------|
| Mineral Spirits | | 30 | | | |
| Aliphatic Thinner | | 30 | | | |
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EMISSION RATE DETERMINATION METHOD

Stack Test Data _____ Emission Factor _____ Material Balance X

Similar Unit Data _____ Other MSDS

Reference: _____

OZONE PRECURSOR EMISSIONS

Typical Ozone Season Emissions
 VOC Emissions 4.3530256376 lb/day
 NOx Emissions _____ lb/day
 CO Emissions _____ lb/day

HAZARDOUS AIR POLLUTANTS

| HAP | CAS CODE | LB/YR |
|-------------------------|-----------|---------------|
| Toluene | 108-88-3 | 219.804618000 |
| Xylene | 1330-20-7 | 63.529477992 |
| Butyl Benzyl Phthalate* | 85-68-7 | 2.854881144 |
| Ethylbenzene | 100-41-4 | 13.665122160 |
| N-Butyl Acetate* | 123-86-4 | 23.334795000 |
| Chromium Compounds | 0 | 33.717672348 |
| Isobutyl Acetate* | 110-19-0 | 124.159444476 |
| Isopropyl Alcohol* | 67-63-0 | 33.675312000 |
| Cyclohexane* | 110-82-7 | 9.982800000 |
| Methyl Ethyl Ketone* | 78-93-3 | 91.563073500 |
| Glycol Ethers | 0 | 4.698604476 |
| Hexane | 110-54-3 | 1.996560000 |
| Methylene Chloride | 75-09-2 | 50.730526488 |
| N-Butyl Alcohol* | 71-36-3 | 44.854716960 |
| n-Heptane* | 142-82-5 | 19.965600000 |
| Acetone* | 67-64-1 | 79.9734836070 |
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CRITERIA POLLUTANT EMISSIONS

VOC Emissions 0.8009567173 ton/yr
 NOx Emissions _____ ton/yr
 CO Emissions _____ ton/yr
 SO2 Emissions _____ ton/yr
 PM10 Emissions 0.0212303176 ton/yr
 Total Particulate 0.0454610655 ton/yr

* New York State HAP

STACK INFORMATION

| | |
|---|--|
| Stack (release) Height <u> 25 </u> feet | Stack Gas Velocity <u> 38 </u> ft/sec |
| Stack Diameter <u> 36 </u> inch | Stack Gas Flow Rate <u> 16,000 </u> acsf/min |
| | Stack Gas Temperature <u> 65 </u> oF |

Other sources that share this stack? _____
 Stack Sampling Report Available? (Y/ N, results?) _____

**Emissions For Painting and Surface Coating Operations
Federal and New York State Regulations**

Name: Seneca Army Depot
Bldg #: 317 (COMIS)
SCC: 4-02-001-10

Date: 8/29/94
Initials: GRM

General Comments: This template should only be used for spray paints, brush applications of paint, and spray booth operations. The use of this template is not intended for process applications of paint such as assembly lines in manufacturing plants, and other major coating operations. AP-42 or other comparable documents should be consulted to determine emissions associated with these processes.

Product/Material Information

Product: Enamel Primer
NSN: 8010-00-159-4518

Note: For annual usage, only fill the boxes for EITHER a, b, OR c and leave other boxes blank

Annual Usage: a) cans/yr at fl.oz/can= 0.000 gal/yr
OR b) cans/yr at wt.oz/can= 0.000 lb/yr
OR c) 20.000 gal/yr

Specific Gravity: 0.948

Notes:

VOC composition: 83.69 (%MSDS/Manuf.)
83.69 (%corrected for water and non-photochemical reactants.)
expressed as : A A = % by weight
B = % by volume

Notes:

Comment: "A" and "B" refer to the percentage of the material which contains VOCs. This is expressed as a percentage of total volume, (i.e. gallons) or of total weight (i.e. pounds). When available, percent by weight should take precedence. Make sure to subtract the percentage of non-photochemically reactive VOCs and water, if any.

Paint Application Method: A A = spray application (spray can or gun)
B = brush application

Spray Booth Filter Efficiency = 60.00 % (enter "0" if no filter is present)
(ex: dry filter = 60%, waterfall type = 85%)

Comment: Filter efficiencies vary dependant on the filter type and materials used as the filtering media. Standard dry filters, which are common at Army installations, are assumed to have a constant 60% removal efficiency under normal operating conditions. However, consult the manufacturer if there is any uncertainty as to the removal efficiency for a particular type of spray booth.

Paint Pigment Composition = 16.31 %

Comment: Pigment composition is derived from the leftover percentage of material in the paint that is not volatile (i.e., if the total VOC component makes up 80%, then the leftover 20% is assumed to be pigment).

Emissions Summary

| Annual VOC Emissions | | | |
|------------------------------------|----------------|----------------|---------------------|
| Annual usage converted to weight = | | <u>157.728</u> | Lbs/yr |
| VOC Emissions = | <u>132.003</u> | Lb/yr | <u>0.066</u> Ton/yr |

| Ozone Season VOC Emissions | | | |
|---------------------------------------|--|---------------|-------------|
| Ozone Season Usage = | | <u>39.432</u> | Lbs |
| Daily Ozone Season Usage = | | <u>0.429</u> | Lbs/day |
| Ozone Season VOC Emissions = | | <u>33.001</u> | Lbs |
| Daily Ozone Season VOC Emissions = | | <u>0.359</u> | Lbs/day |
| Ozone Season Work Day VOC Emissions = | | <u>0.502</u> | Lbs/wrk day |

| Annual Particulate Matter Emissions | | | |
|-------------------------------------|--|--------------|--------|
| TSP Emissions = | | <u>5.145</u> | Lbs/yr |
| | | <u>0.003</u> | Ton/yr |
| PM10 Emissions = | | <u>2.403</u> | Lbs/yr |
| | | <u>0.001</u> | Ton/yr |

HAP Emissions: Estimation of HAP emissions are broken into two categories. The first, on the following page, lists common HAPs associated with painting and surface coating. Enter the composition of each HAP in the columns provided for those HAPs listed. If the HAP is not listed, then enter the name of the HAP and %composition in the spaces below.

| HAP Name | CAS No | (% Composition) | Emissions (Lbs/yr) |
|-------------------------|---------|-----------------|--------------------|
| Butyl Benzyl Phthalate* | 85-68-7 | 1.81 | 2.9 |
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HAP Subtotal = 2.9 Lbs/yr

* New York State HAP

| HAP Emissions | | | |
|-----------------------------------|------------|-----------------|-----------------------|
| HAP Name | CAS # | (% Composition) | Emissions (Lbs/yr) |
| Acetone* | 67-64-1 | 18.15 | 28.6 |
| Barium compounds | 0 | | |
| Benzene | 71-43-2 | | |
| Butoxy ethanol, 2- | 111-76-2 | | |
| Butyl acetate | 123-86-4 | | |
| Butyl alcohol, n- | 71-36-3 | | |
| Calcium carbonate | 1317-65-3 | | |
| Carbon black | 13333-86-4 | | |
| Chromium compounds | 0 | | |
| Cobalt compounds | 0 | | |
| Cumene | 98-82-8 | | |
| Dichlorodifluoromethane | 75-71-8 | | |
| Ethoxyethyl acetate, 2- | 111-15-9 | | |
| Ethyl acetate | 141-78-6 | | |
| Ethyl alcohol | 64-17-5 | | |
| Ethyl-3-ethoxy propionate | 763-69-9 | | |
| Ethylbenzene | 100-41-4 | | |
| Ethylene glycol | 107-21-1 | | |
| Hexane | 110-54-3 | | |
| Isobutyl acetate | 110-19-0 | | |
| Isobutyl alcohol | 78-83-1 | | |
| Isopropyl alcohol | 67-63-0 | | |
| Lead compounds | 0 | | |
| Magnesium silicate | 1343-90-4 | | |
| Methyl Alcohol | 67-56-1 | | |
| Methoxyethanol, 2- | 109-86-4 | | |
| Methyl chloroform | 71-55-6 | | |
| Methyl ethyl ketone | 78-93-3 | | |
| Methyl isobutyl ketone | 108-10-1 | | |
| Methylene chloride | 75-09-2 | | |
| Phenol | 108-95-2 | | |
| Phenylmercuric acetate | 62-38-4 | | |
| Propane | 74-98-6 | | |
| Propyl acetate | 109-60-4 | | |
| Propylene glycol monomethyl ether | 107-98-2 | | |
| Tetrachloroethylene | 127-18-4 | | |
| Titanium dioxide | 13463-67-7 | | |
| Toluene | 108-88-3 | 18.29 | 28.8 |
| Toluene-diisocyanate -2,4 | 584-84-9 | | |
| Xylene | 1330-20-7 | 12.68 | 20.0 |
| Zinc compounds | 0 | | |
| * New York State HAP | | HAP Total = | 80.33 Lbs/yr |
| | | HAP Content = | 4.02 lbs/gal |

**Emissions For Painting and Surface Coating Operations
Federal and New York State Regulations**

Name: Seneca Army Depot
 Bldg #: 317 (COMIS)
 SCC: 4-02-001-10

Date: 8/29/94
 Initials: GRM

General Comments: This template should only be used for spray paints, brush applications of paint, and spray booth operations. The use of this template is not intended for process applications of paint such as assembly lines in manufacturing plants, and other major coating operations. AP-42 or other comparable documents should be consulted to determine emissions associated with these processes.

Product/Material Information

Product: Lacquer Primer
 NSN: 8010-00-597-7854

Note: For annual usage, only fill the boxes for EITHER a, b, OR c and leave other boxes blank

Annual Usage: a) cans/yr at fl.oz/can= 0.000 gal/yr
 OR b) cans/yr at wt.oz/can= 0.000 lb/yr
 OR c) 20.000 gal/yr

Specific Gravity: 1.190

Notes:

VOC composition: 48.38 (%MSDS/Manuf.)
48.38 (%corrected for water and non-photochemical reactants.)
 expressed as : A A = % by weight
 B = % by volume

Notes: VOC: $(4.79 \text{ lb/gal}) / (9.9 \text{ lb/gal}) * 100 = 48.38\%$

Comment: "A" and "B" refer to the percentage of the material which contains VOCs. This is expressed as a percentage of total volume, (i.e. gallons) or of total weight (i.e. pounds). When available, percent by weight should take precedence. Make sure to subtract the percentage of non-photochemically reactive VOCs and water, if any.

Paint Application Method: A A = spray application (spray can or gun)
 B = brush application

Spray Booth Filter Efficiency = 60.00 % (enter "0" if no filter is present)
 (ex: dry filter = 60%, waterfall type = 85%)

Comment: Filter efficiencies vary dependant on the filter type and materials used as the filtering media. Standard dry filters, which are common at Army installations, are assumed to have a consistant 60% removal efficiency under normal operating conditions. However, consult the manufacturer if there is any uncertainty as to the removal efficiency for a particular type of spray booth.

Paint Pigment Composition = 51.62 %

Comment: Pigment composition is derived from the leftover percentage of material in the paint that is not volatile (i.e., if the total VOC component makes up 80%, then the leftover 20% is assumed to be pigment).

Emissions Summary

| Annual VOC Emissions | | |
|------------------------------------|---------------------|---------------------|
| Annual usage converted to weight = | <u>197.992</u> | Lbs/yr |
| VOC Emissions = | <u>95.789</u> Lb/yr | <u>0.048</u> Ton/yr |

| Ozone Season VOC Emissions | | |
|---------------------------------------|---------------|-------------|
| Ozone Season Usage = | <u>49.498</u> | Lbs |
| Daily Ozone Season Usage = | <u>0.538</u> | Lbs/day |
| Ozone Season VOC Emissions = | <u>23.947</u> | Lbs |
| Daily Ozone Season VOC Emissions = | <u>0.260</u> | Lbs/day |
| Ozone Season Work Day VOC Emissions = | <u>0.364</u> | Lbs/wrk day |

| Annual Particulate Matter Emissions | | |
|-------------------------------------|----------------------|---------------------|
| TSP Emissions = | <u>20.441</u> Lbs/yr | <u>0.010</u> Ton/yr |
| PM10 Emissions = | <u>9.546</u> Lbs/yr | <u>0.005</u> Ton/yr |

HAP Emissions: Estimation of HAP emissions are broken into two categories. The first, on the following page, lists common HAPs associated with painting and surface coating. Enter the composition of each HAP in the columns provided for those HAPs listed. If the HAP is not listed, then enter the name of the HAP and %composition in the spaces below.

| HAP Name | CAS No | (% Composition) | Emissions (Lbs/yr) |
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HAP Subtotal = 0.0 Lbs/yr

| HAP Emissions | | | |
|-----------------------------------|------------|-----------------|-----------------------|
| HAP Name | CAS # | (% Composition) | Emissions (Lbs/yr) |
| Acetone | 67-64-1 | | |
| Barium compounds | 0 | | |
| Benzene | 71-43-2 | | |
| Butoxy ethanol, 2- | 111-76-2 | | |
| Butyl acetate | 123-86-4 | | |
| Butyl alcohol, n- | 71-36-3 | | |
| Calcium carbonate | 1317-65-3 | | |
| Carbon black | 13333-86-4 | | |
| Chromium compounds | 0 | | |
| Cobalt compounds | 0 | | |
| Cumene | 98-82-8 | | |
| Dichlorodifluoromethane | 75-71-8 | | |
| Ethoxyethyl acetate, 2- | 111-15-9 | | |
| Ethyl acetate | 141-78-6 | | |
| Ethyl alcohol | 64-17-5 | | |
| Ethyl-3-ethoxy propionate | 763-69-9 | | |
| Ethylbenzene | 100-41-4 | 5 | 9.9 |
| Ethylene glycol | 107-21-1 | | |
| Hexane | 110-54-3 | | |
| Isobutyl acetate* | 110-19-0 | 20 | 39.6 |
| Isobutyl alcohol | 78-83-1 | | |
| Isopropyl alcohol* | 67-63-0 | 5 | 9.9 |
| Lead compounds | 0 | | |
| Magnesium silicate | 1343-90-4 | | |
| Methyl Alcohol | 67-56-1 | | |
| Methoxyethanol, 2- | 109-86-4 | | |
| Methyl chloroform | 71-55-6 | | |
| Methyl ethyl ketone | 78-93-3 | | |
| Methyl isobutyl ketone | 108-10-1 | | |
| Methylene chloride | 75-09-2 | | |
| Phenol | 108-95-2 | | |
| Phenylmercuric acetate | 62-38-4 | | |
| Propane | 74-98-6 | | |
| Propyl acetate | 109-60-4 | | |
| Propylene glycol monomethyl ether | 107-98-2 | | |
| Tetrachloroethylene | 127-18-4 | | |
| Titanium dioxide | 13463-67-7 | | |
| Toluene | 108-88-3 | 5 | 9.9 |
| Toluene-diisocyanate -2,4 | 584-84-9 | | |
| Xylene | 1330-20-7 | 5 | 9.9 |
| Zinc compounds | 0 | | |
| * New York State HAP | | HAP Total = | 79.20 Lbs/yr |
| | | HAP Content = | 3.96 lbs/gal |

**Emissions For Painting and Surface Coating Operations
Federal and New York State Regulations**

Name: Seneca Army Depot
Bldg #: 317 (COMIS)
SCC: 4-02-001-10

Date: 8/29/94
Initials: GRM

General Comments: This template should only be used for spray paints, brush applications of paint, and spray booth operations. The use of this template is not intended for process applications of paint such as assembly lines in manufacturing plants, and other major coating operations. AP-42 or other comparable documents should be consulted to determine emissions associated with these processes.

Product/Material Information

Product: Epoxy Primer - Part A
NSN: 8010-00-082-2450

Note: For annual usage, only fill the boxes for EITHER a, b, OR c and leave other boxes blank

Annual Usage: a) cans/yr at fl.oz/can= 0.000 gal/yr
OR b) cans/yr at wt.oz/can= 0.000 lb/yr
OR c) gal/yr

Specific Gravity: 1.320

Notes:

VOC composition: 39.55 (%MSDS/Manuf.)
39.55 (%corrected for water and non-photochemical reactants.)
expressed as : A A = % by weight
B = % by volume

Notes: VOC: $(4.35 \text{ lb/gal}) / (11.0 \text{ lb/gal}) * 100 = 39.55\%$

Comment: "A" and "B" refer to the percentage of the material which contains VOCs. This is expressed as a percentage of total volume, (i.e. gallons) or of total weight (i.e. pounds). When available, percent by weight should take precedence. Make sure to subtract the percentage of non-photochemically reactive VOCs and water, if any.

Paint Application Method: A A = spray application (spray can or gun)
B = brush application

Spray Booth Filter Efficiency = 60.00 % (enter "0" if no filter is present)
(ex: dry filter = 60%, waterfall type = 85%)

Comment: Filter efficiencies vary dependant on the filter type and materials used as the filtering media. Standard dry filters, which are common at Army installations, are assumed to have a consistant 60% removal efficiency under normal operating conditions. However, consult the manufacturer if there is any uncertainty as to the removal efficiency for a particular type of spray booth.

Paint Pigment Composition = 60.45 %

Comment: Pigment composition is derived from the leftover percentage of material in the paint that is not volatile (i.e., if the total VOC component makes up 80%, then the leftover 20% is assumed to be pigment).

Emissions Summary

| Annual VOC Emissions | | |
|------------------------------------|---------------------|---------------------|
| Annual usage converted to weight = | <u>109.811</u> | Lbs/yr |
| VOC Emissions = | <u>43.430</u> Lb/yr | <u>0.022</u> Ton/yr |

| Ozone Season VOC Emissions | | |
|---------------------------------------|---------------|-------------|
| Ozone Season Usage = | <u>27.453</u> | Lbs |
| Daily Ozone Season Usage = | <u>0.298</u> | Lbs/day |
| Ozone Season VOC Emissions = | <u>10.858</u> | Lbs |
| Daily Ozone Season VOC Emissions = | <u>0.118</u> | Lbs/day |
| Ozone Season Work Day VOC Emissions = | <u>0.165</u> | Lbs/wrk day |

| Annual Particulate Matter Emissions | | |
|-------------------------------------|----------------------|---------------------|
| TSP Emissions = | <u>13.276</u> Lbs/yr | <u>0.007</u> Ton/yr |
| PM10 Emissions = | <u>6.200</u> Lbs/yr | <u>0.003</u> Ton/yr |

HAP Emissions: Estimation of HAP emissions are broken into two categories. The first, on the following page, lists common HAPs associated with painting and surface coating. Enter the composition of each HAP in the columns provided for those HAPs listed. If the HAP is not listed, then enter the name of the HAP and %composition in the spaces below.

| HAP Name | CAS No | (% Composition) | Emissions (Lbs/yr) |
|----------|--------|-----------------|--------------------|
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HAP Subtotal = 0.0 Lbs/yr

| HAP Emissions | | | |
|-----------------------------------|------------|----------------------|-----------------------|
| HAP Name | CAS # | (% Composition) | Emissions (Lbs/yr) |
| Acetone | 67-64-1 | | |
| Barium compounds | 0 | | |
| Benzene | 71-43-2 | | |
| Butoxy ethanol, 2- | 111-76-2 | | |
| Butyl acetate | 123-86-4 | | |
| Butyl alcohol, n- | 71-36-3 | | |
| Calcium carbonate | 1317-65-3 | | |
| Carbon black | 13333-86-4 | | |
| Chromium compounds | 0 | 20 | 22.0 |
| Cobalt compounds | 0 | | |
| Cumene | 98-82-8 | | |
| Dichlorodifluoromethane | 75-71-8 | | |
| Ethoxyethyl acetate, 2- | 111-15-9 | | |
| Ethyl acetate | 141-78-6 | | |
| Ethyl alcohol | 64-17-5 | | |
| Ethyl-3-ethoxy propionate | 763-69-9 | | |
| Ethylbenzene | 100-41-4 | | |
| Ethylene glycol | 107-21-1 | | |
| Hexane | 110-54-3 | | |
| Isobutyl acetate | 110-19-0 | | |
| Isobutyl alcohol | 78-83-1 | | |
| Isopropyl alcohol | 67-63-0 | | |
| Lead compounds | 0 | | |
| Magnesium silicate | 1343-90-4 | | |
| Methyl Alcohol | 67-56-1 | | |
| Methoxyethanol, 2- | 109-86-4 | | |
| Methyl chloroform | 71-55-6 | | |
| Methyl ethyl ketone | 78-93-3 | | |
| Methyl isobutyl ketone | 108-10-1 | | |
| Methylene chloride | 75-09-2 | | |
| Phenol | 108-95-2 | | |
| Phenylmercuric acetate | 62-38-4 | | |
| Propane | 74-98-6 | | |
| Propyl acetate | 109-60-4 | | |
| Propylene glycol monomethyl ether | 107-98-2 | | |
| Tetrachloroethylene | 127-18-4 | | |
| Titanium dioxide | 13463-67-7 | | |
| Toluene | 108-88-3 | 5 | 5.5 |
| Toluene-diisocyanate -2,4 | 584-84-9 | | |
| Xylene | 1330-20-7 | | |
| Zinc compounds | 0 | | |
| | | HAP Total = | 27.45 Lbs/yr |
| | | HAP Content = | 2.75 lbs/gal |

**Emissions For Painting and Surface Coating Operations
Federal and New York State Regulations**

Name: Seneca Army Depot
Bldg #: 317 (COMIS)
SCC: 4-02-001-10

Date: 8/29/94
Initials: GRM

General Comments: This template should only be used for spray paints, brush applications of paint, and spray booth operations. The use of this template is not intended for process applications of paint such as assembly lines in manufacturing plants, and other major coating operations. AP-42 or other comparable documents should be consulted to determine emissions associated with these processes.

Product/Material Information

Product: Epoxy Primer - Part B
NSN: 8010-00-082-2450

Note: For annual usage, only fill the boxes for EITHER a, b, OR c and leave other boxes blank

Annual Usage: a) cans/yr at fl.oz/can= 0.000 gal/yr
OR b) cans/yr at wt.oz/can= 0.000 lb/yr
OR c) 10.000 gal/yr

Specific Gravity: 0.829

Notes:

VOC composition: 82.90 (%MSDS/Manuf.)
82.90 (%corrected for water and non-photochemical reactants.)
expressed as : A A = % by weight
B = % by volume

Notes: VOC: $(5.72 \text{ lb/gal}) / (6.9 \text{ lb/gal}) * 100 = 82.9\%$

Comment: "A" and "B" refer to the percentage of the material which contains VOCs. This is expressed as a percentage of total volume, (i.e. gallons) or of total weight (i.e. pounds). When available, percent by weight should take precedence. Make sure to subtract the percentage of non-photochemically reactive VOCs and water, if any.

Paint Application Method: A A = spray application (spray can or gun)
B = brush application

Spray Booth Filter Efficiency = 60.00 % (enter "0" if no filter is present)
(ex: dry filter = 60%, waterfall type = 85%)

Comment: Filter efficiencies vary dependant on the filter type and materials used as the filtering media. Standard dry filters, which are common at Army installations, are assumed to have a consistant 60% removal efficiency under normal operating conditions. However, consult the manufacturer if there is any uncertainty as to the removal efficiency for a particular type of spray booth.

Paint Pigment Composition = 17.10 %

Comment: Pigment composition is derived from the leftover percentage of material in the paint that is not volatile (i.e., if the total VOC component makes up 80%, then the leftover 20% is assumed to be pigment).

Emissions Summary

| Annual VOC Emissions | | |
|------------------------------------|---------------------|---------------------|
| Annual usage converted to weight = | <u>68.965</u> | Lbs/yr |
| VOC Emissions = | <u>57.172</u> Lb/yr | <u>0.029</u> Ton/yr |

| Ozone Season VOC Emissions | | |
|---------------------------------------|---------------|-------------|
| Ozone Season Usage = | <u>17.241</u> | Lbs |
| Daily Ozone Season Usage = | <u>0.187</u> | Lbs/day |
| Ozone Season VOC Emissions = | <u>14.293</u> | Lbs |
| Daily Ozone Season VOC Emissions = | <u>0.155</u> | Lbs/day |
| Ozone Season Work Day VOC Emissions = | <u>0.218</u> | Lbs/wrk day |

| Annual Particulate Matter Emissions | | |
|-------------------------------------|---------------------|---------------------|
| TSP Emissions = | <u>2.359</u> Lbs/yr | <u>0.001</u> Ton/yr |
| PM10 Emissions = | <u>1.101</u> Lbs/yr | <u>0.001</u> Ton/yr |

HAP Emissions: Estimation of HAP emissions are broken into two categories. The first, on the following page, lists common HAPs associated with painting and surface coating. Enter the composition of each HAP in the columns provided for those HAPs listed. If the HAP is not listed, then enter the name of the HAP and %composition in the spaces below.

| HAP Name | CAS No | (% Composition) | Emissions (Lbs/yr) |
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HAP Subtotal = 0.0 Lbs/yr

| HAP Emissions | | | |
|-----------------------------------|------------|-----------------|-----------------------|
| HAP Name | CAS # | (% Composition) | Emissions (Lbs/yr) |
| Acetone | 67-64-1 | | |
| Barium compounds | 0 | | |
| Benzene | 71-43-2 | | |
| Butoxy ethanol, 2- | 111-76-2 | | |
| Butyl acetate | 123-86-4 | | |
| Butyl alcohol, n- | 71-36-3 | | |
| Calcium carbonate | 1317-65-3 | | |
| Carbon black | 13333-86-4 | | |
| Chromium compounds | 0 | | |
| Cobalt compounds | 0 | | |
| Cumene | 98-82-8 | | |
| Dichlorodifluoromethane | 75-71-8 | | |
| Ethoxyethyl acetate, 2- | 111-15-9 | | |
| Ethyl acetate | 141-78-6 | | |
| Ethyl alcohol | 64-17-5 | | |
| Ethyl-3-ethoxy propionate | 763-69-9 | | |
| Ethylbenzene | 100-41-4 | | |
| Ethylene glycol | 107-21-1 | | |
| Hexane | 110-54-3 | | |
| Isobutyl acetate | 110-19-0 | | |
| Isobutyl alcohol | 78-83-1 | | |
| Isopropyl alcohol* | 67-63-0 | 20 | 13.8 |
| Lead compounds | 0 | | |
| Magnesium silicate | 1343-90-4 | | |
| Methyl Alcohol | 67-56-1 | | |
| Methoxyethanol, 2- | 109-86-4 | | |
| Methyl chloroform | 71-55-6 | | |
| Methyl ethyl ketone | 78-93-3 | 10 | 6.9 |
| Methyl isobutyl ketone | 108-10-1 | | |
| Methylene chloride | 75-09-2 | | |
| Phenol | 108-95-2 | | |
| Phenylmercuric acetate | 62-38-4 | | |
| Propane | 74-98-6 | | |
| Propyl acetate | 109-60-4 | | |
| Propylene glycol monomethyl ether | 107-98-2 | | |
| Tetrachloroethylene | 127-18-4 | | |
| Titanium dioxide | 13463-67-7 | | |
| Toluene | 108-88-3 | 15 | 10.3 |
| Toluene-diisocyanate -2,4 | 584-84-9 | | |
| Xylene | 1330-20-7 | | |
| Zinc compounds | 0 | | |
| * New York State HAP | | HAP Total = | 31.03 Lbs/yr |
| | | HAP Content = | 3.10 lbs/gal |

**Emissions For Painting and Surface Coating Operations
Federal and New York State Regulations**

Name: Seneca Army Depot
 Bldg #: 317 (COMIS)
 SCC: 4-02-001-10

Date: 8/29/94
 Initials: GRM

General Comments: This template should only be used for spray paints, brush applications of paint, and spray booth operations. The use of this template is not intended for process applications of paint such as assembly lines in manufacturing plants, and other major coating operations. AP-42 or other comparable documents should be consulted to determine emissions associated with these processes.

Product/Material Information

Product: So-Sure Zinc Chromate Primer
 NSN: 8010-00-899-8825

Note: For annual usage, only fill the boxes for EITHER a, b, OR c and leave other boxes blank

Annual Usage: a) cans/yr at fl.oz/can= 0.000 gal/yr
 OR b) cans/yr at wt.oz/can= 0.000 lb/yr
 OR c) gal/yr

Specific Gravity: 1.082

Notes:

VOC composition: 94.79 (%MSDS/Manuf.)
94.79 (%corrected for water and non-photochemical reactants.)
 expressed as : A A = % by weight
 B = % by volume

Notes:

Comment: "A" and "B" refer to the percentage of the material which contains VOCs. This is expressed as a percentage of total volume, (i.e. gallons) or of total weight (i.e. pounds). When available, percent by weight should take precedence. Make sure to subtract the percentage of non-photochemically reactive VOCs and water, if any.

Paint Application Method: A A = spray application (spray can or gun)
 B = brush application

Spray Booth Filter Efficiency = 60.00 % (enter "0" if no filter is present)
 (ex: dry filter = 60%, waterfall type = 85%)

Comment: Filter efficiencies vary dependant on the filter type and materials used as the filtering media. Standard dry filters, which are common at Army installations, are assumed to have a consistant 60% removal efficiency under normal operating conditions. However, consult the manufacturer if there is any uncertainty as to the removal efficiency for a particular type of spray booth.

Paint Pigment Composition = 5.21 %

Comment: Pigment composition is derived from the leftover percentage of material in the paint that is not volatile (i.e., if the total VOC component makes up 80%, then the leftover 20% is assumed to be pigment).

Emissions Summary

| Annual VOC Emissions | | | |
|------------------------------------|----------------|----------------|---------------------|
| Annual usage converted to weight = | | <u>180.023</u> | Lbs/yr |
| VOC Emissions = | <u>170.644</u> | Lb/yr | <u>0.085</u> Ton/yr |

| Ozone Season VOC Emissions | | | |
|---------------------------------------|--|---------------|-------------|
| Ozone Season Usage = | | <u>45.006</u> | Lbs |
| Daily Ozone Season Usage = | | <u>0.489</u> | Lbs/day |
| Ozone Season VOC Emissions = | | <u>42.661</u> | Lbs |
| Daily Ozone Season VOC Emissions = | | <u>0.464</u> | Lbs/day |
| Ozone Season Work Day VOC Emissions = | | <u>0.649</u> | Lbs/wrk day |

| Annual Particulate Matter Emissions | | | |
|-------------------------------------|--------------|--------------|---------------------|
| TSP Emissions = | | <u>1.876</u> | Lbs/yr |
| | | <u>0.001</u> | Ton/yr |
| PM10 Emissions = | <u>0.876</u> | Lbs/yr | <u>0.000</u> Ton/yr |

HAP Emissions: Estimation of HAP emissions are broken into two categories. The first, on the following page, lists common HAPs associated with painting and surface coating. Enter the composition of each HAP in the columns provided for those HAPs listed. If the HAP is not listed, then enter the name of the HAP and %composition in the spaces below.

| HAP Name | CAS No | (% Composition) | Emissions (Lbs/yr) |
|---------------|--------|-----------------|--------------------|
| Glycol Ethers | 0 | 2.61 | 4.7 |
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HAP Subtotal = 4.7 Lbs/yr

| HAP Emissions | | | |
|-----------------------------------|------------|-----------------|--------------------|
| HAP Name | CAS # | (% Composition) | Emissions (Lbs/yr) |
| Acetone* | 67-64-1 | 6.18 | 11.1 |
| Barium compounds | 0 | | |
| Benzene | 71-43-2 | | |
| Butoxy ethanol, 2- | 111-76-2 | | |
| Butyl acetate | 123-86-4 | | |
| Butyl alcohol, n- | 71-36-3 | | |
| Calcium carbonate | 1317-65-3 | | |
| Carbon black | 13333-86-4 | | |
| Chromium compounds | 0 | 6.53 | 11.8 |
| Cobalt compounds | 0 | | |
| Cumene | 98-82-8 | | |
| Dichlorodifluoromethane | 75-71-8 | | |
| Ethoxyethyl acetate, 2- | 111-15-9 | | |
| Ethyl acetate | 141-78-6 | | |
| Ethyl alcohol | 64-17-5 | | |
| Ethyl-3-ethoxy propionate | 763-69-9 | | |
| Ethylbenzene | 100-41-4 | | |
| Ethylene glycol | 107-21-1 | | |
| Hexane | 110-54-3 | | |
| Isobutyl acetate | 110-19-0 | 2.61 | 4.7 |
| Isobutyl alcohol | 78-83-1 | | |
| Isopropyl alcohol* | 67-63-0 | | |
| Lead compounds | 0 | | |
| Magnesium silicate | 1343-90-4 | | |
| Methyl Alcohol | 67-56-1 | | |
| Methoxyethanol, 2- | 109-86-4 | | |
| Methyl chloroform | 71-55-6 | | |
| Methyl ethyl ketone | 78-93-3 | | |
| Methyl isobutyl ketone | 108-10-1 | | |
| Methylene chloride | 75-09-2 | 28.18 | 50.7 |
| Phenol | 108-95-2 | | |
| Phenylmercuric acetate | 62-38-4 | | |
| Propane | 74-98-6 | | |
| Propyl acetate | 109-60-4 | | |
| Propylene glycol monomethyl ether | 107-98-2 | | |
| Tetrachloroethylene | 127-18-4 | | |
| Titanium dioxide | 13463-67-7 | | |
| Toluene | 108-88-3 | 15.83 | 28.5 |
| Toluene-diisocyanate -2,4 | 584-84-9 | | |
| Xylene | 1330-20-7 | | |
| Zinc compounds | 0 | | |
| * New York State HAP | | HAP Total = | 111.51 Lbs/yr |
| | | HAP Content = | 5.58 lbs/gal |

**Emissions For Painting and Surface Coating Operations
Federal and New York State Regulations**

Name: Seneca Army Depot
Bldg #: 317 (COMIS)
SCC: 4-02-001-10

Date: 8/29/94
Initials: GRM

General Comments: This template should only be used for spray paints, brush applications of paint, and spray booth operations. The use of this template is not intended for process applications of paint such as assembly lines in manufacturing plants, and other major coating operations. AP-42 or other comparable documents should be consulted to determine emissions associated with these processes.

Product/Material Information

Product: Enamel Topcoat
NSN: 8010-00-527-0216

Note: For annual usage, only fill the boxes for EITHER a, b, OR c and leave other boxes blank

Annual Usage: a) cans/yr at fl.oz/can= 0.000 gal/yr
OR b) cans/yr at wt.oz/can= 0.000 lb/yr
OR c) 30.000 gal/yr

Specific Gravity: 1.203

Notes:

VOC composition: 32.87 (%MSDS/Manuf.)
32.87 (%corrected for water and non-photochemical reactants.)
expressed as : A A = % by weight
B = % by volume

Notes:

Comment: "A" and "B" refer to the percentage of the material which contains VOCs. This is expressed as a percentage of total volume, (i.e. gallons) or of total weight (i.e. pounds). When available, percent by weight should take precedence. Make sure to subtract the percentage of non-photochemically reactive VOCs and water, if any.

Paint Application Method: A A = spray application (spray can or gun)
B = brush application

Spray Booth Filter Efficiency = 60.00 % (enter "0" if no filter is present)
(ex: dry filter = 60%, waterfall type = 85%)

Comment: Filter efficiencies vary dependant on the filter type and materials used as the filtering media. Standard dry filters, which are common at Army installations, are assumed to have a consistant 60% removal efficiency under normal operating conditions. However, consult the manufacturer if there is any uncertainty as to the removal efficiency for a particular type of spray booth.

Paint Pigment Composition = 67.13 %

Comment: Pigment composition is derived from the leftover percentage of material in the paint that is not volatile (i.e., if the total VOC component makes up 80%, then the leftover 20% is assumed to be pigment).

Emissions Summary

| Annual VOC Emissions | | |
|------------------------------------|---------|--------|
| Annual usage converted to weight = | 300.300 | Lbs/yr |
| VOC Emissions = | 98.709 | 0.049 |
| | Lb/yr | Ton/yr |

| Ozone Season VOC Emissions | | |
|---------------------------------------|--------|-------------|
| Ozone Season Usage = | 75.075 | Lbs |
| Daily Ozone Season Usage = | 0.816 | Lbs/day |
| Ozone Season VOC Emissions = | 24.677 | Lbs |
| Daily Ozone Season VOC Emissions = | 0.268 | Lbs/day |
| Ozone Season Work Day VOC Emissions = | 0.376 | Lbs/wrk day |

| Annual Particulate Matter Emissions | | |
|-------------------------------------|--------|--------|
| TSP Emissions = | 40.318 | Lbs/yr |
| | 0.020 | Ton/yr |
| PM10 Emissions = | 18.829 | Lbs/yr |
| | 0.009 | Ton/yr |

HAP Emissions: Estimation of HAP emissions are broken into two categories. The first, on the following page, lists common HAPs associated with painting and surface coating. Enter the composition of each HAP in the columns provided for those HAPs listed. If the HAP is not listed, then enter the name of the HAP and %composition in the spaces below.

| HAP Name | CAS No | (% Composition) | Emissions (Lbs/yr) |
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HAP Subtotal = 0.0 Lbs/yr

| HAP Emissions | | | |
|-----------------------------------|------------|----------------------|-----------------------|
| HAP Name | CAS # | (% Composition) | Emissions (Lbs/yr) |
| Acetone* | 67-64-1 | | |
| Barium compounds | 0 | | |
| Benzene | 71-43-2 | | |
| Butoxy ethanol, 2- | 111-76-2 | | |
| Butyl acetate | 123-86-4 | | |
| Butyl alcohol, n- | 71-36-3 | | |
| Calcium carbonate | 1317-65-3 | | |
| Carbon black | 13333-86-4 | | |
| Chromium compounds | 0 | | |
| Cobalt compounds | 0 | | |
| Cumene | 98-82-8 | | |
| Dichlorodifluoromethane | 75-71-8 | | |
| Ethoxyethyl acetate, 2- | 111-15-9 | | |
| Ethyl acetate | 141-78-6 | | |
| Ethyl alcohol | 64-17-5 | | |
| Ethyl-3-ethoxy propionate | 763-69-9 | | |
| Ethylbenzene | 100-41-4 | | |
| Ethylene glycol | 107-21-1 | | |
| Hexane | 110-54-3 | | |
| Isobutyl acetate | 110-19-0 | | |
| Isobutyl alcohol | 78-83-1 | | |
| Isopropyl alcohol* | 67-63-0 | | |
| Lead compounds | 0 | | |
| Magnesium silicate | 1343-90-4 | | |
| Methyl Alcohol | 67-56-1 | | |
| Methoxyethanol, 2- | 109-86-4 | | |
| Methyl chloroform | 71-55-6 | | |
| Methyl ethyl ketone | 78-93-3 | | |
| Methyl isobutyl ketone | 108-10-1 | | |
| Methylene chloride | 75-09-2 | | |
| Phenol | 108-95-2 | | |
| Phenylmercuric acetate | 62-38-4 | | |
| Propane | 74-98-6 | | |
| Propyl acetate | 109-60-4 | | |
| Propylene glycol monomethyl ether | 107-98-2 | | |
| Tetrachloroethylene | 127-18-4 | | |
| Titanium dioxide | 13463-67-7 | | |
| Toluene | 108-88-3 | | |
| Toluene-diisocyanate -2,4 | 584-84-9 | | |
| Xylene | 1330-20-7 | 5 | 15.0 |
| Zinc compounds | 0 | | |
| | | HAP Total = | 15.02 Lbs/yr |
| | | HAP Content = | 0.50 lbs/gal |

**Emissions For Painting and Surface Coating Operations
Federal and New York State Regulations**

Name: Seneca Army Depot
 Bldg #: 317 (COMIS)
 SCC: 4-02-001-10

Date: 8/29/94
 Initials: GRM

General Comments: This template should only be used for spray paints, brush applications of paint, and spray booth operations. The use of this template is not intended for process applications of paint such as assembly lines in manufacturing plants, and other major coating operations. AP-42 or other comparable documents should be consulted to determine emissions associated with these processes.

Product/Material Information

Product: Lacquer Topcoat
 NSN: 8010-00-584-3149

Note: For annual usage, only fill the boxes for EITHER a, b, OR c and leave other boxes blank

Annual Usage: a) cans/yr at fl.oz/can= 0.000 gal/yr
 OR b) cans/yr at wt.oz/can= 0.000 lb/yr
 OR c) 30.000 gal/yr

Specific Gravity: 0.943

Notes:

VOC composition: 84.05 (%MSDS/Manuf.)
84.05 (%corrected for water and non-photochemical reactants.)
 expressed as : A A = % by weight
 B = % by volume

Notes:

Comment: "A" and "B" refer to the percentage of the material which contains VOCs. This is expressed as a percentage of total volume, (i.e. gallons) or of total weight (i.e. pounds). When available, percent by weight should take precedence. Make sure to subtract the percentage of non-photochemically reactive VOCs and water, if any.

Paint Application Method: A A = spray application (spray can or gun)
 B = brush application

Spray Booth Filter Efficiency = 60.00 % (enter "0" if no filter is present)
 (ex: dry filter = 60%, waterfall type = 85%)

Comment: Filter efficiencies vary dependant on the filter type and materials used as the filtering media. Standard dry filters, which are common at Army installations, are assumed to have a consistant 60% removal efficiency under normal operating conditions. However, consult the manufacturer if there is any uncertainty as to the removal efficiency for a particular type of spray booth.

Paint Pigment Composition = 15.95 %

Comment: Pigment composition is derived from the leftover percentage of material in the paint that is not volatile (i.e., if the total VOC component makes up 80%, then the leftover 20% is assumed to be pigment).

Emissions Summary

| Annual VOC Emissions | | |
|------------------------------------|----------------------|---------------------|
| Annual usage converted to weight = | <u>235.345</u> | Lbs/yr |
| VOC Emissions = | <u>197.807</u> Lb/yr | <u>0.099</u> Ton/yr |

| Ozone Season VOC Emissions | | |
|---------------------------------------|---------------|-------------|
| Ozone Season Usage = | <u>58.836</u> | Lbs |
| Daily Ozone Season Usage = | <u>0.640</u> | Lbs/day |
| Ozone Season VOC Emissions = | <u>49.452</u> | Lbs |
| Daily Ozone Season VOC Emissions = | <u>0.538</u> | Lbs/day |
| Ozone Season Work Day VOC Emissions = | <u>0.753</u> | Lbs/wrk day |

| Annual Particulate Matter Emissions | | |
|-------------------------------------|---------------------|---------------------|
| TSP Emissions = | <u>7.507</u> Lbs/yr | <u>0.004</u> Ton/yr |
| PM10 Emissions = | <u>3.506</u> Lbs/yr | <u>0.002</u> Ton/yr |

HAP Emissions: Estimation of HAP emissions are broken into two categories. The first, on the following page, lists common HAPs associated with painting and surface coating. Enter the composition of each HAP in the columns provided for those HAPs listed. If the HAP is not listed, then enter the name of the HAP and %composition in the spaces below.

| HAP Name | CAS No | (% Composition) | Emissions (Lbs/yr) |
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HAP Subtotal = 0.0 Lbs/yr

| HAP Emissions | | | |
|-----------------------------------|------------|-----------------|-----------------------|
| HAP Name | CAS # | (% Composition) | Emissions (Lbs/yr) |
| Acetone* | 67-64-1 | 17.09 | 40.2 |
| Barium compounds | 0 | | |
| Benzene | 71-43-2 | | |
| Butoxy ethanol, 2- | 111-76-2 | | |
| Butyl acetate | 123-86-4 | | |
| Butyl alcohol, n- | 71-36-3 | 1.6 | 3.8 |
| Calcium carbonate | 1317-65-3 | | |
| Carbon black | 13333-86-4 | | |
| Chromium compounds | 0 | | |
| Cobalt compounds | 0 | | |
| Cumene | 98-82-8 | | |
| Dichlorodifluoromethane | 75-71-8 | | |
| Ethoxyethyl acetate, 2- | 111-15-9 | | |
| Ethyl acetate | 141-78-6 | | |
| Ethyl alcohol | 64-17-5 | | |
| Ethyl-3-ethoxy propionate | 763-69-9 | | |
| Ethylbenzene | 100-41-4 | 1.6 | 3.8 |
| Ethylene glycol | 107-21-1 | | |
| Hexane | 110-54-3 | | |
| Isobutyl acetate | 110-19-0 | | |
| Isobutyl alcohol | 78-83-1 | | |
| Isopropyl alcohol* | 67-63-0 | | |
| Lead compounds | 0 | | |
| Magnesium silicate | 1343-90-4 | | |
| Methyl Alcohol | 67-56-1 | | |
| Methoxyethanol, 2- | 109-86-4 | | |
| Methyl chloroform | 71-55-6 | | |
| Methyl ethyl ketone | 78-93-3 | | |
| Methyl isobutyl ketone | 108-10-1 | | |
| Methylene chloride | 75-09-2 | | |
| Phenol | 108-95-2 | | |
| Phenylmercuric acetate | 62-38-4 | | |
| Propane | 74-98-6 | | |
| Propyl acetate | 109-60-4 | | |
| Propylene glycol monomethyl ether | 107-98-2 | | |
| Tetrachloroethylene | 127-18-4 | | |
| Titanium dioxide | 13463-67-7 | | |
| Toluene | 108-88-3 | 26.76 | 63.0 |
| Toluene-diisocyanate -2,4 | 584-84-9 | | |
| Xylene | 1330-20-7 | 1.6 | 3.8 |
| Zinc compounds | 0 | | |
| * New York State HAP | | HAP Total = | 114.50 Lbs/yr |
| | | HAP Content = | 3.82 lbs/gal |

**Emissions For Painting and Surface Coating Operations
Federal and New York State Regulations**

Name: Seneca Army Depot
 Bldg #: 317 (COMIS)
 SCC: 4-02-001-10

Date: 8/29/94
 Initials: GRM

General Comments: This template should only be used for spray paints, brush applications of paint, and spray booth operations. The use of this template is not intended for process applications of paint such as assembly lines in manufacturing plants, and other major coating operations. AP-42 or other comparable documents should be consulted to determine emissions associated with these processes.

Product/Material Information

Product: Lacquer Thinner
 NSN: 8010-00-160-5794

Note: For annual usage, only fill the boxes for EITHER a, b, OR c and leave other boxes blank

Annual Usage: a) cans/yr at fl.oz/can= 0.000 gal/yr
 OR b) cans/yr at wt.oz/can= 0.000 lb/yr
 OR c) gal/yr

Specific Gravity: 0.800

Notes:

VOC composition: 100.00 (%MSDS/Manuf.)
100.00 (%corrected for water and non-photochemical reactants.)
 expressed as : A A = % by weight
 B = % by volume

Notes:

Comment: "A" and "B" refer to the percentage of the material which contains VOCs. This is expressed as a percentage of total volume, (i.e. gallons) or of total weight (i.e. pounds). When available, percent by weight should take precedence. Make sure to subtract the percentage of non-photochemically reactive VOCs and water, if any.

Paint Application Method: A A = spray application (spray can or gun)
 B = brush application

Spray Booth Filter Efficiency = 60.00 % (enter "0" if no filter is present)
 (ex: dry filter = 60%, waterfall type = 85%)

Comment: Filter efficiencies vary dependant on the filter type and materials used as the filtering media. Standard dry filters, which are common at Army installations, are assumed to have a consistant 60% removal efficiency under normal operating conditions. However, consult the manufacturer if there is any uncertainty as to the removal efficiency for a particular type of spray booth.

Paint Pigment Composition = 0.00 %

Comment: Pigment composition is derived from the leftover percentage of material in the paint that is not volatile (i.e., if the total VOC component makes up 80%, then the leftover 20% is assumed to be pigment).

Emissions Summary

| Annual VOC Emissions | | | |
|------------------------------------|----------------|----------------|---------------------|
| Annual usage converted to weight = | | <u>199.656</u> | Lbs/yr |
| VOC Emissions = | <u>199.656</u> | Lb/yr | <u>0.100</u> Ton/yr |

| Ozone Season VOC Emissions | | | |
|---------------------------------------|--|---------------|-------------|
| Ozone Season Usage = | | <u>49.914</u> | Lbs |
| Daily Ozone Season Usage = | | <u>0.543</u> | Lbs/day |
| Ozone Season VOC Emissions = | | <u>49.914</u> | Lbs |
| Daily Ozone Season VOC Emissions = | | <u>0.543</u> | Lbs/day |
| Ozone Season Work Day VOC Emissions = | | <u>0.760</u> | Lbs/wrk day |

| Annual Particulate Matter Emissions | | | |
|-------------------------------------|--|--------------|--------|
| TSP Emissions = | | <u>0.000</u> | Lbs/yr |
| | | <u>0.000</u> | Ton/yr |
| PM10 Emissions = | | <u>0.000</u> | Lbs/yr |
| | | <u>0.000</u> | Ton/yr |

HAP Emissions: Estimation of HAP emissions are broken into two categories. The first, on the following page, lists common HAPs associated with painting and surface coating. Enter the composition of each HAP in the columns provided for those HAPs listed. If the HAP is not listed, then enter the name of the HAP and %composition in the spaces below.

| HAP Name | CAS No | (% Composition) | Emissions (Lbs/yr) |
|--------------|----------|-----------------|--------------------|
| n-Heptane* | 142-82-5 | 10 | 20.0 |
| Cyclohexane* | 110-82-7 | 5 | 10.0 |
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HAP Subtotal = 29.9 Lbs/yr

* New York State HAP

| HAP Emissions | | | |
|-----------------------------------|------------|-----------------|-----------------------|
| HAP Name | CAS # | (% Composition) | Emissions (Lbs/yr) |
| Acetone* | 67-64-1 | | |
| Barium compounds | 0 | | |
| Benzene | 71-43-2 | | |
| Butoxy ethanol, 2- | 111-76-2 | | |
| Butyl acetate | 123-86-4 | | |
| Butyl alcohol, n- | 71-36-3 | | |
| Calcium carbonate | 1317-65-3 | | |
| Carbon black | 13333-86-4 | | |
| Chromium compounds | 0 | | |
| Cobalt compounds | 0 | | |
| Cumene | 98-82-8 | | |
| Dichlorodifluoromethane | 75-71-8 | | |
| Ethoxyethyl acetate, 2- | 111-15-9 | | |
| Ethyl acetate | 141-78-6 | | |
| Ethyl alcohol | 64-17-5 | | |
| Ethyl-3-ethoxy propionate | 763-69-9 | | |
| Ethylbenzene | 100-41-4 | | |
| Ethylene glycol | 107-21-1 | | |
| Hexane | 110-54-3 | 1 | 2.0 |
| Isobutyl acetate* | 110-19-0 | 40 | 79.9 |
| Isobutyl alcohol | 78-83-1 | | |
| Isopropyl alcohol* | 67-63-0 | 5 | 10.0 |
| Lead compounds | 0 | | |
| Magnesium silicate | 1343-90-4 | | |
| Methyl Alcohol | 67-56-1 | | |
| Methoxyethanol, 2- | 109-86-4 | | |
| Methyl chloroform | 71-55-6 | | |
| Methyl ethyl ketone | 78-93-3 | 10 | 20.0 |
| Methyl isobutyl ketone | 108-10-1 | | |
| Methylene chloride | 75-09-2 | | |
| Phenol | 108-95-2 | | |
| Phenylmercuric acetate | 62-38-4 | | |
| Propane | 74-98-6 | | |
| Propyl acetate | 109-60-4 | | |
| Propylene glycol monomethyl ether | 107-98-2 | | |
| Tetrachloroethylene | 127-18-4 | | |
| Titanium dioxide | 13463-67-7 | | |
| Toluene | 108-88-3 | 15 | 29.9 |
| Toluene-diisocyanate -2,4 | 584-84-9 | | |
| Xylene | 1330-20-7 | | |
| Zinc compounds | 0 | | |
| * New York State HAP | | HAP Total = | 171.70 Lbs/yr |
| | | HAP Content = | 5.72 lbs/gal |

**Emissions For Painting and Surface Coating Operations
Federal and New York State Regulations**

Name: Seneca Army Depot
Bldg #: 317 (COMIS)
SCC: 4-02-001-10

Date: 8/29/94
Initials: GRM

General Comments: This template should only be used for spray paints, brush applications of paint, and spray booth operations. The use of this template is not intended for process applications of paint such as assembly lines in manufacturing plants, and other major coating operations. AP-42 or other comparable documents should be consulted to determine emissions associated with these processes.

Product/Material Information

Product: Enamel Thinner
NSN: 8010-00-160-5794

Note: For annual usage, only fill the boxes for EITHER a, b, OR c and leave other boxes blank

Annual Usage: a) cans/yr at fl.oz/can= 0.000 gal/yr
OR
b) cans/yr at wt.oz/can= 0.000 lb/yr
OR
c) gal/yr

Specific Gravity: 0.784

Notes:

VOC composition: 100.00 (%MSDS/Manuf.)
100.00 (%corrected for water and non-photochemical reactants.)
expressed as : A A = % by weight
B = % by volume

Notes:

Comment: "A" and "B" refer to the percentage of the material which contains VOCs. This is expressed as a percentage of total volume, (i.e. gallons) or of total weight (i.e. pounds). When available, percent by weight should take precedence. Make sure to subtract the percentage of non-photochemically reactive VOCs and water, if any.

Paint Application Method: A A = spray application (spray can or gun)
B = brush application

Spray Booth Filter Efficiency = 60.00 % (enter "0" if no filter is present)
(ex: dry filter = 60%, waterfall type = 85%)

Comment: Filter efficiencies vary dependant on the filter type and materials used as the filtering media. Standard dry filters, which are common at Army installations, are assumed to have a consistant 60% removal efficiency under normal operating conditions. However, consult the manufacturer if there is any uncertainty as to the removal efficiency for a particular type of spray booth.

Paint Pigment Composition = 0.00 %

Comment: Pigment composition is derived from the leftover percentage of material in the paint that is not volatile (i.e., if the total VOC component makes up 80%, then the leftover 20% is assumed to be pigment).

Emissions Summary

| Annual VOC Emissions | | | |
|------------------------------------|----------------------|----------------|--------|
| Annual usage converted to weight = | | <u>195.663</u> | Lbs/yr |
| VOC Emissions = | <u>195.663</u> Lb/yr | <u>0.098</u> | Ton/yr |

| Ozone Season VOC Emissions | | | |
|---------------------------------------|--|---------------|-------------|
| Ozone Season Usage = | | <u>48.916</u> | Lbs |
| Daily Ozone Season Usage = | | <u>0.532</u> | Lbs/day |
| Ozone Season VOC Emissions = | | <u>48.916</u> | Lbs |
| Daily Ozone Season VOC Emissions = | | <u>0.532</u> | Lbs/day |
| Ozone Season Work Day VOC Emissions = | | <u>0.744</u> | Lbs/wrk day |

| Annual Particulate Matter Emissions | | | |
|-------------------------------------|---------------------|---------------------|---------------------|
| TSP Emissions = | | <u>0.000</u> Lbs/yr | <u>0.000</u> Ton/yr |
| PM10 Emissions = | <u>0.000</u> Lbs/yr | <u>0.000</u> | Ton/yr |

HAP Emissions: Estimation of HAP emissions are broken into two categories. The first, on the following page, lists common HAPs associated with painting and surface coating. Enter the composition of each HAP in the columns provided for those HAPs listed. If the HAP is not listed, then enter the name of the HAP and %composition in the spaces below.

| HAP Name | CAS No | (% Composition) | Emissions (Lbs/yr) |
|----------|--------|-----------------|--------------------|
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HAP Subtotal = 0.0 Lbs/yr

* New York State HAP

| HAP Emissions | | | |
|-----------------------------------|------------|-----------------|-----------------------|
| HAP Name | CAS # | (% Composition) | Emissions (Lbs/yr) |
| Acetone* | 67-64-1 | | |
| Barium compounds | 0 | | |
| Benzene | 71-43-2 | | |
| Butoxy ethanol, 2- | 111-76-2 | | |
| Butyl acetate | 123-86-4 | | |
| Butyl alcohol, n- | 71-36-3 | 21 | 41.1 |
| Calcium carbonate | 1317-65-3 | | |
| Carbon black | 13333-86-4 | | |
| Chromium compounds | 0 | | |
| Cobalt compounds | 0 | | |
| Cumene | 98-82-8 | | |
| Dichlorodifluoromethane | 75-71-8 | | |
| Ethoxyethyl acetate, 2- | 111-15-9 | | |
| Ethyl acetate | 141-78-6 | | |
| Ethyl alcohol | 64-17-5 | | |
| Ethyl-3-ethoxy propionate | 763-69-9 | | |
| Ethylbenzene | 100-41-4 | | |
| Ethylene glycol | 107-21-1 | | |
| Hexane | 110-54-3 | | |
| Isobutyl acetate* | 110-19-0 | | |
| Isobutyl alcohol | 78-83-1 | | |
| Isopropyl alcohol* | 67-63-0 | | |
| Lead compounds | 0 | | |
| Magnesium silicate | 1343-90-4 | | |
| Methyl Alcohol | 67-56-1 | | |
| Methoxyethanol, 2- | 109-86-4 | | |
| Methyl chloroform | 71-55-6 | | |
| Methyl ethyl ketone | 78-93-3 | | |
| Methyl isobutyl ketone | 108-10-1 | | |
| Methylene chloride | 75-09-2 | | |
| Phenol | 108-95-2 | | |
| Phenylmercuric acetate | 62-38-4 | | |
| Propane | 74-98-6 | | |
| Propyl acetate | 109-60-4 | | |
| Propylene glycol monomethyl ether | 107-98-2 | | |
| Tetrachloroethylene | 127-18-4 | | |
| Titanium dioxide | 13463-67-7 | | |
| Toluene | 108-88-3 | 11 | 21.5 |
| Toluene-diisocyanate -2,4 | 584-84-9 | | |
| Xylene | 1330-20-7 | | |
| Zinc compounds | 0 | | |
| * New York State HAP | | HAP Total = | 62.61 Lbs/yr |
| | | HAP Content = | 2.09 lbs/gal |

**Emissions For Painting and Surface Coating Operations
Federal and New York State Regulations**

Name: Seneca Army Depot
Bldg #: 317 (COMIS)
SCC: 4-02-001-10

Date: 8/29/94
Initials: GRM

General Comments: This template should only be used for spray paints, brush applications of paint, and spray booth operations. The use of this template is not intended for process applications of paint such as assembly lines in manufacturing plants, and other major coating operations. AP-42 or other comparable documents should be consulted to determine emissions associated with these processes.

Product/Material Information

Product: Mineral Spirits
NSN: _____

Note: For annual usage, only fill the boxes for EITHER a, b, OR c and leave other boxes blank

Annual Usage: a) cans/yr at fl.oz/can= 0.000 gal/yr
OR b) cans/yr at wt.oz/can= 0.000 lb/yr
OR c) 30.000 gal/yr

Specific Gravity: 0.797

Notes:

VOC composition: 100.00 (%MSDS/Manuf.)
100.00 (%corrected for water and non-photochemical reactants.)
expressed as : A A = % by weight
B = % by volume

Notes:

Comment: "A" and "B" refer to the percentage of the material which contains VOCs. This is expressed as a percentage of total volume, (i.e. gallons) or of total weight (i.e. pounds). When available, percent by weight should take precedence. Make sure to subtract the percentage of non-photochemically reactive VOCs and water, if any.

Paint Application Method: A A = spray application (spray can or gun)
B = brush application

Spray Booth Filter Efficiency = 60.00 % (enter "0" if no filter is present)
(ex: dry filter = 60%, waterfall type = 85%)

Comment: Filter efficiencies vary dependant on the filter type and materials used as the filtering media. Standard dry filters, which are common at Army installations, are assumed to have a consistant 60% removal efficiency under normal operating conditions. However, consult the manufacturer if there is any uncertainty as to the removal efficiency for a particular type of spray booth.

Paint Pigment Composition = 0.00 %

Comment: Pigment composition is derived from the leftover percentage of material in the paint that is not volatile (i.e., if the total VOC component makes up 80%, then the leftover 20% is assumed to be pigment).

Emissions Summary

| Annual VOC Emissions | | |
|------------------------------------|----------------------|---------------------|
| Annual usage converted to weight = | <u>198.907</u> | Lbs/yr |
| VOC Emissions = | <u>198.907</u> Lb/yr | <u>0.099</u> Ton/yr |

| Ozone Season VOC Emissions | | |
|---------------------------------------|---------------|-------------|
| Ozone Season Usage = | <u>49.727</u> | Lbs |
| Daily Ozone Season Usage = | <u>0.541</u> | Lbs/day |
| Ozone Season VOC Emissions = | <u>49.727</u> | Lbs |
| Daily Ozone Season VOC Emissions = | <u>0.541</u> | Lbs/day |
| Ozone Season Work Day VOC Emissions = | <u>0.757</u> | Lbs/wrk day |

| Annual Particulate Matter Emissions | | |
|-------------------------------------|---------------------|---------------------|
| TSP Emissions = | <u>0.000</u> Lbs/yr | <u>0.000</u> Ton/yr |
| PM10 Emissions = | <u>0.000</u> Lbs/yr | <u>0.000</u> Ton/yr |

HAP Emissions: Estimation of HAP emissions are broken into two categories. The first, on the following page, lists common HAPs associated with painting and surface coating. Enter the composition of each HAP in the columns provided for those HAPs listed. If the HAP is not listed, then enter the name of the HAP and %composition in the spaces below.

| HAP Name | CAS No | (% Composition) | Emissions (Lbs/yr) |
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HAP Subtotal = 0.0 Lbs/yr

* New York State HAP

| HAP Emissions | | | |
|-----------------------------------|------------|-----------------|-----------------------|
| HAP Name | CAS # | (% Composition) | Emissions (Lbs/yr) |
| Acetone* | 67-64-1 | | |
| Barium compounds | 0 | | |
| Benzene | 71-43-2 | | |
| Butoxy ethanol, 2- | 111-76-2 | | |
| Butyl acetate | 123-86-4 | | |
| Butyl alcohol, n- | 71-36-3 | | |
| Calcium carbonate | 1317-65-3 | | |
| Carbon black | 13333-86-4 | | |
| Chromium compounds | 0 | | |
| Cobalt compounds | 0 | | |
| Cumene | 98-82-8 | | |
| Dichlorodifluoromethane | 75-71-8 | | |
| Ethoxyethyl acetate, 2- | 111-15-9 | | |
| Ethyl acetate | 141-78-6 | | |
| Ethyl alcohol | 64-17-5 | | |
| Ethyl-3-ethoxy propionate | 763-69-9 | | |
| Ethylbenzene | 100-41-4 | | |
| Ethylene glycol | 107-21-1 | | |
| Hexane | 110-54-3 | | |
| Isobutyl acetate* | 110-19-0 | | |
| Isobutyl alcohol | 78-83-1 | | |
| Isopropyl alcohol* | 67-63-0 | | |
| Lead compounds | 0 | | |
| Magnesium silicate | 1343-90-4 | | |
| Methyl Alcohol | 67-56-1 | | |
| Methoxyethanol, 2- | 109-86-4 | | |
| Methyl chloroform | 71-55-6 | | |
| Methyl ethyl ketone | 78-93-3 | | |
| Methyl isobutyl ketone | 108-10-1 | | |
| Methylene chloride | 75-09-2 | | |
| Phenol | 108-95-2 | | |
| Phenylmercuric acetate | 62-38-4 | | |
| Propane | 74-98-6 | | |
| Propyl acetate | 109-60-4 | | |
| Propylene glycol monomethyl ether | 107-98-2 | | |
| Tetrachloroethylene | 127-18-4 | | |
| Titanium dioxide | 13463-67-7 | | |
| Toluene | 108-88-3 | | |
| Toluene-diisocyanate -2,4 | 584-84-9 | | |
| Xylene | 1330-20-7 | | |
| Zinc compounds | 0 | | |
| * New York State HAP | | HAP Total = | 0.00 Lbs/yr |
| | | HAP Content = | 0.00 lbs/gal |

**Emissions For Painting and Surface Coating Operations
Federal and New York State Regulations**

Name: Seneca Army Depot
 Bldg #: 317 (COMIS)
 SCC: 4-02-001-10

Date: 8/29/94
 Initials: GRM

General Comments: This template should only be used for spray paints, brush applications of paint, and spray booth operations. The use of this template is not intended for process applications of paint such as assembly lines in manufacturing plants, and other major coating operations. AP-42 or other comparable documents should be consulted to determine emissions associated with these processes.

Product/Material Information

Product: Aliphatic Thinner
 NSN: _____

Note: For annual usage, only fill the boxes for EITHER a, b, OR c and leave other boxes blank

| | | | | | | | |
|------------------|----------------------|----------------------|---------|----------------------|----------------------|--------------|--------------|
| Annual Usage: a) | <input type="text"/> | cans/yr | at | <input type="text"/> | fl.oz/can= | <u>0.000</u> | gal/yr |
| OR | b) | <input type="text"/> | cans/yr | at | <input type="text"/> | wt.oz/can= | <u>0.000</u> |
| OR | c) | <u>30.000</u> | gal/yr | | | | |

Specific Gravity: 0.850

Notes:

VOC composition: 100.00 (%MSDS/Manuf.)
100.00 (%corrected for water and non-photochemical reactants.)
 expressed as : A A = % by weight
 B = % by volume

Notes:

Comment: "A" and "B" refer to the percentage of the material which contains VOCs. This is expressed as a percentage of total volume, (i.e. gallons) or of total weight (i.e. pounds). When available, percent by weight should take precedence. Make sure to subtract the percentage of non-photochemically reactive VOCs and water, if any.

Paint Application Method: A A = spray application (spray can or gun)
 B = brush application

Spray Booth Filter Efficiency = 60.00 % (enter "0" if no filter is present)
 (ex: dry filter = 60%, waterfall type = 85%)

Comment: Filter efficiencies vary dependant on the filter type and materials used as the filtering media. Standard dry filters, which are common at Army installations, are assumed to have a consistant 60% removal efficiency under normal operating conditions. However, consult the manufacturer if there is any uncertainty as to the removal efficiency for a particular type of spray booth.

Paint Pigment Composition = 0.00 %

Comment: Pigment composition is derived from the leftover percentage of material in the paint that is not volatile (i.e., if the total VOC component makes up 80%, then the leftover 20% is assumed to be pigment).

Emissions Summary

| Annual VOC Emissions | | |
|------------------------------------|----------------------|---------------------|
| Annual usage converted to weight = | <u>212.135</u> | Lbs/yr |
| VOC Emissions = | <u>212.135</u> Lb/yr | <u>0.106</u> Ton/yr |

| Ozone Season VOC Emissions | | |
|---------------------------------------|---------------|-------------|
| Ozone Season Usage = | <u>53.034</u> | Lbs |
| Daily Ozone Season Usage = | <u>0.576</u> | Lbs/day |
| Ozone Season VOC Emissions = | <u>53.034</u> | Lbs |
| Daily Ozone Season VOC Emissions = | <u>0.576</u> | Lbs/day |
| Ozone Season Work Day VOC Emissions = | <u>0.807</u> | Lbs/wrk day |

| Annual Particulate Matter Emissions | | |
|-------------------------------------|---------------------|---------------------|
| TSP Emissions = | <u>0.000</u> Lbs/yr | <u>0.000</u> Ton/yr |
| PM10 Emissions = | <u>0.000</u> Lbs/yr | <u>0.000</u> Ton/yr |

HAP Emissions: Estimation of HAP emissions are broken into two categories. The first, on the following page, lists common HAPs associated with painting and surface coating. Enter the composition of each HAP in the columns provided for those HAPs listed. If the HAP is not listed, then enter the name of the HAP and %composition in the spaces below.

| HAP Name | CAS No | (% Composition) | Emissions (Lbs/yr) |
|----------|--------|-----------------|--------------------|
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HAP Subtotal = 0.0 Lbs/yr

* New York State HAP

| HAP Emissions | | | |
|-----------------------------------|------------|-----------------|-----------------------|
| HAP Name | CAS # | (% Composition) | Emissions (Lbs/yr) |
| Acetone* | 67-64-1 | | |
| Barium compounds | 0 | | |
| Benzene | 71-43-2 | | |
| Butoxy ethanol, 2- | 111-76-2 | | |
| Butyl acetate* | 123-86-4 | 11 | 23.3 |
| Butyl alcohol, n- | 71-36-3 | | |
| Calcium carbonate | 1317-65-3 | | |
| Carbon black | 13333-86-4 | | |
| Chromium compounds | 0 | | |
| Cobalt compounds | 0 | | |
| Cumene | 98-82-8 | | |
| Dichlorodifluoromethane | 75-71-8 | | |
| Ethoxyethyl acetate, 2- | 111-15-9 | | |
| Ethyl acetate | 141-78-6 | | |
| Ethyl alcohol | 64-17-5 | | |
| Ethyl-3-ethoxy propionate | 763-69-9 | | |
| Ethylbenzene | 100-41-4 | | |
| Ethylene glycol | 107-21-1 | | |
| Hexane | 110-54-3 | | |
| Isobutyl acetate* | 110-19-0 | | |
| Isobutyl alcohol | 78-83-1 | | |
| Isopropyl alcohol* | 67-63-0 | | |
| Lead compounds | 0 | | |
| Magnesium silicate | 1343-90-4 | | |
| Methyl Alcohol | 67-56-1 | | |
| Methoxyethanol, 2- | 109-86-4 | | |
| Methyl chloroform | 71-55-6 | | |
| Methyl ethyl ketone | 78-93-3 | 30.5 | 64.7 |
| Methyl isobutyl ketone | 108-10-1 | | |
| Methylene chloride | 75-09-2 | | |
| Phenol | 108-95-2 | | |
| Phenylmercuric acetate | 62-38-4 | | |
| Propane | 74-98-6 | | |
| Propyl acetate | 109-60-4 | | |
| Propylene glycol monomethyl ether | 107-98-2 | | |
| Tetrachloroethylene | 127-18-4 | | |
| Titanium dioxide | 13463-67-7 | | |
| Toluene | 108-88-3 | 10.5 | 22.3 |
| Toluene-diisocyanate -2,4 | 584-84-9 | | |
| Xylene | 1330-20-7 | 7 | 14.8 |
| Zinc compounds | 0 | | |
| * New York State HAP | | HAP Total = | 125.16 Lbs/yr |
| | | HAP Content = | 4.17 lbs/gal |

Painting Operations VOC Emissions
for Building Number 360

| NSN | Solvent | Use gal/yr | VOC Content (%) | VOC Emissions (lb/yr) | VOC Emissions (ton/yr) |
|-----|------------|---------------|--------------------|--------------------------|---------------------------|
| N/A | CARC Paint | 30.00 | 32.11 | 104.98 | 0.05 |

Ozone Season Daily Painting Operations Emissions
for Building Number 360

| Pollutant | Emissions (lb) | Daily Emissions (lb) | Daily Emissions (tons) |
|-----------|-------------------|-------------------------|---------------------------|
| VOC | 104.98 | 0.29 | <0.01 |

Painting Operations HAP Emissions
for Building Number 360

| NSN | Solvent | Use (gal/yr) | HAP Content (lbs/gal) | HAP Emissions (lb/yr) | HAP Emissions (ton/yr) |
|-----|------------|-----------------|--------------------------|--------------------------|---------------------------|
| N/A | CARC Paint | 30.00 | 4.37 | 131.10 | 0.07 |

Painting Operations HAP Emissions
for Building Number 360

| NSN | Solvent | Use (gal/yr) | HAP Toluene (%) | HAP Xylene (%) | HAP Butyl Acetate* (%) |
|-----|------------|-----------------|-----------------------|----------------------|------------------------------|
| N/A | CARC Paint | 30.00 | 5.00 | 15.00 | 5.00 |

| NSN | Solvent | Use (gal/yr) | HAP Chromium Compounds (%) | HAP Methyl Isobutyl Ketone (%) | HAP Hexamethylene- 1,6-diisocyanate (%) |
|-----|------------|-----------------|-------------------------------------|---|--|
| N/A | CARC Paint | 30.00 | 10.00 | 5.00 | 0.10 |

* New York State HAP

PAINTING OPERATIONS

GENERAL INFORMATION

Installation Seneca Army Depot

Data Collected By... T. Sletten Data Collected..... June 6-10, 1994

SCC..... 4-02-001-10 Building No..... 360

Permit No./Expires..... 03601 / 4-1-97 Unit ID Number..... _____

POC..... David Nichols Painting Schedule:
 Hours/day..... * See below
 Days/week..... _____

Phone..... (607) 869-1525

TYPE OF PAINTING

APPLICATION METHOD

(Check all that apply)

Metal Parts..... _____
 Furniture..... _____
 Vehicle..... Fenders
 Aircraft..... _____
 Drums..... Fuel Cells
 Architecture..... _____
 Road Striping..... _____

Brush..... _____
 Spray Can..... _____
 Dip Coat..... _____
 Flow Coat..... _____

Electrodeposition _____

Electrostatic
 Rotating Head..... _____
 Nonrotational Head.. _____
 Manual..... _____
 Mechanical Spray
 Air Atomized..... _____
 Airless..... _____

Spray Gun Manufacturer: _____

Spray Gun Model No.:..... _____

PAINTING AREA

POLLUTION CONTROL EQUIPMENT

Paint Spray Booth
 Walk-in..... _____
 Drive Through... _____
 Open Air
 Indoor..... _____
 Outdoor..... _____

(Enter control efficiency)
 Dry Filter..... _____ Waterfall..... _____
 Incinerator.... _____ Carbon/UV..... _____
 Other: Cross Draft dry filter

PAINT TYPE/USAGE INFORMATION (INCLUDE PAINT/PRIMER/THINNER/LACQUERS)

| PAINT TYPE | NSN/MILSPEC | ANNUAL USE (gal/yr) | DENSITY (lb/gal) | VOC CONTENT (%) | SOLIDS CONTENT (%) |
|------------|------------------|---------------------|------------------|-----------------|--------------------|
| CARC Paint | 8010-01-229-9561 | 30 | | | |
| _____ | _____ | _____ | _____ | _____ | _____ |
| _____ | _____ | _____ | _____ | _____ | _____ |
| _____ | _____ | _____ | _____ | _____ | _____ |
| _____ | _____ | _____ | _____ | _____ | _____ |
| _____ | _____ | _____ | _____ | _____ | _____ |

Notes: Binks Paint Spray Booth: 30'L x 15'H x 12'W

* Booth inactive since May 1994, used only twice between 2/93 and 5/94 to paint fuel cells and fenders, (2 weeks total time)

EMISSION RATE DETERMINATION METHOD

Stack Test Data _____ Emission Factor _____ Material Balance X

Similar Unit Data _____ Other MSDS

Reference: _____

OZONE PRECURSOR EMISSIONS

Typical Ozone Season Emissions
 VOC Emissions 0.2852700390 lb/day
 NOx Emissions _____ lb/day
 CO Emissions _____ lb/day

HAZARDOUS AIR POLLUTANTS

| HAP | CAS CODE | LB/YR |
|--------------------------------|-----------|---------------|
| Toluene | 108-88-3 | 16.3468350000 |
| Xylene | 1330-20-7 | 49.0405050000 |
| Hexamethylene-1,6-diisocyanate | 822-06-0 | 0.3269367000 |
| Methyl Isobutyl Ketone | 108-10-1 | 16.3468350000 |
| N-Butyl Acetate* | 123-86-4 | 16.3468350000 |
| Chromium Compounds | 0 | 32.6936700000 |

CRITERIA POLLUTANT EMISSIONS

VOC Emissions 0.0524896872 ton/yr
 NOx Emissions _____ ton/yr
 CO Emissions _____ ton/yr
 SO2 Emissions _____ ton/yr
 PM10 Emissions 0.0103654071 ton/yr
 Total Particulate 0.0221957326 ton/yr

* New York State HAP

STACK INFORMATION

Stack (release) Height 21 feet
 Stack Diameter 34 inch

Stack Gas Velocity 43.4 ft/sec
 Stack Gas Flow Rate 16,400 acsf/min
 Stack Gas Temperature 65 oF

Other sources that share this stack? _____
 Stack Sampling Report Available? (Y/ N, results?) _____

**Emissions For Painting and Surface Coating Operations
Federal and New York State Regulations**

Name: Seneca Army Depot
 Bldg #: 360
 SCC: 4-02-001-10

Date: 8/29/94
 Initials: GRM

General Comments: This template should only be used for spray paints, brush applications of paint, and spray booth operations. The use of this template is not intended for process applications of paint such as assembly lines in manufacturing plants, and other major coating operations. AP-42 or other comparable documents should be consulted to determine emissions associated with these processes.

Product/Material Information

Product: CARC Paint
 NSN: 8010-01-229-9561

Note: For annual usage, only fill the boxes for EITHER a, b, OR c and leave other boxes blank

Annual Usage: a) cans/yr at fl.oz/can= 0.000 gal/yr
 OR b) cans/yr at wt.oz/can= 0.000 lb/yr
 OR c) gal/yr

Specific Gravity: 1.310

Notes:

VOC composition: 32.11 (%MSDS/Manuf.)
32.11 (%corrected for water and non-photochemical reactants.)
 expressed as : A A = % by weight
 B = % by volume

Notes: VOC: $(3.5 \text{ lb/gal}) / (10.9 \text{ lb/gal}) * 100 = 32.11\%$

Comment: "A" and "B" refer to the percentage of the material which contains VOCs. This is expressed as a percentage of total volume, (i.e. gallons) or of total weight (i.e. pounds). When available, percent by weight should take precedence. Make sure to subtract the percentage of non-photochemically reactive VOCs and water, if any.

Paint Application Method: A A = spray application (spray can or gun)
 B = brush application

Spray Booth Filter Efficiency = 60.00 % (enter "0" if no filter is present)
 (ex: dry filter = 60%, waterfall type = 85%)

Comment: Filter efficiencies vary dependant on the filter type and materials used as the filtering media. Standard dry filters, which are common at Army installations, are assumed to have a consistant 60% removal efficiency under normal operating conditions. However, consult the manufacturer if there is any uncertainty as to the removal efficiency for a particular type of spray booth.

Paint Pigment Composition = 67.89 %

Comment: Pigment composition is derived from the leftover percentage of material in the paint that is not volatile (i.e., if the total VOC component makes up 80%, then the leftover 20% is assumed to be pigment).

Emissions Summary

| Annual VOC Emissions | | | |
|------------------------------------|----------------|----------------|---------------------|
| Annual usage converted to weight = | | <u>326.937</u> | Lbs/yr |
| VOC Emissions = | <u>104.979</u> | Lb/yr | <u>0.052</u> Ton/yr |

| Ozone Season VOC Emissions | | | |
|---------------------------------------|--|---------------|-------------|
| Ozone Season Usage = | | <u>81.734</u> | Lbs |
| Daily Ozone Season Usage = | | <u>0.888</u> | Lbs/day |
| Ozone Season VOC Emissions = | | <u>26.245</u> | Lbs |
| Daily Ozone Season VOC Emissions = | | <u>0.285</u> | Lbs/day |
| Ozone Season Work Day VOC Emissions = | | <u>0.399</u> | Lbs/wrk day |

| Annual Particulate Matter Emissions | | | |
|-------------------------------------|---------------|---------------|---------------------|
| TSP Emissions = | | <u>44.391</u> | Lbs/yr |
| | | <u>0.022</u> | Ton/yr |
| PM10 Emissions = | <u>20.731</u> | Lbs/yr | <u>0.010</u> Ton/yr |

HAP Emissions: Estimation of HAP emissions are broken into two categories. The first, on the following page, lists common HAPs associated with painting and surface coating. Enter the composition of each HAP in the columns provided for those HAPs listed. If the HAP is not listed, then enter the name of the HAP and %composition in the spaces below.

| HAP Name | CAS No | (% Composition) | Emissions (Lbs/yr) |
|--------------------------------|----------|-----------------|--------------------|
| Hexamethylene-1,6-diisocyanate | 822-06-0 | 0.1 | 0.3 |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

HAP Subtotal = 0.3 Lbs/yr

| HAP Emissions | | | |
|-----------------------------------|------------|----------------------|-----------------------|
| HAP Name | CAS # | (% Composition) | Emissions (Lbs/yr) |
| Acetone | 67-64-1 | | |
| Barium compounds | 0 | | |
| Benzene | 71-43-2 | | |
| Butoxy ethanol, 2- | 111-76-2 | | |
| Butyl acetate | 123-86-4 | 5 | 16.3 |
| Butyl alcohol, n- | 71-36-3 | | |
| Calcium carbonate | 1317-65-3 | | |
| Carbon black | 13333-86-4 | | |
| Chromium compounds | 0 | 10 | 32.7 |
| Cobalt compounds | 0 | | |
| Cumene | 98-82-8 | | |
| Dichlorodifluoromethane | 75-71-8 | | |
| Ethoxyethyl acetate, 2- | 111-15-9 | | |
| Ethyl acetate | 141-78-6 | | |
| Ethyl alcohol | 64-17-5 | | |
| Ethyl-3-ethoxy propionate | 763-69-9 | | |
| Ethylbenzene | 100-41-4 | | |
| Ethylene glycol | 107-21-1 | | |
| Hexane | 110-54-3 | | |
| Isobutyl acetate | 110-19-0 | | |
| Isobutyl alcohol | 78-83-1 | | |
| Isopropyl alcohol | 67-63-0 | | |
| Lead compounds | 0 | | |
| Magnesium silicate | 1343-90-4 | | |
| Methyl Alcohol | 67-56-1 | | |
| Methoxyethanol, 2- | 109-86-4 | | |
| Methyl chloroform | 71-55-6 | | |
| Methyl ethyl ketone | 78-93-3 | | |
| Methyl isobutyl ketone | 108-10-1 | 5 | 16.3 |
| Methylene chloride | 75-09-2 | | |
| Phenol | 108-95-2 | | |
| Phenylmercuric acetate | 62-38-4 | | |
| Propane | 74-98-6 | | |
| Propyl acetate | 109-60-4 | | |
| Propylene glycol monomethyl ether | 107-98-2 | | |
| Tetrachloroethylene | 127-18-4 | | |
| Titanium dioxide | 13463-67-7 | | |
| Toluene | 108-88-3 | 5 | 16.3 |
| Toluene-diisocyanate -2,4 | 584-84-9 | | |
| Xylene | 1330-20-7 | 15 | 49.0 |
| Zinc compounds | 0 | | |
| | | HAP Total = | 131.10 Lbs/yr |
| | | HAP Content = | 4.37 lbs/gal |

**Surface Coating VOC Emissions
for Building Number 5**

| NSN | Solvent | Use gal/yr | VOC Content (%) | VOC Emissions (lb/yr) | VOC Emissions (ton/yr) |
|------------------|----------------------------|-----------------------|----------------------------|----------------------------------|-----------------------------------|
| 8010-00-582-5382 | So-Sure Flat Black Lacquer | 0.40 | 85.82 | 2.58 | <0.01 |
| 8010-00-548-3148 | So-Sure Orange Lacquer | 0.48 | 80.85 | 3.03 | <0.01 |
| 8010-00-582-4743 | So-Sure Obliterating | 0.34 | 80.32 | 2.41 | <0.01 |

**Ozone Season Daily Surface Coating Emissions
for Building Number 5**

| Pollutant | Emissions (lb) | Daily Emissions (lb) | Daily Emissions (tons) |
|------------------|---------------------------|---------------------------------|-----------------------------------|
| VOC | 8.02 | 0.02 | <0.01 |

**Painting Operations HAP Emissions
for Building Number 5**

| NSN | Solvent | Use (gal/yr) | HAP Content (lbs/gal) | HAP Emissions (lb/yr) | HAP Emissions (ton/yr) |
|------------------|----------------------------|-------------------------|----------------------------------|----------------------------------|-----------------------------------|
| 8010-00-582-5382 | So-Sure Flat Black Lacquer | 0.40 | 4.37 | 1.74 | <0.01 |
| 8010-00-548-3148 | So-Sure Orange Lacquer | 0.48 | 3.77 | 1.80 | <0.01 |
| 8010-00-582-4743 | So-Sure Obliterating | 0.34 | 3.38 | 1.14 | <0.01 |

**Painting Operations HAP Emissions
for Building Number 5**

| NSN | Solvent | Use (gal/yr) | HAP Toluene (%) | HAP Xylene (%) | HAP MEK (%) | HAP Acetone* (%) |
|------------------|----------------------------|-------------------------|--------------------------------|-------------------------------|----------------------------|---------------------------------|
| 8010-00-582-5382 | So-Sure Flat Black Lacquer | 0.40 | 28.32 | 1.21 | 3.64 | 24.87 |
| 8010-00-548-3148 | So-Sure Orange Lacquer | 0.48 | 22.09 | 3.07 | | 21.31 |
| 8010-00-582-4743 | So-Sure Obliterating | 0.34 | 33.44 | | | 4.69 |

* New York State HAP

EMISSION RATE DETERMINATION METHOD

Stack Test Data _____ Emission Factor _____ Material Balance X

Similar Unit Data _____ Other _____ MSDS

Reference: _____

OZONE PRECURSOR EMISSIONS

Typical Ozone Season Emissions
 VOC Emissions 0.0217828125 lb/day
 NOx Emissions _____ lb/day
 CO Emissions _____ lb/day

HAZARDOUS AIR POLLUTANTS

| HAP | CAS CODE | LB/YR |
|---------------------|-----------|--------------|
| Toluene | 108-88-3 | 2.6811750000 |
| Xylene | 1330-20-7 | 0.1514250000 |
| Acetone* | 67-64-1 | 1.6859250000 |
| Methyl Ethyl Ketone | 78-93-3 | 0.1092000000 |
| Ethylbenzene | 100-41-4 | 0.0577500000 |

CRITERIA POLLUTANT EMISSIONS

VOC Emissions 0.0040080375 ton/yr
 NOx Emissions _____ ton/yr
 CO Emissions _____ ton/yr
 SO2 Emissions _____ ton/yr
 PM10 Emissions 0.0002024357 ton/yr
 Total Particulate 0.0004334813 ton/yr

* New York State HAP

STACK INFORMATION

| | |
|-----------------------------------|------------------------------------|
| Stack (release) Height _____ feet | Stack Gas Velocity _____ ft/sec |
| Stack Diameter _____ inch | Stack Gas Flow Rate _____ ascf/min |
| | Stack Gas Temperature _____ oF |

Other sources that share this stack? _____
 Stack Sampling Report Available? (Y/ N, results?) _____

**Emissions For Painting and Surface Coating Operations
Federal and New York State Regulations**

Name: Seneca Army Depot
 Bldg #: 5
 SCC: 4-02-999-95

Date: 8/29/94
 Initials: GRM

General Comments: This template should only be used for spray paints, brush applications of paint, and spray booth operations. The use of this template is not intended for process applications of paint such as assembly lines in manufacturing plants, and other major coating operations. AP-42 or other comparable documents should be consulted to determine emissions associated with these processes.

Product/Material Information

Product: So-Sure Lacquer - Flat Black
 NSN: 8010-00-582-5382

Note: For annual usage, only fill the boxes for EITHER a, b, OR c and leave other boxes blank

Annual Usage: a) cans/yr at fl.oz/can= 0.000 gal/yr
 OR b) cans/yr at wt.oz/can= 3.000 lb/yr
 OR c) gal/yr

Specific Gravity: 0.905

Notes:

VOC composition: 85.82 (%MSDS/Manuf.)
85.82 (%corrected for water and non-photochemical reactants.)
 expressed as : A A = % by weight
 B = % by volume

Notes:

Comment: "A" and "B" refer to the percentage of the material which contains VOCs. This is expressed as a percentage of total volume, (i.e. gallons) or of total weight (i.e. pounds). When available, percent by weight should take precedence. Make sure to subtract the percentage of non-photochemically reactive VOCs and water, if any.

Paint Application Method: A A = spray application (spray can or gun)
 B = brush application

Spray Booth Filter Efficiency = 0.00 % (enter "0" if no filter is present)
 (ex: dry filter = 60%, waterfall type = 85%)

Comment: Filter efficiencies vary dependant on the filter type and materials used as the filtering media. Standard dry filters, which are common at Army installations, are assumed to have a consistant 60% removal efficiency under normal operating conditions. However, consult the manufacturer if there is any uncertainty as to the removal efficiency for a particular type of spray booth.

Paint Pigment Composition = 14.18 %

Comment: Pigment composition is derived from the leftover percentage of material in the paint that is not volatile (i.e., if the total VOC component makes up 80%, then the leftover 20% is assumed to be pigment).

Emissions Summary

| Annual VOC Emissions | | |
|------------------------------------|--------------------|---------------------|
| Annual usage converted to weight = | <u>3.000</u> | Lbs/yr |
| VOC Emissions = | <u>2.575</u> Lb/yr | <u>0.001</u> Ton/yr |

| Ozone Season VOC Emissions | | |
|---------------------------------------|--------------|-------------|
| Ozone Season Usage = | <u>0.750</u> | Lbs |
| Daily Ozone Season Usage = | <u>0.008</u> | Lbs/day |
| Ozone Season VOC Emissions = | <u>0.644</u> | Lbs |
| Daily Ozone Season VOC Emissions = | <u>0.007</u> | Lbs/day |
| Ozone Season Work Day VOC Emissions = | <u>0.010</u> | Lbs/wrk day |

| Annual Particulate Matter Emissions | | |
|-------------------------------------|---------------------|---------------------|
| TSP Emissions = | <u>0.213</u> Lbs/yr | <u>0.000</u> Ton/yr |
| PM10 Emissions = | <u>0.099</u> Lbs/yr | <u>0.000</u> Ton/yr |

HAP Emissions: Estimation of HAP emissions are broken into two categories. The first, on the following page, lists common HAPs associated with painting and surface coating. Enter the composition of each HAP in the columns provided for those HAPs listed. If the HAP is not listed, then enter the name of the HAP and %composition in the spaces below.

| HAP Name | CAS No | (% Composition) | Emissions (Lbs/yr) |
|----------|--------|-----------------|--------------------|
| | | | |
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| | | | |
| | | | |

HAP Subtotal = 0.0 Lbs/yr

* New York State HAP

| HAP Emissions | | | |
|-----------------------------------|------------|-----------------|-----------------------|
| HAP Name | CAS # | (% Composition) | Emissions (Lbs/yr) |
| Acetone* | 67-64-1 | 24.87 | 0.7 |
| Barium compounds | 0 | | |
| Benzene | 71-43-2 | | |
| Butoxy ethanol, 2- | 111-76-2 | | |
| Butyl acetate | 123-86-4 | | |
| Butyl alcohol, n-* | 71-36-3 | | |
| Calcium carbonate | 1317-65-3 | | |
| Carbon black | 13333-86-4 | | |
| Chromium compounds | 0 | | |
| Cobalt compounds | 0 | | |
| Cumene | 98-82-8 | | |
| Dichlorodifluoromethane | 75-71-8 | | |
| Ethoxyethyl acetate, 2- | 111-15-9 | | |
| Ethyl acetate | 141-78-6 | | |
| Ethyl alcohol | 64-17-5 | | |
| Ethyl-3-ethoxy propionate | 763-69-9 | | |
| Ethylbenzene | 100-41-4 | | |
| Ethylene glycol | 107-21-1 | | |
| Hexane | 110-54-3 | | |
| Isobutyl acetate | 110-19-0 | | |
| Isobutyl alcohol | 78-83-1 | | |
| Isopropyl alcohol | 67-63-0 | | |
| Lead compounds | 0 | | |
| Magnesium silicate | 1343-90-4 | | |
| Methyl Alcohol | 67-56-1 | | |
| Methoxyethanol, 2- | 109-86-4 | | |
| Methyl chloroform | 71-55-6 | | |
| Methyl ethyl ketone | 78-93-3 | 3.64 | 0.1 |
| Methyl isobutyl ketone | 108-10-1 | | |
| Methylene chloride | 75-09-2 | | |
| Phenol | 108-95-2 | | |
| Phenylmercuric acetate | 62-38-4 | | |
| Propane | 74-98-6 | | |
| Propyl acetate | 109-60-4 | | |
| Propylene glycol monomethyl ether | 107-98-2 | | |
| Tetrachloroethylene | 127-18-4 | | |
| Titanium dioxide | 13463-67-7 | | |
| Toluene | 108-88-3 | 28.32 | 0.8 |
| Toluene-diisocyanate -2,4 | 584-84-9 | | |
| Xylene | 1330-20-7 | 1.21 | 0.0 |
| Zinc compounds | 0 | | |
| * New York State HAP | | HAP Total = | 1.74 Lbs/yr |
| | | HAP Content = | 4.37 lbs/gal |

**Emissions For Painting and Surface Coating Operations
Federal and New York State Regulations**

Name: Seneca Army Depot
 Bldg #: 5
 SCC: 4-02-999-95

Date: 8/29/94
 Initials: GRM

General Comments: This template should only be used for spray paints, brush applications of paint, and spray booth operations. The use of this template is not intended for process applications of paint such as assembly lines in manufacturing plants, and other major coating operations. AP-42 or other comparable documents should be consulted to determine emissions associated with these processes.

Product/Material Information

Product: So-Sure Lacquer - Orange
 NSN: 8010-00-584-3148

Note: For annual usage, only fill the boxes for EITHER a, b, OR c and leave other boxes blank

Annual Usage: a) cans/yr at fl.oz/can= 0.000 gal/yr
 OR b) 5 cans/yr at 12.000 wt.oz/can= 3.750 lb/yr
 OR c) gal/yr

Specific Gravity: 0.945

Notes:

VOC composition: 80.85 (%MSDS/Manuf.)
80.85 (%corrected for water and non-photochemical reactants.)
 expressed as : A A = % by weight
 B = % by volume

Notes:

Comment: "A" and "B" refer to the percentage of the material which contains VOCs. This is expressed as a percentage of total volume, (i.e. gallons) or of total weight (i.e. pounds). When available, percent by weight should take precedence. Make sure to subtract the percentage of non-photochemically reactive VOCs and water, if any.

Paint Application Method: A A = spray application (spray can or gun)
 B = brush application

Spray Booth Filter Efficiency = 0.00 % (enter "0" if no filter is present)
 (ex: dry filter = 60%, waterfall type = 85%)

Comment: Filter efficiencies vary dependant on the filter type and materials used as the filtering media. Standard dry filters, which are common at Army installations, are assumed to have a consistant 60% removal efficiency under normal operating conditions. However, consult the manufacturer if there is any uncertainty as to the removal efficiency for a particular type of spray booth.

Paint Pigment Composition = 19.15 %

Comment: Pigment composition is derived from the leftover percentage of material in the paint that is not volatile (i.e., if the total VOC component makes up 80%, then the leftover 20% is assumed to be pigment).

Emissions Summary

| - Annual VOC Emissions | | | |
|------------------------------------|--------------|--------------|---------------------|
| Annual usage converted to weight = | | <u>3.750</u> | Lbs/yr |
| VOC Emissions = | <u>3.032</u> | Lb/yr | <u>0.002</u> Ton/yr |

| Ozone Season VOC Emissions | | | |
|---------------------------------------|--|--------------|-------------|
| Ozone Season Usage = | | <u>0.938</u> | Lbs |
| Daily Ozone Season Usage = | | <u>0.010</u> | Lbs/day |
| Ozone Season VOC Emissions = | | <u>0.758</u> | Lbs |
| Daily Ozone Season VOC Emissions = | | <u>0.008</u> | Lbs/day |
| Ozone Season Work Day VOC Emissions = | | <u>0.012</u> | Lbs/wrk day |

| Annual Particulate Matter Emissions | | | |
|-------------------------------------|--------------|--------|---------------------|
| TSP Emissions = | <u>0.359</u> | Lbs/yr | <u>0.000</u> Ton/yr |
| PM10 Emissions = | <u>0.168</u> | Lbs/yr | <u>0.000</u> Ton/yr |

HAP Emissions: Estimation of HAP emissions are broken into two categories. The first, on the following page, lists common HAPs associated with painting and surface coating. Enter the composition of each HAP in the columns provided for those HAPs listed. If the HAP is not listed, then enter the name of the HAP and %composition in the spaces below.

| HAP Name | CAS No | (% Composition) | Emissions (Lbs/yr) |
|----------|--------|-----------------|--------------------|
| | | | |
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| | | | |
| | | | |

HAP Subtotal = 0.0 Lbs/yr

* New York State HAP

| HAP Emissions | | | |
|-----------------------------------|--------------|------------------------|-------------------------------|
| HAP Name | CAS # | (% Composition) | Emissions (Lbs/yr) |
| Acetone* | 67-64-1 | 21.31 | 0.8 |
| Barium compounds | 0 | | |
| Benzene | 71-43-2 | | |
| Butoxy ethanol, 2- | 111-76-2 | | |
| Butyl acetate | 123-86-4 | | |
| Butyl alcohol, n* | 71-36-3 | | |
| Calcium carbonate | 1317-65-3 | | |
| Carbon black | 13333-86-4 | | |
| Chromium compounds | 0 | | |
| Cobalt compounds | 0 | | |
| Cumene | 98-82-8 | | |
| Dichlorodifluoromethane | 75-71-8 | | |
| Ethoxyethyl acetate, 2- | 111-15-9 | | |
| Ethyl acetate | 141-78-6 | | |
| Ethyl alcohol | 64-17-5 | | |
| Ethyl-3-ethoxy propionate | 763-69-9 | | |
| Ethylbenzene | 100-41-4 | 1.54 | 0.1 |
| Ethylene glycol | 107-21-1 | | |
| Hexane | 110-54-3 | | |
| Isobutyl acetate | 110-19-0 | | |
| Isobutyl alcohol | 78-83-1 | | |
| Isopropyl alcohol | 67-63-0 | | |
| Lead compounds | 0 | | |
| Magnesium silicate | 1343-90-4 | | |
| Methyl Alcohol | 67-56-1 | | |
| Methoxyethanol, 2- | 109-86-4 | | |
| Methyl chloroform | 71-55-6 | | |
| Methyl ethyl ketone | 78-93-3 | | |
| Methyl isobutyl ketone | 108-10-1 | | |
| Methylene chloride | 75-09-2 | | |
| Phenol | 108-95-2 | | |
| Phenylmercuric acetate | 62-38-4 | | |
| Propane | 74-98-6 | | |
| Propyl acetate | 109-60-4 | | |
| Propylene glycol monomethyl ether | 107-98-2 | | |
| Tetrachloroethylene | 127-18-4 | | |
| Titanium dioxide | 13463-67-7 | | |
| Toluene | 108-88-3 | 22.09 | 0.8 |
| Toluene-diisocyanate -2,4 | 584-84-9 | | |
| Xylene | 1330-20-7 | 3.07 | 0.1 |
| Zinc compounds | 0 | | |
| * New York State HAP | | HAP Total = | 1.80 Lbs/yr |
| | | HAP Content = | 3.77 lbs/gal |

**Emissions For Painting and Surface Coating Operations
Federal and New York State Regulations**

Name: Seneca Army Depot
 Bldg #: 5
 SCC: 4-02-999-95

Date: 8/29/94
 Initials: GRM

General Comments: This template should only be used for spray paints, brush applications of paint, and spray booth operations. The use of this template is not intended for process applications of paint such as assembly lines in manufacturing plants, and other major coating operations. AP-42 or other comparable documents should be consulted to determine emissions associated with these processes.

Product/Material Information

Product: So-Sure Brown Obliterating Compound
 NSN: 8010-00-582-4743

Note: For annual usage, only fill the boxes for EITHER a, b, OR c and leave other boxes blank

Annual Usage: a) cans/yr at fl.oz/can= 0.000 gal/yr
 OR b) cans/yr at wt.oz/can= 3.000 lb/yr
 OR c) gal/yr

Specific Gravity: 1.067

Notes:

VOC composition: 80.32 (%MSDS/Manuf.)
80.32 (%corrected for water and non-photochemical reactants.)
 expressed as : A A = % by weight
 B = % by volume

Notes:

Comment: "A" and "B" refer to the percentage of the material which contains VOCs. This is expressed as a percentage of total volume, (i.e. gallons) or of total weight (i.e. pounds). When available, percent by weight should take precedence. Make sure to subtract the percentage of non-photochemically reactive VOCs and water, if any.

Paint Application Method: A A = spray application (spray can or gun)
 B = brush application

Spray Booth Filter Efficiency = 0.00 % (enter "0" if no filter is present)
 (ex: dry filter = 60%, waterfall type = 85%)

Comment: Filter efficiencies vary dependant on the filter type and materials used as the filtering media. Standard dry filters, which are common at Army installations, are assumed to have a consistant 60% removal efficiency under normal operating conditions. However, consult the manufacturer if there is any uncertainty as to the removal efficiency for a particular type of spray booth.

Paint Pigment Composition = 19.68 %

Comment: Pigment composition is derived from the leftover percentage of material in the paint that is not volatile (i.e., if the total VOC component makes up 80%, then the leftover 20% is assumed to be pigment).

Emissions Summary

| Annual VOC Emissions | | | |
|------------------------------------|--------------|--------------|---------------------|
| Annual usage converted to weight = | | <u>3.000</u> | Lbs/yr |
| VOC Emissions = | <u>2.410</u> | Lb/yr | <u>0.001</u> Ton/yr |

| Ozone Season VOC Emissions | | | |
|---------------------------------------|--|--------------|-------------|
| Ozone Season Usage = | | <u>0.750</u> | Lbs |
| Daily Ozone Season Usage = | | <u>0.008</u> | Lbs/day |
| Ozone Season VOC Emissions = | | <u>0.602</u> | Lbs |
| Daily Ozone Season VOC Emissions = | | <u>0.007</u> | Lbs/day |
| Ozone Season Work Day VOC Emissions = | | <u>0.009</u> | Lbs/wrk day |

| Annual Particulate Matter Emissions | | | |
|-------------------------------------|--------------|--------|---------------------|
| TSP Emissions = | <u>0.295</u> | Lbs/yr | <u>0.000</u> Ton/yr |
| PM10 Emissions = | <u>0.138</u> | Lbs/yr | <u>0.000</u> Ton/yr |

HAP Emissions: Estimation of HAP emissions are broken into two categories. The first, on the following page, lists common HAPs associated with painting and surface coating. Enter the composition of each HAP in the columns provided for those HAPs listed. If the HAP is not listed, then enter the name of the HAP and %composition in the spaces below.

| HAP Name | CAS No | (% Composition) | Emissions (Lbs/yr) |
|----------------|--------|-----------------|--------------------|
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| HAP Subtotal = | | | <u>0.0</u> Lbs/yr |

* New York State HAP

| HAP Emissions | | | |
|-----------------------------------|------------|-----------------|-----------------------|
| HAP Name | CAS # | (% Composition) | Emissions (Lbs/yr) |
| Acetone* | 67-64-1 | 4.69 | 0.1 |
| Barium compounds | 0 | | |
| Benzene | 71-43-2 | | |
| Butoxy ethanol, 2- | 111-76-2 | | |
| Butyl acetate | 123-86-4 | | |
| Butyl alcohol, n-* | 71-36-3 | | |
| Calcium carbonate | 1317-65-3 | | |
| Carbon black | 13333-86-4 | | |
| Chromium compounds | 0 | | |
| Cobalt compounds | 0 | | |
| Cumene | 98-82-8 | | |
| Dichlorodifluoromethane | 75-71-8 | | |
| Ethoxyethyl acetate, 2- | 111-15-9 | | |
| Ethyl acetate | 141-78-6 | | |
| Ethyl alcohol* | 64-17-5 | | |
| Ethyl-3-ethoxy propionate | 763-69-9 | | |
| Ethylbenzene | 100-41-4 | | |
| Ethylene glycol | 107-21-1 | | |
| Hexane | 110-54-3 | | |
| Isobutyl acetate | 110-19-0 | | |
| Isobutyl alcohol | 78-83-1 | | |
| Isopropyl alcohol | 67-63-0 | | |
| Lead compounds | 0 | | |
| Magnesium silicate | 1343-90-4 | | |
| Methyl Alcohol | 67-56-1 | | |
| Methoxyethanol, 2- | 109-86-4 | | |
| Methyl chloroform | 71-55-6 | | |
| Methyl ethyl ketone | 78-93-3 | | |
| Methyl isobutyl ketone | 108-10-1 | | |
| Methylene chloride | 75-09-2 | | |
| Phenol | 108-95-2 | | |
| Phenylmercuric acetate | 62-38-4 | | |
| Propane | 74-98-6 | | |
| Propyl acetate | 109-60-4 | | |
| Propylene glycol monomethyl ether | 107-98-2 | | |
| Tetrachloroethylene | 127-18-4 | | |
| Titanium dioxide | 13463-67-7 | | |
| Toluene | 108-88-3 | 33.44 | 1.0 |
| Toluene-diisocyanate -2,4 | 584-84-9 | | |
| Xylene | 1330-20-7 | | |
| Zinc compounds | 0 | | |
| * New York State HAP | | HAP Total = | 1.14 Lbs/yr |
| | | HAP Content = | 3.38 lbs/gal |

Surface Coating VOC Emissions
for Building Number 113

| NSN | Solvent | Use gal/yr | VOC Content (%) | VOC Emissions (lb/yr) | VOC Emissions (ton/yr) |
|-----|----------------------------------|---------------|--------------------|--------------------------|---------------------------|
| N/A | Latex Brown | 35.00 | 3.01 | 11.83 | 0.01 |
| N/A | All Weather White Exterior Paint | 1.00 | 16.63 | 1.66 | <0.01 |

Ozone Season Daily Surface Coating Emissions
for Building Number 113

| Pollutant | Emissions (lb) | Daily Emissions (lb) | Daily Emissions (tons) |
|-----------|-------------------|-------------------------|---------------------------|
| VOC | 13.49 | 0.03 | <0.01 |

Surface Coating HAP Emissions
for Building Number 113

| NSN | Solvent | Use (gal/yr) | HAP Content (lbs/gal) | HAP Emissions (lb/yr) | HAP Emissions (ton/yr) |
|-----|----------------------------------|-----------------|--------------------------|--------------------------|---------------------------|
| N/A | Latex Brown | 35.00 | 0.34 | 11.83 | <0.01 |
| N/A | All Weather White Exterior Paint | 1.00 | 0.50 | 0.50 | <0.01 |

Surface Coating HAP Emissions
for Building Number 113

| NSN | Solvent | Use (gal/yr) | HAP Ethylene Glycol (%) |
|-----|----------------------------------|-----------------|-------------------------------|
| N/A | Latex Brown | 35.00 | 3.01 |
| N/A | All Weather White Exterior Paint | 1.00 | 5.00 |

EMISSION RATE DETERMINATION METHOD

Stack Test Data _____ Emission Factor _____ Material Balance X

Similar Unit Data _____ Other MSDS

Reference: _____

OZONE PRECURSOR EMISSIONS

Typical Ozone Season Emissions
VOC Emissions 0.0366607711 lb/day
NOx Emissions _____ lb/day
CO Emissions _____ lb/day

HAZARDOUS AIR POLLUTANTS

| HAP | CAS CODE | LB/YR |
|--------------------------|-------------------|------------------------|
| <u> Ethylene Glycol </u> | <u> 107-21-1 </u> | <u> 12.3304897750 </u> |
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CRITERIA POLLUTANT EMISSIONS

VOC Emissions 0.0067455819 ton/yr
NOx Emissions _____ ton/yr
CO Emissions _____ ton/yr
SO2 Emissions _____ ton/yr
PM10 Emissions 0.0000000000 ton/yr
Total Particulate 0.0000000000 ton/yr

STACK INFORMATION

Stack (release) Height _____ feet Stack Gas Velocity _____ ft/sec
Stack Diameter _____ inch Stack Gas Flow Rate _____ acf/min
Stack Gas Temperature _____ oF

Other sources that share this stack? _____

Stack Sampling Report Available? (Y/ N, results?) _____

**Emissions For Painting and Surface Coating Operations
Federal and New York State Regulations**

Name: Seneca Army Depot
Bldg #: 113
SCC: 4-02-999-95

Date: 8/26/94
Initials: GRM

General Comments: This template should only be used for spray paints, brush applications of paint, and spray booth operations. The use of this template is not intended for process applications of paint such as assembly lines in manufacturing plants, and other major coating operations. AP-42 or other comparable documents should be consulted to determine emissions associated with these processes.

Product/Material Information

Product: Devo Latex Brown
NSN: _____

Note: For annual usage, only fill the boxes for EITHER a, b, OR c and leave other boxes blank

Annual Usage: a) cans/yr at fl.oz/can= 0.000 gal/yr
OR b) cans/yr at wt.oz/can= 0.000 lb/yr
OR c) 35.000 gal/yr

Specific Gravity: 1.350

Notes:

VOC composition: 6.61 (%MSDS/Manuf.)
3.01 (%corrected for water and non-photochemical reactants.)
expressed as : A A = % by weight
B = % by volume

Notes:

Comment: "A" and "B" refer to the percentage of the material which contains VOCs. This is expressed as a percentage of total volume, (i.e. gallons) or of total weight (i.e. pounds). When available, percent by weight should take precedence. Make sure to subtract the percentage of non-photochemically reactive VOCs and water, if any.

Paint Application Method: B A = spray application (spray can or gun)
B = brush application

Spray Booth Filter Efficiency = 0.00 % (enter "0" if no filter is present)
(ex: dry filter = 60%, waterfall type = 85%)

Comment: Filter efficiencies vary dependant on the filter type and materials used as the filtering media. Standard dry filters, which are common at Army installations, are assumed to have a consistant 60% removal efficiency under normal operating conditions. However, consult the manufacturer if there is any uncertainty as to the removal efficiency for a particular type of spray booth.

Paint Pigment Composition = 93.39 %

Comment: Pigment composition is derived from the leftover percentage of material in the paint that is not volatile (i.e., if the total VOC component makes up 80%, then the leftover 20% is assumed to be pigment).

Emissions Summary

| Annual VOC Emissions | | |
|------------------------------------|---------------------|---------------------|
| Annual usage converted to weight = | <u>393.073</u> | Lbs/yr |
| VOC Emissions = | <u>11.831</u> Lb/yr | <u>0.006</u> Ton/yr |

| Ozone Season VOC Emissions | | |
|---------------------------------------|---------------|-------------|
| Ozone Season Usage = | <u>98.268</u> | Lbs |
| Daily Ozone Season Usage = | <u>1.068</u> | Lbs/day |
| Ozone Season VOC Emissions = | <u>2.958</u> | Lbs |
| Daily Ozone Season VOC Emissions = | <u>0.032</u> | Lbs/day |
| Ozone Season Work Day VOC Emissions = | <u>0.045</u> | Lbs/wrk day |

| Annual Particulate Matter Emissions | | |
|-------------------------------------|---------------------|---------------------|
| TSP Emissions = | <u>0.000</u> Lbs/yr | <u>0.000</u> Ton/yr |
| PM10 Emissions = | <u>0.000</u> Lbs/yr | <u>0.000</u> Ton/yr |

HAP Emissions: Estimation of HAP emissions are broken into two categories. The first, on the following page, lists common HAPs associated with painting and surface coating. Enter the composition of each HAP in the columns provided for those HAPs listed. If the HAP is not listed, then enter the name of the HAP and %composition in the spaces below.

| HAP Name | CAS No | (% Composition) | Emissions (Lbs/yr) |
|----------|--------|-----------------|--------------------|
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HAP Subtotal = 0.0 Lbs/yr

| HAP Emissions | | | |
|-----------------------------------|------------|-----------------|--------------------|
| HAP Name | CAS # | (% Composition) | Emissions (Lbs/yr) |
| Acetone* | 67-64-1 | | |
| Barium compounds | 0 | | |
| Benzene | 71-43-2 | | |
| Butoxy ethanol, 2- | 111-76-2 | | |
| Butyl acetate | 123-86-4 | | |
| Butyl alcohol, n-* | 71-36-3 | | |
| Calcium carbonate | 1317-65-3 | | |
| Carbon black | 13333-86-4 | | |
| Chromium compounds | 0 | | |
| Cobalt compounds | 0 | | |
| Cumene | 98-82-8 | | |
| Dichlorodifluoromethane | 75-71-8 | | |
| Ethoxyethyl acetate, 2- | 111-15-9 | | |
| Ethyl acetate | 141-78-6 | | |
| Ethyl alcohol | 64-17-5 | | |
| Ethyl-3-ethoxy propionate | 763-69-9 | | |
| Ethylbenzene | 100-41-4 | | |
| Ethylene glycol | 107-21-1 | 3.01 | 11.8 |
| Hexane | 110-54-3 | | |
| Isobutyl acetate | 110-19-0 | | |
| Isobutyl alcohol | 78-83-1 | | |
| Isopropyl alcohol | 67-63-0 | | |
| Lead compounds | 0 | | |
| Magnesium silicate | 1343-90-4 | | |
| Methyl Alcohol | 67-56-1 | | |
| Methoxyethanol, 2- | 109-86-4 | | |
| Methyl chloroform | 71-55-6 | | |
| Methyl ethyl ketone | 78-93-3 | | |
| Methyl isobutyl ketone | 108-10-1 | | |
| Methylene chloride | 75-09-2 | | |
| Phenol | 108-95-2 | | |
| Phenylmercuric acetate | 62-38-4 | | |
| Propane | 74-98-6 | | |
| Propyl acetate | 109-60-4 | | |
| Propylene glycol monomethyl ether | 107-98-2 | | |
| Tetrachloroethylene | 127-18-4 | | |
| Titanium dioxide | 13463-67-7 | | |
| Toluene | 108-88-3 | | |
| Toluene-diisocyanate -2,4 | 584-84-9 | | |
| Xylene | 1330-20-7 | | |
| Zinc compounds | 0 | | |
| * New York State HAP | | HAP Total = | 11.83 Lbs/yr |
| | | HAP Content = | 0.34 lbs/gal |

**Emissions For Painting and Surface Coating Operations
Federal and New York State Regulations**

Name: Seneca Army Depot
Bldg #: 113
SCC: 4-02-999-95

Date: 8/26/94
Initials: GRM

General Comments: This template should only be used for spray paints, brush applications of paint, and spray booth operations. The use of this template is not intended for process applications of paint such as assembly lines in manufacturing plants, and other major coating operations. AP-42 or other comparable documents should be consulted to determine emissions associated with these processes.

Product/Material Information

Product: All Weather White Exterior Paint
NSN: _____

Note: For annual usage, only fill the boxes for EITHER a, b, OR c and leave other boxes blank

Annual Usage: a) cans/yr at fl.oz/can= 0.000 gal/yr
OR b) cans/yr at wt.oz/can= 0.000 lb/yr
OR c) 1.000 gal/yr

Specific Gravity: 1.200

Notes: Specific Gravity: $(9.98 \text{ lb/gal}) / (8.319 \text{ lb/gal}) = 1.20$

VOC composition: 66.63 (%MSDS/Manuf.)
16.63 (%corrected for water and non-photochemical reactants.)
expressed as : A A = % by weight
B = % by volume

Notes:

Comment: "A" and "B" refer to the percentage of the material which contains VOCs. This is expressed as a percentage of total volume, (i.e. gallons) or of total weight (i.e. pounds). When available, percent by weight should take precedence. Make sure to subtract the percentage of non-photochemically reactive VOCs and water, if any.

Paint Application Method: B A = spray application (spray can or gun)
B = brush application

Spray Booth Filter Efficiency = 0.00 % (enter "0" if no filter is present)
(ex: dry filter = 60%, waterfall type = 85%)

Comment: Filter efficiencies vary dependant on the filter type and materials used as the filtering media. Standard dry filters, which are common at Army installations, are assumed to have a consistant 60% removal efficiency under normal operating conditions. However, consult the manufacturer if there is any uncertainty as to the removal efficiency for a particular type of spray booth.

Paint Pigment Composition = 33.37 %

Comment: Pigment composition is derived from the leftover percentage of material in the paint that is not volatile (i.e., if the total VOC component makes up 80%, then the leftover 20% is assumed to be pigment).

Emissions Summary

| Annual VOC Emissions | | | |
|------------------------------------|--------------|--------------|---------------------|
| Annual usage converted to weight = | | <u>9.980</u> | Lbs/yr |
| VOC Emissions = | <u>1.660</u> | Lb/yr | <u>0.001</u> Ton/yr |

| Ozone Season VOC Emissions | | | |
|---------------------------------------|--|--------------|-------------|
| Ozone Season Usage = | | <u>2.495</u> | Lbs |
| Daily Ozone Season Usage = | | <u>0.027</u> | Lbs/day |
| Ozone Season VOC Emissions = | | <u>0.415</u> | Lbs |
| Daily Ozone Season VOC Emissions = | | <u>0.005</u> | Lbs/day |
| Ozone Season Work Day VOC Emissions = | | <u>0.006</u> | Lbs/wrk day |

| Annual Particulate Matter Emissions | | | |
|-------------------------------------|--------------|--------|---------------------|
| TSP Emissions = | <u>0.000</u> | Lbs/yr | <u>0.000</u> Ton/yr |
| PM10 Emissions = | <u>0.000</u> | Lbs/yr | <u>0.000</u> Ton/yr |

HAP Emissions: Estimation of HAP emissions are broken into two categories. The first, on the following page, lists common HAPs associated with painting and surface coating. Enter the composition of each HAP in the columns provided for those HAPs listed. If the HAP is not listed, then enter the name of the HAP and %composition in the spaces below.

| HAP Name | CAS No | (% Composition) | Emissions (Lbs/yr) |
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HAP Subtotal = 0.0 Lbs/yr

| HAP Emissions | | | |
|-----------------------------------|------------|-----------------|-----------------------|
| HAP Name | CAS # | (% Composition) | Emissions (Lbs/yr) |
| Acetone* | 67-64-1 | | |
| Barium compounds | 0 | | |
| Benzene | 71-43-2 | | |
| Butoxy ethanol, 2- | 111-76-2 | | |
| Butyl acetate | 123-86-4 | | |
| Butyl alcohol, n-* | 71-36-3 | | |
| Calcium carbonate | 1317-65-3 | | |
| Carbon black | 13333-86-4 | | |
| Chromium compounds | 0 | | |
| Cobalt compounds | 0 | | |
| Cumene | 98-82-8 | | |
| Dichlorodifluoromethane | 75-71-8 | | |
| Ethoxyethyl acetate, 2- | 111-15-9 | | |
| Ethyl acetate | 141-78-6 | | |
| Ethyl alcohol | 64-17-5 | | |
| Ethyl-3-ethoxy propionate | 763-69-9 | | |
| Ethylbenzene | 100-41-4 | | |
| Ethylene glycol | 107-21-1 | 5 | 0.5 |
| Hexane | 110-54-3 | | |
| Isobutyl acetate | 110-19-0 | | |
| Isobutyl alcohol | 78-83-1 | | |
| Isopropyl alcohol | 67-63-0 | | |
| Lead compounds | 0 | | |
| Magnesium silicate | 1343-90-4 | | |
| Methyl Alcohol | 67-56-1 | | |
| Methoxyethanol, 2- | 109-86-4 | | |
| Methyl chloroform | 71-55-6 | | |
| Methyl ethyl ketone | 78-93-3 | | |
| Methyl isobutyl ketone | 108-10-1 | | |
| Methylene chloride | 75-09-2 | | |
| Phenol | 108-95-2 | | |
| Phenylmercuric acetate | 62-38-4 | | |
| Propane | 74-98-6 | | |
| Propyl acetate | 109-60-4 | | |
| Propylene glycol monomethyl ether | 107-98-2 | | |
| Tetrachloroethylene | 127-18-4 | | |
| Titanium dioxide | 13463-67-7 | | |
| Toluene | 108-88-3 | | |
| Toluene-diisocyanate -2,4 | 584-84-9 | | |
| Xylene | 1330-20-7 | | |
| Zinc compounds | 0 | | |
| * New York State HAP | | HAP Total = | 0.50 Lbs/yr |
| | | HAP Content = | 0.50 lbs/gal |

Surface Coating VOC Emissions
for Building Numbers 121 and 319

| NSN | Solvent | Use gal/yr | VOC Content (%) | VOC Emissions (lb/yr) | VOC Emissions (ton/yr) |
|------------------|---------------------|---------------|--------------------|--------------------------|---------------------------|
| 8010-00-582-5382 | So-Sure Black Paint | 1.00 | 85.82 | 6.46 | <0.01 |

Ozone Season Daily Surface Coating Emissions
for Building Numbers 121 and 319

| Pollutant | Emissions (lb) | Daily Emissions (lb) | Daily Emissions (tons) |
|-----------|-------------------|-------------------------|---------------------------|
| VOC | 6.46 | 0.02 | <0.01 |

Surface Coating HAP Emissions
for Building Numbers 121 and 319

| NSN | Solvent | Use (gal/yr) | HAP Content (lbs/gal) | HAP Emissions (lb/yr) | HAP Emissions (ton/yr) |
|------------------|---------------------|-----------------|--------------------------|--------------------------|---------------------------|
| 8010-00-582-5382 | So-Sure Black Paint | 1.00 | 4.46 | 4.46 | <0.01 |

Surface Coating HAP Emissions
for Building Numbers 121 and 319

| NSN | Solvent | Use (gal/yr) | HAP Toluene (%) | HAP Xylene (%) | HAP MEK (%) |
|------------------|---------------------|-----------------|-----------------------|----------------------|-------------------|
| 8010-00-582-5382 | So-Sure Black Paint | 1.00 | 28.32 | 1.21 | 3.64 |

| NSN | Solvent | Use (gal/yr) | HAP Acetone* (%) | HAP N-Butyl Alcohol* (%) |
|------------------|---------------------|-----------------|------------------------|--------------------------------|
| 8010-00-582-5382 | So-Sure Black Paint | 1.00 | 24.87 | 1.21 |

* New York State HAP

EMISSION RATE DETERMINATION METHOD

Stack Test Data _____ Emission Factor _____ Material Balance X

Similar Unit Data _____ Other _____ MSDS _____

Reference: _____

OZONE PRECURSOR EMISSIONS

Typical Ozone Season Emissions

VOC Emissions 0.0175574077 lb/day

NOx Emissions _____ lb/day

CO Emissions _____ lb/day

HAZARDOUS AIR POLLUTANTS

| HAP | CAS CODE | LB/YR |
|---------------------|-----------|--------------|
| Toluene | 108-88-3 | 2.1321264240 |
| Xylene | 1330-20-7 | 0.0910972095 |
| Acetone* | 67-64-1 | 1.8723864465 |
| Methyl Ethyl Ketone | 78-93-3 | 0.2740444980 |
| N-Butyl Alcohol* | 71-36-3 | 0.0910972095 |

CRITERIA POLLUTANT EMISSIONS

VOC Emissions 0.0032305630 ton/yr

NOx Emissions _____ ton/yr

CO Emissions _____ ton/yr

SO2 Emissions _____ ton/yr

PM10 Emissions 0.0001246387 ton/yr

Total Particulate 0.0002668922 ton/yr

* New York State HAP

STACK INFORMATION

| | |
|-----------------------------------|------------------------------------|
| Stack (release) Height _____ feet | Stack Gas Velocity _____ ft/sec |
| Stack Diameter _____ inch | Stack Gas Flow Rate _____ ascf/min |
| | Stack Gas Temperature _____ oF |

Other sources that share this stack? _____

Stack Sampling Report Available? (Y/ N, results?) _____

**Emissions For Painting and Surface Coating Operations
Federal and New York State Regulations**

Name: Seneca Army Depot
Bldg #: 117
SCC: 4-02-999-95

Date: 8/26/94
Initials: GRM

General Comments: This template should only be used for spray paints, brush applications of paint, and spray booth operations. The use of this template is not intended for process applications of paint such as assembly lines in manufacturing plants, and other major coating operations. AP-42 or other comparable documents should be consulted to determine emissions associated with these processes.

Product/Material Information

Product: So-Sure Black Paint
NSN: 8010-00-582-5382

Note: For annual usage, only fill the boxes for EITHER a, b, OR c and leave other boxes blank

Annual Usage: a) cans/yr at fl.oz/can= 0.000 gal/yr
OR b) cans/yr at wt.oz/can= 0.000 lb/yr
OR c) 1.000 gal/yr

Specific Gravity: 0.905

Notes:

VOC composition: 85.82 (%MSDS/Manuf.)
85.82 (%corrected for water and non-photochemical reactants.)
expressed as: A A = % by weight
B = % by volume

Notes:

Comment: "A" and "B" refer to the percentage of the material which contains VOCs. This is expressed as a percentage of total volume, (i.e. gallons) or of total weight (i.e. pounds). When available, percent by weight should take precedence. Make sure to subtract the percentage of non-photochemically reactive VOCs and water, if any.

Paint Application Method: A A = spray application (spray can or gun)
B = brush application

Spray Booth Filter Efficiency = 0.00 % (enter "0" if no filter is present)
(ex: dry filter = 60%, waterfall type = 85%)

Comment: Filter efficiencies vary dependant on the filter type and materials used as the filtering media. Standard dry filters, which are common at Army installations, are assumed to have a consistant 60% removal efficiency under normal operating conditions. However, consult the manufacturer if there is any uncertainty as to the removal efficiency for a particular type of spray booth.

Paint Pigment Composition = 14.18 %

Comment: Pigment composition is derived from the leftover percentage of material in the paint that is not volatile (i.e., if the total VOC component makes up 80%, then the leftover 20% is assumed to be pigment).

Emissions Summary

| Annual VOC Emissions | | | |
|------------------------------------|--------------|--------------|---------------------|
| Annual usage converted to weight = | | <u>7.529</u> | Lbs/yr |
| VOC Emissions = | <u>6.461</u> | Lb/yr | <u>0.003</u> Ton/yr |

| Ozone Season VOC Emissions | | | |
|---------------------------------------|--|--------------|-------------|
| Ozone Season Usage = | | <u>1.882</u> | Lbs |
| Daily Ozone Season Usage = | | <u>0.020</u> | Lbs/day |
| Ozone Season VOC Emissions = | | <u>1.615</u> | Lbs |
| Daily Ozone Season VOC Emissions = | | <u>0.018</u> | Lbs/day |
| Ozone Season Work Day VOC Emissions = | | <u>0.025</u> | Lbs/wrk day |

| Annual Particulate Matter Emissions | | | |
|-------------------------------------|--------------|--------------|---------------------|
| TSP Emissions = | | <u>0.534</u> | Lbs/yr |
| | | <u>0.000</u> | Ton/yr |
| PM10 Emissions = | <u>0.249</u> | Lbs/yr | <u>0.000</u> Ton/yr |

HAP Emissions: Estimation of HAP emissions are broken into two categories. The first, on the following page, lists common HAPs associated with painting and surface coating. Enter the composition of each HAP in the columns provided for those HAPs listed. If the HAP is not listed, then enter the name of the HAP and %composition in the spaces below.

| HAP Name | CAS No | (% Composition) | Emissions (Lbs/yr) |
|----------|--------|-----------------|--------------------|
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HAP Subtotal = 0.0 Lbs/yr

| HAP Emissions | | | |
|-----------------------------------|------------|-----------------|-----------------------|
| HAP Name | CAS # | (% Composition) | Emissions (Lbs/yr) |
| Acetone* | 67-64-1 | 24.87 | 1.9 |
| Barium compounds | 0 | | |
| Benzene | 71-43-2 | | |
| Butoxy ethanol, 2- | 111-76-2 | | |
| Butyl acetate | 123-86-4 | | |
| Butyl alcohol, n-* | 71-36-3 | 1.21 | 0.1 |
| Calcium carbonate | 1317-65-3 | | |
| Carbon black | 13333-86-4 | | |
| Chromium compounds | 0 | | |
| Cobalt compounds | 0 | | |
| Cumene | 98-82-8 | | |
| Dichlorodifluoromethane | 75-71-8 | | |
| Ethoxyethyl acetate, 2- | 111-15-9 | | |
| Ethyl acetate | 141-78-6 | | |
| Ethyl alcohol | 64-17-5 | | |
| Ethyl-3-ethoxy propionate | 763-69-9 | | |
| Ethylbenzene | 100-41-4 | | |
| Ethylene glycol | 107-21-1 | | |
| Hexane | 110-54-3 | | |
| Isobutyl acetate | 110-19-0 | | |
| Isobutyl alcohol | 78-83-1 | | |
| Isopropyl alcohol | 67-63-0 | | |
| Lead compounds | 0 | | |
| Magnesium silicate | 1343-90-4 | | |
| Methyl Alcohol | 67-56-1 | | |
| Methoxyethanol, 2- | 109-86-4 | | |
| Methyl chloroform | 71-55-6 | | |
| Methyl ethyl ketone | 78-93-3 | 3.64 | 0.3 |
| Methyl isobutyl ketone | 108-10-1 | | |
| Methylene chloride | 75-09-2 | | |
| Phenol | 108-95-2 | | |
| Phenylmercuric acetate | 62-38-4 | | |
| Propane | 74-98-6 | | |
| Propyl acetate | 109-60-4 | | |
| Propylene glycol monomethyl ether | 107-98-2 | | |
| Tetrachloroethylene | 127-18-4 | | |
| Titanium dioxide | 13463-67-7 | | |
| Toluene | 108-88-3 | 28.32 | 2.1 |
| Toluene-diisocyanate -2,4 | 584-84-9 | | |
| Xylene | 1330-20-7 | 1.21 | 0.1 |
| Zinc compounds | 0 | | |
| * New York State HAP | | HAP Total = | 4.46 Lbs/yr |
| | | HAP Content = | 4.46 lbs/gal |

Surface Coating VOC Emissions
for Building Numbers 121 and 319

| NSN | Solvent | Use gal/yr | VOC Content (%) | VOC Emissions (lb/yr) | VOC Emissions (ton/yr) |
|-----|----------------------------|---------------|--------------------|--------------------------|---------------------------|
| N/A | Gray Floor Enamel | 30.00 | 46.50 | 118.37 | 0.06 |
| N/A | Enamel for Boilers | 15.00 | 42.09 | 56.25 | 0.03 |
| N/A | Aluminum Paint for Boilers | 2.00 | 70.87 | 11.67 | 0.01 |

Ozone Season Daily Surface Coating Emissions
for Building Numbers 121 and 319

| Pollutant | Emissions (lb) | Daily Emissions (lb) | Daily Emissions (tons) |
|-----------|-------------------|-------------------------|---------------------------|
| VOC | 186.29 | 0.51 | <0.01 |

Surface Coating HAP Emissions
for Building Numbers 121 and 319

| NSN | Solvent | Use (gal/yr) | HAP Content (lbs/gal) | HAP Emissions (lb/yr) | HAP Emissions (ton/yr) |
|-----|----------------------------|-----------------|--------------------------|--------------------------|---------------------------|
| N/A | Enamel for Boilers | 15.00 | 2.46 | 36.89 | 0.02 |
| N/A | Aluminum Paint for Boilers | 2.00 | 5.52 | 11.04 | 0.01 |

Surface Coating HAP Emissions
for Building Numbers 121 and 319

| NSN | Solvent | Use (gal/yr) | HAP Toluene (%) | HAP Xylene (%) | HAP Isopropyl Alcohol* (%) |
|-----|----------------------------|-----------------|-----------------------|----------------------|----------------------------------|
| N/A | Enamel for Boilers | 15.00 | | 25.60 | 2.00 |
| N/A | Aluminum Paint for Boilers | 2.00 | 60.00 | 7.00 | |

* New York State HAP

EMISSION RATE DETERMINATION METHOD

Stack Test Data _____ Emission Factor _____ Material Balance X

Similar Unit Data _____ Other MSDS

Reference: _____

OZONE PRECURSOR EMISSIONS

Typical Ozone Season Emissions
 VOC Emissions 0.5062350220 lb/day
 NOx Emissions _____ lb/day
 CO Emissions _____ lb/day

HAZARDOUS AIR POLLUTANTS

| HAP | CAS CODE | LB/YR |
|--------------------|-----------|---------------|
| Toluene | 108-88-3 | 9.8829720000 |
| Xylene | 1330-20-7 | 35.3374134000 |
| Isopropyl Alcohol* | 67-63-0 | 2.6730000000 |
| | | |
| | | |

CRITERIA POLLUTANT EMISSIONS

VOC Emissions 0.0931472440 ton/yr
 NOx Emissions _____ ton/yr
 CO Emissions _____ ton/yr
 SO2 Emissions _____ ton/yr
 PM10 Emissions 0.0000000000 ton/yr
 Total Particulate 0.0000000000 ton/yr

* New York State HAP

STACK INFORMATION

| | |
|-----------------------------------|------------------------------------|
| Stack (release) Height _____ feet | Stack Gas Velocity _____ ft/sec |
| Stack Diameter _____ inch | Stack Gas Flow Rate _____ ascf/min |
| | Stack Gas Temperature _____ oF |

Other sources that share this stack? _____

Stack Sampling Report Available? (Y/ N, results?) _____

**Emissions For Painting and Surface Coating Operations
Federal and New York State Regulations**

Name: Seneca Army Depot
 Bldg #: 121;319
 SCC: 4-02-999-95

Date: 8/25/94
 Initials: GRM

General Comments: This template should only be used for spray paints, brush applications of paint, and spray booth operations. The use of this template is not intended for process applications of paint such as assembly lines in manufacturing plants, and other major coating operations. AP-42 or other comparable documents should be consulted to determine emissions associated with these processes.

Product/Material Information

Product: Gray Floor Enamel
 NSN: _____

Note: For annual usage, only fill the boxes for EITHER a, b, OR c and leave other boxes blank

Annual Usage: a) cans/yr at fl.oz/can= 0.000 gal/yr
 OR b) cans/yr at wt.oz/can= 0.000 lb/yr
 OR c) 30.000 gal/yr

Specific Gravity: 1.020

Notes:

VOC composition: 46.50 (%MSDS/Manuf.)
46.50 (%corrected for water and non-photochemical reactants.)
 expressed as : A A = % by weight
 B = % by volume

Notes:

Comment: "A" and "B" refer to the percentage of the material which contains VOCs. This is expressed as a percentage of total volume, (i.e. gallons) or of total weight (i.e. pounds). When available, percent by weight should take precedence. Make sure to subtract the percentage of non-photochemically reactive VOCs and water, if any.

Paint Application Method: B A = spray application (spray can or gun)
 B = brush application

Spray Booth Filter Efficiency = 0.00 % (enter "0" if no filter is present)
 (ex: dry filter = 60%, waterfall type = 85%)

Comment: Filter efficiencies vary dependant on the filter type and materials used as the filtering media. Standard dry filters, which are common at Army installations, are assumed to have a consistent 60% removal efficiency under normal operating conditions. However, consult the manufacturer if there is any uncertainty as to the removal efficiency for a particular type of spray booth.

Paint Pigment Composition = 53.50 %

Comment: Pigment composition is derived from the leftover percentage of material in the paint that is not volatile (i.e., if the total VOC component makes up 80%, then the leftover 20% is assumed to be pigment).

Emissions Summary

Annual VOC Emissions

Annual usage converted to weight = 254.561 Lbs/yr
 /OC Emissions = 118.371 Lb/yr 0.059 Ton/yr

Ozone Season VOC Emissions

Ozone Season Usage = 63.640 Lbs
 Daily Ozone Season Usage = 0.692 Lbs/day

 Ozone Season VOC Emissions = 29.593 Lbs
 Daily Ozone Season VOC Emissions = 0.322 Lbs/day
 Ozone Season Work Day VOC Emissions = 0.450 Lbs/wrk day

Annual Particulate Matter Emissions

TSP Emissions = 0.000 Lbs/yr 0.000 Ton/yr
 PM10 Emissions = 0.000 Lbs/yr 0.000 Ton/yr

HAP Emissions: Estimation of HAP emissions are broken into two categories. The first, on the following page, lists common HAPs associated with painting and surface coating. Enter the composition of each HAP in the columns provided for those HAPs listed. If the HAP is not listed, then enter the name of the HAP and %composition in the spaces below.

| HAP Name | CAS No | (% Composition) | Emissions (Lbs/yr) |
|----------|--------|-----------------|--------------------|
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HAP Subtotal = 0.0 Lbs/yr

| HAP Emissions | | | |
|-----------------------------------|------------|-----------------|--------------------|
| HAP Name | CAS # | (% Composition) | Emissions (Lbs/yr) |
| Acetone | 67-64-1 | | |
| Barium compounds | 0 | | |
| Benzene | 71-43-2 | | |
| Butoxy ethanol, 2- | 111-76-2 | | |
| Butyl acetate* | 123-86-4 | | |
| Butyl alcohol, n- | 71-36-3 | | |
| Calcium carbonate | 1317-65-3 | | |
| Carbon black | 13333-86-4 | | |
| Chromium compounds | 0 | | |
| Cobalt compounds | 0 | | |
| Cumene | 98-82-8 | | |
| Dichlorodifluoromethane | 75-71-8 | | |
| Ethoxyethyl acetate, 2- | 111-15-9 | | |
| Ethyl acetate | 141-78-6 | | |
| Ethyl alcohol | 64-17-5 | | |
| Ethyl-3-ethoxy propionate | 763-69-9 | | |
| Ethylbenzene | 100-41-4 | | |
| Ethylene glycol | 107-21-1 | | |
| Hexane | 110-54-3 | | |
| Isobutyl acetate | 110-19-0 | | |
| Isobutyl alcohol | 78-83-1 | | |
| Isopropyl alcohol | 67-63-0 | | |
| Lead compounds | 0 | | |
| Magnesium silicate | 1343-90-4 | | |
| Methyl Alcohol | 67-56-1 | | |
| Methoxyethanol, 2- | 109-86-4 | | |
| Methyl chloroform | 71-55-6 | | |
| Methyl ethyl ketone | 78-93-3 | | |
| Methyl isobutyl ketone | 108-10-1 | | |
| Methylene chloride | 75-09-2 | | |
| Phenol | 108-95-2 | | |
| Phenylmercuric acetate | 62-38-4 | | |
| Propane | 74-98-6 | | |
| Propyl acetate | 109-60-4 | | |
| Propylene glycol monomethyl ether | 107-98-2 | | |
| Tetrachloroethylene | 127-18-4 | | |
| Titanium dioxide | 13463-67-7 | | |
| Toluene | 108-88-3 | | |
| Toluene-diisocyanate -2,4 | 584-84-9 | | |
| Xylene | 1330-20-7 | | |
| Zinc compounds | 0 | | |
| * New York State HAP | | HAP Total = | 0.00 Lbs/yr |
| | | HAP Content = | 0.00 lbs/gal |

**Emissions For Painting and Surface Coating Operations
Federal and New York State Regulations**

Name: Seneca Army Depot
Bldg #: 121;319
SCC: 4-02-999-95

Date: 8/25/94
Initials: GRM

General Comments: This template should only be used for spray paints, brush applications of paint, and spray booth operations. The use of this template is not intended for process applications of paint such as assembly lines in manufacturing plants, and other major coating operations. AP-42 or other comparable documents should be consulted to determine emissions associated with these processes.

Product/Material Information

Product: Enamel for Boilers
NSN: _____

Note: For annual usage, only fill the boxes for EITHER a, b, OR c and leave other boxes blank

Annual Usage: a) cans/yr at fl.oz/can= 0.000 gal/yr
OR b) cans/yr at wt.oz/can= 0.000 lb/yr
OR c) 15.000 gal/yr

Specific Gravity: 1.071

Notes: Specific Gravity: $(8.91 \text{ lb/gal}) / (8.319 \text{ lb/gal}) = 1.071$

VOC composition: 42.09 (%MSDS/Manuf.)
42.09 (%corrected for water and non-photochemical reactants.)
expressed as : A A = % by weight
B = % by volume

Notes: VOC: $(3.75 \text{ lb/gal}) / (8.91 \text{ lb/gal}) * 100 = 42.09\%$

Comment: "A" and "B" refer to the percentage of the material which contains VOCs. This is expressed as a percentage of total volume, (i.e. gallons) or of total weight (i.e. pounds). When available, percent by weight should take precedence. Make sure to subtract the percentage of non-photochemically reactive VOCs and water, if any.

Paint Application Method: B A = spray application (spray can or gun)
B = brush application

Spray Booth Filter Efficiency = 0.00 % (enter "0" if no filter is present)
(ex: dry filter = 60%, waterfall type = 85%)

Comment: Filter efficiencies vary dependant on the filter type and materials used as the filtering media. Standard dry filters, which are common at Army installations, are assumed to have a consistant 60% removal efficiency under normal operating conditions. However, consult the manufacturer if there is any uncertainty as to the removal efficiency for a particular type of spray booth.

Paint Pigment Composition = 57.91 %

Comment: Pigment composition is derived from the leftover percentage of material in the paint that is not volatile (i.e., if the total VOC component makes up 80%, then the leftover 20% is assumed to be pigment).

Emissions Summary

| Annual VOC Emissions | | |
|------------------------------------|---------------------|---------------------|
| Annual usage converted to weight = | <u>133.650</u> | Lbs/yr |
| VOC Emissions = | <u>56.250</u> Lb/yr | <u>0.028</u> Ton/yr |

| Ozone Season VOC Emissions | | |
|---------------------------------------|----------------|-------------|
| Ozone Season Usage = | <u>33.413</u> | Lbs |
| Daily Ozone Season Usage = | <u>0.363</u> | Lbs/day |
| Ozone Season VOC Emissions = | <u>.14.063</u> | Lbs |
| Daily Ozone Season VOC Emissions = | <u>0.153</u> | Lbs/day |
| Ozone Season Work Day VOC Emissions = | <u>0.214</u> | Lbs/wrk day |

| Annual Particulate Matter Emissions | | |
|-------------------------------------|---------------------|---------------------|
| TSP Emissions = | <u>0.000</u> Lbs/yr | <u>0.000</u> Ton/yr |
| PM10 Emissions = | <u>0.000</u> Lbs/yr | <u>0.000</u> Ton/yr |

HAP Emissions: Estimation of HAP emissions are broken into two categories. The first, on the following page, lists common HAPs associated with painting and surface coating. Enter the composition of each HAP in the columns provided for those HAPs listed. If the HAP is not listed, then enter the name of the HAP and %composition in the spaces below.

| HAP Name | CAS No | (% Composition) | Emissions (Lbs/yr) |
|----------|--------|-----------------|--------------------|
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HAP Subtotal = 0.0 Lbs/yr

| HAP Emissions | | | |
|-----------------------------------|------------|-----------------|-----------------------|
| HAP Name | CAS # | (% Composition) | Emissions (Lbs/yr) |
| Acetone | 67-64-1 | | |
| Barium compounds | 0 | | |
| Benzene | 71-43-2 | | |
| Butoxy ethanol, 2- | 111-76-2 | | |
| Butyl acetate* | 123-86-4 | | |
| Butyl alcohol, n- | 71-36-3 | | |
| Calcium carbonate | 1317-65-3 | | |
| Carbon black | 13333-86-4 | | |
| Chromium compounds | 0 | | |
| Cobalt compounds | 0 | | |
| Cumene | 98-82-8 | | |
| Dichlorodifluoromethane | 75-71-8 | | |
| Ethoxyethyl acetate, 2- | 111-15-9 | | |
| Ethyl acetate | 141-78-6 | | |
| Ethyl alcohol | 64-17-5 | | |
| Ethyl-3-ethoxy propionate | 763-69-9 | | |
| Ethylbenzene | 100-41-4 | | |
| Ethylene glycol | 107-21-1 | | |
| Hexane | 110-54-3 | | |
| Isobutyl acetate | 110-19-0 | | |
| Isobutyl alcohol | 78-83-1 | | |
| Isopropyl alcohol* | 67-63-0 | 2 | 2.7 |
| Lead compounds | 0 | | |
| Magnesium silicate | 1343-90-4 | | |
| Methyl Alcohol | 67-56-1 | | |
| Methoxyethanol, 2- | 109-86-4 | | |
| Methyl chloroform | 71-55-6 | | |
| Methyl ethyl ketone | 78-93-3 | | |
| Methyl isobutyl ketone | 108-10-1 | | |
| Methylene chloride | 75-09-2 | | |
| Phenol | 108-95-2 | | |
| Phenylmercuric acetate | 62-38-4 | | |
| Propane | 74-98-6 | | |
| Propyl acetate | 109-60-4 | | |
| Propylene glycol monomethyl ether | 107-98-2 | | |
| Tetrachloroethylene | 127-18-4 | | |
| Titanium dioxide | 13463-67-7 | | |
| Toluene | 108-88-3 | | |
| Toluene-diisocyanate -2,4 | 584-84-9 | | |
| Xylene | 1330-20-7 | 25.6 | 34.2 |
| Zinc compounds | 0 | | |
| * New York State HAP | | HAP Total = | 36.89 Lbs/yr |
| | | HAP Content = | 2.46 lbs/gal |

**Emissions For Painting and Surface Coating Operations
Federal and New York State Regulations**

Name: Seneca Army Depot
 Bldg #: 121;319
 SCC: 4-02-999-95

Date: 8/25/94
 Initials: GRM

General Comments: This template should only be used for spray paints, brush applications of paint, and spray booth operations. The use of this template is not intended for process applications of paint such as assembly lines in manufacturing plants, and other major coating operations. AP-42 or other comparable documents should be consulted to determine emissions associated with these processes.

Product/Material Information

Product: Aluminum Paint for Boilers
 NSN: _____

Note: For annual usage, only fill the boxes for EITHER a, b, OR c and leave other boxes blank

Annual Usage: a)

| |
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| |
|--|

 cans/yr at

| |
|--|
| |
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 fl.oz/can= 0.000 gal/yr
 OR b)

| |
|--|
| |
|--|

 cans/yr at

| |
|--|
| |
|--|

 wt.oz/can= 0.000 lb/yr
 OR c)

| |
|-------|
| 2.000 |
|-------|

 gal/yr

Specific Gravity: 0.990

Notes:

VOC composition: 70.87 (%MSDS/Manuf.)
70.87 (%corrected for water and non-photochemical reactants.)
 expressed as : A A = % by weight
 B = % by volume

Notes: VOC composition and specific gravity directly from manufacturer.

Comment: "A" and "B" refer to the percentage of the material which contains VOCs. This is expressed as a percentage of total volume, (i.e. gallons) or of total weight (i.e. pounds). When available, percent by weight should take precedence. Make sure to subtract the percentage of non-photochemically reactive VOCs and water, if any.

Paint Application Method: B A = spray application (spray can or gun)
 B = brush application

Spray Booth Filter Efficiency = 0.00 % (enter "0" if no filter is present)
 (ex: dry filter = 60%, waterfall type = 85%)

Comment: Filter efficiencies vary dependant on the filter type and materials used as the filtering media. Standard dry filters, which are common at Army installations, are assumed to have a consistant 60% removal efficiency under normal operating conditions. However, consult the manufacturer if there is any uncertainty as to the removal efficiency for a particular type of spray booth.

Paint Pigment Composition = 29.13 %

Comment: Pigment composition is derived from the leftover percentage of material in the paint that is not volatile (i.e., if the total VOC component makes up 80%, then the leftover 20% is assumed to be pigment).

Emissions Summary

| Annual VOC Emissions | | |
|------------------------------------|---------------------|---------------------|
| Annual usage converted to weight = | <u>16.472</u> | Lbs/yr |
| VOC Emissions = | <u>11.673</u> Lb/yr | <u>0.006</u> Ton/yr |

| Ozone Season VOC Emissions | | |
|---------------------------------------|--------------|-------------|
| Ozone Season Usage = | <u>4.118</u> | Lbs |
| Daily Ozone Season Usage = | <u>0.045</u> | Lbs/day |
| Ozone Season VOC Emissions = | <u>2.918</u> | Lbs |
| Daily Ozone Season VOC Emissions = | <u>0.032</u> | Lbs/day |
| Ozone Season Work Day VOC Emissions = | <u>0.044</u> | Lbs/wrk day |

| Annual Particulate Matter Emissions | | |
|-------------------------------------|---------------------|---------------------|
| TSP Emissions = | <u>0.000</u> Lbs/yr | <u>0.000</u> Ton/yr |
| PM10 Emissions = | <u>0.000</u> Lbs/yr | <u>0.000</u> Ton/yr |

HAP Emissions: Estimation of HAP emissions are broken into two categories. The first, on the following page, lists common HAPs associated with painting and surface coating. Enter the composition of each HAP in the columns provided for those HAPs listed. If the HAP is not listed, then enter the name of the HAP and %composition in the spaces below.

| HAP Name | CAS No | (% Composition) | Emissions (Lbs/yr) |
|----------|--------|-----------------|--------------------|
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| | | | |

HAP Subtotal = 0.0 Lbs/yr

| HAP Emissions | | | |
|-----------------------------------|------------|-----------------|-----------------------|
| HAP Name | CAS # | (% Composition) | Emissions (Lbs/yr) |
| Acetone | 67-64-1 | | |
| Barium compounds | 0 | | |
| Benzene | 71-43-2 | | |
| Butoxy ethanol, 2- | 111-76-2 | | |
| Butyl acetate* | 123-86-4 | | |
| Butyl alcohol, n- | 71-36-3 | | |
| Calcium carbonate | 1317-65-3 | | |
| Carbon black | 13333-86-4 | | |
| Chromium compounds | 0 | | |
| Cobalt compounds | 0 | | |
| Cumene | 98-82-8 | | |
| Dichlorodifluoromethane | 75-71-8 | | |
| Ethoxyethyl acetate, 2- | 111-15-9 | | |
| Ethyl acetate | 141-78-6 | | |
| Ethyl alcohol | 64-17-5 | | |
| Ethyl-3-ethoxy propionate | 763-69-9 | | |
| Ethylbenzene | 100-41-4 | | |
| Ethylene glycol | 107-21-1 | | |
| Hexane | 110-54-3 | | |
| Isobutyl acetate | 110-19-0 | | |
| Isobutyl alcohol | 78-83-1 | | |
| Isopropyl alcohol* | 67-63-0 | | |
| Lead compounds | 0 | | |
| Magnesium silicate | 1343-90-4 | | |
| Methyl Alcohol | 67-56-1 | | |
| Methoxyethanol, 2- | 109-86-4 | | |
| Methyl chloroform | 71-55-6 | | |
| Methyl ethyl ketone | 78-93-3 | | |
| Methyl isobutyl ketone | 108-10-1 | | |
| Methylene chloride | 75-09-2 | | |
| Phenol | 108-95-2 | | |
| Phenylmercuric acetate | 62-38-4 | | |
| Propane | 74-98-6 | | |
| Propyl acetate | 109-60-4 | | |
| Propylene glycol monomethyl ether | 107-98-2 | | |
| Tetrachloroethylene | 127-18-4 | | |
| Titanium dioxide | 13463-67-7 | | |
| Toluene | 108-88-3 | 60 | 9.9 |
| Toluene-diisocyanate -2,4 | 584-84-9 | | |
| Xylene | 1330-20-7 | 7 | 1.2 |
| Zinc compounds | 0 | | |
| * New York State HAP | | HAP Total = | 11.04 Lbs/yr |
| | | HAP Content = | 5.52 lbs/gal |

Surface Coating VOC Emissions
for Building Number 317

| NSN | Solvent | Use gal/yr | VOC Content (%) | VOC Emissions (lb/yr) | VOC Emissions (ton/yr) |
|------------------|------------------------|---------------|--------------------|--------------------------|---------------------------|
| 8010-00-721-9749 | So-Sure Lacquer - Gray | 25.00 | 80.24 | 161.54 | 0.08 |
| 8010-00-852-9034 | So-Sure Enamel - Gray | 25.00 | 80.99 | 154.80 | 0.08 |

Ozone Season Daily Surface Coating Emissions
for Building Number 317

| Pollutant | Emissions (lb) | Daily Emissions (lb) | Daily Emissions (tons) |
|-----------|-------------------|-------------------------|---------------------------|
| VOC | 316.33 | 0.86 | <0.01 |

Painting Operations HAP Emissions
for Building Number 317

| NSN | Solvent | Use (gal/yr) | HAP Content (lbs/gal) | HAP Emissions (lb/yr) | HAP Emissions (ton/yr) |
|------------------|------------------------|-----------------|--------------------------|--------------------------|---------------------------|
| 8010-00-721-9749 | So-Sure Lacquer - Gray | 25.00 | 3.76 | 94.10 | 0.05 |
| 8010-00-852-9034 | So-Sure Enamel - Gray | 25.00 | 2.64 | 65.94 | 0.03 |

Painting Operations HAP Emissions
for Building Number 317

| NSN | Solvent | Use (gal/yr) | HAP Toluene (%) | HAP Acetone* (%) |
|------------------|------------------------|-----------------|-----------------------|------------------------|
| 8010-00-721-9749 | So-Sure Lacquer - Gray | 25.00 | 28.55 | 18.19 |
| 8010-00-852-9034 | So-Sure Enamel - Gray | 25.00 | 14.66 | 19.84 |

* New York State HAP

| Date | Description | Amount | Balance | Total | Page |
|------|-------------|--------|---------|--------|------|
| 1900 | Jan 1 | 100.00 | 100.00 | 100.00 | 1 |
| 1900 | Feb 1 | 200.00 | 300.00 | 300.00 | 2 |

EMISSION RATE DETERMINATION METHOD

Stack Test Data _____ Emission Factor _____ Material Balance X

Similar Unit Data _____ Other _____ MSDS _____

Reference: _____

OZONE PRECURSOR EMISSIONS

Typical Ozone Season Emissions
 VOC Emissions 0.8596043611 lb/day
 NOx Emissions _____ lb/day
 CO Emissions _____ lb/day

HAZARDOUS AIR POLLUTANTS

| HAP | CAS CODE | LB/YR |
|----------|----------|---------------|
| Toluene | 108-88-3 | 85.4963179650 |
| Acetone* | 67-64-1 | 74.5400701800 |
| | | |
| | | |
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| | | |

CRITERIA POLLUTANT EMISSIONS

VOC Emissions 0.1581672024 ton/yr
 NOx Emissions _____ ton/yr
 CO Emissions _____ ton/yr
 SO2 Emissions _____ ton/yr
 PM10 Emissions 0.0088863586 ton/yr
 Total Particulate 0.0190286050 ton/yr

* New York State HAP

STACK INFORMATION

| | |
|-----------------------------------|------------------------------------|
| Stack (release) Height _____ feet | Stack Gas Velocity _____ ft/sec |
| Stack Diameter _____ inch | Stack Gas Flow Rate _____ ascf/min |
| | Stack Gas Temperature _____ oF |

Other sources that share this stack? _____

Stack Sampling Report Available? (Y/ N, results?) _____

**Emissions For Painting and Surface Coating Operations
Federal and New York State Regulations**

Name: Seneca Army Depot
Bldg #: 317 (COMIS)
SCC: 4-02-999-95

Date: 8/29/94
Initials: GRM

General Comments: This template should only be used for spray paints, brush applications of paint, and spray booth operations. The use of this template is not intended for process applications of paint such as assembly lines in manufacturing plants, and other major coating operations. AP-42 or other comparable documents should be consulted to determine emissions associated with these processes.

Product/Material Information

Product: So-Sure Lacquer - Gray
NSN: 8010-00-721-9749

Note: For annual usage, only fill the boxes for EITHER a, b, OR c and leave other boxes blank

Annual Usage: a) cans/yr at fl.oz/can= 0.000 gal/yr
OR b) cans/yr at wt.oz/can= 0.000 lb/yr
OR c) 25.000 gal/yr

Specific Gravity: 0.968

Notes:

VOC composition: 80.24 (%MSDS/Manuf.)
80.24 (%corrected for water and non-photochemical reactants.)
expressed as : A A = % by weight
B = % by volume

Notes:

Comment: "A" and "B" refer to the percentage of the material which contains VOCs. This is expressed as a percentage of total volume, (i.e. gallons) or of total weight (i.e. pounds). When available, percent by weight should take precedence. Make sure to subtract the percentage of non-photochemically reactive VOCs and water, if any.

Paint Application Method: A A = spray application (spray can or gun)
B = brush application

Spray Booth Filter Efficiency = 0.00 % (enter "0" if no filter is present)
(ex: dry filter = 60%, waterfall type = 85%)

Comment: Filter efficiencies vary dependant on the filter type and materials used as the filtering media. Standard dry filters, which are common at Army installations, are assumed to have a consistant 60% removal efficiency under normal operating conditions. However, consult the manufacturer if there is any uncertainty as to the removal efficiency for a particular type of spray booth.

Paint Pigment Composition = 19.76 %

Comment: Pigment composition is derived from the leftover percentage of material in the paint that is not volatile (i.e., if the total VOC component makes up 80%, then the leftover 20% is assumed to be pigment).

Emissions Summary

| Annual VOC Emissions | | |
|------------------------------------|----------------------|---------------------|
| Annual usage converted to weight = | <u>201.320</u> | Lbs/yr |
| VOC Emissions = | <u>161.539</u> Lb/yr | <u>0.081</u> Ton/yr |

| Ozone Season VOC Emissions | | |
|---------------------------------------|---------------|-------------|
| Ozone Season Usage = | <u>50.330</u> | Lbs |
| Daily Ozone Season Usage = | <u>0.547</u> | Lbs/day |
| Ozone Season VOC Emissions = | <u>40.385</u> | Lbs |
| Daily Ozone Season VOC Emissions = | <u>0.439</u> | Lbs/day |
| Ozone Season Work Day VOC Emissions = | <u>0.615</u> | Lbs/wrk day |

| Annual Particulate Matter Emissions | | |
|-------------------------------------|----------------------|---------------------|
| TSP Emissions = | <u>19.890</u> Lbs/yr | <u>0.010</u> Ton/yr |
| PM10 Emissions = | <u>9.289</u> Lbs/yr | <u>0.005</u> Ton/yr |

HAP Emissions: Estimation of HAP emissions are broken into two categories. The first, on the following page, lists common HAPs associated with painting and surface coating. Enter the composition of each HAP in the columns provided for those HAPs listed. If the HAP is not listed, then enter the name of the HAP and %composition in the spaces below.

| HAP Name | CAS No | (% Composition) | Emissions (Lbs/yr) |
|----------------|--------|-----------------|--------------------|
| | | | |
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| | | | |
| HAP Subtotal = | | | <u>0.0</u> Lbs/yr |

* New York State HAP

| HAP Emissions | | | |
|-----------------------------------|------------|-----------------|-----------------------|
| HAP Name | CAS # | (% Composition) | Emissions (Lbs/yr) |
| Acetone* | 67-64-1 | 18.19 | 36.6 |
| Barium compounds | 0 | | |
| Benzene | 71-43-2 | | |
| Butoxy ethanol, 2- | 111-76-2 | | |
| Butyl acetate | 123-86-4 | | |
| Butyl alcohol, n-* | 71-36-3 | | |
| Calcium carbonate | 1317-65-3 | | |
| Carbon black | 13333-86-4 | | |
| Chromium compounds | 0 | | |
| Cobalt compounds | 0 | | |
| Cumene | 98-82-8 | | |
| Dichlorodifluoromethane | 75-71-8 | | |
| Ethoxyethyl acetate, 2- | 111-15-9 | | |
| Ethyl acetate | 141-78-6 | | |
| Ethyl alcohol | 64-17-5 | | |
| Ethyl-3-ethoxy propionate | 763-69-9 | | |
| Ethylbenzene | 100-41-4 | | |
| Ethylene glycol | 107-21-1 | | |
| Hexane | 110-54-3 | | |
| Isobutyl acetate | 110-19-0 | | |
| Isobutyl alcohol | 78-83-1 | | |
| Isopropyl alcohol | 67-63-0 | | |
| Lead compounds | 0 | | |
| Magnesium silicate | 1343-90-4 | | |
| Methyl Alcohol | 67-56-1 | | |
| Methoxyethanol, 2- | 109-86-4 | | |
| Methyl chloroform | 71-55-6 | | |
| Methyl ethyl ketone | 78-93-3 | | |
| Methyl isobutyl ketone | 108-10-1 | | |
| Methylene chloride | 75-09-2 | | |
| Phenol | 108-95-2 | | |
| Phenylmercuric acetate | 62-38-4 | | |
| Propane | 74-98-6 | | |
| Propyl acetate | 109-60-4 | | |
| Propylene glycol monomethyl ether | 107-98-2 | | |
| Tetrachloroethylene | 127-18-4 | | |
| Titanium dioxide | 13463-67-7 | | |
| Toluene | 108-88-3 | 28.55 | 57.5 |
| Toluene-diisocyanate -2,4 | 584-84-9 | | |
| Xylene | 1330-20-7 | | |
| Zinc compounds | 0 | | |
| * New York State HAP | | HAP Total = | 94.10 Lbs/yr |
| | | HAP Content = | 3.76 lbs/gal |

**Emissions For Painting and Surface Coating Operations
Federal and New York State Regulations**

Name: Seneca Army Depot
Bldg #: 317 (COMIS)
SCC: 4-02-999-95

Date: 8/29/94
Initials: GRM

General Comments: This template should only be used for spray paints, brush applications of paint, and spray booth operations. The use of this template is not intended for process applications of paint such as assembly lines in manufacturing plants, and other major coating operations. AP-42 or other comparable documents should be consulted to determine emissions associated with these processes.

Product/Material Information

Product: So-Sure Enamel - Gray
NSN: 8010-00-852-9034

Note: For annual usage, only fill the boxes for EITHER a, b, OR c and leave other boxes blank

Annual Usage: a) cans/yr at fl.oz/can= 0.000 gal/yr
OR b) cans/yr at wt.oz/can= 0.000 lb/yr
OR c) 25.000 gal/yr

Specific Gravity: 0.919

Notes:

VOC composition: 80.99 (%MSDS/Manuf.)
80.99 (%corrected for water and non-photochemical reactants.)
expressed as : A A = % by weight
B = % by volume

Notes:

Comment: "A" and "B" refer to the percentage of the material which contains VOCs. This is expressed as a percentage of total volume, (i.e. gallons) or of total weight (i.e. pounds). When available, percent by weight should take precedence. Make sure to subtract the percentage of non-photochemically reactive VOCs and water, if any.

Paint Application Method: A A = spray application (spray can or gun)
B = brush application

Spray Booth Filter Efficiency = 0.00 % (enter "0" if no filter is present)
(ex: dry filter = 60%, waterfall type = 85%)

Comment: Filter efficiencies vary dependant on the filter type and materials used as the filtering media. Standard dry filters, which are common at Army installations, are assumed to have a consistant 60% removal efficiency under normal operating conditions. However, consult the manufacturer if there is any uncertainty as to the removal efficiency for a particular type of spray booth.

Paint Pigment Composition = 19.01 %

Comment: Pigment composition is derived from the leftover percentage of material in the paint that is not volatile (i.e., if the total VOC component makes up 80%, then the leftover 20% is assumed to be pigment).

Emissions Summary

| Annual VOC Emissions | | |
|------------------------------------|----------------------|---------------------|
| Annual usage converted to weight = | <u>191.129</u> | Lbs/yr |
| VOC Emissions = | <u>154.795</u> Lb/yr | <u>0.077</u> Ton/yr |

| Ozone Season VOC Emissions | | |
|---------------------------------------|---------------|-------------|
| Ozone Season Usage = | <u>47.782</u> | Lbs |
| Daily Ozone Season Usage = | <u>0.519</u> | Lbs/day |
| Ozone Season VOC Emissions = | <u>38.699</u> | Lbs |
| Daily Ozone Season VOC Emissions = | <u>0.421</u> | Lbs/day |
| Ozone Season Work Day VOC Emissions = | <u>0.589</u> | Lbs/wrk day |

| Annual Particulate Matter Emissions | | |
|-------------------------------------|----------------------|---------------------|
| TSP Emissions = | <u>18.167</u> Lbs/yr | <u>0.009</u> Ton/yr |
| PM10 Emissions = | <u>8.484</u> Lbs/yr | <u>0.004</u> Ton/yr |

HAP Emissions: Estimation of HAP emissions are broken into two categories. The first, on the following page, lists common HAPs associated with painting and surface coating. Enter the composition of each HAP in the columns provided for those HAPs listed. If the HAP is not listed, then enter the name of the HAP and %composition in the spaces below.

| HAP Name | CAS No | (% Composition) | Emissions (Lbs/yr) |
|----------------|--------|-----------------|--------------------|
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| | | | |
| HAP Subtotal = | | | <u>0.0</u> Lbs/yr |

* New York State HAP

| HAP Emissions | | | |
|-----------------------------------|------------|-----------------|-----------------------|
| HAP Name | CAS # | (% Composition) | Emissions (Lbs/yr) |
| Acetone* | 67-64-1 | 19.84 | 37.9 |
| Barium compounds | 0 | | |
| Benzene | 71-43-2 | | |
| Butoxy ethanol, 2- | 111-76-2 | | |
| Butyl acetate | 123-86-4 | | |
| Butyl alcohol, n-* | 71-36-3 | | |
| Calcium carbonate | 1317-65-3 | | |
| Carbon black | 13333-86-4 | | |
| Chromium compounds | 0 | | |
| Cobalt compounds | 0 | | |
| Cumene | 98-82-8 | | |
| Dichlorodifluoromethane | 75-71-8 | | |
| Ethoxyethyl acetate, 2- | 111-15-9 | | |
| Ethyl acetate | 141-78-6 | | |
| Ethyl alcohol | 64-17-5 | | |
| Ethyl-3-ethoxy propionate | 763-69-9 | | |
| Ethylbenzene | 100-41-4 | | |
| Ethylene glycol | 107-21-1 | | |
| Hexane | 110-54-3 | | |
| Isobutyl acetate | 110-19-0 | | |
| Isobutyl alcohol | 78-83-1 | | |
| Isopropyl alcohol | 67-63-0 | | |
| Lead compounds | 0 | | |
| Magnesium silicate | 1343-90-4 | | |
| Methyl Alcohol | 67-56-1 | | |
| Methoxyethanol, 2- | 109-86-4 | | |
| Methyl chloroform | 71-55-6 | | |
| Methyl ethyl ketone | 78-93-3 | | |
| Methyl isobutyl ketone | 108-10-1 | | |
| Methylene chloride | 75-09-2 | | |
| Phenol | 108-95-2 | | |
| Phenylmercuric acetate | 62-38-4 | | |
| Propane | 74-98-6 | | |
| Propyl acetate | 109-60-4 | | |
| Propylene glycol monomethyl ether | 107-98-2 | | |
| Tetrachloroethylene | 127-18-4 | | |
| Titanium dioxide | 13463-67-7 | | |
| Toluene | 108-88-3 | 14.66 | 28.0 |
| Toluene-diisocyanate -2,4 | 584-84-9 | | |
| Xylene | 1330-20-7 | | |
| Zinc compounds | 0 | | |
| * New York State HAP | | HAP Total = | 65.94 Lbs/yr |
| | | HAP Content = | 2.64 lbs/gal |

Surface Coating VOC Emissions
for Building Number 320

| NSN | Solvent | Use gal/yr | VOC Content (%) | VOC Emissions (lb/yr) | VOC Emissions (ton/yr) |
|------------------|---------------|---------------|--------------------|--------------------------|---------------------------|
| 8010-00-582-5382 | So-Sure Paint | 0.60 | 85.82 | 3.86 | <0.01 |

Ozone Season Daily Surface Coating Emissions
for Building Number 320

| Pollutant | Emissions (lb) | Daily Emissions (lb) | Daily Emissions (tons) |
|-----------|-------------------|-------------------------|---------------------------|
| VOC | 3.86 | 0.01 | <0.01 |

Surface Coating HAP Emissions
for Building Number 320

| NSN | Solvent | Use (gal/yr) | HAP Content (lbs/gal) | HAP Emissions (lb/yr) | HAP Emissions (ton/yr) |
|-------------|---------------|-----------------|--------------------------|--------------------------|---------------------------|
| 10-582-5382 | So-Sure Paint | 0.60 | 4.46 | 2.67 | <0.01 |

Surface Coating HAP Emissions
for Building Number 320

| NSN | Solvent | Use (gal/yr) | HAP Toluene (%) | HAP Xylene (%) | HAP MEK (%) |
|------------------|---------------|-----------------|-----------------------|----------------------|-------------------|
| 8010-00-582-5382 | So-Sure Paint | 0.60 | 28.32 | 1.21 | 3.64 |

| NSN | Solvent | Use (gal/yr) | HAP Acetone* (%) | HAP N-Butyl Alcohol* (%) |
|------------------|---------------|-----------------|------------------------|--------------------------------|
| 8010-00-582-5382 | So-Sure Paint | 0.60 | 24.87 | 1.21 |

* New York State HAP

EMISSION RATE DETERMINATION METHOD

Stack Test Data _____ Emission Factor _____ Material Balance X

Similar Unit Data _____ Other _____ MSDS _____

Reference: _____

OZONE PRECURSOR EMISSIONS

Typical Ozone Season Emissions
 VOC Emissions 0.0104942935 lb/day
 NOx Emissions _____ lb/day
 CO Emissions _____ lb/day

HAZARDOUS AIR POLLUTANTS

| HAP | CAS CODE | LB/YR |
|---------------------|-----------|--------------|
| Toluene | 108-88-3 | 1.2744000000 |
| Xylene | 1330-20-7 | 0.0544500000 |
| Acetone* | 67-64-1 | 1.1191500000 |
| Methyl Ethyl Ketone | 78-93-3 | 0.1638000000 |
| N-Butyl Alcohol* | 71-36-3 | 0.0544500000 |
| | | |
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CRITERIA POLLUTANT EMISSIONS

VOC Emissions 0.0019309500 ton/yr
 NOx Emissions _____ ton/yr
 CO Emissions _____ ton/yr
 SO2 Emissions _____ ton/yr
 PM10 Emissions 0.0000744982 ton/yr
 Total Particulate 0.0001595250 ton/yr

* New York State HAP

STACK INFORMATION

| | |
|-----------------------------------|------------------------------------|
| Stack (release) Height _____ feet | Stack Gas Velocity _____ ft/sec |
| Stack Diameter _____ inch | Stack Gas Flow Rate _____ ascf/min |
| | Stack Gas Temperature _____ oF |

Other sources that share this stack? _____

Stack Sampling Report Available? (Y/ N, results?) _____

**Emissions For Painting and Surface Coating Operations
Federal and New York State Regulations**

Name: Seneca Army Depot
Bldg #: 320
SCC: 4-02-999-95

Date: 8/26/94
Initials: GRM

General Comments: This template should only be used for spray paints, brush applications of paint, and spray booth operations. The use of this template is not intended for process applications of paint such as assembly lines in manufacturing plants, and other major coating operations. AP-42 or other comparable documents should be consulted to determine emissions associated with these processes.

Product/Material Information

Product: So-Sure Black Paint
NSN: 8010-00-582-5382

Note: For annual usage, only fill the boxes for EITHER a, b, OR c and leave other boxes blank

| | | | | | | | |
|------------------|-------------------------|---------|----|----------------------|------------|--------------|--------|
| Annual Usage: a) | <input type="text"/> | cans/yr | at | <input type="text"/> | fl.oz/can= | <u>0.000</u> | gal/yr |
| OR | b) <u>6</u> | cans/yr | at | <u>12.000</u> | wt.oz/can= | <u>4.500</u> | lb/yr |
| OR | c) <input type="text"/> | gal/yr | | | | | |

Specific Gravity: 0.905

Notes:

VOC composition: 85.82 (%MSDS/Manuf.)
85.82 (%corrected for water and non-photochemical reactants.)
expressed as : A A = % by weight
B = % by volume

Notes:

Comment: "A" and "B" refer to the percentage of the material which contains VOCs. This is expressed as a percentage of total volume, (i.e. gallons) or of total weight (i.e. pounds). When available, percent by weight should take precedence. Make sure to subtract the percentage of non-photochemically reactive VOCs and water, if any.

Paint Application Method: A A = spray application (spray can or gun)
B = brush application

Spray Booth Filter Efficiency = 0.00 % (enter "0" if no filter is present)
(ex: dry filter = 60%, waterfall type = 85%)

Comment: Filter efficiencies vary dependant on the filter type and materials used as the filtering media. Standard dry filters, which are common at Army installations, are assumed to have a consistant 60% removal efficiency under normal operating conditions. However, consult the manufacturer if there is any uncertainty as to the removal efficiency for a particular type of spray booth.

Paint Pigment Composition = 14.18 %

Comment: Pigment composition is derived from the leftover percentage of material in the paint that is not volatile (i.e., if the total VOC component makes up 80%, then the leftover 20% is assumed to be pigment).

Emissions Summary

| Annual VOC Emissions | | | |
|------------------------------------|--------------|--------------|---------------------|
| Annual usage converted to weight = | | <u>4.500</u> | Lbs/yr |
| VOC Emissions = | <u>3.862</u> | Lb/yr | <u>0.002</u> Ton/yr |

| Ozone Season VOC Emissions | | | |
|---------------------------------------|--|--------------|-------------|
| Ozone Season Usage = | | <u>1.125</u> | Lbs |
| Daily Ozone Season Usage = | | <u>0.012</u> | Lbs/day |
| Ozone Season VOC Emissions = | | <u>0.965</u> | Lbs |
| Daily Ozone Season VOC Emissions = | | <u>0.010</u> | Lbs/day |
| Ozone Season Work Day VOC Emissions = | | <u>0.015</u> | Lbs/wrk day |

| Annual Particulate Matter Emissions | | | | |
|-------------------------------------|--------------|--------|--------------|--------|
| TSP Emissions = | <u>0.319</u> | Lbs/yr | <u>0.000</u> | Ton/yr |
| PM10 Emissions = | <u>0.149</u> | Lbs/yr | <u>0.000</u> | Ton/yr |

HAP Emissions: Estimation of HAP emissions are broken into two categories. The first, on the following page, lists common HAPs associated with painting and surface coating. Enter the composition of each HAP in the columns provided for those HAPs listed. If the HAP is not listed, then enter the name of the HAP and %composition in the spaces below.

| HAP Name | CAS No | (% Composition) | Emissions (Lbs/yr) |
|----------|--------|-----------------|--------------------|
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HAP Subtotal = 0.0 Lbs/yr

| HAP Emissions | | | |
|-----------------------------------|------------|-----------------|--------------------|
| HAP Name | CAS # | (% Composition) | Emissions (Lbs/yr) |
| Acetone* | 67-64-1 | 24.87 | 1.1 |
| Barium compounds | 0 | | |
| Benzene | 71-43-2 | | |
| Butoxy ethanol, 2- | 111-76-2 | | |
| Butyl acetate | 123-86-4 | | |
| Butyl alcohol, n-* | 71-36-3 | 1.21 | 0.1 |
| Calcium carbonate | 1317-65-3 | | |
| Carbon black | 13333-86-4 | | |
| Chromium compounds | 0 | | |
| Cobalt compounds | 0 | | |
| Cumene | 98-82-8 | | |
| Dichlorodifluoromethane | 75-71-8 | | |
| Ethoxyethyl acetate, 2- | 111-15-9 | | |
| Ethyl acetate | 141-78-6 | | |
| Ethyl alcohol | 64-17-5 | | |
| Ethyl-3-ethoxy propionate | 763-69-9 | | |
| Ethylbenzene | 100-41-4 | | |
| Ethylene glycol | 107-21-1 | | |
| Hexane | 110-54-3 | | |
| Isobutyl acetate | 110-19-0 | | |
| Isobutyl alcohol | 78-83-1 | | |
| Isopropyl alcohol | 67-63-0 | | |
| Lead compounds | 0 | | |
| Magnesium silicate | 1343-90-4 | | |
| Methyl Alcohol | 67-56-1 | | |
| Methoxyethanol, 2- | 109-86-4 | | |
| Methyl chloroform | 71-55-6 | | |
| Methyl ethyl ketone | 78-93-3 | 3.64 | 0.2 |
| Methyl isobutyl ketone | 108-10-1 | | |
| Methylene chloride | 75-09-2 | | |
| Phenol | 108-95-2 | | |
| Phenylmercuric acetate | 62-38-4 | | |
| Propane | 74-98-6 | | |
| Propyl acetate | 109-60-4 | | |
| Propylene glycol monomethyl ether | 107-98-2 | | |
| Tetrachloroethylene | 127-18-4 | | |
| Titanium dioxide | 13463-67-7 | | |
| Toluene | 108-88-3 | 28.32 | 1.3 |
| Toluene-diisocyanate -2,4 | 584-84-9 | | |
| Xylene | 1330-20-7 | 1.21 | 0.1 |
| Zinc compounds | 0 | | |
| * New York State HAP | | HAP Total = | 2.67 Lbs/yr |
| | | HAP Content = | 4.46 lbs/gal |

**Surface Coating VOC Emissions
for Building Number 323**

| NSN | Solvent | Use gal/yr | VOC Content (%) | VOC Emissions (lb/yr) | VOC Emissions (ton/yr) |
|------------------|----------------------------|-----------------------|----------------------------|----------------------------------|-----------------------------------|
| 8010-00-530-8371 | Polyurethane Sealer - Gray | 30.00 | 57.05 | 162.31 | 0.08 |
| 8010-00-F02-1048 | Uline Maskout Paint - Tan | 0.22 | 91.00 | 2.22 | <0.01 |
| N/A | Bostic Super Tan | 7.63 | 7.60 | 6.46 | <0.01 |

**Ozone Season Daily Surface Coating Emissions
for Building Number 323**

| Pollutant | Emissions (lb) | Daily Emissions (lb) | Daily Emissions (tons) |
|------------------|---------------------------|---------------------------------|-----------------------------------|
| VOC | 170.99 | 0.46 | <0.01 |

**Painting Operations HAP Emissions
for Building Number 323**

| NSN | Solvent | Use (gal/yr) | HAP Content (lbs/gal) | HAP Emissions (lb/yr) | HAP Emissions (ton/yr) |
|------------------|----------------------------|-------------------------|----------------------------------|----------------------------------|-----------------------------------|
| 8010-00-530-8371 | Polyurethane Sealer - Gray | 30.00 | 2.47 | 73.97 | <0.01 |
| 8010-00-F02-1048 | Uline Maskout Paint - Tan | 0.22 | 7.69 | 1.71 | <0.01 |
| N/A | Bostic Super Tan | 7.63 | 0.89 | 6.80 | <0.01 |

**Painting Operations HAP Emissions
for Building Number 323**

| NSN | Solvent | Use (gal/yr) | HAP Toluene (%) | HAP Xylene (%) | HAP MEK (%) | HAP n-Butyl Acetate* (%) |
|------------------|----------------------------|-------------------------|--------------------------------|-------------------------------|----------------------------|---|
| 8010-00-530-8371 | Polyurethane Sealer - Gray | 30.00 | 6.00 | 2.00 | 6.00 | 12.00 |
| 8010-00-F02-1048 | Uline Maskout Paint - Tan | 0.22 | 10.00 | | 30.00 | |

| NSN | Solvent | Use (gal/yr) | HAP Acetone* (%) | HAP Zinc Oxide* (%) | HAP Ethylene Glycol (%) |
|------------------|---------------------------|-------------------------|---------------------------------|------------------------------------|--|
| 8010-00-F02-1048 | Uline Maskout Paint - Tan | 0.22 | 30.00 | | |
| N/A | Bostic Super Tan | 7.63 | | 3.00 | 5.00 |

* New York State HAP

THE UNIVERSITY OF CHICAGO
 DEPARTMENT OF CHEMISTRY

| Run | Time | Temp | Pressure | Flow Rate | Detector |
|-----|------|------|----------|-----------|----------|
| 1 | 10.0 | 100 | 1.0 | 1.0 | 1.0 |
| 2 | 10.0 | 100 | 1.0 | 1.0 | 1.0 |
| 3 | 10.0 | 100 | 1.0 | 1.0 | 1.0 |
| 4 | 10.0 | 100 | 1.0 | 1.0 | 1.0 |
| 5 | 10.0 | 100 | 1.0 | 1.0 | 1.0 |
| 6 | 10.0 | 100 | 1.0 | 1.0 | 1.0 |
| 7 | 10.0 | 100 | 1.0 | 1.0 | 1.0 |
| 8 | 10.0 | 100 | 1.0 | 1.0 | 1.0 |
| 9 | 10.0 | 100 | 1.0 | 1.0 | 1.0 |
| 10 | 10.0 | 100 | 1.0 | 1.0 | 1.0 |

CHICAGO, ILLINOIS

EMISSION RATE DETERMINATION METHOD

Stack Test Data _____ Emission Factor _____ Material Balance X

Similar Unit Data _____ Other _____ MSDS _____

Reference: _____

OZONE PRECURSOR EMISSIONS

Typical Ozone Season Emissions
 VOC Emissions 0.4646493639 lb/day
 NOx Emissions _____ lb/day
 CO Emissions _____ lb/day

HAZARDOUS AIR POLLUTANTS

| HAP | CAS CODE | LB/YR |
|---------------------|-----------|---------------|
| Toluene | 108-88-3 | 17.3143380000 |
| Xylene | 1330-20-7 | 5.6901960000 |
| Acetone* | 67-64-1 | 0.7312500000 |
| Methyl Ethyl Ketone | 78-93-3 | 17.8018380000 |
| n-Butyl Acetate* | 123-86-4 | 34.1411760000 |
| Zinc Oxide* | 1314-13-2 | 2.5500000000 |
| Ethylene Glycol | 107-21-1 | 4.2500000000 |

CRITERIA POLLUTANT EMISSIONS

VOC Emissions 0.0854954830 ton/yr
 NOx Emissions _____ ton/yr
 CO Emissions _____ ton/yr
 SO2 Emissions _____ ton/yr
 PM10 Emissions 0.0081601099 ton/yr
 Total Particulate 0.0174734688 ton/yr

* New York State HAP

STACK INFORMATION

| | |
|-----------------------------------|------------------------------------|
| Stack (release) Height _____ feet | Stack Gas Velocity _____ ft/sec |
| Stack Diameter _____ inch | Stack Gas Flow Rate _____ ascf/min |
| | Stack Gas Temperature _____ oF |

Other sources that share this stack? _____
 Stack Sampling Report Available? (Y/ N, results?) _____

**Emissions For Painting and Surface Coating Operations
Federal and New York State Regulations**

Name: Seneca Army Depot
 Bldg #: 323
 SCC: 4-02-999-95

Date: 8/24/94
 Initials: GRM

General Comments: This template should only be used for spray paints, brush applications of paint, and spray booth operations. The use of this template is not intended for process applications of paint such as assembly lines in manufacturing plants, and other major coating operations. AP-42 or other comparable documents should be consulted to determine emissions associated with these processes.

Product/Material Information

Product: Polyurethane Sealer - Gray
 NSN: 8010-00-530-8371

Note: For annual usage, only fill the boxes for EITHER a, b, OR c and leave other boxes blank

Annual Usage: a) cans/yr at fl.oz/can= 0.000 gal/yr
 OR b) cans/yr at wt.oz/can= 0.000 lb/yr
 OR c) 30.000 gal/yr

Specific Gravity: 1.140

Notes:

VOC composition: 57.05 (%MSDS/Manuf.)
57.05 (%corrected for water and non-photochemical reactants.)
 expressed as : A A = % by weight
 B = % by volume

Notes: VOC: $(5.41 \text{ lb/gal}) / (1.14 * 8.319 \text{ lb/gal}) * 100 = 57.05$

Comment: "A" and "B" refer to the percentage of the material which contains VOCs. This is expressed as a percentage of total volume, (i.e. gallons) or of total weight (i.e. pounds). When available, percent by weight should take precedence. Make sure to subtract the percentage of non-photochemically reactive VOCs and water, if any.

Paint Application Method: B A = spray application (spray can or gun)
 B = brush application

Spray Booth Filter Efficiency = 0.00 % (enter "0" if no filter is present)
 (ex: dry filter = 60%, waterfall type = 85%)

Comment: Filter efficiencies vary dependant on the filter type and materials used as the filtering media. Standard dry filters, which are common at Army installations, are assumed to have a consistant 60% removal efficiency under normal operating conditions. However, consult the manufacturer if there is any uncertainty as to the removal efficiency for a particular type of spray booth.

Paint Pigment Composition = 42.95 %

Comment: Pigment composition is derived from the leftover percentage of material in the paint that is not volatile (i.e., if the total VOC component makes up 80%, then the leftover 20% is assumed to be pigment).

Emissions Summary

| Annual VOC Emissions | | |
|------------------------------------|----------------------|---------------------|
| Annual usage converted to weight = | <u>284.510</u> | Lbs/yr |
| VOC Emissions = | <u>162.313</u> Lb/yr | <u>0.081</u> Ton/yr |

| Ozone Season VOC Emissions | | |
|---------------------------------------|---------------|-------------|
| Ozone Season Usage = | <u>71.127</u> | Lbs |
| Daily Ozone Season Usage = | <u>0.773</u> | Lbs/day |
| Ozone Season VOC Emissions = | <u>40.578</u> | Lbs |
| Daily Ozone Season VOC Emissions = | <u>0.441</u> | Lbs/day |
| Ozone Season Work Day VOC Emissions = | <u>0.617</u> | Lbs/wrk day |

| Annual Particulate Matter Emissions | | |
|-------------------------------------|---------------------|---------------------|
| TSP Emissions = | <u>0.000</u> Lbs/yr | <u>0.000</u> Ton/yr |
| PM10 Emissions = | <u>0.000</u> Lbs/yr | <u>0.000</u> Ton/yr |

HAP Emissions: Estimation of HAP emissions are broken into two categories. The first, on the following page, lists common HAPs associated with painting and surface coating. Enter the composition of each HAP in the columns provided for those HAPs listed. If the HAP is not listed, then enter the name of the HAP and %composition in the spaces below.

| HAP Name | CAS No | (% Composition) | Emissions (Lbs/yr) |
|----------|--------|-----------------|--------------------|
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HAP Subtotal = 0.0 Lbs/yr

| HAP Emissions | | | |
|-----------------------------------|------------|-----------------|-----------------------|
| HAP Name | CAS # | (% Composition) | Emissions (Lbs/yr) |
| Acetone | 67-64-1 | | |
| Barium compounds | 0 | | |
| Benzene | 71-43-2 | | |
| Butoxy ethanol, 2- | 111-76-2 | | |
| Butyl acetate* | 123-86-4 | 12 | 34.1 |
| Butyl alcohol, n- | 71-36-3 | | |
| Calcium carbonate | 1317-65-3 | | |
| Carbon black | 13333-86-4 | | |
| Chromium compounds | 0 | | |
| Cobalt compounds | 0 | | |
| Cumene | 98-82-8 | | |
| Dichlorodifluoromethane | 75-71-8 | | |
| Ethoxyethyl acetate, 2- | 111-15-9 | | |
| Ethyl acetate | 141-78-6 | | |
| Ethyl alcohol | 64-17-5 | | |
| Ethyl-3-ethoxy propionate | 763-69-9 | | |
| Ethylbenzene | 100-41-4 | | |
| Ethylene glycol | 107-21-1 | | |
| Hexane | 110-54-3 | | |
| Isobutyl acetate | 110-19-0 | | |
| Isobutyl alcohol | 78-83-1 | | |
| Isopropyl alcohol | 67-63-0 | | |
| Lead compounds | 0 | | |
| Magnesium silicate | 1343-90-4 | | |
| Methyl Alcohol | 67-56-1 | | |
| Methoxyethanol, 2- | 109-86-4 | | |
| Methyl chloroform | 71-55-6 | | |
| Methyl ethyl ketone | 78-93-3 | 6 | 17.1 |
| Methyl isobutyl ketone | 108-10-1 | | |
| Methylene chloride | 75-09-2 | | |
| Phenol | 108-95-2 | | |
| Phenylmercuric acetate | 62-38-4 | | |
| Propane | 74-98-6 | | |
| Propyl acetate | 109-60-4 | | |
| Propylene glycol monomethyl ether | 107-98-2 | | |
| Tetrachloroethylene | 127-18-4 | | |
| Titanium dioxide | 13463-67-7 | | |
| Toluene | 108-88-3 | 6 | 17.1 |
| Toluene-diisocyanate -2,4 | 584-84-9 | | |
| Xylene | 1330-20-7 | 2 | 5.7 |
| Zinc compounds | 0 | | |
| * New York State HAP | | HAP Total = | 73.97 Lbs/yr |
| | | HAP Content = | 2.47 lbs/gal |

**Emissions For Painting and Surface Coating Operations
Federal and New York State Regulations**

Name: Seneca Army Depot
Bldg #: 323
SCC: 4-02-999-95

Date: 8/24/94
Initials: GRM

General Comments: This template should only be used for spray paints, brush applications of paint, and spray booth operations. The use of this template is not intended for process applications of paint such as assembly lines in manufacturing plants, and other major coating operations. AP-42 or other comparable documents should be consulted to determine emissions associated with these processes.

Product/Material Information

Product: Uline Maskout Paint - Tan
NSN: 8010-00-F02-1048

Note: For annual usage, only fill the boxes for EITHER a, b, OR c and leave other boxes blank

Annual Usage: a) cans/yr at fl.oz/can= 0.000 gal/yr
OR b) 3 cans/yr at 13.000 wt.oz/can= 2.438 lb/yr
OR c) gal/yr

Specific Gravity: 1.320

Notes:

VOC composition: 91.00 (%MSDS/Manuf.)
91.00 (%corrected for water and non-photochemical reactants.)
expressed as : A A = % by weight
B = % by volume

Notes:

Comment: "A" and "B" refer to the percentage of the material which contains VOCs. This is expressed as a percentage of total volume, (i.e. gallons) or of total weight (i.e. pounds). When available, percent by weight should take precedence. Make sure to subtract the percentage of non-photochemically reactive VOCs and water, if any.

Paint Application Method: A A = spray application (spray can or gun)
B = brush application

Spray Booth Filter Efficiency = 0.00 % (enter "0" if no filter is present)
(ex: dry filter = 60%, waterfall type = 85%)

Comment: Filter efficiencies vary dependant on the filter type and materials used as the filtering media. Standard dry filters, which are common at Army installations, are assumed to have a consistant 60% removal efficiency under normal operating conditions. However, consult the manufacturer if there is any uncertainty as to the removal efficiency for a particular type of spray booth.

Paint Pigment Composition = 9.00 %

Comment: Pigment composition is derived from the leftover percentage of material in the paint that is not volatile (i.e., if the total VOC component makes up 80%, then the leftover 20% is assumed to be pigment).

Emissions Summary

| Annual VOC Emissions | | |
|------------------------------------|--------------------|---------------------|
| Annual usage converted to weight = | <u>2.438</u> | Lbs/yr |
| VOC Emissions = | <u>2.218</u> Lb/yr | <u>0.001</u> Ton/yr |

| Ozone Season VOC Emissions | | |
|---------------------------------------|--------------|-------------|
| Ozone Season Usage = | <u>0.609</u> | Lbs |
| Daily Ozone Season Usage = | <u>0.007</u> | Lbs/day |
| Ozone Season VOC Emissions = | <u>0.555</u> | Lbs |
| Daily Ozone Season VOC Emissions = | <u>0.006</u> | Lbs/day |
| Ozone Season Work Day VOC Emissions = | <u>0.008</u> | Lbs/wrk day |

| Annual Particulate Matter Emissions | | |
|-------------------------------------|---------------------|---------------------|
| TSP Emissions = | <u>0.110</u> Lbs/yr | <u>0.000</u> Ton/yr |
| PM10 Emissions = | <u>0.051</u> Lbs/yr | <u>0.000</u> Ton/yr |

HAP Emissions: Estimation of HAP emissions are broken into two categories. The first, on the following page, lists common HAPs associated with painting and surface coating. Enter the composition of each HAP in the columns provided for those HAPs listed. If the HAP is not listed, then enter the name of the HAP and %composition in the spaces below.

| HAP Name | CAS No | (% Composition) | Emissions (Lbs/yr) |
|----------|--------|-----------------|--------------------|
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HAP Subtotal = 0.0 Lbs/yr

| HAP Emissions | | | |
|-----------------------------------|--------------|------------------------|-------------------------------|
| HAP Name | CAS # | (% Composition) | Emissions (Lbs/yr) |
| Acetone* | 67-64-1 | 30 | 0.7 |
| Barium compounds | 0 | | |
| Benzene | 71-43-2 | | |
| Butoxy ethanol, 2- | 111-76-2 | | |
| Butyl acetate | 123-86-4 | | |
| Butyl alcohol, n- | 71-36-3 | | |
| Calcium carbonate | 1317-65-3 | | |
| Carbon black | 13333-86-4 | | |
| Chromium compounds | 0 | | |
| Cobalt compounds | 0 | | |
| Cumene | 98-82-8 | | |
| Dichlorodifluoromethane | 75-71-8 | | |
| Ethoxyethyl acetate, 2- | 111-15-9 | | |
| Ethyl acetate | 141-78-6 | | |
| Ethyl alcohol | 64-17-5 | | |
| Ethyl-3-ethoxy propionate | 763-69-9 | | |
| Ethylbenzene | 100-41-4 | | |
| Ethylene glycol | 107-21-1 | | |
| Hexane | 110-54-3 | | |
| Isobutyl acetate | 110-19-0 | | |
| Isobutyl alcohol | 78-83-1 | | |
| Isopropyl alcohol | 67-63-0 | | |
| Lead compounds | 0 | | |
| Magnesium silicate | 1343-90-4 | | |
| Methyl Alcohol | 67-56-1 | | |
| Methoxyethanol, 2- | 109-86-4 | | |
| Methyl chloroform | 71-55-6 | | |
| Methyl ethyl ketone | 78-93-3 | 30 | 0.7 |
| Methyl isobutyl ketone | 108-10-1 | | |
| Methylene chloride | 75-09-2 | | |
| Phenol | 108-95-2 | | |
| Phenylmercuric acetate | 62-38-4 | | |
| Propane | 74-98-6 | | |
| Propyl acetate | 109-60-4 | | |
| Propylene glycol monomethyl ether | 107-98-2 | | |
| Tetrachloroethylene | 127-18-4 | | |
| Titanium dioxide | 13463-67-7 | | |
| Toluene | 108-88-3 | 10 | 0.2 |
| Toluene-diisocyanate -2,4 | 584-84-9 | | |
| Xylene | 1330-20-7 | | |
| Zinc compounds | 0 | | |
| * New York State HAP | | HAP Total = | 1.71 Lbs/yr |
| | | HAP Content = | 7.69 lbs/gal |

**Emissions For Painting and Surface Coating Operations
Federal and New York State Regulations**

Name: Seneca Army Depot
Bldg #: 323
SCC: 4-02-999-95

Date: 8/24/94
Initials: GRM

General Comments: This template should only be used for spray paints, brush applications of paint, and spray booth operations. The use of this template is not intended for process applications of paint such as assembly lines in manufacturing plants, and other major coating operations. AP-42 or other comparable documents should be consulted to determine emissions associated with these processes.

Product/Material Information

Product: Tan Spray Paint
NSN: _____

Note: For annual usage, only fill the boxes for EITHER a, b, OR c and leave other boxes blank

Annual Usage: a) cans/yr at fl.oz/can= 0.000 gal/yr
OR b) 80 cans/yr at 17.000 wt.oz/can= 85.000 lb/yr
OR c) gal/yr

Specific Gravity: 1.340

Notes:

VOC composition: 18.03 (%MSDS/Manuf.)
7.60 (%corrected for water and non-photochemical reactants.)
expressed as : A A = % by weight
B = % by volume

Notes:

Comment: "A" and "B" refer to the percentage of the material which contains VOCs. This is expressed as a percentage of total volume, (i.e. gallons) or of total weight (i.e. pounds). When available, percent by weight should take precedence. Make sure to subtract the percentage of non-photochemically reactive VOCs and water, if any.

Paint Application Method: A A = spray application (spray can or gun)
B = brush application

Spray Booth Filter Efficiency = 0.00 % (enter "0" if no filter is present)
(ex: dry filter = 60%, waterfall type = 85%)

Comment: Filter efficiencies vary dependant on the filter type and materials used as the filtering media. Standard dry filters, which are common at Army installations, are assumed to have a consistant 60% removal efficiency under normal operating conditions. However, consult the manufacturer if there is any uncertainty as to the removal efficiency for a particular type of spray booth.

Paint Pigment Composition = 81.97 %

Comment: Pigment composition is derived from the leftover percentage of material in the paint that is not volatile (i.e., if the total VOC component makes up 80%, then the leftover 20% is assumed to be pigment).

Emissions Summary

| Annual VOC Emissions | | | |
|------------------------------------|--------------|---------------|---------------------|
| Annual usage converted to weight = | | <u>85.000</u> | Lbs/yr |
| VOC Emissions = | <u>6.460</u> | Lb/yr | <u>0.003</u> Ton/yr |

| Ozone Season VOC Emissions | | | |
|---------------------------------------|--|---------------|-------------|
| Ozone Season Usage = | | <u>21.250</u> | Lbs |
| Daily Ozone Season Usage = | | <u>0.231</u> | Lbs/day |
| Ozone Season VOC Emissions = | | <u>1.615</u> | Lbs |
| Daily Ozone Season VOC Emissions = | | <u>0.018</u> | Lbs/day |
| Ozone Season Work Day VOC Emissions = | | <u>0.025</u> | Lbs/wrk day |

| Annual Particulate Matter Emissions | | | |
|-------------------------------------|---------------|--------|---------------------|
| TSP Emissions = | <u>34.837</u> | Lbs/yr | <u>0.017</u> Ton/yr |
| PM10 Emissions = | <u>16.269</u> | Lbs/yr | <u>0.008</u> Ton/yr |

HAP Emissions: Estimation of HAP emissions are broken into two categories. The first, on the following page, lists common HAPs associated with painting and surface coating. Enter the composition of each HAP in the columns provided for those HAPs listed. If the HAP is not listed, then enter the name of the HAP and %composition in the spaces below.

| HAP Name | CAS No | (% Composition) | Emissions (Lbs/yr) |
|-------------|-----------|-----------------|--------------------|
| Zinc Oxide* | 1314-13-2 | 3 | 2.6 |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

HAP Subtotal = 2.6 Lbs/yr

* New York State HAP

| HAP Emissions | | | |
|-----------------------------------|------------|-----------------|-----------------------|
| HAP Name | CAS # | (% Composition) | Emissions (Lbs/yr) |
| Acetone* | 67-64-1 | | |
| Barium compounds | 0 | | |
| Benzene | 71-43-2 | | |
| Butoxy ethanol, 2- | 111-76-2 | | |
| Butyl acetate | 123-86-4 | | |
| Butyl alcohol, n- | 71-36-3 | | |
| Calcium carbonate | 1317-65-3 | | |
| Carbon black | 13333-86-4 | | |
| Chromium compounds | 0 | | |
| Cobalt compounds | 0 | | |
| Cumene | 98-82-8 | | |
| Dichlorodifluoromethane | 75-71-8 | | |
| Ethoxyethyl acetate, 2- | 111-15-9 | | |
| Ethyl acetate | 141-78-6 | | |
| Ethyl alcohol | 64-17-5 | | |
| Ethyl-3-ethoxy propionate | 763-69-9 | | |
| Ethylbenzene | 100-41-4 | | |
| Ethylene glycol | 107-21-1 | 5 | 4.3 |
| Hexane | 110-54-3 | | |
| Isobutyl acetate | 110-19-0 | | |
| Isobutyl alcohol | 78-83-1 | | |
| Isopropyl alcohol | 67-63-0 | | |
| Lead compounds | 0 | | |
| Magnesium silicate | 1343-90-4 | | |
| Methyl Alcohol | 67-56-1 | | |
| Methoxyethanol, 2- | 109-86-4 | | |
| Methyl chloroform | 71-55-6 | | |
| Methyl ethyl ketone | 78-93-3 | | |
| Methyl isobutyl ketone | 108-10-1 | | |
| Methylene chloride | 75-09-2 | | |
| Phenol | 108-95-2 | | |
| Phenylmercuric acetate | 62-38-4 | | |
| Propane | 74-98-6 | | |
| Propyl acetate | 109-60-4 | | |
| Propylene glycol monomethyl ether | 107-98-2 | | |
| Tetrachloroethylene | 127-18-4 | | |
| Titanium dioxide | 13463-67-7 | | |
| Toluene | 108-88-3 | | |
| Toluene-diisocyanate -2,4 | 584-84-9 | | |
| Xylene | 1330-20-7 | | |
| Zinc compounds | 0 | | |
| * New York State HAP | | HAP Total = | 6.80 Lbs/yr |
| | | HAP Content = | 0.89 lbs/gal |

Surface Coating VOC Emissions
for Building Number 357

| NSN | Solvent | Use gal/yr | VOC Content (%) | VOC Emissions (lb/yr) | VOC Emissions (ton/yr) |
|------------------|---------------------------|---------------|--------------------|--------------------------|---------------------------|
| 8010-00-290-6983 | So-Sure Lacquer - Aerosol | 0.56 | 82.42 | 3.71 | <0.01 |

Ozone Season Daily Surface Coating Emissions
for Building Number 357

| Pollutant | Emissions (lb) | Daily Emissions (lb) | Daily Emissions (tons) |
|-----------|-------------------|-------------------------|---------------------------|
| VOC | 3.71 | 0.01 | <0.01 |

Surface Coating HAP Emissions
for Building Number 357

| NSN | Solvent | Use (gal/yr) | HAP Content (lbs/gal) | HAP Emissions (lb/yr) | HAP Emissions (ton/yr) |
|------------------|---------------------------|-----------------|--------------------------|--------------------------|---------------------------|
| 8010-00-290-6983 | So-Sure Lacquer - Aerosol | 0.56 | 3.97 | 2.21 | <0.01 |

Surface Coating HAP Emissions
for Building Number 357

| NSN | Solvent | Use (gal/yr) | HAP Toluene (%) | HAP Xylene (%) | HAP Ethylbenzene (%) | HAP Acetone* (%) |
|------------------|---------------------------|-----------------|-----------------------|----------------------|----------------------------|------------------------|
| 8010-00-290-6983 | So-Sure Lacquer - Aerosol | 0.56 | 26.67 | 1.47 | 1.47 | 19.53 |

* New York State HAP

EMISSION RATE DETERMINATION METHOD

Stack Test Data _____ Emission Factor _____ Material Balance X

Similar Unit Data _____ Other MSDS

Reference: _____

OZONE PRECURSOR EMISSIONS

Typical Ozone Season Emissions
 VOC Emissions 0.0100785326 lb/day
 NOx Emissions _____ lb/day
 CO Emissions _____ lb/day

HAZARDOUS AIR POLLUTANTS

| HAP | CAS CODE | LB/YR |
|--------------|-----------|--------------|
| Toluene | 108-88-3 | 1.2001500000 |
| Xylene | 1330-20-7 | 0.0661500000 |
| Acetone* | 67-64-1 | 0.8788500000 |
| Ethylbenzene | 100-41-4 | 0.0661500000 |
| | | |
| | | |

CRITERIA POLLUTANT EMISSIONS

VOC Emissions 0.0018544500 ton/yr
 NOx Emissions _____ ton/yr
 CO Emissions _____ ton/yr
 SO2 Emissions _____ ton/yr
 PM10 Emissions 0.0000923609 ton/yr
 Total Particulate 0.0001977750 ton/yr

* New York State HAP

STACK INFORMATION

| | |
|-----------------------------------|------------------------------------|
| Stack (release) Height _____ feet | Stack Gas Velocity _____ ft/sec |
| Stack Diameter _____ inch | Stack Gas Flow Rate _____ ascf/min |
| | Stack Gas Temperature _____ oF |

Other sources that share this stack? _____

Stack Sampling Report Available? (Y/ N, results?) _____

**Emissions For Painting and Surface Coating Operations
Federal and New York State Regulations**

Name: Seneca Army Depot
Bldg #: 357 (Mobile Heavy Equip. Repair)
SCC: 4-02-999-95

Date: 8/26/94
Initials: GRM

General Comments: This template should only be used for spray paints, brush applications of paint, and spray booth operations. The use of this template is not intended for process applications of paint such as assembly lines in manufacturing plants, and other major coating operations. AP-42 or other comparable documents should be consulted to determine emissions associated with these processes.

Product/Material Information

Product: So-Sure Lacquer - Aerosol
NSN: 8010-00-290-6983

Note: For annual usage, only fill the boxes for EITHER a, b, OR c and leave other boxes blank

Annual Usage: a) cans/yr at fl.oz/can= 0.000 gal/yr
OR b) 6 cans/yr at 12.000 wt.oz/can= 4.500 lb/yr
OR c) gal/yr

Specific Gravity: 0.971

Notes:

VOC composition: 82.42 (%MSDS/Manuf.)
82.42 (%corrected for water and non-photochemical reactants.)
expressed as: A A = % by weight
B = % by volume

Notes:

Comment: "A" and "B" refer to the percentage of the material which contains VOCs. This is expressed as a percentage of total volume, (i.e. gallons) or of total weight (i.e. pounds). When available, percent by weight should take precedence. Make sure to subtract the percentage of non-photochemically reactive VOCs and water, if any.

Paint Application Method: A A = spray application (spray can or gun)
B = brush application

Spray Booth Filter Efficiency = 0.00 % (enter "0" if no filter is present)
(ex: dry filter = 60%, waterfall type = 85%)

Comment: Filter efficiencies vary dependant on the filter type and materials used as the filtering media. Standard dry filters, which are common at Army installations, are assumed to have a consistant 60% removal efficiency under normal operating conditions. However, consult the manufacturer if there is any uncertainty as to the removal efficiency for a particular type of spray booth.

Paint Pigment Composition = 17.58 %

Comment: Pigment composition is derived from the leftover percentage of material in the paint that is not volatile (i.e., if the total VOC component makes up 80%, then the leftover 20% is assumed to be pigment).

Emissions Summary

| Annual VOC Emissions | | | |
|------------------------------------|--|--------------|--------|
| Annual usage converted to weight = | | <u>4.500</u> | Lbs/yr |
| VOC Emissions = | | <u>3.709</u> | Lb/yr |
| | | <u>0.002</u> | Ton/yr |

| Ozone Season VOC Emissions | | | |
|---------------------------------------|--|--------------|-------------|
| Ozone Season Usage = | | <u>1.125</u> | Lbs |
| Daily Ozone Season Usage = | | <u>0.012</u> | Lbs/day |
| Ozone Season VOC Emissions = | | <u>0.927</u> | Lbs |
| Daily Ozone Season VOC Emissions = | | <u>0.010</u> | Lbs/day |
| Ozone Season Work Day VOC Emissions = | | <u>0.014</u> | Lbs/wrk day |

| Annual Particulate Matter Emissions | | | |
|-------------------------------------|--|--------------|--------|
| TSP Emissions = | | <u>0.396</u> | Lbs/yr |
| | | <u>0.000</u> | Ton/yr |
| PM10 Emissions = | | <u>0.185</u> | Lbs/yr |
| | | <u>0.000</u> | Ton/yr |

HAP Emissions: Estimation of HAP emissions are broken into two categories. The first, on the following page, lists common HAPs associated with painting and surface coating. Enter the composition of each HAP in the columns provided for those HAPs listed. If the HAP is not listed, then enter the name of the HAP and %composition in the spaces below.

| HAP Name | CAS No | (% Composition) | Emissions (Lbs/yr) |
|----------|--------|-----------------|--------------------|
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HAP Subtotal = 0.0 Lbs/yr

| HAP Emissions | | | |
|-----------------------------------|------------|-----------------|-----------------------|
| HAP Name | CAS # | (% Composition) | Emissions (Lbs/yr) |
| Acetone* | 67-64-1 | 19.53 | 0.9 |
| Barium compounds | 0 | | |
| Benzene | 71-43-2 | | |
| Butoxy ethanol, 2- | 111-76-2 | | |
| Butyl acetate | 123-86-4 | | |
| Butyl alcohol, n-* | 71-36-3 | | |
| Calcium carbonate | 1317-65-3 | | |
| Carbon black | 13333-86-4 | | |
| Chromium compounds | 0 | | |
| Cobalt compounds | 0 | | |
| Cumene | 98-82-8 | | |
| Dichlorodifluoromethane | 75-71-8 | | |
| Ethoxyethyl acetate, 2- | 111-15-9 | | |
| Ethyl acetate | 141-78-6 | | |
| Ethyl alcohol | 64-17-5 | | |
| Ethyl-3-ethoxy propionate | 763-69-9 | | |
| Ethylbenzene | 100-41-4 | 1.47 | 0.1 |
| Ethylene glycol | 107-21-1 | | |
| Hexane | 110-54-3 | | |
| Isobutyl acetate | 110-19-0 | | |
| Isobutyl alcohol | 78-83-1 | | |
| Isopropyl alcohol | 67-63-0 | | |
| Lead compounds | 0 | | |
| Magnesium silicate | 1343-90-4 | | |
| Methyl Alcohol | 67-56-1 | | |
| Methoxyethanol, 2- | 109-86-4 | | |
| Methyl chloroform | 71-55-6 | | |
| Methyl ethyl ketone | 78-93-3 | | |
| Methyl isobutyl ketone | 108-10-1 | | |
| Methylene chloride | 75-09-2 | | |
| Phenol | 108-95-2 | | |
| Phenylmercuric acetate | 62-38-4 | | |
| Propane | 74-98-6 | | |
| Propyl acetate | 109-60-4 | | |
| Propylene glycol monomethyl ether | 107-98-2 | | |
| Tetrachloroethylene | 127-18-4 | | |
| Titanium dioxide | 13463-67-7 | | |
| Toluene | 108-88-3 | 26.67 | 1.2 |
| Toluene-diisocyanate -2,4 | 584-84-9 | | |
| Xylene | 1330-20-7 | 1.47 | 0.1 |
| Zinc compounds | 0 | | |
| * New York State HAP | | HAP Total = | 2.21 Lbs/yr |
| | | HAP Content = | 3.97 lbs/gal |

**Surface Coating VOC Emissions
for Building Number 612**

| NSN | Solvent | Use gal/yr | VOC Content (%) | VOC Emissions (lb/yr) | VOC Emissions (ton/yr) |
|------------------|-----------------------------------|-----------------------|----------------------------|----------------------------------|-----------------------------------|
| 8010-00-584-3149 | So-Sure Lacquer - Olive Drab | 1.45 | 84.05 | 8.83 | <0.01 |
| 8010-00-584-3148 | So-Sure Lacquer - Orange | 0.10 | 80.85 | 0.61 | <0.01 |
| 8010-00-582-5382 | So-Sure Lacquer - Flat Black | 0.10 | 85.82 | 0.64 | <0.01 |
| 7510-00-183-7698 | Marsh Spray Stencil Ink | 0.12 | 94.00 | 0.71 | <0.01 |
| 7510-00-N03-3637 | Diagraph Stencil Ink - Roller Ink | 24.00 | 91.60 | 168.25 | 0.08 |
| 8010-00-582-4743 | So-Sure Sand Obliterating | 0.34 | 80.32 | 2.41 | <0.01 |
| 8010-00-141-2950 | So-Sure Lacquer - Yellow | 0.10 | 84.21 | 0.63 | <0.01 |
| 8010-00-848-9272 | Olive Drab Enamel - Brush | 10.00 | 39.50 | 46.60 | 0.02 |

**Ozone Season Daily Surface Coating Emissions
for Building Number 612**

| Pollutant | Emissions (lb) | Daily Emissions (lb) | Daily Emissions (tons) |
|------------------|---------------------------|---------------------------------|-----------------------------------|
| VOC | 228.67 | 0.62 | <0.01 |

**Painting Operations HAP Emissions
for Building Number 612**

| NSN | Solvent | Use (gal/yr) | HAP Content (lbs/gal) | HAP Emissions (lb/yr) | HAP Emissions (ton/yr) |
|------------------|-----------------------------------|-------------------------|----------------------------------|----------------------------------|-----------------------------------|
| 8010-00-584-3149 | So-Sure Lacquer - Olive Drab | 1.45 | 3.82 | 5.11 | <0.01 |
| 8010-00-584-3148 | So-Sure Lacquer - Orange | 0.10 | 3.77 | 0.36 | <0.01 |
| 8010-00-582-5382 | So-Sure Lacquer - Flat Black | 0.10 | 4.37 | 0.44 | <0.01 |
| 7510-00-183-7698 | Marsh Spray Stencil Ink | 0.12 | 4.54 | 0.53 | <0.01 |
| 7510-00-N03-3637 | Diagraph Stencil Ink - Roller Ink | 24.00 | 3.83 | 91.84 | 0.05 |
| 8010-00-582-4743 | So-Sure Sand Obliterating | 0.34 | 3.38 | 1.14 | <0.01 |
| 8010-00-141-2950 | So-Sure Lacquer - Yellow | 0.10 | 3.82 | 0.37 | <0.01 |
| 8010-00-848-9272 | Olive Drab Enamel - Brush | 10.00 | 1.77 | 17.69 | 0.01 |

**Painting Operations HAP Emissions
for Building Number 612**

| NSN | Solvent | Use (gal/yr) | HAP Toluene (%) | HAP Xylene (%) | HAP MEK (%) | HAP Acetone* (%) |
|------------------|-----------------------------------|-------------------------|--------------------------------|-------------------------------|----------------------------|---------------------------------|
| 8010-00-584-3149 | So-Sure Lacquer - Olive Drab | 1.45 | 26.76 | 1.60 | | 17.09 |
| 8010-00-584-3148 | So-Sure Lacquer - Orange | 0.10 | 22.09 | 3.07 | | 21.31 |
| 8010-00-582-5382 | So-Sure Lacquer - Flat Black | 0.10 | 28.32 | 1.21 | 3.64 | 24.87 |
| 7510-00-183-7698 | Marsh Spray Stencil Ink | 0.12 | 30.00 | | | 40.00 |
| 7510-00-N03-3637 | Diagraph Stencil Ink - Roller Ink | 24.00 | 10.00 | | | 40.00 |
| 8010-00-582-4743 | So-Sure Sand Obliterating | 0.34 | 33.44 | | | 4.69 |
| 8010-00-141-2950 | So-Sure Lacquer - Yellow | 0.10 | 23.71 | 3.16 | | 20.45 |
| 8010-00-848-9272 | Olive Drab Enamel - Brush | 10.00 | 5.00 | 5.00 | 5.00 | |

| NSN | Solvent | Use (gal/yr) | HAP Ethylbenzene (%) | HAP n-Butyl Alcohol* (%) |
|------------------|------------------------------|-------------------------|-------------------------------------|---|
| 8010-00-584-3149 | So-Sure Lacquer - Olive Drab | 1.45 | 1.60 | 1.60 |
| 8010-00-584-3148 | So-Sure Lacquer - Orange | 0.10 | 1.54 | |
| 8010-00-141-2950 | So-Sure Lacquer - Yellow | 0.10 | 1.58 | |

* New York State HAP

EMISSION RATE DETERMINATION METHOD

Stack Test Data _____ Emission Factor _____ Material Balance X

Similar Unit Data _____ Other MSDS

Reference: _____

OZONE PRECURSOR EMISSIONS

Typical Ozone Season Emissions
 VOC Emissions 0.6213888729 lb/day
 NOx Emissions _____ lb/day
 CO Emissions _____ lb/day

HAZARDOUS AIR POLLUTANTS

| HAP | CAS CODE | LB/YR |
|---------------------|-----------|---------------|
| Toluene | 108-88-3 | 28.8604230000 |
| Xylene | 1330-20-7 | 6.1219710000 |
| Acetone* | 67-64-1 | 76.2082830000 |
| Methyl Ethyl Ketone | 78-93-3 | 5.9254710000 |
| N-Butyl Alcohol* | 71-36-3 | 0.1680000000 |
| Ethylbenzene | 100-41-4 | 0.1914000000 |

CRITERIA POLLUTANT EMISSIONS

VOC Emissions 0.1143355526 ton/yr
 NOx Emissions _____ ton/yr
 CO Emissions _____ ton/yr
 SO2 Emissions _____ ton/yr
 PM10 Emissions 0.0003127207 ton/yr
 Total Particulate 0.0006696375 ton/yr

* New York State HAP

STACK INFORMATION

| | |
|-----------------------------------|------------------------------------|
| Stack (release) Height _____ feet | Stack Gas Velocity _____ ft/sec |
| Stack Diameter _____ inch | Stack Gas Flow Rate _____ ascf/min |
| | Stack Gas Temperature _____ oF |

Other sources that share this stack? _____

Stack Sampling Report Available? (Y/ N, results?) _____

**Emissions For Painting and Surface Coating Operations
Federal and New York State Regulations**

Name: Seneca Army Depot
Bldg #: 612 (Ammo Maintenance)
SCC: 4-02-999-95

Date: 8/29/94
Initials: GRM

General Comments: This template should only be used for spray paints, brush applications of paint, and spray booth operations. The use of this template is not intended for process applications of paint such as assembly lines in manufacturing plants, and other major coating operations. AP-42 or other comparable documents should be consulted to determine emissions associated with these processes.

Product/Material Information

Product: So-Sure Lacquer - Olive Drab
NSN: 8010-00-584-3149

Note: For annual usage, only fill the boxes for EITHER a, b, OR c and leave other boxes blank

Annual Usage: a) cans/yr at fl.oz/can= 0.000 gal/yr
OR b) 14 cans/yr at 12.000 wt.oz/can= 10.500 lb/yr
OR c) gal/yr

Specific Gravity: 0.943

Notes:

VOC composition: 84.05 (%MSDS/Manuf.)
84.05 (%corrected for water and non-photochemical reactants.)
expressed as : A A = % by weight
B = % by volume

Notes:

Comment: "A" and "B" refer to the percentage of the material which contains VOCs. This is expressed as a percentage of total volume, (i.e. gallons) or of total weight (i.e. pounds). When available, percent by weight should take precedence. Make sure to subtract the percentage of non-photochemically reactive VOCs and water, if any.

Paint Application Method: A A = spray application (spray can or gun)
B = brush application

Spray Booth Filter Efficiency = 0.00 % (enter "0" if no filter is present)
(ex: dry filter = 60%, waterfall type = 85%)

Comment: Filter efficiencies vary dependant on the filter type and materials used as the filtering media. Standard dry filters, which are common at Army installations, are assumed to have a consistant 60% removal efficiency under normal operating conditions. However, consult the manufacturer if there is any uncertainty as to the removal efficiency for a particular type of spray booth.

Paint Pigment Composition = 15.95 %

Comment: Pigment composition is derived from the leftover percentage of material in the paint that is not volatile (i.e., if the total VOC component makes up 80%, then the leftover 20% is assumed to be pigment).

Emissions Summary

| Annual VOC Emissions | | |
|------------------------------------|--------------------|---------------------|
| Annual usage converted to weight = | <u>10.500</u> | Lbs/yr |
| VOC Emissions = | <u>8.825</u> Lb/yr | <u>0.004</u> Ton/yr |

| Ozone Season VOC Emissions | | |
|---------------------------------------|--------------|-------------|
| Ozone Season Usage = | <u>2.625</u> | Lbs |
| Daily Ozone Season Usage = | <u>0.029</u> | Lbs/day |
| Ozone Season VOC Emissions = | <u>2.206</u> | Lbs |
| Daily Ozone Season VOC Emissions = | <u>0.024</u> | Lbs/day |
| Ozone Season Work Day VOC Emissions = | <u>0.034</u> | Lbs/wrk day |

| Annual Particulate Matter Emissions | | |
|-------------------------------------|---------------------|---------------------|
| TSP Emissions = | <u>0.837</u> Lbs/yr | <u>0.000</u> Ton/yr |
| PM10 Emissions = | <u>0.391</u> Lbs/yr | <u>0.000</u> Ton/yr |

HAP Emissions: Estimation of HAP emissions are broken into two categories. The first, on the following page, lists common HAPs associated with painting and surface coating. Enter the composition of each HAP in the columns provided for those HAPs listed. If the HAP is not listed, then enter the name of the HAP and %composition in the spaces below.

| HAP Name | CAS No | (% Composition) | Emissions (Lbs/yr) |
|----------|--------|-----------------|--------------------|
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HAP Subtotal = 0.0 Lbs/yr

| HAP Emissions | | | |
|-----------------------------------|------------|-----------------|-----------------------|
| HAP Name | CAS # | (% Composition) | Emissions (Lbs/yr) |
| Acetone* | 67-64-1 | 17.09 | 1.8 |
| Barium compounds | 0 | | |
| Benzene | 71-43-2 | | |
| Butoxy ethanol, 2- | 111-76-2 | | |
| Butyl acetate | 123-86-4 | | |
| Butyl alcohol, n-* | 71-36-3 | 1.6 | 0.2 |
| Calcium carbonate | 1317-65-3 | | |
| Carbon black | 13333-86-4 | | |
| Chromium compounds | 0 | | |
| Cobalt compounds | 0 | | |
| Cumene | 98-82-8 | | |
| Dichlorodifluoromethane | 75-71-8 | | |
| Ethoxyethyl acetate, 2- | 111-15-9 | | |
| Ethyl acetate | 141-78-6 | | |
| Ethyl alcohol | 64-17-5 | | |
| Ethyl-3-ethoxy propionate | 763-69-9 | | |
| Ethylbenzene | 100-41-4 | 1.6 | 0.2 |
| Ethylene glycol | 107-21-1 | | |
| Hexane | 110-54-3 | | |
| Isobutyl acetate | 110-19-0 | | |
| Isobutyl alcohol | 78-83-1 | | |
| Isopropyl alcohol | 67-63-0 | | |
| Lead compounds | 0 | | |
| Magnesium silicate | 1343-90-4 | | |
| Methyl Alcohol | 67-56-1 | | |
| Methoxyethanol, 2- | 109-86-4 | | |
| Methyl chloroform | 71-55-6 | | |
| Methyl ethyl ketone | 78-93-3 | | |
| Methyl isobutyl ketone | 108-10-1 | | |
| Methylene chloride | 75-09-2 | | |
| Phenol | 108-95-2 | | |
| Phenylmercuric acetate | 62-38-4 | | |
| Propane | 74-98-6 | | |
| Propyl acetate | 109-60-4 | | |
| Propylene glycol monomethyl ether | 107-98-2 | | |
| Tetrachloroethylene | 127-18-4 | | |
| Titanium dioxide | 13463-67-7 | | |
| Toluene | 108-88-3 | 26.76 | 2.8 |
| Toluene-diisocyanate -2,4 | 584-84-9 | | |
| Xylene | 1330-20-7 | 1.6 | 0.2 |
| Zinc compounds | 0 | | |
| * New York State HAP | | HAP Total = | 5.11 Lbs/yr |
| | | HAP Content = | 3.82 lbs/gal |

**Emissions For Painting and Surface Coating Operations
Federal and New York State Regulations**

Name: Seneca Army Depot
Bldg #: 612 (Ammo Maintenance)
SCC: 4-02-999-95

Date: 8/29/94
Initials: GRM

General Comments: This template should only be used for spray paints, brush applications of paint, and spray booth operations. The use of this template is not intended for process applications of paint such as assembly lines in manufacturing plants, and other major coating operations. AP-42 or other comparable documents should be consulted to determine emissions associated with these processes.

Product/Material Information

Product: So-Sure Lacquer - Orange
NSN: 8010-00-584-3148

Note: For annual usage, only fill the boxes for EITHER a, b, OR c and leave other boxes blank

Annual Usage: a) cans/yr at fl.oz/can= 0.000 gal/yr
OR b) cans/yr at wt.oz/can= 0.750 lb/yr
OR c) gal/yr

Specific Gravity: 0.945

Notes:

VOC composition: 80.85 (%MSDS/Manuf.)
80.85 (%corrected for water and non-photochemical reactants.)
expressed as : A A = % by weight
B = % by volume

Notes:

Comment: "A" and "B" refer to the percentage of the material which contains VOCs. This is expressed as a percentage of total volume, (i.e. gallons) or of total weight (i.e. pounds). When available, percent by weight should take precedence. Make sure to subtract the percentage of non-photochemically reactive VOCs and water, if any.

Paint Application Method: A A = spray application (spray can or gun)
B = brush application

Spray Booth Filter Efficiency = 0.00 % (enter "0" if no filter is present)
(ex: dry filter = 60%, waterfall type = 85%)

Comment: Filter efficiencies vary dependant on the filter type and materials used as the filtering media. Standard dry filters, which are common at Army installations, are assumed to have a consistant 60% removal efficiency under normal operating conditions. However, consult the manufacturer if there is any uncertainty as to the removal efficiency for a particular type of spray booth.

Paint Pigment Composition = 19.15 %

Comment: Pigment composition is derived from the leftover percentage of material in the paint that is not volatile (i.e., if the total VOC component makes up 80%, then the leftover 20% is assumed to be pigment).

Emissions Summary

| Annual VOC Emissions | | |
|------------------------------------|--------------------|---------------------|
| Annual usage converted to weight = | <u>0.750</u> | Lbs/yr |
| VOC Emissions = | <u>0.606</u> Lb/yr | <u>0.000</u> Ton/yr |

| Ozone Season VOC Emissions | | |
|---------------------------------------|--------------|-------------|
| Ozone Season Usage = | <u>0.188</u> | Lbs |
| Daily Ozone Season Usage = | <u>0.002</u> | Lbs/day |
| Ozone Season VOC Emissions = | <u>0.152</u> | Lbs |
| Daily Ozone Season VOC Emissions = | <u>0.002</u> | Lbs/day |
| Ozone Season Work Day VOC Emissions = | <u>0.002</u> | Lbs/wrk day |

| Annual Particulate Matter Emissions | | |
|-------------------------------------|---------------------|---------------------|
| TSP Emissions = | <u>0.072</u> Lbs/yr | <u>0.000</u> Ton/yr |
| PM10 Emissions = | <u>0.034</u> Lbs/yr | <u>0.000</u> Ton/yr |

HAP Emissions: Estimation of HAP emissions are broken into two categories. The first, on the following page, lists common HAPs associated with painting and surface coating. Enter the composition of each HAP in the columns provided for those HAPs listed. If the HAP is not listed, then enter the name of the HAP and %composition in the spaces below.

| HAP Name | CAS No | (% Composition) | Emissions (Lbs/yr) |
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HAP Subtotal = 0.0 Lbs/yr

* New York State HAP

| HAP Emissions | | | |
|-----------------------------------|------------|-----------------|-----------------------|
| HAP Name | CAS # | (% Composition) | Emissions (Lbs/yr) |
| Acetone* | 67-64-1 | 21.31 | 0.2 |
| Barium compounds | 0 | | |
| Benzene | 71-43-2 | | |
| Butoxy ethanol, 2- | 111-76-2 | | |
| Butyl acetate | 123-86-4 | | |
| Butyl alcohol, n-* | 71-36-3 | | |
| Calcium carbonate | 1317-65-3 | | |
| Carbon black | 13333-86-4 | | |
| Chromium compounds | 0 | | |
| Cobalt compounds | 0 | | |
| Cumene | 98-82-8 | | |
| Dichlorodifluoromethane | 75-71-8 | | |
| Ethoxyethyl acetate, 2- | 111-15-9 | | |
| Ethyl acetate | 141-78-6 | | |
| Ethyl alcohol | 64-17-5 | | |
| Ethyl-3-ethoxy propionate | 763-69-9 | | |
| Ethylbenzene | 100-41-4 | 1.54 | 0.0 |
| Ethylene glycol | 107-21-1 | | |
| Hexane | 110-54-3 | | |
| Isobutyl acetate | 110-19-0 | | |
| Isobutyl alcohol | 78-83-1 | | |
| Isopropyl alcohol | 67-63-0 | | |
| Lead compounds | 0 | | |
| Magnesium silicate | 1343-90-4 | | |
| Methyl Alcohol | 67-56-1 | | |
| Methoxyethanol, 2- | 109-86-4 | | |
| Methyl chloroform | 71-55-6 | | |
| Methyl ethyl ketone | 78-93-3 | | |
| Methyl isobutyl ketone | 108-10-1 | | |
| Methylene chloride | 75-09-2 | | |
| Phenol | 108-95-2 | | |
| Phenylmercuric acetate | 62-38-4 | | |
| Propane | 74-98-6 | | |
| Propyl acetate | 109-60-4 | | |
| Propylene glycol monomethyl ether | 107-98-2 | | |
| Tetrachloroethylene | 127-18-4 | | |
| Titanium dioxide | 13463-67-7 | | |
| Toluene | 108-88-3 | 22.09 | 0.2 |
| Toluene-diisocyanate -2,4 | 584-84-9 | | |
| Xylene | 1330-20-7 | 3.07 | 0.0 |
| Zinc compounds | 0 | | |
| * New York State HAP | | HAP Total = | 0.36 Lbs/yr |
| | | HAP Content = | 3.77 lbs/gal |

**Emissions For Painting and Surface Coating Operations
Federal and New York State Regulations**

Name: Seneca Army Depot
Bldg #: 612 (Ammo Maintenance)
SCC: 4-02-999-95

Date: 8/29/94
Initials: GRM

General Comments: This template should only be used for spray paints, brush applications of paint, and spray booth operations. The use of this template is not intended for process applications of paint such as assembly lines in manufacturing plants, and other major coating operations. AP-42 or other comparable documents should be consulted to determine emissions associated with these processes.

Product/Material Information

Product: So-Sure Lacquer - Flat Black
NSN: 8010-00-582-5382

Note: For annual usage, only fill the boxes for EITHER a, b, OR c and leave other boxes blank

Annual Usage: a) cans/yr at fl.oz/can= 0.000 gal/yr
OR b) cans/yr at wt.oz/can= 0.750 lb/yr
OR c) gal/yr

Specific Gravity: 0.905

Notes:

VOC composition: 85.82 (%MSDS/Manuf.)
85.82 (%corrected for water and non-photochemical reactants.)
expressed as : A A = % by weight
B = % by volume

Notes:

Comment: "A" and "B" refer to the percentage of the material which contains VOCs. This is expressed as a percentage of total volume, (i.e. gallons) or of total weight (i.e. pounds). When available, percent by weight should take precedence. Make sure to subtract the percentage of non-photochemically reactive VOCs and water, if any.

Paint Application Method: A A = spray application (spray can or gun)
B = brush application

Spray Booth Filter Efficiency = 0.00 % (enter "0" if no filter is present)
(ex: dry filter = 60%, waterfall type = 85%)

Comment: Filter efficiencies vary dependant on the filter type and materials used as the filtering media. Standard dry filters, which are common at Army installations, are assumed to have a consistant 60% removal efficiency under normal operating conditions. However, consult the manufacturer if there is any uncertainty as to the removal efficiency for a particular type of spray booth.

Paint Pigment Composition = 14.18 %

Comment: Pigment composition is derived from the leftover percentage of material in the paint that is not volatile (i.e., if the total VOC component makes up 80%, then the leftover 20% is assumed to be pigment).

Emissions Summary

| Annual VOC Emissions | | |
|------------------------------------|--------------------|---------------------|
| Annual usage converted to weight = | <u>0.750</u> | Lbs/yr |
| VOC Emissions = | <u>0.644</u> Lb/yr | <u>0.000</u> Ton/yr |

| Ozone Season VOC Emissions | | |
|---------------------------------------|--------------|-------------|
| Ozone Season Usage = | <u>0.188</u> | Lbs |
| Daily Ozone Season Usage = | <u>0.002</u> | Lbs/day |
| Ozone Season VOC Emissions = | <u>0.161</u> | Lbs |
| Daily Ozone Season VOC Emissions = | <u>0.002</u> | Lbs/day |
| Ozone Season Work Day VOC Emissions = | <u>0.002</u> | Lbs/wrk day |

| Annual Particulate Matter Emissions | | |
|-------------------------------------|---------------------|---------------------|
| TSP Emissions = | <u>0.053</u> Lbs/yr | <u>0.000</u> Ton/yr |
| PM10 Emissions = | <u>0.025</u> Lbs/yr | <u>0.000</u> Ton/yr |

HAP Emissions: Estimation of HAP emissions are broken into two categories. The first, on the following page, lists common HAPs associated with painting and surface coating. Enter the composition of each HAP in the columns provided for those HAPs listed. If the HAP is not listed, then enter the name of the HAP and %composition in the spaces below.

| HAP Name | CAS No | (% Composition) | Emissions (Lbs/yr) |
|----------|--------|-----------------|--------------------|
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HAP Subtotal = 0.0 Lbs/yr

* New York State HAP

| HAP Emissions | | | |
|-----------------------------------|------------|-----------------|--------------------|
| HAP Name | CAS # | (% Composition) | Emissions (Lbs/yr) |
| Acetone* | 67-64-1 | 24.87 | 0.2 |
| Barium compounds | 0 | | |
| Benzene | 71-43-2 | | |
| Butoxy ethanol, 2- | 111-76-2 | | |
| Butyl acetate | 123-86-4 | | |
| Butyl alcohol, n-* | 71-36-3 | | |
| Calcium carbonate | 1317-65-3 | | |
| Carbon black | 13333-86-4 | | |
| Chromium compounds | 0 | | |
| Cobalt compounds | 0 | | |
| Cumene | 98-82-8 | | |
| Dichlorodifluoromethane | 75-71-8 | | |
| Ethoxyethyl acetate, 2- | 111-15-9 | | |
| Ethyl acetate | 141-78-6 | | |
| Ethyl alcohol | 64-17-5 | | |
| Ethyl-3-ethoxy propionate | 763-69-9 | | |
| Ethylbenzene | 100-41-4 | | |
| Ethylene glycol | 107-21-1 | | |
| Hexane | 110-54-3 | | |
| Isobutyl acetate | 110-19-0 | | |
| Isobutyl alcohol | 78-83-1 | | |
| Isopropyl alcohol | 67-63-0 | | |
| Lead compounds | 0 | | |
| Magnesium silicate | 1343-90-4 | | |
| Methyl Alcohol | 67-56-1 | | |
| Methoxyethanol, 2- | 109-86-4 | | |
| Methyl chloroform | 71-55-6 | | |
| Methyl ethyl ketone | 78-93-3 | 3.64 | 0.0 |
| Methyl isobutyl ketone | 108-10-1 | | |
| Methylene chloride | 75-09-2 | | |
| Phenol | 108-95-2 | | |
| Phenylmercuric acetate | 62-38-4 | | |
| Propane | 74-98-6 | | |
| Propyl acetate | 109-60-4 | | |
| Propylene glycol monomethyl ether | 107-98-2 | | |
| Tetrachloroethylene | 127-18-4 | | |
| Titanium dioxide | 13463-67-7 | | |
| Toluene | 108-88-3 | 28.32 | 0.2 |
| Toluene-diisocyanate -2,4 | 584-84-9 | | |
| Xylene | 1330-20-7 | 1.21 | 0.0 |
| Zinc compounds | 0 | | |
| * New York State HAP | | HAP Total = | 0.44 Lbs/yr |
| | | HAP Content = | 4.37 lbs/gal |

**Emissions For Painting and Surface Coating Operations
Federal and New York State Regulations**

Name: Seneca Army Depot
Bldg #: 612 (Ammo Maintenance)
SCC: 4-02-999-95

Date: 8/29/94
Initials: GRM

General Comments: This template should only be used for spray paints, brush applications of paint, and spray booth operations. The use of this template is not intended for process applications of paint such as assembly lines in manufacturing plants, and other major coating operations. AP-42 or other comparable documents should be consulted to determine emissions associated with these processes.

Product/Material Information

Product: Marsh Spray Stencil Ink
NSN: 7510-00-183-7698

Note: For annual usage, only fill the boxes for EITHER a, b, OR c and leave other boxes blank

Annual Usage: a) cans/yr at fl.oz/can= 0.000 gal/yr
OR b) cans/yr at wt.oz/can= 0.750 lb/yr
OR c) gal/yr

Specific Gravity: 0.780

Notes:

VOC composition: 94.00 (%MSDS/Manuf.)
94.00 (%corrected for water and non-photochemical reactants.)
expressed as : A A = % by weight
B = % by volume

Notes:

Comment: "A" and "B" refer to the percentage of the material which contains VOCs. This is expressed as a percentage of total volume, (i.e. gallons) or of total weight (i.e. pounds). When available, percent by weight should take precedence. Make sure to subtract the percentage of non-photochemically reactive VOCs and water, if any.

Paint Application Method: A A = spray application (spray can or gun)
B = brush application

Spray Booth Filter Efficiency = 0.00 % (enter "0" if no filter is present)
(ex: dry filter = 60%, waterfall type = 85%)

Comment: Filter efficiencies vary dependant on the filter type and materials used as the filtering media. Standard dry filters, which are common at Army installations, are assumed to have a consistant 60% removal efficiency under normal operating conditions. However, consult the manufacturer if there is any uncertainty as to the removal efficiency for a particular type of spray booth.

Paint Pigment Composition = 6.00 %

Comment: Pigment composition is derived from the leftover percentage of material in the paint that is not volatile (i.e., if the total VOC component makes up 80%, then the leftover 20% is assumed to be pigment).

Emissions Summary

| Annual VOC Emissions | | |
|------------------------------------|--------------------|---------------------|
| Annual usage converted to weight = | <u>0.750</u> | Lbs/yr |
| VOC Emissions = | <u>0.705</u> Lb/yr | <u>0.000</u> Ton/yr |

| Ozone Season VOC Emissions | | |
|---------------------------------------|--------------|-------------|
| Ozone Season Usage = | <u>0.188</u> | Lbs |
| Daily Ozone Season Usage = | <u>0.002</u> | Lbs/day |
| Ozone Season VOC Emissions = | <u>0.176</u> | Lbs |
| Daily Ozone Season VOC Emissions = | <u>0.002</u> | Lbs/day |
| Ozone Season Work Day VOC Emissions = | <u>0.003</u> | Lbs/wrk day |

| Annual Particulate Matter Emissions | | |
|-------------------------------------|---------------------|---------------------|
| TSP Emissions = | <u>0.023</u> Lbs/yr | <u>0.000</u> Ton/yr |
| PM10 Emissions = | <u>0.011</u> Lbs/yr | <u>0.000</u> Ton/yr |

HAP Emissions: Estimation of HAP emissions are broken into two categories. The first, on the following page, lists common HAPs associated with painting and surface coating. Enter the composition of each HAP in the columns provided for those HAPs listed. If the HAP is not listed, then enter the name of the HAP and %composition in the spaces below.

| HAP Name | CAS No | (% Composition) | Emissions (Lbs/yr) |
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HAP Subtotal = 0.0 Lbs/yr

* New York State HAP

| HAP Emissions | | | |
|-----------------------------------|------------|-----------------|-----------------------|
| HAP Name | CAS # | (% Composition) | Emissions (Lbs/yr) |
| Acetone* | 67-64-1 | 40 | 0.3 |
| Barium compounds | 0 | | |
| Benzene | 71-43-2 | | |
| Butoxy ethanol, 2- | 111-76-2 | | |
| Butyl acetate | 123-86-4 | | |
| Butyl alcohol, n-* | 71-36-3 | | |
| Calcium carbonate | 1317-65-3 | | |
| Carbon black | 13333-86-4 | | |
| Chromium compounds | 0 | | |
| Cobalt compounds | 0 | | |
| Cumene | 98-82-8 | | |
| Dichlorodifluoromethane | 75-71-8 | | |
| Ethoxyethyl acetate, 2- | 111-15-9 | | |
| Ethyl acetate | 141-78-6 | | |
| Ethyl alcohol | 64-17-5 | | |
| Ethyl-3-ethoxy propionate | 763-69-9 | | |
| Ethylbenzene | 100-41-4 | | |
| Ethylene glycol | 107-21-1 | | |
| Hexane | 110-54-3 | | |
| Isobutyl acetate | 110-19-0 | | |
| Isobutyl alcohol | 78-83-1 | | |
| Isopropyl alcohol | 67-63-0 | | |
| Lead compounds | 0 | | |
| Magnesium silicate | 1343-90-4 | | |
| Methyl Alcohol | 67-56-1 | | |
| Methoxyethanol, 2- | 109-86-4 | | |
| Methyl chloroform | 71-55-6 | | |
| Methyl ethyl ketone | 78-93-3 | | |
| Methyl isobutyl ketone | 108-10-1 | | |
| Methylene chloride | 75-09-2 | | |
| Phenol | 108-95-2 | | |
| Phenylmercuric acetate | 62-38-4 | | |
| Propane | 74-98-6 | | |
| Propyl acetate | 109-60-4 | | |
| Propylene glycol monomethyl ether | 107-98-2 | | |
| Tetrachloroethylene | 127-18-4 | | |
| Titanium dioxide | 13463-67-7 | | |
| Toluene | 108-88-3 | 30 | 0.2 |
| Toluene-diisocyanate -2,4 | 584-84-9 | | |
| Xylene | 1330-20-7 | | |
| Zinc compounds | 0 | | |
| * New York State HAP | | HAP Total = | 0.53 Lbs/yr |
| | | HAP Content = | 4.54 lbs/gal |

**Emissions For Painting and Surface Coating Operations
Federal and New York State Regulations**

Name: Seneca Army Depot
Bldg #: 612 (Ammo Maintenance)
SCC: 4-02-999-95

Date: 8/29/94
Initials: GRM

General Comments: This template should only be used for spray paints, brush applications of paint, and spray booth operations. The use of this template is not intended for process applications of paint such as assembly lines in manufacturing plants, and other major coating operations. AP-42 or other comparable documents should be consulted to determine emissions associated with these processes.

Product/Material Information

Product: Diagraph Stencil Ink - Roller Ink
NSN: 7510-00-N03-3637

Note: For annual usage, only fill the boxes for EITHER a, b, OR c and leave other boxes blank

Annual Usage: a) cans/yr at fl.oz/can= 0.000 gal/yr
OR b) cans/yr at wt.oz/can= 0.000 lb/yr
OR c) 24.000 gal/yr

Specific Gravity: 0.920

Notes:

VOC composition: 91.60 (%MSDS/Manuf.)
91.60 (%corrected for water and non-photochemical reactants.)
expressed as : A A = % by weight
B = % by volume

Notes:

Comment: "A" and "B" refer to the percentage of the material which contains VOCs. This is expressed as a percentage of total volume, (i.e. gallons) or of total weight (i.e. pounds). When available, percent by weight should take precedence. Make sure to subtract the percentage of non-photochemically reactive VOCs and water, if any.

Paint Application Method: B A = spray application (spray can or gun)
B = brush application

Spray Booth Filter Efficiency = 0.00 % (enter "0" if no filter is present)
(ex: dry filter = 60%, waterfall type = 85%)

Comment: Filter efficiencies vary dependant on the filter type and materials used as the filtering media. Standard dry filters, which are common at Army installations, are assumed to have a consistant 60% removal efficiency under normal operating conditions. However, consult the manufacturer if there is any uncertainty as to the removal efficiency for a particular type of spray booth.

Paint Pigment Composition = 8.40 %

Comment: Pigment composition is derived from the leftover percentage of material in the paint that is not volatile (i.e., if the total VOC component makes up 80%, then the leftover 20% is assumed to be pigment).

Emissions Summary

| Annual VOC Emissions | | |
|------------------------------------|---------|--------|
| Annual usage converted to weight = | 183.684 | Lbs/yr |
| VOC Emissions = | 168.254 | Lb/yr |
| | 0.084 | Ton/yr |

| Ozone Season VOC Emissions | | |
|---------------------------------------|--------|-------------|
| Ozone Season Usage = | 45.921 | Lbs |
| Daily Ozone Season Usage = | 0.499 | Lbs/day |
| Ozone Season VOC Emissions = | 42.064 | Lbs |
| Daily Ozone Season VOC Emissions = | 0.457 | Lbs/day |
| Ozone Season Work Day VOC Emissions = | 0.640 | Lbs/wrk day |

| Annual Particulate Matter Emissions | | |
|-------------------------------------|-------|--------|
| TSP Emissions = | 0.000 | Lbs/yr |
| | 0.000 | Ton/yr |
| PM10 Emissions = | 0.000 | Lbs/yr |
| | 0.000 | Ton/yr |

HAP Emissions: Estimation of HAP emissions are broken into two categories. The first, on the following page, lists common HAPs associated with painting and surface coating. Enter the composition of each HAP in the columns provided for those HAPs listed. If the HAP is not listed, then enter the name of the HAP and %composition in the spaces below.

| HAP Name | CAS No | (% Composition) | Emissions (Lbs/yr) |
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HAP Subtotal = 0.0 Lbs/yr

* New York State HAP

| HAP Emissions | | | |
|-----------------------------------|--------------|------------------------|-------------------------------|
| HAP Name | CAS # | (% Composition) | Emissions (Lbs/yr) |
| Acetone* | 67-64-1 | 40 | 73.5 |
| Barium compounds | 0 | | |
| Benzene | 71-43-2 | | |
| Butoxy ethanol, 2- | 111-76-2 | | |
| Butyl acetate | 123-86-4 | | |
| Butyl alcohol, n-* | 71-36-3 | | |
| Calcium carbonate | 1317-65-3 | | |
| Carbon black | 13333-86-4 | | |
| Chromium compounds | 0 | | |
| Cobalt compounds | 0 | | |
| Cumene | 98-82-8 | | |
| Dichlorodifluoromethane | 75-71-8 | | |
| Ethoxyethyl acetate, 2- | 111-15-9 | | |
| Ethyl acetate | 141-78-6 | | |
| Ethyl alcohol | 64-17-5 | | |
| Ethyl-3-ethoxy propionate | 763-69-9 | | |
| Ethylbenzene | 100-41-4 | | |
| Ethylene glycol | 107-21-1 | | |
| Hexane | 110-54-3 | | |
| Isobutyl acetate | 110-19-0 | | |
| Isobutyl alcohol | 78-83-1 | | |
| Isopropyl alcohol | 67-63-0 | | |
| Lead compounds | 0 | | |
| Magnesium silicate | 1343-90-4 | | |
| Methyl Alcohol | 67-56-1 | | |
| Methoxyethanol, 2- | 109-86-4 | | |
| Methyl chloroform | 71-55-6 | | |
| Methyl ethyl ketone | 78-93-3 | | |
| Methyl isobutyl ketone | 108-10-1 | | |
| Methylene chloride | 75-09-2 | | |
| Phenol | 108-95-2 | | |
| Phenylmercuric acetate | 62-38-4 | | |
| Propane | 74-98-6 | | |
| Propyl acetate | 109-60-4 | | |
| Propylene glycol monomethyl ether | 107-98-2 | | |
| Tetrachloroethylene | 127-18-4 | | |
| Titanium dioxide | 13463-67-7 | | |
| Toluene | 108-88-3 | 10 | 18.4 |
| Toluene-diisocyanate -2,4 | 584-84-9 | | |
| Xylene | 1330-20-7 | | |
| Zinc compounds | 0 | | |
| * New York State HAP | | HAP Total = | 91.84 Lbs/yr |
| | | HAP Content = | 3.83 lbs/gal |

**Emissions For Painting and Surface Coating Operations
Federal and New York State Regulations**

Name: Seneca Army Depot
Bldg #: 612 (Ammo Maintenance)
SCC: 4-02-999-95

Date: 8/29/94
Initials: GRM

General Comments: This template should only be used for spray paints, brush applications of paint, and spray booth operations. The use of this template is not intended for process applications of paint such as assembly lines in manufacturing plants, and other major coating operations. AP-42 or other comparable documents should be consulted to determine emissions associated with these processes.

Product/Material Information

Product: So-Sure Brown Obliterating Compound
NSN: 8010-00-582-4743

Note: For annual usage, only fill the boxes for EITHER a, b, OR c and leave other boxes blank

Annual Usage: a) cans/yr at fl.oz/can= 0.000 gal/yr
OR b) cans/yr at wt.oz/can= 3.000 lb/yr
OR c) gal/yr

Specific Gravity: 1.067

Notes:

VOC composition: 80.32 (%MSDS/Manuf.)
80.32 (%corrected for water and non-photochemical reactants.)
expressed as : A A = % by weight
B = % by volume

Notes:

Comment: "A" and "B" refer to the percentage of the material which contains VOCs. This is expressed as a percentage of total volume, (i.e. gallons) or of total weight (i.e. pounds). When available, percent by weight should take precedence. Make sure to subtract the percentage of non-photochemically reactive VOCs and water, if any.

Paint Application Method: A A = spray application (spray can or gun)
B = brush application

Spray Booth Filter Efficiency = 0.00 % (enter "0" if no filter is present)
(ex: dry filter = 60%, waterfall type = 85%)

Comment: Filter efficiencies vary dependant on the filter type and materials used as the filtering media. Standard dry filters, which are common at Army installations, are assumed to have a consistant 60% removal efficiency under normal operating conditions. However, consult the manufacturer if there is any uncertainty as to the removal efficiency for a particular type of spray booth.

Paint Pigment Composition = 19.68 %

Comment: Pigment composition is derived from the leftover percentage of material in the paint that is not volatile (i.e., if the total VOC component makes up 80%, then the leftover 20% is assumed to be pigment).

Emissions Summary

| Annual VOC Emissions | | |
|------------------------------------|-------|--------|
| Annual usage converted to weight = | 3.000 | Lbs/yr |
| VOC Emissions = | 2.410 | Lb/yr |
| | 0.001 | Ton/yr |

| Ozone Season VOC Emissions | | |
|---------------------------------------|-------|-------------|
| Ozone Season Usage = | 0.750 | Lbs |
| Daily Ozone Season Usage = | 0.008 | Lbs/day |
| Ozone Season VOC Emissions = | 0.602 | Lbs |
| Daily Ozone Season VOC Emissions = | 0.007 | Lbs/day |
| Ozone Season Work Day VOC Emissions = | 0.009 | Lbs/wrk day |

| Annual Particulate Matter Emissions | | |
|-------------------------------------|-------|--------|
| TSP Emissions = | 0.295 | Lbs/yr |
| | 0.000 | Ton/yr |
| PM10 Emissions = | 0.138 | Lbs/yr |
| | 0.000 | Ton/yr |

HAP Emissions: Estimation of HAP emissions are broken into two categories. The first, on the following page, lists common HAPs associated with painting and surface coating. Enter the composition of each HAP in the columns provided for those HAPs listed. If the HAP is not listed, then enter the name of the HAP and %composition in the spaces below.

| HAP Name | CAS No | (% Composition) | Emissions (Lbs/yr) |
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HAP Subtotal = 0.0 Lbs/yr

* New York State HAP

| HAP Emissions | | | |
|-----------------------------------|------------|-----------------|-----------------------|
| HAP Name | CAS # | (% Composition) | Emissions (Lbs/yr) |
| Acetone* | 67-64-1 | 4.69 | 0.1 |
| Barium compounds | 0 | | |
| Benzene | 71-43-2 | | |
| Butoxy ethanol, 2- | 111-76-2 | | |
| Butyl acetate | 123-86-4 | | |
| Butyl alcohol, n-* | 71-36-3 | | |
| Calcium carbonate | 1317-65-3 | | |
| Carbon black | 13333-86-4 | | |
| Chromium compounds | 0 | | |
| Cobalt compounds | 0 | | |
| Cumene | 98-82-8 | | |
| Dichlorodifluoromethane | 75-71-8 | | |
| Ethoxyethyl acetate, 2- | 111-15-9 | | |
| Ethyl acetate | 141-78-6 | | |
| Ethyl alcohol* | 64-17-5 | | |
| Ethyl-3-ethoxy propionate | 763-69-9 | | |
| Ethylbenzene | 100-41-4 | | |
| Ethylene glycol | 107-21-1 | | |
| Hexane | 110-54-3 | | |
| Isobutyl acetate | 110-19-0 | | |
| Isobutyl alcohol | 78-83-1 | | |
| Isopropyl alcohol | 67-63-0 | | |
| Lead compounds | 0 | | |
| Magnesium silicate | 1343-90-4 | | |
| Methyl Alcohol | 67-56-1 | | |
| Methoxyethanol, 2- | 109-86-4 | | |
| Methyl chloroform | 71-55-6 | | |
| Methyl ethyl ketone | 78-93-3 | | |
| Methyl isobutyl ketone | 108-10-1 | | |
| Methylene chloride | 75-09-2 | | |
| Phenol | 108-95-2 | | |
| Phenylmercuric acetate | 62-38-4 | | |
| Propane | 74-98-6 | | |
| Propyl acetate | 109-60-4 | | |
| Propylene glycol monomethyl ether | 107-98-2 | | |
| Tetrachloroethylene | 127-18-4 | | |
| Titanium dioxide | 13463-67-7 | | |
| Toluene | 108-88-3 | 33.44 | 1.0 |
| Toluene-diisocyanate -2,4 | 584-84-9 | | |
| Xylene | 1330-20-7 | | |
| Zinc compounds | 0 | | |
| * New York State HAP | | HAP Total = | 1.14 Lbs/yr |
| | | HAP Content = | 3.38 lbs/gal |

**Emissions For Painting and Surface Coating Operations
Federal and New York State Regulations**

Name: Seneca Army Depot
 Bldg #: 612 (Ammo Maintenance)
 SCC: 4-02-999-95

Date: 8/29/94
 Initials: GRM

General Comments: This template should only be used for spray paints, brush applications of paint, and spray booth operations. The use of this template is not intended for process applications of paint such as assembly lines in manufacturing plants, and other major coating operations. AP-42 or other comparable documents should be consulted to determine emissions associated with these processes.

Product/Material Information

Product: So-Sure Lacquer - Yellow
 NSN: 8010-00-141-2950

Note: For annual usage, only fill the boxes for EITHER a, b, OR c and leave other boxes blank

Annual Usage: a) cans/yr at fl.oz/can= 0.000 gal/yr
 OR b) cans/yr at wt.oz/can= 0.750 lb/yr
 OR c) gal/yr

Specific Gravity: 0.938

Notes:

VOC composition: 84.21 (%MSDS/Manuf.)
84.21 (%corrected for water and non-photochemical reactants.)
 expressed as : A A = % by weight
 B = % by volume

Notes:

Comment: "A" and "B" refer to the percentage of the material which contains VOCs. This is expressed as a percentage of total volume, (i.e. gallons) or of total weight (i.e. pounds). When available, percent by weight should take precedence. Make sure to subtract the percentage of non-photochemically reactive VOCs and water, if any.

Paint Application Method: A A = spray application (spray can or gun)
 B = brush application

Spray Booth Filter Efficiency = 0.00 % (enter "0" if no filter is present)
 (ex: dry filter = 60%, waterfall type = 85%)

Comment: Filter efficiencies vary dependant on the filter type and materials used as the filtering media. Standard dry filters, which are common at Army installations, are assumed to have a consistant 60% removal efficiency under normal operating conditions. However, consult the manufacturer if there is any uncertainty as to the removal efficiency for a particular type of spray booth.

Paint Pigment Composition = 15.79 %

Comment: Pigment composition is derived from the leftover percentage of material in the paint that is not volatile (i.e., if the total VOC component makes up 80%, then the leftover 20% is assumed to be pigment).

Emissions Summary

| Annual VOC Emissions | | |
|------------------------------------|--------------------|---------------------|
| Annual usage converted to weight = | <u>0.750</u> | Lbs/yr |
| VOC Emissions = | <u>0.632</u> Lb/yr | <u>0.000</u> Ton/yr |

| Ozone Season VOC Emissions | | |
|---------------------------------------|--------------|-------------|
| Ozone Season Usage = | <u>0.188</u> | Lbs |
| Daily Ozone Season Usage = | <u>0.002</u> | Lbs/day |
| Ozone Season VOC Emissions = | <u>0.158</u> | Lbs |
| Daily Ozone Season VOC Emissions = | <u>0.002</u> | Lbs/day |
| Ozone Season Work Day VOC Emissions = | <u>0.002</u> | Lbs/wrk day |

| Annual Particulate Matter Emissions | | |
|-------------------------------------|---------------------|---------------------|
| TSP Emissions = | <u>0.059</u> Lbs/yr | <u>0.000</u> Ton/yr |
| PM10 Emissions = | <u>0.028</u> Lbs/yr | <u>0.000</u> Ton/yr |

HAP Emissions: Estimation of HAP emissions are broken into two categories. The first, on the following page, lists common HAPs associated with painting and surface coating. Enter the composition of each HAP in the columns provided for those HAPs listed. If the HAP is not listed, then enter the name of the HAP and %composition in the spaces below.

| HAP Name | CAS No | (% Composition) | Emissions (Lbs/yr) |
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HAP Subtotal = 0.0 Lbs/yr

* New York State HAP

| HAP Emissions | | | |
|-----------------------------------|------------|-----------------|-----------------------|
| HAP Name | CAS # | (% Composition) | Emissions (Lbs/yr) |
| Acetone* | 67-64-1 | 20.45 | 0.2 |
| Barium compounds | 0 | | |
| Benzene | 71-43-2 | | |
| Butoxy ethanol, 2- | 111-76-2 | | |
| Butyl acetate | 123-86-4 | | |
| Butyl alcohol, n-* | 71-36-3 | | |
| Calcium carbonate | 1317-65-3 | | |
| Carbon black | 13333-86-4 | | |
| Chromium compounds | 0 | | |
| Cobalt compounds | 0 | | |
| Cumene | 98-82-8 | | |
| Dichlorodifluoromethane | 75-71-8 | | |
| Ethoxyethyl acetate, 2- | 111-15-9 | | |
| Ethyl acetate | 141-78-6 | | |
| Ethyl alcohol | 64-17-5 | | |
| Ethyl-3-ethoxy propionate | 763-69-9 | | |
| Ethylbenzene | 100-41-4 | 1.58 | 0.0 |
| Ethylene glycol | 107-21-1 | | |
| Hexane | 110-54-3 | | |
| Isobutyl acetate | 110-19-0 | | |
| Isobutyl alcohol | 78-83-1 | | |
| Isopropyl alcohol | 67-63-0 | | |
| Lead compounds | 0 | | |
| Magnesium silicate | 1343-90-4 | | |
| Methyl Alcohol | 67-56-1 | | |
| Methoxyethanol, 2- | 109-86-4 | | |
| Methyl chloroform | 71-55-6 | | |
| Methyl ethyl ketone | 78-93-3 | | |
| Methyl isobutyl ketone | 108-10-1 | | |
| Methylene chloride | 75-09-2 | | |
| Phenol | 108-95-2 | | |
| Phenylmercuric acetate | 62-38-4 | | |
| Propane | 74-98-6 | | |
| Propyl acetate | 109-60-4 | | |
| Propylene glycol monomethyl ether | 107-98-2 | | |
| Tetrachloroethylene | 127-18-4 | | |
| Titanium dioxide | 13463-67-7 | | |
| Toluene | 108-88-3 | 23.71 | 0.2 |
| Toluene-diisocyanate -2,4 | 584-84-9 | | |
| Xylene | 1330-20-7 | 3.16 | 0.0 |
| Zinc compounds | 0 | | |
| * New York State HAP | | HAP Total = | 0.37 Lbs/yr |
| | | HAP Content = | 3.82 lbs/gal |

**Emissions For Painting and Surface Coating Operations
Federal and New York State Regulations**

Name: Seneca Army Depot
Bldg #: 612 (Ammo Maintenance)
SCC: 4-02-999-95

Date: 8/29/94
Initials: GRM

General Comments: This template should only be used for spray paints, brush applications of paint, and spray booth operations. The use of this template is not intended for process applications of paint such as assembly lines in manufacturing plants, and other major coating operations. AP-42 or other comparable documents should be consulted to determine emissions associated with these processes.

Product/Material Information

Product: Olive Drab Enamel
NSN: 8010-00-848-9272

Note: For annual usage, only fill the boxes for EITHER a, b, OR c and leave other boxes blank

Annual Usage: a) cans/yr at fl.oz/can= 0.000 gal/yr
OR b) cans/yr at wt.oz/can= 0.000 lb/yr
OR c) 10.000 gal/yr

Specific Gravity: 1.418

Notes:

VOC composition: 39.50 (%MSDS/Manuf.)
39.50 (%corrected for water and non-photochemical reactants.)
expressed as : A A = % by weight
B = % by volume

Notes:

Comment: "A" and "B" refer to the percentage of the material which contains VOCs. This is expressed as a percentage of total volume, (i.e. gallons) or of total weight (i.e. pounds). When available, percent by weight should take precedence. Make sure to subtract the percentage of non-photochemically reactive VOCs and water, if any.

Paint Application Method: B A = spray application (spray can or gun)
B = brush application

Spray Booth Filter Efficiency = 0.00 % (enter "0" if no filter is present)
(ex: dry filter = 60%, waterfall type = 85%)

Comment: Filter efficiencies vary dependant on the filter type and materials used as the filtering media. Standard dry filters, which are common at Army installations, are assumed to have a consistant 60% removal efficiency under normal operating conditions. However, consult the manufacturer if there is any uncertainty as to the removal efficiency for a particular type of spray booth.

Paint Pigment Composition = 60.50 %

Comment: Pigment composition is derived from the leftover percentage of material in the paint that is not volatile (i.e., if the total VOC component makes up 80%, then the leftover 20% is assumed to be pigment).

Emissions Summary

| Annual VOC Emissions | | |
|------------------------------------|---------------------|---------------------|
| Annual usage converted to weight = | <u>117.963</u> | Lbs/yr |
| VOC Emissions = | <u>46.596</u> Lb/yr | <u>0.023</u> Ton/yr |

| Ozone Season VOC Emissions | | |
|---------------------------------------|---------------|-------------|
| Ozone Season Usage = | <u>29.491</u> | Lbs |
| Daily Ozone Season Usage = | <u>0.321</u> | Lbs/day |
| Ozone Season VOC Emissions = | <u>11.649</u> | Lbs |
| Daily Ozone Season VOC Emissions = | <u>0.127</u> | Lbs/day |
| Ozone Season Work Day VOC Emissions = | <u>0.177</u> | Lbs/wrk day |

| Annual Particulate Matter Emissions | | |
|-------------------------------------|---------------------|---------------------|
| TSP Emissions = | <u>0.000</u> Lbs/yr | <u>0.000</u> Ton/yr |
| PM10 Emissions = | <u>0.000</u> Lbs/yr | <u>0.000</u> Ton/yr |

HAP Emissions: Estimation of HAP emissions are broken into two categories. The first, on the following page, lists common HAPs associated with painting and surface coating. Enter the composition of each HAP in the columns provided for those HAPs listed. If the HAP is not listed, then enter the name of the HAP and %composition in the spaces below.

| HAP Name | CAS No | (% Composition) | Emissions (Lbs/yr) |
|----------------|--------|-----------------|--------------------|
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| HAP Subtotal = | | | <u>0.0</u> Lbs/yr |

* New York State HAP

| HAP Emissions | | | |
|-----------------------------------|------------|-----------------|-----------------------|
| HAP Name | CAS # | (% Composition) | Emissions (Lbs/yr) |
| Acetone* | 67-64-1 | | |
| Barium compounds | 0 | | |
| Benzene | 71-43-2 | | |
| Butoxy ethanol, 2- | 111-76-2 | | |
| Butyl acetate | 123-86-4 | | |
| Butyl alcohol, n-* | 71-36-3 | | |
| Calcium carbonate | 1317-65-3 | | |
| Carbon black | 13333-86-4 | | |
| Chromium compounds | 0 | | |
| Cobalt compounds | 0 | | |
| Cumene | 98-82-8 | | |
| Dichlorodifluoromethane | 75-71-8 | | |
| Ethoxyethyl acetate, 2- | 111-15-9 | | |
| Ethyl acetate | 141-78-6 | | |
| Ethyl alcohol* | 64-17-5 | | |
| Ethyl-3-ethoxy propionate | 763-69-9 | | |
| Ethylbenzene | 100-41-4 | | |
| Ethylene glycol | 107-21-1 | | |
| Hexane | 110-54-3 | | |
| Isobutyl acetate | 110-19-0 | | |
| Isobutyl alcohol | 78-83-1 | | |
| Isopropyl alcohol | 67-63-0 | | |
| Lead compounds | 0 | | |
| Magnesium silicate | 1343-90-4 | | |
| Methyl Alcohol | 67-56-1 | | |
| Methoxyethanol, 2- | 109-86-4 | | |
| Methyl chloroform | 71-55-6 | | |
| Methyl ethyl ketone | 78-93-3 | 5 | 5.9 |
| Methyl isobutyl ketone | 108-10-1 | | |
| Methylene chloride | 75-09-2 | | |
| Phenol | 108-95-2 | | |
| Phenylmercuric acetate | 62-38-4 | | |
| Propane | 74-98-6 | | |
| Propyl acetate | 109-60-4 | | |
| Propylene glycol monomethyl ether | 107-98-2 | | |
| Tetrachloroethylene | 127-18-4 | | |
| Titanium dioxide | 13463-67-7 | | |
| Toluene | 108-88-3 | 5 | 5.9 |
| Toluene-diisocyanate -2,4 | 584-84-9 | | |
| Xylene | 1330-20-7 | 5 | 5.9 |
| Zinc compounds | 0 | | |
| * New York State HAP | | HAP Total = | 17.69 Lbs/yr |
| | | HAP Content = | 1.77 lbs/gal |

**Surface Coating VOC Emissions
for Building Number 2073**

| NSN | Solvent | Use gal/yr | VOC Content (%) | VOC Emissions (lb/yr) | VOC Emissions (ton/yr) |
|------------------|-----------------------------------|-----------------------|----------------------------|----------------------------------|-----------------------------------|
| 8010-00-848-9272 | Olive Drab Enamel - Brush | 15.00 | 39.50 | 69.89 | 0.03 |
| 8010-00-584-3149 | So-Sure Lacquer - Olive Drab | 2.17 | 84.05 | 13.24 | 0.01 |
| 8010-00-582-4743 | So-Sure Sand Obliterating | 0.51 | 80.32 | 3.61 | <0.01 |
| 8010-00-584-3148 | So-Sure Lacquer - Orange | 0.10 | 80.85 | 0.61 | <0.01 |
| 8010-00-582-5382 | So-Sure Lacquer - Flat Black | 0.10 | 85.82 | 0.64 | <0.01 |
| 7510-00-183-7698 | Marsh Spray Stencil Ink | 0.12 | 94.00 | 0.71 | <0.01 |
| 8010-00-141-2950 | So-Sure Lacquer - Yellow | 0.10 | 84.21 | 0.63 | <0.01 |
| 7510-00-N03-3637 | Diagraph Stencil Ink - Roller Ink | 36.00 | 91.60 | 252.38 | 0.13 |

**Ozone Season Daily Surface Coating Emissions
for Building Number 2073**

| Pollutant | Emissions (lb) | Daily Emissions (lb) | Daily Emissions (tons) |
|------------------|---------------------------|---------------------------------|-----------------------------------|
| VOC | 341.71 | 0.93 | <0.01 |

**Painting Operations HAP Emissions
for Building Number 2073**

| NSN | Solvent | Use (gal/yr) | HAP Content (lbs/gal) | HAP Emissions (lb/yr) | HAP Emissions (ton/yr) |
|------------------|-----------------------------------|-------------------------|----------------------------------|----------------------------------|-----------------------------------|
| 8010-00-848-9272 | Olive Drab Enamel - Brush | 15.00 | 1.77 | 26.54 | 0.01 |
| 8010-00-584-3149 | So-Sure Lacquer - Olive Drab | 2.17 | 3.82 | 7.66 | <0.01 |
| 8010-00-582-4743 | So-Sure Sand Obliterating | 0.51 | 3.38 | 1.72 | <0.01 |
| 8010-00-584-3148 | So-Sure Lacquer - Orange | 0.10 | 3.77 | 0.36 | <0.01 |
| 8010-00-582-5382 | So-Sure Lacquer - Flat Black | 0.10 | 4.37 | 0.44 | <0.01 |
| 7510-00-183-7698 | Marsh Spray Stencil Ink | 0.12 | 4.54 | 0.53 | <0.01 |
| 8010-00-141-2950 | So-Sure Lacquer - Yellow | 0.10 | 3.82 | 0.37 | <0.01 |
| 7510-00-N03-3637 | Diagraph Stencil Ink - Roller Ink | 36.00 | 3.83 | 137.76 | 0.07 |

**Painting Operations HAP Emissions
for Building Number 2073**

| NSN | Solvent | Use (gal/yr) | HAP Toluene (%) | HAP Xylene (%) | HAP MEK (%) | HAP Acetone' (%) |
|------------------|-----------------------------------|-------------------------|--------------------------------|-------------------------------|----------------------------|---------------------------------|
| 8010-00-848-9272 | Olive Drab Enamel - Brush | 15.00 | 5.00 | 5.00 | 5.00 | |
| 8010-00-584-3149 | So-Sure Lacquer - Olive Drab | 2.17 | 26.76 | 1.60 | | 17.09 |
| 8010-00-582-4743 | So-Sure Sand Obliterating | 0.51 | 33.41 | | | 4.69 |
| 8010-00-584-3148 | So-Sure Lacquer - Orange | 0.10 | 22.09 | 3.07 | | 21.31 |
| 8010-00-582-5382 | So-Sure Lacquer - Flat Black | 0.10 | 28.32 | 1.21 | 3.64 | 24.87 |
| 7510-00-183-7698 | Marsh Spray Stencil Ink | 0.12 | 30.00 | | | 40.00 |
| 8010-00-141-2950 | So-Sure Lacquer - Yellow | 0.10 | 23.71 | 3.16 | | 20.45 |
| 7510-00-N03-3637 | Diagraph Stencil Ink - Roller Ink | 36.00 | 10.00 | | | 40.00 |

| NSN | Solvent | Use (gal/yr) | HAP Ethylbenzene (%) | HAP n-Butyl Alcohol (%) |
|------------------|------------------------------|-------------------------|-------------------------------------|--|
| 8010-00-584-3149 | So-Sure Lacquer - Olive Drab | 2.17 | 1.60 | 1.60 |
| 8010-00-584-3148 | So-Sure Lacquer - Orange | 0.10 | 1.54 | |
| 8010-00-141-2950 | So-Sure Lacquer - Yellow | 0.10 | 1.58 | |

* New York State HAP

EMISSION RATE DETERMINATION METHOD

Stack Test Data _____ Emission Factor _____ Material Balance X

Similar Unit Data _____ Other _____ MSDS _____

Reference: _____

OZONE PRECURSOR EMISSIONS

Typical Ozone Season Emissions
 VOC Emissions 0.9285689071 lb/day
 NOx Emissions _____ lb/day
 CO Emissions _____ lb/day

HAZARDOUS AIR POLLUTANTS

| HAP | CAS CODE | LB/YR |
|---------------------|-----------|---------------|
| Toluene | 108-88-3 | 42.900184500 |
| Xylene | 1330-20-7 | 9.155056500 |
| Acetone* | 67-64-1 | 113.912562000 |
| Methyl Ethyl Ketone | 78-93-3 | 8.874556500 |
| N-Butyl Alcohol* | 71-36-3 | 0.252000000 |
| Ethylbenzene | 100-41-4 | 0.275400000 |

CRITERIA POLLUTANT EMISSIONS

VOC Emissions 0.1708566789 ton/yr
 NOx Emissions _____ ton/yr
 CO Emissions _____ ton/yr
 SO2 Emissions _____ ton/yr
 PM10 Emissions 0.0004449488 ton/yr
 Total Particulate 0.0009527813 ton/yr

* New York State HAP

STACK INFORMATION

| | |
|-----------------------------------|------------------------------------|
| Stack (release) Height _____ feet | Stack Gas Velocity _____ ft/sec |
| Stack Diameter _____ inch | Stack Gas Flow Rate _____ ascf/min |
| | Stack Gas Temperature _____ oF |

Other sources that share this stack? _____
 Stack Sampling Report Available? (Y/ N, results?) _____

**Emissions For Painting and Surface Coating Operations
Federal and New York State Regulations**

Name: Seneca Army Depot
Bldg #: 2073 (Ammo Maintenance)
SCC: 4-02-999-95

Date: 8/29/94
Initials: GRM

General Comments: This template should only be used for spray paints, brush applications of paint, and spray booth operations. The use of this template is not intended for process applications of paint such as assembly lines in manufacturing plants, and other major coating operations. AP-42 or other comparable documents should be consulted to determine emissions associated with these processes.

Product/Material Information

Product: Olive Drab Enamel
NSN: 8010-00-848-9272

Note: For annual usage, only fill the boxes for EITHER a, b, OR c and leave other boxes blank

Annual Usage: a) cans/yr at fl.oz/can= 0.000 gal/yr
OR b) cans/yr at wt.oz/can= 0.000 lb/yr
OR c) 15.000 gal/yr

Specific Gravity: 1.418

Notes:

VOC composition: 39.50 (%MSDS/Manuf.)
39.50 (%corrected for water and non-photochemical reactants.)
expressed as : A A = % by weight
B = % by volume

Notes:

Comment: "A" and "B" refer to the percentage of the material which contains VOCs. This is expressed as a percentage of total volume, (i.e. gallons) or of total weight (i.e. pounds). When available, percent by weight should take precedence. Make sure to subtract the percentage of non-photochemically reactive VOCs and water, if any.

Paint Application Method: B A = spray application (spray can or gun)
B = brush application

Spray Booth Filter Efficiency = 0.00 % (enter "0" if no filter is present)
(ex: dry filter = 60%, waterfall type = 85%)

Comment: Filter efficiencies vary dependant on the filter type and materials used as the filtering media. Standard dry filters, which are common at Army installations, are assumed to have a constant 60% removal efficiency under normal operating conditions. However, consult the manufacturer if there is any uncertainty as to the removal efficiency for a particular type of spray booth.

Paint Pigment Composition = 60.50 %

Comment: Pigment composition is derived from the leftover percentage of material in the paint that is not volatile (i.e., if the total VOC component makes up 80%, then the leftover 20% is assumed to be pigment).

Emissions Summary

| Annual VOC Emissions | | |
|------------------------------------|---------------------|---------------------|
| Annual usage converted to weight = | <u>176.945</u> | Lbs/yr |
| VOC Emissions = | <u>69.893</u> Lb/yr | <u>0.035</u> Ton/yr |

| Ozone Season VOC Emissions | | |
|---------------------------------------|---------------|-------------|
| Ozone Season Usage = | <u>44.236</u> | Lbs |
| Daily Ozone Season Usage = | <u>0.481</u> | Lbs/day |
| Ozone Season VOC Emissions = | <u>17.473</u> | Lbs |
| Daily Ozone Season VOC Emissions = | <u>0.190</u> | Lbs/day |
| Ozone Season Work Day VOC Emissions = | <u>0.266</u> | Lbs/wrk day |

| Annual Particulate Matter Emissions | | |
|-------------------------------------|---------------------|---------------------|
| TSP Emissions = | <u>0.000</u> Lbs/yr | <u>0.000</u> Ton/yr |
| PM10 Emissions = | <u>0.000</u> Lbs/yr | <u>0.000</u> Ton/yr |

HAP Emissions: Estimation of HAP emissions are broken into two categories. The first, on the following page, lists common HAPs associated with painting and surface coating. Enter the composition of each HAP in the columns provided for those HAPs listed. If the HAP is not listed, then enter the name of the HAP and %composition in the spaces below.

| HAP Name | CAS No | (% Composition) | Emissions (Lbs/yr) |
|----------|--------|-----------------|--------------------|
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HAP Subtotal = 0.0 Lbs/yr

* New York State HAP

| HAP Emissions | | | |
|-----------------------------------|------------|-----------------|--------------------|
| HAP Name | CAS # | (% Composition) | Emissions (Lbs/yr) |
| Acetone* | 67-64-1 | | |
| Barium compounds | 0 | | |
| Benzene | 71-43-2 | | |
| Butoxy ethanol, 2- | 111-76-2 | | |
| Butyl acetate | 123-86-4 | | |
| Butyl alcohol, n-* | 71-36-3 | | |
| Calcium carbonate | 1317-65-3 | | |
| Carbon black | 13333-86-4 | | |
| Chromium compounds | 0 | | |
| Cobalt compounds | 0 | | |
| Cumene | 98-82-8 | | |
| Dichlorodifluoromethane | 75-71-8 | | |
| Ethoxyethyl acetate, 2- | 111-15-9 | | |
| Ethyl acetate | 141-78-6 | | |
| Ethyl alcohol* | 64-17-5 | | |
| Ethyl-3-ethoxy propionate | 763-69-9 | | |
| Ethylbenzene | 100-41-4 | | |
| Ethylene glycol | 107-21-1 | | |
| Hexane | 110-54-3 | | |
| Isobutyl acetate | 110-19-0 | | |
| Isobutyl alcohol | 78-83-1 | | |
| Isopropyl alcohol | 67-63-0 | | |
| Lead compounds | 0 | | |
| Magnesium silicate | 1343-90-4 | | |
| Methyl Alcohol | 67-56-1 | | |
| Methoxyethanol, 2- | 109-86-4 | | |
| Methyl chloroform | 71-55-6 | | |
| Methyl ethyl ketone | 78-93-3 | 5 | 8.8 |
| Methyl isobutyl ketone | 108-10-1 | | |
| Methylene chloride | 75-09-2 | | |
| Phenol | 108-95-2 | | |
| Phenylmercuric acetate | 62-38-4 | | |
| Propane | 74-98-6 | | |
| Propyl acetate | 109-60-4 | | |
| Propylene glycol monomethyl ether | 107-98-2 | | |
| Tetrachloroethylene | 127-18-4 | | |
| Titanium dioxide | 13463-67-7 | | |
| Toluene | 108-88-3 | 5 | 8.8 |
| Toluene-diisocyanate -2,4 | 584-84-9 | | |
| Xylene | 1330-20-7 | 5 | 8.8 |
| Zinc compounds | 0 | | |
| * New York State HAP | | HAP Total = | 26.54 Lbs/yr |
| | | HAP Content = | 1.77 lbs/gal |

**Emissions For Painting and Surface Coating Operations
Federal and New York State Regulations**

Name: Seneca Army Depot
 Bldg #: 2073 (Ammo Maintenance)
 SCC: 4-02-999-95

Date: 8/29/94
 Initials: GRM

General Comments: This template should only be used for spray paints, brush applications of paint, and spray booth operations. The use of this template is not intended for process applications of paint such as assembly lines in manufacturing plants, and other major coating operations. AP-42 or other comparable documents should be consulted to determine emissions associated with these processes.

Product/Material Information

Product: So-Sure Lacquer - Olive Drab
 NSN: 8010-00-584-3149

Note: For annual usage, only fill the boxes for EITHER a, b, OR c and leave other boxes blank

Annual Usage: a) cans/yr at fl.oz/can= 0.000 gal/yr
 OR b) cans/yr at wt.oz/can= 15.750 lb/yr
 OR c) gal/yr

Specific Gravity: 0.943

Notes:

VOC composition: 84.05 (%MSDS/Manuf.)
84.05 (%corrected for water and non-photochemical reactants.)
 expressed as : A A = % by weight
 B = % by volume

Notes:

Comment: "A" and "B" refer to the percentage of the material which contains VOCs. This is expressed as a percentage of total volume, (i.e. gallons) or of total weight (i.e. pounds). When available, percent by weight should take precedence. Make sure to subtract the percentage of non-photochemically reactive VOCs and water, if any.

Paint Application Method: A A = spray application (spray can or gun)
 B = brush application

Spray Booth Filter Efficiency = 0.00 % (enter "0" if no filter is present)
 (ex: dry filter = 60%, waterfall type = 85%)

Comment: Filter efficiencies vary dependant on the filter type and materials used as the filtering media. Standard dry filters, which are common at Army installations, are assumed to have a consistant 60% removal efficiency under normal operating conditions. However, consult the manufacturer if there is any uncertainty as to the removal efficiency for a particular type of spray booth.

Paint Pigment Composition = 15.95 %

Comment: Pigment composition is derived from the leftover percentage of material in the paint that is not volatile (i.e., if the total VOC component makes up 80%, then the leftover 20% is assumed to be pigment).

Emissions Summary

| Annual VOC Emissions | | |
|------------------------------------|---------------------|---------------------|
| Annual usage converted to weight = | <u>15.750</u> | Lbs/yr |
| VOC Emissions = | <u>13.238</u> Lb/yr | <u>0.007</u> Ton/yr |

| Ozone Season VOC Emissions | | |
|---------------------------------------|--------------|-------------|
| Ozone Season Usage = | <u>3.938</u> | Lbs |
| Daily Ozone Season Usage = | <u>0.043</u> | Lbs/day |
| Ozone Season VOC Emissions = | <u>3.309</u> | Lbs |
| Daily Ozone Season VOC Emissions = | <u>0.036</u> | Lbs/day |
| Ozone Season Work Day VOC Emissions = | <u>0.050</u> | Lbs/wrk day |

| Annual Particulate Matter Emissions | | |
|-------------------------------------|---------------------|---------------------|
| TSP Emissions = | <u>1.256</u> Lbs/yr | <u>0.001</u> Ton/yr |
| PM10 Emissions = | <u>0.587</u> Lbs/yr | <u>0.000</u> Ton/yr |

HAP Emissions: Estimation of HAP emissions are broken into two categories. The first, on the following page, lists common HAPs associated with painting and surface coating. Enter the composition of each HAP in the columns provided for those HAPs listed. If the HAP is not listed, then enter the name of the HAP and %composition in the spaces below.

| HAP Name | CAS No | (% Composition) | Emissions (Lbs/yr) |
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HAP Subtotal = 0.0 Lbs/yr

| HAP Emissions | | | |
|-----------------------------------|------------|----------------------|-----------------------|
| HAP Name | CAS # | (% Composition) | Emissions (Lbs/yr) |
| Acetone* | 67-64-1 | 17.09 | 2.7 |
| Barium compounds | 0 | | |
| Benzene | 71-43-2 | | |
| Butoxy ethanol, 2- | 111-76-2 | | |
| Butyl acetate | 123-86-4 | | |
| Butyl alcohol, n-* | 71-36-3 | 1.6 | 0.3 |
| Calcium carbonate | 1317-65-3 | | |
| Carbon black | 13333-86-4 | | |
| Chromium compounds | 0 | | |
| Cobalt compounds | 0 | | |
| Cumene | 98-82-8 | | |
| Dichlorodifluoromethane | 75-71-8 | | |
| Ethoxyethyl acetate, 2- | 111-15-9 | | |
| Ethyl acetate | 141-78-6 | | |
| Ethyl alcohol | 64-17-5 | | |
| Ethyl-3-ethoxy propionate | 763-69-9 | | |
| Ethylbenzene | 100-41-4 | 1.6 | 0.3 |
| Ethylene glycol | 107-21-1 | | |
| Hexane | 110-54-3 | | |
| Isobutyl acetate | 110-19-0 | | |
| Isobutyl alcohol | 78-83-1 | | |
| Isopropyl alcohol | 67-63-0 | | |
| Lead compounds | 0 | | |
| Magnesium silicate | 1343-90-4 | | |
| Methyl Alcohol | 67-56-1 | | |
| Methoxyethanol, 2- | 109-86-4 | | |
| Methyl chloroform | 71-55-6 | | |
| Methyl ethyl ketone | 78-93-3 | | |
| Methyl isobutyl ketone | 108-10-1 | | |
| Methylene chloride | 75-09-2 | | |
| Phenol | 108-95-2 | | |
| Phenylmercuric acetate | 62-38-4 | | |
| Propane | 74-98-6 | | |
| Propyl acetate | 109-60-4 | | |
| Propylene glycol monomethyl ether | 107-98-2 | | |
| Tetrachloroethylene | 127-18-4 | | |
| Titanium dioxide | 13463-67-7 | | |
| Toluene | 108-88-3 | 26.76 | 4.2 |
| Toluene-diisocyanate -2,4 | 584-84-9 | | |
| Xylene | 1330-20-7 | 1.6 | 0.3 |
| Zinc compounds | 0 | | |
| * New York State HAP | | HAP Total = | 7.66 Lbs/yr |
| | | HAP Content = | 3.82 lbs/gal |

**Emissions For Painting and Surface Coating Operations
Federal and New York State Regulations**

Name: Seneca Army Depot Date: 8/29/94
 Bldg #: 2073 (Ammo Maintenance) Initials: GRM
 SCC: 4-02-999-95

General Comments: This template should only be used for spray paints, brush applications of paint, and spray booth operations. The use of this template is not intended for process applications of paint such as assembly lines in manufacturing plants, and other major coating operations. AP-42 or other comparable documents should be consulted to determine emissions associated with these processes.

Product/Material Information

Product: So-Sure Brown Obliterating Compound
 NSN: 8010-00-582-4743

Note: For annual usage, only fill the boxes for EITHER a, b, OR c and leave other boxes blank

Annual Usage: a) cans/yr at fl.oz/can= 0.000 gal/yr
 OR b) 6 cans/yr at 12.000 wt.oz/can= 4.500 lb/yr
 OR c) gal/yr

Specific Gravity: 1.067

Notes:

VOC composition: 80.32 (%MSDS/Manuf.)
80.32 (%corrected for water and non-photochemical reactants.)
 expressed as : A A = % by weight
 B = % by volume

Notes:

Comment: "A" and "B" refer to the percentage of the material which contains VOCs. This is expressed as a percentage of total volume, (i.e. gallons) or of total weight (i.e. pounds). When available, percent by weight should take precedence. Make sure to subtract the percentage of non-photochemically reactive VOCs and water, if any.

Paint Application Method: A A = spray application (spray can or gun)
 B = brush application

Spray Booth Filter Efficiency = 0.00 % (enter "0" if no filter is present)
 (ex: dry filter = 60%, waterfall type = 85%)

Comment: Filter efficiencies vary dependant on the filter type and materials used as the filtering media. Standard dry filters, which are common at Army installations, are assumed to have a consistant 60% removal efficiency under normal operating conditions. However, consult the manufacturer if there is any uncertainty as to the removal efficiency for a particular type of spray booth.

Paint Pigment Composition = 19.68 %

Comment: Pigment composition is derived from the leftover percentage of material in the paint that is not volatile (i.e., if the total VOC component makes up 80%, then the leftover 20% is assumed to be pigment).

Emissions Summary

| Annual VOC Emissions | | |
|------------------------------------|--------------------|---------------------|
| Annual usage converted to weight = | <u>4.500</u> | Lbs/yr |
| VOC Emissions = | <u>3.614</u> Lb/yr | <u>0.002</u> Ton/yr |

| Ozone Season VOC Emissions | | |
|---------------------------------------|--------------|-------------|
| Ozone Season Usage = | <u>1.125</u> | Lbs |
| Daily Ozone Season Usage = | <u>0.012</u> | Lbs/day |
| Ozone Season VOC Emissions = | <u>0.904</u> | Lbs |
| Daily Ozone Season VOC Emissions = | <u>0.010</u> | Lbs/day |
| Ozone Season Work Day VOC Emissions = | <u>0.014</u> | Lbs/wrk day |

| Annual Particulate Matter Emissions | | |
|-------------------------------------|---------------------|---------------------|
| TSP Emissions = | <u>0.443</u> Lbs/yr | <u>0.000</u> Ton/yr |
| PM10 Emissions = | <u>0.207</u> Lbs/yr | <u>0.000</u> Ton/yr |

HAP Emissions: Estimation of HAP emissions are broken into two categories. The first, on the following page, lists common HAPs associated with painting and surface coating. Enter the composition of each HAP in the columns provided for those HAPs listed. If the HAP is not listed, then enter the name of the HAP and %composition in the spaces below.

| HAP Name | CAS No | (% Composition) | Emissions (Lbs/yr) |
|----------|--------|-----------------|--------------------|
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HAP Subtotal = 0.0 Lbs/yr

* New York State HAP

| HAP Emissions | | | |
|-----------------------------------|------------|-----------------|--------------------|
| HAP Name | CAS # | (% Composition) | Emissions (Lbs/yr) |
| Acetone* | 67-64-1 | 4.69 | 0.2 |
| Barium compounds | 0 | | |
| Benzene | 71-43-2 | | |
| Butoxy ethanol, 2- | 111-76-2 | | |
| Butyl acetate | 123-86-4 | | |
| Butyl alcohol, n-* | 71-36-3 | | |
| Calcium carbonate | 1317-65-3 | | |
| Carbon black | 13333-86-4 | | |
| Chromium compounds | 0 | | |
| Cobalt compounds | 0 | | |
| Cumene | 98-82-8 | | |
| Dichlorodifluoromethane | 75-71-8 | | |
| Ethoxyethyl acetate, 2- | 111-15-9 | | |
| Ethyl acetate | 141-78-6 | | |
| Ethyl alcohol* | 64-17-5 | | |
| Ethyl-3-ethoxy propionate | 763-69-9 | | |
| Ethylbenzene | 100-41-4 | | |
| Ethylene glycol | 107-21-1 | | |
| Hexane | 110-54-3 | | |
| Isobutyl acetate | 110-19-0 | | |
| Isobutyl alcohol | 78-83-1 | | |
| Isopropyl alcohol | 67-63-0 | | |
| Lead compounds | 0 | | |
| Magnesium silicate | 1343-90-4 | | |
| Methyl Alcohol | 67-56-1 | | |
| Methoxyethanol, 2- | 109-86-4 | | |
| Methyl chloroform | 71-55-6 | | |
| Methyl ethyl ketone | 78-93-3 | | |
| Methyl isobutyl ketone | 108-10-1 | | |
| Methylene chloride | 75-09-2 | | |
| Phenol | 108-95-2 | | |
| Phenylmercuric acetate | 62-38-4 | | |
| Propane | 74-98-6 | | |
| Propyl acetate | 109-60-4 | | |
| Propylene glycol monomethyl ether | 107-98-2 | | |
| Tetrachloroethylene | 127-18-4 | | |
| Titanium dioxide | 13463-67-7 | | |
| Toluene | 108-88-3 | 33.44 | 1.5 |
| Toluene-diisocyanate -2,4 | 584-84-9 | | |
| Xylene | 1330-20-7 | | |
| Zinc compounds | 0 | | |
| * New York State HAP | | HAP Total = | 1.72 Lbs/yr |
| | | HAP Content = | 3.38 lbs/gal |

**Emissions For Painting and Surface Coating Operations
Federal and New York State Regulations**

Name: Seneca Army Depot
Bldg #: 2073 (Ammo Maintenance)
SCC: 4-02-999-95

Date: 8/29/94
Initials: GRM

General Comments: This template should only be used for spray paints, brush applications of paint, and spray booth operations. The use of this template is not intended for process applications of paint such as assembly lines in manufacturing plants, and other major coating operations. AP-42 or other comparable documents should be consulted to determine emissions associated with these processes.

Product/Material Information

Product: So-Sure Lacquer - Orange
NSN: 8010-00-584-3148

Note: For annual usage, only fill the boxes for EITHER a, b, OR c and leave other boxes blank

| | | | | | | | |
|------------------|----------------------|----------------------|---------|----------------------|---------------|--------------|--------------------|
| Annual Usage: a) | <input type="text"/> | cans/yr | at | <input type="text"/> | fl.oz/can= | <u>0.000</u> | gal/yr |
| OR | b) | <u>1</u> | cans/yr | at | <u>12.000</u> | wt.oz/can= | <u>0.750</u> lb/yr |
| OR | c) | <input type="text"/> | gal/yr | | | | |

Specific Gravity: 0.945

Notes:

VOC composition: 80.85 (%MSDS/Manuf.)
80.85 (%corrected for water and non-photochemical reactants.)
expressed as : A A = % by weight
B = % by volume

Notes:

Comment: "A" and "B" refer to the percentage of the material which contains VOCs. This is expressed as a percentage of total volume, (i.e. gallons) or of total weight (i.e. pounds). When available, percent by weight should take precedence. Make sure to subtract the percentage of non-photochemically reactive VOCs and water, if any.

Paint Application Method: A A = spray application (spray can or gun)
B = brush application

Spray Booth Filter Efficiency = 0.00 % (enter "0" if no filter is present)
(ex: dry filter = 60%, waterfall type = 85%)

Comment: Filter efficiencies vary dependant on the filter type and materials used as the filtering media. Standard dry filters, which are common at Army installations, are assumed to have a consistant 60% removal efficiency under normal operating conditions. However, consult the manufacturer if there is any uncertainty as to the removal efficiency for a particular type of spray booth.

Paint Pigment Composition = 19.15 %

Comment: Pigment composition is derived from the leftover percentage of material in the paint that is not volatile (i.e., if the total VOC component makes up 80%, then the leftover 20% is assumed to be pigment).

Emissions Summary

| Annual VOC Emissions | | | |
|------------------------------------|--------------------|--------------|--------|
| Annual usage converted to weight = | | <u>0.750</u> | Lbs/yr |
| VOC Emissions = | <u>0.606</u> Lb/yr | <u>0.000</u> | Ton/yr |

| Ozone Season VOC Emissions | | | |
|---------------------------------------|--|--------------|-------------|
| Ozone Season Usage = | | <u>0.188</u> | Lbs |
| Daily Ozone Season Usage = | | <u>0.002</u> | Lbs/day |
| Ozone Season VOC Emissions = | | <u>0.152</u> | Lbs |
| Daily Ozone Season VOC Emissions = | | <u>0.002</u> | Lbs/day |
| Ozone Season Work Day VOC Emissions = | | <u>0.002</u> | Lbs/wrk day |

| Annual Particulate Matter Emissions | | | |
|-------------------------------------|---------------------|--------------|--------|
| TSP Emissions = | <u>0.072</u> Lbs/yr | <u>0.000</u> | Ton/yr |
| PM10 Emissions = | <u>0.034</u> Lbs/yr | <u>0.000</u> | Ton/yr |

HAP Emissions: Estimation of HAP emissions are broken into two categories. The first, on the following page, lists common HAPs associated with painting and surface coating. Enter the composition of each HAP in the columns provided for those HAPs listed. If the HAP is not listed, then enter the name of the HAP and %composition in the spaces below.

| HAP Name | CAS No | (% Composition) | Emissions (Lbs/yr) |
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HAP Subtotal = 0.0 Lbs/yr

* New York State HAP

| HAP Emissions | | | |
|-----------------------------------|------------|----------------------|---------------------|
| HAP Name | CAS # | (% Composition) | Emissions (Lbs/yr) |
| Acetone* | 67-64-1 | 21.31 | 0.2 |
| Barium compounds | 0 | | |
| Benzene | 71-43-2 | | |
| Butoxy ethanol, 2- | 111-76-2 | | |
| Butyl acetate | 123-86-4 | | |
| Butyl alcohol, n-* | 71-36-3 | | |
| Calcium carbonate | 1317-65-3 | | |
| Carbon black | 13333-86-4 | | |
| Chromium compounds | 0 | | |
| Cobalt compounds | 0 | | |
| Cumene | 98-82-8 | | |
| Dichlorodifluoromethane | 75-71-8 | | |
| Ethoxyethyl acetate, 2- | 111-15-9 | | |
| Ethyl acetate | 141-78-6 | | |
| Ethyl alcohol | 64-17-5 | | |
| Ethyl-3-ethoxy propionate | 763-69-9 | | |
| Ethylbenzene | 100-41-4 | 1.54 | 0.0 |
| Ethylene glycol | 107-21-1 | | |
| Hexane | 110-54-3 | | |
| Isobutyl acetate | 110-19-0 | | |
| Isobutyl alcohol | 78-83-1 | | |
| Isopropyl alcohol | 67-63-0 | | |
| Lead compounds | 0 | | |
| Magnesium silicate | 1343-90-4 | | |
| Methyl Alcohol | 67-56-1 | | |
| Methoxyethanol, 2- | 109-86-4 | | |
| Methyl chloroform | 71-55-6 | | |
| Methyl ethyl ketone | 78-93-3 | | |
| Methyl isobutyl ketone | 108-10-1 | | |
| Methylene chloride | 75-09-2 | | |
| Phenol | 108-95-2 | | |
| Phenylmercuric acetate | 62-38-4 | | |
| Propane | 74-98-6 | | |
| Propyl acetate | 109-60-4 | | |
| Propylene glycol monomethyl ether | 107-98-2 | | |
| Tetrachloroethylene | 127-18-4 | | |
| Titanium dioxide | 13463-67-7 | | |
| Toluene | 108-88-3 | 22.09 | 0.2 |
| Toluene-diisocyanate -2,4 | 584-84-9 | | |
| Xylene | 1330-20-7 | 3.07 | 0.0 |
| Zinc compounds | 0 | | |
| * New York State HAP | | HAP Total = | 0.36 Lbs/yr |
| | | HAP Content = | 3.77 lbs/gal |

**Emissions For Painting and Surface Coating Operations
Federal and New York State Regulations**

Name: Seneca Army Depot
Bldg #: 2073 (Ammo Maintenance)
SCC: 4-02-999-95

Date: 8/29/94
Initials: GRM

General Comments: This template should only be used for spray paints, brush applications of paint, and spray booth operations. The use of this template is not intended for process applications of paint such as assembly lines in manufacturing plants, and other major coating operations. AP-42 or other comparable documents should be consulted to determine emissions associated with these processes.

Product/Material Information

Product: So-Sure Lacquer - Flat Black
NSN: 8010-00-582-5382

Note: For annual usage, only fill the boxes for EITHER a, b, OR c and leave other boxes blank

Annual Usage: a) cans/yr at fl.oz/can= 0.000 gal/yr
OR b) 1 cans/yr at 12.000 wt.oz/can= 0.750 lb/yr
OR c) gal/yr

Specific Gravity: 0.905

Notes:

VOC composition: 85.82 (%MSDS/Manuf.)
85.82 (%corrected for water and non-photochemical reactants.)
expressed as : A A = % by weight
B = % by volume

Notes:

Comment: "A" and "B" refer to the percentage of the material which contains VOCs. This is expressed as a percentage of total volume, (i.e. gallons) or of total weight (i.e. pounds). When available, percent by weight should take precedence. Make sure to subtract the percentage of non-photochemically reactive VOCs and water, if any.

Paint Application Method: A A = spray application (spray can or gun)
B = brush application

Spray Booth Filter Efficiency = 0.00 % (enter "0" if no filter is present)
(ex: dry filter = 60%, waterfall type = 85%)

Comment: Filter efficiencies vary dependant on the filter type and materials used as the filtering media. Standard dry filters, which are common at Army installations, are assumed to have a consistant 60% removal efficiency under normal operating conditions. However, consult the manufacturer if there is any uncertainty as to the removal efficiency for a particular type of spray booth.

Paint Pigment Composition = 14.18 %

Comment: Pigment composition is derived from the leftover percentage of material in the paint that is not volatile (i.e., if the total VOC component makes up 80%, then the leftover 20% is assumed to be pigment).

Emissions Summary

| Annual VOC Emissions | | |
|------------------------------------|--------------------|---------------------|
| Annual usage converted to weight = | <u>0.750</u> | Lbs/yr |
| VOC Emissions = | <u>0.644</u> Lb/yr | <u>0.000</u> Ton/yr |

| Ozone Season VOC Emissions | | |
|---------------------------------------|--------------|-------------|
| Ozone Season Usage = | <u>0.188</u> | Lbs |
| Daily Ozone Season Usage = | <u>0.002</u> | Lbs/day |
| Ozone Season VOC Emissions = | <u>0.161</u> | Lbs |
| Daily Ozone Season VOC Emissions = | <u>0.002</u> | Lbs/day |
| Ozone Season Work Day VOC Emissions = | <u>0.002</u> | Lbs/wrk day |

| Annual Particulate Matter Emissions | | |
|-------------------------------------|---------------------|---------------------|
| TSP Emissions = | <u>0.053</u> Lbs/yr | <u>0.000</u> Ton/yr |
| PM10 Emissions = | <u>0.025</u> Lbs/yr | <u>0.000</u> Ton/yr |

HAP Emissions: Estimation of HAP emissions are broken into two categories. The first, on the following page, lists common HAPs associated with painting and surface coating. Enter the composition of each HAP in the columns provided for those HAPs listed. If the HAP is not listed, then enter the name of the HAP and %composition in the spaces below.

| HAP Name | CAS No | (% Composition) | Emissions (Lbs/yr) |
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HAP Subtotal = 0.0 Lbs/yr

* New York State HAP

| HAP Emissions | | | |
|-----------------------------------|------------|-----------------|--------------------|
| HAP Name | CAS # | (% Composition) | Emissions (Lbs/yr) |
| Acetone* | 67-64-1 | 24.87 | 0.2 |
| Barium compounds | 0 | | |
| Benzene | 71-43-2 | | |
| Butoxy ethanol, 2- | 111-76-2 | | |
| Butyl acetate | 123-86-4 | | |
| Butyl alcohol, n-* | 71-36-3 | | |
| Calcium carbonate | 1317-65-3 | | |
| Carbon black | 13333-86-4 | | |
| Chromium compounds | 0 | | |
| Cobalt compounds | 0 | | |
| Cumene | 98-82-8 | | |
| Dichlorodifluoromethane | 75-71-8 | | |
| Ethoxyethyl acetate, 2- | 111-15-9 | | |
| Ethyl acetate | 141-78-6 | | |
| Ethyl alcohol | 64-17-5 | | |
| Ethyl-3-ethoxy propionate | 763-69-9 | | |
| Ethylbenzene | 100-41-4 | | |
| Ethylene glycol | 107-21-1 | | |
| Hexane | 110-54-3 | | |
| Isobutyl acetate | 110-19-0 | | |
| Isobutyl alcohol | 78-83-1 | | |
| Isopropyl alcohol | 67-63-0 | | |
| Lead compounds | 0 | | |
| Magnesium silicate | 1343-90-4 | | |
| Methyl Alcohol | 67-56-1 | | |
| Methoxyethanol, 2- | 109-86-4 | | |
| Methyl chloroform | 71-55-6 | | |
| Methyl ethyl ketone | 78-93-3 | 3.64 | 0.0 |
| Methyl isobutyl ketone | 108-10-1 | | |
| Methylene chloride | 75-09-2 | | |
| Phenol | 108-95-2 | | |
| Phenylmercuric acetate | 62-38-4 | | |
| Propane | 74-98-6 | | |
| Propyl acetate | 109-60-4 | | |
| Propylene glycol monomethyl ether | 107-98-2 | | |
| Tetrachloroethylene | 127-18-4 | | |
| Titanium dioxide | 13463-67-7 | | |
| Toluene | 108-88-3 | 28.32 | 0.2 |
| Toluene-diisocyanate -2,4 | 584-84-9 | | |
| Xylene | 1330-20-7 | 1.21 | 0.0 |
| Zinc compounds | 0 | | |
| * New York State HAP | | HAP Total = | 0.44 Lbs/yr |
| | | HAP Content = | 4.37 lbs/gal |

**Emissions For Painting and Surface Coating Operations
Federal and New York State Regulations**

Name: Seneca Army Depot
Bldg #: 2073 (Ammo Maintenance)
SCC: 4-02-999-95

Date: 8/29/94
Initials: GRM

General Comments: This template should only be used for spray paints, brush applications of paint, and spray booth operations. The use of this template is not intended for process applications of paint such as assembly lines in manufacturing plants, and other major coating operations. AP-42 or other comparable documents should be consulted to determine emissions associated with these processes.

Product/Material Information

Product: Marsh Spray Stencil Ink
NSN: 7510-00-183-7698

Note: For annual usage, only fill the boxes for EITHER a, b, OR c and leave other boxes blank

Annual Usage: a) cans/yr at fl.oz/can= 0.000 gal/yr
OR b) cans/yr at wt.oz/can= 0.750 lb/yr
OR c) gal/yr

Specific Gravity: 0.780

Notes:

VOC composition: 94.00 (%MSDS/Manuf.)
94.00 (%corrected for water and non-photochemical reactants.)
expressed as : A A = % by weight
B = % by volume

Notes:

Comment: "A" and "B" refer to the percentage of the material which contains VOCs. This is expressed as a percentage of total volume, (i.e. gallons) or of total weight (i.e. pounds). When available, percent by weight should take precedence. Make sure to subtract the percentage of non-photochemically reactive VOCs and water, if any.

Paint Application Method: A A = spray application (spray can or gun)
B = brush application

Spray Booth Filter Efficiency = 0.00 % (enter "0" if no filter is present)
(ex: dry filter = 60%, waterfall type = 85%)

Comment: Filter efficiencies vary dependant on the filter type and materials used as the filtering media. Standard dry filters, which are common at Army installations, are assumed to have a consistant 60% removal efficiency under normal operating conditions. However, consult the manufacturer if there is any uncertainty as to the removal efficiency for a particular type of spray booth.

Paint Pigment Composition = 6.00 %

Comment: Pigment composition is derived from the leftover percentage of material in the paint that is not volatile (i.e., if the total VOC component makes up 80%, then the leftover 20% is assumed to be pigment).

Emissions Summary

| Annual VOC Emissions | | | |
|------------------------------------|--------------|--------------|-------------------|
| Annual usage converted to weight = | | <u>0.750</u> | Lbs/yr |
| VOC Emissions = | <u>0.705</u> | <u>0.000</u> | Lb/yr Ton/yr |

| Ozone Season VOC Emissions | | | |
|---------------------------------------|--|--------------|-------------|
| Ozone Season Usage = | | <u>0.188</u> | Lbs |
| Daily Ozone Season Usage = | | <u>0.002</u> | Lbs/day |
| Ozone Season VOC Emissions = | | <u>0.176</u> | Lbs |
| Daily Ozone Season VOC Emissions = | | <u>0.002</u> | Lbs/day |
| Ozone Season Work Day VOC Emissions = | | <u>0.003</u> | Lbs/wrk day |

| Annual Particulate Matter Emissions | | | |
|-------------------------------------|--------------|--------------|--------------------|
| TSP Emissions = | <u>0.023</u> | <u>0.000</u> | Lbs/yr Ton/yr |
| PM10 Emissions = | <u>0.011</u> | <u>0.000</u> | Lbs/yr Ton/yr |

HAP Emissions: Estimation of HAP emissions are broken into two categories. The first, on the following page, lists common HAPs associated with painting and surface coating. Enter the composition of each HAP in the columns provided for those HAPs listed. If the HAP is not listed, then enter the name of the HAP and %composition in the spaces below.

| HAP Name | CAS No | (% Composition) | Emissions (Lbs/yr) |
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HAP Subtotal = 0.0 Lbs/yr

* New York State HAP

| HAP Emissions | | | |
|-----------------------------------|------------|----------------------|-----------------------|
| HAP Name | CAS # | (% Composition) | Emissions (Lbs/yr) |
| Acetone* | 67-64-1 | 40 | 0.3 |
| Barium compounds | 0 | | |
| Benzene | 71-43-2 | | |
| Butoxy ethanol, 2- | 111-76-2 | | |
| Butyl acetate | 123-86-4 | | |
| Butyl alcohol, n-* | 71-36-3 | | |
| Calcium carbonate | 1317-65-3 | | |
| Carbon black | 13333-86-4 | | |
| Chromium compounds | 0 | | |
| Cobalt compounds | 0 | | |
| Cumene | 98-82-8 | | |
| Dichlorodifluoromethane | 75-71-8 | | |
| Ethoxyethyl acetate, 2- | 111-15-9 | | |
| Ethyl acetate | 141-78-6 | | |
| Ethyl alcohol | 64-17-5 | | |
| Ethyl-3-ethoxy propionate | 763-69-9 | | |
| Ethylbenzene | 100-41-4 | | |
| Ethylene glycol | 107-21-1 | | |
| Hexane | 110-54-3 | | |
| Isobutyl acetate | 110-19-0 | | |
| Isobutyl alcohol | 78-83-1 | | |
| Isopropyl alcohol | 67-63-0 | | |
| Lead compounds | 0 | | |
| Magnesium silicate | 1343-90-4 | | |
| Methyl Alcohol | 67-56-1 | | |
| Methoxyethanol, 2- | 109-86-4 | | |
| Methyl chloroform | 71-55-6 | | |
| Methyl ethyl ketone | 78-93-3 | | |
| Methyl isobutyl ketone | 108-10-1 | | |
| Methylene chloride | 75-09-2 | | |
| Phenol | 108-95-2 | | |
| Phenylmercuric acetate | 62-38-4 | | |
| Propane | 74-98-6 | | |
| Propyl acetate | 109-60-4 | | |
| Propylene glycol monomethyl ether | 107-98-2 | | |
| Tetrachloroethylene | 127-18-4 | | |
| Titanium dioxide | 13463-67-7 | | |
| Toluene | 108-88-3 | 30 | 0.2 |
| Toluene-diisocyanate -2,4 | 584-84-9 | | |
| Xylene | 1330-20-7 | | |
| Zinc compounds | 0 | | |
| * New York State HAP | | HAP Total = | 0.53 Lbs/yr |
| | | HAP Content = | 4.54 lbs/gal |

**Emissions For Painting and Surface Coating Operations
Federal and New York State Regulations**

Name: Seneca Army Depot
Bldg #: 2073 (Ammo Maintenance)
SCC: 4-02-999-95

Date: 8/29/94
Initials: GRM

General Comments: This template should only be used for spray paints, brush applications of paint, and spray booth operations. The use of this template is not intended for process applications of paint such as assembly lines in manufacturing plants, and other major coating operations. AP-42 or other comparable documents should be consulted to determine emissions associated with these processes.

Product/Material Information

Product: So-Sure Lacquer - Yellow
NSN: 8010-00-141-2950

Note: For annual usage, only fill the boxes for EITHER a, b, OR c and leave other boxes blank

Annual Usage: a) cans/yr at fl.oz/can= 0.000 gal/yr
OR b) cans/yr at wt.oz/can= 0.750 lb/yr
OR c) gal/yr

Specific Gravity: 0.938

Notes:

VOC composition: 84.21 (%MSDS/Manuf.)
84.21 (%corrected for water and non-photochemical reactants.)
expressed as : A A = % by weight
B = % by volume

Notes:

Comment: "A" and "B" refer to the percentage of the material which contains VOCs. This is expressed as a percentage of total volume, (i.e. gallons) or of total weight (i.e. pounds). When available, percent by weight should take precedence. Make sure to subtract the percentage of non-photochemically reactive VOCs and water, if any.

Paint Application Method: A A = spray application (spray can or gun)
B = brush application

Spray Booth Filter Efficiency = 0.00 % (enter "0" if no filter is present)
(ex: dry filter = 60%, waterfall type = 85%)

Comment: Filter efficiencies vary dependant on the filter type and materials used as the filtering media. Standard dry filters, which are common at Army installations, are assumed to have a consistant 60% removal efficiency under normal operating conditions. However, consult the manufacturer if there is any uncertainty as to the removal efficiency for a particular type of spray booth.

Paint Pigment Composition = 15.79 %

Comment: Pigment composition is derived from the leftover percentage of material in the paint that is not volatile (i.e., if the total VOC component makes up 80%, then the leftover 20% is assumed to be pigment).

Emissions Summary

| Annual VOC Emissions | | | |
|------------------------------------|--------------|--------------|--------------|
| Annual usage converted to weight = | | <u>0.750</u> | Lbs/yr |
| VOC Emissions = | <u>0.632</u> | Lb/yr | <u>0.000</u> |
| | | | Ton/yr |

| Ozone Season VOC Emissions | | | |
|---------------------------------------|--|--------------|-------------|
| Ozone Season Usage = | | <u>0.188</u> | Lbs |
| Daily Ozone Season Usage = | | <u>0.002</u> | Lbs/day |
| Ozone Season VOC Emissions = | | <u>0.158</u> | Lbs |
| Daily Ozone Season VOC Emissions = | | <u>0.002</u> | Lbs/day |
| Ozone Season Work Day VOC Emissions = | | <u>0.002</u> | Lbs/wrk day |

| Annual Particulate Matter Emissions | | | |
|--|--------------|--------|--------------|
| TSP Emissions = | <u>0.059</u> | Lbs/yr | <u>0.000</u> |
| | | | Ton/yr |
| PM10 Emissions = | <u>0.028</u> | Lbs/yr | <u>0.000</u> |
| | | | Ton/yr |

HAP Emissions: Estimation of HAP emissions are broken into two categories. The first, on the following page, lists common HAPs associated with painting and surface coating. Enter the composition of each HAP in the columns provided for those HAPs listed. If the HAP is not listed, then enter the name of the HAP and %composition in the spaces below.

| HAP Name | CAS No | (% Composition) | Emissions (Lbs/yr) |
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HAP Subtotal = 0.0 Lbs/yr

* New York State HAP

| HAP Emissions | | | |
|-----------------------------------|------------|-----------------|-----------------------|
| HAP Name | CAS # | (% Composition) | Emissions (Lbs/yr) |
| Acetone* | 67-64-1 | 20.45 | 0.2 |
| Barium compounds | 0 | | |
| Benzene | 71-43-2 | | |
| Butoxy ethanol, 2- | 111-76-2 | | |
| Butyl acetate | 123-86-4 | | |
| Butyl alcohol, n-* | 71-36-3 | | |
| Calcium carbonate | 1317-65-3 | | |
| Carbon black | 13333-86-4 | | |
| Chromium compounds | 0 | | |
| Cobalt compounds | 0 | | |
| Cumene | 98-82-8 | | |
| Dichlorodifluoromethane | 75-71-8 | | |
| Ethoxyethyl acetate, 2- | 111-15-9 | | |
| Ethyl acetate | 141-78-6 | | |
| Ethyl alcohol | 64-17-5 | | |
| Ethyl-3-ethoxy propionate | 763-69-9 | | |
| Ethylbenzene | 100-41-4 | 1.58 | 0.0 |
| Ethylene glycol | 107-21-1 | | |
| Hexane | 110-54-3 | | |
| Isobutyl acetate | 110-19-0 | | |
| Isobutyl alcohol | 78-83-1 | | |
| Isopropyl alcohol | 67-63-0 | | |
| Lead compounds | 0 | | |
| Magnesium silicate | 1343-90-4 | | |
| Methyl Alcohol | 67-56-1 | | |
| Methoxyethanol, 2- | 109-86-4 | | |
| Methyl chloroform | 71-55-6 | | |
| Methyl ethyl ketone | 78-93-3 | | |
| Methyl isobutyl ketone | 108-10-1 | | |
| Methylene chloride | 75-09-2 | | |
| Phenol | 108-95-2 | | |
| Phenylmercuric acetate | 62-38-4 | | |
| Propane | 74-98-6 | | |
| Propyl acetate | 109-60-4 | | |
| Propylene glycol monomethyl ether | 107-98-2 | | |
| Tetrachloroethylene | 127-18-4 | | |
| Titanium dioxide | 13463-67-7 | | |
| Toluene | 108-88-3 | 23.71 | 0.2 |
| Toluene-diisocyanate -2,4 | 584-84-9 | | |
| Xylene | 1330-20-7 | 3.16 | 0.0 |
| Zinc compounds | 0 | | |
| * New York State HAP | | HAP Total = | 0.37 Lbs/yr |
| | | HAP Content = | 3.82 lbs/gal |

**Emissions For Painting and Surface Coating Operations
Federal and New York State Regulations**

Name: Seneca Army Depot
Bldg #: 2073 (Ammo Maintenance)
SCC: 4-02-999-95

Date: 8/29/94
Initials: GRM

General Comments: This template should only be used for spray paints, brush applications of paint, and spray booth operations. The use of this template is not intended for process applications of paint such as assembly lines in manufacturing plants, and other major coating operations. AP-42 or other comparable documents should be consulted to determine emissions associated with these processes.

Product/Material Information

Product: Diagraph Stencil Ink - Roller Ink
NSN: 7510-00-N03-3637

Note: For annual usage, only fill the boxes for EITHER a, b, OR c and leave other boxes blank

| | | | | | | | | |
|------------------|----------------------|----------------------|---------|----------------------|----------------------|--------------|--------------|-------|
| Annual Usage: a) | <input type="text"/> | cans/yr | at | <input type="text"/> | fl.oz/can= | <u>0.000</u> | gal/yr | |
| OR | b) | <input type="text"/> | cans/yr | at | <input type="text"/> | wt.oz/can= | <u>0.000</u> | lb/yr |
| OR | c) | <u>36.000</u> | gal/yr | | | | | |

Specific Gravity: 0.920

Notes:

VOC composition: 91.60 (%MSDS/Manuf.)
91.60 (%corrected for water and non-photochemical reactants.)
expressed as : A A = % by weight
B = % by volume

Notes:

Comment: "A" and "B" refer to the percentage of the material which contains VOCs. This is expressed as a percentage of total volume, (i.e. gallons) or of total weight (i.e. pounds). When available, percent by weight should take precedence. Make sure to subtract the percentage of non-photochemically reactive VOCs and water, if any.

Paint Application Method: B A = spray application (spray can or gun)
B = brush application

Spray Booth Filter Efficiency = 0.00 % (enter "0" if no filter is present)
(ex: dry filter = 60%, waterfall type = 85%)

Comment: Filter efficiencies vary dependant on the filter type and materials used as the filtering media. Standard dry filters, which are common at Army installations, are assumed to have a consistant 60% removal efficiency under normal operating conditions. However, consult the manufacturer if there is any uncertainty as to the removal efficiency for a particular type of spray booth.

Paint Pigment Composition = 8.40 %

Comment: Pigment composition is derived from the leftover percentage of material in the paint that is not volatile (i.e., if the total VOC component makes up 80%, then the leftover 20% is assumed to be pigment).

Emissions Summary

| Annual VOC Emissions | | |
|------------------------------------|----------------------|---------------------|
| Annual usage converted to weight = | <u>275.525</u> | Lbs/yr |
| VOC Emissions = | <u>252.381</u> Lb/yr | <u>0.126</u> Ton/yr |

| Ozone Season VOC Emissions | | |
|---------------------------------------|---------------|-------------|
| Ozone Season Usage = | <u>68.881</u> | Lbs |
| Daily Ozone Season Usage = | <u>0.749</u> | Lbs/day |
| Ozone Season VOC Emissions = | <u>63.095</u> | Lbs |
| Daily Ozone Season VOC Emissions = | <u>0.686</u> | Lbs/day |
| Ozone Season Work Day VOC Emissions = | <u>0.960</u> | Lbs/wrk day |

| Annual Particulate Matter Emissions | | |
|-------------------------------------|---------------------|---------------------|
| TSP Emissions = | <u>0.000</u> Lbs/yr | <u>0.000</u> Ton/yr |
| PM10 Emissions = | <u>0.000</u> Lbs/yr | <u>0.000</u> Ton/yr |

HAP Emissions: Estimation of HAP emissions are broken into two categories. The first, on the following page, lists common HAPs associated with painting and surface coating. Enter the composition of each HAP in the columns provided for those HAPs listed. If the HAP is not listed, then enter the name of the HAP and %compositon in the spaces below.

| HAP Name | CAS No | (% Composition) | Emissions (Lbs/yr) |
|----------|--------|-----------------|--------------------|
| | | | |
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| | | | |
| | | | |

HAP Subtotal = 0.0 Lbs/yr

* New York State HAP

| HAP Emissions | | | |
|-----------------------------------|------------|-----------------|--------------------|
| HAP Name | CAS # | (% Composition) | Emissions (Lbs/yr) |
| Acetone* | 67-64-1 | 40 | 110.2 |
| Barium compounds | 0 | | |
| Benzene | 71-43-2 | | |
| Butoxy ethanol, 2- | 111-76-2 | | |
| Butyl acetate | 123-86-4 | | |
| Butyl alcohol, n-* | 71-36-3 | | |
| Calcium carbonate | 1317-65-3 | | |
| Carbon black | 13333-86-4 | | |
| Chromium compounds | 0 | | |
| Cobalt compounds | 0 | | |
| Cumene | 98-82-8 | | |
| Dichlorodifluoromethane | 75-71-8 | | |
| Ethoxyethyl acetate, 2- | 111-15-9 | | |
| Ethyl acetate | 141-78-6 | | |
| Ethyl alcohol | 64-17-5 | | |
| Ethyl-3-ethoxy propionate | 763-69-9 | | |
| Ethylbenzene | 100-41-4 | | |
| Ethylene glycol | 107-21-1 | | |
| Hexane | 110-54-3 | | |
| Isobutyl acetate | 110-19-0 | | |
| Isobutyl alcohol | 78-83-1 | | |
| Isopropyl alcohol | 67-63-0 | | |
| Lead compounds | 0 | | |
| Magnesium silicate | 1343-90-4 | | |
| Methyl Alcohol | 67-56-1 | | |
| Methoxyethanol, 2- | 109-86-4 | | |
| Methyl chloroform | 71-55-6 | | |
| Methyl ethyl ketone | 78-93-3 | | |
| Methyl isobutyl ketone | 108-10-1 | | |
| Methylene chloride | 75-09-2 | | |
| Phenol | 108-95-2 | | |
| Phenylmercuric acetate | 62-38-4 | | |
| Propane | 74-98-6 | | |
| Propyl acetate | 109-60-4 | | |
| Propylene glycol monomethyl ether | 107-98-2 | | |
| Tetrachloroethylene | 127-18-4 | | |
| Titanium dioxide | 13463-67-7 | | |
| Toluene | 108-88-3 | 10 | 27.6 |
| Toluene-diisocyanate -2,4 | 584-84-9 | | |
| Xylene | 1330-20-7 | | |
| Zinc compounds | 0 | | |
| * New York State HAP | | HAP Total = | 137.76 Lbs/yr |
| | | HAP Content = | 3.83 lbs/gal |

Miscellaneous Chemical VOC Emissions
for Building Number 113 - Box and Crate Shop

| NSN | Solvent | Use gal/yr | VOC Content (%) | VOC Emissions (lb/yr) | VOC Emissions (ton/yr) |
|------------------|----------|---------------|--------------------|--------------------------|---------------------------|
| 9150-00-529-7222 | CRC 5-56 | 0.29 | 42.00 | 0.95 | <0.01 |

Ozone Season Daily Miscellaneous Chemical Emissions
for Building Number 113 - Box and Crate Shop

| Pollutant | Emissions (lb) | Daily Emissions (lb) | Daily Emissions (tons) |
|-----------|-------------------|-------------------------|---------------------------|
| VOC | 0.95 | <0.01 | <0.01 |

Miscellaneous Chemical HAP Emissions
for Building Number 113 - Box and Crate Shop

| NSN | Solvent | Use (gal/yr) | HAP Content (lbs/gal) | HAP Emissions (lb/yr) | HAP Emissions (ton/yr) |
|------------------|----------|-----------------|--------------------------|--------------------------|---------------------------|
| 9150-00-529-7222 | CRC 5-56 | 0.29 | 2.25 | 0.65 | <0.01 |

Miscellaneous Chemical HAP Emissions
for Building Number 113 - Box and Crate Shop

| NSN | Solvent | Use (gal/yr) | HAP Methyl Chloroform (%) |
|------------------|----------|-----------------|---------------------------------|
| 9150-00-529-7222 | CRC 5-56 | 0.29 | 29.00 |

MISCELLANEOUS CHEMICAL SOURCES

GENERAL INFORMATION

Installation Seneca Army Depot

SCC..... 4-01-888-01 Unit ID #.....

Location..... Bldg 113 Permit #.....

POC..... Joe Scharette Inventoried by..... T. Sletten

Phone..... (607) 869-1490 Operating Schedule

Inventory Date..... June 6-10, 1994 Hours/day.....

Days/week.....

Type of Activity: Box and Crate Shop

MONTHLY FUEL USE

19__ JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC

Units: _____ lbs _____ gal _____ other (specify)

SOURCE DESCRIPTION

Describe the source, how the chemical product is used, and the mechanism for generating air emissions.

CHEMICAL PRODUCT DATA

(Use extra sheets as necessary)

Product Name CRC 5-56

NSN _____ MILSPEC _____

Annual Use 3 cns/yr (12 oz) Annual Disposal _____

Product Name _____

NSN _____ MILSPEC _____

Annual Use _____ Annual Disposal _____

POLLUTION CONTROL EQUIPMENT

(Enter control efficiency)

Wet Scrubber _____ Cyclone _____ Baghouse _____

Afterburner _____ Activated Charcoal Filter _____

Other _____

EMISSION RATE DETERMINATION METHOD

Stack Test Data _____ Emission Factor _____ Material Balance X

Similar Unit Data _____ Other MSDS

Reference: _____

OZONE PRECURSOR EMISSIONS

Typical Ozone Season Emissions
 VOC Emissions 0.0025679348 lb/day
 NOx Emissions _____ lb/day
 CO Emissions _____ lb/day

HAZARDOUS AIR POLLUTANTS

| HAP | CAS CODE | LB/YR |
|----------------------------|------------------|-----------------------|
| <u> Methyl Chloroform </u> | <u> 71-55-6 </u> | <u> 0.6525000000 </u> |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |

CRITERIA POLLUTANT EMISSIONS

VOC Emissions 0.0004725000 ton/yr
 NOx Emissions _____ ton/yr
 CO Emissions _____ ton/yr
 SO2 Emissions _____ ton/yr
 PM10 Emissions _____ ton/yr
 Total Particulate _____ ton/yr

STACK INFORMATION

| | |
|-----------------------------------|------------------------------------|
| Stack (release) Height _____ feet | Stack Gas Velocity _____ ft/sec |
| Stack Diameter _____ inch | Stack Gas Flow Rate _____ ascf/min |
| | Stack Gas Temperature _____ oF |

Other sources that share this stack? _____

Stack Sampling Report Available? (Y/ N, results?) _____

**Emissions for Miscellaneous Chemicals and Solvents
Federal and New York State Regulations**

Name: Seneca Army Depot
Bldg #: 113 - Box and Crate Shop
SCC: 4-01-888-01

Date: 8/30/94
Initials: GRM

Product/Material Information

Product: CRC 5-56
NSN: 9150-00-529-7222

Note: For annual usage, only fill the boxes for EITHER a, b, OR c and leave other boxes blank

Annual Usage: a) cans/yr at fl.oz/can= 0.000 gal/yr
OR b) 3 cans/yr at 12.000 wt.oz/can= 2.250 lb/yr
OR c) gal/yr

Specific Gravity: 0.932

Notes:

VOC composition: 71.00 %(MSDS/Manuf.)

VOC Composition: 42.00 %(corrected for water and non-photochemical reactants)

expressed as : A A = % by weight

Notes:

B = % by volume

Comment: "A" and "B" refer to the percentage of the material which contains VOCs.

This is expressed as a percentage of total volume, (i.e. gallons) or of total weight (i.e. pounds). When available, percent by weight should take precedence. Make sure to subtract the percentage of hazardous VOCs which are not to be evaluated as a VOC (i.e., methylene chloride).

Emissions Summary

| Annual VOC Emissions | | |
|------------------------------------|--------------------|---------------------|
| Annual usage converted to weight = | <u>2.250</u> | Lbs/yr |
| VOC Emissions = | <u>0.945</u> Lb/yr | <u>0.000</u> Ton/yr |

| Ozone Season VOC Emissions | | |
|------------------------------------|--------------|-------------|
| Ozone Season Usage = | <u>0.563</u> | Lbs |
| Daily Ozone Season Usage = | <u>0.006</u> | Lbs/day |
| Ozone Season VOC Emissions = | <u>0.236</u> | Lbs |
| Daily Ozone Season VOC Emissions = | <u>0.003</u> | Lbs/day |
| Ozone Season Work Day Emissions = | <u>0.004</u> | Lbs/wrk day |

HAP Emissions: To determine HAP emissions, enter the composition of each HAP in one of two areas. First, enter the compositions for HAPs which are presented on the following page. If a particular HAP is not listed on that page, then enter the name and composition in the spaces provided below. HAP totals will be presented at the bottom of the following page.

| Additional HAPs | CAS No. | (% Composition) | Emissions (Lbs/yr) |
|-----------------|---------|-----------------|--------------------|
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| HAP Subtotal = | | | <u>0.0</u> Lbs/yr |

| HAP Emissions | | | |
|---------------------------|-----------|-----------------|--------------------|
| HAP Name | CAS # | (% Composition) | Emissions (Lbs/yr) |
| Benzene | 71-43-2 | | |
| Carbon disulfide | 75-15-0 | | |
| Carbon tetrachloride | 56-23-5 | | |
| Chlorine | 7782-50-5 | | |
| Chlorobenzene | 108-90-7 | | |
| Chloroform | 67-66-3 | | |
| Cumene | 98-82-8 | | |
| 1,4 Dioxane | 123-91-1 | | |
| Epichlorohydrin | 106-89-8 | | |
| Ethylbenzene | 100-41-4 | | |
| Ethylene dibromide | 106-93-4 | | |
| Ethylene dichloride | 107-06-2 | | |
| Ethylene glycol | 107-21-1 | | |
| Ethylene oxide | 75-21-8 | | |
| Formaldehyde | 50-00-0 | | |
| Hexane | 110-54-3 | | |
| Hydrazine | 302-01-2 | | |
| Hydrogen fluoride | 7664-39-3 | | |
| Hydrogen sulfide | 7783-06-4 | | |
| Hydroquinone | 123-31-9 | | |
| m-xylene | 108-38-3 | | |
| Methanol (methyl alcohol) | 67-56-1 | | |
| Methyl chloride | 74-87-3 | | |
| Methyl chloroform | 71-55-6 | 29 | 0.653 |
| Methyl ethyl ketone | 78-93-3 | | |
| Methyl isobutyl ketone | 108-10-1 | | |
| Methyl methacrylate | 80-62-6 | | |
| Methylene chloride | 75-09-2 | | |
| Naphthalene | 91-20-3 | | |
| o-xylene | 95-47-6 | | |
| p-xylene | 106-42-3 | | |
| Phenol | 108-95-2 | | |
| Phosgene | 75-44-5 | | |
| Phosphine | 7803-51-2 | | |
| Styrene | 100-42-5 | | |
| Tetrachloroethylene | 127-18-4 | | |
| Trichloroethylene | 79-01-6 | | |
| Toluene | 108-88-3 | | |
| Vinyl acetate | 108-05-4 | | |
| Vinyl chloride | 75-01-4 | | |
| Xylenes | 1330-20-7 | | |
| HAP Total = | | | 0.65 Lbs/yr |
| HAP Content = | | | 2.25 Lbs/Gal |

Miscellaneous Chemical VOC Emissions
for Security

| NSN | Solvent | Use gal/yr | VOC Content (%) | VOC Emissions (lb/yr) | VOC Emissions (ton/yr) |
|------------------|--------------------|---------------|--------------------|--------------------------|---------------------------|
| 6850-00-224-6663 | Rifle Bore Cleaner | 3.50 | 100.00 | 26.21 | 0.01 |
| 9150-01-054-6453 | CLP | 1.00 | 18.00 | 1.32 | <0.01 |
| 9150-00-273-2389 | PL-S | 0.48 | 54.00 | 1.89 | <0.01 |
| 6850-00-022-4605 | Rifle Bore Cleaner | 1.45 | 85.00 | 8.93 | <0.01 |
| 9150-00-889-3522 | LSA | 0.08 | 66.28 | 0.50 | <0.01 |
| 6850-00-224-6656 | Rifle Bore Cleaner | 0.05 | 100.00 | 0.38 | <0.01 |
| 9150-00-935-6597 | LSA | 0.26 | 54.00 | 1.01 | <0.01 |

Ozone Season Daily Miscellaneous Chemical Emissions
for Security

| Pollutant | Emissions (lb) | Daily Emissions (lb) | Daily Emissions (tons) |
|-----------|-------------------|-------------------------|---------------------------|
| VOC | 40.22 | 0.11 | <0.01 |

Miscellaneous Chemical HAP Emissions
for Security

| NSN | Solvent | Use (gal/yr) | HAP Content (lbs/gal) | HAP Emissions (lb/yr) | HAP Emissions (ton/yr) |
|------------------|---------|-----------------|--------------------------|--------------------------|---------------------------|
| 9150-00-889-3522 | LSA | 0.08 | 4.35 | 0.34 | <0.01 |

Miscellaneous Chemical HAP Emissions
for Security

| NSN | Solvent | Use (gal/yr) | HAP Toluene (%) | HAP MEK (%) | HAP Antimony Cmpd (%) |
|------------------|---------|-----------------|-----------------------|-------------------|-----------------------------|
| 9150-00-889-3522 | LSA | 0.08 | 10.00 | 25.00 | 10.00 |

MISCELLANEOUS CHEMICAL SOURCES

Page__ of __

GENERAL INFORMATION

Installation Seneca Army Depot

SCC..... 4-01-888-01 Unit ID #.....

Location..... Security Permit #.....

POC..... William Plate Inventoried by..... T. Sletten

Phone..... (607) 869-1228 Operating Schedule

Inventory Date..... June 6-10, 1994 Hours/day.....

Days/week.....

Type of Activity: Weapons Training and Cleaning

MONTHLY FUEL USE

| 19__ | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ |

Units: _____ lbs _____ gal _____ other (specify)

SOURCE DESCRIPTION

Describe the source, how the chemical product is used, and the mechanism for generating air emissions.

CHEMICAL PRODUCT DATA

(Use extra sheets as necessary)

Product Name Rifle Bore Cleaner

NSN 6850-00-224-6663 MILSPEC _____

Annual Use 5 gal Annual Disposal _____

Product Name CLP

NSN 9150-01-054-6453 MILSPEC _____

Annual Use 8 pt Annual Disposal _____

POLLUTION CONTROL EQUIPMENT

(Enter control efficiency)

Wet Scrubber _____ Cyclone _____ Baghouse _____

Afterburner _____ Activated Charcoal Filter _____

Other _____

EMISSION RATE DETERMINATION METHOD

Stack Test Data _____ Emission Factor _____ Material Balance X

Similar Unit Data _____ Other _____ MSDS _____

Reference: _____

OZONE PRECURSOR EMISSIONS

Typical Ozone Season Emissions
 VOC Emissions 0.1092994011 lb/day
 NOx Emissions _____ lb/day
 CO Emissions _____ lb/day

HAZARDOUS AIR POLLUTANTS

| HAP | CAS CODE | LB/YR |
|---------------------|----------|--------------|
| Antimony Compounds | 0 | 0.0750000000 |
| Methyl Ethyl Ketone | 78-93-3 | 0.1875000000 |
| Toluene | 108-88-3 | 0.0750000000 |
| | | |
| | | |

CRITERIA POLLUTANT EMISSIONS

VOC Emissions 0.0201110898 ton/yr
 NOx Emissions _____ ton/yr
 CO Emissions _____ ton/yr
 SO2 Emissions _____ ton/yr
 PM10 Emissions _____ ton/yr
 Total Particulate _____ ton/yr

STACK INFORMATION

| | |
|-----------------------------------|------------------------------------|
| Stack (release) Height _____ feet | Stack Gas Velocity _____ ft/sec |
| Stack Diameter _____ inch | Stack Gas Flow Rate _____ ascf/min |
| | Stack Gas Temperature _____ oF |

Other sources that share this stack? _____

Stack Sampling Report Available? (Y/ N, results?) _____

**Emissions for Miscellaneous Chemicals and Solvents
Federal and New York State Regulations**

Name: Seneca Army Depot
 Bldg #: Security
 SCC: 4-01-888-01

Date: 8/30/94
 Initials: GRM

Product/Material Information

Product: Rifle Bore Cleaner
 NSN: 6850-00-224-6663

Note: For annual usage, only fill the boxes for EITHER a, b, OR c and leave other boxes blank

Annual Usage: a) cans/yr at fl.oz/can= 0.000 gal/yr
 OR b) cans/yr at wt.oz/can= 0.000 lb/yr
 OR c) gal/yr

Specific Gravity: 0.900

Notes:

VOC composition: 100.00 %(MSDS/Manuf.)

VOC Composition: 100.00 %(corrected for water and non-photochemical reactants)

expressed as : A A = % by weight

Notes:

B = % by volume

Comment: "A" and "B" refer to the percentage of the material which contains VOCs.

This is expressed as a percentage of total volume, (i.e. gallons) or of total weight (i.e. pounds). When available, percent by weight should take precedence. Make sure to subtract the percentage of hazardous VOCs which are not to be evaluated as a VOC (i.e., methylene chloride).

Emissions Summary

Annual VOC Emissions

Annual usage converted to weight = 26.205 Lbs/yr
 VOC Emissions = 26.205 Lb/yr 0.013 Ton/yr

Ozone Season VOC Emissions

Ozone Season Usage = 6.551 Lbs
 Daily Ozone Season Usage = 0.071 Lbs/day

 Ozone Season VOC Emissions = 6.551 Lbs
 Daily Ozone Season VOC Emissions = 0.071 Lbs/day
 Ozone Season Work Day Emissions = 0.100 Lbs/wrk day

HAP Emissions: To determine HAP emissions, enter the composition of each HAP in one of two areas. First, enter the compositions for HAPs which are presented on the following page. If a particular HAP is not listed on that page, then enter the name and composition in the spaces provided below. HAP totals will be presented at the bottom of the following page.

| Additional HAPs | CAS No. | (% Composition) | Emissions (Lbs/yr) |
|-----------------|---------|-----------------|-----------------------|
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| HAP Subtotal = | | | <u>0.0</u> Lbs/yr |

| HAP Emissions | | | |
|---------------------------|-----------|-----------------|-----------------------|
| HAP Name | CAS # | (% Composition) | Emissions (Lbs/yr) |
| Benzene | 71-43-2 | | |
| Carbon disulfide | 75-15-0 | | |
| Carbon tetrachloride | 56-23-5 | | |
| Chlorine | 7782-50-5 | | |
| Chlorobenzene | 108-90-7 | | |
| Chloroform | 67-66-3 | | |
| Cumene | 98-82-8 | | |
| 1,4 Dioxane | 123-91-1 | | |
| Epichlorohydrin | 106-89-8 | | |
| Ethylbenzene | 100-41-4 | | |
| Ethylene dibromide | 106-93-4 | | |
| Ethylene dichloride | 107-06-2 | | |
| Ethylene glycol | 107-21-1 | | |
| Ethylene oxide | 75-21-8 | | |
| Formaldehyde | 50-00-0 | | |
| Hexane | 110-54-3 | | |
| Hydrazine | 302-01-2 | | |
| Hydrogen fluoride | 7664-39-3 | | |
| Hydrogen sulfide | 7783-06-4 | | |
| Hydroquinone | 123-31-9 | | |
| m-xylene | 108-38-3 | | |
| Methanol (methyl alcohol) | 67-56-1 | | |
| Methyl chloride | 74-87-3 | | |
| Methyl chloroform | 71-55-6 | | |
| Methyl ethyl ketone | 78-93-3 | | |
| Methyl isobutyl ketone | 108-10-1 | | |
| Methyl methacrylate | 80-62-6 | | |
| Methylene chloride | 75-09-2 | | |
| Naphthalene | 91-20-3 | | |
| o-xylene | 95-47-6 | | |
| p-xylene | 106-42-3 | | |
| Phenol | 108-95-2 | | |
| Phosgene | 75-44-5 | | |
| Phosphine | 7803-51-2 | | |
| Styrene | 100-42-5 | | |
| Tetrachloroethylene | 127-18-4 | | |
| Trichloroethylene | 79-01-6 | | |
| Toluene | 108-88-3 | | |
| Vinyl acetate | 108-05-4 | | |
| Vinyl chloride | 75-01-4 | | |
| Xylenes | 1330-20-7 | | |
| HAP Total = | | | 0.00 Lbs/yr |
| HAP Content = | | | 0.00 Lbs/Gal |

**Emissions for Miscellaneous Chemicals and Solvents
Federal and New York State Regulations**

Name: Seneca Army Depot
Bldg #: Security
SCC: 4-01-888-01

Date: 8/30/94
Initials: GRM

Product/Material Information

Product: CLP
NSN: 9150-01-054-6453

Note: For annual usage, only fill the boxes for EITHER a, b, OR c and leave other boxes blank

Annual Usage: a) cans/yr at fl.oz/can= 0.000 gal/yr
OR b) cans/yr at wt.oz/can= 0.000 lb/yr
OR c) 1.000 gal/yr

Specific Gravity: 0.880

Notes:

VOC composition: 18.00 %(MSDS/Manuf.)

VOC Composition: 18.00 %(corrected for water and non-photochemical reactants)

expressed as : A A = % by weight
B = % by volume

Notes:

Comment: "A" and "B" refer to the percentage of the material which contains VOCs.

This is expressed as a percentage of total volume, (i.e. gallons) or of total weight (i.e. pounds). When available, percent by weight should take precedence. Make sure to subtract the percentage of hazardous VOCs which are not to be evaluated as a VOC (i.e., methylene chloride).

Emissions Summary

Annual VOC Emissions

Annual usage converted to weight = 7.321 Lbs/yr
 VOC Emissions = 1.318 Lb/yr 0.001 Ton/yr

Ozone Season VOC Emissions

Ozone Season Usage = 1.830 Lbs
 Daily Ozone Season Usage = 0.020 Lbs/day
 Ozone Season VOC Emissions = 0.329 Lbs
 Daily Ozone Season VOC Emissions = 0.004 Lbs/day
 Ozone Season Work Day Emissions = 0.005 Lbs/wrk day

HAP Emissions: To determine HAP emissions, enter the composition of each HAP in one of two areas. First, enter the compositions for HAPs which are presented on the following page. If a particular HAP is not listed on that page, then enter the name and composition in the spaces provided below. HAP totals will be presented at the bottom of the following page.

| Additional HAPs | CAS No. | (% Composition) | Emissions (Lbs/yr) |
|-----------------|---------|-----------------|-----------------------|
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| HAP Subtotal = | | | <u>0.0</u> Lbs/yr |

| HAP Emissions | | | |
|---------------------------|-----------|-----------------|-----------------------|
| HAP Name | CAS # | (% Composition) | Emissions (Lbs/yr) |
| Benzene | 71-43-2 | | |
| Carbon disulfide | 75-15-0 | | |
| Carbon tetrachloride | 56-23-5 | | |
| Chlorine | 7782-50-5 | | |
| Chlorobenzene | 108-90-7 | | |
| Chloroform | 67-66-3 | | |
| Cumene | 98-82-8 | | |
| 1,4 Dioxane | 123-91-1 | | |
| Epichlorohydrin | 106-89-8 | | |
| Ethylbenzene | 100-41-4 | | |
| Ethylene dibromide | 106-93-4 | | |
| Ethylene dichloride | 107-06-2 | | |
| Ethylene glycol | 107-21-1 | | |
| Ethylene oxide | 75-21-8 | | |
| Formaldehyde | 50-00-0 | | |
| Hexane | 110-54-3 | | |
| Hydrazine | 302-01-2 | | |
| Hydrogen fluoride | 7664-39-3 | | |
| Hydrogen sulfide | 7783-06-4 | | |
| Hydroquinone | 123-31-9 | | |
| m-xylene | 108-38-3 | | |
| Methanol (methyl alcohol) | 67-56-1 | | |
| Methyl chloride | 74-87-3 | | |
| Methyl chloroform | 71-55-6 | | |
| Methyl ethyl ketone | 78-93-3 | | |
| Methyl isobutyl ketone | 108-10-1 | | |
| Methyl methacrylate | 80-62-6 | | |
| Methylene chloride | 75-09-2 | | |
| Naphthalene | 91-20-3 | | |
| o-xylene | 95-47-6 | | |
| p-xylene | 106-42-3 | | |
| Phenol | 108-95-2 | | |
| Phosgene | 75-44-5 | | |
| Phosphine | 7803-51-2 | | |
| Styrene | 100-42-5 | | |
| Tetrachloroethylene | 127-18-4 | | |
| Trichloroethylene | 79-01-6 | | |
| Toluene | 108-88-3 | | |
| Vinyl acetate | 108-05-4 | | |
| Vinyl chloride | 75-01-4 | | |
| Xylenes | 1330-20-7 | | |
| HAP Total = | | | 0.00 Lbs/yr |
| HAP Content = | | | 0.00 Lbs/Gal |

**Emissions for Miscellaneous Chemicals and Solvents
Federal and New York State Regulations**

Name: Seneca Army Depot
Bldg #: Security
SCC: 4-01-888-01

Date: 8/30/94
Initials: GRM

Product/Material Information

Product: PL-S
NSN: 9150-00-273-2389

Note: For annual usage, only fill the boxes for EITHER a, b, OR c and leave other boxes blank

Annual Usage: a) cans/yr at fl.oz/can= 0.000 gal/yr
OR b) 14 cans/yr at 4.000 wt.oz/can= 3.500 lb/yr
OR c) gal/yr

Specific Gravity: 0.880

Notes:

VOC composition: 54.00 %(MSDS/Manuf.)

VOC Composition: 54.00 %(corrected for water and non-photochemical reactants)

expressed as : A A = % by weight
B = % by volume

Notes:

Comment: "A" and "B" refer to the percentage of the material which contains VOCs.

This is expressed as a percentage of total volume, (i.e. gallons) or of total weight (i.e. pounds). When available, percent by weight should take precedence. Make sure to subtract the percentage of hazardous VOCs which are not to be evaluated as a VOC (i.e., methylene chloride).

Emissions Summary

| Annual VOC Emissions | | |
|------------------------------------|--------------|--------|
| Annual usage converted to weight = | <u>3.500</u> | Lbs/yr |
| VOC Emissions = | <u>1.890</u> | Lb/yr |
| | <u>0.001</u> | Ton/yr |

| Ozone Season VOC Emissions | | |
|------------------------------------|--------------|-------------|
| Ozone Season Usage = | <u>0.875</u> | Lbs |
| Daily Ozone Season Usage = | <u>0.010</u> | Lbs/day |
| Ozone Season VOC Emissions = | <u>0.473</u> | Lbs |
| Daily Ozone Season VOC Emissions = | <u>0.005</u> | Lbs/day |
| Ozone Season Work Day Emissions = | <u>0.007</u> | Lbs/wrk day |

HAP Emissions: To determine HAP emissions, enter the composition of each HAP in one of two areas. First, enter the compositions for HAPs which are presented on the following page. If a particular HAP is not listed on that page, then enter the name and composition in the spaces provided below. HAP totals will be presented at the bottom of the following page.

| Additional HAPs | CAS No. | (% Composition) | Emissions (Lbs/yr) |
|-----------------|---------|-----------------|-----------------------|
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| HAP Subtotal = | | | <u>0.0</u> Lbs/yr |

| HAP Emissions | | | |
|---------------------------|-----------|-----------------|-----------------------|
| HAP Name | CAS # | (% Composition) | Emissions (Lbs/yr) |
| Benzene | 71-43-2 | | |
| Carbon disulfide | 75-15-0 | | |
| Carbon tetrachloride | 56-23-5 | | |
| Chlorine | 7782-50-5 | | |
| Chlorobenzene | 108-90-7 | | |
| Chloroform | 67-66-3 | | |
| Cumene | 98-82-8 | | |
| 1,4 Dioxane | 123-91-1 | | |
| Epichlorohydrin | 106-89-8 | | |
| Ethylbenzene | 100-41-4 | | |
| Ethylene dibromide | 106-93-4 | | |
| Ethylene dichloride | 107-06-2 | | |
| Ethylene glycol | 107-21-1 | | |
| Ethylene oxide | 75-21-8 | | |
| Formaldehyde | 50-00-0 | | |
| Hexane | 110-54-3 | | |
| Hydrazine | 302-01-2 | | |
| Hydrogen fluoride | 7664-39-3 | | |
| Hydrogen sulfide | 7783-06-4 | | |
| Hydroquinone | 123-31-9 | | |
| m-xylene | 108-38-3 | | |
| Methanol (methyl alcohol) | 67-56-1 | | |
| Methyl chloride | 74-87-3 | | |
| Methyl chloroform | 71-55-6 | | |
| Methyl ethyl ketone | 78-93-3 | | |
| Methyl isobutyl ketone | 108-10-1 | | |
| Methyl methacrylate | 80-62-6 | | |
| Methylene chloride | 75-09-2 | | |
| Naphthalene | 91-20-3 | | |
| o-xylene | 95-47-6 | | |
| p-xylene | 106-42-3 | | |
| Phenol | 108-95-2 | | |
| Phosgene | 75-44-5 | | |
| Phosphine | 7803-51-2 | | |
| Styrene | 100-42-5 | | |
| Tetrachloroethylene | 127-18-4 | | |
| Trichloroethylene | 79-01-6 | | |
| Toluene | 108-88-3 | | |
| Vinyl acetate | 108-05-4 | | |
| Vinyl chloride | 75-01-4 | | |
| Xylenes | 1330-20-7 | | |
| HAP Total = | | | 0.00 Lbs/yr |
| HAP Content = | | | 0.00 Lbs/Gal |

**Emissions for Miscellaneous Chemicals and Solvents
Federal and New York State Regulations**

Name: Seneca Army Depot
Bldg #: Security
SCC: 4-01-888-01

Date: 8/30/94
Initials: GRM

Product/Material Information

Product: Rifle Bore Cleaner
NSN: 6850-00-022-4605

Note: For annual usage, only fill the boxes for EITHER a, b, OR c and leave other boxes blank

| | | | | | | | |
|------------------|----------------------|----------------------|---------|----------------------|--------------|--------------|---------------------|
| Annual Usage: a) | <input type="text"/> | cans/yr | at | <input type="text"/> | fl.oz/can= | <u>0.000</u> | gal/yr |
| OR | b) | <u>21</u> | cans/yr | at | <u>8.000</u> | wt.oz/can= | <u>10.500</u> lb/yr |
| OR | c) | <input type="text"/> | gal/yr | | | | |

Specific Gravity: 0.870

Notes:

VOC composition: 85.00 %(MSDS/Manuf.)

VOC Composition: 85.00 %(corrected for water and non-photochemical reactants)

expressed as : A A = % by weight
B = % by volume

Notes:

Comment: "A" and "B" refer to the percentage of the material which contains VOCs.

This is expressed as a percentage of total volume, (i.e. gallons) or of total weight (i.e. pounds). When available, percent by weight should take precedence. Make sure to subtract the percentage of hazardous VOCs which are not to be evaluated as a VOC (i.e., methylene chloride).

Emissions Summary

| Annual VOC Emissions | | |
|------------------------------------|--------------------|---------------------|
| Annual usage converted to weight = | <u>10.500</u> | Lbs/yr |
| VOC Emissions = | <u>8.925</u> Lb/yr | <u>0.004</u> Ton/yr |

| Ozone Season VOC Emissions | | |
|------------------------------------|--------------|-------------|
| Ozone Season Usage = | <u>2.625</u> | Lbs |
| Daily Ozone Season Usage = | <u>0.029</u> | Lbs/day |
| Ozone Season VOC Emissions = | <u>2.231</u> | Lbs |
| Daily Ozone Season VOC Emissions = | <u>0.024</u> | Lbs/day |
| Ozone Season Work Day Emissions = | <u>0.034</u> | Lbs/wrk day |

HAP Emissions: To determine HAP emissions, enter the composition of each HAP in one of two areas. First, enter the compositions for HAPs which are presented on the following page. If a particular HAP is not listed on that page, then enter the name and composition in the spaces provided below. HAP totals will be presented at the bottom of the following page.

| Additional HAPs | CAS No. | (% Composition) | Emissions (Lbs/yr) |
|-----------------|---------|-----------------|-----------------------|
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| HAP Subtotal = | | | <u>0.0</u> Lbs/yr |

| HAP Emissions | | | |
|---------------------------|-----------|-----------------|-----------------------|
| HAP Name | CAS # | (% Composition) | Emissions (Lbs/yr) |
| Benzene | 71-43-2 | | |
| Carbon disulfide | 75-15-0 | | |
| Carbon tetrachloride | 56-23-5 | | |
| Chlorine | 7782-50-5 | | |
| Chlorobenzene | 108-90-7 | | |
| Chloroform | 67-66-3 | | |
| Cumene | 98-82-8 | | |
| 1,4 Dioxane | 123-91-1 | | |
| Epichlorohydrin | 106-89-8 | | |
| Ethylbenzene | 100-41-4 | | |
| Ethylene dibromide | 106-93-4 | | |
| Ethylene dichloride | 107-06-2 | | |
| Ethylene glycol | 107-21-1 | | |
| Ethylene oxide | 75-21-8 | | |
| Formaldehyde | 50-00-0 | | |
| Hexane | 110-54-3 | | |
| Hydrazine | 302-01-2 | | |
| Hydrogen fluoride | 7664-39-3 | | |
| Hydrogen sulfide | 7783-06-4 | | |
| Hydroquinone | 123-31-9 | | |
| m-xylene | 108-38-3 | | |
| Methanol (methyl alcohol) | 67-56-1 | | |
| Methyl chloride | 74-87-3 | | |
| Methyl chloroform | 71-55-6 | | |
| Methyl ethyl ketone | 78-93-3 | | |
| Methyl isobutyl ketone | 108-10-1 | | |
| Methyl methacrylate | 80-62-6 | | |
| Methylene chloride | 75-09-2 | | |
| Naphthalene | 91-20-3 | | |
| o-xylene | 95-47-6 | | |
| p-xylene | 106-42-3 | | |
| Phenol | 108-95-2 | | |
| Phosgene | 75-44-5 | | |
| Phosphine | 7803-51-2 | | |
| Styrene | 100-42-5 | | |
| Tetrachloroethylene | 127-18-4 | | |
| Trichloroethylene | 79-01-6 | | |
| Toluene | 108-88-3 | | |
| Vinyl acetate | 108-05-4 | | |
| Vinyl chloride | 75-01-4 | | |
| Xylenes | 1330-20-7 | | |
| HAP Total = | | | 0.00 Lbs/yr |
| HAP Content = | | | 0.00 Lbs/Gal |

**Emissions for Miscellaneous Chemicals and Solvents
Federal and New York State Regulations**

Name: Seneca Army Depot
Bldg #: Security
SCC: 4-01-888-01

Date: 8/30/94
Initials: GRM

Product/Material Information

Product: LSA
NSN: 9150-00-889-3522

Note: For annual usage, only fill the boxes for EITHER a, b, OR c and leave other boxes blank

| | | | | | | | |
|------------------|----------------------|----------------------|---------|----------------------|--------------|--------------|--------------------|
| Annual Usage: a) | <input type="text"/> | cans/yr | at | <input type="text"/> | fl.oz/can= | <u>0.000</u> | gal/yr |
| OR | b) | <u>3</u> | btls/yr | at | <u>4.000</u> | wt.oz/btl= | <u>0.750</u> lb/yr |
| OR | c) | <input type="text"/> | gal/yr | | | | |

Specific Gravity: 1.161

Notes: Specific Gravity: $(9.66 \text{ lb/gal}) / (8.319 \text{ lb/gal}) = 1.161$

VOC composition: 66.28 %(MSDS/Manuf.)

VOC Composition: 66.28 %(corrected for water and non-photochemical reactants)

expressed as : A A = % by weight
B = % by volume

Notes:

Comment: "A" and "B" refer to the percentage of the material which contains VOCs.

This is expressed as a percentage of total volume, (i.e. gallons) or of total weight (i.e. pounds). When available, percent by weight should take precedence. Make sure to subtract the percentage of hazardous VOCs which are not to be evaluated as a VOC (i.e., methylene chloride).

| |
|--------------------------|
| Emissions Summary |
|--------------------------|

| |
|-----------------------------|
| Annual VOC Emissions |
|-----------------------------|

Annual usage converted to weight = 0.750 Lbs/yr

VOC Emissions = 0.497 Lb/yr 0.000 Ton/yr

| |
|-----------------------------------|
| Ozone Season VOC Emissions |
|-----------------------------------|

Ozone Season Usage = 0.188 Lbs

Daily Ozone Season Usage = 0.002 Lbs/day

Ozone Season VOC Emissions = 0.124 Lbs

Daily Ozone Season VOC Emissions = 0.001 Lbs/day

Ozone Season Work Day Emissions = 0.002 Lbs/wrk day

HAP Emissions: To determine HAP emissions, enter the composition of each HAP in one of two areas. First, enter the compositions for HAPs which are presented on the following page. If a particular HAP is not listed on that page, then enter the name and composition in the spaces provided below. HAP totals will be presented at the bottom of the following page.

| Additional HAPs | CAS No. | (% Composition) | Emissions (Lbs/yr) |
|-------------------|---------|-----------------|-----------------------|
| Antimony Compound | 0 | 10 | 0.075 |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| HAP Subtotal = | | | <u>0.1</u> Lbs/yr |

| HAP Emissions | | | |
|---------------------------|-----------|-----------------|--------------------|
| HAP Name | CAS # | (% Composition) | Emissions (Lbs/yr) |
| Benzene | 71-43-2 | | |
| Carbon disulfide | 75-15-0 | | |
| Carbon tetrachloride | 56-23-5 | | |
| Chlorine | 7782-50-5 | | |
| Chlorobenzene | 108-90-7 | | |
| Chloroform | 67-66-3 | | |
| Cumene | 98-82-8 | | |
| 1,4 Dioxane | 123-91-1 | | |
| Epichlorohydrin | 106-89-8 | | |
| Ethylbenzene | 100-41-4 | | |
| Ethylene dibromide | 106-93-4 | | |
| Ethylene dichloride | 107-06-2 | | |
| Ethylene glycol | 107-21-1 | | |
| Ethylene oxide | 75-21-8 | | |
| Formaldehyde | 50-00-0 | | |
| Hexane | 110-54-3 | | |
| Hydrazine | 302-01-2 | | |
| Hydrogen fluoride | 7664-39-3 | | |
| Hydrogen sulfide | 7783-06-4 | | |
| Hydroquinone | 123-31-9 | | |
| m-xylene | 108-38-3 | | |
| Methanol (methyl alcohol) | 67-56-1 | | |
| Methyl chloride | 74-87-3 | | |
| Methyl chloroform | 71-55-6 | | |
| Methyl ethyl ketone | 78-93-3 | 25 | 0.188 |
| Methyl isobutyl ketone | 108-10-1 | | |
| Methyl methacrylate | 80-62-6 | | |
| Methylene chloride | 75-09-2 | | |
| Naphthalene | 91-20-3 | | |
| o-xylene | 95-47-6 | | |
| p-xylene | 106-42-3 | | |
| Phenol | 108-95-2 | | |
| Phosgene | 75-44-5 | | |
| Phosphine | 7803-51-2 | | |
| Styrene | 100-42-5 | | |
| Tetrachloroethylene | 127-18-4 | | |
| Trichloroethylene | 79-01-6 | | |
| Toluene | 108-88-3 | 10 | 0.075 |
| Vinyl acetate | 108-05-4 | | |
| Vinyl chloride | 75-01-4 | | |
| Xylenes | 1330-20-7 | | |
| HAP Total = | | | 0.34 Lbs/yr |
| HAP Content = | | | 4.35 Lbs/Gal |

**Emissions for Miscellaneous Chemicals and Solvents
Federal and New York State Regulations**

Name: Seneca Army Depot
Bldg #: Security
SCC: 4-01-888-01

Date: 8/30/94
Initials: GRM

Product/Material Information

Product: Rifle Bore Cleaner
NSN: 6850-00-224-6656

Note: For annual usage, only fill the boxes for EITHER a, b, OR c and leave other boxes blank

| | | | | | | | |
|------------------|----------------------|----------------------|---------|----------------------|--------------|--------------|--------------------|
| Annual Usage: a) | <input type="text"/> | cans/yr | at | <input type="text"/> | fl.oz/can= | <u>0.000</u> | gal/yr |
| OR | b) | <u>3</u> | btls/yr | at | <u>2.000</u> | wt.oz/btl= | <u>0.375</u> lb/yr |
| OR | c) | <input type="text"/> | gal/yr | | | | |

Specific Gravity: 0.900

Notes:

VOC composition: 100.00 %(MSDS/Manuf.)

VOC Composition: 100.00 %(corrected for water and non-photochemical reactants)

expressed as : A A = % by weight
B = % by volume

Notes:

Comment: "A" and "B" refer to the percentage of the material which contains VOCs.

This is expressed as a percentage of total volume, (i.e. gallons) or of total weight (i.e. pounds). When available, percent by weight should take precedence. Make sure to subtract the percentage of hazardous VOCs which are not to be evaluated as a VOC (i.e., methylene chloride).

Emissions Summary

Annual VOC Emissions

Annual usage converted to weight = 0.375 Lbs/yr
 VOC Emissions = 0.375 Lb/yr 0.000 Ton/yr

Ozone Season VOC Emissions

Ozone Season Usage = 0.094 Lbs
 Daily Ozone Season Usage = 0.001 Lbs/day
 Ozone Season VOC Emissions = 0.094 Lbs
 Daily Ozone Season VOC Emissions = 0.001 Lbs/day
 Ozone Season Work Day Emissions = 0.001 Lbs/wrk day

HAP Emissions: To determine HAP emissions, enter the composition of each HAP in one of two areas. First, enter the compositions for HAPs which are presented on the following page. If a particular HAP is not listed on that page, then enter the name and composition in the spaces provided below. HAP totals will be presented at the bottom of the following page.

| Additional HAPs | CAS No. | (% Composition) | Emissions (Lbs/yr) |
|-----------------|---------|-----------------|-----------------------|
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| HAP Subtotal = | | | <u>0.0</u> Lbs/yr |

| HAP Emissions | | | |
|---------------------------|-----------|-----------------|-----------------------|
| HAP Name | CAS # | (% Composition) | Emissions (Lbs/yr) |
| Benzene | 71-43-2 | | |
| Carbon disulfide | 75-15-0 | | |
| Carbon tetrachloride | 56-23-5 | | |
| Chlorine | 7782-50-5 | | |
| Chlorobenzene | 108-90-7 | | |
| Chloroform | 67-66-3 | | |
| Cumene | 98-82-8 | | |
| 1,4 Dioxane | 123-91-1 | | |
| Epichlorohydrin | 106-89-8 | | |
| Ethylbenzene | 100-41-4 | | |
| Ethylene dibromide | 106-93-4 | | |
| Ethylene dichloride | 107-06-2 | | |
| Ethylene glycol | 107-21-1 | | |
| Ethylene oxide | 75-21-8 | | |
| Formaldehyde | 50-00-0 | | |
| Hexane | 110-54-3 | | |
| Hydrazine | 302-01-2 | | |
| Hydrogen fluoride | 7664-39-3 | | |
| Hydrogen sulfide | 7783-06-4 | | |
| Hydroquinone | 123-31-9 | | |
| m-xylene | 108-38-3 | | |
| Methanol (methyl alcohol) | 67-56-1 | | |
| Methyl chloride | 74-87-3 | | |
| Methyl chloroform | 71-55-6 | | |
| Methyl ethyl ketone | 78-93-3 | | |
| Methyl isobutyl ketone | 108-10-1 | | |
| Methyl methacrylate | 80-62-6 | | |
| Methylene chloride | 75-09-2 | | |
| Naphthalene | 91-20-3 | | |
| o-xylene | 95-47-6 | | |
| p-xylene | 106-42-3 | | |
| Phenol | 108-95-2 | | |
| Phosgene | 75-44-5 | | |
| Phosphine | 7803-51-2 | | |
| Styrene | 100-42-5 | | |
| Tetrachloroethylene | 127-18-4 | | |
| Trichloroethylene | 79-01-6 | | |
| Toluene | 108-88-3 | | |
| Vinyl acetate | 108-05-4 | | |
| Vinyl chloride | 75-01-4 | | |
| Xylenes | 1330-20-7 | | |
| HAP Total = | | | 0.00 Lbs/yr |
| HAP Content = | | | 0.00 Lbs/Gal |

**Emissions for Miscellaneous Chemicals and Solvents
Federal and New York State Regulations**

Name: Seneca Army Depot
Bldg #: Security
SCC: 4-01-888-01

Date: 8/30/94
Initials: GRM

Product/Material Information

Product: LSA
NSN: 9150-00-935-6597

Note: For annual usage, only fill the boxes for EITHER a, b, OR c and leave other boxes blank

| | | | | | | | |
|------------------|----------------------|----------------------|---------|----------------------|--------------|--------------|--------------------|
| Annual Usage: a) | <input type="text"/> | cans/yr | at | <input type="text"/> | fl.oz/can= | <u>0.000</u> | gal/yr |
| OR | b) | <u>15</u> | cans/yr | at | <u>2.000</u> | wt.oz/can= | <u>1.875</u> lb/yr |
| OR | c) | <input type="text"/> | gal/yr | | | | |

Specific Gravity: 0.880

Notes:

VOC composition: 54.00 %(MSDS/Manuf.)

VOC Composition: 54.00 %(corrected for water and non-photochemical reactants)

expressed as : A A = % by weight
B = % by volume

Notes:

Comment: "A" and "B" refer to the percentage of the material which contains VOCs.

This is expressed as a percentage of total volume, (i.e. gallons) or of total weight (i.e. pounds). When available, percent by weight should take precedence. Make sure to subtract the percentage of hazardous VOCs which are not to be evaluated as a VOC (i.e., methylene chloride).

| |
|--------------------------|
| Emissions Summary |
|--------------------------|

| | |
|------------------------------------|--|
| Annual VOC Emissions | |
| Annual usage converted to weight = | <u>1.875</u> Lbs/yr |
| VOC Emissions = | <u>1.013</u> Lb/yr <u>0.001</u> Ton/yr |

| | |
|------------------------------------|--------------------------|
| Ozone Season VOC Emissions | |
| Ozone Season Usage = | <u>0.469</u> Lbs |
| Daily Ozone Season Usage = | <u>0.005</u> Lbs/day |
| Ozone Season VOC Emissions = | <u>0.253</u> Lbs |
| Daily Ozone Season VOC Emissions = | <u>0.003</u> Lbs/day |
| Ozone Season Work Day Emissions = | <u>0.004</u> Lbs/wrk day |

HAP Emissions: To determine HAP emissions, enter the composition of each HAP in one of two areas. First, enter the compositions for HAPs which are presented on the following page. If a particular HAP is not listed on that page, then enter the name and composition in the spaces provided below. HAP totals will be presented at the bottom of the following page.

| Additional HAPs | CAS No. | (% Composition) | Emissions (Lbs/yr) |
|-----------------|---------|-----------------|-----------------------|
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| HAP Subtotal = | | | <u>0.0</u> Lbs/yr |

| HAP Emissions | | | |
|---------------------------|-----------|-----------------|-----------------------|
| HAP Name | CAS # | (% Composition) | Emissions (Lbs/yr) |
| Benzene | 71-43-2 | | |
| Carbon disulfide | 75-15-0 | | |
| Carbon tetrachloride | 56-23-5 | | |
| Chlorine | 7782-50-5 | | |
| Chlorobenzene | 108-90-7 | | |
| Chloroform | 67-66-3 | | |
| Cumene | 98-82-8 | | |
| 1,4 Dioxane | 123-91-1 | | |
| Epichlorohydrin | 106-89-8 | | |
| Ethylbenzene | 100-41-4 | | |
| Ethylene dibromide | 106-93-4 | | |
| Ethylene dichloride | 107-06-2 | | |
| Ethylene glycol | 107-21-1 | | |
| Ethylene oxide | 75-21-8 | | |
| Formaldehyde | 50-00-0 | | |
| Hexane | 110-54-3 | | |
| Hydrazine | 302-01-2 | | |
| Hydrogen fluoride | 7664-39-3 | | |
| Hydrogen sulfide | 7783-06-4 | | |
| Hydroquinone | 123-31-9 | | |
| m-xylene | 108-38-3 | | |
| Methanol (methyl alcohol) | 67-56-1 | | |
| Methyl chloride | 74-87-3 | | |
| Methyl chloroform | 71-55-6 | | |
| Methyl ethyl ketone | 78-93-3 | | |
| Methyl isobutyl ketone | 108-10-1 | | |
| Methyl methacrylate | 80-62-6 | | |
| Methylene chloride | 75-09-2 | | |
| Naphthalene | 91-20-3 | | |
| o-xylene | 95-47-6 | | |
| p-xylene | 106-42-3 | | |
| Phenol | 108-95-2 | | |
| Phosgene | 75-44-5 | | |
| Phosphine | 7803-51-2 | | |
| Styrene | 100-42-5 | | |
| Tetrachloroethylene | 127-18-4 | | |
| Trichloroethylene | 79-01-6 | | |
| Toluene | 108-88-3 | | |
| Vinyl acetate | 108-05-4 | | |
| Vinyl chloride | 75-01-4 | | |
| Xylenes | 1330-20-7 | | |
| HAP Total = | | | 0.00 Lbs/yr |
| HAP Content = | | | 0.00 Lbs/Gal |

Miscellaneous Chemical VOC Emissions
for Building Number 117

| NSN | Solvent | Use gal/yr | VOC Content (%) | VOC Emissions (lb/yr) | VOC Emissions (ton/yr) |
|-----|--------------------------------------|---------------|--------------------|--------------------------|---------------------------|
| N/A | NAPA Battery Cleaner (765-1307) | 8.86 | 85.00 | 43.83 | 0.02 |
| N/A | NAPA CRC Electromotive Brake Cleaner | 10.71 | 77.90 | 111.01 | 0.06 |

Ozone Season Daily Miscellaneous Chemical Emissions
for Building Number 117

| Pollutant | Emissions (lb) | Daily Emissions (lb) | Daily Emissions (tons) |
|-----------|-------------------|-------------------------|---------------------------|
| VOC | 154.84 | 0.42 | <0.01 |

Miscellaneous Chemical HAP Emissions
for Building Number 117

| NSN | Solvent | Use (gal/yr) | HAP Content (lbs/gal) | HAP Emissions (lb/yr) | HAP Emissions (ton/yr) |
|-----|--------------------------------------|-----------------|--------------------------|--------------------------|---------------------------|
| N/A | NAPA Battery Cleaner (765-1307) | 8.86 | 4.02 | 35.58 | 0.02 |
| N/A | NAPA CRC Electromotive Brake Cleaner | 10.71 | 12.80 | 137.09 | 0.07 |

Miscellaneous Chemical HAP Emissions
for Building Number 117

| NSN | Solvent | Use (gal/yr) | HAP Methylene Chloride (%) | HAP Tetrachloroethylene (%) | HAP Xylene (%) |
|-----|--------------------------------------|-----------------|-------------------------------------|-----------------------------------|----------------------|
| N/A | NAPA Battery Cleaner (765-1307) | 8.86 | 15.00 | | 8.00 |
| N/A | NAPA CRC Electromotive Brake Cleaner | 10.71 | 18.30 | 77.90 | |

| NSN | Solvent | Use (gal/yr) | HAP Isobutyl Acetate* (%) | HAP Acetone* (%) |
|-----|---------------------------------|-----------------|------------------------------------|------------------------|
| N/A | NAPA Battery Cleaner (765-1307) | 8.86 | 13.00 | 33.00 |

* New York State HAP



MISCELLANEOUS CHEMICAL SOURCES

Page__ of __

GENERAL INFORMATION

Installation Seneca Army Depot
SCC..... 4-01-888-01 Unit ID #.....
Location..... Bldg 117 Permit #.....
POC..... Jack LaBour Inventoried by..... T. Sletten
Phone..... (607) 869-1396 Operating Schedule
Inventory Date..... June 6-10, 1994 Hours/day..... 8
Days/week..... 220 days/yr

Type of Activity: Equipment & Battery Shop

MONTHLY FUEL USE
19__ JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC

Units: _____ lbs _____ gal _____ other (specify)

SOURCE DESCRIPTION

Describe the source, how the chemical product is used, and the mechanism for generating air emissions.

CHEMICAL PRODUCT DATA

(Use extra sheets as necessary)

Product Name _____

NSN _____ MILSPEC _____

Annual Use _____ Annual Disposal _____

Product Name NAPA Battery Cleaner (765-1307)

NSN _____ MILSPEC _____

Annual Use 5 cases (13 3/4 oz) Annual Disposal _____

POLLUTION CONTROL EQUIPMENT

(Enter control efficiency)

Wet Scrubber _____ Cyclone _____ Baghouse _____

Afterburner _____ Activated Charcoal Filter _____

Other _____

EMISSION RATE DETERMINATION METHOD

Stack Test Data _____ Emission Factor _____ Material Balance X

Similar Unit Data _____ Other MSDS

Reference: _____

OZONE PRECURSOR EMISSIONS

Typical Ozone Season Emissions
 VOC Emissions 0.4207489810 lb/day
 NOx Emissions _____ lb/day
 CO Emissions _____ lb/day

HAZARDOUS AIR POLLUTANTS

| HAP | CAS CODE | LB/YR |
|---------------------|-----------|---------------|
| Methylene Chloride | 75-09-2 | 33.811875000 |
| Xylene | 1330-20-7 | 4.125000000 |
| Isobutyl Acetate* | 110-19-0 | 17.015625000 |
| Acetone* | 67-64-1 | 6.703125000 |
| Tetrachloroethylene | 127-18-4 | 111.007500000 |

CRITERIA POLLUTANT EMISSIONS

VOC Emissions 0.0774178125 ton/yr
 NOx Emissions _____ ton/yr
 CO Emissions _____ ton/yr
 SO2 Emissions _____ ton/yr
 PM10 Emissions _____ ton/yr
 Total Particulate _____ ton/yr

STACK INFORMATION

Stack (release) Height 30 feet
 Stack Diameter 18 inch

Stack Gas Velocity 26 ft/sec
 Stack Gas Flow Rate 2,700 acsf/min
 Stack Gas Temperature 70 oF

Other sources that share this stack? _____

Stack Sampling Report Available? (Y/ N, results?) _____

**Emissions for Miscellaneous Chemicals and Solvents
Federal and New York State Regulations**

Name: Seneca Army Depot
Bldg #: 117 - Equipment & Battery Shop
SCC: 4-01-888-01

Date: 8/30/94
Initials: GRM

Product/Material Information

Product: NAPA Battery Cleaner
NSN: Part No. (765-1307)

Note: For annual usage, only fill the boxes for EITHER a, b, OR c and leave other boxes blank

| | | | | | | | |
|------------------|----------------------|----------------------|---------|----------------------|---------------|--------------|---------------------|
| Annual Usage: a) | <input type="text"/> | cans/yr | at | <input type="text"/> | fl.oz/can= | <u>0.000</u> | gal/yr |
| OR | b) | <u>60</u> | cans/yr | at | <u>13.750</u> | wt.oz/can= | <u>51.563</u> lb/yr |
| OR | c) | <input type="text"/> | gal/yr | | | | |

Specific Gravity: 0.700

Notes:

VOC composition: 100.00 %(MSDS/Manuf.)

VOC Composition: 85.00 %(corrected for water and non-photochemical reactants)

expressed as : A A = % by weight
B = % by volume

Notes:

Comment: "A" and "B" refer to the percentage of the material which contains VOCs.

This is expressed as a percentage of total volume, (i.e. gallons) or of total weight (i.e. pounds). When available, percent by weight should take precedence. Make sure to subtract the percentage of hazardous VOCs which are not to be evaluated as a VOC (i.e., methylene chloride).

| |
|--------------------------|
| Emissions Summary |
|--------------------------|

| | |
|------------------------------------|---|
| Annual VOC Emissions | |
| Annual usage converted to weight = | <u>51.563</u> Lbs/yr |
| VOC Emissions = | <u>43.828</u> Lb/yr <u>0.022</u> Ton/yr |

| | |
|------------------------------------|--------------------------|
| Ozone Season VOC Emissions | |
| Ozone Season Usage = | <u>12.891</u> Lbs |
| Daily Ozone Season Usage = | <u>0.140</u> Lbs/day |
| Ozone Season VOC Emissions = | <u>10.957</u> Lbs |
| Daily Ozone Season VOC Emissions = | <u>0.119</u> Lbs/day |
| Ozone Season Work Day Emissions = | <u>0.167</u> Lbs/wrk day |

HAP Emissions: To determine HAP emissions, enter the composition of each HAP in one of two areas. First, enter the compositions for HAPs which are presented on the following page. If a particular HAP is not listed on that page, then enter the name and composition in the spaces provided below. HAP totals will be presented at the bottom of the following page.

| Additional HAPs | CAS No. | (% Composition) | Emissions (Lbs/yr) |
|-------------------|----------|-----------------|--------------------|
| Isobutyl Acetate* | 110-19-0 | 13 | 6.703 |
| Acetone* | 67-64-1 | 33 | 17.016 |
| | | | |
| | | | |
| | | | |
| HAP Subtotal = | | | <u>23.7</u> Lbs/yr |

| HAP Emissions | | | |
|---------------------------|-----------|-----------------|--------------------|
| HAP Name | CAS # | (% Composition) | Emissions (Lbs/yr) |
| Benzene | 71-43-2 | | |
| Carbon disulfide | 75-15-0 | | |
| Carbon tetrachloride | 56-23-5 | | |
| Chlorine | 7782-50-5 | | |
| Chlorobenzene | 108-90-7 | | |
| Chloroform | 67-66-3 | | |
| Cumene | 98-82-8 | | |
| 1,4 Dioxane | 123-91-1 | | |
| Epichlorohydrin | 106-89-8 | | |
| Ethylbenzene | 100-41-4 | | |
| Ethylene dibromide | 106-93-4 | | |
| Ethylene dichloride | 107-06-2 | | |
| Ethylene glycol | 107-21-1 | | |
| Ethylene oxide | 75-21-8 | | |
| Formaldehyde | 50-00-0 | | |
| Hexane | 110-54-3 | | |
| Hydrazine | 302-01-2 | | |
| Hydrogen fluoride | 7664-39-3 | | |
| Hydrogen sulfide | 7783-06-4 | | |
| Hydroquinone | 123-31-9 | | |
| m-xylene | 108-38-3 | | |
| Methanol (methyl alcohol) | 67-56-1 | | |
| Methyl chloride | 74-87-3 | | |
| Methyl chloroform | 71-55-6 | | |
| Methyl ethyl ketone | 78-93-3 | | |
| Methyl isobutyl ketone | 108-10-1 | | |
| Methyl methacrylate | 80-62-6 | | |
| Methylene chloride | 75-09-2 | 15 | 7.734 |
| Naphthalene | 91-20-3 | | |
| o-xylene | 95-47-6 | | |
| p-xylene | 106-42-3 | | |
| Phenol | 108-95-2 | | |
| Phosgene | 75-44-5 | | |
| Phosphine | 7803-51-2 | | |
| Styrene | 100-42-5 | | |
| Tetrachloroethylene | 127-18-4 | | |
| Trichloroethylene | 79-01-6 | | |
| Toluene | 108-88-3 | | |
| Vinyl acetate | 108-05-4 | | |
| Vinyl chloride | 75-01-4 | | |
| Xylenes | 1330-20-7 | 8 | 4.125 |
| HAP Total = | | | 35.58 Lbs/yr |
| HAP Content = | | | 4.02 Lbs/Gal |

**Emissions for Miscellaneous Chemicals and Solvents
Federal and New York State Regulations**

Name: Seneca Army Depot Date: 8/30/94
 Bldg #: 117 - Equipment & Battery Shop Initials: GRM
 SCC: 4-01-888-01

Product/Material Information

Product: CRC Lectra Motive
 NSN: 8500-00-696-1426

Note: For annual usage, only fill the boxes for EITHER a, b, OR c and leave other boxes blank

| | | | | | | | |
|------------------|-------------------------|---------|----|----------------------|------------|----------------|--------|
| Annual Usage: a) | <input type="text"/> | cans/yr | at | <input type="text"/> | fl.oz/can= | <u>0.000</u> | gal/yr |
| OR | b) <u>120</u> | cans/yr | at | <u>19.000</u> | wt.oz/can= | <u>142.500</u> | lb/yr |
| OR | c) <input type="text"/> | gal/yr | | | | | |

Specific Gravity: 1.600

Notes:

VOC composition: 100.00 %(MSDS/Manuf.)
 VOC Composition: 77.90 %(corrected for water and non-photochemical reactants)

expressed as : A A = % by weight
 B = % by volume

Notes:

Comment: "A" and "B" refer to the percentage of the material which contains VOCs.
 This is expressed as a percentage of total volume, (i.e. gallons) or of total weight (i.e. pounds). When available, percent by weight should take precedence. Make sure to subtract the percentage of hazardous VOCs which are not to be evaluated as a VOC (i.e., methylene chloride).

Emissions Summary

| Annual VOC Emissions | | |
|------------------------------------|----------------|--------|
| Annual usage converted to weight = | <u>142.500</u> | Lbs/yr |
| VOC Emissions = | <u>111.008</u> | Lb/yr |
| | <u>0.056</u> | Ton/yr |

| Ozone Season VOC Emissions | | |
|------------------------------------|---------------|-------------|
| Ozone Season Usage = | <u>35.625</u> | Lbs |
| Daily Ozone Season Usage = | <u>0.387</u> | Lbs/day |
| Ozone Season VOC Emissions = | <u>27.752</u> | Lbs |
| Daily Ozone Season VOC Emissions = | <u>0.302</u> | Lbs/day |
| Ozone Season Work Day Emissions = | <u>0.422</u> | Lbs/wrk day |

HAP Emissions: To determine HAP emissions, enter the composition of each HAP in one of two areas. First, enter the compositions for HAPs which are presented on the following page. If a particular HAP is not listed on that page, then enter the name and composition in the spaces provided below. HAP totals will be presented at the bottom of the following page.

| Additional HAPs | CAS No. | (% Composition) | Emissions (Lbs/yr) |
|-----------------|---------|-----------------|-----------------------|
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| HAP Subtotal = | | | <u>0.0</u> Lbs/yr |

| HAP Emissions | | | |
|---------------------------|-----------|-----------------|--------------------|
| HAP Name | CAS # | (% Composition) | Emissions (Lbs/yr) |
| Benzene | 71-43-2 | | |
| Carbon disulfide | 75-15-0 | | |
| Carbon tetrachloride | 56-23-5 | | |
| Chlorine | 7782-50-5 | | |
| Chlorobenzene | 108-90-7 | | |
| Chloroform | 67-66-3 | | |
| Cumene | 98-82-8 | | |
| 1,4 Dioxane | 123-91-1 | | |
| Epichlorohydrin | 106-89-8 | | |
| Ethylbenzene | 100-41-4 | | |
| Ethylene dibromide | 106-93-4 | | |
| Ethylene dichloride | 107-06-2 | | |
| Ethylene glycol | 107-21-1 | | |
| Ethylene oxide | 75-21-8 | | |
| Formaldehyde | 50-00-0 | | |
| Hexane | 110-54-3 | | |
| Hydrazine | 302-01-2 | | |
| Hydrogen fluoride | 7664-39-3 | | |
| Hydrogen sulfide | 7783-06-4 | | |
| Hydroquinone | 123-31-9 | | |
| m-xylene | 108-38-3 | | |
| Methanol (methyl alcohol) | 67-56-1 | | |
| Methyl chloride | 74-87-3 | | |
| Methyl chloroform | 71-55-6 | | |
| Methyl ethyl ketone | 78-93-3 | | |
| Methyl isobutyl ketone | 108-10-1 | | |
| Methyl methacrylate | 80-62-6 | | |
| Methylene chloride | 75-09-2 | 18.3 | 26.078 |
| Naphthalene | 91-20-3 | | |
| o-xylene | 95-47-6 | | |
| p-xylene | 106-42-3 | | |
| Phenol | 108-95-2 | | |
| Phosgene | 75-44-5 | | |
| Phosphine | 7803-51-2 | | |
| Styrene | 100-42-5 | | |
| Tetrachloroethylene | 127-18-4 | 77.9 | 111.008 |
| Trichloroethylene | 79-01-6 | | |
| Toluene | 108-88-3 | | |
| Vinyl acetate | 108-05-4 | | |
| Vinyl chloride | 75-01-4 | | |
| Xylenes | 1330-20-7 | | |
| HAP Total = | | | 137.09 Lbs/yr |
| HAP Content = | | | 12.80 Lbs/Gal |

Miscellaneous Chemical VOC Emissions
for Building Number 118

| NSN | Solvent | Use gal/yr | VOC Content (%) | VOC Emissions (lb/yr) | VOC Emissions (ton/yr) |
|------------------|-------------------------------|---------------|--------------------|--------------------------|---------------------------|
| 9150-00-529-7222 | NAPA CRC 5-56 (765-1434) | 3.48 | 42.00 | 11.34 | 0.01 |
| N/A | NAPA Silicon Spray (765-6422) | 0.94 | 59.00 | 3.54 | <0.01 |

Ozone Season Daily Miscellaneous Chemical Emissions
for Building Number 118

| Pollutant | Emissions (lb) | Daily Emissions (lb) | Daily Emissions (tons) |
|-----------|-------------------|-------------------------|---------------------------|
| VOC | 14.88 | 0.04 | <0.01 |

Miscellaneous Chemical HAP Emissions
for Building Number 118

| NSN | Solvent | Use (gal/yr) | HAP Content (lbs/gal) | HAP Emissions (lb/yr) | HAP Emissions (ton/yr) |
|------------------|-------------------------------|-----------------|--------------------------|--------------------------|---------------------------|
| 9150-00-529-7222 | NAPA CRC 5-56 (765-1434) | 3.48 | 2.25 | 7.83 | <0.01 |
| N/A | NAPA Silicon Spray (765-6422) | 0.94 | 4.39 | 4.14 | <0.01 |

Miscellaneous Chemical HAP Emissions
for Building Number 118

| NSN | Solvent | Use (gal/yr) | HAP Hexane (%) | HAP Methyl Chloroform (%) |
|------------------|-------------------------------|-----------------|----------------------|---------------------------------|
| 9150-00-529-7222 | NAPA CRC 5-56 (765-1434) | 3.48 | | 29.00 |
| N/A | NAPA Silicon Spray (765-6422) | 0.94 | 31.00 | 38.00 |

MISCELLANEOUS CHEMICAL SOURCES

Page__ of __

GENERAL INFORMATION

Installation Seneca Army Depot

SCC..... 4-01-888-01 Unit ID #.....

Location..... Bldg 118 Permit #.....

POC..... Jack LaBour Inventoried by..... T. Sletten

Phone..... (607) 869-1396 Operating Schedule

Inventory Date..... June 6-10, 1994 Hours/day.....

Days/week.....

Type of Activity: Equipment Shop

MONTHLY FUEL USE

19__ JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC

Units: _____ lbs _____ gal _____ other (specify)

SOURCE DESCRIPTION

Describe the source, how the chemical product is used, and the mechanism for generating air emissions.

CHEMICAL PRODUCT DATA

(Use extra sheets as necessary)

Product Name NAPA CRC 5-56 (765-1434)

NSN _____ MILSPEC _____

Annual Use 26 cns (12 oz) Annual Disposal _____

Product Name NAPA Silicon Spray (765-6422)

NSN _____ MILSPEC _____

Annual Use 8 cns (12 oz) Annual Disposal _____

POLLUTION CONTROL EQUIPMENT

(Enter control efficiency)

Wet Scrubber _____ Cyclone _____ Baghouse _____

Afterburner _____ Activated Charcoal Filter _____

Other _____

EMISSION RATE DETERMINATION METHOD

Stack Test Data _____ Emission Factor _____ Material Balance X

Similar Unit Data _____ Other MSDS

Reference: _____

OZONE PRECURSOR EMISSIONS

Typical Ozone Season Emissions
 VOC Emissions 0.0404347826 lb/day
 NOx Emissions _____ lb/day
 CO Emissions _____ lb/day

HAZARDOUS AIR POLLUTANTS

| HAP | CAS CODE | LB/YR |
|-------------------|----------|--------------|
| Methyl Chloroform | 71-55-6 | 10.110000000 |
| Hexane | 110-54-3 | 1.860000000 |
| | | |
| | | |

CRITERIA POLLUTANT EMISSIONS

VOC Emissions 0.0074400000 ton/yr
 NOx Emissions _____ ton/yr
 CO Emissions _____ ton/yr
 SO2 Emissions _____ ton/yr
 PM10 Emissions _____ ton/yr
 Total Particulate _____ ton/yr

STACK INFORMATION

| | |
|-----------------------------------|------------------------------------|
| Stack (release) Height _____ feet | Stack Gas Velocity _____ ft/sec |
| Stack Diameter _____ inch | Stack Gas Flow Rate _____ ascf/min |
| | Stack Gas Temperature _____ oF |

Other sources that share this stack? _____

Stack Sampling Report Available? (Y/ N, results?) _____

**Emissions for Miscellaneous Chemicals and Solvents
Federal and New York State Regulations**

Name: Seneca Army Depot
Bldg #: 118 - Equipment Shop
SCC: 4-01-888-01

Date: 8/30/94
Initials: GRM

Product/Material Information

Product: NAPA CRC 5-56
NSN: 9150-00-529-7222

Note: For annual usage, only fill the boxes for EITHER a, b, OR c and leave other boxes blank

Annual Usage: a) cans/yr at fl.oz/can= 0.000 gal/yr
OR b) cans/yr at wt.oz/can= 27.000 lb/yr
OR c) gal/yr

Specific Gravity: 0.932

Notes:

VOC composition: 71.00 %(MSDS/Manuf.)

VOC Composition: 42.00 %(corrected for water and non-photochemical reactants)

expressed as : A A = % by weight
B = % by volume

Notes:

Comment: "A" and "B" refer to the percentage of the material which contains VOCs.

This is expressed as a percentage of total volume, (i.e. gallons) or of total weight (i.e. pounds). When available, percent by weight should take precedence. Make sure to subtract the percentage of hazardous VOCs which are not to be evaluated as a VOC (i.e., methylene chloride).

Emissions Summary

| Annual VOC Emissions | | |
|------------------------------------|---------------------|---------------------|
| Annual usage converted to weight = | <u>27.000</u> | Lbs/yr |
| VOC Emissions = | <u>11.340</u> Lb/yr | <u>0.006</u> Ton/yr |

| Ozone Season VOC Emissions | | |
|------------------------------------|--------------|-------------|
| Ozone Season Usage = | <u>6.750</u> | Lbs |
| Daily Ozone Season Usage = | <u>0.073</u> | Lbs/day |
| Ozone Season VOC Emissions = | <u>2.835</u> | Lbs |
| Daily Ozone Season VOC Emissions = | <u>0.031</u> | Lbs/day |
| Ozone Season Work Day Emissions = | <u>0.043</u> | Lbs/wrk day |

HAP Emissions: To determine HAP emissions, enter the composition of each HAP in one of two areas. First, enter the compositions for HAPs which are presented on the following page. If a particular HAP is not listed on that page, then enter the name and composition in the spaces provided below. HAP totals will be presented at the bottom of the following page.

| Additional HAPs | CAS No. | (% Composition) | Emissions (Lbs/yr) |
|-----------------|---------|-----------------|-----------------------|
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| HAP Subtotal = | | | <u>0.0</u> Lbs/yr |

| HAP Emissions | | | |
|---------------------------|-----------|-----------------|--------------------|
| HAP Name | CAS # | (% Composition) | Emissions (Lbs/yr) |
| Benzene | 71-43-2 | | |
| Carbon disulfide | 75-15-0 | | |
| Carbon tetrachloride | 56-23-5 | | |
| Chlorine | 7782-50-5 | | |
| Chlorobenzene | 108-90-7 | | |
| Chloroform | 67-66-3 | | |
| Cumene | 98-82-8 | | |
| 1,4 Dioxane | 123-91-1 | | |
| Epichlorohydrin | 106-89-8 | | |
| Ethylbenzene | 100-41-4 | | |
| Ethylene dibromide | 106-93-4 | | |
| Ethylene dichloride | 107-06-2 | | |
| Ethylene glycol | 107-21-1 | | |
| Ethylene oxide | 75-21-8 | | |
| Formaldehyde | 50-00-0 | | |
| Hexane | 110-54-3 | | |
| Hydrazine | 302-01-2 | | |
| Hydrogen fluoride | 7664-39-3 | | |
| Hydrogen sulfide | 7783-06-4 | | |
| Hydroquinone | 123-31-9 | | |
| m-xylene | 108-38-3 | | |
| Methanol (methyl alcohol) | 67-56-1 | | |
| Methyl chloride | 74-87-3 | | |
| Methyl chloroform | 71-55-6 | 29 | 7.830 |
| Methyl ethyl ketone | 78-93-3 | | |
| Methyl isobutyl ketone | 108-10-1 | | |
| Methyl methacrylate | 80-62-6 | | |
| Methylene chloride | 75-09-2 | | |
| Naphthalene | 91-20-3 | | |
| o-xylene | 95-47-6 | | |
| p-xylene | 106-42-3 | | |
| Phenol | 108-95-2 | | |
| Phosgene | 75-44-5 | | |
| Phosphine | 7803-51-2 | | |
| Styrene | 100-42-5 | | |
| Tetrachloroethylene | 127-18-4 | | |
| Trichloroethylene | 79-01-6 | | |
| Toluene | 108-88-3 | | |
| Vinyl acetate | 108-05-4 | | |
| Vinyl chloride | 75-01-4 | | |
| Xylenes | 1330-20-7 | | |
| HAP Total = | | | 7.83 Lbs/yr |
| HAP Content = | | | 2.25 Lbs/Gal |

**Emissions for Miscellaneous Chemicals and Solvents
Federal and New York State Regulations**

Name: Seneca Army Depot
Bldg #: 118 - Equipment Shop
SCC: 4-01-888-01

Date: 8/30/94
Initials: GRM

Product/Material Information

Product: NAPA Silicone Lubricant
NSN: Part No. (765--6522)

Note: For annual usage, only fill the boxes for EITHER a, b, OR c and leave other boxes blank

| | | | | | | | |
|------------------|----------------------|----------------------|---------|----------------------|---------------|--------------|--------------------|
| Annual Usage: a) | <input type="text"/> | cans/yr | at | <input type="text"/> | fl.oz/can= | <u>0.000</u> | gal/yr |
| OR | b) | <u>8</u> | cans/yr | at | <u>12.000</u> | wt.oz/can= | <u>6.000</u> lb/yr |
| OR | c) | <input type="text"/> | gal/yr | | | | |

Specific Gravity: 0.765

Notes:

VOC composition: 97.00 %(MSDS/Manuf.)

VOC Composition: 59.00 %(corrected for water and non-photochemical reactants)

expressed as : A A = % by weight
B = % by volume

Notes:

Comment: "A" and "B" refer to the percentage of the material which contains VOCs.

This is expressed as a percentage of total volume, (i.e. gallons) or of total weight (i.e. pounds). When available, percent by weight should take precedence. Make sure to subtract the percentage of hazardous VOCs which are not to be evaluated as a VOC (i.e., methylene chloride).

Emissions Summary

| Annual VOC Emissions | | |
|------------------------------------|--------------------|---------------------|
| Annual usage converted to weight = | <u>6.000</u> | Lbs/yr |
| VOC Emissions = | <u>3.540</u> Lb/yr | <u>0.002</u> Ton/yr |

| Ozone Season VOC Emissions | | |
|------------------------------------|--------------|-------------|
| Ozone Season Usage = | <u>1.500</u> | Lbs |
| Daily Ozone Season Usage = | <u>0.016</u> | Lbs/day |
| Ozone Season VOC Emissions = | <u>0.885</u> | Lbs |
| Daily Ozone Season VOC Emissions = | <u>0.010</u> | Lbs/day |
| Ozone Season Work Day Emissions = | <u>0.013</u> | Lbs/wrk day |

HAP Emissions: To determine HAP emissions, enter the composition of each HAP in one of two areas. First, enter the compositions for HAPs which are presented on the following page. If a particular HAP is not listed on that page, then enter the name and composition in the spaces provided below. HAP totals will be presented at the bottom of the following page.

| Additional HAPs | CAS No. | (% Composition) | Emissions (Lbs/yr) |
|-----------------|---------|-----------------|--------------------|
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| HAP Subtotal = | | | <u>0.0</u> Lbs/yr |

| HAP Emissions | | | |
|---------------------------|-----------|-----------------|--------------------|
| HAP Name | CAS # | (% Composition) | Emissions (Lbs/yr) |
| Benzene | 71-43-2 | | |
| Carbon disulfide | 75-15-0 | | |
| Carbon tetrachloride | 56-23-5 | | |
| Chlorine | 7782-50-5 | | |
| Chlorobenzene | 108-90-7 | | |
| Chloroform | 67-66-3 | | |
| Cumene | 98-82-8 | | |
| 1,4 Dioxane | 123-91-1 | | |
| Epichlorohydrin | 106-89-8 | | |
| Ethylbenzene | 100-41-4 | | |
| Ethylene dibromide | 106-93-4 | | |
| Ethylene dichloride | 107-06-2 | | |
| Ethylene glycol | 107-21-1 | | |
| Ethylene oxide | 75-21-8 | | |
| Formaldehyde | 50-00-0 | | |
| Hexane | 110-54-3 | 31 | 1.860 |
| Hydrazine | 302-01-2 | | |
| Hydrogen fluoride | 7664-39-3 | | |
| Hydrogen sulfide | 7783-06-4 | | |
| Hydroquinone | 123-31-9 | | |
| m-xylene | 108-38-3 | | |
| Methanol (methyl alcohol) | 67-56-1 | | |
| Methyl chloride | 74-87-3 | | |
| Methyl chloroform | 71-55-6 | 38 | 2.280 |
| Methyl ethyl ketone | 78-93-3 | | |
| Methyl isobutyl ketone | 108-10-1 | | |
| Methyl methacrylate | 80-62-6 | | |
| Methylene chloride | 75-09-2 | | |
| Naphthalene | 91-20-3 | | |
| o-xylene | 95-47-6 | | |
| p-xylene | 106-42-3 | | |
| Phenol | 108-95-2 | | |
| Phosgene | 75-44-5 | | |
| Phosphine | 7803-51-2 | | |
| Styrene | 100-42-5 | | |
| Tetrachloroethylene | 127-18-4 | | |
| Trichloroethylene | 79-01-6 | | |
| Toluene | 108-88-3 | | |
| Vinyl acetate | 108-05-4 | | |
| Vinyl chloride | 75-01-4 | | |
| Xylenes | 1330-20-7 | | |
| HAP Total = | | | 4.14 Lbs/yr |
| HAP Content = | | | 4.39 Lbs/Gal |

Miscellaneous Chemical VOC Emissions
for Building Number 122 - Locksmith/Sheetmetal

| NSN | Solvent | Use gal/yr | VOC Content (%) | VOC Emissions (lb/yr) | VOC Emissions (ton/yr) |
|-----|--------------|---------------|--------------------|--------------------------|---------------------------|
| N/A | Visi Dust II | 1.13 | 32.00 | 2.88 | <0.01 |

Ozone Season Daily Miscellaneous Chemical Emissions
for Building Number 122 - Locksmith/Sheetmetal

| Pollutant | Emissions (lb) | Daily Emissions (lb) | Daily Emissions (tons) |
|-----------|-------------------|-------------------------|---------------------------|
| VOC | 2.88 | 0.01 | <0.01 |

Miscellaneous Chemical HAP Emissions
for Building Number 122 - Locksmith/Sheetmetal

| NSN | Solvent | Use (gal/yr) | HAP Content (lbs/gal) | HAP Emissions (lb/yr) | HAP Emissions (ton/yr) |
|-----|--------------|-----------------|--------------------------|--------------------------|---------------------------|
| | Visi Dust II | 1.13 | 5.03 | 5.67 | <0.01 |

Miscellaneous Chemical HAP Emissions
for Building Number 122 - Locksmith/Sheetmetal

| NSN | Solvent | Use (gal/yr) | HAP Methyl Chloroform (%) |
|-----|--------------|-----------------|---------------------------------|
| N/A | Visi Dust II | 1.13 | 63.00 |

MISCELLANEOUS CHEMICAL SOURCES

GENERAL INFORMATION

Installation Seneca Army Depot

SCC..... 4-01-888-01 Unit ID #.....

Location..... Bldg 122 Permit #.....

POC..... Fred Kaufman Inventoried by..... T. Sletten

Phone..... (607) 869-1456 Operating Schedule

Inventory Date..... June 6-10, 1994 Hours/day.....

Days/week.....

Type of Activity: Locksmith/Sheetmetal

MONTHLY FUEL USE

| | | | | | | | | | | | | |
|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 19__ | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC |
| | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ |

Units: _____ lbs _____ gal _____ other (specify)

SOURCE DESCRIPTION

Describe the source, how the chemical product is used, and the mechanism for generating air emissions.

CHEMICAL PRODUCT DATA

(Use extra sheets as necessary)

Product Name _____

NSN _____ MILSPEC _____

Annual Use _____ Annual Disposal _____

Product Name Visi Dust II

NSN _____ MILSPEC _____

Annual Use 12 cns (12 oz) Annual Disposal _____

POLLUTION CONTROL EQUIPMENT

(Enter control efficiency)

Wet Scrubber _____ Cyclone _____ Baghouse _____

Afterburner _____ Activated Charcoal Filter _____

Other _____

EMISSION RATE DETERMINATION METHOD

Stack Test Data _____ Emission Factor _____ Material Balance X

Similar Unit Data _____ Other MSDS

Reference: _____

OZONE PRECURSOR EMISSIONS

Typical Ozone Season Emissions
 VOC Emissions 0.0078260870 lb/day
 NOx Emissions _____ lb/day
 CO Emissions _____ lb/day

HAZARDOUS AIR POLLUTANTS

| HAP | CAS CODE | LB/YR |
|----------------------------------|------------------------|-----------------------------|
| <u> Methyl Chloroform </u> | <u> 71-55-6 </u> | <u> 5.6700000000 </u> |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |

CRITERIA POLLUTANT EMISSIONS

VOC Emissions 0.0014400000 ton/yr
 NOx Emissions _____ ton/yr
 CO Emissions _____ ton/yr
 SO2 Emissions _____ ton/yr
 PM10 Emissions _____ ton/yr
 Total Particulate _____ ton/yr

STACK INFORMATION

| | |
|-----------------------------------|------------------------------------|
| Stack (release) Height _____ feet | Stack Gas Velocity _____ ft/sec |
| Stack Diameter _____ inch | Stack Gas Flow Rate _____ ascf/min |
| | Stack Gas Temperature _____ oF |

Other sources that share this stack? _____

Stack Sampling Report Available? (Y/ N, results?) _____

**Emissions for Miscellaneous Chemicals and Solvents
Federal and New York State Regulations**

Name: Seneca Army Depot Date: 8/30/94
 Bldg #: 122 - Locksmith/Sheetmetal Initials: GRM
 SCC: 4-01-888-01

Product/Material Information

Product: Visi Dust II
 NSN: _____

Note: For annual usage, only fill the boxes for EITHER a, b, OR c and leave other boxes blank

Annual Usage: a) cans/yr at fl.oz/can= 0.000 gal/yr
 OR b) cans/yr at wt.oz/can= 9.000 lb/yr
 OR c) gal/yr

Specific Gravity: 0.960

Notes:

VOC composition: 100.00 %(MSDS/Manuf.)

VOC Composition: 32.00 %(corrected for water and non-photochemical reactants)

expressed as : A A = % by weight
 B = % by volume

Notes:

Comment: "A" and "B" refer to the percentage of the material which contains VOCs.

This is expressed as a percentage of total volume, (i.e. gallons) or of total weight (i.e. pounds). When available, percent by weight should take precedence. Make sure to subtract the percentage of hazardous VOCs which are not to be evaluated as a VOC (i.e., methylene chloride).

Emissions Summary

| Annual VOC Emissions | | |
|------------------------------------|--------------------|---------------------|
| Annual usage converted to weight = | <u>9.000</u> | Lbs/yr |
| VOC Emissions = | <u>2.880</u> Lb/yr | <u>0.001</u> Ton/yr |

| Ozone Season VOC Emissions | | |
|------------------------------------|--------------|-------------|
| Ozone Season Usage = | <u>2.250</u> | Lbs |
| Daily Ozone Season Usage = | <u>0.024</u> | Lbs/day |
| Ozone Season VOC Emissions = | <u>0.720</u> | Lbs |
| Daily Ozone Season VOC Emissions = | <u>0.008</u> | Lbs/day |
| Ozone Season Work Day Emissions = | <u>0.011</u> | Lbs/wrk day |

HAP Emissions: To determine HAP emissions, enter the composition of each HAP in one of two areas. First, enter the compositions for HAPs which are presented on the following page. If a particular HAP is not listed on that page, then enter the name and composition in the spaces provided below. HAP totals will be presented at the bottom of the following page.

| Additional HAPs | CAS No. | (% Composition) | Emissions (Lbs/yr) |
|-----------------|---------|-----------------|-----------------------|
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| HAP Subtotal = | | | <u>0.0</u> Lbs/yr |

| HAP Emissions | | | |
|---------------------------|-----------|-----------------|-----------------------|
| HAP Name | CAS # | (% Composition) | Emissions (Lbs/yr) |
| Benzene | 71-43-2 | | |
| Carbon disulfide | 75-15-0 | | |
| Carbon tetrachloride | 56-23-5 | | |
| Chlorine | 7782-50-5 | | |
| Chlorobenzene | 108-90-7 | | |
| Chloroform | 67-66-3 | | |
| Cumene | 98-82-8 | | |
| 1,4 Dioxane | 123-91-1 | | |
| Epichlorohydrin | 106-89-8 | | |
| Ethylbenzene | 100-41-4 | | |
| Ethylene dibromide | 106-93-4 | | |
| Ethylene dichloride | 107-06-2 | | |
| Ethylene glycol | 107-21-1 | | |
| Ethylene oxide | 75-21-8 | | |
| Formaldehyde | 50-00-0 | | |
| Hexane | 110-54-3 | | |
| Hydrazine | 302-01-2 | | |
| Hydrogen fluoride | 7664-39-3 | | |
| Hydrogen sulfide | 7783-06-4 | | |
| Hydroquinone | 123-31-9 | | |
| m-xylene | 108-38-3 | | |
| Methanol (methyl alcohol) | 67-56-1 | | |
| Methyl chloride | 74-87-3 | | |
| Methyl chloroform | 71-55-6 | 63 | 5.670 |
| Methyl ethyl ketone | 78-93-3 | | |
| Methyl isobutyl ketone | 108-10-1 | | |
| Methyl methacrylate | 80-62-6 | | |
| Methylene chloride | 75-09-2 | | |
| Naphthalene | 91-20-3 | | |
| o-xylene | 95-47-6 | | |
| p-xylene | 106-42-3 | | |
| Phenol | 108-95-2 | | |
| Phosgene | 75-44-5 | | |
| Phosphine | 7803-51-2 | | |
| Styrene | 100-42-5 | | |
| Tetrachloroethylene | 127-18-4 | | |
| Trichloroethylene | 79-01-6 | | |
| Toluene | 108-88-3 | | |
| Vinyl acetate | 108-05-4 | | |
| Vinyl chloride | 75-01-4 | | |
| Xylenes | 1330-20-7 | | |
| HAP Total = | | | 5.67 Lbs/yr |
| HAP Content = | | | 5.03 Lbs/Gal |

Miscellaneous Chemical VOC Emissions
for Building Number 122 - Public Works Maintenance Repair Section

| NSN | Solvent | Use gal/yr | VOC Content (%) | VOC Emissions (lb/yr) | VOC Emissions (ton/yr) |
|------------------|-------------------|---------------|--------------------|--------------------------|---------------------------|
| N/A | WD-40 | 5.07 | 78.00 | 26.33 | 0.01 |
| 9150-00-529-7222 | CRC 5-56 | 3.48 | 42.00 | 11.34 | 0.01 |
| 8500-00-696-1426 | CRC Lectra Motive | 0.68 | 77.90 | 7.01 | <0.01 |

Ozone Season Daily Miscellaneous Chemical Emissions
for Building Number 122 - Public Works Maintenance Repair Section

| Pollutant | Emissions (lb) | Daily Emissions (lb) | Daily Emissions (tons) |
|-----------|-------------------|-------------------------|---------------------------|
| VOC | 44.68 | 0.12 | <0.01 |

Miscellaneous Chemical HAP Emissions
for Building Number 122 - Public Works Maintenance Repair Section

| NSN | Solvent | Use (gal/yr) | HAP Content (lbs/gal) | HAP Emissions (lb/yr) | HAP Emissions (ton/yr) |
|------------------|-------------------|-----------------|--------------------------|--------------------------|---------------------------|
| 9150-00-529-7222 | CRC 5-56 | 3.48 | 2.25 | 7.83 | <0.01 |
| 8500-00-696-1426 | CRC Lectra Motive | 0.68 | 12.80 | 8.66 | <0.01 |

Miscellaneous Chemical HAP Emissions
for Building Number 122 - Public Works Maintenance Repair Section

| NSN | Solvent | Use (gal/yr) | HAP Methyl Chloroform (%) | HAP Methylene Chloride (%) | HAP Tetrachloroethylene (%) |
|------------------|-------------------|-----------------|------------------------------------|-------------------------------------|-----------------------------------|
| 9150-00-529-7222 | CRC 5-56 | 3.48 | 29.00 | | |
| 8500-00-696-1426 | CRC Lectra Motive | 0.68 | | 18.30 | 77.90 |

MISCELLANEOUS CHEMICAL SOURCES

GENERAL INFORMATION

Installation Seneca Army Depot

SCC..... 4-01-888-01 Unit ID #.....

Location..... Bldg 122 Permit #.....

POC..... Fred Kaufman Inventoried by..... T. Sletten

Phone..... (607) 869-1456 Operating Schedule

Inventory Date..... June 6-10, 1994 Hours/day.....

Days/week.....

Type of Activity: Public works Maintenance Repair Section

MONTHLY FUEL USE

19__ JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC

Units: _____ lbs _____ gal _____ other (specify)

SOURCE DESCRIPTION

Describe the source, how the chemical product is used, and the mechanism for generating air emissions.

CHEMICAL PRODUCT DATA

(Use extra sheets as necessary)

Product Name WD-40

NSN _____ MILSPEC _____

Annual Use 3 cases (15 oz) Annual Disposal _____

Product Name CRC 5-56

NSN _____ MILSPEC _____

Annual Use 3 cases (12 oz) Annual Disposal _____

POLLUTION CONTROL EQUIPMENT

(Enter control efficiency)

Wet Scrubber _____ Cyclone _____ Baghouse _____

Afterburner _____ Activated Charcoal Filter _____

Other _____

EMISSION RATE DETERMINATION METHOD

Stack Test Data _____ Emission Factor _____ Material Balance X

Similar Unit Data _____ Other MSDS

Reference: _____

OZONE PRECURSOR EMISSIONS

Typical Ozone Season Emissions
 VOC Emissions 0.1214021739 lb/day
 NOx Emissions _____ lb/day
 CO Emissions _____ lb/day

HAZARDOUS AIR POLLUTANTS

| HAP | CAS CODE | LB/YR |
|---------------------|----------|--------------|
| Methyl Chloroform | 71-55-6 | 7.8300000000 |
| Methylene Chloride | 75-09-2 | 1.6470000000 |
| Tetrachloroethylene | 124-38-9 | 7.0110000000 |
| _____ | _____ | _____ |
| _____ | _____ | _____ |

CRITERIA POLLUTANT EMISSIONS

VOC Emissions 0.0223380000 ton/yr
 NOx Emissions _____ ton/yr
 CO Emissions _____ ton/yr
 SO2 Emissions _____ ton/yr
 PM10 Emissions _____ ton/yr
 Total Particulate _____ ton/yr

STACK INFORMATION

Stack (release) Height _____ feet
 Stack Diameter _____ inch
 Stack Gas Velocity _____ ft/sec
 Stack Gas Flow Rate _____ ascf/min
 Stack Gas Temperature _____ oF

Other sources that share this stack? _____

Stack Sampling Report Available? (Y/ N, results?) _____

**Emissions for Miscellaneous Chemicals and Solvents
Federal and New York State Regulations**

Name: Seneca Army Depot Date: 8/30/94
 Bldg #: 122 - Public Works Maintenance Repair Initials: GRM
 SCC: 4-01-888-01

Product/Material Information

Product: WD-40
 NSN: _____

Note: For annual usage, only fill the boxes for EITHER a, b, OR c and leave other boxes blank

| | | | | | | | |
|------------------|----------------------|----------------------|---------|----------------------|---------------|--------------|---------------------|
| Annual Usage: a) | <input type="text"/> | cans/yr | at | <input type="text"/> | fl.oz/can= | <u>0.000</u> | gal/yr |
| OR | b) | <u>36</u> | cans/yr | at | <u>15.000</u> | wt.oz/can= | <u>33.750</u> lb/yr |
| OR | c) | <input type="text"/> | gal/yr | | | | |

Specific Gravity: 0.800

Notes:

VOC composition: 78.00 %(MSDS/Manuf.)

VOC Composition: 78.00 %(corrected for water and non-photochemical reactants)

expressed as : A A = % by weight
 B = % by volume

Notes:

Comment: "A" and "B" refer to the percentage of the material which contains VOCs.

This is expressed as a percentage of total volume, (i.e. gallons) or of total weight (i.e. pounds). When available, percent by weight should take precedence. Make sure to subtract the percentage of hazardous VOCs which are not to be evaluated as a VOC (i.e., methylene chloride).

Emissions Summary

Annual VOC Emissions

Annual usage converted to weight = 33.750 Lbs/yr
 VOC Emissions = 26.325 Lb/yr 0.013 Ton/yr

Ozone Season VOC Emissions

Ozone Season Usage = 8.438 Lbs
 Daily Ozone Season Usage = 0.092 Lbs/day

 Ozone Season VOC Emissions = 6.581 Lbs
 Daily Ozone Season VOC Emissions = 0.072 Lbs/day
 Ozone Season Work Day Emissions = 0.100 Lbs/wrk day

HAP Emissions: To determine HAP emissions, enter the composition of each HAP in one of two areas. First, enter the compositions for HAPs which are presented on the following page. If a particular HAP is not listed on that page, then enter the name and composition in the spaces provided below. HAP totals will be presented at the bottom of the following page.

| Additional HAPs | CAS No. | (% Composition) | Emissions (Lbs/yr) |
|-----------------|---------|-----------------|-----------------------|
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| HAP Subtotal = | | | <u>0.0</u> Lbs/yr |

| HAP Emissions | | | |
|---------------------------|-----------|-----------------|-----------------------|
| HAP Name | CAS # | (% Composition) | Emissions (Lbs/yr) |
| Benzene | 71-43-2 | | |
| Carbon disulfide | 75-15-0 | | |
| Carbon tetrachloride | 56-23-5 | | |
| Chlorine | 7782-50-5 | | |
| Chlorobenzene | 108-90-7 | | |
| Chloroform | 67-66-3 | | |
| Cumene | 98-82-8 | | |
| 1,4 Dioxane | 123-91-1 | | |
| Epichlorohydrin | 106-89-8 | | |
| Ethylbenzene | 100-41-4 | | |
| Ethylene dibromide | 106-93-4 | | |
| Ethylene dichloride | 107-06-2 | | |
| Ethylene glycol | 107-21-1 | | |
| Ethylene oxide | 75-21-8 | | |
| Formaldehyde | 50-00-0 | | |
| Hexane | 110-54-3 | | |
| Hydrazine | 302-01-2 | | |
| Hydrogen fluoride | 7664-39-3 | | |
| Hydrogen sulfide | 7783-06-4 | | |
| Hydroquinone | 123-31-9 | | |
| m-xylene | 108-38-3 | | |
| Methanol (methyl alcohol) | 67-56-1 | | |
| Methyl chloride | 74-87-3 | | |
| Methyl chloroform | 71-55-6 | | |
| Methyl ethyl ketone | 78-93-3 | | |
| Methyl isobutyl ketone | 108-10-1 | | |
| Methyl methacrylate | 80-62-6 | | |
| Methylene chloride | 75-09-2 | | |
| Naphthalene | 91-20-3 | | |
| o-xylene | 95-47-6 | | |
| p-xylene | 106-42-3 | | |
| Phenol | 108-95-2 | | |
| Phosgene | 75-44-5 | | |
| Phosphine | 7803-51-2 | | |
| Styrene | 100-42-5 | | |
| Tetrachloroethylene | 127-18-4 | | |
| Trichloroethylene | 79-01-6 | | |
| Toluene | 108-88-3 | | |
| Vinyl acetate | 108-05-4 | | |
| Vinyl chloride | 75-01-4 | | |
| Xylenes | 1330-20-7 | | |
| HAP Total = | | | 0.00 Lbs/yr |
| HAP Content = | | | 0.00 Lbs/Gal |

**Emissions for Miscellaneous Chemicals and Solvents
Federal and New York State Regulations**

Name: Seneca Army Depot Date: 8/30/94
 Bldg #: 122 - Public Works Maintenance Repair Initials: GRM
 SCC: 4-01-888-01

Product/Material Information

Product: CRC 5-56
 NSN: 9150-00-529-7222

Note: For annual usage, only fill the boxes for EITHER a, b, OR c and leave other boxes blank

| | | | | | | | |
|------------------|----------------------|----------------------|---------|----------------------|---------------|--------------|---------------------|
| Annual Usage: a) | <input type="text"/> | cans/yr | at | <input type="text"/> | fl.oz/can= | <u>0.000</u> | gal/yr |
| OR | b) | <u>36</u> | cans/yr | at | <u>12.000</u> | wt.oz/can= | <u>27.000</u> lb/yr |
| OR | c) | <input type="text"/> | gal/yr | | | | |

Specific Gravity: 0.932

Notes:

VOC composition: 71.00 %(MSDS/Manuf.)

VOC Composition: 42.00 %(corrected for water and non-photochemical reactants)

expressed as : A A = % by weight
 B = % by volume

Notes:

Comment: "A" and "B" refer to the percentage of the material which contains VOCs.

This is expressed as a percentage of total volume, (i.e. gallons) or of total weight (i.e. pounds). When available, percent by weight should take precedence. Make sure to subtract the percentage of hazardous VOCs which are not to be evaluated as a VOC (i.e., methylene chloride).

| |
|--------------------------|
| Emissions Summary |
|--------------------------|

| | |
|------------------------------------|---|
| Annual VOC Emissions | |
| Annual usage converted to weight = | <u>27.000</u> Lbs/yr |
| VOC Emissions = | <u>11.340</u> Lb/yr <u>0.006</u> Ton/yr |

| | |
|------------------------------------|--------------------------|
| Ozone Season VOC Emissions | |
| Ozone Season Usage = | <u>6.750</u> Lbs |
| Daily Ozone Season Usage = | <u>0.073</u> Lbs/day |
| Ozone Season VOC Emissions = | <u>2.835</u> Lbs |
| Daily Ozone Season VOC Emissions = | <u>0.031</u> Lbs/day |
| Ozone Season Work Day Emissions = | <u>0.043</u> Lbs/wrk day |

HAP Emissions: To determine HAP emissions, enter the composition of each HAP in one of two areas. First, enter the compositions for HAPs which are presented on the following page. If a particular HAP is not listed on that page, then enter the name and composition in the spaces provided below. HAP totals will be presented at the bottom of the following page.

| Additional HAPs | CAS No. | (% Composition) | Emissions (Lbs/yr) |
|-----------------|---------|-----------------|-----------------------|
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| HAP Subtotal = | | | <u>0.0</u> Lbs/yr |

| HAP Emissions | | | |
|---------------------------|-----------|-----------------|--------------------|
| HAP Name | CAS # | (% Composition) | Emissions (Lbs/yr) |
| Benzene | 71-43-2 | | |
| Carbon disulfide | 75-15-0 | | |
| Carbon tetrachloride | 56-23-5 | | |
| Chlorine | 7782-50-5 | | |
| Chlorobenzene | 108-90-7 | | |
| Chloroform | 67-66-3 | | |
| Cumene | 98-82-8 | | |
| 1,4 Dioxane | 123-91-1 | | |
| Epichlorohydrin | 106-89-8 | | |
| Ethylbenzene | 100-41-4 | | |
| Ethylene dibromide | 106-93-4 | | |
| Ethylene dichloride | 107-06-2 | | |
| Ethylene glycol | 107-21-1 | | |
| Ethylene oxide | 75-21-8 | | |
| Formaldehyde | 50-00-0 | | |
| Hexane | 110-54-3 | | |
| Hydrazine | 302-01-2 | | |
| Hydrogen fluoride | 7664-39-3 | | |
| Hydrogen sulfide | 7783-06-4 | | |
| Hydroquinone | 123-31-9 | | |
| m-xylene | 108-38-3 | | |
| Methanol (methyl alcohol) | 67-56-1 | | |
| Methyl chloride | 74-87-3 | | |
| Methyl chloroform | 71-55-6 | 29 | 7.830 |
| Methyl ethyl ketone | 78-93-3 | | |
| Methyl isobutyl ketone | 108-10-1 | | |
| Methyl methacrylate | 80-62-6 | | |
| Methylene chloride | 75-09-2 | | |
| Naphthalene | 91-20-3 | | |
| o-xylene | 95-47-6 | | |
| p-xylene | 106-42-3 | | |
| Phenol | 108-95-2 | | |
| Phosgene | 75-44-5 | | |
| Phosphine | 7803-51-2 | | |
| Styrene | 100-42-5 | | |
| Tetrachloroethylene | 127-18-4 | | |
| Trichloroethylene | 79-01-6 | | |
| Toluene | 108-88-3 | | |
| Vinyl acetate | 108-05-4 | | |
| Vinyl chloride | 75-01-4 | | |
| Xylenes | 1330-20-7 | | |
| HAP Total = | | | 7.83 Lbs/yr |
| HAP Content = | | | 2.25 Lbs/Gal |

**Emissions for Miscellaneous Chemicals and Solvents
Federal and New York State Regulations**

Name: Seneca Army Depot Date: 8/30/94
 Bldg #: 122 - Public Works Maintenance Repair Initials: GRM
 SCC: 4-01-888-01

Product/Material Information

Product: CRC Lectra Motive
 NSN: 8500-00-696-1426

Note: For annual usage, only fill the boxes for EITHER a, b, OR c and leave other boxes blank

Annual Usage: a) cans/yr at fl.oz/can= 0.000 gal/yr
 OR b) cans/yr at wt.oz/can= 9.000 lb/yr
 OR c) gal/yr

Specific Gravity: 1.600

Notes:

VOC composition: 100.00 %(MSDS/Manuf.)

VOC Composition: 77.90 %(corrected for water and non-photochemical reactants)

expressed as : A A = % by weight
 B = % by volume

Notes:

Comment: "A" and "B" refer to the percentage of the material which contains VOCs.

This is expressed as a percentage of total volume, (i.e. gallons) or of total weight (i.e. pounds). When available, percent by weight should take precedence. Make sure to subtract the percentage of hazardous VOCs which are not to be evaluated as a VOC (i.e., methylene chloride).

Emissions Summary

| Annual VOC Emissions | | |
|------------------------------------|--------------|--------|
| Annual usage converted to weight = | <u>9.000</u> | Lbs/yr |
| VOC Emissions = | <u>7.011</u> | Lb/yr |
| | <u>0.004</u> | Ton/yr |

| Ozone Season VOC Emissions | | |
|------------------------------------|--------------|-------------|
| Ozone Season Usage = | <u>2.250</u> | Lbs |
| Daily Ozone Season Usage = | <u>0.024</u> | Lbs/day |
| Ozone Season VOC Emissions = | <u>1.753</u> | Lbs |
| Daily Ozone Season VOC Emissions = | <u>0.019</u> | Lbs/day |
| Ozone Season Work Day Emissions = | <u>0.027</u> | Lbs/wrk day |

HAP Emissions: To determine HAP emissions, enter the composition of each HAP in one of two areas. First, enter the compositions for HAPs which are presented on the following page. If a particular HAP is not listed on that page, then enter the name and composition in the spaces provided below. HAP totals will be presented at the bottom of the following page.

| Additional HAPs | CAS No. | (% Composition) | Emissions (Lbs/yr) |
|-----------------|---------|-----------------|-----------------------|
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| HAP Subtotal = | | | <u>0.0</u> Lbs/yr |

| HAP Emissions | | | |
|---------------------------|-----------|-----------------|--------------------|
| HAP Name | CAS # | (% Composition) | Emissions (Lbs/yr) |
| Benzene | 71-43-2 | | |
| Carbon disulfide | 75-15-0 | | |
| Carbon tetrachloride | 56-23-5 | | |
| Chlorine | 7782-50-5 | | |
| Chlorobenzene | 108-90-7 | | |
| Chloroform | 67-66-3 | | |
| Cumene | 98-82-8 | | |
| 1,4 Dioxane | 123-91-1 | | |
| Epichlorohydrin | 106-89-8 | | |
| Ethylbenzene | 100-41-4 | | |
| Ethylene dibromide | 106-93-4 | | |
| Ethylene dichloride | 107-06-2 | | |
| Ethylene glycol | 107-21-1 | | |
| Ethylene oxide | 75-21-8 | | |
| Formaldehyde | 50-00-0 | | |
| Hexane | 110-54-3 | | |
| Hydrazine | 302-01-2 | | |
| Hydrogen fluoride | 7664-39-3 | | |
| Hydrogen sulfide | 7783-06-4 | | |
| Hydroquinone | 123-31-9 | | |
| m-xylene | 108-38-3 | | |
| Methanol (methyl alcohol) | 67-56-1 | | |
| Methyl chloride | 74-87-3 | | |
| Methyl chloroform | 71-55-6 | | |
| Methyl ethyl ketone | 78-93-3 | | |
| Methyl isobutyl ketone | 108-10-1 | | |
| Methyl methacrylate | 80-62-6 | | |
| Methylene chloride | 75-09-2 | 18.3 | 1.647 |
| Naphthalene | 91-20-3 | | |
| o-xylene | 95-47-6 | | |
| p-xylene | 106-42-3 | | |
| Phenol | 108-95-2 | | |
| Phosgene | 75-44-5 | | |
| Phosphine | 7803-51-2 | | |
| Styrene | 100-42-5 | | |
| Tetrachloroethylene | 127-18-4 | 77.9 | 7.011 |
| Trichloroethylene | 79-01-6 | | |
| Toluene | 108-88-3 | | |
| Vinyl acetate | 108-05-4 | | |
| Vinyl chloride | 75-01-4 | | |
| Xylenes | 1330-20-7 | | |
| HAP Total = | | | 8.66 Lbs/yr |
| HAP Content = | | | 12.80 Lbs/Gal |

Miscellaneous Chemical VOC Emissions
for Building Number 306 - Ammo Surveillance Workshop

| NSN | Solvent | Use gal/yr | VOC Content (%) | VOC Emissions (lb/yr) | VOC Emissions (ton/yr) |
|-----|-------------|---------------|--------------------|--------------------------|---------------------------|
| N/A | Stencil Ink | 0.69 | 94.00 | 4.23 | <0.01 |

Ozone Season Daily Miscellaneous Chemical Emissions
for Building Number 306 - Ammo Surveillance Workshop

| Pollutant | Emissions (lb) | Daily Emissions (lb) | Daily Emissions (tons) |
|-----------|-------------------|-------------------------|---------------------------|
| VOC | 4.23 | 0.01 | <0.01 |

Miscellaneous Chemical HAP Emissions
for Building Number 306 - Ammo Surveillance Workshop

| NSN | Solvent | Use (gal/yr) | HAP Content (lbs/gal) | HAP Emissions (lb/yr) | HAP Emissions (ton/yr) |
|-----|-------------|-----------------|--------------------------|--------------------------|---------------------------|
| | Stencil Ink | 0.69 | 4.54 | 3.15 | <0.01 |

Miscellaneous Chemical HAP Emissions
for Building Number 306 - Ammo Surveillance Workshop

| NSN | Solvent | Use (gal/yr) | HAP Acetone* (%) | HAP Toluene (%) |
|-----|-------------|-----------------|------------------------|-----------------------|
| N/A | Stencil Ink | 0.69 | 40.00 | 30.00 |

* New York State HAP

MISCELLANEOUS CHEMICAL SOURCES

GENERAL INFORMATION

Installation Seneca Army Depot

SCC..... 4-01-888-01 Unit ID #.....

Location..... Bldg 306 Permit #.....

POC..... Karen Mikkeltorg Inventoried by..... T. Sletten

Phone..... (607) 869-4135 Operating Schedule

Inventory Date..... June 6-10, 1994 Hours/day.....

Days/week.....

Type of Activity: Ammo Surveillance Workshop

MONTHLY FUEL USE

19__ JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC

Units: _____ lbs _____ gal _____ other (specify)

SOURCE DESCRIPTION

Describe the source, how the chemical product is used, and the mechanism for generating air emissions.

Ink to change color/markings on boxes

CHEMICAL PRODUCT DATA

(Use extra sheets as necessary)

Product Name Stencil Ink

NSN _____ MILSPEC _____

Annual Use 6 cns (12 oz) Annual Disposal _____

Product Name _____

NSN _____ MILSPEC _____

Annual Use _____ Annual Disposal _____

POLLUTION CONTROL EQUIPMENT

(Enter control efficiency)

Wet Scrubber _____ Cyclone _____ Baghouse _____

Afterburner _____ Activated Charcoal Filter _____

Other _____

EMISSION RATE DETERMINATION METHOD

Stack Test Data _____ Emission Factor _____ Material Balance X

Similar Unit Data _____ Other MSDS

Reference: _____

OZONE PRECURSOR EMISSIONS

Typical Ozone Season Emissions
 VOC Emissions 0.0114945652 lb/day
 NOx Emissions _____ lb/day
 CO Emissions _____ lb/day

HAZARDOUS AIR POLLUTANTS

| HAP | CAS CODE | LB/YR |
|----------|----------|--------------|
| Acetone* | 67-64-1 | 1.8000000000 |
| Toluene | 108-88-3 | 1.3500000000 |
| | | |
| | | |

CRITERIA POLLUTANT EMISSIONS

VOC Emissions 0.0021150000 ton/yr
 NOx Emissions _____ ton/yr
 CO Emissions _____ ton/yr
 SO2 Emissions _____ ton/yr
 PM10 Emissions _____ ton/yr
 Total Particulate _____ ton/yr

* New York State HAP

STACK INFORMATION

| | |
|-----------------------------------|------------------------------------|
| Stack (release) Height _____ feet | Stack Gas Velocity _____ ft/sec |
| Stack Diameter _____ inch | Stack Gas Flow Rate _____ acsf/min |
| | Stack Gas Temperature _____ oF |

Other sources that share this stack? _____

Stack Sampling Report Available? (Y/ N, results?) _____

**Emissions for Miscellaneous Chemicals and Solvents
Federal and New York State Regulations**

Name: Seneca Army Depot Date: 8/30/94
 Bldg #: 306 - Ammo Surveillance Workshop Initials: GRM
 SCC: 4-01-888-01

Product/Material Information

Product: Stencil Ink
 NSN: _____

Note: For annual usage, only fill the boxes for EITHER a, b, OR c and leave other boxes blank

| | | | | | | | |
|------------------|----------------------|----------------------|---------|----------------------|---------------|--------------|--------------------|
| Annual Usage: a) | <input type="text"/> | cans/yr | at | <input type="text"/> | fl.oz/can= | <u>0.000</u> | gal/yr |
| OR | b) | <u>6</u> | cans/yr | at | <u>12.000</u> | wt.oz/can= | <u>4.500</u> lb/yr |
| OR | c) | <input type="text"/> | gal/yr | | | | |

Specific Gravity: 0.780

Notes:

VOC composition: 94.00 %(MSDS/Manuf.)

VOC Composition: 94.00 %(corrected for water and non-photochemical reactants)

expressed as : A A = % by weight
 B = % by volume

Notes:

Comment: "A" and "B" refer to the percentage of the material which contains VOCs.

This is expressed as a percentage of total volume, (i.e. gallons) or of total weight (i.e. pounds). When available, percent by weight should take precedence. Make sure to subtract the percentage of hazardous VOCs which are not to be evaluated as a VOC (i.e., methylene chloride).

Emissions Summary

| Annual VOC Emissions | | |
|------------------------------------|--------------------|---------------------|
| Annual usage converted to weight = | <u>4.500</u> | Lbs/yr |
| VOC Emissions = | <u>4.230</u> Lb/yr | <u>0.002</u> Ton/yr |

| Ozone Season VOC Emissions | | |
|------------------------------------|--------------|-------------|
| Ozone Season Usage = | <u>1.125</u> | Lbs |
| Daily Ozone Season Usage = | <u>0.012</u> | Lbs/day |
| Ozone Season VOC Emissions = | <u>1.058</u> | Lbs |
| Daily Ozone Season VOC Emissions = | <u>0.011</u> | Lbs/day |
| Ozone Season Work Day Emissions = | <u>0.016</u> | Lbs/wrk day |

HAP Emissions: To determine HAP emissions, enter the composition of each HAP in one of two areas. First, enter the compositions for HAPs which are presented on the following page. If a particular HAP is not listed on that page, then enter the name and composition in the spaces provided below. HAP totals will be presented at the bottom of the following page.

| Additional HAPs | CAS No. | (% Composition) | Emissions (Lbs/yr) |
|-----------------|---------|-----------------|--------------------|
| Acetone* | 67-64-1 | 40 | 1.800 |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| HAP Subtotal = | | | <u>1.8</u> Lbs/yr |

* New York State HAP

| HAP Emissions | | | |
|---------------------------|-----------|-----------------|--------------------|
| HAP Name | CAS # | (% Composition) | Emissions (Lbs/yr) |
| Benzene | 71-43-2 | | |
| Carbon disulfide | 75-15-0 | | |
| Carbon tetrachloride | 56-23-5 | | |
| Chlorine | 7782-50-5 | | |
| Chlorobenzene | 108-90-7 | | |
| Chloroform | 67-66-3 | | |
| Cumene | 98-82-8 | | |
| 1,4 Dioxane | 123-91-1 | | |
| Epichlorohydrin | 106-89-8 | | |
| Ethylbenzene | 100-41-4 | | |
| Ethylene dibromide | 106-93-4 | | |
| Ethylene dichloride | 107-06-2 | | |
| Ethylene glycol | 107-21-1 | | |
| Ethylene oxide | 75-21-8 | | |
| Formaldehyde | 50-00-0 | | |
| Hexane | 110-54-3 | | |
| Hydrazine | 302-01-2 | | |
| Hydrogen fluoride | 7664-39-3 | | |
| Hydrogen sulfide | 7783-06-4 | | |
| Hydroquinone | 123-31-9 | | |
| m-xylene | 108-38-3 | | |
| Methanol (methyl alcohol) | 67-56-1 | | |
| Methyl chloride | 74-87-3 | | |
| Methyl chloroform | 71-55-6 | | |
| Methyl ethyl ketone | 78-93-3 | | |
| Methyl isobutyl ketone | 108-10-1 | | |
| Methyl methacrylate | 80-62-6 | | |
| Methylene chloride | 75-09-2 | | |
| Naphthalene | 91-20-3 | | |
| o-xylene | 95-47-6 | | |
| p-xylene | 106-42-3 | | |
| Phenol | 108-95-2 | | |
| Phosgene | 75-44-5 | | |
| Phosphine | 7803-51-2 | | |
| Styrene | 100-42-5 | | |
| Tetrachloroethylene | 127-18-4 | | |
| Trichloroethylene | 79-01-6 | | |
| Toluene | 108-88-3 | 30 | 1.350 |
| Vinyl acetate | 108-05-4 | | |
| Vinyl chloride | 75-01-4 | | |
| Xylenes | 1330-20-7 | | |
| HAP Total = | | | 3.15 Lbs/yr |
| HAP Content = | | | 4.54 Lbs/Gal |

Miscellaneous Chemical VOC Emissions
for Building Number 317 - (COMIS)

| NSN | Solvent | Use gal/yr | VOC Content (%) | VOC Emissions (lb/yr) | VOC Emissions (ton/yr) |
|------------------|-----------------------------|---------------|--------------------|--------------------------|---------------------------|
| 9150-00-529-7222 | CRC 5-56 | 1.16 | 42.00 | 3.78 | <0.01 |
| N/A | WD-40 | 1.35 | 78.00 | 7.02 | <0.01 |
| N/A | LPS-3 Rust Inhibitor | 7.07 | 75.00 | 37.13 | 0.02 |
| 8030-00-526-1604 | P-19 CPC | 110.00 | 55.00 | 440.39 | 0.22 |
| N/A | DX 330 Wax & Grease Remover | 70.00 | 99.99 | 444.27 | 0.22 |

Ozone Season Daily Miscellaneous Chemical Emissions
for Building Number 317 - (COMIS)

| Pollutant | Emissions (lb) | Daily Emissions (lb) | Daily Emissions (tons) |
|-----------|-------------------|-------------------------|---------------------------|
| VOC | 932.59 | 2.53 | <0.01 |

Miscellaneous Chemical HAP Emissions
for Building Number 317 - (COMIS)

| NSN | Solvent | Use (gal/yr) | HAP Content (lbs/gal) | HAP Emissions (lb/yr) | HAP Emissions (ton/yr) |
|------------------|----------|-----------------|--------------------------|--------------------------|---------------------------|
| 9150-00-529-7222 | CRC 5-56 | 1.16 | 2.25 | 2.61 | <0.01 |

Miscellaneous Chemical HAP Emissions
for Building Number 317 - (COMIS)

| NSN | Solvent | Use (gal/yr) | HAP Methyl Chloroform (%) |
|------------------|----------|-----------------|------------------------------------|
| 9150-00-529-7222 | CRC 5-56 | 3.48 | 29.00 |

EMISSION RATE DETERMINATION METHOD

Stack Test Data _____ Emission Factor _____ Material Balance X

Similar Unit Data _____ Other _____ MSDS _____

Reference: _____

OZONE PRECURSOR EMISSIONS

Typical Ozone Season Emissions
 VOC Emissions 2.5341995128 lb/day
 NOx Emissions _____ lb/day
 CO Emissions _____ lb/day

HAZARDOUS AIR POLLUTANTS

| HAP | CAS CODE | LB/YR |
|----------------------------|------------------|-----------------------|
| <u> Methyl Chloroform </u> | <u> 71-55-6 </u> | <u> 2.6100000000 </u> |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |

CRITERIA POLLUTANT EMISSIONS

VOC Emissions 0.4662927104 ton/yr
 NOx Emissions _____ ton/yr
 CO Emissions _____ ton/yr
 SO2 Emissions _____ ton/yr
 PM10 Emissions _____ ton/yr
 Total Particulate _____ ton/yr

STACK INFORMATION

| | |
|-----------------------------------|------------------------------------|
| Stack (release) Height _____ feet | Stack Gas Velocity _____ ft/sec |
| Stack Diameter _____ inch | Stack Gas Flow Rate _____ ascf/min |
| | Stack Gas Temperature _____ oF |

Other sources that share this stack? _____

Stack Sampling Report Available? (Y/ N, results?) _____

**Emissions for Miscellaneous Chemicals and Solvents
Federal and New York State Regulations**

Name: Seneca Army Depot
Bldg #: 317 - (COMIS)
SCC: 4-01-888-01

Date: 8/30/94
Initials: GRM

Product/Material Information

Product: CRC 5-56
NSN: 9150-00-529-7222

Note: For annual usage, only fill the boxes for EITHER a, b, OR c and leave other boxes blank

| | | | | | | | |
|------------------|----------------------|----------------------|---------|----------------------|---------------|--------------|--------------------|
| Annual Usage: a) | <input type="text"/> | cans/yr | at | <input type="text"/> | fl.oz/can= | <u>0.000</u> | gal/yr |
| OR | b) | <u>12</u> | cans/yr | at | <u>12.000</u> | wt.oz/can= | <u>9.000</u> lb/yr |
| OR | c) | <input type="text"/> | gal/yr | | | | |

Specific Gravity: 0.932

Notes:

VOC composition: 71.00 %(MSDS/Manuf.)

VOC Composition: 42.00 %(corrected for water and non-photochemical reactants)

expressed as : A A = % by weight
B = % by volume

Notes:

Comment: "A" and "B" refer to the percentage of the material which contains VOCs.

This is expressed as a percentage of total volume, (i.e. gallons) or of total weight (i.e. pounds). When available, percent by weight should take precedence. Make sure to subtract the percentage of hazardous VOCs which are not to be evaluated as a VOC (i.e., methylene chloride).

Emissions Summary

Annual VOC Emissions

Annual usage converted to weight = 9.000 Lbs/yr
 VOC Emissions = 3.780 Lb/yr 0.002 Ton/yr

Ozone Season VOC Emissions

Ozone Season Usage = 2.250 Lbs
 Daily Ozone Season Usage = 0.024 Lbs/day

 Ozone Season VOC Emissions = 0.945 Lbs
 Daily Ozone Season VOC Emissions = 0.010 Lbs/day
 Ozone Season Work Day Emissions = 0.014 Lbs/wrk day

HAP Emissions: To determine HAP emissions, enter the composition of each HAP in one of two areas. First, enter the compositions for HAPs which are presented on the following page. If a particular HAP is not listed on that page, then enter the name and composition in the spaces provided below. HAP totals will be presented at the bottom of the following page.

| Additional HAPs | CAS No. | (% Composition) | Emissions (Lbs/yr) |
|-----------------|---------|-----------------|-----------------------|
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| HAP Subtotal = | | | <u>0.0</u> Lbs/yr |

| HAP Emissions | | | |
|---------------------------|-----------|-----------------|-----------------------|
| HAP Name | CAS # | (% Composition) | Emissions (Lbs/yr) |
| Benzene | 71-43-2 | | |
| Carbon disulfide | 75-15-0 | | |
| Carbon tetrachloride | 56-23-5 | | |
| Chlorine | 7782-50-5 | | |
| Chlorobenzene | 108-90-7 | | |
| Chloroform | 67-66-3 | | |
| Cumene | 98-82-8 | | |
| 1,4 Dioxane | 123-91-1 | | |
| Epichlorohydrin | 106-89-8 | | |
| Ethylbenzene | 100-41-4 | | |
| Ethylene dibromide | 106-93-4 | | |
| Ethylene dichloride | 107-06-2 | | |
| Ethylene glycol | 107-21-1 | | |
| Ethylene oxide | 75-21-8 | | |
| Formaldehyde | 50-00-0 | | |
| Hexane | 110-54-3 | | |
| Hydrazine | 302-01-2 | | |
| Hydrogen fluoride | 7664-39-3 | | |
| Hydrogen sulfide | 7783-06-4 | | |
| Hydroquinone | 123-31-9 | | |
| m-xylene | 108-38-3 | | |
| Methanol (methyl alcohol) | 67-56-1 | | |
| Methyl chloride | 74-87-3 | | |
| Methyl chloroform | 71-55-6 | 29 | 2.610 |
| Methyl ethyl ketone | 78-93-3 | | |
| Methyl isobutyl ketone | 108-10-1 | | |
| Methyl methacrylate | 80-62-6 | | |
| Methylene chloride | 75-09-2 | | |
| Naphthalene | 91-20-3 | | |
| o-xylene | 95-47-6 | | |
| p-xylene | 106-42-3 | | |
| Phenol | 108-95-2 | | |
| Phosgene | 75-44-5 | | |
| Phosphine | 7803-51-2 | | |
| Styrene | 100-42-5 | | |
| Tetrachloroethylene | 127-18-4 | | |
| Trichloroethylene | 79-01-6 | | |
| Toluene | 108-88-3 | | |
| Vinyl acetate | 108-05-4 | | |
| Vinyl chloride | 75-01-4 | | |
| Xylenes | 1330-20-7 | | |
| HAP Total = | | | 2.61 Lbs/yr |
| HAP Content = | | | 2.25 Lbs/Gal |

**Emissions for Miscellaneous Chemicals and Solvents
Federal and New York State Regulations**

Name: Seneca Army Depot
Bldg #: 317 - (COMIS)
SCC: 4-01-888-01

Date: 8/30/94
Initials: GRM

Product/Material Information

Product: WD-40
NSN: _____

Note: For annual usage, only fill the boxes for EITHER a, b, OR c and leave other boxes blank

| | | | | | | | |
|------------------|----------------------|----------------------|---------|----------------------|---------------|--------------|--------------------|
| Annual Usage: a) | <input type="text"/> | cans/yr | at | <input type="text"/> | fl.oz/can= | <u>0.000</u> | gal/yr |
| OR | b) | <u>12</u> | cans/yr | at | <u>12.000</u> | wt.oz/can= | <u>9.000</u> lb/yr |
| OR | c) | <input type="text"/> | gal/yr | | | | |

Specific Gravity: 0.800

Notes:

VOC composition: 78.00 %(MSDS/Manuf.)

VOC Composition: 78.00 %(corrected for water and non-photochemical reactants)

expressed as : A A = % by weight
B = % by volume

Notes:

Comment: "A" and "B" refer to the percentage of the material which contains VOCs.

This is expressed as a percentage of total volume, (i.e. gallons) or of total weight (i.e. pounds). When available, percent by weight should take precedence. Make sure to subtract the percentage of hazardous VOCs which are not to be evaluated as a VOC (i.e., methylene chloride).

Emissions Summary

Annual VOC Emissions

Annual usage converted to weight = 9.000 Lbs/yr
 VOC Emissions = 7.020 Lb/yr 0.004 Ton/yr

Ozone Season VOC Emissions

Ozone Season Usage = 2.250 Lbs
 Daily Ozone Season Usage = 0.024 Lbs/day

 Ozone Season VOC Emissions = 1.755 Lbs
 Daily Ozone Season VOC Emissions = 0.019 Lbs/day
 Ozone Season Work Day Emissions = 0.027 Lbs/wrk day

HAP Emissions: To determine HAP emissions, enter the composition of each HAP in one of two areas. First, enter the compositions for HAPs which are presented on the following page. If a particular HAP is not listed on that page, then enter the name and composition in the spaces provided below. HAP totals will be presented at the bottom of the following page.

| Additional HAPs | CAS No. | (% Composition) | Emissions (Lbs/yr) |
|-----------------|---------|-----------------|-----------------------|
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| HAP Subtotal = | | | <u>0.0</u> Lbs/yr |

| HAP Emissions | | | |
|---------------------------|-----------|-----------------|--------------------|
| HAP Name | CAS # | (% Composition) | Emissions (Lbs/yr) |
| Benzene | 71-43-2 | | |
| Carbon disulfide | 75-15-0 | | |
| Carbon tetrachloride | 56-23-5 | | |
| Chlorine | 7782-50-5 | | |
| Chlorobenzene | 108-90-7 | | |
| Chloroform | 67-66-3 | | |
| Cumene | 98-82-8 | | |
| 1,4 Dioxane | 123-91-1 | | |
| Epichlorohydrin | 106-89-8 | | |
| Ethylbenzene | 100-41-4 | | |
| Ethylene dibromide | 106-93-4 | | |
| Ethylene dichloride | 107-06-2 | | |
| Ethylene glycol | 107-21-1 | | |
| Ethylene oxide | 75-21-8 | | |
| Formaldehyde | 50-00-0 | | |
| Hexane | 110-54-3 | | |
| Hydrazine | 302-01-2 | | |
| Hydrogen fluoride | 7664-39-3 | | |
| Hydrogen sulfide | 7783-06-4 | | |
| Hydroquinone | 123-31-9 | | |
| m-xylene | 108-38-3 | | |
| Methanol (methyl alcohol) | 67-56-1 | | |
| Methyl chloride | 74-87-3 | | |
| Methyl chloroform | 71-55-6 | | |
| Methyl ethyl ketone | 78-93-3 | | |
| Methyl isobutyl ketone | 108-10-1 | | |
| Methyl methacrylate | 80-62-6 | | |
| Methylene chloride | 75-09-2 | | |
| Naphthalene | 91-20-3 | | |
| o-xylene | 95-47-6 | | |
| p-xylene | 106-42-3 | | |
| Phenol | 108-95-2 | | |
| Phosgene | 75-44-5 | | |
| Phosphine | 7803-51-2 | | |
| Styrene | 100-42-5 | | |
| Tetrachloroethylene | 127-18-4 | | |
| Trichloroethylene | 79-01-6 | | |
| Toluene | 108-88-3 | | |
| Vinyl acetate | 108-05-4 | | |
| Vinyl chloride | 75-01-4 | | |
| Xylenes | 1330-20-7 | | |
| HAP Total = | | | 0.00 Lbs/yr |
| HAP Content = | | | 0.00 Lbs/Gal |

**Emissions for Miscellaneous Chemicals and Solvents
Federal and New York State Regulations**

Name: Seneca Army Depot
Bldg #: 317 - (COMIS)
SCC: 4-01-888-01

Date: 8/30/94
Initials: GRM

Product/Material Information

Product: LPS-3 Rust Inhibitor
NSN: Part No. 00316

Note: For annual usage, only fill the boxes for EITHER a, b, OR c and leave other boxes blank

| | | | | | | | |
|------------------|----------------------|----------------------|---------|----------------------|---------------|--------------|---------------------|
| Annual Usage: a) | <input type="text"/> | cans/yr | at | <input type="text"/> | fl.oz/can= | <u>0.000</u> | gal/yr |
| OR | b) | <u>72</u> | cans/yr | at | <u>11.000</u> | wt.oz/can= | <u>49.500</u> lb/yr |
| OR | c) | <input type="text"/> | gal/yr | | | | |

Specific Gravity: 0.830

Notes:

VOC composition: 75.00 %(MSDS/Manuf.)

VOC Composition: 75.00 %(corrected for water and non-photochemical reactants)

expressed as : A A = % by weight
B = % by volume

Notes:

Comment: "A" and "B" refer to the percentage of the material which contains VOCs.

This is expressed as a percentage of total volume, (i.e. gallons) or of total weight (i.e. pounds). When available, percent by weight should take precedence. Make sure to subtract the percentage of hazardous VOCs which are not to be evaluated as a VOC (i.e., methylene chloride).

Emissions Summary

| Annual VOC Emissions | | |
|------------------------------------|---------------------|---------------------|
| Annual usage converted to weight = | <u>49.500</u> | Lbs/yr |
| VOC Emissions = | <u>37.125</u> Lb/yr | <u>0.019</u> Ton/yr |

| Ozone Season VOC Emissions | | |
|------------------------------------|---------------|-------------|
| Ozone Season Usage = | <u>12.375</u> | Lbs |
| Daily Ozone Season Usage = | <u>0.135</u> | Lbs/day |
| Ozone Season VOC Emissions = | <u>9.281</u> | Lbs |
| Daily Ozone Season VOC Emissions = | <u>0.101</u> | Lbs/day |
| Ozone Season Work Day Emissions = | <u>0.141</u> | Lbs/wrk day |

HAP Emissions: To determine HAP emissions, enter the composition of each HAP in one of two areas. First, enter the compositions for HAPs which are presented on the following page. If a particular HAP is not listed on that page, then enter the name and composition in the spaces provided below. HAP totals will be presented at the bottom of the following page.

| Additional HAPs | CAS No. | (% Composition) | Emissions (Lbs/yr) |
|-----------------|---------|-----------------|-----------------------|
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| HAP Subtotal = | | | <u>0.0</u> Lbs/yr |

| HAP Emissions | | | |
|---------------------------|-----------|-----------------|-----------------------|
| HAP Name | CAS # | (% Composition) | Emissions (Lbs/yr) |
| Benzene | 71-43-2 | | |
| Carbon disulfide | 75-15-0 | | |
| Carbon tetrachloride | 56-23-5 | | |
| Chlorine | 7782-50-5 | | |
| Chlorobenzene | 108-90-7 | | |
| Chloroform | 67-66-3 | | |
| Cumene | 98-82-8 | | |
| 1,4 Dioxane | 123-91-1 | | |
| Epichlorohydrin | 106-89-8 | | |
| Ethylbenzene | 100-41-4 | | |
| Ethylene dibromide | 106-93-4 | | |
| Ethylene dichloride | 107-06-2 | | |
| Ethylene glycol | 107-21-1 | | |
| Ethylene oxide | 75-21-8 | | |
| Formaldehyde | 50-00-0 | | |
| Hexane | 110-54-3 | | |
| Hydrazine | 302-01-2 | | |
| Hydrogen fluoride | 7664-39-3 | | |
| Hydrogen sulfide | 7783-06-4 | | |
| Hydroquinone | 123-31-9 | | |
| m-xylene | 108-38-3 | | |
| Methanol (methyl alcohol) | 67-56-1 | | |
| Methyl chloride | 74-87-3 | | |
| Methyl chloroform | 71-55-6 | | |
| Methyl ethyl ketone | 78-93-3 | | |
| Methyl isobutyl ketone | 108-10-1 | | |
| Methyl methacrylate | 80-62-6 | | |
| Methylene chloride | 75-09-2 | | |
| Naphthalene | 91-20-3 | | |
| o-xylene | 95-47-6 | | |
| p-xylene | 106-42-3 | | |
| Phenol | 108-95-2 | | |
| Phosgene | 75-44-5 | | |
| Phosphine | 7803-51-2 | | |
| Styrene | 100-42-5 | | |
| Tetrachloroethylene | 127-18-4 | | |
| Trichloroethylene | 79-01-6 | | |
| Toluene | 108-88-3 | | |
| Vinyl acetate | 108-05-4 | | |
| Vinyl chloride | 75-01-4 | | |
| Xylenes | 1330-20-7 | | |
| HAP Total = | | | 0.00 Lbs/yr |
| HAP Content = | | | 0.00 Lbs/Gal |

**Emissions for Miscellaneous Chemicals and Solvents
Federal and New York State Regulations**

Name: Seneca Army Depot
Bldg #: 317 - (COMIS)
SCC: 4-01-888-01

Date: 8/30/94
Initials: GRM

Product/Material Information

Product: P-19 CPC
NSN: 8030-00-526-1604

Note: For annual usage, only fill the boxes for EITHER a, b, OR c and leave other boxes blank

Annual Usage: a) cans/yr at fl.oz/can= 0.000 gal/yr
OR b) cans/yr at wt.oz/can= 0.000 lb/yr
OR c) 110.000 gal/yr

Specific Gravity: 0.875

Notes:

VOC composition: 55.00 %(MSDS/Manuf.)

VOC Composition: 55.00 %(corrected for water and non-photochemical reactants)

expressed as : A A = % by weight
B = % by volume

Notes:

Comment: "A" and "B" refer to the percentage of the material which contains VOCs.

This is expressed as a percentage of total volume, (i.e. gallons) or of total weight (i.e. pounds). When available, percent by weight should take precedence. Make sure to subtract the percentage of hazardous VOCs which are not to be evaluated as a VOC (i.e., methylene chloride).

Emissions Summary

Annual VOC Emissions

Annual usage converted to weight = 800.704 Lbs/yr
 VOC Emissions = 440.387 Lb/yr 0.220 Ton/yr

Ozone Season VOC Emissions

Ozone Season Usage = 200.176 Lbs
 Daily Ozone Season Usage = 2.176 Lbs/day

 Ozone Season VOC Emissions = 110.097 Lbs
 Daily Ozone Season VOC Emissions = 1.197 Lbs/day
 Ozone Season Work Day Emissions = 1.675 Lbs/wrk day

HAP Emissions: To determine HAP emissions, enter the composition of each HAP in one of two areas. First, enter the compositions for HAPs which are presented on the following page. If a particular HAP is not listed on that page, then enter the name and composition in the spaces provided below. HAP totals will be presented at the bottom of the following page.

| Additional HAPs | CAS No. | (% Composition) | Emissions (Lbs/yr) |
|-----------------|---------|-----------------|--------------------|
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| HAP Subtotal = | | | <u>0.0</u> Lbs/yr |

| HAP Emissions | | | |
|---------------------------|-----------|-----------------|--------------------|
| HAP Name | CAS # | (% Composition) | Emissions (Lbs/yr) |
| Benzene | 71-43-2 | | |
| Carbon disulfide | 75-15-0 | | |
| Carbon tetrachloride | 56-23-5 | | |
| Chlorine | 7782-50-5 | | |
| Chlorobenzene | 108-90-7 | | |
| Chloroform | 67-66-3 | | |
| Cumene | 98-82-8 | | |
| 1,4 Dioxane | 123-91-1 | | |
| Epichlorohydrin | 106-89-8 | | |
| Ethylbenzene | 100-41-4 | | |
| Ethylene dibromide | 106-93-4 | | |
| Ethylene dichloride | 107-06-2 | | |
| Ethylene glycol | 107-21-1 | | |
| Ethylene oxide | 75-21-8 | | |
| Formaldehyde | 50-00-0 | | |
| Hexane | 110-54-3 | | |
| Hydrazine | 302-01-2 | | |
| Hydrogen fluoride | 7664-39-3 | | |
| Hydrogen sulfide | 7783-06-4 | | |
| Hydroquinone | 123-31-9 | | |
| m-xylene | 108-38-3 | | |
| Methanol (methyl alcohol) | 67-56-1 | | |
| Methyl chloride | 74-87-3 | | |
| Methyl chloroform | 71-55-6 | | |
| Methyl ethyl ketone | 78-93-3 | | |
| Methyl isobutyl ketone | 108-10-1 | | |
| Methyl methacrylate | 80-62-6 | | |
| Methylene chloride | 75-09-2 | | |
| Naphthalene | 91-20-3 | | |
| o-xylene | 95-47-6 | | |
| p-xylene | 106-42-3 | | |
| Phenol | 108-95-2 | | |
| Phosgene | 75-44-5 | | |
| Phosphine | 7803-51-2 | | |
| Styrene | 100-42-5 | | |
| Tetrachloroethylene | 127-18-4 | | |
| Trichloroethylene | 79-01-6 | | |
| Toluene | 108-88-3 | | |
| Vinyl acetate | 108-05-4 | | |
| Vinyl chloride | 75-01-4 | | |
| Xylenes | 1330-20-7 | | |
| HAP Total = | | | 0.00 Lbs/yr |
| HAP Content = | | | 0.00 Lbs/Gal |

**Emissions for Miscellaneous Chemicals and Solvents
Federal and New York State Regulations**

Name: Seneca Army Depot
 Bldg #: 317 - (COMIS)
 SCC: 4-01-888-01

Date: 8/30/94
 Initials: GRM

Product/Material Information

Product: DX 330 Wax & Grease Remover
 NSN: _____

Note: For annual usage, only fill the boxes for EITHER a, b, OR c and leave other boxes blank

| | | | | | | | |
|------------------|----------------------|----------------------|---------|----------------------|----------------------|--------------|--------------|
| Annual Usage: a) | <input type="text"/> | cans/yr | at | <input type="text"/> | fl.oz/can= | <u>0.000</u> | gal/yr |
| OR | b) | <input type="text"/> | cans/yr | at | <input type="text"/> | wt.oz/can= | <u>0.000</u> |
| OR | c) | <u>70.000</u> | gal/yr | | | | |

Specific Gravity: 0.763

Notes: Specific Gravity: $(6.35 \text{ lb/gal}) / (8.319 \text{ lb/gal}) = 0.763$

VOC composition: 99.99 % (MSDS/Manuf.)

VOC Composition: 99.99 % (corrected for water and non-photochemical reactants)

expressed as : A A = % by weight
 B = % by volume

Notes:

Comment: "A" and "B" refer to the percentage of the material which contains VOCs.

This is expressed as a percentage of total volume, (i.e. gallons) or of total weight (i.e. pounds). When available, percent by weight should take precedence. Make sure to subtract the percentage of hazardous VOCs which are not to be evaluated as a VOC (i.e., methylene chloride).

Emissions Summary

| Annual VOC Emissions | |
|------------------------------------|--|
| Annual usage converted to weight = | <u>444.318</u> Lbs/yr |
| VOC Emissions = | <u>444.273</u> Lb/yr <u>0.222</u> Ton/yr |

| Ozone Season VOC Emissions | |
|------------------------------------|--------------------------|
| Ozone Season Usage = | <u>111.079</u> Lbs |
| Daily Ozone Season Usage = | <u>1.207</u> Lbs/day |
| Ozone Season VOC Emissions = | <u>111.068</u> Lbs |
| Daily Ozone Season VOC Emissions = | <u>1.207</u> Lbs/day |
| Ozone Season Work Day Emissions = | <u>1.690</u> Lbs/wrk day |

HAP Emissions: To determine HAP emissions, enter the composition of each HAP in one of two areas. First, enter the compositions for HAPs which are presented on the following page. If a particular HAP is not listed on that page, then enter the name and composition in the spaces provided below. HAP totals will be presented at the bottom of the following page.

| Additional HAPs | CAS No. | (% Composition) | Emissions (Lbs/yr) |
|-----------------|---------|-----------------|-----------------------|
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| HAP Subtotal = | | | <u>0.0</u> Lbs/yr |

| HAP Emissions | | | |
|---------------------------|-----------|-----------------|-----------------------|
| HAP Name | CAS # | (% Composition) | Emissions (Lbs/yr) |
| Benzene | 71-43-2 | | |
| Carbon disulfide | 75-15-0 | | |
| Carbon tetrachloride | 56-23-5 | | |
| Chlorine | 7782-50-5 | | |
| Chlorobenzene | 108-90-7 | | |
| Chloroform | 67-66-3 | | |
| Cumene | 98-82-8 | | |
| 1,4 Dioxane | 123-91-1 | | |
| Epichlorohydrin | 106-89-8 | | |
| Ethylbenzene | 100-41-4 | | |
| Ethylene dibromide | 106-93-4 | | |
| Ethylene dichloride | 107-06-2 | | |
| Ethylene glycol | 107-21-1 | | |
| Ethylene oxide | 75-21-8 | | |
| Formaldehyde | 50-00-0 | | |
| Hexane | 110-54-3 | | |
| Hydrazine | 302-01-2 | | |
| Hydrogen fluoride | 7664-39-3 | | |
| Hydrogen sulfide | 7783-06-4 | | |
| Hydroquinone | 123-31-9 | | |
| m-xylene | 108-38-3 | | |
| Methanol (methyl alcohol) | 67-56-1 | | |
| Methyl chloride | 74-87-3 | | |
| Methyl chloroform | 71-55-6 | | |
| Methyl ethyl ketone | 78-93-3 | | |
| Methyl isobutyl ketone | 108-10-1 | | |
| Methyl methacrylate | 80-62-6 | | |
| Methylene chloride | 75-09-2 | | |
| Naphthalene | 91-20-3 | | |
| o-xylene | 95-47-6 | | |
| p-xylene | 106-42-3 | | |
| Phenol | 108-95-2 | | |
| Phosgene | 75-44-5 | | |
| Phosphine | 7803-51-2 | | |
| Styrene | 100-42-5 | | |
| Tetrachloroethylene | 127-18-4 | | |
| Trichloroethylene | 79-01-6 | | |
| Toluene | 108-88-3 | | |
| Vinyl acetate | 108-05-4 | | |
| Vinyl chloride | 75-01-4 | | |
| Xylenes | 1330-20-7 | | |
| HAP Total = | | | 0.00 Lbs/yr |
| HAP Content = | | | 0.00 Lbs/Gal |

Miscellaneous Chemical VOC Emissions
for Building Number 321 (TMDE)

| NSN | Solvent | Use gal/yr | VOC Content (%) | VOC Emissions (lb/yr) | VOC Emissions (ton/yr) |
|------------------|-------------------|---------------|--------------------|--------------------------|---------------------------|
| 6810-00-543-7415 | Denatured Alcohol | 4.00 | 100.00 | 31.03 | 0.02 |
| 9150-00-529-7222 | CRC 5-56 | 0.60 | 42.00 | 1.97 | <0.01 |
| 8010-00-F01-3448 | Graffiti Remover | 0.31 | 98.00 | 2.21 | <0.01 |

Ozone Season Daily Miscellaneous Chemical Emissions
for Building Number 321 (TMDE)

| Pollutant | Emissions (lb) | Daily Emissions (lb) | Daily Emissions (tons) |
|-----------|-------------------|-------------------------|---------------------------|
| VOC | 35.20 | 0.10 | <0.01 |

Miscellaneous Chemical HAP Emissions
for Building Number 321 (TMDE)

| NSN | Solvent | Use (gal/yr) | HAP Content (lbs/gal) | HAP Emissions (lb/yr) | HAP Emissions (ton/yr) |
|------------------|-------------------|-----------------|--------------------------|--------------------------|---------------------------|
| 6810-00-543-7415 | Denatured Alcohol | 4.00 | 0.37 | 1.49 | <0.01 |
| 9150-00-529-7222 | CRC 5-56 | 0.60 | 2.25 | 1.36 | <0.01 |
| 8010-00-F01-3448 | Graffiti Remover | 0.31 | 6.84 | 2.14 | <0.01 |

Miscellaneous Chemical HAP Emissions
for Building Number 321 (TMDE)

| NSN | Solvent | Use (gal/yr) | HAP Methyl Chloroform (%) | HAP Methyl Alcohol (%) | HAP Methyl Ethyl Ketone (%) |
|------------------|-------------------|-----------------|------------------------------------|---------------------------------|--------------------------------------|
| 6810-00-543-7415 | Denatured Alcohol | 4.00 | | 4.80 | |
| 9150-00-529-7222 | CRC 5-56 | 0.60 | 29.00 | | |
| 8010-00-F01-3448 | Graffiti Remover | 0.31 | | | 15.00 |

| NSN | Solvent | Use (gal/yr) | HAP Acetone* (%) | HAP Glycol Ethers (%) | HAP Isopropyl Alcohol* (%) | HAP Toluene (%) |
|--------------|------------------|-----------------|------------------------|--------------------------------|-------------------------------------|-----------------------|
| -00-F01-3448 | Graffiti Remover | 0.31 | 5.00 | 15.00 | 20.00 | 40.00 |

* New York State HAP

1992-1993

1992

1993



MISCELLANEOUS CHEMICAL SOURCES

GENERAL INFORMATION

Installation Seneca Army Depot

SCC..... 4-01-888-01 Unit ID #.....

Location..... Bldg 321 (TMDE) Permit #.....

POC..... Clint Kunkle Inventoried by..... T. Sletten

Phone..... (607) 869-1385 Operating Schedule

Inventory Date..... June 6-10, 1994 Hours/day.....

Days/week.....

Type of Activity: _____

| MONTHLY FUEL USE | | | | | | | | | | | | |
|------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 19__ | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC |
| _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ |

Units: _____ lbs _____ gal _____ other (specify)

SOURCE DESCRIPTION

Describe the source, how the chemical product is used, and the mechanism for generating air emissions.

CHEMICAL PRODUCT DATA

(Use extra sheets as necessary)

Product Name Denatured Alcohol

NSN 6810-00-543-7415 MILSPEC _____

Annual Use 4 gal Annual Disposal _____

Product Name CRC 5-56

NSN _____ MILSPEC _____

Annual Use 6 cans (12.5 oz) Annual Disposal _____

POLLUTION CONTROL EQUIPMENT

(Enter control efficiency)

Wet Scrubber _____ Cyclone _____ Baghouse _____

Afterburner _____ Activated Charcoal Filter _____

Other _____

EMISSION RATE DETERMINATION METHOD

Stack Test Data _____ Emission Factor _____ Material Balance X

Similar Unit Data _____ Other MSDS

Reference: _____

OZONE PRECURSOR EMISSIONS

Typical Ozone Season Emissions
 VOC Emissions 0.0956167989 lb/day
 NOx Emissions _____ lb/day
 CO Emissions _____ lb/day

HAZARDOUS AIR POLLUTANTS

| HAP | CAS CODE | LB/YR |
|---------------------|----------|--------------|
| Methyl Alcohol | 67-56-1 | 1.4886351360 |
| Glycol Ethers | 0 | 0.3375000000 |
| Acetone* | 67-64-1 | 0.1125000000 |
| Toluene | 108-88-3 | 0.9000000000 |
| Isopropyl Alcohol* | 67-63-0 | 0.4500000000 |
| Methyl Ethyl Ketone | 78-93-3 | 0.3375000000 |
| Methyl Chloroform | 71-55-6 | 1.3593750000 |
| Glycol Ethers | 0 | 0.3375000000 |

CRITERIA POLLUTANT EMISSIONS

VOC Emissions 0.0175934910 ton/yr
 NOx Emissions _____ ton/yr
 CO Emissions _____ ton/yr
 SO2 Emissions _____ ton/yr
 PM10 Emissions _____ ton/yr
 Total Particulate _____ ton/yr

* New York State HAP

STACK INFORMATION

Stack (release) Height _____ feet Stack Gas Velocity _____ ft/sec
 Stack Diameter _____ inch Stack Gas Flow Rate _____ ascf/min
 Stack Gas Temperature _____ oF

Other sources that share this stack? _____

Stack Sampling Report Available? (Y/ N, results?) _____

**Emissions for Miscellaneous Chemicals and Solvents
Federal and New York State Regulations**

Name: Seneca Army Depot
Bldg #: 321 - (TMDE)
SCC: 4-01-888-01

Date: 8/30/94
Initials: GRM

Product/Material Information

Product: Denatured Alcohol
NSN: 6810-00-543-7415

Note: For annual usage, only fill the boxes for EITHER a, b, OR c and leave other boxes blank

Annual Usage: a) cans/yr at fl.oz/can= 0.000 gal/yr
OR b) cans/yr at wt.oz/can= 0.000 lb/yr
OR c) 4.000 gal/yr

Specific Gravity: 0.932

Notes:

VOC composition: 100.00 %(MSDS/Manuf.)

VOC Composition: 100.00 %(corrected for water and non-photochemical reactants)

expressed as : A A = % by weight
B = % by volume

Notes:

Comment: "A" and "B" refer to the percentage of the material which contains VOCs.

This is expressed as a percentage of total volume, (i.e. gallons) or of total weight (i.e. pounds). When available, percent by weight should take precedence. Make sure to subtract the percentage of hazardous VOCs which are not to be evaluated as a VOC (i.e., methylene chloride).

Emissions Summary

| Annual VOC Emissions | | |
|------------------------------------|---------------------|---------------------|
| Annual usage converted to weight = | <u>31.013</u> | Lbs/yr |
| VOC Emissions = | <u>31.013</u> Lb/yr | <u>0.016</u> Ton/yr |

| Ozone Season VOC Emissions | | |
|------------------------------------|--------------|-------------|
| Ozone Season Usage = | <u>7.753</u> | Lbs |
| Daily Ozone Season Usage = | <u>0.084</u> | Lbs/day |
| Ozone Season VOC Emissions = | <u>7.753</u> | Lbs |
| Daily Ozone Season VOC Emissions = | <u>0.084</u> | Lbs/day |
| Ozone Season Work Day Emissions = | <u>0.118</u> | Lbs/wrk day |

HAP Emissions: To determine HAP emissions, enter the composition of each HAP in one of two areas. First, enter the compositions for HAPs which are presented on the following page. If a particular HAP is not listed on that page, then enter the name and composition in the spaces provided below. HAP totals will be presented at the bottom of the following page.

| Additional HAPs | CAS No. | (% Composition) | Emissions (Lbs/yr) |
|-----------------|---------|-----------------|-----------------------|
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| HAP Subtotal = | | | <u>0.0</u> Lbs/yr |

* New York State HAP

| HAP Emissions | | | |
|---------------------------|-----------|----------------------|---------------------|
| HAP Name | CAS # | (% Composition) | Emissions (Lbs/yr) |
| Benzene | 71-43-2 | | |
| Carbon disulfide | 75-15-0 | | |
| Carbon tetrachloride | 56-23-5 | | |
| Chlorine | 7782-50-5 | | |
| Chlorobenzene | 108-90-7 | | |
| Chloroform | 67-66-3 | | |
| Cumene | 98-82-8 | | |
| 1,4 Dioxane | 123-91-1 | | |
| Epichlorohydrin | 106-89-8 | | |
| Ethylbenzene | 100-41-4 | | |
| Ethylene dibromide | 106-93-4 | | |
| Ethylene dichloride | 107-06-2 | | |
| Ethylene glycol | 107-21-1 | | |
| Ethylene oxide | 75-21-8 | | |
| Formaldehyde | 50-00-0 | | |
| Hexane | 110-54-3 | | |
| Hydrazine | 302-01-2 | | |
| Hydrogen fluoride | 7664-39-3 | | |
| Hydrogen sulfide | 7783-06-4 | | |
| Hydroquinone | 123-31-9 | | |
| m-xylene | 108-38-3 | | |
| Methanol (methyl alcohol) | 67-56-1 | 4.8 | 1.489 |
| Methyl chloride | 74-87-3 | | |
| Methyl chloroform | 71-55-6 | | |
| Methyl ethyl ketone | 78-93-3 | | |
| Methyl isobutyl ketone | 108-10-1 | | |
| Methyl methacrylate | 80-62-6 | | |
| Methylene chloride | 75-09-2 | | |
| Naphthalene | 91-20-3 | | |
| o-xylene | 95-47-6 | | |
| p-xylene | 106-42-3 | | |
| Phenol | 108-95-2 | | |
| Phosgene | 75-44-5 | | |
| Phosphine | 7803-51-2 | | |
| Styrene | 100-42-5 | | |
| Tetrachloroethylene | 127-18-4 | | |
| Trichloroethylene | 79-01-6 | | |
| Toluene | 108-88-3 | | |
| Vinyl acetate | 108-05-4 | | |
| Vinyl chloride | 75-01-4 | | |
| Xylenes | 1330-20-7 | | |
| | | HAP Total = | 1.49 Lbs/yr |
| | | HAP Content = | 0.37 Lbs/Gal |

**Emissions for Miscellaneous Chemicals and Solvents
Federal and New York State Regulations**

Name: Seneca Army Depot
 Bldg #: 321 - (TMDE)
 SCC: 4-01-888-01

Date: 8/30/94
 Initials: GRM

Product/Material Information

Product: CRC 5-56
 NSN: 9150-00-529-7222

Note: For annual usage, only fill the boxes for EITHER a, b, OR c and leave other boxes blank

| | | | | | | | |
|------------------|----------------------|----------------------|---------|----------------------|---------------|--------------|--------------------|
| Annual Usage: a) | <input type="text"/> | cans/yr | at | <input type="text"/> | fl.oz/can= | <u>0.000</u> | gal/yr |
| OR | b) | <u>6</u> | cans/yr | at | <u>12.500</u> | wt.oz/can= | <u>4.688</u> lb/yr |
| OR | c) | <input type="text"/> | gal/yr | | | | |

Specific Gravity: 0.932

Notes:

VOC composition: 71.00 %(MSDS/Manuf.)

VOC Composition: 42.00 %(corrected for water and non-photochemical reactants)

expressed as : A A = % by weight
 B = % by volume

Notes:

Comment: "A" and "B" refer to the percentage of the material which contains VOCs.

This is expressed as a percentage of total volume, (i.e. gallons) or of total weight (i.e. pounds). When available, percent by weight should take precedence. Make sure to subtract the percentage of hazardous VOCs which are not to be evaluated as a VOC (i.e., methylene chloride).

Emissions Summary

| Annual VOC Emissions | | |
|------------------------------------|-------|--------|
| Annual usage converted to weight = | 4.688 | Lbs/yr |
| VOC Emissions = | 1.969 | Lb/yr |
| | 0.001 | Ton/yr |

| Ozone Season VOC Emissions | | |
|------------------------------------|-------|-------------|
| Ozone Season Usage = | 1.172 | Lbs |
| Daily Ozone Season Usage = | 0.013 | Lbs/day |
| Ozone Season VOC Emissions = | 0.492 | Lbs |
| Daily Ozone Season VOC Emissions = | 0.005 | Lbs/day |
| Ozone Season Work Day Emissions = | 0.007 | Lbs/wrk day |

HAP Emissions: To determine HAP emissions, enter the composition of each HAP in one of two areas. First, enter the compositions for HAPs which are presented on the following page. If a particular HAP is not listed on that page, then enter the name and composition in the spaces provided below. HAP totals will be presented at the bottom of the following page.

| Additional HAPs | CAS No. | (% Composition) | Emissions (Lbs/yr) |
|-----------------|---------|-----------------|-----------------------|
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| HAP Subtotal = | | | 0.0 Lbs/yr |

| HAP Emissions | | | |
|---------------------------|-----------|-----------------|--------------------|
| HAP Name | CAS # | (% Composition) | Emissions (Lbs/yr) |
| Benzene | 71-43-2 | | |
| Carbon disulfide | 75-15-0 | | |
| Carbon tetrachloride | 56-23-5 | | |
| Chlorine | 7782-50-5 | | |
| Chlorobenzene | 108-90-7 | | |
| Chloroform | 67-66-3 | | |
| Cumene | 98-82-8 | | |
| 1,4 Dioxane | 123-91-1 | | |
| Epichlorohydrin | 106-89-8 | | |
| Ethylbenzene | 100-41-4 | | |
| Ethylene dibromide | 106-93-4 | | |
| Ethylene dichloride | 107-06-2 | | |
| Ethylene glycol | 107-21-1 | | |
| Ethylene oxide | 75-21-8 | | |
| Formaldehyde | 50-00-0 | | |
| Hexane | 110-54-3 | | |
| Hydrazine | 302-01-2 | | |
| Hydrogen fluoride | 7664-39-3 | | |
| Hydrogen sulfide | 7783-06-4 | | |
| Hydroquinone | 123-31-9 | | |
| m-xylene | 108-38-3 | | |
| Methanol (methyl alcohol) | 67-56-1 | | |
| Methyl chloride | 74-87-3 | | |
| Methyl chloroform | 71-55-6 | 29 | 1.359 |
| Methyl ethyl ketone | 78-93-3 | | |
| Methyl isobutyl ketone | 108-10-1 | | |
| Methyl methacrylate | 80-62-6 | | |
| Methylene chloride | 75-09-2 | | |
| Naphthalene | 91-20-3 | | |
| o-xylene | 95-47-6 | | |
| p-xylene | 106-42-3 | | |
| Phenol | 108-95-2 | | |
| Phosgene | 75-44-5 | | |
| Phosphine | 7803-51-2 | | |
| Styrene | 100-42-5 | | |
| Tetrachloroethylene | 127-18-4 | | |
| Trichloroethylene | 79-01-6 | | |
| Toluene | 108-88-3 | | |
| Vinyl acetate | 108-05-4 | | |
| Vinyl chloride | 75-01-4 | | |
| Xylenes | 1330-20-7 | | |
| HAP Total = | | | 1.36 Lbs/yr |
| HAP Content = | | | 2.25 Lbs/Gal |

**Emissions for Miscellaneous Chemicals and Solvents
Federal and New York State Regulations**

Name: Seneca Army Depot
 Bldg #: 321 - (TMDE)
 SCC: 4-01-888-01

Date: 8/30/94
 Initials: GRM

Product/Material Information

Product: Graffiti Remover
 NSN: 8010-00-F01-3448

Note: For annual usage, only fill the boxes for EITHER a, b, OR c and leave other boxes blank

Annual Usage: a) cans/yr at fl.oz/can= 0.000 gal/yr
 OR b) cans/yr at wt.oz/can= 2.250 lb/yr
 OR c) gal/yr

Specific Gravity: 0.865

Notes:

VOC composition: 98.00 %(MSDS/Manuf.)
 VOC Composition: 98.00 %(corrected for water and non-photochemical reactants)

expressed as : A A = % by weight
 B = % by volume

Notes:

Comment: "A" and "B" refer to the percentage of the material which contains VOCs.
 This is expressed as a percentage of total volume, (i.e. gallons) or of total weight (i.e. pounds). When available, percent by weight should take precedence. Make sure to subtract the percentage of hazardous VOCs which are not to be evaluated as a VOC (i.e., methylene chloride).

Emissions Summary

| Annual VOC Emissions | | |
|------------------------------------|--------------------|---------------------|
| Annual usage converted to weight = | <u>2.250</u> | Lbs/yr |
| VOC Emissions = | <u>2.205</u> Lb/yr | <u>0.001</u> Ton/yr |

| Ozone Season VOC Emissions | | |
|------------------------------------|--------------|-------------|
| Ozone Season Usage = | <u>0.563</u> | Lbs |
| Daily Ozone Season Usage = | <u>0.006</u> | Lbs/day |
| Ozone Season VOC Emissions = | <u>0.551</u> | Lbs |
| Daily Ozone Season VOC Emissions = | <u>0.006</u> | Lbs/day |
| Ozone Season Work Day Emissions = | <u>0.008</u> | Lbs/wrk day |

HAP Emissions: To determine HAP emissions, enter the composition of each HAP in one of two areas. First, enter the compositions for HAPs which are presented on the following page. If a particular HAP is not listed on that page, then enter the name and composition in the spaces provided below. HAP totals will be presented at the bottom of the following page.

| Additional HAPs | CAS No. | (% Composition) | Emissions (Lbs/yr) |
|--------------------|---------|-----------------|--------------------|
| Acetone* | 67-64-1 | 5 | 0.113 |
| Glycol Ethers | 0 | 15 | 0.338 |
| Isopropyl Alcohol* | 67-63-0 | 20 | 0.450 |
| | | | |
| | | | |
| HAP Subtotal = | | | <u>0.9</u> Lbs/yr |

* New York State HAP

| HAP Emissions | | | |
|---------------------------|-----------|-----------------|-----------------------|
| HAP Name | CAS # | (% Composition) | Emissions (Lbs/yr) |
| Benzene | 71-43-2 | | |
| Carbon disulfide | 75-15-0 | | |
| Carbon tetrachloride | 56-23-5 | | |
| Chlorine | 7782-50-5 | | |
| Chlorobenzene | 108-90-7 | | |
| Chloroform | 67-66-3 | | |
| Cumene | 98-82-8 | | |
| 1,4 Dioxane | 123-91-1 | | |
| Epichlorohydrin | 106-89-8 | | |
| Ethylbenzene | 100-41-4 | | |
| Ethylene dibromide | 106-93-4 | | |
| Ethylene dichloride | 107-06-2 | | |
| Ethylene glycol | 107-21-1 | | |
| Ethylene oxide | 75-21-8 | | |
| Formaldehyde | 50-00-0 | | |
| Hexane | 110-54-3 | | |
| Hydrazine | 302-01-2 | | |
| Hydrogen fluoride | 7664-39-3 | | |
| Hydrogen sulfide | 7783-06-4 | | |
| Hydroquinone | 123-31-9 | | |
| m-xylene | 108-38-3 | | |
| Methanol (methyl alcohol) | 67-56-1 | | |
| Methyl chloride | 74-87-3 | | |
| Methyl chloroform | 71-55-6 | | |
| Methyl ethyl ketone | 78-93-3 | 15 | 0.338 |
| Methyl isobutyl ketone | 108-10-1 | | |
| Methyl methacrylate | 80-62-6 | | |
| Methylene chloride | 75-09-2 | | |
| Naphthalene | 91-20-3 | | |
| o-xylene | 95-47-6 | | |
| p-xylene | 106-42-3 | | |
| Phenol | 108-95-2 | | |
| Phosgene | 75-44-5 | | |
| Phosphine | 7803-51-2 | | |
| Styrene | 100-42-5 | | |
| Tetrachloroethylene | 127-18-4 | | |
| Trichloroethylene | 79-01-6 | | |
| Toluene | 108-88-3 | 40 | 0.900 |
| Vinyl acetate | 108-05-4 | | |
| Vinyl chloride | 75-01-4 | | |
| Xylenes | 1330-20-7 | | |
| HAP Total = | | | 2.14 Lbs/yr |
| HAP Content = | | | 6.84 Lbs/Gal |

Miscellaneous Chemical VOC Emissions
for Building Number 323

| NSN | Solvent | Use gal/yr | VOC Content (%) | VOC Emissions (lb/yr) | VOC Emissions (ton/yr) |
|------------------|------------------------|---------------|--------------------|--------------------------|---------------------------|
| 9150-00-529-7222 | CRC 5-56 | 1.13 | 78.00 | 5.85 | <0.01 |
| 7510-01-280-9671 | One-Shot Ink Cartridge | 0.19 | 61.60 | 1.08 | <0.01 |

Ozone Season Daily Miscellaneous Chemical Emissions
for Building Number 323

| Pollutant | Emissions (lb) | Daily Emissions (lb) | Daily Emissions (tons) |
|-----------|-------------------|-------------------------|---------------------------|
| VOC | 6.93 | <0.01 | <0.01 |

Miscellaneous Chemical HAP Emissions
for Building Number 323

| NSN | Solvent | Use (gal/yr) | HAP Content (lbs/gal) | HAP Emissions (lb/yr) | HAP Emissions (ton/yr) |
|------------------|----------|-----------------|--------------------------|--------------------------|---------------------------|
| 9150-00-529-7222 | CRC 5-56 | 1.13 | 2.25 | 0.44 | <0.01 |

Miscellaneous Chemical HAP Emissions
for Building Number 323

| NSN | Solvent | Use (gal/yr) | HAP Methyl Chloroform (%) |
|------------------|----------|-----------------|------------------------------------|
| 9150-00-529-7222 | CRC 5-56 | 1.13 | 29.00 |

MISCELLANEOUS CHEMICAL SOURCES

GENERAL INFORMATION

Installation Seneca Army Depot

SCC..... 4-01-888-01 Unit ID #.....

Location..... Bldg 323 Permit #.....

POC..... Roy Wilde Inventoried by..... T. Sletten

Phone..... (607) 869-1677 Operating Schedule

Inventory Date..... June 6-10, 1994 Hours/day.....

Days/week.....

Type of Activity: _____

MONTHLY FUEL USE

19__ JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC

Units: _____ lbs _____ gal _____ other (specify)

SOURCE DESCRIPTION

Describe the source, how the chemical product is used, and the mechanism for generating air emissions.

CHEMICAL PRODUCT DATA

(Use extra sheets as necessary)

Product Name CRC 5-56

NSN _____ MILSPEC _____

Annual Use 2 cans (12 oz) Annual Disposal _____

Product Name One Shot Ink Cartridge

NSN _____ MILSPEC _____

Annual Use 6 cans (125 ml) 30244 1/11 Annual Disposal _____

POLLUTION CONTROL EQUIPMENT

(Enter control efficiency)

Wet Scrubber _____ Cyclone _____ Baghouse _____

Afterburner _____ Activated Charcoal Filter _____

Other _____

EMISSION RATE DETERMINATION METHOD

Stack Test Data _____ Emission Factor _____ Material Balance X

Similar Unit Data _____ Other MSDS

Reference: _____

OZONE PRECURSOR EMISSIONS

Typical Ozone Season Emissions
 VOC Emissions 0.0046565968 lb/day
 NOx Emissions _____ lb/day
 CO Emissions _____ lb/day

HAZARDOUS AIR POLLUTANTS

| HAP | CAS CODE | LB/YR |
|----------------------------|------------------|-----------------------|
| <u> Methyl Chloroform </u> | <u> 71-55-6 </u> | <u> 0.4350000000 </u> |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |

CRITERIA POLLUTANT EMISSIONS

VOC Emissions 0.0008568138 ton/yr
 NOx Emissions _____ ton/yr
 CO Emissions _____ ton/yr
 SO2 Emissions _____ ton/yr
 PM10 Emissions _____ ton/yr
 Total Particulate _____ ton/yr

STACK INFORMATION

| | |
|-----------------------------------|------------------------------------|
| Stack (release) Height _____ feet | Stack Gas Velocity _____ ft/sec |
| Stack Diameter _____ inch | Stack Gas Flow Rate _____ ascf/min |
| | Stack Gas Temperature _____ oF |

Other sources that share this stack? _____

Stack Sampling Report Available? (Y/ N, results?) _____

**Emissions for Miscellaneous Chemicals and Solvents
Federal and New York State Regulations**

Name: Seneca Army Depot
 Bldg #: 323
 SCC: 4-01-888-01

Date: 8/30/94
 Initials: GRM

Product/Material Information

Product: CRC 5-56
 NSN: 9150-00-529-7222

Note: For annual usage, only fill the boxes for EITHER a, b, OR c and leave other boxes blank

Annual Usage: a) cans/yr at fl.oz/can= 0.000 gal/yr
 OR b) 2 cans/yr at 12.000 wt.oz/can= 1.500 lb/yr
 OR c) gal/yr

Specific Gravity: 0.932

Notes:

VOC composition: 71.00 %(MSDS/Manuf.)

VOC Composition: 42.00 %(corrected for water and non-photochemical reactants)

expressed as : A A = % by weight
 B = % by volume

Notes:

Comment: "A" and "B" refer to the percentage of the material which contains VOCs.
 This is expressed as a percentage of total volume, (i.e. gallons) or of total weight (i.e. pounds). When available, percent by weight should take precedence. Make sure to subtract the percentage of hazardous VOCs which are not to be evaluated as a VOC (i.e., methylene chloride).

Emissions Summary

| Annual VOC Emissions | | |
|------------------------------------|--------------------|---------------------|
| Annual usage converted to weight = | <u>1.500</u> | Lbs/yr |
| VOC Emissions = | <u>0.630</u> Lb/yr | <u>0.000</u> Ton/yr |

| Ozone Season VOC Emissions | | |
|------------------------------------|--------------|-------------|
| Ozone Season Usage = | <u>0.375</u> | Lbs |
| Daily Ozone Season Usage = | <u>0.004</u> | Lbs/day |
| Ozone Season VOC Emissions = | <u>0.158</u> | Lbs |
| Daily Ozone Season VOC Emissions = | <u>0.002</u> | Lbs/day |
| Ozone Season Work Day Emissions = | <u>0.002</u> | Lbs/wrk day |

HAP Emissions: To determine HAP emissions, enter the composition of each HAP in one of two areas. First, enter the compositions for HAPs which are presented on the following page. If a particular HAP is not listed on that page, then enter the name and composition in the spaces provided below. HAP totals will be presented at the bottom of the following page.

| Additional HAPs | CAS No. | (% Composition) | Emissions (Lbs/yr) |
|-----------------|---------|-----------------|-----------------------|
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| HAP Subtotal = | | | <u>0.0</u> Lbs/yr |

| HAP Emissions | | | |
|---------------------------|-----------|-----------------|--------------------|
| HAP Name | CAS # | (% Composition) | Emissions (Lbs/yr) |
| Benzene | 71-43-2 | | |
| Carbon disulfide | 75-15-0 | | |
| Carbon tetrachloride | 56-23-5 | | |
| Chlorine | 7782-50-5 | | |
| Chlorobenzene | 108-90-7 | | |
| Chloroform | 67-66-3 | | |
| Cumene | 98-82-8 | | |
| 1,4 Dioxane | 123-91-1 | | |
| Epichlorohydrin | 106-89-8 | | |
| Ethylbenzene | 100-41-4 | | |
| Ethylene dibromide | 106-93-4 | | |
| Ethylene dichloride | 107-06-2 | | |
| Ethylene glycol | 107-21-1 | | |
| Ethylene oxide | 75-21-8 | | |
| Formaldehyde | 50-00-0 | | |
| Hexane | 110-54-3 | | |
| Hydrazine | 302-01-2 | | |
| Hydrogen fluoride | 7664-39-3 | | |
| Hydrogen sulfide | 7783-06-4 | | |
| Hydroquinone | 123-31-9 | | |
| m-xylene | 108-38-3 | | |
| Methanol (methyl alcohol) | 67-56-1 | | |
| Methyl chloride | 74-87-3 | | |
| Methyl chloroform | 71-55-6 | 29 | 0.435 |
| Methyl ethyl ketone | 78-93-3 | | |
| Methyl isobutyl ketone | 108-10-1 | | |
| Methyl methacrylate | 80-62-6 | | |
| Methylene chloride | 75-09-2 | | |
| Naphthalene | 91-20-3 | | |
| o-xylene | 95-47-6 | | |
| p-xylene | 106-42-3 | | |
| Phenol | 108-95-2 | | |
| Phosgene | 75-44-5 | | |
| Phosphine | 7803-51-2 | | |
| Styrene | 100-42-5 | | |
| Tetrachloroethylene | 127-18-4 | | |
| Trichloroethylene | 79-01-6 | | |
| Toluene | 108-88-3 | | |
| Vinyl acetate | 108-05-4 | | |
| Vinyl chloride | 75-01-4 | | |
| Xylenes | 1330-20-7 | | |
| HAP Total = | | | 0.44 Lbs/yr |
| HAP Content = | | | 2.25 Lbs/Gal |

**Emissions for Miscellaneous Chemicals and Solvents
Federal and New York State Regulations**

Name: Seneca Army Depot
Bldg #: 323
SCC: 4-01-888-01

Date: 8/30/94
Initials: GRM

Product/Material Information

Product: One Shot Ink Cartridge
NSN: 7510-01-280-9671

Note: For annual usage, only fill the boxes for EITHER a, b, OR c and leave other boxes blank

Annual Usage: a) cans/yr at fl.oz/can= 0.000 gal/yr
OR b) cans/yr at wt.oz/can= 0.000 lb/yr
OR c) gal/yr

Specific Gravity: 1.090

Notes: Usage: $(750 \text{ ml/yr}) / (3875.412 \text{ ml/gal}) = 0.194 \text{ Gal/yr}$

VOC composition: 93.70 %(MSDS/Manuf.)

VOC Composition: 61.60 %(corrected for water and non-photochemical reactants)

expressed as : A A = % by weight
B = % by volume

Notes:

Comment: "A" and "B" refer to the percentage of the material which contains VOCs.

This is expressed as a percentage of total volume, (i.e. gallons) or of total weight (i.e. pounds). When available, percent by weight should take precedence. Make sure to subtract the percentage of hazardous VOCs which are not to be evaluated as a VOC (i.e., methylene chloride).

Emissions Summary

| Annual VOC Emissions | | |
|------------------------------------|--------------------|---------------------|
| Annual usage converted to weight = | <u>1.759</u> | Lbs/yr |
| VOC Emissions = | <u>1.084</u> Lb/yr | <u>0.001</u> Ton/yr |

| Ozone Season VOC Emissions | | |
|------------------------------------|--------------|-------------|
| Ozone Season Usage = | <u>0.440</u> | Lbs |
| Daily Ozone Season Usage = | <u>0.005</u> | Lbs/day |
| Ozone Season VOC Emissions = | <u>0.271</u> | Lbs |
| Daily Ozone Season VOC Emissions = | <u>0.003</u> | Lbs/day |
| Ozone Season Work Day Emissions = | <u>0.004</u> | Lbs/wrk day |

HAP Emissions: To determine HAP emissions, enter the composition of each HAP in one of two areas. First, enter the compositions for HAPs which are presented on the following page. If a particular HAP is not listed on that page, then enter the name and composition in the spaces provided below. HAP totals will be presented at the bottom of the following page.

| Additional HAPs | CAS No. | (% Composition) | Emissions (Lbs/yr) |
|-----------------|---------|-----------------|-----------------------|
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| HAP Subtotal = | | | <u>0.0</u> Lbs/yr |

| HAP Emissions | | | |
|---------------------------|-----------|-----------------|-----------------------|
| HAP Name | CAS # | (% Composition) | Emissions (Lbs/yr) |
| Benzene | 71-43-2 | | |
| Carbon disulfide | 75-15-0 | | |
| Carbon tetrachloride | 56-23-5 | | |
| Chlorine | 7782-50-5 | | |
| Chlorobenzene | 108-90-7 | | |
| Chloroform | 67-66-3 | | |
| Cumene | 98-82-8 | | |
| 1,4 Dioxane | 123-91-1 | | |
| Epichlorohydrin | 106-89-8 | | |
| Ethylbenzene | 100-41-4 | | |
| Ethylene dibromide | 106-93-4 | | |
| Ethylene dichloride | 107-06-2 | | |
| Ethylene glycol | 107-21-1 | | |
| Ethylene oxide | 75-21-8 | | |
| Formaldehyde | 50-00-0 | | |
| Hexane | 110-54-3 | | |
| Hydrazine | 302-01-2 | | |
| Hydrogen fluoride | 7664-39-3 | | |
| Hydrogen sulfide | 7783-06-4 | | |
| Hydroquinone | 123-31-9 | | |
| m-xylene | 108-38-3 | | |
| Methanol (methyl alcohol) | 67-56-1 | | |
| Methyl chloride | 74-87-3 | | |
| Methyl chloroform | 71-55-6 | 29 | 0.510 |
| Methyl ethyl ketone | 78-93-3 | | |
| Methyl isobutyl ketone | 108-10-1 | | |
| Methyl methacrylate | 80-62-6 | | |
| Methylene chloride | 75-09-2 | | |
| Naphthalene | 91-20-3 | | |
| o-xylene | 95-47-6 | | |
| p-xylene | 106-42-3 | | |
| Phenol | 108-95-2 | | |
| Phosgene | 75-44-5 | | |
| Phosphine | 7803-51-2 | | |
| Styrene | 100-42-5 | | |
| Tetrachloroethylene | 127-18-4 | | |
| Trichloroethylene | 79-01-6 | | |
| Toluene | 108-88-3 | | |
| Vinyl acetate | 108-05-4 | | |
| Vinyl chloride | 75-01-4 | | |
| Xylenes | 1330-20-7 | | |
| HAP Total = | | | 0.51 Lbs/yr |
| HAP Content = | | | 2.63 Lbs/Gal |

Miscellaneous Chemical VOC Emissions
for Building Number 357 - Mobile Heavy Equipment

| NSN | Solvent | Use gal/yr | VOC Content (%) | VOC Emissions (lb/yr) | VOC Emissions (ton/yr) |
|------------|----------------|-----------------------|----------------------------|----------------------------------|-----------------------------------|
| N/A | PD-680 Type I | 3.50 | 100.00 | 23.00 | <0.01 |

Ozone Season Daily Miscellaneous Chemical Emissions
for Building Number 357 - Mobile Heavy Equipment

| Pollutant | Emissions (lb) | Daily Emissions (lb) | Daily Emissions (tons) |
|------------------|---------------------------|---------------------------------|-----------------------------------|
| VOC | 23.00 | 0.06 | <0.01 |

MISCELLANEOUS CHEMICAL SOURCES

GENERAL INFORMATION

Installation Seneca Army Depot

SCC..... 4-01-888-01 Unit ID #.....

Location..... Bldg 357 Permit #.....

POC..... Tom Scoon Inventoried by..... T. Sletten

Phone..... (607) 869-1493 Operating Schedule

Inventory Date..... June 6-10, 1994 Hours/day.....

Days/week.....

Type of Activity: Mobile Heavy Equipment

| MONTHLY FUEL USE | | | | | | | | | | | | |
|------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 19__ | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC |
| _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ |

Units: _____ lbs _____ gal _____ other (specify)

SOURCE DESCRIPTION

Describe the source, how the chemical product is used, and the mechanism for generating air emissions.

CHEMICAL PRODUCT DATA

(Use extra sheets as necessary)

Product Name PD-680 Type I

NSN _____ MILSPEC _____

Annual Use 3.5 gal Annual Disposal _____

Product Name _____

NSN _____ MILSPEC _____

Annual Use _____ Annual Disposal _____

POLLUTION CONTROL EQUIPMENT

(Enter control efficiency)

Wet Scrubber _____ Cyclone _____ Baghouse _____

Afterburner _____ Activated Charcoal Filter _____

Other _____

**Emissions for Miscellaneous Chemicals and Solvents
Federal and New York State Regulations**

Name: Seneca Army Depot
 Bldg #: 357 - Mobile Heavy Equipment
 SCC: 4-01-888-01

Date: 8/30/94
 Initials: GRM

Product/Material Information

Product: PD-680 Type I
 NSN: _____

Note: For annual usage, only fill the boxes for EITHER a, b, OR c and leave other boxes blank

Annual Usage: a) cans/yr at fl.oz/can= 0.000 gal/yr
 OR b) cans/yr at wt.oz/can= 0.000 lb/yr
 OR c) gal/yr

Specific Gravity: 0.790

Notes:

VOC composition: 100.00 %(MSDS/Manuf.)

VOC Composition: 100.00 %(corrected for water and non-photochemical reactants)

expressed as : A A = % by weight
 B = % by volume

Notes:

Comment: "A" and "B" refer to the percentage of the material which contains VOCs.

This is expressed as a percentage of total volume, (i.e. gallons) or of total weight (i.e. pounds). When available, percent by weight should take precedence. Make sure to subtract the percentage of hazardous VOCs which are not to be evaluated as a VOC (i.e., methylene chloride).

Emissions Summary

| Annual VOC Emissions | | |
|------------------------------------|---------------------|---------------------|
| Annual usage converted to weight = | <u>23.002</u> | Lbs/yr |
| VOC Emissions = | <u>23.002</u> Lb/yr | <u>0.012</u> Ton/yr |

| Ozone Season VOC Emissions | | |
|------------------------------------|--------------|-------------|
| Ozone Season Usage = | <u>5.751</u> | Lbs |
| Daily Ozone Season Usage = | <u>0.063</u> | Lbs/day |
| Ozone Season VOC Emissions = | <u>5.751</u> | Lbs |
| Daily Ozone Season VOC Emissions = | <u>0.063</u> | Lbs/day |
| Ozone Season Work Day Emissions = | <u>0.088</u> | Lbs/wrk day |

HAP Emissions: To determine HAP emissions, enter the composition of each HAP in one of two areas. First, enter the compositions for HAPs which are presented on the following page. If a particular HAP is not listed on that page, then enter the name and composition in the spaces provided below. HAP totals will be presented at the bottom of the following page.

| Additional HAPs | CAS No. | (% Composition) | Emissions (Lbs/yr) |
|-----------------|---------|-----------------|-----------------------|
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| HAP Subtotal = | | | <u>0.0</u> Lbs/yr |

| HAP Emissions | | | |
|---------------------------|-----------|-----------------|-----------------------|
| HAP Name | CAS # | (% Composition) | Emissions (Lbs/yr) |
| Benzene | 71-43-2 | | |
| Carbon disulfide | 75-15-0 | | |
| Carbon tetrachloride | 56-23-5 | | |
| Chlorine | 7782-50-5 | | |
| Chlorobenzene | 108-90-7 | | |
| Chloroform | 67-66-3 | | |
| Cumene | 98-82-8 | | |
| 1,4 Dioxane | 123-91-1 | | |
| Epichlorohydrin | 106-89-8 | | |
| Ethylbenzene | 100-41-4 | | |
| Ethylene dibromide | 106-93-4 | | |
| Ethylene dichloride | 107-06-2 | | |
| Ethylene glycol | 107-21-1 | | |
| Ethylene oxide | 75-21-8 | | |
| Formaldehyde | 50-00-0 | | |
| Hexane | 110-54-3 | | |
| Hydrazine | 302-01-2 | | |
| Hydrogen fluoride | 7664-39-3 | | |
| Hydrogen sulfide | 7783-06-4 | | |
| Hydroquinone | 123-31-9 | | |
| m-xylene | 108-38-3 | | |
| Methanol (methyl alcohol) | 67-56-1 | | |
| Methyl chloride | 74-87-3 | | |
| Methyl chloroform | 71-55-6 | | |
| Methyl ethyl ketone | 78-93-3 | | |
| Methyl isobutyl ketone | 108-10-1 | | |
| Methyl methacrylate | 80-62-6 | | |
| Methylene chloride | 75-09-2 | | |
| Naphthalene | 91-20-3 | | |
| o-xylene | 95-47-6 | | |
| p-xylene | 106-42-3 | | |
| Phenol | 108-95-2 | | |
| Phosgene | 75-44-5 | | |
| Phosphine | 7803-51-2 | | |
| Styrene | 100-42-5 | | |
| Tetrachloroethylene | 127-18-4 | | |
| Trichloroethylene | 79-01-6 | | |
| Toluene | 108-88-3 | | |
| Vinyl acetate | 108-05-4 | | |
| Vinyl chloride | 75-01-4 | | |
| Xylenes | 1330-20-7 | | |
| HAP Total = | | | 0.00 Lbs/yr |
| HAP Content = | | | 0.00 Lbs/Gal |

Miscellaneous Chemical VOC Emissions
for Building Number 612 - Ammunition Maintenance

| NSN | Solvent | Use gal/yr | VOC Content (%) | VOC Emissions (lb/yr) | VOC Emissions (ton/yr) |
|------------------|----------|---------------|--------------------|--------------------------|---------------------------|
| N/A | WD-40 | 1.13 | 78.00 | 5.85 | <0.01 |
| 9150-00-529-7222 | CRC 5-56 | 0.97 | 42.00 | 3.15 | <0.01 |

Ozone Season Daily Miscellaneous Chemical Emissions
for Building Number 612 - Ammunition Maintenance

| Pollutant | Emissions (lb) | Daily Emissions (lb) | Daily Emissions (tons) |
|-----------|-------------------|-------------------------|---------------------------|
| VOC | 9.00 | 0.02 | <0.01 |

Miscellaneous Chemical HAP Emissions
for Building Number 612 - Ammunition Maintenance

| NSN | Solvent | Use (gal/yr) | HAP Content (lbs/gal) | HAP Emissions (lb/yr) | HAP Emissions (ton/yr) |
|------------------|----------|-----------------|--------------------------|--------------------------|---------------------------|
| 9150-00-529-7222 | CRC 5-56 | 0.97 | 2.25 | 2.18 | <0.01 |

Miscellaneous Chemical HAP Emissions
for Building Number 612 - Ammunition Maintenance

| NSN | Solvent | Use (gal/yr) | HAP Methyl Chloroform (%) |
|------------------|----------|-----------------|------------------------------------|
| 9150-00-529-7222 | CRC 5-56 | 3.48 | 29.00 |

MISCELLANEOUS CHEMICAL SOURCES

Page__ of __

GENERAL INFORMATION

Installation Seneca Army Depot

SCC..... 4-01-888-01 Unit ID #.....

Location..... Bldg 612 Permit #.....

POC..... John Hennessy Inventoried by..... T. Sletten

Phone..... (607) 869-1422 Operating Schedule

Inventory Date..... June 6-10, 1994 Hours/day.....

Days/week.....

Type of Activity: Ammunition Maintenance

| MONTHLY FUEL USE | | | | | | | | | | | | |
|------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 19__ | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC |
| | | | | | | | | | | | | |

Units: _____ lbs _____ gal _____ other (specify)

SOURCE DESCRIPTION

Describe the source, how the chemical product is used, and the mechanism for generating air emissions.

CHEMICAL PRODUCT DATA

(Use extra sheets as necessary)

Product Name WD-40

NSN _____ MILSPEC _____

Annual Use 10 cans (12 oz) Annual Disposal _____

Product Name CRC 5-56

NSN _____ MILSPEC _____

Annual Use 10 cans (12 oz) Annual Disposal _____

POLLUTION CONTROL EQUIPMENT

(Enter control efficiency)

Wet Scrubber _____ Cyclone _____ Baghouse _____

Afterburner _____ Activated Charcoal Filter _____

Other _____

EMISSION RATE DETERMINATION METHOD

Stack Test Data _____ Emission Factor _____ Material Balance X

Similar Unit Data _____ Other MSDS

Reference: _____

OZONE PRECURSOR EMISSIONS

Typical Ozone Season Emissions
 VOC Emissions 0.0244565217 lb/day
 NOx Emissions _____ lb/day
 CO Emissions _____ lb/day

HAZARDOUS AIR POLLUTANTS

| HAP | CAS CODE | LB/YR |
|----------------------------|------------------|-----------------------|
| <u> Methyl Chloroform </u> | <u> 71-55-6 </u> | <u> 2.1750000000 </u> |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |

CRITERIA POLLUTANT EMISSIONS

VOC Emissions 0.0045000000 ton/yr
 NOx Emissions _____ ton/yr
 CO Emissions _____ ton/yr
 SO2 Emissions _____ ton/yr
 PM10 Emissions _____ ton/yr
 Total Particulate _____ ton/yr

STACK INFORMATION

| | |
|-----------------------------------|------------------------------------|
| Stack (release) Height _____ feet | Stack Gas Velocity _____ ft/sec |
| Stack Diameter _____ inch | Stack Gas Flow Rate _____ ascf/min |
| | Stack Gas Temperature _____ oF |

Other sources that share this stack? _____

Stack Sampling Report Available? (Y/ N, results?) _____

**Emissions for Miscellaneous Chemicals and Solvents
Federal and New York State Regulations**

Name: Seneca Army Depot
 Bldg #: 612 - Ammunition Maintenance
 SCC: 4-01-888-01

Date: 8/30/94
 Initials: GRM

Product/Material Information

Product: WD-40
 NSN: _____

Note: For annual usage, only fill the boxes for EITHER a, b, OR c and leave other boxes blank

Annual Usage: a) cans/yr at fl.oz/can= 0.000 gal/yr
 OR b) cans/yr at wt.oz/can= 7.500 lb/yr
 OR c) gal/yr

Specific Gravity: 0.800

Notes:

VOC composition: 78.00 %(MSDS/Manuf.)

VOC Composition: 78.00 %(corrected for water and non-photochemical reactants)

expressed as : A A = % by weight
 B = % by volume

Notes:

Comment: "A" and "B" refer to the percentage of the material which contains VOCs.

This is expressed as a percentage of total volume, (i.e. gallons) or of total weight (i.e. pounds). When available, percent by weight should take precedence. Make sure to subtract the percentage of hazardous VOCs which are not to be evaluated as a VOC (i.e., methylene chloride).

Emissions Summary

| Annual VOC Emissions | | |
|------------------------------------|--------------------|---------------------|
| Annual usage converted to weight = | <u>7.500</u> | Lbs/yr |
| VOC Emissions = | <u>5.850</u> Lb/yr | <u>0.003</u> Ton/yr |

| Ozone Season VOC Emissions | | |
|------------------------------------|--------------|-------------|
| Ozone Season Usage = | <u>1.875</u> | Lbs |
| Daily Ozone Season Usage = | <u>0.020</u> | Lbs/day |
| Ozone Season VOC Emissions = | <u>1.463</u> | Lbs |
| Daily Ozone Season VOC Emissions = | <u>0.016</u> | Lbs/day |
| Ozone Season Work Day Emissions = | <u>0.022</u> | Lbs/wrk day |

HAP Emissions: To determine HAP emissions, enter the composition of each HAP in one of two areas. First, enter the compositions for HAPs which are presented on the following page. If a particular HAP is not listed on that page, then enter the name and composition in the spaces provided below. HAP totals will be presented at the bottom of the following page.

| Additional HAPs | CAS No. | (% Composition) | Emissions (Lbs/yr) |
|-----------------|---------|-----------------|-----------------------|
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| HAP Subtotal = | | | <u>0.0</u> Lbs/yr |

| HAP Emissions | | | |
|---------------------------|-----------|-----------------|-----------------------|
| HAP Name | CAS # | (% Composition) | Emissions (Lbs/yr) |
| Benzene | 71-43-2 | | |
| Carbon disulfide | 75-15-0 | | |
| Carbon tetrachloride | 56-23-5 | | |
| Chlorine | 7782-50-5 | | |
| Chlorobenzene | 108-90-7 | | |
| Chloroform | 67-66-3 | | |
| Cumene | 98-82-8 | | |
| 1,4 Dioxane | 123-91-1 | | |
| Epichlorohydrin | 106-89-8 | | |
| Ethylbenzene | 100-41-4 | | |
| Ethylene dibromide | 106-93-4 | | |
| Ethylene dichloride | 107-06-2 | | |
| Ethylene glycol | 107-21-1 | | |
| Ethylene oxide | 75-21-8 | | |
| Formaldehyde | 50-00-0 | | |
| Hexane | 110-54-3 | | |
| Hydrazine | 302-01-2 | | |
| Hydrogen fluoride | 7664-39-3 | | |
| Hydrogen sulfide | 7783-06-4 | | |
| Hydroquinone | 123-31-9 | | |
| m-xylene | 108-38-3 | | |
| Methanol (methyl alcohol) | 67-56-1 | | |
| Methyl chloride | 74-87-3 | | |
| Methyl chloroform | 71-55-6 | | |
| Methyl ethyl ketone | 78-93-3 | | |
| Methyl isobutyl ketone | 108-10-1 | | |
| Methyl methacrylate | 80-62-6 | | |
| Methylene chloride | 75-09-2 | | |
| Naphthalene | 91-20-3 | | |
| o-xylene | 95-47-6 | | |
| p-xylene | 106-42-3 | | |
| Phenol | 108-95-2 | | |
| Phosgene | 75-44-5 | | |
| Phosphine | 7803-51-2 | | |
| Styrene | 100-42-5 | | |
| Tetrachloroethylene | 127-18-4 | | |
| Trichloroethylene | 79-01-6 | | |
| Toluene | 108-88-3 | | |
| Vinyl acetate | 108-05-4 | | |
| Vinyl chloride | 75-01-4 | | |
| Xylenes | 1330-20-7 | | |
| HAP Total = | | | 0.00 Lbs/yr |
| HAP Content = | | | 0.00 Lbs/Gal |

**Emissions for Miscellaneous Chemicals and Solvents
Federal and New York State Regulations**

Name: Seneca Army Depot Date: 8/30/94
 Bldg #: 612 - Ammunition Maintenance Initials: GRM
 SCC: 4-01-888-01

Product/Material Information

Product: CRC 5-56
 NSN: 9150-00-529-7222

Note: For annual usage, only fill the boxes for EITHER a, b, OR c and leave other boxes blank

Annual Usage: a) cans/yr at fl.oz/can= 0.000 gal/yr
 OR b) 10 cans/yr at 12.000 wt.oz/can= 7.500 lb/yr
 OR c) gal/yr

Specific Gravity: 0.932

Notes:

VOC composition: 71.00 %(MSDS/Manuf.)

VOC Composition: 42.00 %(corrected for water and non-photochemical reactants)

expressed as : A A = % by weight
 B = % by volume

Notes:

Comment: "A" and "B" refer to the percentage of the material which contains VOCs.

This is expressed as a percentage of total volume, (i.e. gallons) or of total weight (i.e. pounds). When available, percent by weight should take precedence. Make sure to subtract the percentage of hazardous VOCs which are not to be evaluated as a VOC (i.e., methylene chloride).

Emissions Summary

| Annual VOC Emissions | | |
|------------------------------------|--------------------|---------------------|
| Annual usage converted to weight = | <u>7.500</u> | Lbs/yr |
| VOC Emissions = | <u>3.150</u> Lb/yr | <u>0.002</u> Ton/yr |

| Ozone Season VOC Emissions | | |
|------------------------------------|--------------|-------------|
| Ozone Season Usage = | <u>1.875</u> | Lbs |
| Daily Ozone Season Usage = | <u>0.020</u> | Lbs/day |
| Ozone Season VOC Emissions = | <u>0.788</u> | Lbs |
| Daily Ozone Season VOC Emissions = | <u>0.009</u> | Lbs/day |
| Ozone Season Work Day Emissions = | <u>0.012</u> | Lbs/wrk day |

HAP Emissions: To determine HAP emissions, enter the composition of each HAP in one of two areas. First, enter the compositions for HAPs which are presented on the following page. If a particular HAP is not listed on that page, then enter the name and composition in the spaces provided below. HAP totals will be presented at the bottom of the following page.

| Additional HAPs | CAS No. | (% Composition) | Emissions (Lbs/yr) |
|-----------------|---------|-----------------|--------------------|
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| HAP Subtotal = | | | <u>0.0</u> Lbs/yr |

| HAP Emissions | | | |
|---------------------------|-----------|-----------------|--------------------|
| HAP Name | CAS # | (% Composition) | Emissions (Lbs/yr) |
| Benzene | 71-43-2 | | |
| Carbon disulfide | 75-15-0 | | |
| Carbon tetrachloride | 56-23-5 | | |
| Chlorine | 7782-50-5 | | |
| Chlorobenzene | 108-90-7 | | |
| Chloroform | 67-66-3 | | |
| Cumene | 98-82-8 | | |
| 1,4 Dioxane | 123-91-1 | | |
| Epichlorohydrin | 106-89-8 | | |
| Ethylbenzene | 100-41-4 | | |
| Ethylene dibromide | 106-93-4 | | |
| Ethylene dichloride | 107-06-2 | | |
| Ethylene glycol | 107-21-1 | | |
| Ethylene oxide | 75-21-8 | | |
| Formaldehyde | 50-00-0 | | |
| Hexane | 110-54-3 | | |
| Hydrazine | 302-01-2 | | |
| Hydrogen fluoride | 7664-39-3 | | |
| Hydrogen sulfide | 7783-06-4 | | |
| Hydroquinone | 123-31-9 | | |
| m-xylene | 108-38-3 | | |
| Methanol (methyl alcohol) | 67-56-1 | | |
| Methyl chloride | 74-87-3 | | |
| Methyl chloroform | 71-55-6 | 29 | 2.175 |
| Methyl ethyl ketone | 78-93-3 | | |
| Methyl isobutyl ketone | 108-10-1 | | |
| Methyl methacrylate | 80-62-6 | | |
| Methylene chloride | 75-09-2 | | |
| Naphthalene | 91-20-3 | | |
| o-xylene | 95-47-6 | | |
| p-xylene | 106-42-3 | | |
| Phenol | 108-95-2 | | |
| Phosgene | 75-44-5 | | |
| Phosphine | 7803-51-2 | | |
| Styrene | 100-42-5 | | |
| Tetrachloroethylene | 127-18-4 | | |
| Trichloroethylene | 79-01-6 | | |
| Toluene | 108-88-3 | | |
| Vinyl acetate | 108-05-4 | | |
| Vinyl chloride | 75-01-4 | | |
| Xylenes | 1330-20-7 | | |
| HAP Total = | | | 2.18 Lbs/yr |
| HAP Content = | | | 2.25 Lbs/Gal |

PESTICIDES/HERBICIDES

GENERAL INFORMATION

Installation Seneca Army Depot

SCC..... A246180000 Date Collected..... 1993

Location..... Bldg 606 Inventoried by..... T. Sletten

Phone..... (607) 869-4201 Dale Larson Inventory Date..... June 6-10, 1994

PESTICIDES/HERBICIDES INFORMATION

Name..... Anticoagulant Density..... _____ lb/gal

Manufacturer..... _____ VOC content..... _____ (units)

NSN or MSDS#..... _____ Dilution ratio..... none (H₂O: product)

(circle one)

MONTHLY USAGE (lbs)

| Usage | Month | Usage | Month | Usage | Month |
|-------------|-----------------|-------------|---------------|------------|------------------|
| <u>36.5</u> | <u>January</u> | <u>1.0</u> | <u>May</u> | <u>0</u> | <u>September</u> |
| <u>10.0</u> | <u>February</u> | <u>0</u> | <u>June</u> | <u>3.0</u> | <u>October</u> |
| <u>0.8</u> | <u>March</u> | <u>0</u> | <u>July</u> | <u>2.0</u> | <u>November</u> |
| <u>1.0</u> | <u>April</u> | <u>19.0</u> | <u>August</u> | <u>8.0</u> | <u>December</u> |

Annual Usage: 81.3 lbs Annual Disposal: _____

Check here if DD Form 1532 is available:... _____ (attach a copy of DD Form 1532 for each month within the calendar year you are inventorying)

EMISSIONS ESTIMATES

VOC EMISSIONS = [VOC (lb/gal)] x [Annual use (gal/yr)]

= _____ lb/day

= _____ tons/year

HAZARDOUS AIR POLLUTANTS

| HAP (Specify) | CAS CODE | lb/yr |
|---------------|----------|-------|
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |

PESTICIDES/HERBICIDES

GENERAL INFORMATION

Installation Seneca Army Depot

SCC..... A2461800000 Date Collected..... 1993

Location..... Bldg 606 Inventoried by..... T. Sletten

Phone..... (607) 869-4201 Dale Larson Inventory Date..... June 6-10, 1994

PESTICIDES/HERBICIDES INFORMATION

Name..... Arsenal Density..... _____ lb/gal

Manufacturer..... _____ VOC content..... _____ (units)

NSN or MSDS#..... _____ Dilution ratio..... 1:0.01
(circle one) (H₂O: product)

MONTHLY USAGE

| Usage | Month | Usage | Month | Usage | Month |
|-------|----------|-------|--------|-------|-----------|
| _____ | January | 900.0 | May | _____ | September |
| _____ | February | 120.0 | June | _____ | October |
| _____ | March | _____ | July | _____ | November |
| _____ | April | _____ | August | _____ | December |

Annual Usage: 1020.0 gal Annual Disposal: _____

Check here if DD Form 1532 is available:... _____ (attach a copy of DD Form 1532 for each month within the calendar year you are inventorying)

EMISSIONS ESTIMATES

VOC EMISSIONS = [VOC (lb/gal)] x [Annual use (gal/yr)]

= _____ lb/day

= _____ tons/year

HAZARDOUS AIR POLLUTANTS

| HAP (Specify) | CAS CODE | lb/yr |
|---------------|----------|-------|
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |

Emissions For Pesticide/Herbicide Applications
Federal and New York State Regulations

Facility: Seneca Army Depot Date: 8/23/94
 Location: _____ Initials: CM
 SCC: A2461800000

Product Information:
 Pesticide/Herbicide Name: Arsenal NSN: 6840-01-356-8902
 Annual Usage: 1,020.00 gal/yr Monthly usage available? a
 A - yes (enter usage in spaces below)
 B - no (leave spaces below blank)

Monthly Usage (gal)

| January | | | February | | |
|-------------------------------------|-----------------------|------------------------|-------------------------------------|-----------------------|------------------------|
| Usage (gals) | Dilution Ratio (%) | Adjusted Use (gals) | Usage (gals) | Dilution Ratio (%) | Adjusted Use (gals) |
| | | | | | |
| | | | | | |
| | | | | | |
| Total adjusted monthly usage (gals) | | 0.00 | Total adjusted monthly usage (gals) | | 0.00 |
| March | | | April | | |
| Usage (gals) | Dilution Ratio (%) | Adjusted Use (gals) | Usage (gals) | Dilution Ratio (%) | Adjusted Use (gals) |
| | | | | | |
| | | | | | |
| | | | | | |
| Total adjusted monthly usage (gals) | | 0.00 | Total adjusted monthly usage (gals) | | 0.00 |
| May | | | June | | |
| Usage (gals) | Dilution Ratio (%) | Adjusted Use (gals) | Usage (gals) | Dilution Ratio (%) | Adjusted Use (gals) |
| 900.00 | 0.01 | 0.09 | 120.00 | 0.01 | 0.01 |
| | | | | | |
| | | | | | |
| Total adjusted monthly usage (gals) | | 0.09 | Total adjusted monthly usage (gals) | | 0.01 |
| July | | | August | | |
| Usage (gals) | Dilution Ratio (%) | Adjusted Use (gals) | Usage (gals) | Dilution Ratio (%) | Adjusted Use (gals) |
| | | | | | |
| | | | | | |
| | | | | | |
| Total adjusted monthly usage (gals) | | 0.00 | Total adjusted monthly usage (gals) | | 0.00 |

| Monthly Usage Cont. (gals) | | | | | |
|---|-----------------------|------------------------|-------------------------------------|-----------------------|------------------------|
| September | | | October | | |
| Usage (gals) | Dilution Ratio (%) | Adjusted Use (gals) | Usage (gals) | Dilution Ratio (%) | Adjusted Use (gals) |
| | | | | | |
| | | | | | |
| | | | | | |
| Total adjusted monthly usage (gals) | | 0.00 | Total adjusted monthly usage (gals) | | 0.00 |
| November | | | December | | |
| Usage (gals) | Dilution Ratio (%) | Adjusted Use (gals) | Usage (gals) | Dilution Ratio (%) | Adjusted Use (gals) |
| | | | | | |
| | | | | | |
| | | | | | |
| Total adjusted monthly usage (gals) | | 0.00 | Total adjusted monthly usage (gals) | | 0.00 |
| Adjusted Total Annual Usage (gals) | | <u>0.10</u> | | | |

| | | | | | |
|----------------------------------|-------|---|---------------|---|------------------------------------|
| Product Composition Data: | | | | | |
| VOC composition: | 1.00 | % | expressed as: | a | A - % by weight B - % by volume |
| Specific Gravity: | 1.090 | | | | |
| Dilution ratio: | | | % | (Use ONLY if monthly data is NOT available) | |

| | | |
|--|---------------------|---|
| Ozone Season VOC Calculations : | <u> b </u> | A - based on annual usage/emissions B - based on monthly usage/emissions |
| <p>Comment: Ozone season VOC emissions can be based on actual monthly VOC emissions or annual emissions. If monthly usages are available, it is more accurate to estimate ozone season VOC emissions based on the three months of the peak ozone season (June-August).</p> | | |

Emissions Summary**VOC Emissions**Annual usage converted to weight = 0.92 Lbs/yrAnnual VOC Emissions = 0.01 Lbs/yrDaily Ozone Season VOC Emissions = <0.1 Lbs/dayOzone Season Work Day VOC Emissions = <0.1 Lbs/wrk day

HAP Emissions: To determine HAP emissions, enter the composition of each HAP in one of two areas. First, enter the compositions for HAPs which are presented on the following page. If a particular HAP is not listed on that page, then enter the name and composition in the spaces provided below. HAP totals will be presented at the bottom of the following page.

| Additional HAPs | (% Composition) | Emissions (Lbs/yr) |
|------------------------|-----------------|-----------------------|
| Isopropylamine* | 5 | 0.046 |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| | HAP Subtotal = | <0.1 Lbs/yr |

* New York State HAP

PESTICIDES/HERBICIDES

GENERAL INFORMATION

Installation Seneca Army Depot
 SCC..... A2461800000 Date Collected..... 1993
 Location..... Bldg 606 Inventoried by..... T. Sletten
 Phone..... (607) 869-4201 Dale Larson Inventory Date..... June 6-10, 1994

PESTICIDES/HERBICIDES INFORMATION

Name..... Baygon Density..... _____ lb/gal
 Manufacturer..... _____ VOC content..... _____ (units)
 NSN or MSDS#..... _____ Dilution ratio..... none
(circle one) (H₂O: product)

MONTHLY USAGE

| Usage | Month | Usage | Month | Usage | Month |
|-------|----------|-------|--------|--------|-----------|
| _____ | January | 105.0 | May | 615.00 | September |
| _____ | February | 75.0 | June | _____ | October |
| _____ | March | 300.0 | July | _____ | November |
| 12.0 | April | 860.0 | August | _____ | December |

Annual Usage: 1967.0 fl. oz. Annual Disposal: _____

Check here if DD Form 1532 is available:... _____ (attach a copy of DD Form 1532 for each month within the calendar year you are inventorying)

EMISSIONS ESTIMATES

VOC EMISSIONS = [VOC (lb/gal)] x [Annual use (gal/yr)]
 = _____ lb/day
 = _____ tons/year

HAZARDOUS AIR POLLUTANTS

| HAP (Specify) | CAS CODE | lb/yr |
|---------------|----------|-------|
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |

Emissions For Pesticide/Herbicide Applications
Federal and New York State Regulations

Facility: Seneca Army Depot Date: 8/23/94
 Location: _____ Initials: CM
 SCC: A2461800000

Product Information:
 Pesticide/Herbicide Name: Baygon NSN: 6840-00-F00-4019

Annual Usage: 15.37 gal/yr Monthly usage available? a
 A - yes (enter usage in spaces below)
 B - no (leave spaces below blank)

Monthly Usage (gal)

| January | | | February | | |
|-------------------------------------|-----------------------|------------------------|-------------------------------------|-----------------------|------------------------|
| Usage (gals) | Dilution Ratio (%) | Adjusted Use (gals) | Usage (gals) | Dilution Ratio (%) | Adjusted Use (gals) |
| | | | | | |
| | | | | | |
| | | | | | |
| Total adjusted monthly usage (gals) | | 0.00 | Total adjusted monthly usage (gals) | | 0.00 |
| March | | | April | | |
| Usage (gals) | Dilution Ratio (%) | Adjusted Use (gals) | Usage (gals) | Dilution Ratio (%) | Adjusted Use (gals) |
| | | | | | |
| | | | | | |
| | | | | | |
| Total adjusted monthly usage (gals) | | 0.00 | Total adjusted monthly usage (gals) | | 0.09 |
| May | | | June | | |
| Usage (gals) | Dilution Ratio (%) | Adjusted Use (gals) | Usage (gals) | Dilution Ratio (%) | Adjusted Use (gals) |
| | | | | | |
| | | | | | |
| | | | | | |
| Total adjusted monthly usage (gals) | | 0.82 | Total adjusted monthly usage (gals) | | 0.59 |
| July | | | August | | |
| Usage (gals) | Dilution Ratio (%) | Adjusted Use (gals) | Usage (gals) | Dilution Ratio (%) | Adjusted Use (gals) |
| | | | | | |
| | | | | | |
| | | | | | |
| Total adjusted monthly usage (gals) | | 2.34 | Total adjusted monthly usage (gals) | | 6.72 |

| Monthly Usage Cont. (gals) | | | | | |
|---|-----------------------|------------------------|-------------------------------------|-----------------------|------------------------|
| September | | | October | | |
| Usage (gals) | Dilution Ratio (%) | Adjusted Use (gals) | Usage (gals) | Dilution Ratio (%) | Adjusted Use (gals) |
| 4.80 | 100 | 4.80 | | | |
| | | | | | |
| | | | | | |
| Total adjusted monthly usage (gals) | | 4.80 | Total adjusted monthly usage (gals) | | 0.00 |
| November | | | December | | |
| Usage (gals) | Dilution Ratio (%) | Adjusted Use (gals) | Usage (gals) | Dilution Ratio (%) | Adjusted Use (gals) |
| | | | | | |
| | | | | | |
| | | | | | |
| Total adjusted monthly usage (gals) | | 0.00 | Total adjusted monthly usage (gals) | | 0.00 |
| Adjusted Total Annual Usage (gals) | | <u>15.37</u> | | | |

| | | | | | |
|----------------------------------|---|---|---------------|----------|------------------------------------|
| Product Composition Data: | | | | | |
| VOC composition: | 84.00 | % | expressed as: | a | A - % by weight B - % by volume |
| Specific Gravity: | 0.770 | | | | |
| Dilution ratio: | % (Use ONLY if monthly data is NOT available) | | | | |

| | | |
|--|------------------|---|
| Ozone Season VOC Calculations : | <u> b </u> | A - based on annual usage/emissions B - based on monthly usage/emissions |
| <p>Comment: Ozone season VOC emissions can be based on actual monthly VOC emissions or annual emissions. If monthly usages are available, it is more accurate to estimate ozone season VOC emissions based on the three months of the peak ozone season (June-August).</p> | | |

Emissions Summary

VOC Emissions

Annual usage converted to weight = 98.44 Lbs/yr

Annual VOC Emissions = 82.69 Lbs/yr

Daily Ozone Season VOC Emissions = 0.5643 Lbs/day

Ozone Season Work Day VOC Emissions = 0.790 Lbs/wrk day

HAP Emissions: To determine HAP emissions, enter the composition of each HAP in one of two areas. First, enter the compositions for HAPs which are presented on the following page. If a particular HAP is not listed on that page, then enter the name and composition in the spaces provided below. HAP totals will be presented at the bottom of the following page.

| Additional HAPs | (% Composition) | Emissions (Lbs/yr) |
|-----------------|-----------------|-----------------------|
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| | HAP Subtotal = | 0.0 Lbs/yr |

PESTICIDES/HERBICIDES

GENERAL INFORMATION

Installation Seneca Army Depot
 SCC..... A2461800000 Date Collected..... 1993
 Location..... Bldg 606 Inventoried by..... T. Sletten
 Phone..... (607) 869-4201 Dale Larson Inventory Date..... June 6-10, 1994

PESTICIDES/HERBICIDES INFORMATION

Name..... Boric Acid (FLO) Density..... _____ lb/gal
 Manufacturer..... _____ VOC content..... _____ (units)
 NSN or MSDS#..... _____ Dilution ratio..... none
(circle one) (H₂O: product)

MONTHLY USAGE

| Usage | Month | Usage | Month | Usage | Month |
|-------------|----------|-------------|--------|-------|-----------|
| _____ | January | _____ | May | _____ | September |
| <u>11.0</u> | February | _____ | June | _____ | October |
| _____ | March | <u>29.0</u> | July | _____ | November |
| <u>6.0</u> | April | _____ | August | _____ | December |

Annual Usage: 46.0 fl. oz. Annual Disposal: _____

Check here if DD Form 1532 is available:... _____ (attach a copy of DD Form 1532 for each month within the calendar year you are inventorying)

EMISSIONS ESTIMATES

VOC EMISSIONS = [VOC (lb/gal)] x [Annual use (gal/yr)]
 = _____ lb/day
 = _____ tons/year

HAZARDOUS AIR POLLUTANTS

| HAP (Specify) | CAS CODE | lb/yr |
|---------------|----------|-------|
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |

**Emissions For Pesticide/Herbicide Applications
Federal and New York State Regulations**

Facility: Seneca Army Depot
 Location: _____
 SCC: A2461800000

Date: 8/23/94
 Initials: CM

Product Information:

Pesticide/Herbicide Name: Boric Acid NSN: 6840-01-287-3938

Annual Usage: 0.36 gal/yr Monthly usage available? a
 A - yes (enter usage in spaces below)
 B - no (leave spaces below blank)

Monthly Usage (gal)

| January | | | February | | |
|-------------------------------------|--------------------|---------------------|-------------------------------------|--------------------|---------------------|
| Usage (gals) | Dilution Ratio (%) | Adjusted Use (gals) | Usage (gals) | Dilution Ratio (%) | Adjusted Use (gals) |
| | | | 0.09 | 100 | 0.09 |
| | | | | | |
| | | | | | |
| Total adjusted monthly usage (gals) | | 0.00 | Total adjusted monthly usage (gals) | | 0.09 |

| March | | | April | | |
|-------------------------------------|--------------------|---------------------|-------------------------------------|--------------------|---------------------|
| Usage (gals) | Dilution Ratio (%) | Adjusted Use (gals) | Usage (gals) | Dilution Ratio (%) | Adjusted Use (gals) |
| | | | 0.05 | 100 | 0.05 |
| | | | | | |
| | | | | | |
| Total adjusted monthly usage (gals) | | 0.00 | Total adjusted monthly usage (gals) | | 0.05 |

| May | | | June | | |
|-------------------------------------|--------------------|---------------------|-------------------------------------|--------------------|---------------------|
| Usage (gals) | Dilution Ratio (%) | Adjusted Use (gals) | Usage (gals) | Dilution Ratio (%) | Adjusted Use (gals) |
| | | | | | |
| | | | | | |
| | | | | | |
| Total adjusted monthly usage (gals) | | 0.00 | Total adjusted monthly usage (gals) | | 0.00 |

| July | | | August | | |
|-------------------------------------|--------------------|---------------------|-------------------------------------|--------------------|---------------------|
| Usage (gals) | Dilution Ratio (%) | Adjusted Use (gals) | Usage (gals) | Dilution Ratio (%) | Adjusted Use (gals) |
| 0.23 | 100 | 0.23 | | | |
| | | | | | |
| | | | | | |
| Total adjusted monthly usage (gals) | | 0.23 | Total adjusted monthly usage (gals) | | 0.00 |

Emissions Summary

VOC Emissions

Annual usage converted to weight = 2.94 Lbs/yr

Annual VOC Emissions = 0.00 Lbs/yr

Daily Ozone Season VOC Emissions = 0.0000 Lbs/day

Ozone Season Work Day VOC Emissions = 0.000 Lbs/wrk day

HAP Emissions: To determine HAP emissions, enter the composition of each HAP in one of two areas. First, enter the compositions for HAPs which are presented on the following page. If a particular HAP is not listed on that page, then enter the name and composition in the spaces provided below. HAP totals will be presented at the bottom of the following page.

| Additional HAPs | (% Composition) | Emissions (Lbs/yr) |
|-----------------|-----------------|-----------------------|
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| | HAP Subtotal = | 0.0 Lbs/yr |

PESTICIDES/HERBICIDES

GENERAL INFORMATION

Installation Seneca Army Depot

SCC..... A2461800000 Date Collected..... 1993

Location..... Bldg 606 Inventoried by..... T. Sletten

Phone..... (607) 869-4201 Dale Larson Inventory Date..... June 6-10, 1994

PESTICIDES/HERBICIDES INFORMATION

Name..... Boric Acid (PDW) Density..... _____ lb/gal

Manufacturer..... _____ VOC content..... _____ (units)

NSN or MSDS#..... _____ Dilution ratio..... none

(circle one) (H₂O: product)

MONTHLY USAGE (lbs)

| Usage | Month | Usage | Month | Usage | Month |
|-------|----------|-------|--------|-------|-----------|
| _____ | January | 1.7 | May | _____ | September |
| _____ | February | 1.2 | June | _____ | October |
| _____ | March | _____ | July | _____ | November |
| _____ | April | 6.0 | August | _____ | December |

Annual Usage: 8.9 lbs. Annual Disposal: _____

Check here if DD Form 1532 is available:... _____ (attach a copy of DD Form 1532 for each month within the calendar year you are inventorying)

EMISSIONS ESTIMATES

VOC EMISSIONS = [VOC (lb/gal)] x [Annual use (gal/yr)]

= _____ lb/day

= _____ tons/year

HAZARDOUS AIR POLLUTANTS

| HAP (Specify) | CAS CODE | lb/yr |
|---------------|----------|-------|
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |

**Emissions For Pesticide/Herbicide Applications
Federal and New York State Regulations**

Facility: Seneca Army Depot
 Location: _____
 SCC: A2461800000

Date: 8/23/94
 Initials: CM

Product Information:

Pesticide/Herbicide Name: Boric Acid NSN: 6840-01-287-3938

Annual Usage: 8.90 lb/yr Monthly usage available? a
 A - yes (enter usage in spaces below)
 B - no (leave spaces below blank)

Monthly Usage (lbs)

| January | | | February | | |
|------------------------------------|--------------------|--------------------|------------------------------------|--------------------|--------------------|
| Usage (lbs) | Dilution Ratio (%) | Adjusted Use (lbs) | Usage (lbs) | Dilution Ratio (%) | Adjusted Use (lbs) |
| | | | | | |
| | | | | | |
| | | | | | |
| Total adjusted monthly usage (lbs) | | 0.00 | Total adjusted monthly usage (lbs) | | 0.00 |

| March | | | April | | |
|------------------------------------|--------------------|--------------------|------------------------------------|--------------------|--------------------|
| Usage (lbs) | Dilution Ratio (%) | Adjusted Use (lbs) | Usage (lbs) | Dilution Ratio (%) | Adjusted Use (lbs) |
| | | | | | |
| | | | | | |
| | | | | | |
| Total adjusted monthly usage (lbs) | | 0.00 | Total adjusted monthly usage (lbs) | | 0.00 |

| May | | | June | | |
|------------------------------------|--------------------|--------------------|------------------------------------|--------------------|--------------------|
| Usage (lbs) | Dilution Ratio (%) | Adjusted Use (lbs) | Usage (lbs) | Dilution Ratio (%) | Adjusted Use (lbs) |
| 1.70 | 100 | 1.70 | 1.20 | 100 | 1.20 |
| | | | | | |
| | | | | | |
| Total adjusted monthly usage (lbs) | | 1.70 | Total adjusted monthly usage (lbs) | | 1.20 |

| July | | | August | | |
|------------------------------------|--------------------|--------------------|------------------------------------|--------------------|--------------------|
| Usage (lbs) | Dilution Ratio (%) | Adjusted Use (lbs) | Usage (lbs) | Dilution Ratio (%) | Adjusted Use (lbs) |
| | | | 6.00 | 100 | 6.00 |
| | | | | | |
| | | | | | |
| Total adjusted monthly usage (lbs) | | 0.00 | Total adjusted monthly usage (lbs) | | 6.00 |

| Monthly Usage Cont. (lbs) | | | | | |
|--|-----------------------|-----------------------|------------------------------------|-----------------------|-----------------------|
| September | | | October | | |
| Usage (lbs) | Dilution Ratio (%) | Adjusted Use (lbs) | Usage (lbs) | Dilution Ratio (%) | Adjusted Use (lbs) |
| | | | | | |
| | | | | | |
| | | | | | |
| Total adjusted monthly usage (lbs) | | 0.00 | Total adjusted monthly usage (lbs) | | 0.00 |
| November | | | December | | |
| Usage (lbs) | Dilution Ratio (%) | Adjusted Use (lbs) | Usage (lbs) | Dilution Ratio (%) | Adjusted Use (lbs) |
| | | | | | |
| | | | | | |
| | | | | | |
| Total adjusted monthly usage (lbs) | | 0.00 | Total adjusted monthly usage (lbs) | | 0.00 |
| Adjusted Total Annual Usage (lbs) | | <u>8.90</u> | | | |

| | | | | | |
|----------------------------------|---|---|---------------|----------|------------------------------------|
| Product Composition Data: | | | | | |
| VOC composition: | 0.00 | % | expressed as: | a | A - % by weight B - % by volume |
| Specific Gravity: | 0.983 | | | | |
| Dilution ratio: | % (Use ONLY if monthly data is NOT available) | | | | |

| | | |
|--|---------------------|---|
| Ozone Season VOC Calculations : | <u> b </u> | A - based on annual usage/emissions B - based on monthly usage/emissions |
| <p>Comment: Ozone season VOC emissions can be based on actual monthly VOC emissions or annual emissions. If monthly usages are available, it is more accurate to estimate ozone season VOC emissions based on the three months of the peak ozone season (June-August).</p> | | |

Emissions Summary

VOC Emissions

Annual usage converted to weight = 8.90 Lbs/yr

Annual VOC Emissions = 0.00 Lbs/yr

Daily Ozone Season VOC Emissions = 0.0000 Lbs/day

Ozone Season Work Day VOC Emissions = 0.000 Lbs/wrk day

HAP Emissions: To determine HAP emissions, enter the composition of each HAP in one of two areas. First, enter the compositions for HAPs which are presented on the following page. If a particular HAP is not listed on that page, then enter the name and composition in the spaces provided below. HAP totals will be presented at the bottom of the following page.

| Additional HAPs | (% Composition) | Emissions (Lbs/yr) |
|-----------------|-----------------|-----------------------|
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| | HAP Subtotal = | 0.0 Lbs/yr |

PESTICIDES/HERBICIDES

GENERAL INFORMATION

Installation Seneca Army Depot

SCC..... A2461800000 Date Collected..... 1993

Location..... Bldg 606 Inventoried by..... T. Sletten

Phone..... (607) 869-4201 Dale Larson Inventory Date..... June 6-10, 1994

PESTICIDES/HERBICIDES INFORMATION

Name..... Bromacil Density..... _____ lb/gal

Manufacturer..... _____ VOC content..... _____ (units)

NSN or MSDS#..... _____ Dilution ratio..... 1:0.01
(circle one) (H₂O: product)

MONTHLY USAGE

| Usage | Month | Usage | Month | Usage | Month |
|-------|----------|-------|--------|-------|-----------|
| _____ | January | _____ | May | _____ | September |
| _____ | February | 900.0 | June | _____ | October |
| _____ | March | _____ | July | _____ | November |
| _____ | April | _____ | August | _____ | December |

Annual Usage: 900 gal Annual Disposal: _____

Check here if DD Form 1532 is available:... _____ (attach a copy of DD Form 1532 for each month within the calendar year you are inventorying)

EMISSIONS ESTIMATES

VOC EMISSIONS = [VOC (lb/gal)] x [Annual use (gal/yr)]

= _____ lb/day
 = _____ tons/year

HAZARDOUS AIR POLLUTANTS

| HAP (Specify) | CAS CODE | lb/yr |
|---------------|----------|-------|
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |

PESTICIDES/HERBICIDES

GENERAL INFORMATION

Installation Seneca Army Depot

SCC..... A2461800000 Date Collected..... 1993

Location..... Bldg 606 Inventoried by..... T. Sletten

Phone..... (607) 869-4201 Dale Larson Inventory Date..... June 6-10, 1994

PESTICIDES/HERBICIDES INFORMATION

Name..... Diazinon (emulsion) Density..... _____ lb/gal

Manufacturer..... _____ VOC content..... _____ (units)

NSN or MSDS#..... _____ Dilution ratio..... 1:0.5

(circle one) (H₂O: product)

MONTHLY USAGE

| Usage | Month | Usage | Month | Usage | Month |
|-------|----------|-------|--------|-------|-----------|
| _____ | January | _____ | May | 32 | September |
| _____ | February | _____ | June | 64 | October |
| _____ | March | _____ | July | 16 | November |
| _____ | April | _____ | August | _____ | December |

Annual Usage: 112 fl. oz. Annual Disposal: _____

Check here if DD Form 1532 is available:... _____ (attach a copy of DD Form 1532 for each month within the calendar year you are inventorying)

EMISSIONS ESTIMATES

VOC EMISSIONS = [VOC (lb/gal)] x [Annual use (gal/yr)]

= _____ lb/day

= _____ tons/year

HAZARDOUS AIR POLLUTANTS

| HAP (Specify) | CAS CODE | lb/yr |
|---------------|----------|-------|
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |

**Emissions For Pesticide/Herbicide Applications
Federal and New York State Regulations**

Facility: Seneca Army Depot Date: 8/23/94
 Location: _____ Initials: CM
 SCC: A2461800000

Product Information:
 Pesticide/Herbicide Name: Diazinon (emulsion) NSN: 6840-00-844-7355

Annual Usage: 0.88 gal/yr Monthly usage available? a
 A - yes (enter usage in spaces below)
 B - no (leave spaces below blank)

Monthly Usage (gal)

| January | | | February | | |
|-------------------------------------|--------------------|---------------------|-------------------------------------|--------------------|---------------------|
| Usage (gals) | Dilution Ratio (%) | Adjusted Use (gals) | Usage (gals) | Dilution Ratio (%) | Adjusted Use (gals) |
| | | | | | |
| | | | | | |
| | | | | | |
| Total adjusted monthly usage (gals) | | 0.00 | Total adjusted monthly usage (gals) | | 0.00 |
| March | | | April | | |
| Usage (gals) | Dilution Ratio (%) | Adjusted Use (gals) | Usage (gals) | Dilution Ratio (%) | Adjusted Use (gals) |
| | | | | | |
| | | | | | |
| | | | | | |
| Total adjusted monthly usage (gals) | | 0.00 | Total adjusted monthly usage (gals) | | 0.00 |
| May | | | June | | |
| Usage (gals) | Dilution Ratio (%) | Adjusted Use (gals) | Usage (gals) | Dilution Ratio (%) | Adjusted Use (gals) |
| | | | | | |
| | | | | | |
| | | | | | |
| Total adjusted monthly usage (gals) | | 0.00 | Total adjusted monthly usage (gals) | | 0.00 |
| July | | | August | | |
| Usage (gals) | Dilution Ratio (%) | Adjusted Use (gals) | Usage (gals) | Dilution Ratio (%) | Adjusted Use (gals) |
| | | | | | |
| | | | | | |
| | | | | | |
| Total adjusted monthly usage (gals) | | 0.00 | Total adjusted monthly usage (gals) | | 0.00 |

| Monthly Usage Cont. (gals) | | | | | |
|---|-----------------------|------------------------|-------------------------------------|-----------------------|------------------------|
| September | | | October | | |
| Usage (gals) | Dilution Ratio (%) | Adjusted Use (gals) | Usage (gals) | Dilution Ratio (%) | Adjusted Use (gals) |
| 0.25 | 0.5 | 0.00 | 0.50 | 0.5 | 0.00 |
| | | | | | |
| | | | | | |
| Total adjusted monthly usage (gals) | | 0.00 | Total adjusted monthly usage (gals) | | 0.00 |
| November | | | December | | |
| Usage (gals) | Dilution Ratio (%) | Adjusted Use (gals) | Usage (gals) | Dilution Ratio (%) | Adjusted Use (gals) |
| 0.13 | 0.5 | 0.00 | | | |
| | | | | | |
| | | | | | |
| Total adjusted monthly usage (gals) | | 0.00 | Total adjusted monthly usage (gals) | | 0.00 |
| Adjusted Total Annual Usage (gals) | | <u>0.00</u> | | | |

| | | | | | |
|----------------------------------|-------|---|---|---|------------------------------------|
| Product Composition Data: | | | | | |
| VOC composition: | 99.00 | % | expressed as: | a | A - % by weight B - % by volume |
| Specific Gravity: | 0.780 | | | | |
| Dilution ratio: | | % | (Use ONLY if monthly data is NOT available) | | |

| | | |
|--|--------------|---|
| Ozone Season VOC Calculations : | <u> b </u> | A - based on annual usage/emissions B - based on monthly usage/emissions |
| <p>Comment: Ozone season VOC emissions can be based on actual monthly VOC emissions or annual emissions. If monthly usages are available, it is more accurate to estimate ozone season VOC emissions based on the three months of the peak ozone season (June-August).</p> | | |

Emissions Summary

VOC Emissions

Annual usage converted to weight = 0.03 Lbs/yr

Annual VOC Emissions = 0.03 Lbs/yr

Daily Ozone Season VOC Emissions = 0.0000 Lbs/day

Ozone Season Work Day VOC Emissions = 0.000 Lbs/wrk day

HAP Emissions: To determine HAP emissions, enter the composition of each HAP in one of two areas. First, enter the compositions for HAPs which are presented on the following page. If a particular HAP is not listed on that page, then enter the name and composition in the spaces provided below. HAP totals will be presented at the bottom of the following page.

| Additional HAPs | (% Composition) | Emissions (Lbs/yr) |
|-----------------|-----------------|-----------------------|
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| | HAP Subtotal = | 0.0 Lbs/yr |

PESTICIDES/HERBICIDES

GENERAL INFORMATION

Installation Seneca Army Depot

SCC..... A2461800000 Date Collected..... 1993

Location..... Bldg 606 Inventoried by..... T. Sletten

Phone..... (607) 869-4201 Dale Larson Inventory Date..... June 6-10, 1994

PESTICIDES/HERBICIDES INFORMATION

Name..... Diazinon (solution) Density..... _____ lb/gal

Manufacturer..... _____ VOC content..... _____ (units)

NSN or MSDS#..... _____ Dilution ratio..... 1:0.5
(circle one) (H₂O: product)

MONTHLY USAGE

| Usage | Month | Usage | Month | Usage | Month |
|-------|----------|-------|--------|-------|-----------|
| _____ | January | 2.5 | May | _____ | September |
| _____ | February | 320 | June | _____ | October |
| _____ | March | _____ | July | _____ | November |
| _____ | April | _____ | August | _____ | December |

Annual Usage: 322.5 fl. oz. Annual Disposal: _____

Check here if DD Form 1532 is available:... _____ (attach a copy of DD Form 1532 for each month within the calendar year you are inventorying)

EMISSIONS ESTIMATES

VOC EMISSIONS = [VOC (lb/gal)] x [Annual use (gal/yr)]

= _____ lb/day

= _____ tons/year

HAZARDOUS AIR POLLUTANTS

| HAP (Specify) | CAS CODE | lb/yr |
|---------------|----------|-------|
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |

Emissions For Pesticide/Herbicide Applications
Federal and New York State Regulations

Facility: Seneca Army Depot Date: 8/23/94
 Location: _____ Initials: CM
 SCC: A2461800000

Product Information:
Pesticide/Herbicide Name: Diazinon (solution) **NSN:** 6840-00-844-7355

Annual Usage: 2.52 gal/yr **Monthly usage available?** a
 A - yes (enter usage in spaces below)
 B - no (leave spaces below blank)

Monthly Usage (gal)

| January | | | February | | |
|-------------------------------------|--------------------|---------------------|-------------------------------------|--------------------|---------------------|
| Usage (gals) | Dilution Ratio (%) | Adjusted Use (gals) | Usage (gals) | Dilution Ratio (%) | Adjusted Use (gals) |
| | | | | | |
| | | | | | |
| | | | | | |
| Total adjusted monthly usage (gals) | | 0.00 | Total adjusted monthly usage (gals) | | 0.00 |
| March | | | April | | |
| Usage (gals) | Dilution Ratio (%) | Adjusted Use (gals) | Usage (gals) | Dilution Ratio (%) | Adjusted Use (gals) |
| | | | | | |
| | | | | | |
| | | | | | |
| Total adjusted monthly usage (gals) | | 0.00 | Total adjusted monthly usage (gals) | | 0.00 |
| May | | | June | | |
| Usage (gals) | Dilution Ratio (%) | Adjusted Use (gals) | Usage (gals) | Dilution Ratio (%) | Adjusted Use (gals) |
| 0.02 | 0.5 | 0.00 | 2.50 | 0.5 | 0.01 |
| | | | | | |
| | | | | | |
| Total adjusted monthly usage (gals) | | 0.00 | Total adjusted monthly usage (gals) | | 0.01 |
| July | | | August | | |
| Usage (gals) | Dilution Ratio (%) | Adjusted Use (gals) | Usage (gals) | Dilution Ratio (%) | Adjusted Use (gals) |
| | | | | | |
| | | | | | |
| | | | | | |
| Total adjusted monthly usage (gals) | | 0.00 | Total adjusted monthly usage (gals) | | 0.00 |

| Monthly Usage Cont. (gals) | | | | | |
|---|-----------------------|------------------------|-------------------------------------|-----------------------|------------------------|
| September | | | October | | |
| Usage (gals) | Dilution Ratio (%) | Adjusted Use (gals) | Usage (gals) | Dilution Ratio (%) | Adjusted Use (gals) |
| | | | | | |
| | | | | | |
| | | | | | |
| Total adjusted monthly usage (gals) | | 0.00 | Total adjusted monthly usage (gals) | | 0.00 |
| November | | | December | | |
| Usage (gals) | Dilution Ratio (%) | Adjusted Use (gals) | Usage (gals) | Dilution Ratio (%) | Adjusted Use (gals) |
| | | | | | |
| | | | | | |
| | | | | | |
| Total adjusted monthly usage (gals) | | 0.00 | Total adjusted monthly usage (gals) | | 0.00 |
| Adjusted Total Annual Usage (gals) | | <u>0.01</u> | | | |

| | | | | | |
|----------------------------------|-------|---|---|----------|------------------------------------|
| Product Composition Data: | | | | | |
| VOC composition: | 99.00 | % | expressed as: | a | A - % by weight B - % by volume |
| Specific Gravity: | 0.780 | | | | |
| Dilution ratio: | % | | (Use ONLY if monthly data is NOT available) | | |

| | | |
|--|---------------------|---|
| Ozone Season VOC Calculations : | <u> b </u> | A - based on annual usage/emissions B - based on monthly usage/emissions |
| <p>Comment: Ozone season VOC emissions can be based on actual monthly VOC emissions or annual emissions. If monthly usages are available, it is more accurate to estimate ozone season VOC emissions based on the three months of the peak ozone season (June-August).</p> | | |

Emissions Summary

VOC Emissions

Annual usage converted to weight = 0.08 Lbs/yr

Annual VOC Emissions = 0.08 Lbs/yr

Daily Ozone Season VOC Emissions = <0.1 Lbs/day

Ozone Season Work Day VOC Emissions = <0.1 Lbs/wrk day

HAP Emissions: To determine HAP emissions, enter the composition of each HAP in one of two areas. First, enter the compositions for HAPs which are presented on the following page. If a particular HAP is not listed on that page, then enter the name and composition in the spaces provided below. HAP totals will be presented at the bottom of the following page.

| Additional HAPs | (% Composition) | Emissions (Lbs/yr) |
|-----------------|-----------------|--------------------|
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| HAP Subtotal = | | 0.0 Lbs/yr |

PESTICIDES/HERBICIDES

GENERAL INFORMATION

Installation Seneca Army Depot

SCC..... A2461800000 Date Collected..... 1993

Location..... Bldg 606 Inventoried by..... T. Sletten

Phone..... (607) 869-4201 Dale Larson Inventory Date..... June 6-10, 1994

PESTICIDES/HERBICIDES INFORMATION

Name..... Ficam Density..... _____ lb/gal

Manufacturer..... _____ VOC content..... _____ (units)

NSN or MSDS#..... _____ Dilution ratio..... none

(circle one) (H₂O: product)

MONTHLY USAGE

| Usage | Month | Usage | Month | Usage | Month |
|-------|----------|-------|--------|-------|-----------|
| _____ | January | _____ | May | _____ | September |
| _____ | February | _____ | June | 160.0 | October |
| _____ | March | _____ | July | _____ | November |
| _____ | April | _____ | August | _____ | December |

Annual Usage: 160.0 fl. oz. Annual Disposal: _____

Check here if DD Form 1532 is available:... _____ (attach a copy of DD Form 1532 for each month within the calendar year you are inventorying)

EMISSIONS ESTIMATES

VOC EMISSIONS = [VOC (lb/gal)] x [Annual use (gal/yr)]

= _____ lb/day

= _____ tons/year

HAZARDOUS AIR POLLUTANTS

| HAP (Specify) | CAS CODE | lb/yr |
|---------------|----------|-------|
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |

PESTICIDES/HERBICIDES

GENERAL INFORMATION

Installation Seneca Army Depot

SCC..... A2461800000 Date Collected..... 1993

Location..... Bldg 606 Inventoried by..... T. Sletten

Phone..... (607) 869-4201 Dale Larson Inventory Date..... June 6-10, 1994

PESTICIDES/HERBICIDES INFORMATION

Name..... Ficam Density..... _____ lb/gal

Manufacturer..... _____ VOC content..... _____ (units)

NSN or MSDS#..... _____ Dilution ratio..... none

(circle one) (H₂O: product)

MONTHLY USAGE

| Usage | Month | Usage | Month | Usage | Month |
|-------|----------|-------|--------|-------|-----------|
| _____ | January | _____ | May | 16.0 | September |
| _____ | February | _____ | June | _____ | October |
| _____ | March | _____ | July | _____ | November |
| _____ | April | 64.0 | August | _____ | December |

Annual Usage: 80.0 fl. oz. Annual Disposal: _____

Check here if DD Form 1532 is available:... _____ (attach a copy of DD Form 1532 for each month within the calendar year you are inventorying)

EMISSIONS ESTIMATES

VOC EMISSIONS = [VOC (lb/gal)] x [Annual use (gal/yr)]

= _____ lb/day

= _____ tons/year

HAZARDOUS AIR POLLUTANTS

| HAP (Specify) | CAS CODE | lb/yr |
|---------------|----------|-------|
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |

PESTICIDES/HERBICIDES

GENERAL INFORMATION

Installation Seneca Army Depot

SCC..... A2461800000 Date Collected..... 1993

Location..... Bldg 606 Inventoried by..... T. Sletten

Phone..... (607) 869-4201 Dale Larson Inventory Date..... June 6-10, 1994

PESTICIDES/HERBICIDES INFORMATION

Name..... Glyphosate Density..... _____ lb/gal

Manufacturer..... _____ VOC content..... _____ (units)

NSN or MSDS#..... _____ Dilution ratio..... 1:0.02
(circle one) (H₂O: product)

MONTHLY USAGE

| Usage | Month | Usage | Month | Usage | Month |
|-------|----------|-------|--------|-------|-----------|
| _____ | January | _____ | May | _____ | September |
| _____ | February | _____ | June | _____ | October |
| _____ | March | 450.0 | July | _____ | November |
| _____ | April | _____ | August | _____ | December |

Annual Usage: 450 gal. Annual Disposal: _____

Check here if DD Form 1532 is available:... _____ (attach a copy of DD Form 1532 for each month within the calendar year you are inventorying)

EMISSIONS ESTIMATES

VOC EMISSIONS = [VOC (lb/gal)] x [Annual use (gal/yr)]

= _____ lb/day
= _____ tons/year

HAZARDOUS AIR POLLUTANTS

| HAP (Specify) | CAS CODE | lb/yr |
|---------------|----------|-------|
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |

PESTICIDES/HERBICIDES

GENERAL INFORMATION

Installation Seneca Army Depot
 SCC..... A2461800000 Date Collected..... 1993
 Location..... Bldg 606 Inventoried by..... T. Sletten
 Phone..... (607) 869-4201 Dale Larson Inventory Date..... June 6-10, 1994

PESTICIDES/HERBICIDES INFORMATION

Name..... Imazapyr Density..... _____ lb/gal
 Manufacturer..... _____ VOC content..... _____ (units)
 NSN or MSDS#..... _____ Dilution ratio..... 1:0.01
(circle one) (H₂O: product)

MONTHLY USAGE

| Usage | Month | Usage | Month | Usage | Month |
|-------|----------|-------|--------|-------|-----------|
| _____ | January | _____ | May | 300.0 | September |
| _____ | February | _____ | June | _____ | October |
| _____ | March | _____ | July | _____ | November |
| _____ | April | _____ | August | _____ | December |

Annual Usage: 300.0 gal Annual Disposal: _____

Check here if DD Form 1532 is available:... _____ (attach a copy of DD Form 1532 for each month within the calendar year you are inventorying)

EMISSIONS ESTIMATES

VOC EMISSIONS = [VOC (lb/gal)] x [Annual use (gal/yr)]
 = _____ lb/day
 = _____ tons/year

HAZARDOUS AIR POLLUTANTS

| HAP (Specify) | CAS CODE | lb/yr |
|---------------|----------|-------|
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |

**Emissions For Pesticide/Herbicide Applications
Federal and New York State Regulations**

Facility: Seneca Army Depot
 Location: _____
 SCC: A2461800000

Date: 8/23/94
 Initials: CM

Product Information:

Pesticide/Herbicide Name: Imazapyr NSN: 6840-01-356-8902

Annual Usage: 300.00 gal/yr Monthly usage available? a
 A - yes (enter usage in spaces below)
 B - no (leave spaces below blank)

Monthly Usage (gal)

| January | | | February | | |
|-------------------------------------|--------------------|---------------------|-------------------------------------|--------------------|---------------------|
| Usage (gals) | Dilution Ratio (%) | Adjusted Use (gals) | Usage (gals) | Dilution Ratio (%) | Adjusted Use (gals) |
| | | | | | |
| | | | | | |
| | | | | | |
| Total adjusted monthly usage (gals) | | 0.00 | Total adjusted monthly usage (gals) | | 0.00 |

| March | | | April | | |
|-------------------------------------|--------------------|---------------------|-------------------------------------|--------------------|---------------------|
| Usage (gals) | Dilution Ratio (%) | Adjusted Use (gals) | Usage (gals) | Dilution Ratio (%) | Adjusted Use (gals) |
| | | | | | |
| | | | | | |
| | | | | | |
| Total adjusted monthly usage (gals) | | 0.00 | Total adjusted monthly usage (gals) | | 0.00 |

| May | | | June | | |
|-------------------------------------|--------------------|---------------------|-------------------------------------|--------------------|---------------------|
| Usage (gals) | Dilution Ratio (%) | Adjusted Use (gals) | Usage (gals) | Dilution Ratio (%) | Adjusted Use (gals) |
| | | | | | |
| | | | | | |
| | | | | | |
| Total adjusted monthly usage (gals) | | 0.00 | Total adjusted monthly usage (gals) | | 0.00 |

| July | | | August | | |
|-------------------------------------|--------------------|---------------------|-------------------------------------|--------------------|---------------------|
| Usage (gals) | Dilution Ratio (%) | Adjusted Use (gals) | Usage (gals) | Dilution Ratio (%) | Adjusted Use (gals) |
| | | | | | |
| | | | | | |
| | | | | | |
| Total adjusted monthly usage (gals) | | 0.00 | Total adjusted monthly usage (gals) | | 0.00 |

| Monthly Usage Cont. (gals) | | | | | |
|---|-----------------------|------------------------|-------------------------------------|-----------------------|------------------------|
| September | | | October | | |
| Usage (gals) | Dilution Ratio (%) | Adjusted Use (gals) | Usage (gals) | Dilution Ratio (%) | Adjusted Use (gals) |
| 300.00 | 0.01 | 0.03 | | | |
| | | | | | |
| | | | | | |
| Total adjusted monthly usage (gals) | | 0.03 | Total adjusted monthly usage (gals) | | 0.00 |
| November | | | December | | |
| Usage (gals) | Dilution Ratio (%) | Adjusted Use (gals) | Usage (gals) | Dilution Ratio (%) | Adjusted Use (gals) |
| | | | | | |
| | | | | | |
| | | | | | |
| Total adjusted monthly usage (gals) | | 0.00 | Total adjusted monthly usage (gals) | | 0.00 |
| Adjusted Total Annual Usage (gals) | | <u>0.03</u> | | | |

| | | | | | |
|----------------------------------|-------|---|---|----------|------------------------------------|
| Product Composition Data: | | | | | |
| VOC composition: | 1.00 | % | expressed as: | a | A - % by weight B - % by volume |
| Specific Gravity: | 1.090 | | | | |
| Dilution ratio: | | % | (Use ONLY if monthly data is NOT available) | | |

| | | |
|--|------------------|---|
| Ozone Season VOC Calculations : | <u> b </u> | A - based on annual usage/emissions B - based on monthly usage/emissions |
| <p>Comment: Ozone season VOC emissions can be based on actual monthly VOC emissions or annual emissions. If monthly usages are available, it is more accurate to estimate ozone season VOC emissions based on the three months of the peak ozone season (June-August).</p> | | |

PESTICIDES/HERBICIDES

GENERAL INFORMATION

Installation Seneca Army Depot
 SCC..... A2461800000 Date Collected..... 1993
 Location..... Bldg 606 Inventoried by..... T. Sletten
 Phone..... (607) 869-4201 Dale Larson Inventory Date..... June 6-10, 1994

PESTICIDES/HERBICIDES INFORMATION

Name..... Maxforce Density..... _____ lb/gal
 Manufacturer..... _____ VOC content..... _____ (units)
 NSN or MSDS#..... _____ Dilution ratio..... N/A
(circle one) (H₂O: product)

MONTHLY USAGE (lbs)

| Usage | Month | Usage | Month | Usage | Month |
|-------|----------|-------|--------|-------|-----------|
| _____ | January | 24.0 | May | _____ | September |
| _____ | February | _____ | June | _____ | October |
| _____ | March | _____ | July | _____ | November |
| _____ | April | _____ | August | _____ | December |

Annual Usage: 24.0 lbs Annual Disposal: _____

Check here if DD Form 1532 is available:... _____ (attach a copy of DD Form 1532 for each month within the calendar year you are inventorying)

EMISSIONS ESTIMATES

VOC EMISSIONS = [VOC (lb/gal)] x [Annual use (gal/yr)]
 = _____ lb/day
 = _____ tons/year

HAZARDOUS AIR POLLUTANTS

| HAP (Specify) | CAS CODE | lb/yr |
|---------------|----------|-------|
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |

PESTICIDES/HERBICIDES

GENERAL INFORMATION

Installation Seneca Army Depot

SCC..... A2461800000 Date Collected..... 1993

Location..... Bldg 606 Inventoried by..... T. Sletten

Phone..... (607) 869-4201 Dale Larson Inventory Date..... June 6-10, 1994

PESTICIDES/HERBICIDES INFORMATION

Name..... Pyrethrum Density..... _____ lb/gal

Manufacturer..... _____ VOC content..... _____ (units)

NSN or MSDS#..... _____ Dilution ratio..... none

(circle one) (H₂O: product)

MONTHLY USAGE

| Usage | Month | Usage | Month | Usage | Month |
|-------|----------|-------|--------|-------|-----------|
| _____ | January | _____ | May | _____ | September |
| _____ | February | 25.0 | June | _____ | October |
| 3.0 | March | 2.0 | July | _____ | November |
| _____ | April | 27.0 | August | _____ | December |

Annual Usage: 57.0 fl. oz. Annual Disposal: _____

Check here if DD Form 1532 is available:... _____ (attach a copy of DD Form 1532 for each month within the calendar year you are inventorying)

EMISSIONS ESTIMATES

VOC EMISSIONS = [VOC (lb/gal)] x [Annual use (gal/yr)]

= _____ lb/day
 = _____ tons/year

HAZARDOUS AIR POLLUTANTS

| HAP (Specify) | CAS CODE | lb/yr |
|---------------|----------|-------|
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |

PESTICIDES/HERBICIDES

GENERAL INFORMATION

Installation Seneca Army Depot

SCC..... A2461800000 Date Collected..... 1993

Location..... Bldg 606 Inventoried by..... T. Sletten

Phone..... (607) 869-4201 Dale Larson Inventory Date..... June 6-10, 1994

PESTICIDES/HERBICIDES INFORMATION

Name..... Pyrethrum Density..... _____ lb/gal

Manufacturer..... _____ VOC content..... _____ (units)

NSN or MSDS#..... _____ Dilution ratio..... none
(circle one) (H₂O: product)

MONTHLY USAGE

| Usage | Month | Usage | Month | Usage | Month |
|-------|----------|-------|--------|-------|-----------|
| _____ | January | 48.0 | May | _____ | September |
| _____ | February | _____ | June | _____ | October |
| _____ | March | _____ | July | _____ | November |
| _____ | April | _____ | August | _____ | December |

Annual Usage: 48.0 fl. oz. Annual Disposal: _____

Check here if DD Form 1532 is available:... _____ (attach a copy of DD Form 1532 for each month within the calendar year you are inventorying)

EMISSIONS ESTIMATES

VOC EMISSIONS = [VOC (lb/gal)] x [Annual use (gal/yr)]

= _____ lb/day
 = _____ tons/year

HAZARDOUS AIR POLLUTANTS

| HAP (Specify) | CAS CODE | lb/yr |
|---------------|----------|-------|
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |

PESTICIDES/HERBICIDES

Page ___ of ___

GENERAL INFORMATION

Installation Seneca Army Depot
 SCC..... A2461800000 Date Collected..... 1993
 Location..... Bldg 606 Inventoried by..... T. Sletten
 Phone..... (607) 869-4201 Dale Larson Inventory Date..... June 6-10, 1994

PESTICIDES/HERBICIDES INFORMATION

Name..... Pyrethrum Density..... _____ lb/gal
 Manufacturer..... _____ VOC content..... _____ (units)
 NSN or MSDS#..... _____ Dilution ratio..... none
(circle one) (H₂O: product)

MONTHLY USAGE

| Usage | Month | Usage | Month | Usage | Month |
|-------|----------|-------|--------|-------|-----------|
| _____ | January | _____ | May | _____ | September |
| _____ | February | _____ | June | _____ | October |
| _____ | March | _____ | July | _____ | November |
| 10.0 | April | _____ | August | 2.0 | December |

Annual Usage: 12.0 fl. oz. Annual Disposal: _____

Check here if DD Form 1532 is available:... _____ (attach a copy of DD Form 1532 for each month within the calendar year you are inventorying)

EMISSIONS ESTIMATES

VOC EMISSIONS = [VOC (lb/gal)] x [Annual use (gal/yr)]
 = _____ lb/day
 = _____ tons/year

HAZARDOUS AIR POLLUTANTS

| HAP (Specify) | CAS CODE | lb/yr |
|---------------|----------|-------|
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |

PESTICIDES/HERBICIDES

GENERAL INFORMATION

Installation Seneca Army Depot

SCC..... A2461800000 Date Collected..... 1993

Location..... Bldg 606 Inventoried by..... T. Sletten

Phone..... (607) 869-4201 Dale Larson Inventory Date..... June 6-10, 1994

PESTICIDES/HERBICIDES INFORMATION

Name..... Pyrethrum Density..... _____ lb/gal

Manufacturer..... _____ VOC content..... _____ (units)

NSN or MSDS#..... _____ Dilution ratio..... none (H₂O: product)

(circle one)

MONTHLY USAGE

| Usage | Month | Usage | Month | Usage | Month |
|------------|-----------------|-------|---------------|-------|------------------|
| <u>0.5</u> | <u>January</u> | _____ | <u>May</u> | _____ | <u>September</u> |
| _____ | <u>February</u> | _____ | <u>June</u> | _____ | <u>October</u> |
| _____ | <u>March</u> | _____ | <u>July</u> | _____ | <u>November</u> |
| _____ | <u>April</u> | _____ | <u>August</u> | _____ | <u>December</u> |

Annual Usage: 0.5 fl. oz. Annual Disposal: _____

Check here if DD Form 1532 is available:... _____ (attach a copy of DD Form 1532 for each month within the calendar year you are inventorying)

EMISSIONS ESTIMATES

VOC EMISSIONS = [VOC (lb/gal)] x [Annual use (gal/yr)]

= _____ lb/day
 = _____ tons/year

HAZARDOUS AIR POLLUTANTS

| HAP (Specify) | CAS CODE | lb/yr |
|---------------|----------|-------|
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |

**Emissions For Pesticide/Herbicide Applications
Federal and New York State Regulations**

Facility: Seneca Army Depot Date: 8/23/94
 Location: _____ Initials: CM
 SCC: A2461800000

Product Information:
Pesticide/Herbicide Name: Pyrethrum **NSN:** 6840-00-823-7849
Annual Usage: 0.92 gal/yr **Monthly usage available?** a
 A - yes (enter usage in spaces below)
 B - no (leave spaces below blank)

Monthly Usage (gal)

| January | | | February | | |
|-------------------------------------|--------------------|---------------------|-------------------------------------|--------------------|---------------------|
| Usage (gals) | Dilution Ratio (%) | Adjusted Use (gals) | Usage (gals) | Dilution Ratio (%) | Adjusted Use (gals) |
| 0.00 | 100 | 0.00 | | | |
| | | | | | |
| | | | | | |
| Total adjusted monthly usage (gals) | | 0.00 | Total adjusted monthly usage (gals) | | 0.00 |

| March | | | April | | |
|-------------------------------------|--------------------|---------------------|-------------------------------------|--------------------|---------------------|
| Usage (gals) | Dilution Ratio (%) | Adjusted Use (gals) | Usage (gals) | Dilution Ratio (%) | Adjusted Use (gals) |
| 0.02 | 100 | 0.02 | 0.08 | 100 | 0.08 |
| | | | | | |
| | | | | | |
| Total adjusted monthly usage (gals) | | 0.02 | Total adjusted monthly usage (gals) | | 0.08 |

| May | | | June | | |
|-------------------------------------|--------------------|---------------------|-------------------------------------|--------------------|---------------------|
| Usage (gals) | Dilution Ratio (%) | Adjusted Use (gals) | Usage (gals) | Dilution Ratio (%) | Adjusted Use (gals) |
| 0.38 | 100 | 0.38 | 0.20 | 100 | 0.20 |
| | | | | | |
| | | | | | |
| Total adjusted monthly usage (gals) | | 0.38 | Total adjusted monthly usage (gals) | | 0.20 |

| July | | | August | | |
|-------------------------------------|--------------------|---------------------|-------------------------------------|--------------------|---------------------|
| Usage (gals) | Dilution Ratio (%) | Adjusted Use (gals) | Usage (gals) | Dilution Ratio (%) | Adjusted Use (gals) |
| 0.02 | 100 | 0.02 | 0.21 | 100 | 0.21 |
| | | | | | |
| | | | | | |
| Total adjusted monthly usage (gals) | | 0.02 | Total adjusted monthly usage (gals) | | 0.21 |

| Monthly Usage Cont. (gals) | | | | | |
|---|-----------------------|------------------------|-------------------------------------|-----------------------|------------------------|
| September | | | October | | |
| Usage (gals) | Dilution Ratio (%) | Adjusted Use (gals) | Usage (gals) | Dilution Ratio (%) | Adjusted Use (gals) |
| | | | | | |
| | | | | | |
| | | | | | |
| Total adjusted monthly usage (gals) | | 0.00 | Total adjusted monthly usage (gals) | | 0.00 |
| November | | | December | | |
| Usage (gals) | Dilution Ratio (%) | Adjusted Use (gals) | Usage (gals) | Dilution Ratio (%) | Adjusted Use (gals) |
| | | | | | |
| | | | | | |
| | | | | | |
| Total adjusted monthly usage (gals) | | 0.00 | Total adjusted monthly usage (gals) | | 0.02 |
| Adjusted Total Annual Usage (gals) | | <u>0.92</u> | | | |

| | | | | | |
|----------------------------------|---|---|---------------|---|------------------------------------|
| Product Composition Data: | | | | | |
| VOC composition: | 29.50 | % | expressed as: | a | A - % by weight B - % by volume |
| Specific Gravity: | 0.910 | | | | |
| Dilution ratio: | % (Use ONLY if monthly data is NOT available) | | | | |

| | | |
|--|---|---|
| Ozone Season VOC Calculations : | b | A - based on annual usage/emissions B - based on monthly usage/emissions |
| <p>Comment: Ozone season VOC emissions can be based on actual monthly VOC emissions or annual emissions. If monthly usages are available, it is more accurate to estimate ozone season VOC emissions based on the three months of the peak ozone season (June-August).</p> | | |

Emissions Summary**VOC Emissions**Annual usage converted to weight = 6.95 Lbs/yrAnnual VOC Emissions = 2.05 Lbs/yrDaily Ozone Season VOC Emissions = <0.1 Lbs/dayOzone Season Work Day VOC Emissions = <0.1 Lbs/wrk day

HAP Emissions: To determine HAP emissions, enter the composition of each HAP in one of two areas. First, enter the compositions for HAPs which are presented on the following page. If a particular HAP is not listed on that page, then enter the name and composition in the spaces provided below. HAP totals will be presented at the bottom of the following page.

| Additional HAPs | (% Composition) | Emissions (Lbs/yr) |
|-------------------|-----------------|-----------------------|
| <u>Pyrethrum*</u> | <u>0.5</u> | <u>0.035</u> |
| <u>_____</u> | <u>_____</u> | <u>_____</u> |
| <u>_____</u> | <u>_____</u> | <u>_____</u> |
| <u>_____</u> | <u>_____</u> | <u>_____</u> |
| HAP Subtotal = | | 0.0 Lbs/yr |

* New York State HAP

PESTICIDES/HERBICIDES

GENERAL INFORMATION

Installation Seneca Army Depot

SCC..... A2461800000 Date Collected..... 1993

Location..... Bldg 606 Inventoried by..... T. Sletten

Phone..... (607) 869-4201 Dale Larson Inventory Date..... June 6-10, 1994

PESTICIDES/HERBICIDES INFORMATION

Name..... Resmethrin Density..... _____ lb/gal

Manufacturer..... _____ VOC content..... _____ (units)

NSN or MSDS#..... _____ Dilution ratio..... 1:0.03
(circle one) (H₂O: product)

MONTHLY USAGE

| Usage | Month | Usage | Month | Usage | Month |
|-------|----------|-------|--------|-------|-----------|
| _____ | January | _____ | May | _____ | September |
| _____ | February | _____ | June | _____ | October |
| _____ | March | _____ | July | _____ | November |
| _____ | April | 5.0 | August | _____ | December |

Annual Usage: 5.0 fl. oz. Annual Disposal: _____

Check here if DD Form 1532 is available:... _____ (attach a copy of DD Form 1532 for each month within the calendar year you are inventorying)

EMISSIONS ESTIMATES

VOC EMISSIONS = [VOC (lb/gal)] x [Annual use (gal/yr)]

= _____ lb/day

= _____ tons/year

HAZARDOUS AIR POLLUTANTS

| HAP (Specify) | CAS CODE | lb/yr |
|---------------|----------|-------|
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |

Emissions For Pesticide/Herbicide Applications
Federal and New York State Regulations

Facility: Seneca Army Depot Date: 8/23/94
 Location: _____ Initials: CM
 SCC: A246180000

Product Information:
Pesticide/Herbicide Name: Resmethrin **NSN:** 6840-01-104-0780

Annual Usage: 0.04 gal/yr **Monthly usage available?** a
 A - yes (enter usage in spaces below)
 B - no (leave spaces below blank)

Monthly Usage (gal)

| January | | | February | | |
|-------------------------------------|-----------------------|------------------------|-------------------------------------|-----------------------|------------------------|
| Usage (gals) | Dilution Ratio (%) | Adjusted Use (gals) | Usage (gals) | Dilution Ratio (%) | Adjusted Use (gals) |
| | | | | | |
| | | | | | |
| | | | | | |
| Total adjusted monthly usage (gals) | | 0.00 | Total adjusted monthly usage (gals) | | 0.00 |
| March | | | April | | |
| Usage (gals) | Dilution Ratio (%) | Adjusted Use (gals) | Usage (gals) | Dilution Ratio (%) | Adjusted Use (gals) |
| | | | | | |
| | | | | | |
| | | | | | |
| Total adjusted monthly usage (gals) | | 0.00 | Total adjusted monthly usage (gals) | | 0.00 |
| May | | | June | | |
| Usage (gals) | Dilution Ratio (%) | Adjusted Use (gals) | Usage (gals) | Dilution Ratio (%) | Adjusted Use (gals) |
| | | | | | |
| | | | | | |
| | | | | | |
| Total adjusted monthly usage (gals) | | 0.00 | Total adjusted monthly usage (gals) | | 0.00 |
| July | | | August | | |
| Usage (gals) | Dilution Ratio (%) | Adjusted Use (gals) | Usage (gals) | Dilution Ratio (%) | Adjusted Use (gals) |
| | | | 0.04 | 0.03 | 0.00 |
| | | | | | |
| | | | | | |
| Total adjusted monthly usage (gals) | | 0.00 | Total adjusted monthly usage (gals) | | 0.00 |

Emissions Summary

VOC Emissions

Annual usage converted to weight = 0.00 Lbs/yr

Annual VOC Emissions = 0.00 Lbs/yr

Daily Ozone Season VOC Emissions = <0.1 Lbs/day

Ozone Season Work Day VOC Emissions = <0.1 Lbs/wrk day

HAP Emissions: To determine HAP emissions, enter the composition of each HAP in one of two areas. First, enter the compositions for HAPs which are presented on the following page. If a particular HAP is not listed on that page, then enter the name and composition in the spaces provided below. HAP totals will be presented at the bottom of the following page.

| Additional HAPs | (% Composition) | Emissions (Lbs/yr) |
|-----------------|-----------------|-----------------------|
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| | HAP Subtotal = | 0.0 Lbs/yr |

WASTEWATER TREATMENT UNITS (Continued)

EMISSION RATE DETERMINATION METHOD

Stack Test Data _____ Emission Factor _____ Material Balance _____

Similar Unit Data _____ Other _____ (specify)

Reference: _____

OZONE PRECURSOR EMISSIONS

HAZARDOUS AIR POLLUTANTS

| Typical Ozone Season Emissions | HAP | CAS Code | lb/yr |
|--|-------|----------|-------|
| VOC Emissions _____ lb/day | _____ | _____ | _____ |
| NO _x Emissions _____ lb/day | _____ | _____ | _____ |
| CO Emissions _____ lb/day | _____ | _____ | _____ |

CRITERIA POLLUTANT EMISSIONS

| | |
|---|--------------------------------------|
| VOC Emissions _____ ton/yr | _____ |
| NO _x Emissions _____ ton/yr | _____ |
| CO Emissions _____ ton/yr | _____ |
| SO ₂ Emissions _____ ton/yr | _____ |
| PM ₁₀ Emissions _____ ton/yr | _____ |
| Total Particulate _____ ton/yr | (use additional sheets if necessary) |

COMMENTS

This treatment plant has been operated since 1942 and is still in use. The system was designed to handle 250,000 gallons per day. Its load is 100% domestic sewage. The system uses no chemicals.

System Characteristics

- (1) Bar Screen and Wet Well
- (2) 30' Trickling Filters with plastic media
- (3) Dual chambered 1m-hoff settling tank
- (4) Clarifier and two sludge drying beds - 35' x 35'
- (5) Wetlands

WASTEWATER TREATMENT UNITS

GENERAL INFORMATION

Installation Seneca Army Depot
SCC 5-01-007-01 Unit ID # SEAD - 21
Location Bldg 715 Permit #
POC George Shadman Inventoried by T. Sletten
Phone (607) 869-1470 Inventory Date June 6-10, 1994

UNIT DESCRIPTION

Treatment Unit...# of Design Parameters Units
Junction Box... Volume Flow Rate...
Lift Station... Surface Area...
Sump... Liquid Depth...
Weir... Fetch Length...
Other... Retention Time (turnover/yr)...
Configuration Pollutant of Interest..
Flowthrough... Conc Before Treatment..
Disposal...
Aerated...
Diffused Air...
Biodegradation...
Oil Film Layer...
Treatment Unit...# of Design Parameters Units
Junction Box... Volume Flow Rate...
Lift Station... Surface Area...
Sump... Liquid Depth...
Weir... Fetch Length...
Other... Retention Time (turnover/yr)...
Configuration Pollutant of Interest.....
Flowthrough... Conc Before Treatment..
Disposal...
Mechanical Aeration....
Diffused Air...
Biodegradation...
Oil Film Layer...

INDUSTRIAL PROCESSES

Identify the industrial process(es) discharging to the treatment facility:

Table with 3 columns: INDUSTRIAL SOURCE DESCRIPTION, BUILDING/SOURCE, POLLUTANTS. Row 1: See comments

WASTEWATER TREATMENT UNITS (Continued)

Page ___ of ___

EMISSION RATE DETERMINATION METHOD

Stack Test Data _____ Emission Factor _____ Material Balance _____

Similar Unit Data _____ Other _____ (specify)

Reference: _____

OZONE PRECURSOR EMISSIONS

Typical Ozone Season Emissions

VOC Emissions _____ lb/day

NO_x Emissions _____ lb/day

CO Emissions _____ lb/day

CRITERIA POLLUTANT EMISSIONS

VOC Emissions _____ ton/yr

NO_x Emissions _____ ton/yr

CO Emissions _____ ton/yr

SO₂ Emissions _____ ton/yrPM₁₀ Emissions _____ ton/yr

Total Particulate _____ ton/yr (use additional sheets if necessary)

HAZARDOUS AIR POLLUTANTS

HAP

CAS Code

lb/yr

COMMENTS

This treatment plant was operated from 1956 to December 1993. The system was designed to handle 750,000 gallons per day, but was operated, on the average, 300,000 gallons per day in 1993. No chemicals are used within the system.

System Characteristics

- (1) Grinder pump and comminutor
- (2) Primary setting chamber
- (3) Rotating Biological Contactor's (RBC's) - 2
- (4) Secondary clarifier and sand filters
- (5) Sludge holding tank and sludge digestion tank (old 1mhoff tank)
- (6) Concrete lined sludge drying beds with gravel and sand floors (40 ft x 15 ft) each - 2

POTABLEWATER TREATMENT UNITS

GENERAL INFORMATION

Installation Seneca Army Depot

SCC..... N/A Unit ID #.....

Location..... Bldg 2411 Permit #.....

POC..... George Shadman Inventoried by..... T. Sletten

Phone..... (607) 869-1470 Inventory Date..... June 6-10, 1994

UNIT DESCRIPTION

| Treatment Unit...# ___ of ___ | Design Parameters | Units |
|---|--|-------|
| Junction Box..... <u></u> | Volume Flow Rate... <u></u> | |
| Lift Station..... <u></u> | Surface Area..... <u></u> | |
| Sump..... <u></u> | Liquid Depth..... <u></u> | |
| Weir..... <u></u> | Fetch Length..... <u></u> | |
| Other..... <u></u> | Retention Time (turnover/yr).... <u></u> | |
| Configuration | Pollutant of Interest.. <u></u> | |
| Flowthrough..... <u></u> | Conc Before Treatment.. <u></u> | |
| Disposal..... <u></u> | | |
| | | |
| Aerated <u></u> | | |
| Diffused Air..... <u></u> | | |
| Biodegradation..... <u></u> | | |
| Oil Film Layer..... <u></u> | | |
| | | |
| Treatment Unit...# ___ of ___ | Design Parameters | Units |
| Junction Box..... <u></u> | Volume Flow Rate... <u></u> | |
| Lift Station..... <u></u> | Surface Area..... <u></u> | |
| Sump..... <u></u> | Liquid Depth..... <u></u> | |
| Weir..... <u></u> | Fetch Length..... <u></u> | |
| Other..... <u></u> | Retention Time (turnover/yr).... <u></u> | |
| Configuration | Pollutant of Interest..... <u></u> | |
| Flowthrough..... <u></u> | Conc Before Treatment.. <u></u> | |
| Disposal..... <u></u> | | |
| | | |
| Mechanical Aeration <u></u> | | |
| Diffused Air..... <u></u> | | |
| Biodegradation..... <u></u> | | |
| Oil Film Layer..... <u></u> | | |

INDUSTRIAL PROCESSES

Identify the industrial process(es) discharging to the treatment facility:

| INDUSTRIAL SOURCE DESCRIPTION | BUILDING/SOURCE | POLLUTANTS |
|-------------------------------|-----------------|------------|
| See comments | | |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |

WASTEWATER TREATMENT UNITS (Continued)

EMISSION RATE DETERMINATION METHOD

Stack Test Data _____ Emission Factor _____ Material Balance _____

Similar Unit Data _____ Other _____ (specify)

Reference: Reynolds, Tom D., Unit Operations And Process in Environmental Engineering, CA, 1982

OZONE PRECURSOR EMISSIONS

HAZARDOUS AIR POLLUTANTS

| Typical Ozone Season Emissions | HAP | CAS Code | lb/yr |
|--|-----------------|------------------|-------------------|
| VOC Emissions _____ lb/day | <u>Chlorine</u> | <u>7782-50-5</u> | <u>121.764000</u> |
| NO _x Emissions _____ lb/day | _____ | _____ | _____ |
| CO Emissions _____ lb/day | _____ | _____ | _____ |

CRITERIA POLLUTANT EMISSIONS

| | |
|---|--------------------------------------|
| VOC Emissions _____ ton/yr | _____ |
| NO _x Emissions _____ ton/yr | _____ |
| CO Emissions _____ ton/yr | _____ |
| SO ₂ Emissions _____ ton/yr | _____ |
| PM ₁₀ Emissions _____ ton/yr | _____ |
| Total Particulate _____ ton/yr | (use additional sheets if necessary) |

COMMENTS

This treatment plant was designed to handle 800,000 gallons per day but operated on the average 200,000 gallons per day. The water is drawn from the lake and is first sent to a chlorine well. It is then gravity fed to a second fluoridated well. From here it goes to the residential area.

Chemicals Utilized in Process

- Chlorine - 1,200 lb/yr
- Fluoride liquid - unknown amount

Emissions For Water Treatment Plants
Federal and New York State Regulations

Facility: Seneca Army Depot
Location: Building 2411
SCC: 5-01-007-01

Date: 8/29/94
Initials: mole

Notes: The only emissions from water treatment operations occur when chlorine is used in the treatment process for disinfection. The only input parameters required are the annual flow (10E6 gal/yr) and the chlorine residual (ppm) in the end-of-the-line water.

Inputs: Annual water flow: 73.00 (10E6 gal/yr)

Chlorine residual: 0.20 (ppm)

(Notes: Chlorine residuals should be available from the plant operator as a single value or a range of values. If a range of values is given, then use the highest value. If chlorination is utilized, but a chlorine residual is not available, then use 0.2 ppm (AEC Recommended), which is a typical maximum end-of-the line water)

Solution:

HAP Emissions

| HAP Name | CAS # | Emissions (lbs/yr) |
|----------|-----------|-----------------------|
| Chlorine | 7782-50-5 | 121.8 |

References: Reynolds, Tom D., Unit Operations and Process in Environmental Engineering, PWS-KENT Publishing Company, CA, 1982.

LANDFILLS

GENERAL INFORMATION

Name of Installation Seneca Army Depot GEOMET Rep..... M. Onesty/T. Sletten

Calendar Year Data Represents..... _____

SCC..... 5-02-006-02 Building No..... Various locations

Date..... 6/8/94 Unit ID Number..... _____

POC..... Randall Battaglia Phone No..... (607) 869-1450

UNIT INFORMATION

*Year Opened. Multiple areas 1940's-1987 Original Depth.... _____ (units)

Surface Area... _____ (units)

*Original Capacity... See attached list Remaining Capacity.... _____ (units)

(units)

WASTE INFORMATION

Amount of waste disposed per year by Type (e.g., Municipal, Industrial, Hazardous, Construction debris)

| **Year | Amount Disposed (Units) | Waste Type (%) |
|-------------------------------------|-------------------------|----------------|
| (1 st year of operation) | _____ | _____ |
| Unknown | Unknown | Unknown |
| See attached list | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |

Typical weight of Waste disposed _____ lb./yd³

LANDFILL GAS INFORMATION

NMOC.... _____ ppmv Methane.... _____ (volume %)

CO₂.... _____ (volume %)

*Required model input

**Model requires amount disposed per year or cumulative amount disposed to date and year opened.

FILL.XLS

Sencra Army Depot Landfill/ Debris Disposal Areas

| Unit No. | Disposal Area Name | Disposal Area Size | Dates Used | Debris Description * |
|----------|----------------------------------|----------------------------|-----------------------------|--|
| SEAD- 6 | Ash Fill Area | 600 x 300 ft | 1941-early 60s 1974-1979 | Ash from refuse burn pits and solid waste incinerator |
| SEAD-7 | Shale Pit | 2 acres | 1987 to present | Construction debris |
| SEAD-8 | Non-Combustible Fill Area | 350 x 350 ft | 1974-1979 | Bulky non-combustible waste and some constructoin debris |
| SEAD-11 | Old Construction Debris Landfill | 590 x 590 ft | 1946-1949 | Construction debris |
| SEAD-12 | Radioactive Waste Burial Sites | 5 pits Unknown size | Pre - 1962 | Radioactive and nonradioactive wastes from the clinic and classified metal parts |
| SEAD-13 | IRFNA Disposal Site | 6 Pits, 30 x 8 x 4 ft deep | Early 1960's | IRFNA- an oxidizer used in missile liquid propellant systems |
| SEAD-59 | Fill Area West of Bldg. 135 | 150 ft dia. x 10 ft deep | Unknown | Construction Debris |
| SEAD-63 | Misc. Components Burial Site | 80 x 60 ft | 1950's to 1960's | Inert material (classified parts) |
| SEAD-64 | Garbage Disposal Areas | 4 Areas unknown size | Unknown | Exact makeup of debris unknown Possible house hold garbage, metalliac waste, (areas possibly used during periods when the solid waste incinerator was inoperable) |

FILL.XLS

| Unit No. | Disposal Area Name | Disposal Area Size | Dates Used | Debris Description * |
|----------|--|-----------------------------|------------|---|
| SEAD-67 | Dump Site (east of Sewage Treatment Plant No. 4) | Waste Piles Unknown size | Unknown | Unknown |
| SEAD-69 | Disposal Area (Bldg. 606) | Waste Piles | Unknown | Fence wire, concrete post and possibly 2,4-D cans and pesticide cans |

* Amount of waste disposed is unknown

OPEN BURNING/DETONATION SENECA ARMY DEPOT

| Month | Lot No. | NSN | DODIC | Quantity | Units |
|----------|---------------|---------------|-------|----------|-------|
| DECEMBER | COP-4-817 | 1340000286090 | | 10,655 | |
| 1992 | LOP89H016-004 | 1375007247040 | M023 | 90 | |
| | ENB-1-4 | 1375001436995 | | 300 | ft |
| | HEP-64-1 | 1375007561865 | M130 | 6 | |
| | ENS90E002-010 | 1375000285246 | | 100 | ft |
| | SGK86D001-002 | 1375006911671 | M766 | 6 | |
| | RAD-68069 | 1315003517914 | | 6 | |
| JANUARY | COP-4-817 | 1340000286090 | | 405 | |
| 1993 | LOP89H016-004 | 1375007247040 | M023 | 108 | |
| | ENB-1-4 | 1375001436995 | | 450 | ft |
| | HEP-64-1 | 1375007561865 | M130 | 9 | |
| FEBRUARY | COP-4-817 | 1340000286090 | | 2,294 | |
| 1993 | LOP89H016-004 | 1375007247040 | M023 | 271 | |
| | ENB-1-4 | 1375001436995 | | 2,260 | ft |
| | HEP-64-1 | 1375007561865 | M130 | 4 | |
| APRIL | COP-4-817 | 1340000286090 | | 490 | |
| 1993 | LOP89H016-004 | 1375007247040 | M023 | 117 | |
| | ENB-1-4 | 1375001436995 | | 184 | ft |
| | HEP-64-1 | 1375007561865 | M130 | 2 | |
| MAY | COP-4-817 | 1340000286090 | | 2,945 | |
| 1993 | LOP89H016-004 | 1375007247040 | M023 | 600 | |
| | ENB-1-4 | 1375001436995 | | 1,300 | ft |
| | HEP-64-1 | 1375007561865 | M130 | 4 | |
| | IRI87A001-025 | 1375011929174 | | 12 | |
| JUNE | COP-4-817 | 1340000286090 | | 5,750 | |
| 1993 | LOP89H016-004 | 1375007247040 | M023 | 1,110 | |
| | ENB-1-4 | 1375001436995 | | 7,434 | ft |
| | IRI87A001-025 | 1375011929174 | | 35 | |
| JULY | COP-4-817 | 1340000286090 | | 5,090 | |
| 1993 | LOP89H016-004 | 1375007247040 | M023 | 915 | |
| | ENB-1-4 | 1375001436995 | | 5,393 | ft |
| | IRI87A001-025 | 1375011929174 | | 61 | |
| AUGUST | COP-4-817 | 1340000286090 | | 679 | |
| 1993 | COP-4-793 | 1340000286090 | | 5578 | |
| | LOP89H016-004 | 1375007247040 | M023 | 1,095 | |
| | ENB-1-4 | 1375001436995 | | 7,449 | ft |
| | IRI87A001-025 | 1375011929174 | | 83 | |

OPEN BURNING/DETONATION SENECA ARMY DEPOT

| | | | | | |
|-----------|---------------|---------------|------|---------|----|
| SEPTEMBER | COP-4-793 | 1340000286090 | | 4,034 | |
| 1993 | LOP89H016-004 | 1375007247040 | M023 | 750 | |
| | ENB-1-4 | 1375001436995 | | 4,338 | ft |
| | IRI87A001-025 | 1375011929174 | | 50 | |
| | ENB87K015-010 | 1375001809356 | | 3,400 | ft |
| | | | | | |
| MARCH | PA-76H001-002 | 1320006287741 | D674 | 759 | |
| 1994 | ENS90E002-010 | 1375000285246 | | 130 | ft |
| | SGK80D011-002 | 1375006911671 | M766 | 21 | |
| | | | | | |
| APRIL | PA76G001-001 | 1320006287741 | D674 | 371 | |
| 1994 | PA76H001-002 | 1320006287741 | D674 | 141,859 | |
| | ENS90E002-010 | 1375000285246 | | 195 | ft |
| | SGK80D011-002 | 1375006911671 | M766 | 31 | |
| | | | | | |
| MAY | PA-76H001-002 | 1320006287741 | D674 | 1,712 | |
| 1994 | ENS90E002-010 | 1375000285246 | | 140 | ft |
| | SGK80D011-002 | 1375006911671 | M766 | 34 | |
| | | | | | |
| JUNE | PA-66-21 | 1320001794164 | | 13 | |
| 1994 | | 1135008560392 | | 13 | |
| | LOP89H016-004 | 1375007247040 | M023 | 13 | |
| | | 1375001809356 | M456 | 120 | ft |
| | IRI91A006-004 | | | 1 | |
| | PA-76H001-002 | 1320006287741 | D674 | 432 | |
| | ENS90E002-010 | 1375000285246 | | 30 | ft |
| | SGK86D001-002 | 1375006911671 | M766 | 8 | |

EMISSION RATE DETERMINATION METHOD

Stack Test Data _____ Emission Factor X Material Balance _____

Similar Unit Data _____ Other _____ (specify)

Reference: AP-42, Tables 1.10-1, 1.10-3, 1.10-4

OZONE PRECURSOR EMISSIONS

HAZARDOUS AIR POLLUTANTS

| Typical Ozone Season Emissions | HAP | CAS Code | lb/yr |
|--|--------------------------------------|-----------------|-------------|
| VOC Emissions <u>372.3</u> lb/day* | <u>Benzene</u> | <u>71-43-2</u> | <u>41.2</u> |
| NO _x Emissions <u>23.5</u> lb/day* | <u>Toluene</u> | <u>108-88-3</u> | <u>15.5</u> |
| CO Emissions _____ lb/day | <u>Methyl ethyl ketone</u> | <u>78-93-3</u> | <u>6.2</u> |
| CRITERIA POLLUTANT EMISSIONS | <u>O-Xylene</u> | <u>95-47-6</u> | <u>4.3</u> |
| VOC Emissions <u>0.47</u> ton/yr | <u>Napthalene</u> | <u>98-01-1</u> | <u>6.1</u> |
| NO _x Emissions <u>0.03</u> ton/yr | <u>Furfural*</u> | <u>91-20-3</u> | <u>10.3</u> |
| CO Emissions <u>2.45</u> ton/yr | _____ | _____ | _____ |
| SO ₂ Emissions <u><0.01</u> ton/yr | _____ | _____ | _____ |
| PM ₁₀ Emissions <u>0.33</u> ton/yr | _____ | _____ | _____ |
| Total Particulate _____ ton/yr | (use additional sheets if necessary) | | |

*New York State HAP

STACK INFORMATION

Stack (Release) Height _____ feet Stack Gas Velocity _____ ft/sec
 Stack Diameter _____ inch Stack Gas Flow Rate _____ ascf/min
 Stack Gas Temperature _____ °F

Other sources that share this stack ? _____

FLOW DIAGRAM & DISCUSSION OF ASSUMPTIONS OR UNUSUAL CONDITIONS

* Ozone season emissions were the results of emissions on two separate days only.

INCINERATORS

GENERAL INFORMATION

Installation Seneca Army Depot

SCC..... 5-01-001-01 Unit ID #.....

Location..... Bldg 709 Permit #..... 0709B

POC..... Tom Grasek Inventoried by..... T. Sletten

Phone..... (607) 869-1450 Inventory Date..... June 6-10, 1994

Manufacturer..... Consumat Systems Inc. Fuel Type..... Propane

Date Installed..... Annual Fuel Use..... 173.0 cf/yr
(units)

Rated Capacity..... Operating Schedule*
(units) Hours/day..... 2

Annual Thruput..... Days/week..... 250 days/ yr (1/93-5/93)
(units)

Type of Incinerator (check one):
Municipal _____ Medical _____ Classified Hazardous _____

WASTE CHARACTERIZATION

WASTE THROUGHPUT

| Relative Percent by Waste Type: | MONTH | AMOUNT | MONTH | AMOUNT |
|---|-------|-----------------------|-------|--------|
| Type 0 (dry trash) % | _____ | _____ | _____ | _____ |
| Type 1 (rubbish) % | _____ | _____ | _____ | _____ |
| Type 2 (refuse) % | _____ | _____ | _____ | _____ |
| Type 3 (garbage) % | _____ | _____ | _____ | _____ |
| Type 4 (animal/human wastes) % | _____ | _____ | _____ | _____ |
| Type 5 (gas, liquid, semi-liquid) % | _____ | _____ | _____ | _____ |
| Type 6 (semi-solid) % | _____ | _____ | _____ | _____ |
| Other Plastic bags & paper % | _____ | _____ | _____ | _____ |
| | | Units?: _____ | | |
| TOTAL--> <u>100 %</u> | | ANNUAL TOTAL--> _____ | | |

MONTHLY FUEL USE

19__ JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC

Units: gal _____ cubic feet _____ lb _____ other _____

| | | |
|--------------------------------|----------------------|--|
| COMBUSTION CHAMBER DATA | CHARGING DATA | POLLUTION CONTROL EQUIPMENT (enter control efficiency) |
| No. of Chambers.... <u>2</u> | Manual..... | ESP..... |
| Primary Chamber Type | Ram..... | Baghouse..... |
| Excess Air..... | Conveyor.... | Wet/Dry Scrubber.. |
| Starved Air..... | Charging Rate.... | Scrubber Liquid..... |
| Underfire Air.... | <u>100 lb/hr</u> | Cyclone..... |
| Overfire Air..... | Size of Charge... | Spray Dryer..... |
| Chamber Temperature | (mass or volume) | Other.. |
| Primary..... | | |
| Secondary.. | | |

INCINERATORS (Continued)

Page ___ of ___

EMISSION RATE DETERMINATION METHOD

Stack Test Data _____ Emission Factor X Material Balance _____

Similar Unit Data _____ Other _____ (specify)

Reference: AP-42

OZONE PRECURSOR EMISSIONS

Typical Ozone Season Emissions

VOC Emissions _____ lb/day

NO_x Emissions _____ lb/day

CO Emissions _____ lb/day

CRITERIA POLLUTANT EMISSIONS

VOC Emissions _____ ton/yr

NO_x Emissions _____ ton/yr

CO Emissions _____ ton/yr

SO₂ Emissions _____ ton/yrPM₁₀ Emissions _____ ton/yr

Total Particulate _____ ton/yr (use additional sheets if necessary)

HAZARDOUS AIR POLLUTANTS

HAP

CAS Code

lb/yr

STACK INFORMATION

Stack (Release) Height 17 (feet) Stack Gas Velocity 23.0 (ft/sec)Stack Diameter 13 (inch) Stack Gas Flow Rate 1286.0 (acsf/min)Stack Gas Temperature 1000 (°F)

Other sources that share this stack ? _____

COMMENTS

*Not used since 5/93, Incinerator listed as inactive, cannot be operated without prior notification to D.E.C. (New York State Department of Environmental Conservation).

INCINERATORS (Continued)

Page ___ of ___

EMISSION RATE DETERMINATION METHOD

Stack Test Data _____ Emission Factor X Material Balance _____

Similar Unit Data _____ Other _____ (specify)

Reference: AP-42

OZONE PRECURSOR EMISSIONS

Typical Ozone Season Emissions

VOC Emissions _____ lb/day

NO_x Emissions _____ lb/day

CO Emissions _____ lb/day

CRITERIA POLLUTANT EMISSIONS

VOC Emissions _____ ton/yr

NO_x Emissions _____ ton/yr

CO Emissions _____ ton/yr

SO₂ Emissions _____ ton/yrPM₁₀ Emissions _____ ton/yr

Total Particulate _____ ton/yr (use additional sheets if necessary)

HAZARDOUS AIR POLLUTANTS

HAP

CAS Code

lb/yr

STACK INFORMATION

Stack (Release) Height 17 (feet) Stack Gas Velocity 23.0 (ft/sec)Stack Diameter 13 (inch) Stack Gas Flow Rate 1286.0 (acsf/min)Stack Gas Temperature 1000 (°F)Other sources that share this stack ? No

COMMENTS

*Not use since 10/93, Propane tank removed 12/93, operating schedule based on permit data

APPLICATION OF CUTBACK ASPHALT

GENERAL INFORMATION

Installation Seneca Army Depot

SCC..... N/A

Location..... _____ Unit ID #..... _____

POC..... James Brewer Permit #..... _____

Phone..... (607) 869-1532 Inventory Date..... June 6-10, 1994

List the type, grade and volume of cutback asphalt used annually.

| Type ^a | Grade ^b | Volume (gal) |
|---------------------------|--------------------|--------------|
| AC-20 Type 3 Binder Dense | 1,526,934 cu yd | _____ |
| AC-20 Type 7 Top Course | 715,556 cu yd | _____ |
| Hot Patch | 20 ton/yr max | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |

^a Slow Cure (SC), Medium Cure (MC), Rapid Cure (RC)
^b Medium Cure only 30, 70, 250, 800, or 2000

REMARKS

CARPENTRY/WOODWORKING**GENERAL INFORMATION**

Installation Seneca Army Depot GEOMET Rep..... T. Sletten
 Calendar Year Data Represents.....93
 SCC.....3-07-030-97 Building No..... 113
 Date.....June 6-10, 1994 Unit ID Number... Permit No. 00113
 POC.....Joe Scharett
 Phone No..... (607) 869-1490 Hours/day..... 6 (cyclone operates 3 hrs/dy)
 Date Unit Installed/Modified.. _____ Days/week..... 5

Type of process (woodworking, carpentry shop, hobby shop, other)

Box and crate shop

Manufacturer of cyclone _____

Model No. 005

Dimensions of cyclone (ft)

Height _____ Width _____ Diameter _____

Flow of Cyclone (psi, ft/sec.) _____

Dimensions of container used to collect cyclone dust

Height 7' Width 5' Depth 4'

Number of times per year container is emptied 4

NUMBER OF TIMES PER OZONE SEASON CONTAINER IS EMPTIED _____

NUMBER OF TIMES PER CO SEASON CONTAINER IS EMPTIED _____

Describe the collection system 4 radial arm saws, 2 table saws, 1 joiner, 2 bandsaws,
1 wood shaper and 1 planer attached to cyclone.

Board feet processed per year _____

No pressure treated lumber used.

EMISSION RATE DETERMINATION METHOD

Stack Test Data _____ Emission Factor X Material Balance _____

Similar Unit Data _____ Other _____

Reference: AP-42, VOLUME 1, SECTION 10.4, TABLE 10.4-1

OZONE PRECURSOR EMISSIONS

HAZARDOUS AIR POLLUTANTS

Typical Ozone Season Emissions

HAP

CAS #

LB/YR

VOC Emissions _____ lb/day

Arsenic compounds 0 NA

NOx Emissions _____ lb/day

Chromium compounds 0 NA

CO Emissions _____ lb/day

Copper compounds* 0 NA

CRITERIA POLLUTANT EMISSIONS

VOC Emissions _____ ton/yr

NOx Emissions _____ ton/yr

CO Emissions _____ ton/yr

SO2 Emissions _____ ton/yr

PM10 Emissions 0.7220850000 ton/yr

Total Particulate 1.3650000000 ton/yr

(use additional sheets if necessary)

STACK INFORMATION

Stack (release) Height _____ feet

Stack Gas Velocity _____ ft/sec

Stack Diameter _____ inch

Stack Gas Flow Rate _____ acsf/min

Stack Gas Temperature _____ oF

Other sources that share this stack? _____

COMMENTS

EMISSIONS FROM WOODWORKING OPERATIONS

Federal and New York State Regulations

Facility: Seneca Army Depot
 Location: Bldg 113
 ID Number: _____

Date: 8/24/94
 Initials: DCP
 SCC: 3-07-030-97

INPUT DATAHOURS OF OPERATION Hrs/YrAMOUNT OF WOOD HANDLED Lbs/Yr
(If amount not known enter "0")CONTROL SYSTEM PRESENT A - CYCLONE
B - BAGHOUSEDOES THE OPERATION HANDLE PRESURE TREATED WOOD? A - YES
B - NOIF YES, WHAT PERCENTAGE OF THE TIME
IS PRESURE TREATED WOOD HANDLED? %
(If unknown enter 100%)

The hours of operation is referring to the actual hours that wood is being handled (sanded, cut, etc.) and not the shop operation hours. Consider lb/feet of wood processed to estimate this.

SOLUTION

| | |
|--------------------------------|-----------------|
| PARTICULATE EMISSIONS (TSP)* | 2,730.00 Lbs/Yr |
| PARTICULATE EMISSIONS (PM10)** | 1,444.17 Lbs/Yr |

* TSP EMISSION FACTORS OBTAINED FROM AP-42 MANUAL, SECTION 10.4, TABLE 10.4.1.

** PM10 EMISSION FACTORS BASED ON APPENDIX C.1-110 OF AP-42.

| HAP EMISSIONS | | |
|-----------------------|-------|-------------------|
| HAP | CAS # | Emissions (lb/yr) |
| Arsenic compounds*** | NA | NA |
| Chromium compounds*** | NA | NA |
| Copper compounds | NA | NA |

***Based on the assumption that the wood is treated with chromated copper arsenic (CCA), which, according to information received from manufacturers is applied @ 0.25 lb/ft³ or 0.00694 lb/lb of wood.

AUDIT OF EMISSION DATA
CALCULATIONS VERIFICATION FORM

SOURCE INFORMATION

Source Description..... Seneca Army Depot, Bldg 319
Source Category..... Boilers SCC..... 1-02-004-01
Fuel Type (if applicable). F.O. #6
Control Equipment: _____ Control Efficiency (%) _____

EMISSION INFORMATION

Pollutant (circle one): SO₂, NO_x, VOC, CO, PM₁₀, or HAP _____
Pollutant Emission Rate: 14.21 lb/yr (specify) _____ (specify units)
Source of Emission Data: (check all appropriate and provide details)
 AP-42 _____ MSDS _____ Other Emission Factor
_____ Emission Model _____ Material Balance _____ Emission Test Data
_____ Other (specify) _____
Cite reference and describe calculation Table 1.3-2

Pollutant (circle one): SO₂, NO_x, VOC, CO, PM₁₀, or HAP _____
Pollutant Emission Rate: 2,791.53 lb/yr (specify) _____ (specify units)
Source of Emission Data: (check all appropriate and provide details)
 AP-42 _____ MSDS _____ Other Emission Factor
_____ Emission Model _____ Material Balance _____ Emission Test Data
_____ Other (specify) _____
Cite reference and describe calculation Table 1.3-2

Pollutant (circle one): SO₂, NO_x, VOC, CO, PM₁₀, or HAP _____
Pollutant Emission Rate: 253.78 lb/yr (specify) _____ (specify units)
Source of Emission Data: (check all appropriate and provide details)
 AP-42 _____ MSDS _____ Other Emission Factor
_____ Emission Model _____ Material Balance _____ Emission Test Data
_____ Other (specify) _____
Cite reference and describe calculation Table 1.3-2

AUDIT OF EMISSION DATA
CALCULATIONS VERIFICATION FORM

Page ___ of ___

SOURCE INFORMATION

Source Description..... Seneca Army Depot, Bldg 319
Source Category..... Boilers SCC..... 1-02-004-01
Fuel Type (if applicable). F.O. #6
Control Equipment: _____ Control Efficiency (%) _____

EMISSION INFORMATION

Pollutant (circle one): SO₂, NO_x, VOC, CO, PM₁₀, or HAP _____
Pollutant Emission Rate: 11,952.80 lb/yr (specify) (specify units)
Source of Emission Data: (check all appropriate and provide details)
 AP-42 _____ MSDS _____ Other Emission Factor
_____ Emission Model _____ Material Balance _____ Emission Test Data
_____ Other (specify) _____
Cite reference and describe calculation Table 1.3-2

Pollutant (circle one): SO₂, NO_x, VOC, CO, PM₁₀, or HAP _____
Pollutant Emission Rate: 742.26 lb/yr (specify) (specify units)
Source of Emission Data: (check all appropriate and provide details)
 AP-42 _____ MSDS _____ Other Emission Factor
_____ Emission Model _____ Material Balance _____ Emission Test Data
_____ Other (specify) _____
Cite reference and describe calculation Table 1.3-2

Pollutant (circle one): SO₂, NO_x, VOC, CO, PM₁₀, or HAP TSP
Pollutant Emission Rate: 863.09 lb/yr (specify) (specify units)
Source of Emission Data: (check all appropriate and provide details)
 AP-42 _____ MSDS _____ Other Emission Factor
_____ Emission Model _____ Material Balance _____ Emission Test Data
_____ Other (specify) _____
Cite reference and describe calculation Table 1.3-2

AUDIT OF EMISSION DATA
CALCULATIONS VERIFICATION FORM

Page ___ of ___

SOURCE INFORMATION

Source Description..... Seneca Army Depot, Bldg 319
Source Category..... Boilers SCC..... 1-02-004-01
Fuel Type (if applicable). F.D. #6
Control Equipment: _____ Control Efficiency (%) _____

EMISSION INFORMATION

Pollutant (circle one): SO₂, NO_x, VOC, CO, PM₁₀, or HAP Arsenic
Pollutant Emission Rate: _____ 8.68 x 10⁻¹ lb/yr (specify units)
Source of Emission Data: (check all appropriate and provide details)
 AP-42 _____ MSDS _____ Other Emission Factor
_____ Emission Model _____ Material Balance _____ Emission Test Data
_____ Other (specify) _____
Cite reference and describe calculation Table 1.3.11

Pollutant (circle one): SO₂, NO_x, VOC, CO, PM₁₀, or HAP Beryllium
Pollutant Emission Rate: _____ 3.20 x 10⁻² lb/yr (specify units)
Source of Emission Data: (check all appropriate and provide details)
 AP-42 _____ MSDS _____ Other Emission Factor
_____ Emission Model _____ Material Balance _____ Emission Test Data
_____ Other (specify) _____
Cite reference and describe calculation Table 1.3-11

Pollutant (circle one): SO₂, NO_x, VOC, CO, PM₁₀, or HAP Cadmium
Pollutant Emission Rate: _____ 1.61 lb/yr (specify units)
Source of Emission Data: (check all appropriate and provide details)
 AP-42 _____ MSDS _____ Other Emission Factor
_____ Emission Model _____ Material Balance _____ Emission Test Data
_____ Other (specify) _____
Cite reference and describe calculation Table 1.3-11

AUDIT OF EMISSION DATA
CALCULATIONS VERIFICATION FORM

Page ___ of ___

SOURCE INFORMATION

Source Description..... Seneca Army Depot, Bldg 319
Source Category..... Borders SCC..... H02-004-01
Fuel Type (if applicable). F.O. #6
Control Equipment: _____ Control Efficiency (%) _____

EMISSION INFORMATION

Pollutant (circle one): SO₂, NO_x, VOC, CO, PM₁₀, or (HAP) Chromium
Pollutant Emission Rate: 9.74 x 10⁻¹ lb/yr (specify) (specify units)
Source of Emission Data: (check all appropriate and provide details)
 AP-42 _____ MSDS _____ Other Emission Factor
_____ Emission Model _____ Material Balance _____ Emission Test Data
_____ Other (specify) _____
Cite reference and describe calculation Table 1.3-11

Pollutant (circle one): SO₂, NO_x, VOC, CO, PM₁₀, or (HAP) lead
Pollutant Emission Rate: 1.48 lb/yr (specify) (specify units)
Source of Emission Data: (check all appropriate and provide details)
 AP-42 _____ MSDS _____ Other Emission Factor
_____ Emission Model _____ Material Balance _____ Emission Test Data
_____ Other (specify) _____
Cite reference and describe calculation Table 1.3-11

Pollutant (circle one): SO₂, NO_x, VOC, CO, PM₁₀, or (HAP) Mercury
Pollutant Emission Rate: 2.44 x 10⁻¹ lb/yr (specify) (specify units)
Source of Emission Data: (check all appropriate and provide details)
 AP-42 _____ MSDS _____ Other Emission Factor
_____ Emission Model _____ Material Balance _____ Emission Test Data
_____ Other (specify) _____
Cite reference and describe calculation Table 1.3-11

AUDIT OF EMISSION DATA
CALCULATIONS VERIFICATION FORM

Page ___ of ___

SOURCE INFORMATION

Source Description..... Seneca Army Depot, Bldg 319
Source Category..... Boilers SCC..... 1-02-004-01
Fuel Type (if applicable). F.O. #6
Control Equipment: _____ Control Efficiency (%) _____

EMISSION INFORMATION

Pollutant (circle one): SO₂, NO_x, VOC, CO, PM₁₀, or (HAP) manganese
Pollutant Emission Rate: _____ 5.63 x 10⁻¹ lb/yr (specify units)
Source of Emission Data: (check all appropriate and provide details)
 AP-42 _____ MSDS _____ Other Emission Factor
_____ Emission Model _____ Material Balance _____ Emission Test Data
_____ Other (specify) _____

Cite reference and describe calculation Table 1.3-11

Pollutant (circle one): SO₂, NO_x, VOC, CO, PM₁₀, or (HAP) Nickel
Pollutant Emission Rate: _____ 1.77 lb/yr (specify units)
Source of Emission Data: (check all appropriate and provide details)
 AP-42 _____ MSDS _____ Other Emission Factor
_____ Emission Model _____ Material Balance _____ Emission Test Data
_____ Other (specify) _____

Cite reference and describe calculation Table 1.3-11

Pollutant (circle one): SO₂, NO_x, VOC, CO, PM₁₀, or (HAP) POM
Pollutant Emission Rate: _____ 6.40 x 10⁻² lb/yr (specify units)
Source of Emission Data: (check all appropriate and provide details)
 AP-42 _____ MSDS _____ Other Emission Factor
_____ Emission Model _____ Material Balance _____ Emission Test Data
_____ Other (specify) _____

Cite reference and describe calculation Table 1.3-11

**AUDIT OF EMISSION DATA
CALCULATIONS VERIFICATION FORM**

Page ___ of ___

SOURCE INFORMATION

Source Description..... Seneca Army Depot, Bldg 319
Source Category..... Boilers SCC..... 1-02-004-01
Fuel Type (if applicable). F.D. #6
Control Equipment: _____ Control Efficiency (%) _____

EMISSION INFORMATION

Pollutant (circle one): SO₂, NO_x, VOC, CO, PM₁₀, or (HAP) Formaldehyde
Pollutant Emission Rate: _____ 3.08 lb/yr (specify units)
Source of Emission Data: (check all appropriate and provide details)
 AP-42 _____ MSDS _____ Other Emission Factor
_____ Emission Model _____ Material Balance _____ Emission Test Data
_____ Other (specify) _____
Cite reference and describe calculation Table 1.3-11

Pollutant (circle one): SO₂, NO_x, VOC, CO, PM₁₀, or (HAP) Copper
Pollutant Emission Rate: _____ 2.13 lb/yr (specify units)
Source of Emission Data: (check all appropriate and provide details)
_____ AP-42 _____ MSDS Other Emission Factor
_____ Emission Model _____ Material Balance _____ Emission Test Data
_____ Other (specify) _____

Cite reference and describe calculation Table 4-1 of Estimating Air Toxic Emissions from Coal & Oil Combustion Sources.
Pollutant (circle one): SO₂, NO_x, VOC, CO, PM₁₀, or (HAP) Antimony
Pollutant Emission Rate: _____ 3.50 x 10⁻¹ lb/yr (specify units)
Source of Emission Data: (check all appropriate and provide details)
 AP-42 _____ MSDS _____ Other Emission Factor
_____ Emission Model _____ Material Balance _____ Emission Test Data
_____ Other (specify) _____
Cite reference and describe calculation Table 1.3-11

AUDIT OF EMISSION DATA
CALCULATIONS VERIFICATION FORM

Page ___ of ___

SOURCE INFORMATION

Source Description..... Seneca army Depot, Bldg 319
Source Category..... Boilers SCC..... 1-02-009-01
Fuel Type (if applicable). _____
Control Equipment: _____ Control Efficiency (%) _____

EMISSION INFORMATION

Pollutant (circle one): SO₂, NO_x, VOC, CO, PM₁₀, or HAP Cobalt
Pollutant Emission Rate: _____ 9.21 x 10⁻¹ lb/yr (specify units)
Source of Emission Data: (check all appropriate and provide details)
 AP-42 _____ MSDS _____ Other Emission Factor
_____ Emission Model _____ Material Balance _____ Emission Test Data
_____ Other (specify) _____
Cite reference and describe calculation Table 1.3-11

Pollutant (circle one): SO₂, NO_x, VOC, CO, PM₁₀, or HAP Selenium
Pollutant Emission Rate: _____ 2.89 x 10⁻¹ lb/yr (specify units)
Source of Emission Data: (check all appropriate and provide details)
 AP-42 _____ MSDS _____ Other Emission Factor
_____ Emission Model _____ Material Balance _____ Emission Test Data
_____ Other (specify) _____
Cite reference and describe calculation Table 1.3-11

Pollutant (circle one): SO₂, NO_x, VOC, CO, PM₁₀, or HAP Ozone
Pollutant Emission Rate: _____ 0.038618 lb/day (specify units)
Source of Emission Data: (check all appropriate and provide details)
 AP-42 _____ MSDS _____ Other Emission Factor
_____ Emission Model _____ Material Balance _____ Emission Test Data
_____ Other (specify) _____
Cite reference and describe calculation Table 1.3-2

AUDIT OF EMISSION DATA
CALCULATIONS VERIFICATION FORM

Page ___ of ___

SOURCE INFORMATION

Source Description..... Seneca Army Depot, Bldg 319
Source Category..... Boilers SCC..... 1-02-00A-01
Fuel Type (if applicable). _____
Control Equipment: _____ Control Efficiency (%) _____

EMISSION INFORMATION

Pollutant (circle one): SO₂, NO_x, VOC, CO, PM₁₀, or HAP OZONE
Pollutant Emission Rate: _____ 7.585666 ^(specify) lb/yr (specify units)
Source of Emission Data: (check all appropriate and provide details)
 AP-42 _____ MSDS _____ Other Emission Factor
_____ Emission Model _____ Material Balance _____ Emission Test Data
_____ Other (specify) _____
Cite reference and describe calculation Table 1.3-2

Pollutant (circle one): SO₂, NO_x, VOC, CO, PM₁₀, or HAP _____
Pollutant Emission Rate: _____ (specify) _____ (specify units)
Source of Emission Data: (check all appropriate and provide details)
_____ AP-42 _____ MSDS _____ Other Emission Factor
_____ Emission Model _____ Material Balance _____ Emission Test Data
_____ Other (specify) _____
Cite reference and describe calculation _____

Pollutant (circle one): SO₂, NO_x, VOC, CO, PM₁₀, or HAP _____
Pollutant Emission Rate: _____ (specify) _____ (specify units)
Source of Emission Data: (check all appropriate and provide details)
_____ AP-42 _____ MSDS _____ Other Emission Factor
_____ Emission Model _____ Material Balance _____ Emission Test Data
_____ Other (specify) _____
Cite reference and describe calculation _____

**AUDIT OF EMISSION DATA
CALCULATIONS VERIFICATION FORM (Continued)**

CALCULATED EMISSIONS

| Pollutant | Audit Calculations (lb/yr) | Original Calculations (lb/yr) | Percent Deviation* |
|-------------------------|----------------------------|-------------------------------|--------------------|
| VOC | 14.21 | 14.21 | 0 |
| NO _x | 2,791.53 | 2,791.53 | 0 |
| CO | 253.78 | 253.78 | 0 |
| SO ₂ | 11,952.80 | 11,952.80 | 0 |
| PM ₁₀ | 742.26 | 742.26 | 0 |
| Pb TSP | 863.09 | 863.09 | 0 |
| HAP's (Specify) | | | |
| Arsenic | 8.68×10^{-1} | 8.68×10^{-1} | 0 |
| Beryllium | 3.20×10^{-2} | 3.20×10^{-2} | 0 |
| Cadmium | 1.61 | 1.61 | 0 |
| Chromium | 9.74×10^{-1} | 9.74×10^{-1} | 0 |
| lead | 1.48 | 1.48 | 0 |
| Mercury | 2.44×10^{-1} | 2.44×10^{-1} | 0 |
| manganese | 5.63×10^{-1} | 5.63×10^{-1} | 0 |
| Nickel | 1.77 | 1.77 | 0 |
| POM | 6.40×10^{-2} | 6.40×10^{-2} | 0 |
| Formaldehyde | 3.08 | 3.08 | 0 |
| Copper | 2.13 | 2.13 | 0 |
| Antimony | 3.50×10^{-1} | 3.50×10^{-1} | 0 |
| Cobalt | 9.21×10^{-1} | 9.21×10^{-1} | 0 |
| Selenium | 2.89×10^{-1} | 2.89×10^{-1} | 0 |
| VOC- ozone | 0.038618 lb/day | 0.038618 lb/day | 0 |
| NO _x - ozone | 7.585666 lb/day | 7.585666 lb/day | 0 |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

*Percent Deviation = [(original - audit)/original] x 100

AUDIT OF EMISSION DATA
CALCULATIONS VERIFICATION FORM

Page ___ of ___

SOURCE INFORMATION

Source Description..... Seneca Army Depot, Bldg. 4
Source Category..... Generators SCC..... 2-02-001-02
Fuel Type (if applicable), Diesel
Control Equipment: _____ Control Efficiency (%) _____

EMISSION INFORMATION

Pollutant (circle one): SO₂, NO_x, VOC, CO, PM₁₀, or HAP _____
Pollutant Emission Rate: _____ 22.78 lb/yr (specify) (specify units)
Source of Emission Data: (check all appropriate and provide details)
 AP-42 _____ MSDS _____ Other Emission Factor
_____ Emission Model _____ Material Balance _____ Emission Test Data
_____ Other (specify) _____
Cite reference and describe calculation *

Pollutant (circle one): SO₂, NO_x, VOC, CO, PM₁₀, or HAP _____
Pollutant Emission Rate: _____ 18.60 lb/yr (specify) (specify units)
Source of Emission Data: (check all appropriate and provide details)
 AP-42 _____ MSDS _____ Other Emission Factor
_____ Emission Model _____ Material Balance _____ Emission Test Data
_____ Other (specify) _____
Cite reference and describe calculation *

Pollutant (circle one): SO₂, NO_x, VOC, CO, PM₁₀, or HAP _____
Pollutant Emission Rate: _____ 60.54 lb/yr (specify) (specify units)
Source of Emission Data: (check all appropriate and provide details)
 AP-42 _____ MSDS _____ Other Emission Factor
_____ Emission Model _____ Material Balance _____ Emission Test Data
_____ Other (specify) _____
Cite reference and describe calculation *

* Section 3.3, Table 3.3-1

AUDIT OF EMISSION DATA
CALCULATIONS VERIFICATION FORM

Page ___ of ___

SOURCE INFORMATION

Source Description..... Seneca Army Depot, Bldg. 4
Source Category..... Generators SCC..... 2-02-001-02
Fuel Type (if applicable). Diesel
Control Equipment: _____ Control Efficiency (%) _____

EMISSION INFORMATION

Pollutant (circle one): SO₂, NO_x, VOC, CO, PM₁₀, or HAP _____
Pollutant Emission Rate: _____ 279.73 lb/yr (specify units)
Source of Emission Data: (check all appropriate and provide details)
 AP-42 _____ MSDS _____ Other Emission Factor
_____ Emission Model _____ Material Balance _____ Emission Test Data
_____ Other (specify) _____
Cite reference and describe calculation * _____

Pollutant (circle one): SO₂, NO_x, VOC, CO, ~~PM₁₀~~^{TSP}, or HAP _____
Pollutant Emission Rate: _____ 19.98 lb/yr (specify units)
Source of Emission Data: (check all appropriate and provide details)
 AP-42 _____ MSDS _____ Other Emission Factor
_____ Emission Model _____ Material Balance _____ Emission Test Data
_____ Other (specify) _____
Cite reference and describe calculation * _____

Pollutant (circle one): SO₂, NO_x, VOC, CO, PM₁₀, or HAP Benzene
Pollutant Emission Rate: _____ 0.0215118151 lb/yr (specify units)
Source of Emission Data: (check all appropriate and provide details)
 AP-42 _____ MSDS _____ Other Emission Factor
_____ Emission Model _____ Material Balance _____ Emission Test Data
_____ Other (specify) _____
Cite reference and describe calculation * _____

* Section 3.3, Table 3.3-1

AUDIT OF EMISSION DATA
CALCULATIONS VERIFICATION FORM

Page ___ of ___

SOURCE INFORMATION

Source Description..... Seneca Army Depot, Bldg. 4
Source Category..... Generators SCC..... 2-02-001-02
Fuel Type (if applicable). Diesel
Control Equipment: _____ Control Efficiency (%) _____

EMISSION INFORMATION

Pollutant (circle one): SO₂, NO_x, VOC, CO, PM₁₀, or HAP Toluene

Pollutant Emission Rate: _____ 0.0094301526 lb/yr (specify units)

Source of Emission Data: (check all appropriate and provide details)

AP-42 _____ MSDS _____ Other Emission Factor
_____ Emission Model _____ Material Balance _____ Emission Test Data
_____ Other (specify) _____

Cite reference and describe calculation *

Pollutant (circle one): SO₂, NO_x, VOC, CO, PM₁₀, or HAP Xylenes (Isomers)

Pollutant Emission Rate: _____ 0.0065711332 lb/yr (specify units)

Source of Emission Data: (check all appropriate and provide details)

AP-42 _____ MSDS _____ Other Emission Factor
_____ Emission Model _____ Material Balance _____ Emission Test Data
_____ Other (specify) _____

Cite reference and describe calculation *

Pollutant (circle one): SO₂, NO_x, VOC, CO, PM₁₀, or HAP Formaldehyde

Pollutant Emission Rate: _____ 0.0272067972 lb/yr (specify units)

Source of Emission Data: (check all appropriate and provide details)

AP-42 _____ MSDS _____ Other Emission Factor
_____ Emission Model _____ Material Balance _____ Emission Test Data
_____ Other (specify) _____

Cite reference and describe calculation *

* Section 3.3, Table 3.3-1

AUDIT OF EMISSION DATA
CALCULATIONS VERIFICATION FORM

Page ___ of ___

SOURCE INFORMATION

Source Description..... Seneca Army Depot, Bldg. 4
Source Category..... Generators SCC..... 2-02-001-02
Fuel Type (if applicable). Diesel
Control Equipment: _____ Control Efficiency (%) _____

EMISSION INFORMATION

Pollutant (circle one): SO₂, NO_x, VOC, CO, PM₁₀, or HAP 1,3-Butadiene
Pollutant Emission Rate: _____ 0.0009015134 lb/yr (specify units)
Source of Emission Data: (check all appropriate and provide details)
 AP-42 _____ MSDS _____ Other Emission Factor
_____ Emission Model _____ Material Balance _____ Emission Test Data
_____ Other (specify) _____
Cite reference and describe calculation *

Pollutant (circle one): SO₂, NO_x, VOC, CO, PM₁₀, or HAP Acetaldehyde
Pollutant Emission Rate: _____ 0.0176844182 lb/yr (specify units)
Source of Emission Data: (check all appropriate and provide details)
 AP-42 _____ MSDS _____ Other Emission Factor
_____ Emission Model _____ Material Balance _____ Emission Test Data
_____ Other (specify) _____
Cite reference and describe calculation *

Pollutant (circle one): SO₂, NO_x, VOC, CO, PM₁₀, or HAP Acrolein
Pollutant Emission Rate: _____ 0.0021327362 lb/yr (specify units)
Source of Emission Data: (check all appropriate and provide details)
 AP-42 _____ MSDS _____ Other Emission Factor
_____ Emission Model _____ Material Balance _____ Emission Test Data
_____ Other (specify) _____
Cite reference and describe calculation *

* Section 3.3, Table 3.3-1

AUDIT OF EMISSION DATA
CALCULATIONS VERIFICATION FORM

Page ___ of ___

SOURCE INFORMATION

Source Description..... Seneca Army Depot, Bldg. 4
Source Category..... Generators SCC..... 2-02-001-02
Fuel Type (if applicable). Diesel
Control Equipment: _____ Control Efficiency (%) _____

EMISSION INFORMATION

Pollutant (circle one): SO₂, NO_x, VOC, CO, PM₁₀, or HAP Naphthalene
Pollutant Emission Rate: 0.0019552003 lb/yr (specify) (specify units)
Source of Emission Data: (check all appropriate and provide details)
 AP-42 _____ MSDS _____ Other Emission Factor
_____ Emission Model _____ Material Balance _____ Emission Test Data
_____ Other (specify) _____
Cite reference and describe calculation *

Pollutant (circle one): SO₂, NO_x, VOC, CO, PM₁₀, or HAP Ozone season
Pollutant Emission Rate: 0.0618959584 lb/day (specify) (specify units)
Source of Emission Data: (check all appropriate and provide details)
 AP-42 _____ MSDS _____ Other Emission Factor
_____ Emission Model _____ Material Balance _____ Emission Test Data
_____ Other (specify) _____
Cite reference and describe calculation *

Pollutant (circle one): SO₂, NO_x, VOC, CO, PM₁₀, or HAP Ozone Season
Pollutant Emission Rate: 0.7601258052 lb/day (specify) (specify units)
Source of Emission Data: (check all appropriate and provide details)
 AP-42 _____ MSDS _____ Other Emission Factor
_____ Emission Model _____ Material Balance _____ Emission Test Data
_____ Other (specify) _____
Cite reference and describe calculation *

* Section 3.3, Table 3.3-1

**AUDIT OF EMISSION DATA
CALCULATIONS VERIFICATION FORM (Continued)**

CALCULATED EMISSIONS

| Pollutant | Audit Calculations (lb/yr) | Original Calculations (lb/yr) | Percent Deviation* |
|------------------------------|-------------------------------|----------------------------------|-----------------------|
| VOC | 22.78 | 22.78 | 0 |
| NO _x | 279.72 | 279.72 | 0 |
| CO | 60.54 | 60.54 | 0 |
| SO ₂ | 18.60 | 18.60 | 0 |
| PM ₁₀ TSP | 19.98 | 19.98 | 0 |
| Pb | | | |
| HAP's (Specify) | | | |
| Benzene | 0.0215118151 | 0.0215118151 | 0 |
| Toluene | 0.0094301526 | 0.0094301526 | 0 |
| Xylenes (Isomers) | 0.0065711332 | 0.0065711332 | 0 |
| Formaldehyde | 0.0272067972 | 0.0272067972 | 0 |
| 1,3-Butadiene | 0.0009015134 | 0.0009015134 | 0 |
| Acetaldehyde | 0.0176844182 | 0.0176844182 | 0 |
| Acrolein | 0.0021327362 | 0.0021327362 | 0 |
| Naphthalene | 0.0019552003 | 0.0019552003 | 0 |
| VOC ozone season | 0.0618959584 lb/day | 0.0618959584 lb/day | 0 |
| NO _x ozone season | 0.7601258052 lb/day | 0.7601258052 lb/day | 0 |
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*Percent Deviation = [(original - audit)/original] x 100

AUDIT OF EMISSION DATA
CALCULATIONS VERIFICATION FORM

Page ___ of ___

SOURCE INFORMATION

Source Description..... Seneca Army Depot, Bldg. 722 Fire Station
Source Category..... Generators SCC..... 2-02-001-02
Fuel Type (if applicable). Diesel
Control Equipment: _____ Control Efficiency (%) _____

EMISSION INFORMATION

Pollutant (circle one): SO₂, NO_x, VOC, CO, PM₁₀, or HAP _____
Pollutant Emission Rate: _____ 2.43 lb/yr (specify) (specify units)
Source of Emission Data: (check all appropriate and provide details)
 AP-42 _____ MSDS _____ Other Emission Factor
_____ Emission Model _____ Material Balance _____ Emission Test Data
_____ Other (specify) _____
Cite reference and describe calculation * _____

Pollutant (circle one): SO₂, NO_x, VOC, CO, PM₁₀, or HAP _____
Pollutant Emission Rate: _____ 1.98 lb/yr (specify) (specify units)
Source of Emission Data: (check all appropriate and provide details)
 AP-42 _____ MSDS _____ Other Emission Factor
_____ Emission Model _____ Material Balance _____ Emission Test Data
_____ Other (specify) _____
Cite reference and describe calculation * _____

Pollutant (circle one): SO₂, NO_x, VOC, CO, PM₁₀, or HAP _____
Pollutant Emission Rate: _____ 6.45 lb/yr (specify) (specify units)
Source of Emission Data: (check all appropriate and provide details)
 AP-42 _____ MSDS _____ Other Emission Factor
_____ Emission Model _____ Material Balance _____ Emission Test Data
_____ Other (specify) _____
Cite reference and describe calculation * _____

* Section 3.3, Table 3.3-1

AUDIT OF EMISSION DATA
CALCULATIONS VERIFICATION FORM

Page ___ of ___

SOURCE INFORMATION

Source Description..... Seneca Army Depot, Bldg. 722 Fire Station
Source Category..... Generators SCC..... 2-02-001-02
Fuel Type (if applicable). Diesel
Control Equipment: _____ Control Efficiency (%) _____

EMISSION INFORMATION

Pollutant (circle one): SO₂, NO_x, VOC, CO, PM₁₀, or HAP _____
Pollutant Emission Rate: _____ 29.79 lb/yr (specify) (specify units)
Source of Emission Data: (check all appropriate and provide details)
 AP-42 _____ MSDS _____ Other Emission Factor
_____ Emission Model _____ Material Balance _____ Emission Test Data
_____ Other (specify) _____
Cite reference and describe calculation * _____

Pollutant (circle one): SO₂, NO_x, VOC, CO, TSP, or HAP _____
Pollutant Emission Rate: _____ 2.13 lb/yr (specify) (specify units)
Source of Emission Data: (check all appropriate and provide details)
 AP-42 _____ MSDS _____ Other Emission Factor
_____ Emission Model _____ Material Balance _____ Emission Test Data
_____ Other (specify) _____
Cite reference and describe calculation * _____

Pollutant (circle one): SO₂, NO_x, VOC, CO, PM₁₀, or HAP Benzene
Pollutant Emission Rate: _____ 0.00229192 lb/yr (specify) (specify units)
Source of Emission Data: (check all appropriate and provide details)
 AP-42 _____ MSDS _____ Other Emission Factor
_____ Emission Model _____ Material Balance _____ Emission Test Data
_____ Other (specify) _____
Cite reference and describe calculation * _____

* Section 3.3, Table 3.3-1

AUDIT OF EMISSION DATA
CALCULATIONS VERIFICATION FORM

Page ___ of ___

SOURCE INFORMATION

Source Description..... Seneca Army Depot, Bldg. 722 Fire Station
Source Category..... Generators SCC..... 2-02-001-02
Fuel Type (if applicable). Diesel
Control Equipment: _____ Control Efficiency (%) _____

EMISSION INFORMATION

Pollutant (circle one): SO₂, NO_x, VOC, CO, PM₁₀, or HAP Toluene
Pollutant Emission Rate: _____ 0.0010043950 lb/yr (specify units)
Source of Emission Data: (check all appropriate and provide details)
 AP-42 _____ MSDS _____ Other Emission Factor
_____ Emission Model _____ Material Balance _____ Emission Test Data
_____ Other (specify) _____
Cite reference and describe calculation *

Pollutant (circle one): SO₂, NO_x, VOC, CO, PM₁₀, or HAP Xylenes (Isomers)
Pollutant Emission Rate: _____ 0.0006998840 lb/yr (specify units)
Source of Emission Data: (check all appropriate and provide details)
 AP-42 _____ MSDS _____ Other Emission Factor
_____ Emission Model _____ Material Balance _____ Emission Test Data
_____ Other (specify) _____
Cite reference and describe calculation *

Pollutant (circle one): SO₂, NO_x, VOC, CO, PM₁₀, or HAP Formaldehyde
Pollutant Emission Rate: _____ 0.0028977654 lb/yr (specify units)
Source of Emission Data: (check all appropriate and provide details)
 AP-42 _____ MSDS _____ Other Emission Factor
_____ Emission Model _____ Material Balance _____ Emission Test Data
_____ Other (specify) _____
Cite reference and describe calculation *

* Section 3.3, Table 3.3-1

AUDIT OF EMISSION DATA
CALCULATIONS VERIFICATION FORM

Page ___ of ___

SOURCE INFORMATION

Source Description..... Seneca Army Depot, Bldg. 722 Fire Station
Source Category..... Generators SCC..... 2-02-001-02
Fuel Type (if applicable). Diesel
Control Equipment: _____ Control Efficiency (%) _____

EMISSION INFORMATION

Pollutant (circle one): SO₂, NO_x, VOC, CO, PM₁₀, or HAP 1,3-Butadiene
(specify)
Pollutant Emission Rate: 0.00009601926/yr (specify units)
Source of Emission Data: (check all appropriate and provide details)
 AP-42 _____ MSDS _____ Other Emission Factor
_____ Emission Model _____ Material Balance _____ Emission Test Data
_____ Other (specify) _____
Cite reference and describe calculation *

Pollutant (circle one): SO₂, NO_x, VOC, CO, PM₁₀, or HAP Acetaldehyde
(specify)
Pollutant Emission Rate: 0.0018835475 lb/yr (specify units)
Source of Emission Data: (check all appropriate and provide details)
 AP-42 _____ MSDS _____ Other Emission Factor
_____ Emission Model _____ Material Balance _____ Emission Test Data
_____ Other (specify) _____
Cite reference and describe calculation *

Pollutant (circle one): SO₂, NO_x, VOC, CO, PM₁₀, or HAP Acrolein
(specify)
Pollutant Emission Rate: 0.0002271553 lb/yr (specify units)
Source of Emission Data: (check all appropriate and provide details)
 AP-42 _____ MSDS _____ Other Emission Factor
_____ Emission Model _____ Material Balance _____ Emission Test Data
_____ Other (specify) _____
Cite reference and describe calculation *

* Section 3.3, Table 3.3-1

AUDIT OF EMISSION DATA
CALCULATIONS VERIFICATION FORM

Page ___ of ___

SOURCE INFORMATION

Source Description..... Seneca Army Depot, Bldg. 722 Fire Station
Source Category..... Generators SCC..... 2-02-001-02
Fuel Type (if applicable). Diesel
Control Equipment: _____ Control Efficiency (%) _____

EMISSION INFORMATION

Pollutant (circle one): SO₂, NO_x, VOC, CO, PM₁₀, or **HAP** Naphthalene
Pollutant Emission Rate: _____ 0.0002082462 lb/yr (specify units)
Source of Emission Data: (check all appropriate and provide details)
 AP-42 _____ MSDS _____ Other Emission Factor
_____ Emission Model _____ Material Balance _____ Emission Test Data
_____ Other (specify) _____
Cite reference and describe calculation *

Pollutant (circle one): SO₂, NO_x, **VOC**, CO, PM₁₀, or HAP Ozone Season
Pollutant Emission Rate: _____ 0.0065924689 lb/day (specify units)
Source of Emission Data: (check all appropriate and provide details)
 AP-42 _____ MSDS _____ Other Emission Factor
_____ Emission Model _____ Material Balance _____ Emission Test Data
_____ Other (specify) _____
Cite reference and describe calculation *

Pollutant (circle one): SO₂, **NO_x**, VOC, CO, PM₁₀, or HAP Ozone Season
Pollutant Emission Rate: _____ 0.0809601449 lb/day (specify units)
Source of Emission Data: (check all appropriate and provide details)
 AP-42 _____ MSDS _____ Other Emission Factor
_____ Emission Model _____ Material Balance _____ Emission Test Data
_____ Other (specify) _____
Cite reference and describe calculation *

* Section 3.3, Table 3.3-1

**AUDIT OF EMISSION DATA
CALCULATIONS VERIFICATION FORM**

Page ___ of ___

SOURCE INFORMATION

Source Description..... Seneca Army Depot, Bldg 113, 606
Source Category..... USTs SCC..... 4-04-004-14
Fuel Type (if applicable). Fuel Oil #2
Control Equipment: _____ Control Efficiency (%) _____

EMISSION INFORMATION

Pollutant (circle one): SO₂, NO_x, **VOC**, CO, PM₁₀, or HAP _____ (specify)
Pollutant Emission Rate: 0.09 lb/yr (specify units)
Source of Emission Data: (check all appropriate and provide details)
 AP-42 _____ MSDS _____ Other Emission Factor
_____ Emission Model _____ Material Balance _____ Emission Test Data
_____ Other (specify) _____
Cite reference and describe calculation Section 12.3

Pollutant (circle one): SO₂, NO_x, VOC, CO, PM₁₀, or HAP _____ (specify)
Pollutant Emission Rate: _____ (specify units)
Source of Emission Data: (check all appropriate and provide details)
_____ AP-42 _____ MSDS _____ Other Emission Factor
_____ Emission Model _____ Material Balance _____ Emission Test Data
_____ Other (specify) _____
Cite reference and describe calculation _____

Pollutant (circle one): SO₂, NO_x, VOC, CO, PM₁₀, or HAP _____ (specify)
Pollutant Emission Rate: _____ (specify units)
Source of Emission Data: (check all appropriate and provide details)
_____ AP-42 _____ MSDS _____ Other Emission Factor
_____ Emission Model _____ Material Balance _____ Emission Test Data
_____ Other (specify) _____
Cite reference and describe calculation _____

AUDIT OF EMISSION DATA
CALCULATIONS VERIFICATION FORM

Page ___ of ___

SOURCE INFORMATION

Source Description..... Seneca Army Depot, Bldg 120
Source Category..... LSTS SCC..... 4-04-004-14
Fuel Type (if applicable). Diesel Fuel
Control Equipment: _____ Control Efficiency (%) _____

EMISSION INFORMATION

Pollutant (circle one): SO₂, NO_x, VOC, CO, PM₁₀, or HAP _____
(specify)
Pollutant Emission Rate: _____ 0.73 lb/yr _____ (specify units)
Source of Emission Data: (check all appropriate and provide details)
 AP-42 _____ MSDS _____ Other Emission Factor
_____ Emission Model _____ Material Balance _____ Emission Test Data
_____ Other (specify) _____
Cite reference and describe calculation Section 12.3

Pollutant (circle one): SO₂, NO_x, VOC, CO, PM₁₀, or HAP _____ OZON
(specify)
Pollutant Emission Rate: _____ 0.0012266 lb/day _____ (specify units)
Source of Emission Data: (check all appropriate and provide details)
 AP-42 _____ MSDS _____ Other Emission Factor
_____ Emission Model _____ Material Balance _____ Emission Test Data
_____ Other (specify) _____
Cite reference and describe calculation Section 12.3

Pollutant (circle one): SO₂, NO_x, VOC, CO, PM₁₀, or HAP _____
(specify)
Pollutant Emission Rate: _____ (specify units)
Source of Emission Data: (check all appropriate and provide details)
_____ AP-42 _____ MSDS _____ Other Emission Factor
_____ Emission Model _____ Material Balance _____ Emission Test Data
_____ Other (specify) _____
Cite reference and describe calculation _____

AUDIT OF EMISSION DATA
CALCULATIONS VERIFICATION FORM

Page ___ of ___

SOURCE INFORMATION

Source Description..... Seruca Army Depot, Bldg 718
Source Category..... USTs SCC..... NIA
Fuel Type (if applicable). Fuel Oil #6
Control Equipment: _____ Control Efficiency (%) _____

EMISSION INFORMATION

Pollutant (circle one): SO₂, NO_x, VOC, CO, PM₁₀, or HAP _____ (specify)
Pollutant Emission Rate: 0.02 lb/yr (specify units)
Source of Emission Data: (check all appropriate and provide details)
 AP-42 _____ MSDS _____ Other Emission Factor
_____ Emission Model _____ Material Balance _____ Emission Test Data
_____ Other (specify) _____
Cite reference and describe calculation Section 12.3

Pollutant (circle one): SO₂, NO_x, VOC, CO, PM₁₀, or HAP _____ (specify)
Pollutant Emission Rate: _____ (specify units)
Source of Emission Data: (check all appropriate and provide details)
_____ AP-42 _____ MSDS _____ Other Emission Factor
_____ Emission Model _____ Material Balance _____ Emission Test Data
_____ Other (specify) _____
Cite reference and describe calculation _____

Pollutant (circle one): SO₂, NO_x, VOC, CO, PM₁₀, or HAP _____ (specify)
Pollutant Emission Rate: _____ (specify units)
Source of Emission Data: (check all appropriate and provide details)
_____ AP-42 _____ MSDS _____ Other Emission Factor
_____ Emission Model _____ Material Balance _____ Emission Test Data
_____ Other (specify) _____
Cite reference and describe calculation _____

AUDIT OF EMISSION DATA
CALCULATIONS VERIFICATION FORM

Page ___ of ___

SOURCE INFORMATION

Source Description..... Seneca Army Depot, Bldg 334
Source Category..... ASTs SCC..... 4-03-001-03
Fuel Type (if applicable). Gasoline
Control Equipment: _____ Control Efficiency (%) _____

EMISSION INFORMATION

Pollutant (circle one): SO₂, NO_x, VOC, CO, PM₁₀, or HAP _____ (specify)
Pollutant Emission Rate: _____ 75.18 lb/yr (specify units)
Source of Emission Data: (check all appropriate and provide details)
 AP-42 _____ MSDS _____ Other Emission Factor
_____ Emission Model _____ Material Balance _____ Emission Test Data
_____ Other (specify) _____
Cite reference and describe calculation Section 12.3

Pollutant (circle one): SO₂, NO_x, VOC, CO, PM₁₀, or HAP _____ Ozone (specify)
Pollutant Emission Rate: _____ 0.578199 lb/yr (specify units)
Source of Emission Data: (check all appropriate and provide details)
 AP-42 _____ MSDS _____ Other Emission Factor
_____ Emission Model _____ Material Balance _____ Emission Test Data
_____ Other (specify) _____
Cite reference and describe calculation Section 12.3

Pollutant (circle one): SO₂, NO_x, VOC, CO, PM₁₀, or HAP _____ Hexane (specify)
Pollutant Emission Rate: _____ 2.94 lb/day (specify units)
Source of Emission Data: (check all appropriate and provide details)
_____ AP-42 _____ MSDS Other Emission Factor
_____ Emission Model _____ Material Balance _____ Emission Test Data
_____ Other (specify) _____
Cite reference and describe calculation Specification Profile 1190

AUDIT OF EMISSION DATA
CALCULATIONS VERIFICATION FORM

Page ___ of ___

SOURCE INFORMATION

Source Description..... Seneca Army Depot, Bldg 334
Source Category..... ASTS SCC..... 4-03-001-03
Fuel Type (if applicable). Gasoline
Control Equipment: _____ Control Efficiency (%) _____

EMISSION INFORMATION

Pollutant (circle one): SO₂, NO_x, VOC, CO, PM₁₀, or HAP Benzene (specify)
Pollutant Emission Rate: 2.44 lb/yr (specify units)

Source of Emission Data: (check all appropriate and provide details)
 AP-42 MSDS Other Emission Factor
 Emission Model Material Balance Emission Test Data
 Other (specify) _____

Cite reference and describe calculation Speciation Profile #1190

Pollutant (circle one): SO₂, NO_x, VOC, CO, PM₁₀, or HAP Toluene (specify)
Pollutant Emission Rate: 11.44 lb/yr (specify units)

Source of Emission Data: (check all appropriate and provide details)
 AP-42 MSDS Other Emission Factor
 Emission Model Material Balance Emission Test Data
 Other (specify) _____

Cite reference and describe calculation Speciation Profile #1190

Pollutant (circle one): SO₂, NO_x, VOC, CO, PM₁₀, or HAP _____ (specify)
Pollutant Emission Rate: _____ (specify units)

Source of Emission Data: (check all appropriate and provide details)
 AP-42 MSDS Other Emission Factor
 Emission Model Material Balance Emission Test Data
 Other (specify) _____

Cite reference and describe calculation _____

AUDIT OF EMISSION DATA
CALCULATIONS VERIFICATION FORM

Page ___ of ___

SOURCE INFORMATION

Source Description..... Seneca Army Depot, Bldg 122
Source Category..... Degreasing Op. SCC..... 4-01-003-35
Fuel Type (if applicable). _____
Control Equipment: _____ Control Efficiency (%) _____

EMISSION INFORMATION

Pollutant (circle one): SO₂, NO_x, VOC, CO, PM₁₀, or HAP _____
(specify)
Pollutant Emission Rate: 53.64 lb/yr (specify units)
Source of Emission Data: (check all appropriate and provide details)
 AP-42 MSDS Other Emission Factor
 Emission Model Material Balance Emission Test Data
 Other (specify) _____
Cite reference and describe calculation _____

Pollutant (circle one): SO₂, NO_x, VOC, CO, PM₁₀, or HAP Toluene
(specify)
Pollutant Emission Rate: 0.269568 lb/yr (specify units)
Source of Emission Data: (check all appropriate and provide details)
 AP-42 MSDS Other Emission Factor
 Emission Model Material Balance Emission Test Data
 Other (specify) _____
Cite reference and describe calculation _____

Pollutant (circle one): SO₂, NO_x, VOC, CO, PM₁₀, or HAP Xylenes (Isomers)
(specify)
Pollutant Emission Rate: 0.539136 lb/yr (specify units)
Source of Emission Data: (check all appropriate and provide details)
 AP-42 MSDS Other Emission Factor
 Emission Model Material Balance Emission Test Data
 Other (specify) _____
Cite reference and describe calculation _____

**AUDIT OF EMISSION DATA
CALCULATIONS VERIFICATION FORM**

Page ___ of ___

SOURCE INFORMATION

Source Description..... Seneca Army Depot, Bldg 122
Source Category..... Degreasing Op. SCC..... 4-01-003-35
Fuel Type (if applicable). _____
Control Equipment: _____ Control Efficiency (%) _____

EMISSION INFORMATION

Pollutant (circle one): SO₂, NO_x, VOC, CO, PM₁₀, or HAP Ethyl benzene
(specify)
Pollutant Emission Rate: 0.269568 lb/yr (specify units)
Source of Emission Data: (check all appropriate and provide details)
 AP-42 MSDS Other Emission Factor
 Emission Model Material Balance Emission Test Data
 Other (specify) _____
Cite reference and describe calculation _____

Pollutant (circle one): SO₂, NO_x, VOC, CO, PM₁₀, or HAP Tetrachloroethylene
(specify)
Pollutant Emission Rate: 0.269568 lb/yr (specify units)
Source of Emission Data: (check all appropriate and provide details)
 AP-42 MSDS Other Emission Factor
 Emission Model Material Balance Emission Test Data
 Other (specify) _____
Cite reference and describe calculation _____

Pollutant (circle one): SO₂, NO_x, VOC, CO, PM₁₀, or HAP Methyl Chloroform
(specify)
Pollutant Emission Rate: 0.269568 lb/yr (specify units)
Source of Emission Data: (check all appropriate and provide details)
 AP-42 MSDS Other Emission Factor
 Emission Model Material Balance Emission Test Data
 Other (specify) _____
Cite reference and describe calculation _____

AUDIT OF EMISSION DATA
CALCULATIONS VERIFICATION FORM

Page ___ of ___

SOURCE INFORMATION

Source Description..... Seneca Army Depot, Bldg 122
Source Category..... Degreasing Op. SCC..... 4-01-003-35
Fuel Type (if applicable)..... _____
Control Equipment: _____ Control Efficiency (%) _____

EMISSION INFORMATION

Pollutant (circle one): SO₂, NO_x, **VOC**, CO, PM₁₀, or HAP Ozone Season
Pollutant Emission Rate: _____ 0.1457718261 lb/day (specify units)
Source of Emission Data: (check all appropriate and provide details)
 AP-42 _____ MSDS _____ Other Emission Factor
_____ Emission Model _____ Material Balance _____ Emission Test Data
_____ Other (specify) _____

Cite reference and describe calculation _____

Pollutant (circle one): SO₂, NO_x, VOC, CO, PM₁₀, or HAP _____
Pollutant Emission Rate: _____ (specify units)
Source of Emission Data: (check all appropriate and provide details)
_____ AP-42 _____ MSDS _____ Other Emission Factor
_____ Emission Model _____ Material Balance _____ Emission Test Data
_____ Other (specify) _____

Cite reference and describe calculation _____

Pollutant (circle one): SO₂, NO_x, VOC, CO, PM₁₀, or HAP _____
Pollutant Emission Rate: _____ (specify units)
Source of Emission Data: (check all appropriate and provide details)
_____ AP-42 _____ MSDS _____ Other Emission Factor
_____ Emission Model _____ Material Balance _____ Emission Test Data
_____ Other (specify) _____

Cite reference and describe calculation _____

**AUDIT OF EMISSION DATA
CALCULATIONS VERIFICATION FORM**

Page ___ of ___

SOURCE INFORMATION

Source Description..... Seneca Army Depot - Bldg 317 (Comis)
Source Category..... Degreasers SCC..... N/A
Fuel Type (if applicable). _____
Control Equipment: _____ Control Efficiency (%) _____

EMISSION INFORMATION

Pollutant (circle one): SO₂, NO_x, VOC, CO, PM₁₀, or HAP _____
Pollutant Emission Rate: 135.24 lb/yr (specify) _____ (specify units)

Source of Emission Data: (check all appropriate and provide details)

_____ AP-42 X MSDS _____ Other Emission Factor
_____ Emission Model X Material Balance _____ Emission Test Data
_____ Other (specify) _____

Cite reference and describe calculation solvent used minus solvent disposed, multiplied by density of solvent & % by wgt VOC.

Pollutant (circle one): SO₂, NO_x, VOC, CO, PM₁₀, or HAP see following page
Pollutant Emission Rate: see following page (specify) _____ (specify units)

Source of Emission Data: (check all appropriate and provide details)

_____ AP-42 X MSDS _____ Other Emission Factor
_____ Emission Model _____ Material Balance _____ Emission Test Data
_____ Other (specify) _____

Cite reference and describe calculation multiply weight of product (used minus disposed) by % by wgt HAP

Pollutant (circle one): SO₂, NO_x, VOC, CO, PM₁₀, or HAP _____
Pollutant Emission Rate: _____ (specify) _____ (specify units)

Source of Emission Data: (check all appropriate and provide details)

_____ AP-42 _____ MSDS _____ Other Emission Factor
_____ Emission Model _____ Material Balance _____ Emission Test Data
_____ Other (specify) _____

Cite reference and describe calculation _____

**AUDIT OF EMISSION DATA
CALCULATIONS VERIFICATION FORM (Continued)**

CALCULATED EMISSIONS

| Pollutant | Audit Calculations (lb/yr) | Original Calculations (lb/yr) | Percent Deviation* |
|------------------|----------------------------|-------------------------------|--------------------|
| VOC | 135.24 | 135.24 | 0 |
| NO _x | | | |
| CO | | | |
| SO ₂ | | | |
| PM ₁₀ | | | |
| Pb | | | |
| HAP's (Specify) | | | |
| toluene | 86.53 | 86.53 | 0 |
| Xylene | 14.36 | 14.36 | 0 |
| Acetone | 26.51 | 26.51 | 0 |
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*Percent Deviation = ((original - audit)/original) x 100

AUDIT OF EMISSION DATA
CALCULATIONS VERIFICATION FORM

Page ___ of ___

SOURCE INFORMATION

Source Description..... Seneca Army Depot, Bldg 319
Source Category..... Degreasing Op. SCC..... 4-01-003-35
Fuel Type (if applicable).....
Control Equipment: _____ Control Efficiency (%) _____

EMISSION INFORMATION

Pollutant (circle one): SO₂, NO_x, VOC, CO, PM₁₀, or HAP _____
(specify)
Pollutant Emission Rate: 41.26 lb/yr (specify units)
Source of Emission Data: (check all appropriate and provide details)
 AP-42 _____ MSDS _____ Other Emission Factor
_____ Emission Model _____ Material Balance _____ Emission Test Data
_____ Other (specify) _____
Cite reference and describe calculation _____

Pollutant (circle one): SO₂, NO_x, VOC, CO, PM₁₀, or HAP _____
(specify)
Pollutant Emission Rate: _____ (specify units)
Source of Emission Data: (check all appropriate and provide details)
_____ AP-42 _____ MSDS _____ Other Emission Factor
_____ Emission Model _____ Material Balance _____ Emission Test Data
_____ Other (specify) _____
Cite reference and describe calculation _____

Pollutant (circle one): SO₂, NO_x, VOC, CO, PM₁₀, or HAP _____
(specify)
Pollutant Emission Rate: _____ (specify units)
Source of Emission Data: (check all appropriate and provide details)
_____ AP-42 _____ MSDS _____ Other Emission Factor
_____ Emission Model _____ Material Balance _____ Emission Test Data
_____ Other (specify) _____
Cite reference and describe calculation _____

AUDIT OF EMISSION DATA
CALCULATIONS VERIFICATION FORM

Page ___ of ___

SOURCE INFORMATION

Source Description..... Seneca Army Depot, Bldg 120 - Public Works Gas Station
Source Category..... Gas Station SCC..... 4-06-003-06
4-06-003-07
Fuel Type (if applicable). Mogas 4-06-004-01
4-06-004-02
Control Equipment: _____ Control Efficiency (%) _____

EMISSION INFORMATION

Pollutant (circle one): SO₂, NO_x, VOC, CO, PM₁₀, or HAP _____
Pollutant Emission Rate: _____ 1739.18 lb/yr (specify) _____ (specify units)
Source of Emission Data: (check all appropriate and provide details)
 AP-42 _____ MSDS _____ Other Emission Factor
_____ Emission Model _____ Material Balance _____ Emission Test Data
_____ Other (specify) _____

Cite reference and describe calculation * _____

Pollutant (circle one): SO₂, NO_x, VOC, CO, PM₁₀, or HAP Hexane
Pollutant Emission Rate: _____ 68.0017737956 lb/yr (specify) _____ (specify units)
Source of Emission Data: (check all appropriate and provide details)
_____ AP-42 _____ MSDS Other Emission Factor
_____ Emission Model _____ Material Balance _____ Emission Test Data
_____ Other (specify) _____

Cite reference and describe calculation Profile 1190 _____

Pollutant (circle one): SO₂, NO_x, VOC, CO, PM₁₀, or HAP Ozone Season
Pollutant Emission Rate: _____ 4.9302281370 lb/day (specify) _____ (specify units)
Source of Emission Data: (check all appropriate and provide details)
 AP-42 _____ MSDS _____ Other Emission Factor
_____ Emission Model _____ Material Balance _____ Emission Test Data
_____ Other (specify) _____

Cite reference and describe calculation * _____

* Section 4.4, EPA Technical Guidance - Stage II Vapor Recovery Systems for control of Vehicle Refueling Emissions at Gasoline Dispensing Facilities. Volume 1: EPA-4013-91 022A

AUDIT OF EMISSION DATA
CALCULATIONS VERIFICATION FORM

Page ___ of ___

SOURCE INFORMATION

Source Description..... Seneca Army Depot
Source Category..... ATO (C-141) scc..... 2-76-010-14
Fuel Type (if applicable).....
Control Equipment: _____ Control Efficiency (%) _____

EMISSION INFORMATION

Pollutant (circle one): SO₂, NO_x, VOC, CO, PM₁₀, or HAP _____ (specify)
Pollutant Emission Rate: 1052.16 lb/yr (specify units)
Source of Emission Data: (check all appropriate and provide details)
 AP-42 _____ MSDS _____ Other Emission Factor
_____ Emission Model _____ Material Balance _____ Emission Test Data
_____ Other (specify) _____
Cite reference and describe calculation Table 11-1-10

Pollutant (circle one): SO₂, NO_x, VOC, CO, PM₁₀, or HAP _____ (specify)
Pollutant Emission Rate: 3610 lb/yr (specify units)
Source of Emission Data: (check all appropriate and provide details)
 AP-42 _____ MSDS _____ Other Emission Factor
_____ Emission Model _____ Material Balance _____ Emission Test Data
_____ Other (specify) _____
Cite reference and describe calculation Table 11-1-10

Pollutant (circle one): SO₂, NO_x, VOC, CO, PM₁₀, or HAP _____ (specify)
Pollutant Emission Rate: 230.4 lb/yr (specify units)
Source of Emission Data: (check all appropriate and provide details)
 AP-42 _____ MSDS _____ Other Emission Factor
_____ Emission Model _____ Material Balance _____ Emission Test Data
_____ Other (specify) _____
Cite reference and describe calculation Table 11-1-10

AUDIT OF EMISSION DATA
CALCULATIONS VERIFICATION FORM

Page ___ of ___

SOURCE INFORMATION

Source Description..... Seneca Army Depot
Source Category..... ATO (C-141) scc..... 2-76-010-14
Fuel Type (if applicable). _____
Control Equipment: _____ Control Efficiency (%) _____

EMISSION INFORMATION

Pollutant (circle one): SO₂, NO_x, VOC, CO, PM₁₀, _____
(specify) _____
Pollutant Emission Rate: 1108.8 lb/yr (specify units)
Source of Emission Data: (check all appropriate and provide details)
 AP-42 _____ MSDS _____ Other Emission Factor
_____ Emission Model _____ Material Balance _____ Emission Test Data
_____ Other (specify) _____
Cite reference and describe calculation _____ Table 11-1-10

Pollutant (circle one): SO₂, NO_x, VOC, CO, PM₁₀, HAP 1,3, Butadiene
(specify) _____
Pollutant Emission Rate: 19.88582 lb/yr (specify units)
Source of Emission Data: (check all appropriate and provide details)
_____ AP-42 _____ MSDS Other Emission Factor
_____ Emission Model _____ Material Balance _____ Emission Test Data
_____ Other (specify) _____
Cite reference and describe calculation _____ Profile 1097

Pollutant (circle one): SO₂, NO_x, VOC, CO, PM₁₀, or HAP Formaldehyde
(specify) _____
Pollutant Emission Rate: 162.8744 lb/yr (specify units)
Source of Emission Data: (check all appropriate and provide details)
_____ AP-42 _____ MSDS Other Emission Factor
_____ Emission Model _____ Material Balance _____ Emission Test Data
_____ Other (specify) _____
Cite reference and describe calculation _____ Profile 1097

SOURCE INFORMATION

Source Description..... Seneca Army Depot
Source Category..... ATO(C-141) SCC..... 2-76-010-14
Fuel Type (if applicable). _____
Control Equipment: _____ Control Efficiency (%) _____

EMISSION INFORMATION

Pollutant (circle one): SO₂, NO_x, VOC, CO, PM₁₀, or HAP Acetaldehyde
(specify)
Pollutant Emission Rate: 50.81933 lb/yr (specify units)
Source of Emission Data: (check all appropriate and provide details)
 AP-42 MSDS Other Emission Factor
 Emission Model Material Balance Emission Test Data
 Other (specify) _____
Cite reference and describe calculation Profile 1097

Pollutant (circle one): SO₂, NO_x, VOC, CO, PM₁₀, or HAP Propionaldehyde
(specify)
Pollutant Emission Rate: 10.31117 lb/yr (specify units)
Source of Emission Data: (check all appropriate and provide details)
 AP-42 MSDS Other Emission Factor
 Emission Model Material Balance Emission Test Data
 Other (specify) _____
Cite reference and describe calculation Profile 1097

Pollutant (circle one): SO₂, NO_x, VOC, CO, PM₁₀, or HAP Acrolein
(specify)
Pollutant Emission Rate: 25.04141 lb/yr (specify units)
Source of Emission Data: (check all appropriate and provide details)
 AP-42 MSDS Other Emission Factor
 Emission Model Material Balance Emission Test Data
 Other (specify) _____
Cite reference and describe calculation Profile 1097

SOURCE INFORMATION

Source Description..... Seneca Army Depot
Source Category..... ATO(C-141) SCC..... 2-76-010-14
Fuel Type (if applicable). _____
Control Equipment: _____ Control Efficiency (%) _____

EMISSION INFORMATION

Pollutant (circle one): SO₂, NO_x, VOC, CO, PM₁₀, or HAP Benzene
(specify)
Pollutant Emission Rate: 21,25363 lb/yr (specify units)
Source of Emission Data: (check all appropriate and provide details)
 AP-42 MSDS Other Emission Factor
 Emission Model Material Balance Emission Test Data
 Other (specify) _____
Cite reference and describe calculation Profile 1097

Pollutant (circle one): SO₂, NO_x, VOC, CO, PM₁₀, or HAP Toluene
(specify)
Pollutant Emission Rate: 5,78688 lb/yr (specify units)
Source of Emission Data: (check all appropriate and provide details)
 AP-42 MSDS Other Emission Factor
 Emission Model Material Balance Emission Test Data
 Other (specify) _____
Cite reference and describe calculation Profile 1097

Pollutant (circle one): SO₂, NO_x, VOC, CO, PM₁₀, or HAP Ethylbenzene
(specify)
Pollutant Emission Rate: 1,893888 lb/yr (specify units)
Source of Emission Data: (check all appropriate and provide details)
 AP-42 MSDS Other Emission Factor
 Emission Model Material Balance Emission Test Data
 Other (specify) _____
Cite reference and describe calculation Profile 1097

AUDIT OF EMISSION DATA
CALCULATIONS VERIFICATION FORM

SOURCE INFORMATION

Source Description..... Seneca Army Depot
Source Category..... ATO (C-141) scc..... 2-76-010-14
Fuel Type (if applicable). _____
Control Equipment: _____ Control Efficiency (%) _____

EMISSION INFORMATION

Pollutant (circle one): SO₂, NO_x, VOC, CO, PM₁₀, or HAP O-xylene
Pollutant Emission Rate: 2.10432 lb/yr (specify) (specify units)
Source of Emission Data: (check all appropriate and provide details)
 AP-42 MSDS Other Emission Factor
 Emission Model Material Balance Emission Test Data
 Other (specify) _____
Cite reference and describe calculation Profile 1097

Pollutant (circle one): SO₂, NO_x, VOC, CO, PM₁₀, or HAP Styrene
Pollutant Emission Rate: 4.313856 lb/yr (specify) (specify units)
Source of Emission Data: (check all appropriate and provide details)
 AP-42 MSDS Other Emission Factor
 Emission Model Material Balance Emission Test Data
 Other (specify) _____
Cite reference and describe calculation Profile 1097

Pollutant (circle one): SO₂, NO_x, VOC, CO, PM₁₀, or HAP Phenol
Pollutant Emission Rate: 2.735616 lb/yr (specify) (specify units)
Source of Emission Data: (check all appropriate and provide details)
 AP-42 MSDS Other Emission Factor
 Emission Model Material Balance Emission Test Data
 Other (specify) _____
Cite reference and describe calculation Profile 1097

AUDIT OF EMISSION DATA
CALCULATIONS VERIFICATION FORM

Page ___ of ___

SOURCE INFORMATION

Source Description..... Seneca Army Depot

Source Category..... ATO (C-141) scc..... 2-76-010-14

Fuel Type (if applicable). _____

Control Equipment: _____ Control Efficiency (%) _____

EMISSION INFORMATION

Pollutant (circle one): SO₂, NO_x, VOC, CO, PM₁₀, or HAP Naphthalene
(specify)

Pollutant Emission Rate: 6.31296 lb/yr (specify units)

Source of Emission Data: (check all appropriate and provide details)

_____ AP-42 _____ MSDS X Other Emission Factor

_____ Emission Model _____ Material Balance _____ Emission Test Data

_____ Other (specify) _____

Cite reference and describe calculation Profile 1097

Pollutant (circle one): SO₂, NO_x, VOC, CO, PM₁₀, or HAP m,p Xylene
(specify)

Pollutant Emission Rate: 3.15648 lb/yr (specify units)

Source of Emission Data: (check all appropriate and provide details)

_____ AP-42 _____ MSDS X Other Emission Factor

_____ Emission Model _____ Material Balance _____ Emission Test Data

_____ Other (specify) _____

Cite reference and describe calculation Profile 1097

Pollutant (circle one): SO₂, NO_x, VOC, CO, PM₁₀, or HAP Heptane
(specify)

Pollutant Emission Rate: 0.736512 lb/yr (specify units)

Source of Emission Data: (check all appropriate and provide details)

_____ AP-42 _____ MSDS X Other Emission Factor

_____ Emission Model _____ Material Balance _____ Emission Test Data

_____ Other (specify) _____

Cite reference and describe calculation Profile 1097

SOURCE INFORMATION

Source Description..... Seneca Army Depot
Source Category..... ATO (C-141) SCC..... 2-76-010-14
Fuel Type (if applicable). _____
Control Equipment: _____ Control Efficiency (%) _____

EMISSION INFORMATION

Pollutant (circle one): SO₂, NO_x, VOC, CO, PM₁₀, or HAP Acetone
Pollutant Emission Rate: 25,357.06 lb/yr (specify) (specify units)
Source of Emission Data: (check all appropriate and provide details)
 AP-42 MSDS Other Emission Factor
 Emission Model Material Balance Emission Test Data
 Other (specify) _____
Cite reference and describe calculation Profile 1097

Pollutant (circle one): SO₂, NO_x, VOC, CO, PM₁₀, or HAP _____
Pollutant Emission Rate: _____ (specify) (specify units)
Source of Emission Data: (check all appropriate and provide details)
 AP-42 MSDS Other Emission Factor
 Emission Model Material Balance Emission Test Data
 Other (specify) _____
Cite reference and describe calculation Profile 1097

Pollutant (circle one): SO₂, NO_x, VOC, CO, PM₁₀, or HAP _____
Pollutant Emission Rate: _____ (specify) (specify units)
Source of Emission Data: (check all appropriate and provide details)
 AP-42 MSDS Other Emission Factor
 Emission Model Material Balance Emission Test Data
 Other (specify) _____
Cite reference and describe calculation Profile 1097

**AUDIT OF EMISSION DATA
CALCULATIONS VERIFICATION FORM (Continued)**

CALCULATED EMISSIONS

| Pollutant | Audit Calculations (lb/yr) | Original Calculations (lb/yr) | Percent Deviation* |
|------------------|----------------------------|-------------------------------|--------------------|
| VOC | 1052.16 | 1052.16 | 0.0% |
| NO _x | 230.4 | 230.4 | 0.0% |
| CO | 1108.8 | 1108.8 | 0.0% |
| SO ₂ | 36.0 | 36.0 | 0% |
| PM ₁₀ | | | |
| Pb | | | |
| HAP's (Specify) | | | |
| 1,3, Butadiene | 19.88582 | 19.88582 | 0.0 % |
| Formaldehyde | 162.8744 | 162.8744 | 0.0 % |
| Acetaldehyde | 50.81933 | 50.81933 | 0.0 % |
| Propionaldehyde | 10.31117 | 10.31117 | 0.0 % |
| Acrolein | 25.04141 | 25.04141 | 0.0 % |
| Benzene | 21.25363 | 21.25363 | 0.0 % |
| Toluene | 5.78688 | 5.78688 | 0.0 % |
| Ethylbenzene | 1.893888 | 1.893888 | 0.0 % |
| o-xylene | 2.10432 | 2.10432 | 0.0 % |
| Styrene | 4.313856 | 4.313856 | 0.0 % |
| Phenol | 2.735616 | 2.735616 | 0.0 % |
| Napthalene | 6.31296 | 6.31296 | 0.0 % |
| m,p xylene | 3.15648 | 3.15648 | 0.0 % |
| Heptane | 0.736512 | 0.736512 | 0.0 % |
| Acetone | 25.35706 | 25.35706 | 0.0 % |
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*Percent Deviation = [(original - audit)/original] x 100

**AUDIT OF EMISSION DATA
CALCULATIONS VERIFICATION FORM**

Page ___ of ___

SOURCE INFORMATION

Source Description..... Seneca Army Depot
Source Category..... ATO (u-21) scc..... 2-76-010-14
Fuel Type (if applicable)..... _____
Control Equipment: _____ Control Efficiency (%) _____

EMISSION INFORMATION

Pollutant (circle one): SO₂, NO_x, VOC, CO, PM₁₀, or HAP _____ (specify)
Pollutant Emission Rate: _____ 35.56 lbs/yr _____ (specify units)
Source of Emission Data: (check all appropriate and provide details)
 AP-42 _____ MSDS _____ Other Emission Factor
_____ Emission Model _____ Material Balance _____ Emission Test Data
_____ Other (specify) _____
Cite reference and describe calculation Table 11-1-10

Pollutant (circle one): SO₂, NO_x, VOC, CO, PM₁₀, or HAP _____ (specify)
Pollutant Emission Rate: _____ 0.84 lbs/yr _____ (specify units)
Source of Emission Data: (check all appropriate and provide details)
 AP-42 _____ MSDS _____ Other Emission Factor
_____ Emission Model _____ Material Balance _____ Emission Test Data
_____ Other (specify) _____
Cite reference and describe calculation Table 11-1-10

Pollutant (circle one): SO₂, NO_x, VOC, CO, PM₁₀, or HAP _____ (specify)
Pollutant Emission Rate: _____ 4.20 lbs/yr _____ (specify units)
Source of Emission Data: (check all appropriate and provide details)
 AP-42 _____ MSDS _____ Other Emission Factor
_____ Emission Model _____ Material Balance _____ Emission Test Data
_____ Other (specify) _____
Cite reference and describe calculation Table 11-1-10

AUDIT OF EMISSION DATA
CALCULATIONS VERIFICATION FORM

SOURCE INFORMATION

Source Description..... Seneca Army Depot
Source Category..... ATO (U-21) scc..... 2-76-010-14
Fuel Type (if applicable).....
Control Equipment: _____ Control Efficiency (%) _____

EMISSION INFORMATION

Pollutant (circle one): SO₂, NO_x, VOC, CO, PM₁₀, or HAP _____ (specify)
Pollutant Emission Rate: 48.44 lbs/yr (specify units)
Source of Emission Data: (check all appropriate and provide details)
 AP-42 _____ MSDS _____ Other Emission Factor
_____ Emission Model _____ Material Balance _____ Emission Test Data
_____ Other (specify) _____
Cite reference and describe calculation Table 11-1-10

Pollutant (circle one): SO₂, NO_x, VOC, CO, PM₁₀, or HAP 1,3, Butadiene (specify)
Pollutant Emission Rate: 0.672084 lb/yr (specify units)
Source of Emission Data: (check all appropriate and provide details)
_____ AP-42 _____ MSDS Other Emission Factor
_____ Emission Model _____ Material Balance _____ Emission Test Data
_____ Other (specify) _____
Cite reference and describe calculation Profile 1097

Pollutant (circle one): SO₂, NO_x, VOC, CO, PM₁₀, or HAP Formaldehyde (specify)
Pollutant Emission Rate: 5.504688 lb/yr (specify units)
Source of Emission Data: (check all appropriate and provide details)
_____ AP-42 _____ MSDS Other Emission Factor
_____ Emission Model _____ Material Balance _____ Emission Test Data
_____ Other (specify) _____
Cite reference and describe calculation Profile 1097

AUDIT OF EMISSION DATA
CALCULATIONS VERIFICATION FORM

SOURCE INFORMATION

Source Description..... Seneca Army Depot
Source Category..... ATO(u-21) scc..... 2-76-010-14
Fuel Type (if applicable).....
Control Equipment: _____ Control Efficiency (%) _____

EMISSION INFORMATION

Pollutant (circle one): SO₂, NO_x, VOC, CO, PM₁₀, or HAP Acetaldehyde
Pollutant Emission Rate: 1.717548 lb/yr (specify) (specify units)
Source of Emission Data: (check all appropriate and provide details)
 AP-42 MSDS Other Emission Factor
 Emission Model Material Balance Emission Test Data
 Other (specify) _____
Cite reference and describe calculation Profile 1097

Pollutant (circle one): SO₂, NO_x, VOC, CO, PM₁₀, or HAP Propionaldehyde
Pollutant Emission Rate: 0.348488 lb/yr (specify) (specify units)
Source of Emission Data: (check all appropriate and provide details)
 AP-42 MSDS Other Emission Factor
 Emission Model Material Balance Emission Test Data
 Other (specify) _____
Cite reference and describe calculation Profile 1097

Pollutant (circle one): SO₂, NO_x, VOC, CO, PM₁₀, or HAP Acrolein
Pollutant Emission Rate: 0.846328 lb/yr (specify) (specify units)
Source of Emission Data: (check all appropriate and provide details)
 AP-42 MSDS Other Emission Factor
 Emission Model Material Balance Emission Test Data
 Other (specify) _____
Cite reference and describe calculation Profile 1097

AUDIT OF EMISSION DATA
CALCULATIONS VERIFICATION FORM

Page ___ of ___

SOURCE INFORMATION

Source Description..... Seneca Army Depot
Source Category..... ATO(u-21) scc..... 2-76-010-14
Fuel Type (if applicable).....
Control Equipment: _____ Control Efficiency (%) _____

EMISSION INFORMATION

Pollutant (circle one): SO₂, NO_x, VOC, CO, PM₁₀, or HAP Benzene
(specify)
Pollutant Emission Rate: 0.7183120 (specify units)
Source of Emission Data: (check all appropriate and provide details)
 AP-42 MSDS Other Emission Factor
 Emission Model Material Balance Emission Test Data
 Other (specify) _____
Cite reference and describe calculation Profile 1097

Pollutant (circle one): SO₂, NO_x, VOC, CO, PM₁₀, or HAP Toluene
(specify)
Pollutant Emission Rate: 0.19558 lb/yr (specify units)
Source of Emission Data: (check all appropriate and provide details)
 AP-42 MSDS Other Emission Factor
 Emission Model Material Balance Emission Test Data
 Other (specify) _____
Cite reference and describe calculation Profile 1097

Pollutant (circle one): SO₂, NO_x, VOC, CO, PM₁₀, or HAP Ethyl benzene
(specify)
Pollutant Emission Rate: 0.064008 lb/yr (specify units)
Source of Emission Data: (check all appropriate and provide details)
 AP-42 MSDS Other Emission Factor
 Emission Model Material Balance Emission Test Data
 Other (specify) _____
Cite reference and describe calculation Profile 1097

AUDIT OF EMISSION DATA
CALCULATIONS VERIFICATION FORM

SOURCE INFORMATION

Source Description..... Seneca Army Depot
Source Category..... ATO(u-21) scc..... 2-76-010-14
Fuel Type (if applicable). _____
Control Equipment: _____ Control Efficiency (%) _____

EMISSION INFORMATION

Pollutant (circle one): SO₂, NO_x, VOC, CO, PM₁₀, or HAP o-Xylene
(specify)
Pollutant Emission Rate: 0.07112 lb/yr (specify units)
Source of Emission Data: (check all appropriate and provide details)
 AP-42 MSDS Other Emission Factor
 Emission Model Material Balance Emission Test Data
 Other (specify) _____
Cite reference and describe calculation Profile 1097

Pollutant (circle one): SO₂, NO_x, VOC, CO, PM₁₀, or HAP Styrene
(specify)
Pollutant Emission Rate: 0.145796 lb/yr (specify units)
Source of Emission Data: (check all appropriate and provide details)
 AP-42 MSDS Other Emission Factor
 Emission Model Material Balance Emission Test Data
 Other (specify) _____
Cite reference and describe calculation Profile 1097

Pollutant (circle one): SO₂, NO_x, VOC, CO, PM₁₀, or HAP Phenol
(specify)
Pollutant Emission Rate: 0.092456 lb/yr (specify units)
Source of Emission Data: (check all appropriate and provide details)
 AP-42 MSDS Other Emission Factor
 Emission Model Material Balance Emission Test Data
 Other (specify) _____
Cite reference and describe calculation Profile 1097

AUDIT OF EMISSION DATA
CALCULATIONS VERIFICATION FORM

SOURCE INFORMATION

Source Description..... Seneca Army Depot
Source Category..... ATO(u-21) SCC..... 2-76-010-14
Fuel Type (if applicable). _____
Control Equipment: _____ Control Efficiency (%) _____

EMISSION INFORMATION

Pollutant (circle one): SO₂, NO_x, VOC, CO, PM₁₀, or HAP Naphthalene
(specify)
Pollutant Emission Rate: 0.21336 lb/yr (specify units)
Source of Emission Data: (check all appropriate and provide details)
 AP-42 MSDS Other Emission Factor
 Emission Model Material Balance Emission Test Data
 Other (specify) _____
Cite reference and describe calculation Profile 1097

Pollutant (circle one): SO₂, NO_x, VOC, CO, PM₁₀, or HAP m:p Xylene
(specify)
Pollutant Emission Rate: 0.10668 lb/yr (specify units)
Source of Emission Data: (check all appropriate and provide details)
 AP-42 MSDS Other Emission Factor
 Emission Model Material Balance Emission Test Data
 Other (specify) _____
Cite reference and describe calculation Profile 1097

Pollutant (circle one): SO₂, NO_x, VOC, CO, PM₁₀, or HAP Heptane
(specify)
Pollutant Emission Rate: 0.024892 lb/yr (specify units)
Source of Emission Data: (check all appropriate and provide details)
 AP-42 MSDS Other Emission Factor
 Emission Model Material Balance Emission Test Data
 Other (specify) _____
Cite reference and describe calculation Profile 1097

AUDIT OF EMISSION DATA
CALCULATIONS VERIFICATION FORM

Page ___ of ___

SOURCE INFORMATION

Source Description..... Seneca Army Depot
Source Category..... ATO(u-21) scc..... 2-76-010-14
Fuel Type (if applicable). _____
Control Equipment: _____ Control Efficiency (%) _____

EMISSION INFORMATION

Pollutant (circle one): SO₂, NO_x, VOC, CO, PM₁₀, or HAP Acetone
(specify)
Pollutant Emission Rate: 0.856996 lb/yr (specify units)
Source of Emission Data: (check all appropriate and provide details)
 AP-42 MSDS Other Emission Factor
 Emission Model Material Balance Emission Test Data
 Other (specify) _____
Cite reference and describe calculation Profile 1097

Pollutant (circle one): SO₂, NO_x, VOC, CO, PM₁₀, or HAP
(specify)
Pollutant Emission Rate: _____ (specify units)
Source of Emission Data: (check all appropriate and provide details)
 AP-42 MSDS Other Emission Factor
 Emission Model Material Balance Emission Test Data
 Other (specify) _____
Cite reference and describe calculation Profile 1097

Pollutant (circle one): SO₂, NO_x, VOC, CO, PM₁₀, or HAP
(specify)
Pollutant Emission Rate: _____ (specify units)
Source of Emission Data: (check all appropriate and provide details)
 AP-42 MSDS Other Emission Factor
 Emission Model Material Balance Emission Test Data
 Other (specify) _____
Cite reference and describe calculation Profile 1097

**AUDIT OF EMISSION DATA
CALCULATIONS VERIFICATION FORM (Continued)**

CALCULATED EMISSIONS

| Pollutant | Audit Calculations (lb/yr) | Original Calculations (lb/yr) | Percent Deviation* |
|---------------------|----------------------------|-------------------------------|--------------------|
| VOC | 35.56 | 35.56 | 0.0% |
| NO _x | 4.20 | 4.20 | 0.0% |
| CO | 48.44 | 48.44 | 0.0% |
| SO ₂ | 0.84 | 0.84 | 0.0% |
| PM ₁₀ | | | |
| Pb | | | |
| HAP's (Specify) | | | |
| 1,3-Butadiene | 0.672084 | 0.672084 | 0.0% |
| Formaldehyde | 5.504688 | 5.504688 | 0.0% |
| Acetaldehyde | 1.717548 | 1.717548 | 0.0% |
| Propionaldehyde | 0.348488 | 0.348488 | 0.0% |
| Acrolein | 0.846328 | 0.846328 | 0.0% |
| Benzene | 0.7183120 | 0.7183120 | 0.0% |
| Toluene | 0.19558 | 0.195580 | 0.0% |
| Ethylbenzene | 0.064008 | 0.064008 | 0.0% |
| o-xylene | 0.071120 | 0.071120 | 0.0% |
| Styrene | 0.145796 | 0.145796 | 0.0% |
| Phenol | 0.092456 | 0.092456 | 0.0% |
| Napthalene | 0.213360 | 0.213360 | 0.0% |
| m-Xylene ; p-Xylene | 0.106680 | 0.106680 | 0.0% |
| Heptane | 0.024892 | 0.024892 | 0.0% |
| Acetone | 0.856996 | 0.856996 | 0.0% |
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*Percent Deviation = [(original - audit)/original] x 100

AUDIT OF EMISSION DATA
CALCULATIONS VERIFICATION FORM

Page ___ of ___

SOURCE INFORMATION

Source Description..... Seneca Army Depot, Bldg 320
Source Category..... Welding SCC..... 3-09-999-99
Fuel Type (if applicable). _____
Control Equipment: _____ Control Efficiency (%) _____

EMISSION INFORMATION

Pollutant (circle one): SO₂, NO_x, VOC, CO, PM₁₀ or HAP _____
(specify)
Pollutant Emission Rate: _____ 0.009 lb/yr (specify units)
Source of Emission Data: (check all appropriate and provide details)
 AP-42 MSDS Other Emission Factor
 Emission Model Material Balance Emission Test Data
 Other (specify) _____
Cite reference and describe calculation * _____

Pollutant (circle one): SO₂, NO_x, VOC, CO, PM₁₀, or HAP Total Particulate
(specify)
Pollutant Emission Rate: _____ 0.009 (specify units)
Source of Emission Data: (check all appropriate and provide details)
 AP-42 MSDS Other Emission Factor
 Emission Model Material Balance Emission Test Data
 Other (specify) _____
Cite reference and describe calculation * _____

Pollutant (circle one): SO₂, NO_x, VOC, CO, PM₁₀, or HAP Cobalt Compounds
(specify)
Pollutant Emission Rate: _____ 0.0000002608 lb/yr (specify units)
Source of Emission Data: (check all appropriate and provide details)
 AP-42 MSDS Other Emission Factor
 Emission Model Material Balance Emission Test Data
 Other (specify) _____
Cite reference and describe calculation * _____

* Section 313 Reporting Issue Paper; Clarification and Guidance for the Metal Fabrication Industry, 14+15.

AUDIT OF EMISSION DATA
CALCULATIONS VERIFICATION FORM

Page ___ of ___

SOURCE INFORMATION

Source Description..... Seneca Army Depot, Bldg 320
Source Category..... Welding SCC..... 3-09-999-99
Fuel Type (if applicable). _____
Control Equipment: _____ Control Efficiency (%) _____

EMISSION INFORMATION

Pollutant (circle one): SO₂, NO_x, VOC, CO, PM₁₀, or HAP Manganese Compounds
Pollutant Emission Rate: _____ 0.0003777357 lb/yr (specify units)
Source of Emission Data: (check all appropriate and provide details)
 AP-42 MSDS Other Emission Factor
 Emission Model Material Balance Emission Test Data
 Other (specify) _____
Cite reference and describe calculation *

Pollutant (circle one): SO₂, NO_x, VOC, CO, PM₁₀, or HAP Chromium Compounds
Pollutant Emission Rate: _____ 0.0000013491 lb/yr (specify units)
Source of Emission Data: (check all appropriate and provide details)
 AP-42 MSDS Other Emission Factor
 Emission Model Material Balance Emission Test Data
 Other (specify) _____
Cite reference and describe calculation *

Pollutant (circle one): SO₂, NO_x, VOC, CO, PM₁₀, or HAP Nickel Compounds
Pollutant Emission Rate: _____ 0.0000015289 lb/yr (specify units)
Source of Emission Data: (check all appropriate and provide details)
 AP-42 MSDS Other Emission Factor
 Emission Model Material Balance Emission Test Data
 Other (specify) _____
Cite reference and describe calculation *

* Section 313 Reporting Issue Paper; Clarification and Guidance for the Metal Fabrication Industry, 14 + 15.

AUDIT OF EMISSION DATA
CALCULATIONS VERIFICATION FORM

Page ___ of ___

SOURCE INFORMATION

Source Description..... Seneca Army Depot, Bldg 320
Source Category..... Welding SCC..... 3-09-999-99
Fuel Type (if applicable). _____
Control Equipment: _____ Control Efficiency (%) _____

EMISSION INFORMATION

Pollutant (circle one): SO₂, NO_x, VOC, CO, PM₁₀, or HAP Barium (specify)
Pollutant Emission Rate: 0.0000000899 lb/yr (specify units)
Source of Emission Data: (check all appropriate and provide details)
 AP-42 MSDS Other Emission Factor
 Emission Model Material Balance Emission Test Data
 Other (specify) _____
Cite reference and describe calculation *

Pollutant (circle one): SO₂, NO_x, VOC, CO, PM₁₀, or HAP Copper (specify)
Pollutant Emission Rate: 0.0000132207 lb/yr (specify units)
Source of Emission Data: (check all appropriate and provide details)
 AP-42 MSDS Other Emission Factor
 Emission Model Material Balance Emission Test Data
 Other (specify) _____
Cite reference and describe calculation *

Pollutant (circle one): SO₂, NO_x, VOC, CO, PM₁₀, or HAP _____ (specify)
Pollutant Emission Rate: _____ (specify units)
Source of Emission Data: (check all appropriate and provide details)
 AP-42 MSDS Other Emission Factor
 Emission Model Material Balance Emission Test Data
 Other (specify) _____
Cite reference and describe calculation _____

* Section 313 Reporting Issue Paper; Clarification and Guidance for the Metal Fabrication Industry, 14 + 15.

AUDIT OF EMISSION DATA
CALCULATIONS VERIFICATION FORM

SOURCE INFORMATION

Source Description..... Seneca Army Depot, Bldg 317
Source Category..... Abrasive Blasting SCC..... A2309100200
Fuel Type (if applicable).....
Control Equipment: _____ Control Efficiency (%) _____

EMISSION INFORMATION

Pollutant (circle one): SO₂, NO_x, VOC, CO, PM₁₀, or HAP TSP
Pollutant Emission Rate: _____ 0.8 lb/yr (specify) _____ (specify units)
Source of Emission Data: (check all appropriate and provide details)
 AP-42 MSDS Other Emission Factor
 Emission Model Material Balance Emission Test Data
 Other (specify) _____
Cite reference and describe calculation Air Quality Permits, Vol 1 Section 2.3.1

Pollutant (circle one): SO₂, NO_x, VOC, CO, PM₁₀, or HAP _____
Pollutant Emission Rate: _____ 0.56 lb/yr (specify) _____ (specify units)
Source of Emission Data: (check all appropriate and provide details)
 AP-42 MSDS Other Emission Factor
 Emission Model Material Balance Emission Test Data
 Other (specify) _____
Cite reference and describe calculation Air Quality Permits, Vol 1, Section 2.3.1

Pollutant (circle one): SO₂, NO_x, VOC, CO, PM₁₀, or HAP _____
Pollutant Emission Rate: _____ (specify) _____ (specify units)
Source of Emission Data: (check all appropriate and provide details)
 AP-42 MSDS Other Emission Factor
 Emission Model Material Balance Emission Test Data
 Other (specify) _____
Cite reference and describe calculation _____

**AUDIT OF EMISSION DATA
CALCULATIONS VERIFICATION FORM**

Page of

SOURCE INFORMATION

Source Description..... Seneca Army Depot Bldg 360 CARC Paint
Source Category..... Painting Operations SCC..... 4-02-001-10
Fuel Type (if applicable)..... _____
Control Equipment: _____ Control Efficiency (%) _____

EMISSION INFORMATION

Pollutant (circle one): SO₂, NO_x, VOC, CO, PM₁₀, or HAP _____ (specify)

Pollutant Emission Rate: 104.979 lb/yr (specify units)

Source of Emission Data: (check all appropriate and provide details)

_____ AP-42 X MSDS _____ Other Emission Factor

_____ Emission Model _____ Material Balance _____ Emission Test Data

_____ Other (specify) _____

Cite reference and describe calculation Multiply usage (weight) by % weight VOC

Pollutant (circle one): SO₂, NO_x, VOC, CO, PM₁₀, or HAP _____ (specify)

Pollutant Emission Rate: 20.731 lb/yr (specify units)

Source of Emission Data: (check all appropriate and provide details)

_____ AP-42 X MSDS _____ Other Emission Factor

_____ Emission Model _____ Material Balance _____ Emission Test Data

_____ Other (specify) _____

Cite reference and describe calculation Multiply usage (weight) by % by weight pigment
and paint transfer efficiency

Pollutant (circle one): SO₂, NO_x, VOC, CO, PM₁₀, or HAP TSP _____ (specify)

Pollutant Emission Rate: 44.391 lb/yr (specify units)

Source of Emission Data: (check all appropriate and provide details)

_____ AP-42 X MSDS _____ Other Emission Factor

_____ Emission Model _____ Material Balance _____ Emission Test Data

_____ Other (specify) _____

Cite reference and describe calculation Multiply usage (weight) by % by weight pigment
& paint transfer efficiency

**AUDIT OF EMISSION DATA
CALCULATIONS VERIFICATION FORM**

SOURCE INFORMATION

Source Description..... Seneca Army Depot Bldg 360 CARC Paint
Source Category..... Painting operations SCC..... 4-02-001-10
Fuel Type (if applicable).....
Control Equipment: _____ Control Efficiency (%) _____

EMISSION INFORMATION

Pollutant (circle one): SO₂, NO_x, VOC, CO, PM₁₀, or HAP Hexamethylene-1,6-diisocyanate
(specify)
Pollutant Emission Rate: 0.3 lb/yr (specify units)

Source of Emission Data: (check all appropriate and provide details)

AP-42 MSDS Other Emission Factor
 Emission Model Material Balance Emission Test Data
 Other (specify) _____

Cite reference and describe calculation Multiply usage (weight) by % by weight
Hexamethylene-1,6-diisocyanate

Pollutant (circle one): SO₂, NO_x, VOC, CO, PM₁₀, or HAP Butyl Acetate
(specify)
Pollutant Emission Rate: 16.3 lb/yr (specify units)

Source of Emission Data: (check all appropriate and provide details)

AP-42 MSDS Other Emission Factor
 Emission Model Material Balance Emission Test Data
 Other (specify) _____

Cite reference and describe calculation Multiply usage (weight) by % by weight
Butyl Acetate

Pollutant (circle one): SO₂, NO_x, VOC, CO, PM₁₀, or HAP Chromium Compounds
(specify)
Pollutant Emission Rate: 32.7 lb/yr (specify units)

Source of Emission Data: (check all appropriate and provide details)

AP-42 MSDS Other Emission Factor
 Emission Model Material Balance Emission Test Data
 Other (specify) _____

Cite reference and describe calculation Multiply usage (weight) by % by weight
Chromium Compounds

**AUDIT OF EMISSION DATA
CALCULATIONS VERIFICATION FORM**

SOURCE INFORMATION

Source Description..... Seneca Army Depot Bldg 360 CARC Paint
Source Category..... Painting Operations SCC..... 4-02-001-10
Fuel Type (if applicable)..... _____
Control Equipment: _____ Control Efficiency (%) _____

EMISSION INFORMATION

Pollutant (circle one): SO₂, NO_x, VOC, CO, PM₁₀, or HAP Methyl isobutyl Ketone
(specify)

Pollutant Emission Rate: 16.3 lb/yr (specify units)

Source of Emission Data: (check all appropriate and provide details)

AP-42 MSDS Other Emission Factor
 Emission Model Material Balance Emission Test Data
 Other (specify) _____

Cite reference and describe calculation Multiply usage (weight) by % by weight
Methyl isobutyl ketone

Pollutant (circle one): SO₂, NO_x, VOC, CO, PM₁₀, or HAP Toluene
(specify)

Pollutant Emission Rate: 16.3 lb/yr (specify units)

Source of Emission Data: (check all appropriate and provide details)

AP-42 MSDS Other Emission Factor
 Emission Model Material Balance Emission Test Data
 Other (specify) _____

Cite reference and describe calculation Multiply usage (weight) by % by weight
Toluene

Pollutant (circle one): SO₂, NO_x, VOC, CO, PM₁₀, or HAP Xylene
(specify)

Pollutant Emission Rate: 49.0 lb/yr (specify units)

Source of Emission Data: (check all appropriate and provide details)

AP-42 MSDS Other Emission Factor
 Emission Model Material Balance Emission Test Data
 Other (specify) _____

Cite reference and describe calculation Multiply usage (weight) by % by weight
xylene

AUDIT OF EMISSION DATA
CALCULATIONS VERIFICATION FORM

Page ___ of ___

SOURCE INFORMATION

Source Description..... Seneca Army Depot - Sol-Sure Lacquer (Grey)
Source Category..... Surface Coating SCC..... 4-02-999-95
Fuel Type (if applicable)..... _____
Control Equipment: _____ Control Efficiency (%) _____

EMISSION INFORMATION

Pollutant (circle one): SO₂, NO_x, VOC, CO, PM₁₀, or HAP _____
Pollutant Emission Rate: 161.539 lb/yr (specify) _____ (specify units)

Source of Emission Data: (check all appropriate and provide details)

_____ AP-42 _____ X MSDS _____ Other Emission Factor
_____ Emission Model _____ X Material Balance _____ Emission Test Data
_____ Other (specify) _____

Cite reference and describe calculation convert usage (volume) to weight by multiplying by specific gravity, density, then multiply % by wgt VOC.

Pollutant (circle one): SO₂, NO_x, VOC, CO, PM₁₀, or HAP TSP
Pollutant Emission Rate: 19.890 lb/yr (specify) _____ (specify units)

Source of Emission Data: (check all appropriate and provide details)

_____ AP-42 _____ X MSDS _____ Other Emission Factor
_____ Emission Model _____ Material Balance _____ Emission Test Data
_____ Other (specify) _____

Cite reference and describe calculation multiply weight of product by % by wgt pigment & paint transfer efficiency

Pollutant (circle one): SO₂, NO_x, VOC, CO, PM₁₀, or HAP see following page
Pollutant Emission Rate: see following page (specify) _____ (specify units)

Source of Emission Data: (check all appropriate and provide details)

_____ AP-42 _____ X MSDS _____ Other Emission Factor
_____ Emission Model _____ Material Balance _____ Emission Test Data
_____ Other (specify) _____

Cite reference and describe calculation multiply weight of product by % by wgt HAP.

**AUDIT OF EMISSION DATA
CALCULATIONS VERIFICATION FORM**

Page ___ of ___

SOURCE INFORMATION

Source Description..... Seneca Army Depot - So-Sure Flat Black Coquer
Source Category..... Surface Coating SCC..... 4-02-999-95
Fuel Type (if applicable)..... _____
Control Equipment: _____ Control Efficiency (%) _____

EMISSION INFORMATION

Pollutant (circle one): SO₂, NO_x, VOC, CO, PM₁₀, or HAP _____ (specify)

Pollutant Emission Rate: 2.575 lb/yr (specify units)

Source of Emission Data: (check all appropriate and provide details)

_____ AP-42 _____ X MSDS _____ Other Emission Factor

_____ Emission Model _____ X Material Balance _____ Emission Test Data

_____ Other (specify) _____

Cite reference and describe calculation multiply weight of product by % by
wgt VOCs

Pollutant (circle one): SO₂, NO_x, VOC, CO, PM₁₀, or HAP TSP (specify)

Pollutant Emission Rate: 0.213 lb/yr (specify units)

Source of Emission Data: (check all appropriate and provide details)

_____ AP-42 _____ X MSDS _____ Other Emission Factor

_____ Emission Model _____ X Material Balance _____ Emission Test Data

_____ Other (specify) _____

Cite reference and describe calculation multiply weight of product by % by wgt
pigment + paint transfer efficiency

Pollutant (circle one): SO₂, NO_x, VOC, CO, PM₁₀, or HAP see following page (specify)

Pollutant Emission Rate: see following page (specify units)

Source of Emission Data: (check all appropriate and provide details)

_____ AP-42 _____ X MSDS _____ Other Emission Factor

_____ Emission Model _____ X Material Balance _____ Emission Test Data

_____ Other (specify) _____

Cite reference and describe calculation multiply weight of product by % by
HAP

**AUDIT OF EMISSION DATA
CALCULATIONS VERIFICATION FORM**

SOURCE INFORMATION

Source Description..... Seneca Army Depot - Latex Brown
Source Category..... Surface Coating SCC..... 4-02-999-95
Fuel Type (if applicable)..... _____
Control Equipment: _____ Control Efficiency (%) _____

EMISSION INFORMATION

Pollutant (circle one): SO₂, NO_x, **VOC**, CO, PM₁₀, or HAP _____
Pollutant Emission Rate: 11.831 lb/yr (specify) _____ (specify units)

Source of Emission Data: (check all appropriate and provide details)

_____ AP-42 MSDS _____ Other Emission Factor
_____ Emission Model Material Balance _____ Emission Test Data
_____ Other (specify) _____

Cite reference and describe calculation multiply usage (volume) by specific gravity,
density of water, & % by wgt VOC

Pollutant (circle one): SO₂, NO_x, **VOC**, CO, PM₁₀, or HAP Ozone Season
Pollutant Emission Rate: 0.032 lb/day (specify) _____ (specify units)

Source of Emission Data: (check all appropriate and provide details)

_____ AP-42 _____ MSDS _____ Other Emission Factor
_____ Emission Model _____ Material Balance _____ Emission Test Data
_____ Other (specify) _____

Cite reference and describe calculation multiply VOC emissions by $\frac{12 \text{ months/yr}}{3 \text{ months/Ozone season}}$
and divide by number of days per Ozone season (92).

Pollutant (circle one): SO₂, NO_x, VOC, CO, PM₁₀, or **HAP** ethylene glycol
Pollutant Emission Rate: 11.831 lb/yr (specify) _____ (specify units)

Source of Emission Data: (check all appropriate and provide details)

_____ AP-42 MSDS _____ Other Emission Factor
_____ Emission Model Material Balance _____ Emission Test Data
_____ Other (specify) _____

Cite reference and describe calculation multiply weight of product by
% by wgt HAP

**AUDIT OF EMISSION DATA
CALCULATIONS VERIFICATION FORM**

Page of

SOURCE INFORMATION

Source Description..... Seneca Army Depot - Polyurethane Sealer
Source Category..... Surface Coating SCC..... 4-02-999-95
Fuel Type (if applicable)..... _____
Control Equipment: _____ Control Efficiency (%) _____

EMISSION INFORMATION

Pollutant (circle one): SO₂, NO_x, VOC, CO, PM₁₀, or HAP _____ (specify)

Pollutant Emission Rate: 162.313 lb/yr (specify units)

Source of Emission Data: (check all appropriate and provide details)

_____ AP-42 X MSDS _____ Other Emission Factor
_____ Emission Model X Material Balance _____ Emission Test Data
_____ Other (specify) _____

Cite reference and describe calculation multiply usage (volume) by specific gravity,
density of water & % by wgt VOC.

Pollutant (circle one): SO₂, NO_x, VOC, CO, PM₁₀, or HAP Ozone season VOC (specify)

Pollutant Emission Rate: 0.441 lb/day (specify units)

Source of Emission Data: (check all appropriate and provide details)

_____ AP-42 X MSDS _____ Other Emission Factor
_____ Emission Model X Material Balance _____ Emission Test Data
_____ Other (specify) _____

Cite reference and describe calculation _____

Pollutant (circle one): SO₂, NO_x, VOC, CO, PM₁₀, or HAP see following page (specify)

Pollutant Emission Rate: see following page (specify units)

Source of Emission Data: (check all appropriate and provide details)

_____ AP-42 X MSDS _____ Other Emission Factor
_____ Emission Model X Material Balance _____ Emission Test Data
_____ Other (specify) _____

Cite reference and describe calculation multiply weight of product by
% by wgt ~~see~~ HAP

**AUDIT OF EMISSION DATA
CALCULATIONS VERIFICATION FORM**

Page of

SOURCE INFORMATION

Source Description..... Seneca Army Depot - Olive Drab Enamel
Source Category..... Surface Coating SCC..... 4-02-999-95
Fuel Type (if applicable).....
Control Equipment: _____ Control Efficiency (%) _____

EMISSION INFORMATION

Pollutant (circle one): SO₂, NO_x, VOC, CO, PM₁₀, or HAP _____
Pollutant Emission Rate: 69.893 lb/yr (specify) _____ (specify units)

Source of Emission Data: (check all appropriate and provide details)

_____ AP-42 X MSDS _____ Other Emission Factor
_____ Emission Model X Material Balance _____ Emission Test Data
_____ Other (specify) _____

Cite reference and describe calculation multiply usage (volume) by % by wgt VOC,
specific gravity & density of water.

Pollutant (circle one): SO₂, NO_x, VOC, CO, PM₁₀, or HAP methyl ethyl ketone
Pollutant Emission Rate: 8.847 lb/yr (specify) _____ (specify units)

Source of Emission Data: (check all appropriate and provide details)

_____ AP-42 X MSDS _____ Other Emission Factor
_____ Emission Model X Material Balance _____ Emission Test Data
_____ Other (specify) _____

Cite reference and describe calculation multiply wgt of product by % by wgt
HAP.

Pollutant (circle one): SO₂, NO_x, VOC, CO, PM₁₀, or HAP toluene
Pollutant Emission Rate: 8.847 (specify) _____ (specify units)

Source of Emission Data: (check all appropriate and provide details)

_____ AP-42 X MSDS _____ Other Emission Factor
_____ Emission Model X Material Balance _____ Emission Test Data
_____ Other (specify) _____

Cite reference and describe calculation multiply wgt of product by % by wgt
HAP.

**AUDIT OF EMISSION DATA
CALCULATIONS VERIFICATION FORM**

Page of

SOURCE INFORMATION

Source Description..... Seneca Army Depot - Gray Floor Enamel
Source Category..... Surface Coating SCC..... 4-02-999-95
Fuel Type (if applicable)..... _____
Control Equipment: _____ Control Efficiency (%) _____

EMISSION INFORMATION

Pollutant (circle one): SO₂, NO_x, VOC, CO, PM₁₀, or HAP _____ (specify)
Pollutant Emission Rate: 118.371 lb/yr (specify units)

Source of Emission Data: (check all appropriate and provide details)

_____ AP-42 MSDS _____ Other Emission Factor
_____ Emission Model Material Balance _____ Emission Test Data
_____ Other (specify) _____

Cite reference and describe calculation multiply usage (volume) by specific gravity,
density of water and % by wgt VOC.

Pollutant (circle one): SO₂, NO_x, VOC, CO, PM₁₀, or HAP _____ (specify)

Pollutant Emission Rate: _____ (specify units)

Source of Emission Data: (check all appropriate and provide details)

_____ AP-42 _____ MSDS _____ Other Emission Factor
_____ Emission Model _____ Material Balance _____ Emission Test Data
_____ Other (specify) _____

Cite reference and describe calculation _____

Pollutant (circle one): SO₂, NO_x, VOC, CO, PM₁₀, or HAP _____ (specify)

Pollutant Emission Rate: _____ (specify units)

Source of Emission Data: (check all appropriate and provide details)

_____ AP-42 _____ MSDS _____ Other Emission Factor
_____ Emission Model _____ Material Balance _____ Emission Test Data
_____ Other (specify) _____

Cite reference and describe calculation _____

**AUDIT OF EMISSION DATA
CALCULATIONS VERIFICATION FORM**

SOURCE INFORMATION

Source Description..... Seneca Army Depot - Enamel Paint
Source Category..... 4-02-999-95 SCC..... Surface Coating
Fuel Type (if applicable)..... _____
Control Equipment: _____ Control Efficiency (%) _____

EMISSION INFORMATION

Pollutant (circle one): SO₂, NO_x, VOC, CO, PM₁₀, or HAP _____
Pollutant Emission Rate: 56.250 lb/yr (specify) _____ (specify units)

Source of Emission Data: (check all appropriate and provide details)
 AP-42 MSDS _____ Other Emission Factor
 Emission Model Material Balance _____ Emission Test Data
_____ Other (specify) _____

Cite reference and describe calculation multiply usage (volume) by specific gravity, density of water and % by wgt VOC.

Pollutant (circle one): SO₂, NO_x, VOC, CO, PM₁₀, or HAP Isopropyl Alcohol
Pollutant Emission Rate: 2673 lb/yr (specify) _____ (specify units)

Source of Emission Data: (check all appropriate and provide details)
 AP-42 MSDS _____ Other Emission Factor
 Emission Model Material Balance _____ Emission Test Data
_____ Other (specify) _____

Cite reference and describe calculation _____

Pollutant (circle one): SO₂, NO_x, VOC, CO, PM₁₀, or HAP Xylene
Pollutant Emission Rate: 34.213 lb/yr (specify) _____ (specify units)

Source of Emission Data: (check all appropriate and provide details)
 AP-42 MSDS _____ Other Emission Factor
 Emission Model Material Balance _____ Emission Test Data
_____ Other (specify) _____

Cite reference and describe calculation _____

**AUDIT OF EMISSION DATA
CALCULATIONS VERIFICATION FORM**

Page of

SOURCE INFORMATION

Source Description..... Seneca Army Depot - Aluminum Boiler Paint
Source Category..... Surface Coating SCC..... 4-02-999-95
Fuel Type (if applicable)..... _____
Control Equipment: _____ Control Efficiency (%) _____

EMISSION INFORMATION

Pollutant (circle one): SO₂, NO_x, **VOC**, CO, PM₁₀, or HAP _____ (specify)

Pollutant Emission Rate: 11.673 lb/yr (specify units)

Source of Emission Data: (check all appropriate and provide details)

AP-42 MSDS Other Emission Factor
 Emission Model Material Balance Emission Test Data
 Other (specify) _____

Cite reference and describe calculation multiply usage (volume) by specific gravity
density of water and % by wgt VOC.

Pollutant (circle one): SO₂, NO_x, VOC, CO, PM₁₀, or **HAP** toluene (specify)

Pollutant Emission Rate: 9.883 lb/yr (specify units)

Source of Emission Data: (check all appropriate and provide details)

AP-42 MSDS Other Emission Factor
 Emission Model Material Balance Emission Test Data
 Other (specify) _____

Cite reference and describe calculation multiply weight of product by % by
wgt HAP

Pollutant (circle one): SO₂, NO_x, VOC, CO, PM₁₀, or **HAP** Xylene (specify)

Pollutant Emission Rate: 1.153 lb/yr (specify units)

Source of Emission Data: (check all appropriate and provide details)

AP-42 MSDS Other Emission Factor
 Emission Model Material Balance Emission Test Data
 Other (specify) _____

Cite reference and describe calculation multiply weight of product by % by
wgt HAP

**AUDIT OF EMISSION DATA
CALCULATIONS VERIFICATION FORM**

Page of

SOURCE INFORMATION

Source Description..... Seneca Army Depot - Bldg 117 - NAPA Battery Cleaner
Source Category..... Miscellaneous Chemicals SCC..... 4-01-888-01
Fuel Type (if applicable)..... _____
Control Equipment: _____ Control Efficiency (%) _____

EMISSION INFORMATION

Pollutant (circle one): SO₂, NO_x, VOC, CO, PM₁₀, or HAP _____ (specify)

Pollutant Emission Rate: 43.828 lb/yr (specify units)

Source of Emission Data: (check all appropriate and provide details)

_____ AP-42 X MSDS _____ Other Emission Factor
_____ Emission Model X Material Balance _____ Emission Test Data
_____ Other (specify) _____

Cite reference and describe calculation multiply weight of product by % by wgt VOCs

Pollutant (circle one): SO₂, NO_x, VOC, CO, PM₁₀, or HAP methylene chloride (specify)

Pollutant Emission Rate: 7.734 lb/yr (specify units)

Source of Emission Data: (check all appropriate and provide details)

_____ AP-42 X MSDS _____ Other Emission Factor
_____ Emission Model X Material Balance _____ Emission Test Data
_____ Other (specify) _____

Cite reference and describe calculation multiply % by wgt HAP by weight of product

Pollutant (circle one): SO₂, NO_x, VOC, CO, PM₁₀, or HAP Acetone (specify)

Pollutant Emission Rate: 17.016 lb/yr (specify units)

Source of Emission Data: (check all appropriate and provide details)

_____ AP-42 X MSDS _____ Other Emission Factor
_____ Emission Model X Material Balance _____ Emission Test Data
_____ Other (specify) _____

Cite reference and describe calculation multiply % by wgt HAP by wgt of product

**AUDIT OF EMISSION DATA
CALCULATIONS VERIFICATION FORM**

Page ___ of ___

SOURCE INFORMATION

Source Description..... Sevaca Army Depot - Bldg 117 - Rifle Bore Cleaner
Source Category..... Miscellaneous Chemicals SCC..... 4-01-888-01
Fuel Type (if applicable)..... _____
Control Equipment: _____ Control Efficiency (%) _____

EMISSION INFORMATION

Pollutant (circle one): SO₂, NO_x, **VOC**, CO, PM₁₀, or HAP _____ (specify)

Pollutant Emission Rate: 26.205 lb/yr (specify units)

Source of Emission Data: (check all appropriate and provide details)

_____ AP-42 MSDS _____ Other Emission Factor
_____ Emission Model Material Balance _____ Emission Test Data
_____ Other (specify) _____

Cite reference and describe calculation multiply usage (volume) by specific gravity,
density of water and % by wgt VOC.

Pollutant (circle one): SO₂, NO_x, VOC, CO, PM₁₀, or HAP _____ (specify)

Pollutant Emission Rate: _____ (specify units)

Source of Emission Data: (check all appropriate and provide details)

_____ AP-42 _____ MSDS _____ Other Emission Factor
_____ Emission Model _____ Material Balance _____ Emission Test Data
_____ Other (specify) _____

Cite reference and describe calculation _____

Pollutant (circle one): SO₂, NO_x, VOC, CO, PM₁₀, or HAP _____ (specify)

Pollutant Emission Rate: _____ (specify units)

Source of Emission Data: (check all appropriate and provide details)

_____ AP-42 _____ MSDS _____ Other Emission Factor
_____ Emission Model _____ Material Balance _____ Emission Test Data
_____ Other (specify) _____

Cite reference and describe calculation _____

**AUDIT OF EMISSION DATA
CALCULATIONS VERIFICATION FORM**

Page of

SOURCE INFORMATION

Source Description..... Seneca Army Depot - Bldg 118 - NAPA Silicon Lubricant
Source Category..... Miscellaneous Chemicals SCC..... 4-01-888-01
Fuel Type (if applicable)..... _____
Control Equipment: _____ Control Efficiency (%) _____

EMISSION INFORMATION

Pollutant (circle one): SO₂, NO_x, VOC, CO, PM₁₀, or HAP _____ (specify)

Pollutant Emission Rate: 3.54 lb/yr (specify units)

Source of Emission Data: (check all appropriate and provide details)

_____ AP-42 _____ MSDS _____ Other Emission Factor

_____ Emission Model _____ Material Balance _____ Emission Test Data

_____ Other (specify) _____

Cite reference and describe calculation multiply weight of product by %
by weight VOC.

Pollutant (circle one): SO₂, NO_x, VOC, CO, PM₁₀, or HAP Hexane (specify)

Pollutant Emission Rate: 1.860 lb/yr (specify units)

Source of Emission Data: (check all appropriate and provide details)

_____ AP-42 _____ MSDS _____ Other Emission Factor

_____ Emission Model _____ Material Balance _____ Emission Test Data

_____ Other (specify) _____

Cite reference and describe calculation multiply weight of product by %
by wgt HAP

Pollutant (circle one): SO₂, NO_x, VOC, CO, PM₁₀, or HAP methyl chloroform (specify)

Pollutant Emission Rate: 2.28 lb/yr (specify units)

Source of Emission Data: (check all appropriate and provide details)

_____ AP-42 _____ MSDS _____ Other Emission Factor

_____ Emission Model _____ Material Balance _____ Emission Test Data

_____ Other (specify) _____

Cite reference and describe calculation multiply weight of product by
% by wgt HAP.

AUDIT OF EMISSION DATA
CALCULATIONS VERIFICATION FORM

Page ___ of ___

SOURCE INFORMATION

Source Description..... Seneca Army Depot - Bldg 122 - CRC 556
Source Category..... 4-01-888-01 SCC..... miscellaneous chemicals
Fuel Type (if applicable)..... _____
Control Equipment: _____ Control Efficiency (%) _____

EMISSION INFORMATION

Pollutant (circle one): SO₂, NO_x, VOC, CO, PM₁₀, or HAP _____ (specify)

Pollutant Emission Rate: _____ 11.34 lb/yr _____ (specify units)

Source of Emission Data: (check all appropriate and provide details)

_____ AP-42 _____ MSDS _____ Other Emission Factor
_____ Emission Model _____ Material Balance _____ Emission Test Data
_____ Other (specify) _____

Cite reference and describe calculation multiply weight of product by % by wgt VOC.

Pollutant (circle one): SO₂, NO_x, VOC, CO, PM₁₀, or HAP methyl chloroform _____ (specify)

Pollutant Emission Rate: _____ 7.83 lb/yr _____ (specify units)

Source of Emission Data: (check all appropriate and provide details)

_____ AP-42 _____ MSDS _____ Other Emission Factor
_____ Emission Model _____ Material Balance _____ Emission Test Data
_____ Other (specify) _____

Cite reference and describe calculation multiply weight of product by % by wgt HAP.

Pollutant (circle one): SO₂, NO_x, VOC, CO, PM₁₀, or HAP _____ (specify)

Pollutant Emission Rate: _____ (specify units)

Source of Emission Data: (check all appropriate and provide details)

_____ AP-42 _____ MSDS _____ Other Emission Factor
_____ Emission Model _____ Material Balance _____ Emission Test Data
_____ Other (specify) _____

Cite reference and describe calculation _____

**AUDIT OF EMISSION DATA
CALCULATIONS VERIFICATION FORM**

Page of

SOURCE INFORMATION

Source Description..... Seneca Army Depot - Bldg 317 - P19CPC
Source Category..... miscellaneous chemicals SCC..... 4-01-888-01
Fuel Type (if applicable). _____
Control Equipment: _____ Control Efficiency (%) _____

EMISSION INFORMATION

Pollutant (circle one): SO₂, NO_x, VOC, CO, PM₁₀, or HAP _____
Pollutant Emission Rate: 440.387 lb/yr (specify) _____ (specify units)

Source of Emission Data: (check all appropriate and provide details)

AP-42 MSDS Other Emission Factor
 Emission Model Material Balance Emission Test Data
 Other (specify) _____

Cite reference and describe calculation multiply usage (volume) by specific gravity,
density of water & % by wgt VOC

Pollutant (circle one): SO₂, NO_x, VOC, CO, PM₁₀, or HAP ozone season VOC
Pollutant Emission Rate: 1.197 lb/day (specify) _____ (specify units)

Source of Emission Data: (check all appropriate and provide details)

AP-42 MSDS Other Emission Factor
 Emission Model Material Balance Emission Test Data
 Other (specify) _____

Cite reference and describe calculation _____

Pollutant (circle one): SO₂, NO_x, VOC, CO, PM₁₀, or HAP _____
Pollutant Emission Rate: _____ (specify) _____ (specify units)

Source of Emission Data: (check all appropriate and provide details)

AP-42 MSDS Other Emission Factor
 Emission Model Material Balance Emission Test Data
 Other (specify) _____

Cite reference and describe calculation _____

**AUDIT OF EMISSION DATA
CALCULATIONS VERIFICATION FORM**

Page of

SOURCE INFORMATION

Source Description..... Seneca Army Depot - Bldg 321 - Denatured Alcohol
Source Category..... Miscellaneous Chemicals SCC..... 4-01-888-01
Fuel Type (if applicable)..... _____
Control Equipment: _____ Control Efficiency (%) _____

EMISSION INFORMATION

Pollutant (circle one): SO₂, NO_x, **VOC**, CO, PM₁₀, or HAP _____ (specify)

Pollutant Emission Rate: 31.013 lb/yr (specify units)

Source of Emission Data: (check all appropriate and provide details)

_____ AP-42 MSDS _____ Other Emission Factor

_____ Emission Model Material Balance _____ Emission Test Data

_____ Other (specify) _____

Cite reference and describe calculation multiply usage (volume) by specific gravity,
density of water, & % by wgt VOC.

Pollutant (circle one): SO₂, NO_x, VOC, CO, PM₁₀, or **HAP** _____ methanol (specify)

Pollutant Emission Rate: 1.489 lb/yr (specify units)

Source of Emission Data: (check all appropriate and provide details)

_____ AP-42 MSDS _____ Other Emission Factor

_____ Emission Model Material Balance _____ Emission Test Data

_____ Other (specify) _____

Cite reference and describe calculation _____

Pollutant (circle one): SO₂, NO_x, VOC, CO, PM₁₀, or HAP _____ (specify)

Pollutant Emission Rate: _____ (specify units)

Source of Emission Data: (check all appropriate and provide details)

_____ AP-42 _____ MSDS _____ Other Emission Factor

_____ Emission Model _____ Material Balance _____ Emission Test Data

_____ Other (specify) _____

Cite reference and describe calculation _____

**AUDIT OF EMISSION DATA
CALCULATIONS VERIFICATION FORM**

Page ___ of ___

SOURCE INFORMATION

Source Description..... Seneca Army Depot - Bldg 357 - PD 680
Source Category..... Miscellaneous Chemicals SCC..... 401-888-01
Fuel Type (if applicable)..... _____
Control Equipment: _____ Control Efficiency (%) _____

EMISSION INFORMATION

Pollutant (circle one): SO₂, NO_x, VOC, CO, PM₁₀, or HAP _____
(specify)
Pollutant Emission Rate: 23.002 lb/yr (specify units)
Source of Emission Data: (check all appropriate and provide details)
 AP-42 MSDS Other Emission Factor
 Emission Model Material Balance Emission Test Data
 Other (specify) _____
Cite reference and describe calculation _____

Pollutant (circle one): SO₂, NO_x, VOC, CO, PM₁₀, or HAP _____
(specify)
Pollutant Emission Rate: _____ (specify units)
Source of Emission Data: (check all appropriate and provide details)
 AP-42 MSDS Other Emission Factor
 Emission Model Material Balance Emission Test Data
 Other (specify) _____
Cite reference and describe calculation _____

Pollutant (circle one): SO₂, NO_x, VOC, CO, PM₁₀, or HAP _____
(specify)
Pollutant Emission Rate: _____ (specify units)
Source of Emission Data: (check all appropriate and provide details)
 AP-42 MSDS Other Emission Factor
 Emission Model Material Balance Emission Test Data
 Other (specify) _____
Cite reference and describe calculation _____

**AUDIT OF EMISSION DATA
CALCULATIONS VERIFICATION FORM**

Page of

SOURCE INFORMATION

Source Description..... Sevco Army Depot - Arsenal
Source Category..... Pesticides SCC..... A246180000
Fuel Type (if applicable)..... _____
Control Equipment: _____ Control Efficiency (%) _____

EMISSION INFORMATION

Pollutant (circle one): SO₂, NO_x, VOC, CO, PM₁₀, or HAP _____
Pollutant Emission Rate: 0.009 lb/yr (specify) _____ (specify units)

Source of Emission Data: (check all appropriate and provide details)

_____ AP-42 MSDS _____ Other Emission Factor
_____ Emission Model Material Balance _____ Emission Test Data
_____ Other (specify) _____

Cite reference and describe calculation multiply volume of pesticide use annually, by concentration (%),
specific gravity, density of water & % by wgt VOCs.

Pollutant (circle one): SO₂, NO_x, VOC, CO, PM₁₀, or HAP Ozone season VOC
Pollutant Emission Rate: _____ < 0.1 lb/yr (specify) _____ (specify units)

Source of Emission Data: (check all appropriate and provide details)

_____ AP-42 _____ MSDS _____ Other Emission Factor
_____ Emission Model _____ Material Balance _____ Emission Test Data
_____ Other (specify) _____

Cite reference and describe calculation multiply ^{sum of} usage for June-August by concentration,
specific gravity, density of water, & % by wgt VOC, then divide by # of days in ozone season

Pollutant (circle one): SO₂, NO_x, VOC, CO, PM₁₀, or HAP isopropylamine
Pollutant Emission Rate: _____ 0.046 lb/yr (specify) _____ (specify units)

Source of Emission Data: (check all appropriate and provide details)

_____ AP-42 _____ MSDS _____ Other Emission Factor
_____ Emission Model _____ Material Balance _____ Emission Test Data
_____ Other (specify) _____

Cite reference and describe calculation _____

**AUDIT OF EMISSION DATA
CALCULATIONS VERIFICATION FORM**

Page of

SOURCE INFORMATION

Source Description..... Seneca Army Depot - Imazapyr
Source Category..... Pesticides SCC..... A246180000
Fuel Type (if applicable).....
Control Equipment: _____ Control Efficiency (%) _____

EMISSION INFORMATION

Pollutant (circle one): SO₂, NO_x, VOC, CO, PM₁₀, or HAP _____
(specify)
Pollutant Emission Rate: 0.0027 lb/yr (specify units)

Source of Emission Data: (check all appropriate and provide details)

_____ AP-42 X MSDS _____ Other Emission Factor
_____ Emission Model X Material Balance _____ Emission Test Data
_____ Other (specify) _____

Cite reference and describe calculation multiply usage (volume) by concentration (%),
specific gravity, density of water & % by wgt VOCs.

Pollutant (circle one): SO₂, NO_x, VOC, CO, PM₁₀, or HAP isopropyl amine
(specify)
Pollutant Emission Rate: 0.014 lb/yr (specify units)

Source of Emission Data: (check all appropriate and provide details)

_____ AP-42 X MSDS _____ Other Emission Factor
_____ Emission Model _____ Material Balance _____ Emission Test Data
_____ Other (specify) _____

Cite reference and describe calculation multiply weight of product by % by
wgt HAP.

Pollutant (circle one): SO₂, NO_x, VOC, CO, PM₁₀, or HAP _____
(specify)
Pollutant Emission Rate: _____ (specify units)

Source of Emission Data: (check all appropriate and provide details)

_____ AP-42 _____ MSDS _____ Other Emission Factor
_____ Emission Model _____ Material Balance _____ Emission Test Data
_____ Other (specify) _____

Cite reference and describe calculation _____

**AUDIT OF EMISSION DATA
CALCULATIONS VERIFICATION FORM**

Page of

SOURCE INFORMATION

Source Description..... Sereca Army Depot - WTP at bldg 2411
Source Category..... Water treatment SCC..... 5-01-007-01
Fuel Type (if applicable). _____
Control Equipment: _____ Control Efficiency (%) _____

EMISSION INFORMATION

Pollutant (circle one): SO₂, NO_x, VOC, CO, PM₁₀, or **HAP** chlorine
Pollutant Emission Rate: 121.8 lb/yr (specify) (specify units)
Source of Emission Data: (check all appropriate and provide details)
 AP-42 MSDS Other Emission Factor
 Emission Model Material Balance Emission Test Data
 Other (specify) _____
Cite reference and describe calculation Unit operations in Wastewater Treatment

Pollutant (circle one): SO₂, NO_x, VOC, CO, PM₁₀, or HAP _____
Pollutant Emission Rate: _____ (specify) (specify units)
Source of Emission Data: (check all appropriate and provide details)
 AP-42 MSDS Other Emission Factor
 Emission Model Material Balance Emission Test Data
 Other (specify) _____
Cite reference and describe calculation _____

Pollutant (circle one): SO₂, NO_x, VOC, CO, PM₁₀, or HAP _____
Pollutant Emission Rate: _____ (specify) (specify units)
Source of Emission Data: (check all appropriate and provide details)
 AP-42 MSDS Other Emission Factor
 Emission Model Material Balance Emission Test Data
 Other (specify) _____
Cite reference and describe calculation _____

**AUDIT OF EMISSION DATA
CALCULATIONS VERIFICATION FORM (Continued)**

CALCULATED EMISSIONS

| Pollutant | Audit Calculations (lb/yr) | Original Calculations (lb/yr) | Percent Deviation* |
|------------------|-------------------------------|----------------------------------|-----------------------|
| VOC | | | |
| NO _x | | | |
| CO | | | |
| SO ₂ | | | |
| PM ₁₀ | | | |
| Pb | | | |
| HAP's (Specify) | | | |
| <i>Chlorine</i> | <i>121.8</i> | <i>121.8</i> | |
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*Percent Deviation = [(original - audit)/original] x 100

AUDIT OF EMISSION DATA
CALCULATIONS VERIFICATION FORM

Page ___ of ___

SOURCE INFORMATION

Source Description..... Firefighting Training
Source Category..... _____ SCC..... 5-01-006-04
Fuel Type (if applicable). _____
Control Equipment: _____ Control Efficiency (%) _____

EMISSION INFORMATION

Pollutant (circle one): SO₂, NO_x, VOC, CO, PM₁₀, or HAP _____
Pollutant Emission Rate: 930.8 lb/yr (specify) _____ (specify units)
Source of Emission Data: (check all appropriate and provide details)
 AP-42 _____ MSDS _____ Other Emission Factor
_____ Emission Model _____ Material Balance _____ Emission Test Data
_____ Other (specify) _____
Cite reference and describe calculation Table 1.10-1, AP-42

Pollutant (circle one): SO₂, NO_x, VOC, CO, PM₁₀, or HAP _____
Pollutant Emission Rate: 59.5 lb/yr (specify) _____ (specify units)
Source of Emission Data: (check all appropriate and provide details)
 AP-42 _____ MSDS _____ Other Emission Factor
_____ Emission Model _____ Material Balance _____ Emission Test Data
_____ Other (specify) _____
Cite reference and describe calculation Table 1.10-1, AP-42

Pollutant (circle one): SO₂, NO_x, VOC, CO, PM₁₀, or HAP _____
Pollutant Emission Rate: _____ (specify) _____ (specify units)
Source of Emission Data: (check all appropriate and provide details)
_____ AP-42 _____ MSDS _____ Other Emission Factor
_____ Emission Model _____ Material Balance _____ Emission Test Data
_____ Other (specify) _____
Cite reference and describe calculation _____

Mathematical Induction

1. Base Case

Let $P(n)$ be a statement involving the natural number n . To prove that $P(n)$ is true for all natural numbers n , we first show that $P(1)$ is true. This is the base case. If $P(1)$ is true, then we can assume that $P(k)$ is true for some natural number k . This is the inductive hypothesis. We then show that $P(k+1)$ is true. This is the inductive step. If we can show that $P(k+1)$ is true whenever $P(k)$ is true, then we can conclude that $P(n)$ is true for all natural numbers n .

For example, let $P(n)$ be the statement that the sum of the first n natural numbers is $\frac{n(n+1)}{2}$. We first show that $P(1)$ is true. This is the base case. If $P(1)$ is true, then we can assume that $P(k)$ is true for some natural number k . This is the inductive hypothesis. We then show that $P(k+1)$ is true. This is the inductive step. If we can show that $P(k+1)$ is true whenever $P(k)$ is true, then we can conclude that $P(n)$ is true for all natural numbers n .

Another example is the statement that $2^n > n$ for all natural numbers n . We first show that $P(1)$ is true. This is the base case. If $P(1)$ is true, then we can assume that $P(k)$ is true for some natural number k . This is the inductive hypothesis. We then show that $P(k+1)$ is true. This is the inductive step. If we can show that $P(k+1)$ is true whenever $P(k)$ is true, then we can conclude that $P(n)$ is true for all natural numbers n .

Q.E.D.

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AUDIT OF EMISSION DATA
CALCULATIONS VERIFICATION FORM

Page ___ of ___

SOURCE INFORMATION

Source Description..... Seneca Army Depot, Bldg 113
Source Category..... Carpentry / Woodworking, scc..... 3-07-030-97
Fuel Type (if applicable). _____
Control Equipment: _____ Control Efficiency (%) _____

EMISSION INFORMATION

Pollutant (circle one): SO₂, NO_x, VOC, CO, PM₁₀, or HAP TSP
Pollutant Emission Rate: _____ 2,730.0 lb/yr (specify) _____ (specify units)
Source of Emission Data: (check all appropriate and provide details)
 AP-42 _____ MSDS _____ Other Emission Factor
_____ Emission Model _____ Material Balance _____ Emission Test Data
_____ Other (specify) _____

Cite reference and describe calculation Section 10.4

Pollutant (circle one): SO₂, NO_x, VOC, CO, PM₁₀ or HAP _____
Pollutant Emission Rate: _____ 1444.17 lb/yr (specify) _____ (specify units)
Source of Emission Data: (check all appropriate and provide details)
 AP-42 _____ MSDS _____ Other Emission Factor
_____ Emission Model _____ Material Balance _____ Emission Test Data
_____ Other (specify) _____

Cite reference and describe calculation Appendix C.1-110

Pollutant (circle one): SO₂, NO_x, VOC, CO, PM₁₀, or HAP _____
Pollutant Emission Rate: _____ (specify) _____ (specify units)
Source of Emission Data: (check all appropriate and provide details)
_____ AP-42 _____ MSDS _____ Other Emission Factor
_____ Emission Model _____ Material Balance _____ Emission Test Data
_____ Other (specify) _____

Cite reference and describe calculation _____

