

461-84

*SEAD REG 420-2

HEADQUARTERS
SENECA ARMY DEPOT
ROMULUS, NY 14541

SEAD REGULATION
NO. 420-2

1 Oct 1991

ENVIRONMENTAL QUALITY
HAZARDOUS WASTE MANAGEMENT

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*This Regulation supersedes SEADR 420-2, dated 6 June 1983.

APPENDICES

- A. 6 NYCRR Part 371 Identification and Listing of Hazardous wastes.
- B. Storage Area Inspection Report Sheet.
- C. Depot Spill Prevention, Control, and Countermeasures Plan.
- D. Depot Spill Contingency Plan.

ENVIRONMENTAL QUALITY
HAZARDOUS WASTE MANAGEMENT

1. Purpose. This regulation prescribes responsibilities, standards and procedures for the efficient and economical removal of Hazardous Waste (HW) in an environmentally acceptable manner.

2. Applicability. This regulation is applicable to all Seneca Army Depot (SEAD) activities; to all tenant commands, activities and organizations; and to all users of SEAD facilities. This regulation includes the management and disposal of all HW as defined in CFR 40 Part 261 revised as of July 1, 1990 and/or NYSDEC 6 NYCRR Part 371 (Appendix A).

3. Authority. The Resource Conservation and Recovery Act (RCRA) of 1976, as amended, section 6901, title 42, United States Code (42 USC 6901 et seq) states that "Each Department of the Federal Government...engaged in any activity resulting...in the disposal of solid waste or hazardous waste shall be subject to, and comply with all Federal, State, Interstate and local requirements, both substantive and procedural (including any requirements for permits or reporting...)."

Army regulations implementing this act include AR 200-1 (Environmental Protection and Enhancement) effective 23 May 1990 and AR 420-47 (Solid and Hazardous Waste Management).

The State of New York has been granted jurisdiction from the Environmental Protection Agency (EPA) to manage their own HW program. As such, SEAD will follow procedures specified in the 6 NYCRR 370, 371, 372 and 373 of regulations administered by the New York State Department of Environmental Conservation (NYSDEC).

4. Responsibilities.

a. The Depot Commander will:

(1) Ensure Hazardous Waste Management (HWM) activities are conducted according to Federal, State, and local regulations.

(2) Provide necessary resources to ensure compliance with Federal, State, and local regulations.

b. All Commanders, Major Activity Directors, and Supervisory Personnel will:

(1) Ensure that the policies stated in this regulation are carefully observed within their activity and cooperate fully with the Engineering/Environmental Management Division (EEMD) in managing HW.

(2) Ensure that all suspected HW generated by their activity are reported in writing to EEMD for the purpose of verification and record keeping.

(3) Make every attempt to decrease or eliminate HW through recycling, reclaiming, reuse, or alternate processes.

(4) Ensure that all HW generated by their activity is accumulated in accordance with this regulation as follows:

(a) The generator will provide an accumulation area for HW. Area will be adequately lighted, ventilated, and not located near any drainage system

(b) All HW will be accumulated in closed containers to preclude spillage and/or the emission of vapors. Containers will conform to 49 CFR Parts 100-199 required to offer a HW for transport. All container will be kept from direct contact with the foundation or flooring by use of pallets or other suitable device to facilitate inspections of containers for leaks and deterioration. HW will not be accumulated in underground tanks.

(c) Segregate each different HW during accumulation and insure they remain segregated.

(d) All HW containers must be labeled with HW labels which contain the date accumulation started and ended. The exact name of the HW. SEAD's EPA identification number NY0213820830.

(e) Provide and maintain an emergency spill clean up kit on site.

(f) Provide to EEMD the properly completed 1348 and waste profile sheet, along with the necessary equipment and qualified labor for the transfer of all full containers, of HW generated by their activity, to building 307 within 3 days of the containers end accumulation date.

(5) Ensure that all HW generated by their activity is handled and removed in accordance with this regulation.

(6) Ensure that all HW handlers are fully aware and knowledgeable of these HWM requirements.

(7) Prepare standard operating procedures on handling HW within the activity as required by RCRA.

(8) Report any spills or leaks of HW in accordance with (IAW) the Depot Spill Plan.

C. The Directorate of Engineering and Housing (DEH) will:

(1) Exercise SEAD Staff responsibility to plan, direct and coordinate HW determination, compliance of accumulation, handling, storage, and removal.

(2) Develop contract specifications for off-site disposal of HW when ever HW is not being removed thur DRMO contractors.

(3) Operate and maintain the HW storage building 307 and PCB storage building 301. IAW the Treatment Storage Disposal Facility (TSDF) permit.

(4) Supervise the transfer of HW to bldg. 307.

(5) Inspect and accept into or reject all transfers of HW to bldg. 307. Using HW Storage Area Turn-In sheet. Maintain a up to date inventory and layout sketch of HW stored there, and periodically inspect the building and its contents.

(6) Supervise/oversee the removal of HW from Bldg. 307 and 301.

(7) Consult, coordinate, prepare and report HW activities as required to Federal, New York State and higher headquarters agencies within the Dept of Army.

(8) Maintain overall surveillance of HW activities to ensure compliance with this regulation.

(9) Update this regulation in part or in full as necessary.

(10) Offer advise and make recommendations to decrease or eliminate the amounts of HW generated.

(11) Provide technical support and distribute information pertaining to the regulations and/or revisions to regulations governing HW.

(12) Insure that all TSDF permits are currant, renew as required.

(13) Notify D/Supply of date of shipment of HW from Building 307 and transporters expected arrival time.

d. The Industrial Hygienist will:

(1) Ensure that all accumulation and handling of HW is IAW Occupational Safety and Health Administration (OSHA) and all other health regulations.

e. The Depot Safety Officer will:

(1) Monitor the accumulation and handling of HW to ensure compliance with current HW safety standards.

f. The Directorate of Supply will:

(1) Maintain stockage levels of DOT containers and labels for all HW.

(2) Comply with all requirements to operate a TSDF (40 CFR Parts 264 and 265) for ammunition wastes.

(3) Provide to EEMD all reports, plans and information, etc. required by 40 CFR 264 and 265 for submission to EPA.

(4) Provide equipment and personnel to transfer HW from Building 307 and 301 to the transporters vehicle for disposal off depot. When requested by DEH.

5. Procedures.

a. Generator will draw the proper containers and labels required to properly accumulate their HW.

b. Generator will manage their HW during accumulation and certify the contents and containers by signing HW turn in document 1348 and the turn in inspection sheet.

c. Generator will contact EEMD and arrange for transfer of HW to building 307.

d. EEMD will inspect and accept or reject transfer of HW to bldg. 307.

e. EEMD will update building 307 inventory and layout sketch.

f. EEMD will determine when shipment to off-depot TSDF is necessary and take the necessary actions as described in this regulation to accomplish that shipment.

g. EEMD will inspect the HW transporters vehicle prior to signing any manifests and/or land ban statements.

h. EEMD will ensure all HW transporter documents are correct and complete before signing any manifests and/or land ban statements.

6. Record Keeping.

a. As required by state and federal regulations, EEMD will keep a copy of each manifest document for at least 3 years from the date the HW was accepted by the initial HW transporter.

b. Copies of each annual report, any exception reports and each HW Storage Area Inspection Report will be kept by EEMD for three years from the due date or inspection date of that report.

7. REPORTS.

a. Annual Report - EEMD shall submit completed annual report forms to NYSDEC no later than _____ for the preceding calendar year.

b. Exception Report - If a copy of the manifest signed by the disposal facility operator is not received within 20 days of the date of shipping, EEMD must file an exception report as specified in 6 NYCRR 372.2 (c).

c. Inspection Reports - HW Storage Area Inspection Report Sheets shall be completed by DEH.

8. Inspection.

a. Accumulation areas will be inspected daily for leaking or deteriorated containers by the generator.

b. Building 307 and 301 will be inspected weekly using the HW Storage Area Inspection Report sheets (Appendix B) by the Depot Fire Department. These inspection reports will be forwarded to EEMD.

c. Building 307 and 301 will be inspected monthly using the HW Storage Area Inspection Report Sheets (Appendix B) by EEMD.

9. Spill Prevention and Control.

a. In the event of a HW spill, containment and clean up will be accomplished by the Depot Spill Response Team (DSRT). Activities/generator responsible for the event, when possible, will take all actions possible to curtail, contain and clean up spillage prior to the arrival of DSRT.

b. SEAD Fire Department will immediately be notified in the event of a spill. Fire department personnel who receive such notification will notify the DSRT for implementation of appropriate actions as specified in the Depot Spill Prevention Control and Countermeasure Plan (Appendix C) and Depot Spill Contingency Plan (Appendix D).

c. All activities which store quantities of petroleum products, hazardous materials or accumulate/store hazardous wastes will be familiar with the spill response procedures outlined in the Depot Spill Contingency Plan (Appendix D).

d. A spill training exercise will be conducted annually.

10. Training Requirements.

a. General. Each supervisor who is responsible for the generation of HW shall have this duty noted on their job description. These supervisors must successfully complete a program of classroom instruction which teaches them to perform their duties in a way that ensures compliance with the 6 NYCRR 373-2. This training program must be directed by an instructor trained in HWM procedures (including contingency plan implementation). ALMAC Defense Hazardous Materials/Waste Handling Course will satisfy this requirement.

Once trained, Responsible Supervisors will be required to attend an annual update of training in the form of a review/workshop. SEAD Hazardous Waste Handling Review Workshop will satisfy this requirement.

b. Civilian Personnel Office Training Responsibilities.

(1) Identify the supervisors who are responsible for HW generation operations and require they be trained. Submit names of supervisors who are trained to EEMD.

(2) Submit names of supervisors who need annual review/workshop training to EEMD.

(3) As required by state and federal law, maintain training records for three years, after employee no longer works at SEAD, the following information:

- (a) Names of persons trained in handling HW.
- (b) Date of training.
- (c) Date in which personnel started handling HW.
- (d) Description of waste and job capacity in which personnel handle the HW.

(4) Notify EEMD if there are any changes in personnel who handle HW. Insure that within six months personnel are trained in the procedures of handling HW. Personnel who handle HW will have this noted in their job description.

c. DEH's Training Responsibilities.

(1) Schedule and conduct at least two SEAD HW Handling Review Workshops per fiscal year. Review will be directed by an instructor trained in HW management procedures. Review shall include instructions on the following procedures:

- (a) Packaging

- (b) Labeling
- (c) Inspecting
- (d) Administrative record keeping
- (e) Safety Procedures
- (f) Emergency Response Procedures

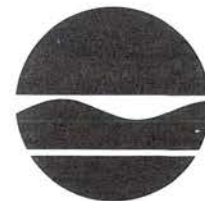
(2) Keep up-to-date with current regulations and HW handling procedures to implement the training program.

11. Updating this Regulation.

This regulation will be updated as personnel, operations and regulations change. The proponent of this regulation is the DEH EEMD telephone 41403. Users are requested to send comments and suggested improvements on DA Form 2028 (Recommended Changes to Publications and Blank Forms) to DEH, ATTN: EEMD.

FOR THE COMMANDER:

New York State Department of Environmental Conservation
6274 East Avon-Lima Road, Avon, NY 14414



Thomas C. Jorling
Commissioner

January 14, 1992

28 JAN REC'D
Randy
MARK MRP
Tom G. T.G.
Karen File

Commander
Seneca Army Depot
Route 96
Romulus, NY 14541-5001

Attention: Mr. Stephen M. Absolom
Chief, Engineer/Environmental
Management Division

Dear Mr. Absolom:

Re: Hazardous Waste Compliance Inspection Date:
September 11, 1991
Location of Handler: Same as above

EPA Identification Number: NY 0213820830

Your submittals in response to the warning letter dated October 17, 1991, have been deemed satisfactory. This matter can now be considered concluded and the enforcement action resolved.

However, I must emphasize that various units and portions of units at the facility were not inspected; and the Department has made no determination as to whether violations exist at the areas that were not inspected.

Please be advised that your facility is under the continuing obligation to comply with all the applicable state and federal regulations regarding the management of hazardous waste. If your facility should be found in violation of the regulations in the future, you may be subject to escalated enforcement action, including monetary penalties.



THE UNIVERSITY OF CHICAGO
DEPARTMENT OF POLITICAL SCIENCE

PHOTOGRAPHY
BY [illegible]

[The main body of the page contains several paragraphs of text that are extremely faint and illegible due to the quality of the scan. The text appears to be a formal letter or report.]

[The bottom section of the page contains a few lines of text, possibly a signature block or a footer, which are also illegible.]

Mr. Absolom

-2-

January 14, 1992

Please note that this letter in no way addresses any liability you may have for any regulatory fees.

Thank you for your cooperation.

Sincerely,



Dixon Rollins, P. E.
Regional Hazardous
Substances Engineer
Division of Hazardous
Substances Regulation

db
Enclosure

cc: J. Desai
J. Gavin, Inspector
A. Goswami, Reviewer
Seneca County Health Department

*** ACTIVITY REPORT ***

TRANSMISSION OK

TX/RX NO.	2524
CONNECTION TEL	667172678264
CONNECTION ID	DESCOM-ENV
START TIME	01/28 11:06
USAGE TIME	01'11
PAGES	3
RESULT	OK



SENECA ARMY DEPOT

BLDG 123

ROMULUS, N.Y.

14541



DIRECTORATE of ENGINEERING and HOUSING

DATE: 28 JUN 92 TIME: ~~0700~~ 1000 # of PAGES W/ COVER SHT: 3

TO: Diane Michaels FROM: RW Ballinger

OFFICE/CO.: HQ DKSCOM SENECA ARMY DEPOT
FAX# (607) 869-1362
PHONE# (607) 869-1532

FAX# AV 570-~~807~~ 8264

COMMENTS: "Closure" of inspection set
waiting for dated 17 OCT 91



DEPARTMENT OF THE ARMY
SENECA ARMY DEPOT
ROMULUS, NEW YORK 14541-5001

REPLY TO
ATTENTION OF

October 28, 1991

Office of Engineering/Environmental
Management Division

Dixon F. Rollins, P.E.
Environmental Engineer III
Division of Hazardous Substances Regulation
New York State Department of Environmental Conservation
6274 East Avon-Lima Road
Avon, New York 14414
Attention: Mr. Joseph Gavin, Inspector

Dear Sirs:

In reference to your letter dated October 17, 1991, regarding Hazardous Waste Compliance Inspection at Seneca Army Depot, a violation of 6NYCRR Part 373-3.2(g)(1), (2), (3) occurred in that "the owner or operator must ensure that facility personnel take part in an annual review of the initial training required."

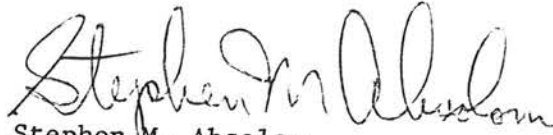
The following action is being taken to correct this violation and prevent its reoccurrence in the future:

EPA Identification Number NY0213820830.

Seneca Army Depot Environmental Office will be conducting a minimum of two training review workshops per calendar year. Presently two reviews have been scheduled. The first review will be November 7, 1991, and the second April 16, 1992. The reviews will consist of one day of classroom training with a written pass or fail test at the end of the review. This review will be directed by a person trained in hazardous waste management procedures from the Seneca Army Depot Environmental Office. An outline of this review is attached at enclosure 1. As this review is being taught by Seneca Army Depot personnel, it can be scheduled as often as necessary to meet the above requirements.

If the action described above is not adequate, or should you have any questions regarding the Review workshop, please contact Mr. Thomas Grasek at (607) 869-1450.

Sincerely,



Stephen M. Absolom
Chief, Engineering/Environmental
Management Division

Copy Furnished:

Mr. Janafrai M. Desai, P.E., Supervisor of the Compliance Inspection Section,
Bureau of Hazardous Waste Facility Compliance, Division of Hazardous Substance
Regulation, NYSDEC, 50 Wolf Road - Room 208/204, Albany, New York 12233-7250
518-457-0532, Attention: Mr. Arvind Goswami, Reviewer

Commander, U.S. Army Depot System Command, ATTN: AMSDS-EN-FD (Ms. D. Michaels),
Chambersburg, PA 17201

SEAD HAZARDOUS WASTE HANDLING REVIEW/WORK SHOP

SENECA ARMY DEPOT

CLASS 92-1
THURSDAY 7 NOV 91

HOURS	SUBJECT
0730-0800	Administration
0800-0820	Introduction (Commander)
0820-0910	Identification of HW/HM
0910-0920	Break
0920-1020	Packaging and Labeling
1020-1030	Break
1030-1125	Accumulation/Storage Areas
1125-1205	Lunch
1205-1255	Record Keeping
1255-1305	Break
1305-1400	Safety Procedures (Safety Office)
1400-1410	Break
1410-1500	Spill Response
1500-1600	Review, Test, Certificates

New York State Department of Environmental Conservation
6274 East Avon-Lima Road, Avon, NY 14414



Thomas C. Jorling
Commissioner

CERTIFIED MAIL, RETURN RECEIPT REQUESTED

October 17, 1991

Mr. Tom Grasek
Environmental Protection Specialist
Seneca Army Depot
Route 96
Romulus, NY 14581

Dear Mr. Grasek:

Re: Hazardous Waste Compliance Inspection Date:
September 16, 1991
Location of Handler: Same as Above

EPA Identification Number: NYO213820830

In order to determine compliance with the New York State Hazardous Waste Regulations, the New York State Department of Environmental Conservation conducted an inspection of your facility on the above referenced date.

As a result of that inspection, we believe that your facility is operating as a generator and a treater, storer, and/or disposer of hazardous waste.

6NYCRR Part 373-3.2(g)(1),(2),(3) requires that facility personnel must successfully complete a program of classroom instruction or on-the-job training that teaches them to perform their duties in a way that ensures the facility's compliance with the requirements of this subpart. In addition, the owner or operator must ensure that facility personnel take part in an annual review of the initial training required.

You have not met the above requirement and, therefore, are in violation of 6NYCRR Part 373-3.2(g)(1),(2),(3).

Please confirm in writing, within 30 days of the date of this letter, that the above referenced violations have been corrected and include supporting documentation. You MUST include your EPA

Mr. Grasek

-2-

October 17, 1991

Identification Number on all correspondence. This confirmation should be addressed to:

Dixon Rollins, P.E.
Regional Hazardous Substances Engineer
NYS Department of Environmental Conservation
Division of Hazardous Substances Regulation
6274 East Avon-Lima Road
Avon, NY 14414
(716)226-2466
Attention: Mr. Joseph Gavin, Inspector

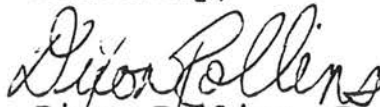
with a copy to:

Janakrai Desai
NYS Department of Environmental Conservation
Division of Hazardous Substances Regulation
Bureau of Hazardous Waste Facility Compliance
Compliance Inspection Section
50 Wolf Road - Room 208/204
Albany, NY 12233-7252
(518)457-0532
Attention: Mr. Arvind Goswami, Reviewer

Please note that this inspection does not cover compliance with the mixed waste regulations.

If you have any questions about this notice or should you wish to discuss this matter further, please contact the Inspector or the Reviewer at the telephone number above. A copy of the Inspection Form is enclosed for your information.

Sincerely,



Dixon Rollins, P. E.
Regional Hazardous Substances
Engineer
Division of Hazardous
Substances Regulation

db
Enclosure

Mr. Grasek

-3-

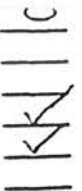
October 17, 19.

cc: Mr. Joseph Gavin, Inspector
Mr. Arvind Goswami, Reviewer
Seneca County Health Department



INSPECTION FORM

Region:
 LAND BASED TSDF
 COMMERCIAL TSDF
 OTHER TSDF
 TC GENERATOR
 OTHER GENERATOR



NEW YORK STATE INDUSTRIAL HAZARDOUS WASTE MANAGEMENT ACT
 (Chapter 639, Laws of 1978)

Prepared for:

Commissioner
 NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Send to: Division of Hazardous Substances Regulation
 Compliance Inspection Section
 50 Wolf Road - Room 208
 Albany, New York 12233-7252

EPA I.D. NUMBER: NY 021 382 0830

COMPANY NAME (Corporate): ~~Seneca Army Depot~~

(Division): _____

COMPANY MAILING ADDRESS: Seneca Army Depot, Route 96

City & State Romulus, NY Zip Code 14581

COMPANY LOCATION ADDRESS: _____

(if different than mailing) _____

City & State _____, NY Zip Code _____

COMPANY TELEPHONE NUMBER: (607) 869-1281 Extension _____

FULL NAME OF COMPANY CONTACT: (Mr.) (Ms.) Tom Emsek

TITLE OF COMPANY CONTACT: Environmental Protection Specialist

INSPECTION DATE: 9/16/1991 TIME OF INSPECTION: 10 (a.m.) _____ (p.m.)

INSPECTOR'S NAME: Joseph Gavin

TITLE: Environmental Engineer I

NAME: Darshan Patel

TITLE: Environmental Engineer I

REPORT PREPARED BY: Joseph Gavin DATE: 10-1-91

REPORT APPROVED BY: Debra Rollins DATE: 10-1-91

NA

Indicate:

X Violations

Indicate:

X Satisfactory
NA Not Applicable

- 2. written job description for each position - 373-3.2(g)(4)(ii) ✓
- 3. written description of the type and amount of both introductory and continuing training that will be given to each person related to hazardous waste management - 373-3.2(g)(4)(iii) ✓
- 4. records that document the training or job experience required has been given to and completed by facility personnel - 373-3.2(g)(4)(iv). ✓
- B. The training program is directed by a person trained in hazardous waste management procedures and must include instruction which teaches facility personnel hazardous waste management procedures (including contingency plan implementation) relevant to the positions in which they are employed. 373-3.2(g)(1)(i),(ii) and (iii). The components are: ✓
 - 1. Procedures for using, inspecting, repairing and replacing facility emergency and monitoring equipment; ✓
 - 2. Key parameters for automated waste feed cutoff systems; NA
 - 3. Communications or alarm systems; ✓
 - 4. Response to fires and explosions; ✓
 - 5. Response to groundwater contamination incidents; and NA
 - 6. Shutdown of operations. ✓
- C. Facility personnel have successfully completed the program by the effective date of these regulations or six months after the date of their employment. 373-3.2(g)(2). ✓
- D. Facility personnel have taken part in an annual review of the initial training required - 373-3.2(g)(3). —
- E. Training records on current personnel have been kept permanently at the facility (until closure) - 373-3.2(g)(5). ✓
- F. Training records on former employees have been kept for at least three years from the date the employee last worked at the facility - 373-3.2(g)(5). ✓

New York State Department of Environmental Conservation
6274 East Avon-Lima Road, Avon, NY 14414



Thomas C. Jorling
Commissioner

CERTIFIED MAIL, RETURN RECEIPT REQUESTED

October 17, 1991

Mr. Tom Grasek
Environmental Protection Specialist
Seneca Army Depot
Route 96
Romulus, NY 14581

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September 16, 1991
Location of Handler: Same as Above

EPA Identification Number: NYO213820830

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As a result of that inspection, we believe that your facility is operating as a generator and a treater, storer, and/or disposer of hazardous waste.

6NYCRR Part 373-3.2(g)(1),(2),(3) requires that facility personnel must successfully complete a program of classroom instruction or on-the-job training that teaches them to perform their duties in a way that ensures the facility's compliance with the requirements of this subpart. In addition, the owner or operator must ensure that facility personnel take part in an annual review of the initial training required.

You have not met the above requirement and, therefore, are in violation of 6NYCRR Part 373-3.2(g)(1),(2),(3).

Please confirm in writing, within 30 days of the date of this letter, that the above referenced violations have been corrected and include supporting documentation. You MUST include your EPA



10/10/10
10/10/10

10/10/10
10/10/10

These contents in relation to days of the year of this
letter. That the above referenced violations have been corrected
and include supporting documentation. You MUST include your EIA

Mr. Grasek

-2-

October 17, 1991

Identification Number on all correspondence. This confirmation should be addressed to:

Dixon Rollins, P.E.
Regional Hazardous Substances Engineer
NYS Department of Environmental Conservation
Division of Hazardous Substances Regulation
6274 East Avon-Lima Road
Avon, NY 14414
(716)226-2466
Attention: Mr. Joseph Gavin, Inspector

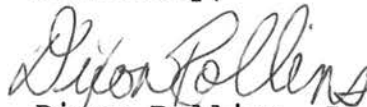
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Division of Hazardous Substances Regulation
Bureau of Hazardous Waste Facility Compliance
Compliance Inspection Section
50 Wolf Road - Room 208/204
Albany, NY 12233-7252
(518)457-0532
Attention: Mr. Arvind Goswami, Reviewer

Please note that this inspection does not cover compliance with the mixed waste regulations.

If you have any questions about this notice or should you wish to discuss this matter further, please contact the Inspector or the Reviewer at the telephone number above. A copy of the Inspection Form is enclosed for your information.

Sincerely,



Dixon Rollins, P. E.
Regional Hazardous Substances
Engineer
Division of Hazardous
Substances Regulation

db
Enclosure

Mr. Grasek

-3-

October 17, 1991

cc: Mr. Joseph Gavin, Inspector
Mr. Arvind Goswami, Reviewer
Seneca County Health Department



INSPECTION FORM

Region:
 LAND BASED TSDF
 COMMERCIAL TSDF
 OTHER TSDF
 TC GENERATOR
 OTHER GENERATOR

8
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NEW YORK STATE INDUSTRIAL HAZARDOUS WASTE MANAGEMENT ACT
 (Chapter 639, Laws of 1978)

Prepared for:

Commissioner
 NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Send to: Division of Hazardous Substances Regulation
 Compliance Inspection Section
 50 Wolf Road - Room 208
 Albany, New York 12233-7252

EPA I.D. NUMBER: N Y 0 2 1 3 8 2 0 8 3 0

COMPANY NAME (Corporate): Seneca Army Depot

(Division): _____

COMPANY MAILING ADDRESS: Seneca Army Depot, Route 96

City & State Romulus, NY Zip Code 14581

COMPANY LOCATION ADDRESS: _____

(if different than mailing) _____

City & State _____, NY Zip Code _____

COMPANY TELEPHONE NUMBER: (607) 869-1281 Extension _____

FULL NAME OF COMPANY CONTACT: (Mr.) (Ms.) Tom Emsek

TITLE OF COMPANY CONTACT: Environmental Protection Specialist

INSPECTION DATE: 9/16/1991 TIME OF INSPECTION: 10 (a.m.) _____ (p.m.)

INSPECTOR'S NAME: Joseph Gavin

TITLE: Environmental Engineer I

NAME: Darshan Patel

TITLE: Environmental Engineer I

REPORT PREPARED BY: Joseph Gavin DATE: 10-1-91

REPORT APPROVED BY: Diana Rollins DATE: 10-1-91

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Appendix C	Groundwater Monitoring C-1
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PART I

General Information and Classification of Facility

- | | <u>Yes</u> | <u>No</u> |
|--|------------|-----------|
| 1. <u>Identification of Hazardous Waste - 371</u> | | |
| A. Is there reason to believe the facility has hazardous waste on-site? If yes, check appropriate box/boxes. | <u>X</u> | _____ |
| (1) <u>X</u> Company recognizes that its waste is hazardous during the inspection. | | |
| (2) <u>X</u> Company admitted the waste is hazardous in its RCRA notification and/or Part A permit application. | | |
| (3) <u>X</u> Testing has shown characteristics of: | | |
| <u>X</u> Ignitability (D001) - 371.3(b) | | |
| <u>X</u> Corrosivity (D002) - 371.3(c) | | |
| () Reactivity (D003) - 371.3(d) | | |
| <u>X</u> EP Toxicity (D004 - 017) - 371.3(e) | | |
| (4) <u>X</u> The material is listed in the regulations as a hazardous waste from non-specific sources (F-Waste). 371.4(b) | | |
| (5) _____ The waste is listed in the regulations as a hazardous waste from specific sources (K-Waste). 371.4(c) | | |
| (6) _____ The material or product is listed in the regulations as discarded commercial chemical products, off-specification species, container residues and spill residues thereof (P & U Wastes). 371.4(d). | | |
| (7) _____ The material is listed in the regulations as a waste containing PCBs. 371.4(e). | | |
| B. Is there reason, other than those above, for you to believe that there is hazardous waste on site? (Explain) _____ | | |

C. The handler notified EPA as a:

TSD

Has EPA or DEC officially modified the handlers status? If so, attach correspondence.

NO

D. If the facility is a treatment, storage or disposal facility, have they:

Submitted a Part A application.

Should the Part A be modified by the Company? If so, explain.

Been granted a Part B permit.*

Submitted a Part 373 permit application.

Been granted a Part 373 permit.*

If so, when does it expire: _____

*Complete Appendix M - indicate compliance status with permit conditions.

E. Describe the activities that result in the generation of hazardous waste. Include manufacturing processes that generate hazardous waste.

Hazardous wastes are generated from machine rework operations, painting, cleaning and degreasing. Hazardous waste is also generated from maintenance and destruction of ammunition.

F. Identify the hazardous wastes that are on-site, the quantity of each, and the storage method (be as specific as possible).

Accumulation Areas:

90 day Storage Areas:

Permitted Storage Areas:

112 (55 gallon containers) of D001, D002
D005, D008, F002, F003, F005, B004 and B005
wastes
6 TRANSFORMERS had been tested for PCB content
Results pending

2. Status Identification:

A. Transporter - complete Appendix B

B. Generator Status Identification

1. Category 1 - Conditionally Exempt Generator - generates less than 100 kg/mo and stores less than 100 kg. - 372.1(e)(1)(vii)(a) Complete Part II, 1A.
2. Category 2 - Small Quantity Generator - generates less than 100 kg/mo and stores more than 100 kg but less than 1,000 kg. - 372.2(a)(8)(vi) - Complete Part II, 1B.
3. Category 3 - Generator Subject to Reduced Requirements - generates more than 100 kg/mo but less than 1,000 kg/mo and stores less than 1,000 kg. - 372.2(a)(8)(iii) - Complete Part II, 1C.
4. Category 4 - Generator - generates and/or stores 1,000 kilograms or more per month or generates acute hazardous waste in quantities greater than those specified in Part 372.1(e)(1)(v). Complete Part II, Questions 2-7. (Generators over sole source aquifers also complete Appendix A.)

C. Treatment, Storage or Disposal Facility Status

1. Hazardous waste is generated and stored on-site. If so:
 - (a) Is hazardous waste stored on-site longer than 90 days? 373-1.1(d)(1)(iii) - If yes, complete Appendix A.*
 - (b) Is more than 8,800 gallons of hazardous waste stored in containers? 373-1.1(d)(1)(iii)(a) - If yes, complete Appendix A.*
 - (c) Is more than 20,000 gallons of hazardous waste stored in tanks? 373-1.1(d)(1)(iii)(b) - If yes, complete Appendix A.*

* (Note: Do not complete Appendix A for generators only that have exceeded 90 days or quantity limits.)

2. Hazardous waste is received from off-site and not beneficially used, reused or legitimately recycled or stored. If yes, complete Appendix A.
3. Hazardous waste is treated on-site. If yes, complete appropriate portion of this report.

4. ___ Hazardous waste is disposed of on-site. If yes, complete appropriate portion of this report.

3. Exemptions

A. Generator Exemptions

- (1) ___ Not a regulated handler.
- (2) ___ Samples collected for testing. 372.1(e)(5)
- (3) ___ Residues of hazardous waste in empty containers. 372.1(e)(6)
- (4) ___ A hazardous waste which is generated in a product or raw material storage tank, a product or raw material transport vehicle or vessel, a product or raw material pipeline, or in a manufacturing process unit or an associated non-waste treatment manufacturing unit is not subject to regulation until it exits the unit in which it was generated, unless the unit is a surface impoundment, or unless the hazardous waste remains in the unit more than 90 days after the unit ceases to be operated for manufacturing, or for storage or transportation of product or raw materials. 372.1(e)(7).

B. TSD Exemptions

1. TSD exemptions

- (a) ___ Recycling of Hazardous Wastes: 373-1.1(d)(1)(viii). Parts 373-2.2(c), 372.4(b), 372.4(d)(1) must be complied with (Storage of wastes prior to recycling is not exempt under this subparagraph.) In addition:
- This exemption does not apply to commercial facilities which recycle listed hazardous wastes or hazardous waste sludges received from off-site or burn these wastes for energy recovery;
 - Commercial facilities that reclaim precious metals from hazardous wastes do qualify;
 - This exemption does not apply to boiler and industrial furnaces that burn hazardous wastes for energy recovery if the waste stream has a heat value of less than 8,000 BTU/lb.

- (b) — The storage of the following hazardous wastes is exempt from permitting provided that Part 374 of this Title is complied with: 373-1.1(d)(1)(vii).
- hazardous wastes that are recycled in a manner constituting disposal;
 - hazardous waste burned for energy recovery in boilers and industrial furnaces that are not regulated under section 373-2.15 or 373-3.15 of this Part. This exemption is not available if the hazardous waste stream has individual hazardous waste components with little or no heat value (less than 8,000 BTU/lb);
 - hazardous waste from which precious metals (as defined in section 374.6 of this Title) are being reclaimed; and
 - spent lead acid batteries that are being reclaimed by battery crackers or secondary lead smelters.
- (c) — Totally enclosed treatment facility - 373-1.1(d)(1)(xi).
- (d) — Elementary neutralization units or wastewater treatment units other than units located at commercial facilities. Units utilized only to neutralize or treat hazardous waste from recycling characteristic hazardous wastes or for precious metal recovery at commercial facilities are exempt. 373-1.1(d)(1)(xii) (Complete Appendix Q).
- (e) — Storage of hazardous waste generated and stored on-site for 90 days or less and 8,800 gallons or less is stored in containers or 20,000 gallons or less is stored in tanks. 373-1.1(d)(1)(iii).
- (f) — Storage of liquid hazardous waste over the designated sole source aquifers provided the waste is stored less than 90 days and 8,800 gallons or less is stored in containers or 20,000 gallons or less is stored in tanks. 373-1.1(d)(1)(iv).

- (g) — Storage and treatment of hazardous waste on-site of generation if generates less than 100 kilograms and stores less than 1,000 kilograms of hazardous waste in each calendar month and not generate or store acute hazardous waste as described in 373-1.1(d)(1)(i)(b). 373-1.1(d)(1)(v).
- (h) — Accumulation areas. Complete Part II: 3A. 373-1.1(d)(1)(xiv).
- (i) — Storage of manifested shipments of hazardous waste in containers or vehicles by a transporter at its own transfer facility for 5 days or less. Complete Appendix B. 373-1.1(d)(1)(xv).

Part II

Generator Inspection Section

Indicate:

X Violations

Indicate:

X Satisfactory
NA Not Applicable

1. Requirements for Exempt and Small Quantity Generator (Category 1-3 Generators):

A. Category 1 - The conditionally exempt generator has:

1. made a hazardous waste determination - 372.1(e)(1)(vii)(a).
2. accumulated no more than 100 kg of hazardous waste on-site - 372.1(e)(1)(vii)(b).
3. disposed of hazardous waste in an authorized, permitted or licensed on-site or off-site facility - 372.1(e)(1)(vii)(c).
4. ensured delivery to an off-site facility by a transporter authorized under Part 364 or by the generator himself - 372.1(e)(1)(vii)(d).

NA

B. Category 2 - The generator who generates less than 100 kg/month and stores between 100-1000 kg has complied with the following:

General Requirement - Items 2A-E (pg. II-5)
Manifest & Reporting - Item 4A-N (pgs. II-9, 10)

1. uses tanks that are properly sheltered and protected to prevent spillage, seepage or any discharge - 372.2(a)(8)(vi)(a).
2. keeps containers and tanks holding hazardous waste closed during storage except to add or remove wastes. Containers and tanks must not be opened, handled or stored in a manner which may rupture the tank or containers or cause them to leak. Tanks and containers must be inspected at least quarterly for leaks or damage - 372.2(a)(8)(vi)(b).
3. uses tanks that are designed, constructed or operated in accordance with whichever of the following requirements are in effect in the municipality where the facility is located: 372.2(a)(8)(vi)(c).

↓

- (a) — the State Uniform Fire Protection and Building Code NA
Title 9 (B) NYCRR, Subchapter C, including the
National Fire Protection Association Flammable and
Combustible Liquids Code (NFPA-30) -
372.2(a)(8)(vi)(c)(1), or
- (b) — the applicable local building and fire codes -
372.(a)(8)(vi)(c)(2).
4. — the quantity of waste accumulated on-site must never
exceed 1,000 kilograms - 372.2(a)(8)(vi)(d).
- C. Category 3 - The generator subject to reduced requirements has
complied with the following:
- General Requirements - Complete Items 2A-E (pg. II-5)
Manifest & Reporting - Complete Items 4A-N (pgs. II-9, 10)
Container Requirements - Complete
Item 3D, questions 1,3-9 [except for Question 8(a) -(c)] (pg. II-5)
Preparedness & Prevention - Complete Items 6A-F (pgs. II-12, 13)
1. — quantity of waste on-site never exceeds 1000 kg and
may be stored for up to 180 days unless the disposal
facility is 200 miles or more away. Storage up to
270 days then is allowed - 372.2(a)(8)(iii)(a).
2. — the date upon which each period of accumulation begins
is clearly marked and visible for inspection on each
container - 372.2(a)(8)(iii)(d): 373-1.1(d)(1)(iii)(c)(2).
3. — each container is marked with the words 'Hazardous
Waste' - 372.2(a)(8)(iii)(d): 373-1.1(d)(1)(iii)(c)(3).
4. — at all times there must be at least one employee
on-site or on call with the responsibility for
coordinating emergency measures - 372.2(a)(8)(iii)(e)(1).
5. — the name and phone number of the emergency coordinator
must be posted next to the telephone -
372.2(a)(8)(iii)(e)(2)(i).
6. — location of fire extinguishers and spill control
material and, if present, fire alarm must be
posted next to the telephone - 372.(a)(8)(iii)(e)(2)(ii).
7. — telephone number of the fire department must be posted
next to the phone unless the facility has a direct alarm -
372.2(a)(8)(iii)(e)(2)(iii).
8. — ensure that all employees are thoroughly familiar
with proper waste handling and emergency procedures -
372.2(a)(8)(iii)(e)(3).

Indicate:

X Violations

Indicate:

X Satisfactory
NA Not Applicable

- 9. — the emergency coordinator or a designee have responded appropriately to any emergencies that have arisen - 372-2(a)(8)(iii)(e)(4).

NA

Tank Storage Requirements: 373-3.10(1)
(Complete the following section)

General operating requirements:

- 10. — treatment or storage of hazardous waste in tanks must comply with the following requirements for ignitable, reactive or incompatible wastes - 373-3.10(1)(2)(i):

- (a) — the owner or operator must take precautions to prevent accidental ignition of ignitable or reactive wastes. "No Smoking" signs must be placed wherever there is a hazard from either waste - 373-3.2(h)(1), and

- (b) — where specifically required by other sections of this Subpart, the treatment, storage, or disposal of ignitable or reactive waste, and the mixture or commingling of incompatible wastes, or incompatible wastes and materials, must be conducted so that it does not:

- (1) — generate extreme heat or pressure, fire or explosions, or violent reactions;

- (2) — produce uncontrolled toxic mists, fumes, dusts or gases in sufficient quantities to threaten human health;

- (3) — produce uncontrolled flammable fumes or gases in sufficient quantities to pose a risk of fire or explosions;

- (4) — damage the structural integrity of the device or facility containing the waste; or

- (5) — through other like means threaten human health or the environment.

- 11. — hazardous wastes or treatment reagents must not be placed in a tank if they could cause the tank or its inner liner to fail - 373-3.10(1)(2)(ii).

- 12. — uncovered tanks must be operated to ensure at least 60 centimeters (2 feet) of freeboard, unless there is adequate containment - 373-3.10(1)(2)(iii).

↓

X Violations

X Satisfactory
NA Not Applicable

- 13. — where hazardous waste is continuously fed into a tank, the tank must be equipped with a means to stop this inflow - 373-3.10(1)(2)(iv).
- 14. — the owner or operator must mark all tanks with the words "Hazardous Waste" and with other words that identify the contents of the tanks. For underground tanks, the markings must be placed on a sign in the area above the tank - 373-3.10(1)(2)(v).

NA

Tank(s) are inspected each operating day for:

- 15. — discharge control equipment (e.g. waste feed cutoff systems, bypass systems and drainage systems) - 373-3.10(1)(3)(i).
- 16. — monitoring equipment (e.g. pressure and temperature gauges) - 373-3.10(1)(3)(ii).
- 17. — level of waste in tank to ensure proper freeboard - 373-3.10(1)(3)(iii).

Tank(s) are inspected weekly for:

- 18. — corrosion or leaking of fixtures or seams - 373-3.10(1)(3)(iv).
- 19. — erosion or obvious signs of leakage (e.g. wet spots or dead vegetation) of the construction materials of, and the area immediately surrounding discharge confinement structures (e.g. dikes) - 373-3.10(1)(3)(v).

Closure:

- 20. — at closure all hazardous waste must be removed from tanks, discharge control equipment and discharge confinements structures - 373-3.10(1)(4).

Indicate:

X Violations

Indicate:

X Satisfactory
NA Not Applicable

Special requirements for ignitable or reactive waste:

- | | | | |
|-----|-----|---|----|
| 21. | — | ignitable or reactive waste is placed in a tank and the waste is stored, treated, rendered or mixed before or immediately after placement in the tank so that the resulting wastes, mixture or dissolution of material is no longer ignitable or reactive: 373-3.10(1)(5)(i)(a)(1); and | NA |
| 22. | — | the treatment, storage or disposal of ignitable or reactive waste in a tank, is conducted so that it does not: 373-3.10(1)(5)(i)(a)(2) | |
| | (a) | — generate extreme heat or pressure, fire or explosions violent reactions - 373-3.2(h)(2)(i). | |
| | (b) | — produce uncontrolled toxic mists, fumes dusts or gases in sufficient quantities to threaten human health - 373-3.2(h)(2)(ii). | |
| | (c) | — produce uncontrolled flammable fumes or gases in sufficient quantities to pose a risk of fire or explosion - 373-3.2(h)(2)(iii). | |
| | (d) | — damage the structural integrity of the device or facility containing the waste - 373-3.2(h)(2)(iv). | |
| | (e) | — through other like means threaten human health or the environment - 373-3.2(h)(2)(v); or | |
| 23. | — | the waste is stored or treated in such a way that it is protected from any material or conditions that may cause the waste to ignite or react - 373-3.10(1)(5)(i)(b), or | |
| 24. | — | the tank is used solely for emergencies - 373-3.10(1)(5)(i)(c) | |
| 25. | — | storage of ignitable or reactive waste in covered tanks complies with the National Fire Protection Association's (NFPA's) buffer zone requirements for tanks, contained in Tables 2-1 thru 2-6 of the "Flammable and Combustible Liquids Codes." 373-3.10(1)(5)(ii). | |

Indicate:

X Violations

Indicate:

X Satisfactory
NA Not Applicable

For Category 4 Generators of Hazardous Waste - complete remainder of Part II.

2. General Requirements

- A. The generator has made a determination as to whether or not his solid waste is a hazardous waste - 372.2(a)(2). ✓
- B. The generator has obtained an EPA identification number - 372.2(a)(3). ✓
- C. Before transporting or offering hazardous waste for* transportation off-site the generator has packaged the waste in accordance with the applicable USDOT regulations - 372.(a)(4). ✓
- D. Before transporting or offering hazardous waste for* transportation off-site the generator has labeled each package of waste in accordance with the applicable USDOT regulations - 372.2(a)(5). NA
- E. Before transporting or offering hazardous waste for* transportation off-site the generator has marked each container or package of waste properly - 372.2(a)(6). ✓

3. On-site Accumulation of Hazardous Waste Prior to Shipment

- A. Accumulation areas - 372.2(a)(8)(i)(a).
 - (1) The containers appear to be in good condition and are not in danger of leaking - 373-3.9(b). NA
 - (2) Hazardous waste is stored in containers made of compatible materials - 373-3.9(c). |
 - (3) All containers except those in use are closed - 373-3.9(d)(1). ✓ |
 - (4) Containers holding hazardous waste must not be opened, handled or stored in a manner which may rupture the container or cause it to leak - 373-3.9(d)(2). ✓ |
 - (5) Containers are marked either with the words "Hazardous Waste" or with other words that identify the contents of the containers - 372.2(a)(8)(i)(a)(2). ✓ |
 - (6) Hazardous waste may be accumulated in excess of 55 gallons or 1 quart of acutely hazardous waste at the point of generation provided that Section 372.2(a)(8)(ii) requirements are met within 3 days, and the container holding the excess accumulation must be marked with the date the excess amount began accumulation - 372.2(a)(8)(i)(b). ✓

* This does not apply to drums in storage.

X Violations

X Satisfactory
NA Not Applicable

90 Day Storage Area/Permitted Storage Area (complete as applicable and be specific)

B. All such wastes are shipped off-site to an authorized treatment, storage or disposal (TSD) facility in 90 days or less - 372.2(a)(8)(ii). NA

C. The date upon which each period of accumulation begins is clearly marked and visible for inspection on each container or tank - 372.2(a)(8)(ii):373-1.1(d)(1)(iii)(c)(2), 373-1.1(d)(1)(iv)(d). ✓

D. Standards for management of containers - 372.2(a)(8)(ii); 373-3.9 (This section will also be completed for TSD's as referred to from Appendix A.)

1. What type of containers are used for holding hazardous waste? Describe the size, type, and location in the storage area.

Primarily containers are steel 55gallon
several other size steel containers and
1 plastic overpack container

2. Each container is marked with the words "Hazardous Waste." 372.2(a)(8): 373-1.1(d)(1)(iii) (c)(3), 373-1.1(d)(1)(iv)(d). ✓

3. The containers appear to be in good condition and are not in danger of leaking. (If containers are leaking, describe the type, condition, contents and number that are leaking or corroded. Be detailed and specific) - 373-3.9(b). ✓

4. Hazardous waste is stored in containers made of compatible materials - 373-3.9(c). (If not, please explain). ✓

Indicate:

X Violations

Indicate:

X Satisfactory
NA Not Applicable

5. All containers except those in use are closed - 373-3.9(d)(1). ✓
6. Containers holding hazardous waste must not be opened, handled or stored in a manner which may rupture the container or cause it to leak - 373-3.9(d)(2). ✓
7. The storage area is inspected at least weekly - 373-3.9(e). ✓
8. The generator complies with the following special requirements related to storage of ignitable or reactive wastes. 373-3.9(f):
- (a) Containers holding ignitable or reactive waste are located at least 15 meters (50 feet) from the facility property line - 373-3.9(f). ✓
- (b) Generator has taken precautions to prevent accidental ignition or reaction of ignitable or reactive waste by separating and protecting such waste from sources of ignition or reaction - 373-3.2(h)(1). ✓
- (c) Generator has placed "No Smoking" signs conspicuously wherever there is a hazard from ignitable or reactive waste - 373-3.2(h)(1). ✓
9. The generator complies with the following special requirements related to incompatible wastes: 373-3.9(g).
- (a) Incompatible wastes, or incompatible wastes and materials, are not placed in the same container, or in an unwashed container that previously held an incompatible waste or material unless the placement is conducted to prevent the following: 373-3.9(g)(1) & (2).
- (1) the generation of extreme heat or pressure, fire or explosion, or violent reaction - 373-3.2(h)(2)(i). ✓
- (2) production of uncontrolled toxic mists, fumes, dusts or gases in sufficient quantities to pose a risk of fire or explosions - 373-3.2(h)(2)(ii). ✓
- (3) production of uncontrolled flammable fumes or gases in sufficient quantities to pose a risk of fire or explosions - 373-3.2(h)(2)(iii). ✓

- (4) — damage to the structural integrity of the device or facility containing the waste - 373-3.2(h)(2)(iv). ✓
 - (5) — a threat to human health or the environment - 373-3.2(h)(2)(v). ✓
 - (b) — Containers holding a hazardous waste that is incompatible with any waste or other materials stored nearby in other containers, piles, open tanks, or surface impoundments must be separated from the other materials or protected from them by means of a dike, berm, wall, or other device. 373-3.9(g)(3). ✓
10. Special requirements for generators of liquid hazardous waste over sole source aquifers: 373-1.1(d)(1)(iv)
- (a) — the facility submits written notification to the regional office that they qualify for the exemption under 373-1.1(d)(1)(iv) and submits a TSD annual report - 373-1.1(d)(1)(iv)(c). NA
 - (b) — The container storage areas are within a secondary containment system designed and operated in accordance with the following:
 - (1) — the base under the containers must be free of cracks or gaps and sufficiently impervious to contain collected material until it is removed - 373-2.9(f)(1)(i). NA
 - (2) — the base must be sloped or the containment system otherwise designed and operated to drain and remove liquid unless the containers are elevated or protected from contact with accumulated liquids - 373-2.9(f)(1)(ii). NA

Indicate:

X Violations

Indicate:

X Satisfactory
NA Not Applicable

- (3) — the containment system must have sufficient capacity to contain 10 percent of the volume of containers or the volume of the largest container, whichever is greater. Containers that do not contain free liquids are not considered in this determination - 373-2.9(f)(1)(iii).
- (4) — Run-on is prevented unless the system has sufficient excess capacity over that required in (3) - 373-2.9(f)(1)(iv).
- (5) — Accumulated waste and precipitation must be removed as necessary to prevent overflow 373-2.9(f)(1)(v).

NA
↓

E. Standards for management of tanks: 373-3.10

- 1. — Generators complete Appendix O except for Section 373-3.10(h)(3); Items 7C1-5 (pages 0-14 to 0-15). [In addition, sections 373-3.7 and 3.8 which are cross-referenced do not apply except for section 373-3.7(b) and (e)].
- 2. — Generators over sole-source aquifers complete Appendix O except for Section 373-3.10(h)(3), Items 7C1-5 (pages 0-14 to 0-15). [Requirements of section 373-3.8 do not apply.]

4. Manifest Records and Reporting: 372.2(b)

A. Hazardous waste is shipped off-site with an accompanying manifest.

If "violation" is checked please elaborate.

B. List the number of shipments per month and the amount of waste per shipment. _____

2 to 3 shipments / month

50 to 60 drums / month

C. The transporter has a valid Part 364 permit or is otherwise authorized to transport the waste to the designated facility - 372.3(a)(4).

List transporter and permit number.

Safety Kleen IL-009

Environmental Transportation Service OK-004

Chemical Waste Management IL-015

Indicate:

X Violations

Indicate:

X Satisfactory
NA Not Applicable

D. Each manifest (a representative sample) has the following information: 372.2(b)(1); Appendix 30.

	Generator	Transporter 1	Transporter 2	TSDf	
1. ___ Name of	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	___	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
2. ___ EPA ID No. of	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	___	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
3. ___ Mailing Address of	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	___	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
4. ___ Telephone No. of	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	___	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
5. ___ Manifest Document #					<input checked="" type="checkbox"/>
6. ___ The proper USDOT description.					<input checked="" type="checkbox"/>
7. ___ The appropriate: ___ quantity, ___ container number, ___ container type, and ___ waste type by units of weight or volume.					<input checked="" type="checkbox"/>
8. ___ Signed certification that the materials are properly classified, described, packaged, marked and labeled, and are in proper condition for transportation under regulations of the USDOT and NYSDEC - 372.2(a)(4) and 372.2(a)(5) and 372.2(a)(6).					<input checked="" type="checkbox"/>
9. ___ Signed copies of the manifest records have been retained for at least three years - 372.2(c)(1)(i).					<input checked="" type="checkbox"/>
E. ___ The generator must distribute copies of the manifest as specified on the manifest form - 372.2(b)(3).					<input checked="" type="checkbox"/>
F. ___ The generator has received signed copies (from the TSD facility) of all manifests for wastes shipped off-site more than 20 days ago:					<input checked="" type="checkbox"/>
___ If not, exception reports have been submitted covering these shipments - 372.2(c)(3)					<u>NA</u>
G. ___ A generator who ships hazardous waste off-site to a treatment, storage or disposal facility located within the United States must submit Annual Reports on Forms specified by the Commissioner.					<input checked="" type="checkbox"/>
H. For international shipments the generator has done the following: 372.5.					
1. ___ EPA and the Department have been notified 60 days prior to shipment of hazardous waste destined for treatment, storage or disposal outside the United States - 372.5(c)(1).					<u>NA</u>

2. Delivery of the wastes has been confirmed by the consignee within 90 days of acceptance by initial transporter - 372.5(e)(2). NA
3. Primary exporters of hazardous waste must file with the Administrator and the Department no later than March 1 of each year, a report summarizing the types, quantities, frequency, and ultimate destination of all hazardous waste exported during the previous calendar year - 372.5(f)(1). NA
- I. Has complied with interstate shipments - 372.6 ✓
- J. Has complied with shipments by rail or water (bulk) - 372.7 NA
- K. A copy of each manifest has been kept for at least three years from the date the waste was accepted by the initial transporter. 372.2(c)(1)(i). ✓
- L. A copy of each Annual Report and Exception Report must be kept for a period of at least three years from the due date of the report. 372.2(c)(1)(ii). ✓
- M. A generator must keep records of any test results, waste analyses, or other determinations made in accordance with Part 372.2(a)(2) for at least three years. 372.2(c)(1)(iii). ✓
- N. All records required under this subdivision were furnished upon request, or made available at a reasonable time for inspection - 372.2(c)(1)(iv). ✓
- O. There is written communication that the designated treatment, storage or disposal facility is an authorized treatment, storage or disposal facility for the particular wastes being offered for shipment and has capacity to accept the hazardous waste set forth on the manifest and will assure the ultimate disposal method if followed - 372.2(b)(2)(i). ✓
- P. There is written communication that the designated transporter is authorized to deliver the waste to the facility on the manifest - 372.2(b)(2)(ii). ✓
5. Personnel Training - 372.2(a)(8)(ii) and 373-3.2(g)
- A. There is a:
1. written description of the job title for each position at the facility related to hazardous waste management and name of the employee filling each job - 373-3.2(g)(4)(i) ✓

Indicate:

Indicate:

X Violations

X Satisfactory
NA Not Applicable

- 2. written job description for each position - 373-3.2(g)(4)(ii) ✓
- 3. written description of the type and amount of both introductory and continuing training that will be given to each person related to hazardous waste management - 373-3.2(g)(4)(iii) ✓
- 4. records that document the training or job experience required has been given to and completed by facility personnel - 373-3.2(g)(4)(iv). ✓
- B. The training program is directed by a person trained in hazardous waste management procedures and must include instruction which teaches facility personnel hazardous waste management procedures (including contingency plan implementation) relevant to the positions in which they are employed. 373-3.2(g)(1)(i),(ii) and (iii). The components are: ✓
 - 1. Procedures for using, inspecting, repairing and replacing facility emergency and monitoring equipment; ✓
 - 2. Key parameters for automated waste feed cutoff systems; NA
 - 3. Communications or alarm systems; ✓
 - 4. Response to fires and explosions; ✓
 - 5. Response to groundwater contamination incidents; and NA
 - 6. Shutdown of operations. ✓
- C. Facility personnel have successfully completed the program by the effective date of these regulations or six months after the date of their employment. 373-3.2(g)(2). ✓
- D. Facility personnel have taken part in an annual review of the initial training required - 373-3.2(g)(3).
- E. Training records on current personnel have been kept permanently at the facility (until closure) - 373-3.2(g)(5). ✓
- F. Training records on former employees have been kept for at least three years from the date the employee last worked at the facility - 373-3.2(g)(5). ✓

6. Preparedness and Prevention - 372.2(a)(8)(ii); 373-3.3

- A. The facility is maintained and operated to minimize the possibility of a fire or explosion, or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil or surface water - 373-3.3(b). ✓
- B. The facility must be equipped with the following, unless none of the hazards posed by waste handled at the facility could require a particular kind of equipment specified below: ✓
1. An internal communication or alarm system capable of providing immediate emergency instruction (voice or signal) to facility personnel; ✓
 2. A device, such as a telephone (immediately available at the scene of operations) or a hand-held, two-way radio capable of summoning emergency assistance from local police departments, fire teams; ✓
 3. Portable fire extinguishers, fire control equipment, spill control equipment and decontamination equipment; ✓
 4. Water at adequate volume and pressure to supply water hose streams, or foam-producing equipment, or automatic sprinklers, or water spray systems. ✓
- C. Facility communications or alarm systems, fire protection equipment, and spill control equipment are tested and maintained as necessary to assure their proper operation in time of emergency - 373-3.3(d). ✓
- D. Personnel involved in hazardous waste operations have immediate access to an internal alarm or emergency communication device - 373-3.3(e). ✓
- E. The owner or operator must maintain aisle space to allow the unobstructed movement of personnel, fire protection equipment, spill control equipment, and decontamination equipment to any area of facility operation in an emergency unless aisle space is not needed for any of these purposes - 373-3.3(f). ✓
- F. The facility owner or operator has made an attempt in good faith to make the following arrangements with local authorities, as appropriate for the type of waste handled at the facility and the potential need for the services of these organizations - 373-3.3(g)(1):

Indicate:

X Violations

Indicate:

X Satisfactory
NA Not Applicable

1. Arrangements to familiarize police, fire departments and emergency response teams with the functions and layout of the facility;
 2. Where more than one police and fire department might respond to an emergency, an agreement designating primary emergency authority to a specific police and a specific fire department, and agreements with any others to provide support to primary emergency authority;
 3. Agreements with government emergency response teams, emergency response contractors, and equipment suppliers;
 4. Arrangements to familiarize local hospitals with the properties of hazardous waste handled at the facility and the types of injuries or illness which could result from fires, explosions or releases at the facility; and
 5. Where state or local authorities decline to enter into such arrangements, the owner or operator has documented the refusal in the operating record.
7. Contingency Plan and Emergency Procedures - 372.2(a)(8)(ii); 373-3.4
- A. The facility has a contingency plan or some other emergency plan which incorporates hazardous waste management.
 - B. The following are included in the contingency plan - 373-3.4(c):
 1. A description of actions facility personnel must take in response to fires, explosions or any unplanned sudden or non-sudden releases of hazardous waste or hazardous waste constituents to air, soil or surface water;
 2. A description of arrangements agreed to by local police departments, fire departments, hospitals, contractors, and state and local emergency response teams to coordinate emergency services;
 3. Names, addresses and phone numbers of all persons qualified to act as emergency coordinator;

NA



NA

- 4. A list of all emergency equipment at the facility, and decontamination equipment, where this equipment is required; ✓
- 5. The location and the physical description of each item on the list, and a brief outline of its capabilities; ✓
- 6. An evacuation plan for facility personnel, where there is a possibility that evacuation could be necessary. ✓
- C. Copies of the contingency plan are maintained at the facility. 373-3.4(d)(1) ✓
- D. Copies of the contingency plan have been submitted to all local police departments, fire departments, hospitals, and state and local emergency response teams that may be called upon to provide emergency services. 373-3.4(d)(2) NA
- E. The contingency plan has been amended, as necessary, when applicable regulations were revised, the plan failed in an emergency, the facility changes or the list of emergency coordinators or equipment changes - 373-3.4(e). ✓
- F. There was at least one employee either on the facility premises or on call with the responsibility for coordinating all emergency response measures - 373-3.4(f). ✓
- G. During a past emergency situation the emergency coordinator (or his designee when the emergency coordinator is not on call) immediately activated emergency procedures - 373-3.4(g).* NA

*Do not go back further than the previous inspection date.

The following was done:

- 1. Activated internal facility alarms or communication systems;
- 2. Notified appropriate state or local agencies;
- 3. Immediately identified the character, exact source, amount and areal extent of any released materials;
- 4. The emergency coordinator assessed possible hazards to human health and the environment;

Indicate:

X Violations

Indicate:

X Satisfactory
NA Not Applicable

- | | | | |
|-----|---|--|----|
| 5. | — | The emergency coordinator, after determining that that facility had a release, fire or explosion which could threaten human health or the environment outside the facility, reported his findings; | NA |
| 6. | — | During the emergency, the emergency coordinator took all reasonable measures necessary to ensure that fire, explosions and releases do not occur, recur or spread to other hazardous waste; | |
| 7. | — | The emergency coordinator monitored for leaks, pressure buildup, gas generation or ruptures in valves, pipes or other equipment, where appropriate during the facility's response to the emergency; | |
| 8. | — | The emergency coordinator provided for treating, storing or disposing of recovered waste, contaminated soil or surface water, or any other material that resulted from a release, fire or explosion at the facility; | |
| 9. | — | The emergency coordinator ensured that in the affected area no waste that may be incompatible with the released material was treated, stored or disposed of until cleanup procedures were completed; | |
| 10. | — | The emergency coordinator ensured that all emergency equipment listed in the contingency plan was cleaned and fitted for its intended use before operations were resumed; | |
| 11. | — | The owner or operator notified the Commissioner that the facility is in compliance with Part 373-3.4(g)(8) before operations were resumed in the affected areas of the facility; | |
| 12. | — | The owner or operator noted in the operating record the time, date and details of the incident that required implementation of the contingency plan; | |
| 13. | — | The owner or operator submitted a complete written report on the incident within 15 days after the incident occurred. | |

Company Name Seneca Army Depot

EPA ID No. NY0213820830

Appendix A

Treatment, Storage and Disposal Inspection Section

Also complete for generators over sole source aquifer areas.

Indicate:

X Violations

Indicate:

X Satisfactory
NA Not Applicable

1. Required Notices 373-3.2(c)

A. Before transferring ownership or operation of a facility during its operating life, or of a disposal facility during the post-closure care period, the owner or operator notified the new owner or operator in writing of the requirements - 373-3.2(c)(2).

NA

2. Sampling

A. The owner or operator obtained a sample of the waste and had it analyzed - 373-3.2(d)(1)(i).

✓

B. The analysis included data developed under 6NYCRR Part 371, and existing published or documented data on the hazardous waste or on waste generated from similar processes - 373-3.2(d)(1)(ii).

✓

C. The analysis has been repeated as necessary to ensure that it is accurate and up to date - 373-3.2(d)(1)(iii).

✓

3. Waste Analysis Plan

A. The owner or operator has developed and followed a written waste analysis plan - 373-3.2(d)(2).

✓

B. The owner or operator keeps this plan at the facility - 373-3.2(d)(2).

✓

X Violations

X Satisfactory
NA Not Applicable

C. The plan specifies at a minimum:

- 1. The parameters for which each hazardous waste will be analyzed and the rationale for the selection of these parameters - 373-3.2(d)(2)(i). ✓
- 2. The test methods which will be used to test for these parameters - 373-3.2(d)(2)(ii). ✓
- 3. The sampling method which will be used to obtain a representative sample of the waste to be analyzed - 373-3.2(d)(2)(iii). ✓
- 4. The frequency with which the initial analysis of the waste will be reviewed or repeated to ensure that the analysis is accurate and up to date - 373-3.2(d)(2)(iv). ✓
- 5. For off-site facilities, the waste analyses that hazardous waste generators have agreed to supply - 373-3.2(d)(2)(v). NA
- 6. (For off-site facilities). The waste analysis plan required must also specify the procedures which will be used to inspect and, if necessary, analyze each movement of hazardous waste received at the facility to ensure that it matches the identity of the waste designated on the accompanying manifest or shipping paper. The plan describes, at a minimum:
 - (a) The procedures which will be used to determine the identity of each movement of waste managed at the facility - 373-3.2(d)(3)(i); and NA
 - (b) The sampling method which will be used to obtain a representative sample of the waste to be identified, if the identification method includes sampling - 373-3.2(d)(3)(ii). NA

4. Security - 373-3.2(e)

A. The owner or operator must prevent the unknowing entry, and minimize the possibility for the unauthorized entry, of persons or livestock onto the active portion of his facility, unless:

- 1. physical contact with the waste, structures or equipment within the active portion of the facility will not injure unknowing or unauthorized persons or livestock which may enter the active portion of a facility; and - 373-3.2(e)(1)(i). ✓

Indicate:

X Violations

Indicate:

X Satisfactory
NA Not Applicable

2. — disturbance of the waste or equipment, by the unknowing or unauthorized entry of persons or livestock onto the active portion of a facility, will not cause a violation of the requirements of this Subpart - 373-3.2(e)(1)(ii). ✓

B. Unless the owner or operator has made a successful demonstration under A1 and A2 above, a facility must have:

1. — A 24-hour surveillance system which continuously monitors and controls entry onto the active portion of the facility - 373-3.2(e)(2)(i) or ✓

2. — An artificial or natural barrier which completely surrounds the active portion of the facility - 373-3.2(e)(2)(ii)(a) and ✓

3. — A means to control entry, at all times, through the gates or other entrances to the active portion of the facility - 373-3.2(e)(2)(ii)(b). ✓

4. — A sign with the legend, "Danger - Unauthorized Personnel Keep Out" posted at each entrance to the active portion of the facility, and at other locations, in sufficient numbers to be seen from any approach to the active portion - 373-3.2(e)(3). ✓

5. General Inspection Requirements - 373-3.2(f)

A. — The owner or operator has inspected the facility for malfunctions and deterioration, operator errors, and discharges which may be causing - or may lead to release of hazardous waste constituents to the environment, or a threat to human health - 373-3.2(f)(1). ✓

B. 1. — The owner or operator has developed a written schedule for inspecting all monitoring equipment, safety and emergency equipment, security devices, and operating and structural equipment that are important to preventing, detecting or responding to environmental or human health hazards - 373-3.2(f)(2)(i). ✓

2. — He has kept the written inspection schedules at the facility - 373-3.2(f)(2)(ii). ✓

3. — The schedule identifies the types of problems which are to be looked for during the inspection - 373-3.2(f)(2)(iii). ✓

X Violations

X Satisfactory
NA Not Applicable

4. The frequency of inspection is based on the rate of possible deterioration of the equipment and the probability of an environmental or human health incident, if the deterioration or malfunction or any operator error goes undetected between inspections - 373-3.2(f)(2)(iv). ✓
- C. The owner or operation has remediated deterioration of malfunction of equipment or structures which the inspection has revealed - 373-3.2(f)(3). NA
- D. The owner or operator has recorded inspections in an inspection log or summary - 373-3.2(f)(4). ✓
- E. The inspection log or summary has been kept for at least three years from the date of inspection - 373-3.2(f)(4). ✓
- F. The records, at a minimum, include the date and time of the inspection, the name of the inspector, a notation of the observations made, and the date and nature of any repairs or remedial actions - 373-3.2(f)(4). ✓
6. Ignitable, Reactive Wastes or Incompatible Wastes - Complete Part II, questions 3.D.8 and 9; (pgs II-9 and 10). NOTE: this is for container storage only.
7. Personnel Training - Complete Part II, question 5 (pgs. II-14 and 15).
8. Preparedness and Prevention - Complete Part II, question 6 (pgs. II-16 and 17).
9. Contingency Plan and Emergency Procedures - Complete Part II, question 7 (pgs. II-17 thru 19).
10. Manifest System, Recordkeeping and Reporting - Complete Part II, question 4 (pgs. II-12 thru 14). NOTE: These questions apply only to TSD's that ship hazardous waste off-site.
11. Operating Record - 373-3.5(c)
- A. There is an operating record. ✓
- B. The owner or operator has kept a written operating record at his facility. ✓
- C. The following information is included in the operating record, as it becomes available, or maintained in the operating record until closure of the facility:

Indicate:

X Violations

Indicate:

X Satisfactory
NA Not Applicable

- 1. ___ A description and the quantity of each hazardous waste received;
- 2. ___ The method(s) and date(s) of its treatment, storage or disposal at the facility;
- 3. ___ The location of each hazardous waste within the facility and the quantity at each location;
- 4. ___ (For disposal facilities). The location and quantity of each hazardous waste must be recorded on a map or diagram of each cell or disposal area;
- 5. ___ Information must include cross references to specific manifest document numbers, if the waste was accompanied by a manifest;
- 6. ___ Records and results of waste analyses and trial tests performed;
- 7. ___ Summary reports and details of all incidents that require implementing the contingency plan;
- 8. ___ Records and results of inspections;
- 9. ___ Monitoring, testing or analytical data where required;
- 10. ___ All closure cost estimates;
- 11. ___ (For disposal facilities). All post-closure cost estimates.

NA
NA
✓
NA
NA
✓
NA
✓
✓
✓
NA

12. Manifest (NOTE: This section applies only to TSD operations that receive hazardous waste from off-site.)

A. Upon receipt of manifested shipment of hazardous waste the owner or operator:

- 1. ___ determined significant discrepancies from those stated on the manifest - 372.4(b)(1)(i).
- 2. ___ determined that all portions of the manifest have been completed - 372.4(b)(1)(ii).
Explain: _____

NA
NA

X Violations

X Satisfactory
NA Not Applicable

3. — distribute copies of the manifest according to the instructions with the manifest form - 372.4(b)(4). ✓
- B. Upon receipt of an unmanifested shipment of hazardous waste the owner or operator:
1. — determined the reason why the shipment was not accompanied by a manifest - 372.4(c)(1). NA
2. — filed an unmanifested waste report after accepting the waste - 372.4(c)(3). —
- C. — Facility accepted a particular hazardous waste without an authorized permit to do so - 372.4(f)(i). —
- D. — Facility accepted a hazardous waste without having adequate treatment, storage or disposal capacity available - 372.4(f)(ii). ✓
13. Availability, Retention and Disposition of Records - 373.3.5(d)
- A. — All records, including plans, required under this Part are furnished upon request, and made available at all reasonable times for inspection - 373-3.5(d)(1). ✓
- B. — All reports and records required were retained for three years from the date of submittal - 372.4(d)(3)(i). ✓
- C. — Upon closure of the facility, a copy of records of waste disposal locations and quantities under subparagraph (c)(2)(ii) of this Section was submitted to the Commissioner and the county clerk's office of the county in which the facility is located - 373-3.5(d)(3). NA
14. Additional Reports - 373-3.5(g)
- A. — A TSDF Annual Report has been submitted to the Department - 373-3.5(e). ✓
- B. — Releases, fires and explosions as specified in paragraph 373-3.4(g)(10) - 373-3.5(g)(1). NA
- C. — Groundwater contamination and monitoring data as specified in subdivisions 373-3.6(d) and 373-3.6(e) - 373-3.5(g)(2). NA
- D. — Facility closure as specified in subdivision 373-3.7(f) - 373-3.5(g)(3). ✓

Indicate:

X Violations

Indicate:

X Satisfactory
NA Not Applicable

15. Groundwater Monitoring - 373-3.6

A. A groundwater monitoring plan is required. NA

B. A groundwater monitoring program is required, and has been instituted. NA

ATTACH COMPLETED GROUNDWATER MONITORING QUESTIONNAIRE APPENDIX C

16. Closure and Post-Closure - 373-3.7

A. The owner or operator has a written closure plan. Until final closure is completed and certified, a copy of the most current plan must be furnished to the commissioner upon request. In addition, for facilities without approved plans it must be provided during site inspections, on the day of inspection to any authorized Department representative - 373-3.7(c)(1). ✓

B. The owner or operator must amend the closure plan whenever changes in operating plans or facility design affect the closure plan or there is a change in the expected year of closure - 373-3.7(c)(3)(i). ✓

C. The owner or operator of a hazardous waste disposal unit must have a written post-closure plan - 373-3.7(h)(1). ✓

17. Financial Requirements - 373-3.8

A. The owner or operator has a written estimate of the cost of closing the facility. The estimate appears to equal the cost of closure at the point in the facility's operating life when the extent and manner of its operation would make closure the most expensive, as indicated by its closure plan - 373-3.8(c)(1). ✓

B. Within 60 days prior to each anniversary of the date on which the first closure cost estimate was prepared, the owner or operator has adjusted the latest closure cost estimate for inflation. For owners and operators using the financial test or corporate guarantee, the closure cost estimate must be updated for inflation within 30 days after the close of the firm's fiscal year - 373-3.8(c)(2). ✓

X Violations

X Satisfactory
NA Not Applicable

- C. — The owner or operator has revised the new closure cost estimate no later than 30 days, after a revision to the closure plan affects the cost of closure - 373-3.8(c)(3). NA
- D. — The owner or operator has kept this estimate, and all subsequent estimates required at the facility - 373-3.8(c)(4). ✓
- E. — The owner or operator has established financial assurance for closure of the facility - 373-3.8(d). ✓

(QUESTIONS E THRU F ARE FOR OWNERS AND OPERATORS OF DISPOSAL FACILITIES)

- E. — The owner or operator of a hazardous waste disposal unit facility has a written estimate of the annual costs of post-closure monitoring and maintenance of the facility - 373-3.8(e)(1). NA
- F. — Within 60 days prior to the anniversary date on which the first post-closure cost estimate was prepared, during the active life of the facility, the owner or operator has adjusted the latest post-closure cost estimate - 373-3.8(e)(2). NA

18. Use and Management of Containers - 373-3.9

Complete Part II, 3 D. (pgs II-8 thru 10)

19. Tanks - 373-3.10

Complete Appendix O.

RCRA LAND DISPOSAL RESTRICTIONS INSPECTION

I. General Information

Facility: United States Military - Seneca Army Depot
 U.S. EPA ID No.: NY0 213 820 830
 Street: _____
 City: Romulus State: NY Zip: 14581
 Telephone: 607 - 869 - 1281
 Inspection Date: 9/17/91 Time: 10:00 (am/pm) am
 Weather Conditions: _____

	<u>Name</u>	<u>Agency/Title</u>	<u>Telephone</u>
Inspectors:	<u>Darshan R. Patel</u>	<u>NYSDEC</u>	<u>716-226-2466</u>
	<u>Joseph P. Gavin</u>	<u>NYSDEC</u>	<u>716-226-2466</u>

Facility Representatives: Tom Grasek
Environmental Protection Specialist

See Appendix B to determine which of the following LDR waste categories the facility manages:

	<u>Generate</u>	<u>Transport</u>	<u>Treat</u>	<u>Store</u>	<u>Dispose</u>
F001-F005 Solvents	<u>✓</u>	_____	_____	<u>✓</u>	_____
F020-F023 and F026-F028	_____	_____	_____	_____	_____
California List*	<u>✓</u>	_____	_____	_____	_____
First Third [40 CFR 268.10]	_____	_____	_____	_____	_____
Second Third [40 CFR 268.11]	_____	_____	_____	_____	_____
Third Third [40 CFR 268.12]	<u>✓</u>	_____	_____	<u>✓</u>	_____

* See Appendix A

INSPECTION SUMMARY

Processes That Generate LDR Wastes:

LDR wastes are generated from following operations

1. Painting and degreasing
2. Decontamination of incinerator area
3. Removal of excess/waste battery fluid
4. spill cleanup
5. PCB decontamination.

LDR Waste Management:

All wastes are sent to off site TSD for disposal.

Waste solvents are either incinerated or recovered.

Waste containing Epox metals (2007 and 2008) are sent to off site TSD for land disposal under extended national capacity variance.

Summary:

All LDR wastes are sent to authorized TSD for disposal with appropriate LDR notification.

There were 11 55 gal containers of 0005 waste in storage having accumulation date of 6/30/88, and

4 55 gal containers of 0001 spill debris with accumulation date of Oct '87.

Signature:

[Handwritten Signature]

RCRA LAND DISPOSAL RESTRICTIONS INSPECTION

II. WASTE IDENTIFICATION

A. List waste codes which the facility handles in each of the following LDR categories*:

- 1. F001 through F005 spent solvents: F002, F003, F005
- 2. F020-F023 and F026-F028 dioxin-containing wastes: None
- 3. California List Wastes (See Appendix A): Liquid hazardous waste containing > 50 ppm PCB
- 4. First Third Wastes [40 CFR 268.10]: None
- 5. Second Third Wastes [40 CFR 268.11]: None
- 6. Third Third Wastes [40 CFR 268.12]**: 5001, 5006, 5007, 5009, 5009

*See Appendix B.

** Note: Effective 09/25/90, large quantity generators and TSDs are required to use the toxicity characteristic leaching procedure (TCLP) instead of the extraction procedure (EP) for determining the toxicity characteristic (TC). Small quantity generators must comply with this new requirement by 03/29/91. Wastes which exhibit TC, but do not exhibit EP, will be considered "newly identified" wastes. They will be regulated under 40 CFR Part 268 only after they are evaluated by U.S. EPA, even if they are characteristic for a constituent previously covered under the EP toxicity characteristic [55 FR 22531].

B. Waste Code Determination

1. Have all wastes been correctly identified for purposes of compliance with 40 CFR Part 268?*

Yes No

If no, list below:

<u>Assigned Classification</u>	<u>Correct Classification</u>
_____	_____
_____	_____
_____	_____
_____	_____

*Areas of concern include: California list/waste categories with more stringent treatment standards; listed/characteristic; multi-source/single-source leachate; P and U waste codes/F and K wastes; and waste code carry through principle.

Comments: _____

2. Have both the listed and characteristic waste code been assigned, where a listed waste exhibits a characteristic? [40 CFR 268.9(a)]

Yes No NA

Comments _____

3. Has multi-source leachate been assigned the F039 waste code?* [40 CFR 261.31]

Yes No NA

*Leachate derived exclusively from F020-F023 and/or F026-F028 dioxin wastes retains the individual waste codes.

If yes, was single-source leachate combined to form multi-source leachate? [55 FR 22623]

Yes No

Comments _____

C. Does the facility handle the following wastes (national capacity variances)?

1. F001-F005 contaminated soil and debris resulting from a CERCLA response action or a RCRA corrective action (expires - 11/08/90). [40 CFR 268.30(c)]

Yes No List _____

2. Dioxin contaminated soil and debris resulting from a CERCLA response action or a RCRA corrective action (expires - 11/08/90). [40 CFR 268.31(b)]

Yes No List _____

3. California list contaminated soil and debris resulting from a CERCLA response action or a RCRA corrective action (expires - 11/08/90). [40 CFR 268.32(d)(2)]

Yes No List _____

4. K048-K052 petroleum wastes (nonwastewaters; expires - 11/08/90). [40 CFR 268.35(b)]

Yes No List _____

5. Soil and debris contaminated with wastes that had treatment standards based on incineration set in the Second Third rule [✓]F010, F024, K009, K010, K011, K013, K014, K023, K027, K028, K029, K038, K039, K040, K043, K093, K094, K095, K096, K113, K114, K115, K116, P039, P040, P041, P043, P044, P062, P071, P085, P089, P094, P097, P109, P111, U028, U058, U069, U087, U088, U102, U107, U190, U221, U223, U235 (expires - 06/08/91). [40 CFR 268.34(d)]

Yes No List _____

6. Soil and debris contaminated with wastes that had treatment standards set in the Third Third rule based on incineration, mercury retorting, or vitrification. See Appendix A; (expires - 05/08/92). [40 CFR 268.35(c)]

Yes ___ No List _____

7. The following nonwastewaters - F039, K031, K084, K101, K102, K106, P010, P011, P012, P036, P038, P065, P087, P092, U136, U151. (expires -05/08/92). [40 CFR 268.35(c)]

Yes ___ No List _____

8. The following wastes identified as hazardous based on a characteristic alone: D004 (nonwastewaters), D008 (lead materials stored before secondary smelting), D009 (nonwastewaters) (expires - 05/08/92). [40 CFR 268.35(c)]

Yes ___ No List _____

9. Inorganic solid debris as defined in 40 CFR 268.2(g)*; includes chromium refractory bricks carrying EPA Hazardous Waste Nos. K048-K052 (expires - 05/08/92). [40 CFR 268.35(c)]

Yes ___ No List _____

*Note: Incorrect reference [40 CFR 268.2(a)(7)] in Third Third rule.

10. RCRA hazardous wastes that contain naturally occurring radioactive materials (expires - 05/08/92). [40 CFR 268.35(c)]

Yes ___ No List _____

11. Wastes listed in 40 CFR 268.10, 268.11, and 268.12 that are mixed radioactive/hazardous wastes (expires - 05/08/92)*. [40 CFR 268.35(d)]

Yes ___ No List _____

*Note: 40 CFR 268.10 and 268.11 wastes incorrectly omitted from this variance in the Third Third rule.

12. According to Federal Register / Vol 55 No 106 / Friday June 1, 1990 / Rules and Regulations / 22649 & 22650, (#3 Capacity Variance for Contaminated Soil and Debris)

Facility is generating D007 and D008 which are under extended national capacity variance up to May of 1992.

RCRA LAND DISPOSAL RESTRICTION INSPECTION

III. GENERATOR REQUIREMENTS

A. Treatability Group/Treatment Standard Identification*

*Note: This information is generally available on LDR notifications. If not, waste profile data and other documentation should be checked.

1. F001-F005 Spent Solvent Wastes: Does the generator correctly determine the appropriate treatability group/treatment standard for each F-solvent?

Yes No NA

If available, list each waste code and check the correct treatability group.

Waste Code	Wastewater*	Nonwastewater
<u>F002</u>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<u>F003</u>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<u>F005</u>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

*Less than 1% by weight total organic carbon (TOC), or less than 1% by weight total F001-F005 solvent constituents listed in 40 CFR 268.41, Table CCWE. [40 CFR 268.2(f)(1)]

Comments _____

2. F020-F023 and F026-F028 Dioxin Wastes: Does the generator correctly determine the appropriate treatability group/treatment standard for each dioxin waste?

Yes No NA

If yes, list each waste code and check the correct treatability group.

Waste Code	Wastewater*	Nonwastewater
_____	<input type="checkbox"/>	<input type="checkbox"/>
_____	<input type="checkbox"/>	<input type="checkbox"/>
_____	<input type="checkbox"/>	<input type="checkbox"/>

Comments _____

*Less than 1% TOC by weight and less than 1% total suspended solids (TSS) by weight. [40 CFR 268.2(f)]

3. First, Second, and Third Third Wastes:

- a. Does the generator correctly determine the appropriate treatability group/treatment standard for each waste?

Yes No NA

If available, list each waste code and check the correct treatability group:

Waste Code	Subcategory	Wastewater*	Nonwastewater
<u>0001</u>			<input checked="" type="checkbox"/>
<u>0006</u>			<input checked="" type="checkbox"/>
<u>0007</u>			<input checked="" type="checkbox"/>
<u>0008</u>			<input checked="" type="checkbox"/>
<u>0009</u>			

* Less than 1% TOC by weight and less than 1% total suspended solids (TSS) with the following exceptions: K011, K013, and K014 wastewaters - less than 5% by weight TOC and less than 1% by weight TSS; K103 and K104 wastewaters - less than 4% by weight TOC and less than 1% by weight TSS. [40 CFR 268.2(f)(2) and (3)]

Comments _____

b. Do the assigned treatment standards for listed wastes cover constituents that may cause the waste to exhibit any characteristics? [40 CFR 268.9 (b)]

Yes No NA

c. Does the generator specify alternative treatment standards for lab packs?*

Yes No NA

*Use of the alternative treatment standards is not required. [55 FR 22629]

If yes, do lab packs only contain the following wastes?* [40 CFR 268.42(c)(2)]

- Organometallics: 40 Part 268, Appendix IV constituents
- Organics: 40 CFR Part 268, Appendix V constituents

*Unregulated wastes and hazardous wastes which meet treatment standards may be commingled in the appropriate Appendix IV and V lab pack. [55 FR 22629]

d. Does the generator specify alternative treatment standards for F039 multi-source leachate?*

Yes No NA

*Use of the alternative treatment standards is required. [55 FR 22619]

4. California List Wastes: Has the generator correctly identified the treatability group and treatment standard/prohibition level for the following wastes? [55 FR 22675]

a. Liquid hazardous wastes containing PCBs ≥ 50 ppm

Yes No NA

If yes, check the appropriate treatability group:

- 50 to 500 ppm PCBs
- ≥ 500 ppm PCBs

b. Listed or characteristic wastes containing $\geq 1,000$ mg/l (liquids) or mg/kg (non-liquids) HOCs, which are not listed or characterized by the HOC content

Yes ___ No ___ NA

If yes, check the appropriate treatability group:

- Dilute HOC wastewater (1,000 mg/l to 10,000 mg/l HOCs)
- All other HOCs greater than or equal to the prohibition level of 1,000 mg/l (liquids) or mg/kg (non-liquids)

c. Liquid hazardous wastes that exhibit a characteristic and also contain ≥ 134 mg/l nickel and/or ≥ 130 mg/l thallium

Yes ___ No ___ NA

5. National Capacity Variance Wastes: Have all applicable California List prohibitions been identified for wastes covered under national capacity variances? (See Appendix A.)

Yes ___ No ___ NA

If a wastestream contains a mixture of wastes, and a variance only applies to some of the waste codes, has the generator identified all applicable treatment standards and California List prohibitions? (See Appendix A.)

Yes ___ No ___ NA ___

If California List prohibitions apply to wastestreams managed by the generator, complete the following table for each waste code, noting the date on which relevant national capacity variances expire.

<u>Waste Code</u>	<u>Cal List Applicability</u>	<u>Expiration Date</u>
_____	_____	____/____/____
_____	_____	____/____/____
_____	_____	____/____/____

Comments _____

6. Treatment standards expressed as required technologies: Has the generator specified an alternative method to that required in 40 CFR 268.42?

Yes ___ No ___ NA

If yes, list the waste code, the technology specified in 40 CFR 268.42, the alternative method, and documentation of approval. [40 CFR 268.42(b)]

<u>Waste Code</u>	<u>Required Technology</u>	<u>Alternative Method</u>	<u>Approval</u>
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

Comments _____

7. Does the generator mix restricted wastes with different treatment standards for a constituent of concern?

Yes ___ No

If yes, did the generator select the most stringent treatment standards?
[40 CFR 268.41(b) and 268.43(b)]

Yes ___ No ___

Comments _____

B. Waste Analysis

1. Does the generator determine whether restricted wastes exceed treatment standards/prohibition levels at the point of generation?* [268.7(a)]

Yes No ___

*Note: This determination may be made at the point of disposal if the waste only has a prohibition level in effect.

If no, does the generator ship all restricted wastes as not meeting treatment standards?

Yes ___ No ___

Comments _____

2. Which of the following analytical methods does the generator employ?*

*Note: A "No" answer to applicable questions b. through d. does not necessarily constitute a violation. However, knowledge of waste is rarely adequate if a generator certifies that treatment standard criteria have been met.

a. Knowledge of waste:

Yes No ___

If yes, list the wastes for which applied knowledge was used and describe the basis of determination. Attach documentation. [40 CFR 268.7(a)(5)]

5001, F002, F003, F005, 5809

b. TCLP*: Are wastes with treatment standards specified in 40 CFR 268.41 analyzed using TCLP? (BDAT*** = stabilization/immobilization technology)

Yes No ___ NA ___

*TCLP = Toxicity Characteristic Leaching Procedure [40 CFR Part 268, Appendix I, EPA Test Method 1311]

**See Appendix C for exceptions.

***BDAT = best demonstrated available technology. See Appendix A.

If yes, list the wastes for which TCLP was used and provide the date of last test, the frequency of testing, and note any problems. Attach test results. [40 CFR 268.7(a)(5)]

NDG

c. Total constituent analysis: Are wastes with treatment standards specified in 268.43 analyzed using total constituent analysis?* (BDAT = destruction/removal technology)

Yes ___ No ___ NA

*See Appendix C for exceptions.

If yes, list the wastes for which total constituent analysis was used and provide the date of last test, the frequency of testing, and note any problems. Attach test results. [40 CFR 268.7(a)(5)]

d. PFLT*: Was PFLT used to determine if California List constituents were contained in *liquid* hazardous waste?

Yes ___ No ___ NA

*PFLT = Paint Filter Liquids Test [Test Method 9095, EPA Publication No. SW-846]

If yes, list the wastes for which PFLT was used and provide the date of last test, the frequency of testing, and note any problems. Attach test results. [40 CFR 268.7(a)(5)]

3. Does the generator treat restricted wastes in 90-day tanks or containers regulated under 40 CFR 262.34 (permissible in some states)?

Yes ___ No (If No, go to 4.)

Does the generator treat the wastes to meet appropriate treatment standards/prohibition levels?

Yes ___ No ___

If yes, has the generator prepared a waste analysis plan detailing the frequency of testing to be conducted? 40 CFR 268.7(a)(4)]

Yes ___ No ___ (If No, go to 4.)

Does the plan fulfill the following? [40 CFR 268.7(a)(4)(i)]

- Based on a detailed chemical and physical analysis of a representative sample
- Contains information necessary to treat the wastes in accordance with 40 CFR Part 268 requirements

Has the plan been filed with the Regional Administrator (return receipt, Federal Express slip, etc. required for verification)? [40 CFR 268.7(a)(4)(ii)]

Yes ___ No ___

Comments _____

4. Dilution Prohibition [40 CFR 268.3]:

a. Does the generator mix prohibited* wastes with different treatment standards?

*See Appendix E for distinction between restricted and prohibited wastes.

Yes ___ No (If No, go to b.)

List the wastes _____

Are the wastes amenable to the same type of treatment? [55 FR 22666]

Yes ___ No ___

Comments _____

b. Does the generator dilute prohibited wastes to meet treatment standard criteria, or render them non-hazardous? [55 FR 22665-22666]

Yes ___ No (If No, go to c.)

Check appropriate category:

- Dilutes to meet treatment standards
- Dilutes to render waste non-hazardous

Do the wastes fall into the following categories? (Check if appropriate.) [40 CFR 268.3(b)]

- Managed in treatment systems regulated under the Clean Water Act
- Non-toxic* characteristic wastes
- Treatment standard specified in 40 CFR 268.41 or 268.43

*Non-toxic = D001(except high TOC nonwastewaters), D002, and D003(except cyanides and sulfides). [55 FR 22666]

If the wastes do not fall into the above categories, briefly describe the conditions under which they were diluted.

c. Based on an assessment of points a. and b., and any other relevant circumstances, does the generator dilute prohibited wastes as a substitute for adequate treatment? [40 CFR 268.3(a)]

Yes ___ No

Comments _____

5. F039 Multi-source leachate: Has the generator run an initial analysis for all constituents of concern in 40 CFR 268.41 and 268.43? [55 FR 22620]

Yes ___ No ___ NA

C. Management

1. On-Site Management

a. Are restricted wastes treated (other than in a RCRA exempt unit), stored for greater than 90 (small quantity generator* - 180) days, or disposed on site?

Yes No ___

(If yes, the TSD Checklist must also be completed.)

* Small quantity generator = generator of greater than or equal to 100 kg/mo. but less than 1,000 kg/mo. hazardous waste, or less than 1 kg/mo. acutely hazardous waste

Comments _____

b. If the generator treats characteristic wastes in systems regulated under the Clean Water Act, have the following been documented: the determination of restriction, how restricted wastes are managed, and why wastes discharged pursuant to an NPDES permit are not prohibited (if applicable)? [55 FR 22662]

Yes ___ No ___ NA

c. If the generator treats characteristic wastes in RCRA exempt units to render them non-hazardous, are the wastes managed as restricted until 40 CFR Part 268 treatment standards are met?* [40 CFR 268.9(d)]

Yes ___ No ___ NA

*This applies to both concentration based treatment standards specified in 40 CFR 268.41 and 268.43, and to some 40 CFR 268.42 required methods which result in treatment below the characteristic level. See Appendix D.

2. Off-Site Management: Waste Exceeds Treatment Standards

a. Does the generator ship any waste that exceeds treatment standards /prohibition levels (not subject to a national capacity variance) to an off-site treatment or storage facility?

Yes No ___ (If No, go to 3.)

Identify waste code(s) and off-site treatment or storage facilities to which wastes are shipped.

Waste Code	Receiving Facility
F001, D006, D007 F002, F003, F005	Safety Klean Corporation
D002, D006, D008	Laidlaw Environmental services
F002, F003, F005 D008	Chem waste management

Does the generator provide a notification to the treatment or storage facility?
[40 CFR 268.7(a)(1)]

Yes No (If No, go to 3.)

If the generator specifies alternative treatment standards for lab packs, is the certification required in 40 CFR 268.7(a)(7) or (8) included with the notification?

Yes No NA

b. Is a notification sent with each waste shipment?

Yes No

If no, is the waste subject to a tolling agreement pursuant to 262.20(e) (small quantity generator only)?

Yes No (If No, go to 3.)

List waste codes and subsequent handler with whom a contractual tolling agreement is held.

<u>Waste Code</u>	<u>Subsequent Handler</u>
_____	_____
_____	_____
_____	_____

Did the small quantity generator provide a notification to the receiving facility with the first waste shipment subject to the tolling agreement? [40 CFR 268.7(a)(9)]

Yes No

3. Off-Site Management: Waste Meets Treatment Standards

a. Does the generator ship waste that meets treatment standards/prohibition levels to an off-site disposal facility?

Yes No (If No, go to 4.)

Identify waste code(s) and off-site disposal facilities:

<u>Waste Code</u>	<u>Receiving Facility</u>
_____	_____
_____	_____
_____	_____

Does the generator provide a notification and a certification to the disposal facility? [40 CFR 268.7(a)(2)(i) and 268.7(a)(2)(ii)]?

Yes No (If No, go to d.)

b. Are a notification and a certification sent with each waste shipment?

Yes ___ No ___

If no, is the waste subject to a tolling agreement pursuant to 262.20(e) (small quantity generator only)?

Yes ___ No ___ (If No, go to c.)

List waste codes and subsequent handler with whom a contractual tolling agreement is held.

<u>Waste Code</u>	<u>Subsequent Handler</u>
_____	_____
_____	_____
_____	_____

Did the small quantity generator provide a notification and a certification to the receiving facility with the first waste shipment subject to the tolling agreement? [40 CFR 268.7(a)(9)]

Yes ___ No ___

c. Are characteristic wastes which have been rendered non-hazardous (in a RCRA exempt unit) shipped to a Subtitle D facility?

Yes ___ No ___ NA ___ (If No or NA, go to 4.)

Complete the following table:

<u>Waste Code</u>	<u>Receiving Facility</u>
_____	_____
_____	_____
_____	_____

Are a notification and a certification for each shipment sent to the Regional Administrator or authorized State? [40 CFR 268.9(d)(1) and 268.7(b)(5)]?

Yes ___ No ___

4. Off-Site Management: Wastes Subject to Variances, Extensions, or Petitions

a. Does the generator ship wastes to a treatment, storage, or disposal facility which are subject to a national capacity variance (40 CFR Part 268, Subpart C), or case-by-case extension (40 CFR 268.5)?

Yes ^{*} No ___ (If No, go to 5.)

Complete the following table:

<u>Waste Code</u>	<u>Receiving Facility</u>
D007	chemical waste mgmt
D008	landfill environmental services
_____	_____

* refer to page 3 of section III (waste identification)

Does the generator provide notification to the off-site receiving facility that the waste is not prohibited from land disposal? [40 CFR 268.7(a)(3)]

Yes No

Generator has used old variance date (08/08/90) refer to attached manifest & LDR notification

b. Is a notification sent with each waste shipment?

Yes No

If no, is the waste subject to a tolling agreement pursuant to 40 CFR 262.20(e) (small quantity generator only)?

Yes No (If No, go to 5.)

List waste codes and subsequent handler with whom a contractual tolling agreement is held.

Waste Code	Subsequent Handler
_____	_____
_____	_____
_____	_____

Did the small quantity generator provide a notification to the receiving facility with the first waste shipment subject to the tolling agreement? [40 CFR 268.7(a)(9)]

Yes No

5. Records Retention

Does the generator retain on site copies of all notifications, certifications, and other relevant documents for a period of 5 years? [40 CFR 268.7(a)(6)]

Yes No

Are copies of relevant tolling agreements, along with the LDR notification and/or certification, kept on site for at least 3 years after expiration or termination of the agreement? [40 CFR 268.9]

Yes No NA

Do LDR documents reflect proper management of wastes previously covered under expired national capacity variances, case by case extensions and the soft hammer provision*?

Yes No NA

*See Appendix B. Note that the soft hammer provision expired as of 05/08/90. Soft hammer wastes which had treatment standards established in the Third Third rule were granted a minimum 90-day national capacity variance to 08/08/90.

Comments _____

D. Treatment Using RCRA 40 CFR Parts 264 and 265 Exempt Units or Processes

1. Are restricted wastes treated in RCRA exempt units (i.e., boilers, furnaces, distillation units, wastewater treatment tanks, elementary neutralization, etc.)?

Yes ___ No (If No, do not complete this section.)

List types of waste treatment units and processes:

<u>Waste Code</u>	<u>Type of Treatment</u>	<u>Treatment Units and Processes</u>
_____	_____	_____
_____	_____	_____
_____	_____	_____

2. Are treatment residuals generated from these units?

Yes ___ No ___

Comments _____

3. Are residuals further treated, stored for greater than 90/180 days, or disposed on site?

Yes ___ No ___ NA ___

(If yes, the TSD checklist must also be completed.)

E. Additional Comments, Concerns, or Issues Not Addressed in the Checklist:

RCRA LAND DISPOSAL RESTRICTION INSPECTION

IV. TSD REQUIREMENTS

A. Waste Analysis [40 CFR 268.7(b), 264.13, and 265.13]

1. Does the waste analysis plan address the following LDR waste categories? [40 CFR 264.13(b)(6) and 265.13(b)(6)]

F001-F005 Spent Solvents	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	NA <input type="checkbox"/>
F020-F023 and F026-F028 Dioxins	Yes <input type="checkbox"/>	No <input type="checkbox"/>	NA <input type="checkbox"/>
California List Wastes	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	NA <input type="checkbox"/>
First, Second, and Third Third Wastes	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	NA <input type="checkbox"/>

Comments _____

2. Has the waste analysis plan been revised to address F039 multi-source leachate?

Yes No NA

3. What date was the waste analysis plan last revised? 1/1 March 1990

4. Does analytical data contain all the information required to treat, store, or dispose of restricted wastes? [40 CFR 264.13(a)(1) and 265.13(a)(1)]

Yes No NA Facility is only storage facility. No new waste from outside is accepted.

If yes, which of the following are sources of analytical data? (More than one may apply.):

- Generator provides data
- Facility performs analyses in on-site laboratory
- Facility contracts analyses at off-site laboratory

If the generator provides data, does the facility provide corroborative testing? [40 CFR 264.13(a)(2) and 265.13(a)(2)]

Yes No NA

If analyses are conducted off site, identify lab: _____

a. Are wastes with treatment standards specified in 40 CFR 268.41 analyzed using the toxicity characteristic leaching procedure (TCLP)?* (BDAT** = stabilization/immobilization technology) [40 CFR 268.7(b)(1)]

Yes No NA

*See Appendix C for exceptions.
**BDAT = best demonstrated available technology. See Appendix A.

If yes, list the wastes for which TCLP was used and provide the date of last test, frequency of testing, and note any problems. Attach test results. [40 CFR 264.73 (b)(3) and 265.73(b)(3)]

- b. Are wastes with treatment standards specified in 40 CFR 268.43 analyzed using total constituent analysis?* (BDAT = destruction/removal technology) [40 CFR 268.7(b)(3)]

Yes ___ No ___ NA

*See Appendix C for exceptions.

If yes, list the wastes for which total constituent analysis was used and provide the date of last test, frequency of testing, and note any problems. Attach test results. [40 CFR 264.73 (b)(3) and 265.73(b)(3)]

- c. Is the paint filter liquids test (PFLT) used to determine if California List wastes are contained in liquid hazardous waste? [40 CFR 268.32(i)]

Yes ___ No ___ NA

If yes, list the wastes for which PELT was used and provide the date of last test, the frequency of testing, and note any problems. Attach test results. [40 CFR 264.73(b)(3) and 265.73(b)(3)]

B. Operating Record [40 CFR 264.73 and 265.73]

1. Does the operating record contain records and results of waste analyses performed as specified in 40 CFR 268.4 and/or 40 CFR 268.7(b)? [40 CFR 264.73(b)(3) and 265.73(b)(3)]

Yes No ___

2. Does the operating record contain copies of LDR notifications and certifications?* [40 CFR 264.73(b)(11), (13), and (15) and 40 CFR 265.73(b)(11), (13), and (15)]

Yes No ___

*Include both those received from generators, and those prepared for off-site shipments.

3. Does the operating record include appropriate documentation for restricted wastes which are managed wholly on site? [40 CFR 264.73(b)(12), (14), and (16) and 265.73(b)(12), (14), and (16)]

Yes ___ No ___ NA

Does the documentation discussed in points 2. and 3. reflect proper historical management of wastes previously covered under expired national capacity variances, case by case extensions, and the soft hammer provision?*

Yes ___ No ___ NA ___

*Note that the soft hammer provision expired as of 05/08/90. Soft hammer wastes which had treatment standards established in the Third Third rule were granted a minimum 90-day national capacity variance to 08/08/90.

C. Storage [40 CFR 268.50]

1. Are prohibited* wastes stored on site in containers?

Yes No ___ (If No, go to 2.)

*See Appendix E for distinction between restricted and prohibited wastes.

Are all containers clearly marked to identify the contents and date(s) entering storage? [40 CFR 268.50(a)(2)(i)]

Yes No ___

Have wastes been stored for more than one year since the applicable LDR regulations went into effect?

Yes No ___ (If No, go to 2.)

Can the facility show that such accumulation is necessary to facilitate property recovery, treatment, or disposal? [40 CFR 268.50 (c)]

Yes ___ No

If yes, state how: _____

2. Are prohibited wastes stored on site in tanks?

Yes ___ No (If No, go to 3.)

Are all tanks clearly marked with a description of the contents, the quantity of each hazardous waste received, and date each period of accumulation begins, or is such information recorded and maintained in the operating record? [40 CFR 268.50(a)(2)(ii)]

Yes ___ No ___

Have tanks been emptied at least once per year since the applicable LDR regulations went into effect?

Yes ___ No ___ (If Yes, go to 3.)

Can the facility show that such accumulation is necessary to facilitate proper recovery, treatment, or disposal? [40 CFR 268.50(c)]

Yes ___ No ___

If yes, state how: _____

3. Does the facility store liquid hazardous waste containing PCBs at concentrations greater than or equal to 50 ppm?

Yes No ___ (If No, go to D.)

Does the facility meet the TSCA criteria in 40 CFR 761.65(b)? [40 CFR 268.50(f)]

Yes No ___

Have these wastes been stored for more than one year? [40 CFR 268.50(f)]

Yes ___ No

D. Treatment

1. Does the facility treat restricted wastes other than in surface impoundments?

Yes ___ No (If No, do not complete this section. Go to E.)

2. Are required technologies used to treat wastes which have treatment standards specified in 40 CFR 268.42? [40 CFR 268.40(b)]

Yes ___ No ___ NA ___ (If Yes or NA, go to 3.)

Was an alternative method approved?

Yes ___ No ___

List each waste code, the technology specified in 40 CFR 268.42, and the alternative method. Check if approval of the alternative method is documented. [40 CFR 268.42(b)]

<u>Waste Code</u>	<u>Required Technology</u>	<u>Alternative Method</u>	<u>Approval</u>
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

3. Lab packs: If alternative treatment standards are specified, are incinerator residues from lab packs containing D004, D005, D006, D007, D008, D010, and D011 treated in compliance with the subpart D treatment standards for these characteristic wastes? [40 CFR 268.42(c)(4)]

Yes ___ No ___ NA ___

4. Describe all other waste codes and treatment processes:

<u>Waste Code</u>	<u>Treatment Processes</u>
_____	_____
_____	_____
_____	_____

5. Characteristic wastes:

Is the 40 CFR Part 268 treatment standard lower than the 40 CFR Part 261 characteristic level?*

Yes ___ No ___

*This applies to both concentration based treatment standards specified in 40 CFR 268.41 and 268.43, and to some 40 CFR 268.42 required methods which result in treatment below the characteristic level. See Appendix D.

If yes, does the facility manage the waste as restricted until 40 CFR Part 268 treatment standards are met, even after the waste is rendered non-hazardous? [40 CFR 268.9(d)]

Yes ___ No ___

Comments _____

6. Dilution Prohibition [40 CFR 268.3]:

a. Does the facility mix prohibited wastes with different treatment standards?

Yes ___ No ___ (If No, go to c.)

List the wastes _____

b. Are the wastes amenable to the same type of treatment? [55 FR 22666]

Yes ___ No ___

If yes, is this method used for the aggregated wastes?

Yes ___ No ___

Comments _____

c. Based on an assessment of points a. and b., or any other relevant information, is dilution used as a substitute for treatment? [40 CFR 268.3(a)]

Yes ___ No ___

Comments _____

7. Does the facility, in accordance with an acceptable waste analysis plan, test residues from all treatment processes? [40 CFR 268.7(b)]

Yes ___ No ___

Comments _____

8. Does the facility ship any characteristic wastes which have been rendered non-hazardous to a Subtitle D facility?

Yes ___ No ___ (If No, go to 9.)

Complete the following table:

<u>Waste Code</u>	<u>Receiving Facility</u>
_____	_____
_____	_____
_____	_____

Are a notification and a certification for each shipment sent to the Regional Administrator or authorized State? [40 CFR 268.9(d)(1) and 268.7(b)(5)]

Yes ___ No ___

9. Does the facility ship any wastes or treatment residues to an off-site land disposal facility?

Yes ___ No ___ (If No, go to 10.)

Complete the following table:

<u>Waste Code</u>	<u>Receiving Facility</u>
_____	_____
_____	_____
_____	_____

Are a notification and a certification provided to the land disposal facility with each waste shipment? [40 CFR 268.7(b)(4) and 40 CFR 268.7(b)(5)]

Yes ___ No ___

10. Does the facility ship any wastes or treatment residues to be further managed at a different treatment or storage facility?

Yes ___ No ___ (If No, go to E.)

Complete the following table:

<u>Waste Code</u>	<u>Receiving Facility</u>
_____	_____
_____	_____
_____	_____

Are appropriate generator notifications and certifications provided to the receiving facility with each waste shipment? [40 CFR 268.7(b)(6)]

Yes ___ No ___

E. Surface Impoundments [40 CFR 268.4]

1. Are restricted wastes placed in surface impoundments for treatment?

Yes ___ No (If No, go to F.)

List _____

2. Are evaporation or dilution the only recognizable treatment occurring in the surface impoundment? [40 CFR 268.3(a) and 268.4(b)]

Yes ___ No ___

Comments _____

3. Has the facility submitted to the Agency a waste analysis plan and certification of compliance with minimum technology requirements and ground-water monitoring requirements? [40 CFR 268.4(a)(4)]

Yes ___ No ___

4. If the minimum technology requirements have not been met, has a waiver been granted for that unit? [40 CFR 268.4(a)(3)(ii)]

Yes ___ No ___ NA ___

5. Are representative samples of sludge and supernatant from the surface impoundment tested separately, acceptably, and in accordance with the sampling frequency and analyses specified in the waste analysis plan? (Attach test results.) [40 CFR 268.4(a)(2)(i)]

Yes ___ No ___

6. Does the operating record adequately document the results of waste analyses performed in accordance with 40 CFR 268.4? [40 CFR 264.73(b)(3) and 265.73(b)(3)]

Yes ___ No ___

Comments _____

7. Do the treatment residues (sludges or liquids) exceed applicable treatment standards/prohibition levels?

Sludge Yes ___ No ___ Waste Code _____
Supernatant Yes ___ No ___ Waste Code _____

Provide the frequency of analyses conducted on treatment residues:

8. If sludge residues exceed treatment standards/prohibition levels, are they removed on an annual basis? [40 CFR 268.4(a)(2)(ii)]

Yes ___ No ___ NA ___

Comments _____

Are residues subsequently managed in another surface impoundment? [40 CFR 268.4(a)(2)(iii)]

Yes ___ No ___

9. If supernatant is determined to exceed treatment standards, is annual throughput greater than impoundment volume? [40 CFR 268.4(a)(2)(ii)]

Yes ___ No ___ NA ___

Comments _____

F. Land Disposal

1. Are restricted wastes placed in or on the land in units such as landfills, surface impoundments*, waste piles, land treatment units, salt domes/beds, mines/caves, concrete vaults, or bunkers? [40 CFR 268.2(c)]

Yes ___ No (If No, go to G.)

*Note: Do not include surface impoundments addressed in E.

If yes, specify which units and what wastes each unit has received:

<u>Unit</u>	<u>Waste</u>
_____	_____
_____	_____
_____	_____

2. Does the facility, in accordance with an acceptable waste analysis plan, test prohibited wastes prior to land disposal to ensure that all applicable treatment standards and/or prohibition levels have been met? [40 CFR 268.7(c)(2)]

Yes ___ No ___

Comments _____

3. Does the facility test wastes to ensure that they do not exhibit any characteristics at the point of disposal?* [40 CFR 268.9(c)]

Yes ___ No ___ NA ___

*Note: A waste may exceed a characteristic level only if the treatment standard for that characteristic has been met.

4. Does the operating record adequately document the results of waste analyses performed in accordance with 40 CFR 268.7(c)? [40 CFR 264.73(b)(3) and 265.73(b)(3)]

Yes ___ No ___

If yes, at what frequency are analyses performed? _____

5. Does the facility land dispose of restricted wastes which are not prohibited?

Yes ___ No ___ (If No, go to 6.)

List waste codes in appropriate category below:

- National Capacity Variance (40 CFR Part 268, Subpart C) _____
- Case-By-Case Extension (40 CFR 268.5) _____
- No-Migration Petition (40 CFR 268.6) _____
- Treatment Standard Variance (40 CFR 268.44) _____

Does the operating record contain records of the quantities, date of placement, and a copy of the generator notification [40 CFR 268.7(a)(3)] for each shipment of restricted waste subject to a case-by case extension or no-migration petition? [40 CFR 264.73(b)(10) and 265.73(b)(10)]

Yes ___ No ___ NA ___

Do land disposal units receiving wastes covered by a national capacity variance or case-by-case extension meet the requirements in 40 CFR 268.5(h)(2)?

Yes ___ No ___ NA ___

If the facility has a case-by-case extension, is progress being made as described in reports to the Regional Administrator?

Yes ___ No ___ NA ___

6. Are restricted wastes placed in underground injection wells?

Yes ___ No ___ List _____

G. Other Wastestreams

1. Does the facility generate wastes other than residues from RCRA treatment units?

Yes No (If No, go to H.)

2. On-Site Management

a. If characteristic wastes are treated in systems regulated under the Clean Water Act, have the following been documented: the determination of restriction, how restricted wastes are managed, and why wastes discharged pursuant to an NPDES permit are not prohibited (if applicable)? [55 FR 22662]

Yes No NA

b. If characteristic wastes are treated in RCRA exempt units to render them non-hazardous, are the wastes managed as restricted until 40 CFR Part 268 treatment standards are met? [40 CFR 268.9(d)]

Yes No NA

*This applies to both concentration based treatment standards specified in 40 CFR 268.41 and 268.43, and to some 40 CFR 268.42 required methods which result in treatment below the characteristic level. See Appendix D.

3. Off-Site Management: Waste Exceeds Treatment Standards

Are wastes that exceed treatment standards/prohibition levels (not subject to a national capacity variance) shipped to an off-site treatment or storage facility?

Yes No (If No, go to 4.)

Identify wastes code(s) and off-site treatment or storage facilities to which wastes are shipped.

Waste Code	Receiving Facility
D001, D006, D007, F002, F003, F005, D002, D006, D008, F002, F003, F005, D008.	Safety Kipen Corp. Cardlaw Environmental Services Chemical Waste mgmt

Are LDR notifications provided for each shipment to the treatment or storage facility? [40 CFR 268.7(a)(1)]

Yes No (If No, go to 4.)

If alternative treatment standards are specified for lab packs, is the certification required in 40 CFR 268.7(a)(7) or (8) included with the notification?

Yes ___ No ___ NA

4. Off-Site Management: Wastes Meets Treatment Standards

a. Are wastes that meet treatment standards/prohibition levels shipped to an off-site disposal facility?

Yes ___ No (If No, go to 5.)

Identify waste code(s) and off-site disposal facilities:

<u>Waste Code</u>	<u>Receiving Facility</u>
_____	_____
_____	_____
_____	_____

Are LDR notifications and certifications provided for each shipment to the disposal facility? [40 CFR 268.7(a)(2)(i) and 268.7(a)(2)(ii)]?

Yes ___ No ___ (If No, go to b.)

b. Are characteristic wastes which have been rendered non-hazardous (in a RCRA exempt unit) shipped to a Subtitle D facility?

Yes ___ No ___ NA ___ (If No or NA, go to 5.)

Complete the following table:

<u>Waste Code</u>	<u>Receiving Facility</u>
_____	_____
_____	_____
_____	_____

Are a notification and a certification for each shipment sent to the Regional Administrator or authorized State? [40 CFR 268.9(d)(1) and 268.7(b)(5)]?

Yes ___ No ___

5. Off-Site Management: Wastes Subject to Variances, Extensions, or Petitions

a. Are wastes that are subject to a national capacity variance (40 CFR Part 268, Subpart C) or a case-by-case extension (40 CFR 268.5) shipped to a treatment, storage, or disposal facility?

Yes No (If No, go to 6.)

Complete the following table:

<u>Waste Code</u>	<u>Receiving Facility</u>
<u>5007</u>	<u>Chemical waste mgmt</u>
<u>5008</u>	<u>Landlaw Environmental Services</u>

b. Are LDR notifications (stating that the waste is not prohibited from land disposal) provided for each shipment to the off-site receiving facility? [40 CFR 268.7(a)(3)]

Yes No

TSD has used old variance date 08/08/98 in notification. 5007 and 5008 has got extension for 2 years.

6. Dilution Prohibition [40 CFR 268.3]:

a. Are prohibited* wastes with different treatment standards mixed?

*See Appendix E for distinction between restricted and prohibited wastes.

Yes No (If No, go to b.)

List the wastes _____

Are the wastes amenable to the same type of treatment? [55 FR 22666]

Yes No

Comments _____

b. Are prohibited wastes diluted to meet treatment standard criteria, or render them non-hazardous? [55 FR 22665-22666]

Yes No (If No, go to c.)

Check appropriate category:

- Dilutes to meet treatment standards
- Dilutes to render waste non-hazardous

Do wastes fall into the following categories? (Check if appropriate.) [40 CFR 268.3(b)]

- Managed in treatment systems regulated under the Clean Water Act
- Non-toxic* characteristic wastes
- Treatment standard specified in 40 CFR 268.41 or 268.43

*Non-toxic = D001 (except high TOC nonwastewaters), D002, and D003 (except cyanides and sulfides). [55 FR 22666]

If the wastes do not fall into the above categories, briefly describe the conditions under which they were diluted.

c. Based on an assessment of points a. and b., and any other relevant circumstances, are prohibited wastes diluted as a substitute for adequate treatment? [40 CFR 268.3(a)]

Yes No

Comments _____

H. Additional Comments, Concerns, or Issues Not Addressed in the Checklist:

STATE OF NEW YORK
DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF HAZARDOUS SUBSTANCES REGULATION

HAZARDOUS WASTE MANIFEST
P.O. Box 12820, Albany, New York 12212

Form Approved. OMB No. 2050-0039. Expires 9-30-91

Please print or type. Do not Staple.

In case of emergency or spill immediately call the National Response Center (800) 424-5502 and the N.Y. Dept. of Environmental Conservation (518) 457-7362.

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator's US EPA No. NY 10211382083070115		Manifest Document No.		2. Page 1 of 1		Information in the shaded areas is not required by Federal Law.													
3. Generator's Name and Mailing Address Seneca Army Depot Rome, NY 14541						A. State Manifest Document No. NY B 227011 5															
4. Generator's Phone 607) 869-1450						B. Generator's ID S2712															
5. Transporter 1 (Company Name) Laidlaw Environmental Services (TG)				6. US EPA ID Number SICID 9 8 17 15 17 14 16 14 17		C. State Transporter's ID 2750															
7. Transporter 2 (Company Name)				8. US EPA ID Number		D. Transporter's Phone (603) 587-3139															
9. Designated Facility Name and Site Address Laidlaw Environmental Services (TS) Rt. 11 Box 3, Watlington Ind. Rd. Reidsville, NC 27320				10. US EPA ID Number NICID 0 0 10 16 14 18 14 15 11		E. State Transporter's ID															
11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)						12. Containers		13. Total Quantity		14. Unit		15. Waste No.									
a. Hazardous Waste Solid, n.o.s. ORM-E NA9189 (D008)						No. Type 49 DM		43852		P		EPA 5008 STATE									
b.												EPA STATE									
c.												EPA STATE									
d.												EPA STATE									
J. Additional Descriptions for Materials listed Above						K. Handling Codes for Wastes Listed Above															
a. RP33013 RP330013						a. <input checked="" type="checkbox"/> L <input type="checkbox"/> c <input type="checkbox"/>															
b.						b. <input type="checkbox"/> d <input type="checkbox"/>															
15. Special Handling Instructions and Additional Information Truck # K263 P.O. # 28916 DLA20091D0011/9,11 24 Hr. Emerg. # 607-869-1316						a. Guide #31 COR. David Kelat															
16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations and state laws and regulations. If I am a large quantity generator, I certify that I have program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR if I am a small generator, I have made a good faith effort to minimize my waste and select the best waste management method that is available to me and that I can afford.										Printed/Typed Name MARK R. PAPROCKI				Signature Mark R. Paprocki				Mo. Day Year 10/6/2011			
17. Transporter 1 (Acknowledgement of Receipt of Materials)				Printed/Typed Name T. J. ...				Signature T. J. ...				Mo. Day Year 11/1/11									
18. Transporter 2 (Acknowledgement of Receipt of Materials)				Printed/Typed Name				Signature				Mo. Day Year									
19. Discrepancy Indication Space																					
20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.																					
Printed/Typed Name MARY SATINA						Signature Mary Satina						Mo. Day Year 11/1/11									

NY B 227011 5

STATE OF NEW YORK
DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF HAZARDOUS SUBSTANCES REGULATION

HAZARDOUS WASTE MANIFEST

P.O. Box 12820, Albany, New York 12212

Form Approved. OMB No. 2050-0039. Expires 9-30-91

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UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator's US EPA No. NY1031131820830701115		Manifest Document No.		2. Page 1 of 1		Information in the shaded areas is not required by Federal Law.					
3. Generator's Name and Mailing Address Seneca Army Depot Rome, NY 14541 4. Generator's Phone (607) 869-1450						A. State Manifest Document No. NY B 227011 5							
5. Transporter 1 (Company Name) Laidlaw Environmental Services (TG)						6. US EPA ID Number SICD987574647							
7. Transporter 2 (Company Name)						8. US EPA ID Number							
9. Designated Facility Name and Site Address Laidlaw Environmental Services (TS) Rt. 11 Box 3, Watlington Ind. Rd. Reidsville, NC 27320						10. US EPA ID Number NICD000648451							
11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)						12. Containers No. Type		13. Total Quantity		14. Unit Wt/Vol		15. Waste No.	
a. Hazardous Waste Solid, n.o.s. ORM-B HA9189 (D008)						49 438152		P		EPA D008		STATE	
b.										EPA		STATE	
c.										EPA		STATE	
d.										EPA		STATE	
J. Additional Descriptions for Materials listed Above						K. Handling Codes for Wastes Listed Above							
a. RP03013 RP930013						a. <input checked="" type="checkbox"/> b. <input type="checkbox"/> c. <input type="checkbox"/> d. <input type="checkbox"/>							
15. Special Handling Instructions and Additional Information Truck # 2263 P.O. # 28916 DLA20091E0011/9,11 24 Hr. Emerg. # 607-869-1316						a. Guide #31 COR. Daniel K. ...							
16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations and state laws and regulations. If I am a large quantity generator, I certify that I have program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR if I am a small generator, I have made a good faith effort to minimize my waste and select the best waste management method that is available to me and that I can afford.						Printed/Typed Name: Mark P. Procki Signature: [Signature] Mo. Day Year: 06/11/11							
17. Transporter 1 (Acknowledgement of Receipt of Materials)						Printed/Typed Name: [Name] Signature: [Signature] Mo. Day Year: [Date]							
18. Transporter 2 (Acknowledgement of Receipt of Materials)						Printed/Typed Name: [Name] Signature: [Signature] Mo. Day Year: [Date]							
19. Discrepancy Indication Space													
20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.						Printed/Typed Name: [Name] Signature: [Signature] Mo. Day Year: [Date]							

In case of emergency or spill immediately call the National Response Center (800) 424-6602 and the N.Y. Dept. of Environmental Conservation (518) 457-7362.

GENERATOR

TRANSPORTER

FACILITY

NY B 227011 5

STATE OF NEW YORK
DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF HAZARDOUS SUBSTANCES REGULATION
HAZARDOUS WASTE MANIFEST
P.O. Box 12820, Albany, New York 12212

Form Approved. OMB No. 2050-0039, Expires 9-30-91

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UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator's US EPA No. NY 021302003070124		Manifest Document No.		2. Page 1 of 1		Information in the shaded areas is not required by Federal Law.					
3. Generator's Name and Mailing Address Seneca Army Depot Romulus, NY 14541				MAIL TO: MARK PAPROCKI Bldg 123		A. State Manifest Document No. NY B 227012 4							
4. Generator's Phone (607) 869-1450						B. Generator's ID 5882							
5. Transporter 1 (Company Name) Laidlaw Environmental Services (TG)				6. US EPA ID Number SCD987574647		C. State Transporter's ID 52225 SC							
7. Transporter 2 (Company Name)				8. US EPA ID Number		D. Transporter's Phone (803) 587-3139							
9. Designated Facility Name and Site Address Laidlaw Environmental Services (TS) Rt. 11 Box 3, Watlington Ind. Rd. Reidsville, NC 27320				10. US EPA ID Number NC D000648451		E. State Transporter's ID							
						F. Transporter's Phone ()							
						G. State Facility's ID							
						H. Facility's Phone (919) 342-5568							
11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)						12. Containers		13. Total Quantity		14. Unit Wt/Vol		I. Waste No.	
a. Hazardous Waste Solid, n.c.s. ORM-B WA9189 (D008)						No. 151 Type DR		38212		P		EP093	
b.												STATE	
c.												EPA	
d.												STATE	
J. Additional Descriptions for Materials Listed Above						K. Handling Codes for Wastes Listed Above							
a. RP83013 RP830013						a. <input checked="" type="checkbox"/> b. <input type="checkbox"/> c. <input type="checkbox"/> d. <input type="checkbox"/>							
b.						b. <input type="checkbox"/> d. <input type="checkbox"/>							
15. Special Handling Instructions and Additional Information Truck # K269 P.O. # 28917 DLA2G091DG011/9,11						COR: David Kalbitz a. Guide #31 24 Hr. Emergency # 607-869-1316							
16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations and state laws and regulations.										If I am a large quantity generator, I certify that I have program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR If I am a small generator, I have made a good faith effort to minimize my waste and select the best waste management method that is available to me and that I can afford.			
Printed/Typed Name MARK R PAPROCKI				Signature <i>Mark R. Paprocki</i>				Mo. Day Year 06/21/91					
Printed/Typed Name Chester Lawson				Signature <i>Chester Lawson</i>				Mo. Day Year 06/29/91					
Printed/Typed Name				Signature				Mo. Day Year					
19. Discrepancy Indication Space													
20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.													
Printed/Typed Name MARY SAPIA				Signature <i>Mary Sapia</i>				Mo. Day Year 06/29/91					

In case of emergency or spill immediately call the National Response Center (800) 424-8802 and the N.Y. Dept. of Environmental Conservation (518) 457-7362.

NY B 227012 4

STATE OF NEW YORK
DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF HAZARDOUS SUBSTANCES REGULATION

HAZARDOUS WASTE MANIFEST

P.O. Box 12820, Albany, New York 12212

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UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator's US EPA No. NY 021382003070124		Manifest Document No. 1		2. Page 1 of 1		Information in the shaded areas is not required by Federal Law.			
3. Generator's Name and Mailing Address Seneca Army Depot Bosulus, NY 14541				A. State Manifest Document No. NY B 227012 4		B. Generator's ID 3300					
4. Generator's Phone (607) 859-1450				6. US EPA ID Number SCD987574647		C. State Transporter's ID 52325 SC		D. Transporter's Phone (803) 587-3139			
5. Transporter 1 (Company Name) Laidlaw Environmental Services (TG)				8. US EPA ID Number		E. State Transporter's ID		F. Transporter's Phone ()			
7. Transporter 2 (Company Name)				10. US EPA ID Number		G. State Facility's ID		H. Facility's Phone (919) 342-5568			
9. Designated Facility Name and Site Address Laidlaw Environmental Services (TS) Rt. 11 Box 3, Mattington Ind. Rd. Reidsville, NC 27320				10. US EPA ID Number NC D000648451		12. Containers		13. Total Quantity		14. Unit Wt/Vol	
11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number) Hazardous Waste Solid, n.o.s. CRN-E WA9189 (D008)						No. 151		Type DM		I. Waste No. D008	
b.										EPA STATE	
c.										EPA STATE	
d.										EPA STATE	
J. Additional Descriptions for Materials listed Above						K. Handling Codes for Wastes Listed Above					
a. RP83013 RP830013						a. <input checked="" type="checkbox"/> L c <input type="checkbox"/>					
b.						b. <input type="checkbox"/> d <input type="checkbox"/>					
15. Special Handling Instructions and Additional Information Truck # E269 P.O. # 28917						a. Guide #31					
DLA20091D0011/9,11						24 Hr. Emergency # 607-859-1316					
16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations and state laws and regulations. If I am a large quantity generator, I certify that I have program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR if I am a small generator, I have made a good faith effort to minimize my waste and select the best waste management method that is available to me and that I can afford.											
Printed/Typed Name Mark R Paprocki				Signature <i>Mark R Paprocki</i>				Mo. Day Year 11/11/11			
17. Transporter 1 (Acknowledgement of Receipt of Materials)											
Printed/Typed Name Chester Lawson				Signature <i>Chester Lawson</i>				Mo. Day Year 06/29/11			
18. Transporter 2 (Acknowledgement of Receipt of Materials)											
Printed/Typed Name				Signature				Mo. Day Year			
19. Discrepancy Indication Space											
20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.											
Printed/Typed Name				Signature				Mo. Day Year			

In case of emergency or spill immediately call the National Response Center (800) 424-6802 and the N.Y. Dept. of Environmental Conservation (518) 457-7362.

GENERATOR

TRANSPORTER

FACILITY

NY B 227012 4

HAZARDOUS WASTE MANIFEST

P.O. Box 12820, Albany, New York 12212

Form Approved. OMB No. 2050-0039. Expires 9-30-91

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UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator's US EPA No. NY10211382083070133	Manifest Document No. 1	2. Page 1 of 1	Information in the shaded areas is not required by Federal Law.	
3. Generator's Name and Mailing Address Seneca Army Depot Romulus, NY 14541		MAIL TO: MARK PAPROCKI Bldg 123		A. State Manifest Document No. NY B 227013 3		
4. Generator's Phone 607 869-1450				B. Generator's ID same		
5. Transporter 1 (Company Name) Laidlaw Environmental Services (TG)		6. US EPA ID Number SCD987574647		C. State Transporter's ID 222550 SC		
7. Transporter 2 (Company Name)		8. US EPA ID Number		D. Transporter's Phone 803 587-3139		
9. Designated Facility Name and Site Address Laidlaw Environmental Services (TS) Rt. 11 Box 3, Watlington Ind. Rd. Reidsville, NC 27320		10. US EPA ID Number NCID000648451		E. State Transporter's ID		
				F. Transporter's Phone ()		
				G. State Facility's ID		
				H. Facility's Phone (919) 342-5568		
11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)		12. Containers No.	Type	13. Total Quantity	14. Unit WI/Vol	I. Waste No.
a. Hazardous Waste Solid, n.o.s. ORM-E NA9189 (D008)		28	DRM	19860	P	EPA D008 STATE
b.						EPA STATE
c.						EPA STATE
d.						EPA STATE
J. Additional Descriptions for Materials listed Above		K. Handling Codes for Wastes Listed Above				
a. RP83013 RP830013		a. <input checked="" type="checkbox"/> L				
b.		b. <input type="checkbox"/>				
c.		c. <input type="checkbox"/>				
d.		d. <input type="checkbox"/>				
15. Special Handling Instructions and Additional Information Truck # K270 P.O. # 28918		COR: Frank Kabat a. Guide # 31				
DIA20091D0011/9		24 Hr. Emarg. # 607-869-1316				
16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations and state laws and regulations. If I am a large quantity generator, I certify that I have program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR if I am a small generator, I have made a good faith effort to minimize my waste and select the best waste management method that is available to me and that I can afford.						
Printed/Typed Name MARK R PAPROCKI		Signature <i>Mark R Paprocki</i>			Mo. Day Year DEC 28 91	
17. Transporter 1 (Acknowledgement of Receipt of Materials)		Printed/Typed Name BEANLY HUMPHRIES			Signature <i>Beany Humphries</i>	
18. Transporter 2 (Acknowledgement of Receipt of Materials)		Printed/Typed Name			Signature	
19. Discrepancy Indication Space						
20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.						
Printed/Typed Name Jon L Burkert		Signature <i>Jon L Burkert</i>			Mo. Day Year DEC 28 91	

In case of emergency or spill immediately call the National Response Center (800) 424-8602 and the N.Y. Dept. of Environmental Conservation (516) 457-7362.

GENERATOR

TRANSPORTER

FACILITY

NY B 227013 3

STATE OF NEW YORK
DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF HAZARDOUS SUBSTANCES REGULATION

HAZARDOUS WASTE MANIFEST

P.O. Box 12820, Albany, New York 12212

Form Approved. OMB No. 2050-0039. Expires 9-30-91

Please print or type. Do not Staple.

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator's US EPA No. NY 021382083070133		Manifest Document No. 1		2. Page 1 of 1		Information in the shaded areas is not required by Federal Law.			
3. Generator's Name and Mailing Address Seneca Army Depot Romulus, NY 14541				A. State Manifest Document No. NY B 227013 3		B. Generator's ID same					
4. Generator's Phone (607) 869-1450				5. Transporter 1 (Company Name) Laidlaw Environmental Services (TQ)		6. US EPA ID Number SCD987574647		C. State Transporter's ID TP2255050			
7. Transporter 2 (Company Name)				8. US EPA ID Number		D. Transporter's Phone (803) 587-3129		E. State Transporter's ID			
9. Designated Facility Name and Site Address Laidlaw Environmental Services (TS) Rt. 11 Box 3, Watlington Ind. Rd. Reidsville, NC 27320				10. US EPA ID Number NCDC000648451		F. Transporter's Phone ()		G. State Facility's ID			
11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)				12. Containers		13. Total Quantity		14. Unit Wt/Vol			
a. Hazardous Waste Solid, n.o.s. ORM-E NA9189 (D008)				No. 128 Type DM		19186K		P			
b.								EPA Waste No. 5008			
c.								STATE			
d.								EPA STATE			
J. Additional Descriptions for Materials listed Above				K. Handling Codes for Wastes Listed Above		a. <input checked="" type="checkbox"/>		c. <input type="checkbox"/>			
a. RP83013 RP830013				b. <input type="checkbox"/>		d. <input type="checkbox"/>					
15. Special Handling Instructions and Additional Information Truck # K270 P.O. # 28918				a. Guides 31		24 Hr. Emerg. # 607-369-1316					
16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations and state laws and regulations.											
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Printed/Typed Name MARK R. PROCIK				Signature <i>Mark R. Prociak</i>				Mo. Day Year 12/19/91			
17. Transporter 1 (Acknowledgement of Receipt of Materials)				Printed/Typed Name BENNY HUMPHRIES				Signature <i>Benny Humphries</i>		Mo. Day Year 06/13/91	
18. Transporter 2 (Acknowledgement of Receipt of Materials)				Printed/Typed Name				Signature		Mo. Day Year	
19. Discrepancy Indication Space											
20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.											
Printed/Typed Name				Signature				Mo. Day Year			

In case of emergency or spill immediately call the National Response Center (800) 424-6602 and the N.Y. Dept. of Environmental Conservation (518) 457-7362.

NY B 227013 3



CUSTOMER NOTIFICATION AND CERTIFICATION

Only Statements with Original Signatures will be Accepted!

Generator Name/Location: Sonoco Army Depot / Romeus, NY 14541

EPA I.D. Number: NY0213820830

Waste Profile or ARF Designation: RP830013

Manifest Number: NYB2270133

EPA Hazardous Waste Number(s): 0008

Waste Analysis Attached? YES NO On file at facility.

Unrestricted Waste Notification (Category 1)

I notify that I am familiar with the waste through analysis and testing or through knowledge of the waste to support this notification that the waste is not restricted as specified in 40 CFR 268, Subpart D and all applicable prohibitions set forth in 40 CFR 268.32 or RCRA Section 3004(d).

Restricted Waste Notification (Category 2)

I notify that I am familiar with the waste through analysis and testing or through knowledge of the waste to support this notification that the waste is subject to the treatment standards specified in 40 CFR 268, Subpart D. Waste must be treated to the appropriate regulatory treatment standard, by the appropriate regulatory treatment method, or qualifies for a variance as described in Category 3 or meets the standard as described under Category 4.

Corresponding Treatment Standard(s)

See Back

Restricted Waste Variance Notification (Category 3)

I notify pursuant to 40 CFR 268.7(a)(3) that I am familiar with the waste through analysis and testing or through knowledge of the waste to support this notification that this waste is subject to a national capacity variance under 40 CFR 268 Subpart C, or a case-by-case extension under 40 CFR 268.5, or an exemption under 40 CFR 268.6.

Applicable Variance (Give the date the waste is subject to prohibitions)

Restricted Waste Certification (Category 4)

I certify under penalty of law that I personally examined and am familiar with the waste through analysis and testing or through knowledge of the waste to support this certification that the waste complies with the treatment standards specified in 40 CFR Part 268 Subpart D and all applicable prohibitions set forth in 40 CFR 268.32 or RCRA Section 3004(d). I believe that the information I submitted is true, accurate, and complete. I am aware that there are significant penalties for submitting a false certification including the possibility of fine and imprisonment.

SIGNATURE: Mark R. Porzochi DATE: 6-12-91

PRINT NAME: MARK R. PORZUCHI TITLE: ENVIRONMENTAL ENGINEER

MANIFEST # NV B2270133

MANF. LINE ITEM	DO #	CLIN	HIN	ITEM DESCRIPTION	# OF CONT.	VOL.
a	11	001	2004	Furnace Ash	28	19860 19860

CONTRACT # DLR 2009120011 / 11

GSX GOVERNMENT SERVICES, INC.

SIGNATURE *Mark Howard*
DATE 6/12/91

C.O.R.
SIGNATURE *Daniel K. [unclear]*
DATE 6-12-91

Waste Profile or AREF	EPA or State Waste Code	Variance Date	Sub Category	Treatability Group (WW or NWW)	40 CFR Ref.	Specific Treatment Technology	Legend #	Other
RF830013	DIC08	Aug 8, 1990	L. waste	NWW	268.41	Tablet CCDF		

LEGEND FOR TREATMENT STANDARDS EXPRESSED AS CONCENTRATION

TABLE CCWE-CONSTITUENTS IN WASTE EXTRACT

Legend #	Constituent Name	Concentration (in mg/l)	
		Waste Water Containing Spent Solvents	All other Spent Solvent Wastes
		F001-F005 spent solvent	F010-F023 and F026-F028 dioxin Containing Waste
1	Acetone	0.05	0.59
2	n-butyl alcohol	5.0	5.0
3	Carbon disulfide	1.05	4.81
4	Carbon Tetrachloride	.05	.96
5	Chlorobenzene	.15	.05
6	Cresols (and cresylic acid)	2.82	.75
7	Cyclohexanone	.125	.75
8	1,2-dichlorobenzene	.65	.125
9	Ethyl acetate	.05	.75
10	Ethyl benzene	.05	.053
11	Ethyl ether	.05	.75
12	Isobutanol	5.0	5.0
13	Methanol	.25	.75
14	Methylene chloride	.20	.96
15	Methylene chloride (from the pharmaceutical industry)	.44	.96
16	Methyl ethyl ketone	0.05	0.75
17	Methyl isobutyl ketone	0.05	0.33
18	Nitrobenzene	0.66	0.125
19	Pyridine	1.12	0.33
20	Tetrachloroethylene	0.079	0.05
21	Toluene	1.12	0.33
22	1,1,1-Trichloroethane	1.05	0.41
23	1,1,2-trichloro-1,2,2-trifluoroethane	1.05	0.95
24	Trichloroethylene	0.062	0.091
25	Trichlorofluoromethane	0.05	0.96
26	Xylene	0.05	0.15

CALIFORNIA LIST WASTES

37	Nickel	134 mg/l
38	Thallium	130 mg/l
39	Cyanide (Liquid)	1000 mg/l



CUSTOMER NOTIFICATION AND CERTIFICATION

Only Statements with Original Signatures will be Accepted!

Generator Name/Location: Sensco Army Depot / Port Jervis, NY 14541

EPA I.D. Number: NY0213820830

Waste Profile or ARF Designation: RP830013

Manifest Number: NYB2270124

EPA Hazardous Waste Number(s): 0008

Waste Analysis Attached? YES NO On file at facility.

Unrestricted Waste Notification (Category 1)

I notify that I am familiar with the waste through analysis and testing or through knowledge of the waste to support this notification that the waste is not restricted as specified in 40 CFR 268, Subpart D and all applicable prohibitions set forth in 40 CFR 268.32 or RCRA Section 3004(d).

Restricted Waste Notification (Category 2)

I notify that I am familiar with the waste through analysis and testing or through knowledge of the waste to support this notification that the waste is subject to the treatment standards specified in 40 CFR 268, Subpart D. Waste must be treated to the appropriate regulatory treatment standard, by the appropriate regulatory treatment method, or qualifies for a variance as described in Category 3 or meets the standard as described under Category 4.

Corresponding Treatment Standard(s)

See Buck

Restricted Waste Variance Notification (Category 3)

I notify pursuant to 40 CFR 268.7(a)(3) that I am familiar with the waste through analysis and testing or through knowledge of the waste to support this notification that this waste is subject to a national capacity variance under 40 CFR 268 Subpart C, or a case-by-case extension under 40 CFR 268.5, or an exemption under 40 CFR 268.6.

Applicable Variance (Give the date the waste is subject to prohibitions)

Restricted Waste Certification (Category 4)

I certify under penalty of law that I personally examined and am familiar with the waste through analysis and testing or through knowledge of the waste to support this certification that the waste complies with the treatment standards specified in 40 CFR Part 268 Subpart D and all applicable prohibitions set forth in 40 CFR 268.32 or RCRA Section 3004(d). I believe that the information I submitted is true, accurate, and complete. I am aware that there are significant penalties for submitting a false certification including the possibility of fine and imprisonment.

SIGNATURE: Mark P. Paprocki

DATE: 6-12-91

PRINT NAME: MARK P. PAPROCKI

TITLE: ENVIRONMENTAL
ENGINEER

MANIFEST # NYB2270124

MANF. LINE ITEM	DO #	CLIN	HIN	ITEM DESCRIPTION	# OF CONT.	VOL.
a	9	0002	2004	Furnace Ash	()	12171 [#]
	11	0001	2004	Furnace Ash	()	2641 [#]
				Totals	51	38212 [#]

CONTRACT # 06H2009100011 / 9,11

GSX GOVERNMENT SERVICES, INC.

SIGNATURE M. J. Howard

DATE 6-12-91

SIGNATURE David Kalat C.D.R.

DATE 6-12-91

Waste Profile or ARF	Category #	EPA or State Waste Code	Variance Date	Sub Category	Treatability Group (WW or NWW)	40 CFR Ref.	Specific Treatment Technology	Legend #	Other
R230013	2	0108	Aug 8, 1990	Liquid	NWW	268.41 Table C.1.1			

LEGEND FOR TREATMENT STANDARDS EXPRESSED AS CONCENTRATION

TABLE CCWE-CONSTITUENTS IN WASTE EXTRACT		Concentration (in mg/l)	
Legend #	Constituent Name	Waste Water Containing Spent Solvents	All other Spent Solvent Wastes
1	Acetone	0.05	0.59
2	n-butyl alcohol	5.0	5.0
3	Carbon disulfide	1.05	4.81
4	Carbon Tetrachloride	.05	.96
5	Chlorobenzene	.15	.05
6	Cresols (and cresylic acid)	2.82	.75
7	Cyclohexanone	.125	.75
8	1,2-dichlorobenzene	.65	.125
9	Ethyl acetate	.05	.75
10	Ethyl benzene	.05	.053
11	Ethyl ether	.05	.75
12	Isobutanol	5.0	5.0
13	Methanol	.25	.75
14	Methylene chloride	.20	.96
15	Methylene chloride (from the pharmaceutical industry)	.044	.96
16	Methyl ethyl ketone	0.05	0.33
17	Methyl isobutyl ketone	0.66	0.125
18	Nitrobenzene	1.12	0.33
19	Pyridine	0.079	0.33
20	Tetrachlorethylene	1.12	0.05
21	Toluene	1.12	0.33
22	1,1,1-Trichloroethane	1.05	0.41
23	1,1,2-trichloro-1,2,2-	1.05	0.96
24	Trifluoroethane	0.062	0.091
25	Trichloroethylene	0.05	0.96
26	Trichlorofluoromethane	0.05	0.15
	Xylene	0.05	0.15

F010-F023 and F026-F028 dioxin Containing Waste		Concentration
Legend #	Constituent Name	Concentration
27	HxCDD-kAll Hexachlorodibenzo-p-dioxins	1 ppb
28	HxCDF-kAll Hexachlorodibenzofurans	1 ppb
29	PeCDD-kAll Pentachlorodibenzo-p-dioxins	1 ppb
30	PeCDF-kAll Pentachlorodibenzofurans	1 ppb
31	TCDD-kAll Tetrachlorodibenzo-p-dioxins	1 ppb
32	TCDF-kAll Tetrachlorodibenzofurans	1 ppb
33	2,4,5-Trichlorophenol	0.05 ppm
34	2,4,6-Trichlorophenol	0.05 ppm
35	2,3,4,6-Tetrachlorophenol	0.10 ppm
36	Pentachlorophenol	0.01 ppm

CALIFORNIA LIST WASTES		Concentration
Legend #	Constituent Name	Concentration
37	Nickel	134 mg/l
38	Thallium	130 mg/l
39	Cyanide (Liquid)	1000 mg/l



CUSTOMER NOTIFICATION AND CERTIFICATION

Only Statements with Original Signatures will be Accepted!

Generator Name/Location: Seneca Army Depot / Palmyra, NY 14541
EPA I.D. Number: NY0213820830
Waste Profile or ARF Designation: RP830013
Manifest Number: NYB2270115
EPA Hazardous Waste Number(s): 008
Waste Analysis Attached? YES [checked] NO [] On file at facility.

Unrestricted Waste Notification (Category 1)

I notify that I am familiar with the waste through analysis and testing or through knowledge of the waste to support this notification that the waste is not restricted as specified in 40 CFR 268, Subpart D and all applicable prohibitions set forth in 40 CFR 268.32 or RCRA Section 3004(d).

Restricted Waste Notification (Category 2)

I notify that I am familiar with the waste through analysis and testing or through knowledge of the waste to support this notification that the waste is subject to the treatment standards specified in 40 CFR 268, Subpart D. Waste must be treated to the appropriate regulatory treatment standard, by the appropriate regulatory treatment method, or qualifies for a variance as described in Category 3 or meets the standard as described under Category 4.

Corresponding Treatment Standard(s)

See Back

Restricted Waste Variance Notification (Category 3)

I notify pursuant to 40 CFR 268.7(a)(3) that I am familiar with the waste through analysis and testing or through knowledge of the waste to support this notification that this waste is subject to a national capacity variance under 40 CFR 268 Subpart C, or a case-by-case extension under 40 CFR 268.5, or an exemption under 40 CFR 268.6.

Applicable Variance (Give the date the waste is subject to prohibitions)

Restricted Waste Certification (Category 4)

I certify under penalty of law that I personally examined and am familiar with the waste through analysis and testing or through knowledge of the waste to support this certification that the waste complies with the treatment standards specified in 40 CFR Part 268 Subpart D and all applicable prohibitions set forth in 40 CFR 268.32 or RCRA Section 3004(d). I believe that the information I submitted is true, accurate, and complete. I am aware that there are significant penalties for submitting a false certification including the possibility of fine and imprisonment.

SIGNATURE: Mark F. Pawrocki DATE: 6-12-91
PRINT NAME: MARK F PAWROCKI TITLE: ENVIRONMENTAL ENGINEER

MANIFEST # NYB 2270115

MANF. LINE ITEM	DO #	CLIN	HIN	ITEM DESCRIPTION	# OF CONT.	VOL.
a	9	0001	2004	Furnace ASH	()	33000
	9	0002	2004	Furnace ASH	()	10952
				TOTALS	44 44	43852

CONTRACT # DLA200912001 / 9

GSX GOVERNMENT SERVICES, INC.

SIGNATURE Mark Hayward

DATE 6-12-91

P.O.R.

SIGNATURE David Rotat

DATE 6-12-91

Generator Name/Location: Seneca Army Depot / Seneca, NY 14541
EPA ID Number: NY0223820830 Manifest Number: NYB2270115

Waste Profile or ARF	Category #	EPA or State Waste Code	Variance Date	Sub Category	Treatability Group (WW or NWW)	40 CFR Ref.	Specific Treatment Technology	Legend #	Other
R8830013	2	0008	Aug 8, 1990	Liquid	NWW	268.41 Table CC6E7			

LEGEND FOR TREATMENT STANDARDS EXPRESSED AS CONCENTRATION

F001-F005 spent solvent		F010-F023 and F026-F028 dioxin Containing Waste	
Legend #	Constituent Name	Concentration (in mg/l)	
		Waste Water Containing Spent Solvents	All other Spent Solvent Wastes
1	Acetone	0.05	0.59
2	n-butyl alcohol	5.0	5.0
3	Carbon disulfide	1.05	4.81
4	Carbon Tetrachloride	.05	.96
5	Chlorobenzene	.15	.05
6	Cresols (and cresylic acid)	2.82	.75
7	Cyclohexanone	.125	.75
8	1,2-dichlorobenzene	.65	.125
9	Ethyl acetate	.05	.75
10	Ethyl benzene	.05	.053
11	Ethyl ether	.05	.75
12	Isobutanol	5.0	5.0
13	Methanol	.25	.75
14	Methylene chloride	.20	.96
15	Methylene chloride (from the pharmaceutical industry)	0.44	.96
16	Methyl ethyl ketone	0.05	0.75
17	Methyl isobutyl ketone	0.05	0.33
18	Nitrobenzene	0.66	0.125
19	Pyridine	1.12	0.33
20	Tetrachlorethylene	0.079	0.05
21	Toluene	1.12	0.33
22	1,1,1-Trichloroethane	1.05	0.41
23	1,2,2-trichloro-1,2,2-trifluoroethane	1.05	0.96
24	Trichloroethylene	0.062	0.091
25	Trichlorofluoromethane	0.05	0.96
26	Xylene	0.05	0.15

Legend #	Constituent Name	Concentration
27	HxCDD-kAll Hexachlorodibenzo-p-dioxins	1 ppb
28	HxCDF-kAll Hexachlorodibenzofurans	1 ppb
29	PeCDD-kAll Pentachlorodibenzo-p-dioxins	1 ppb
30	PeCDF-kAll Pentachlorodibenzofurans	1 ppb
31	TCDD-kAll Tetrachlorodibenzo-p-dioxins	1 ppb
32	TCDF-kAll Tetrachlorodibenzofurans	1 ppb
33	2,4,5-Trichlorophenol	0.05 ppm
34	2,4,6-Trichlorophenol	0.05 ppm
35	2,3,4,6-Tetrachlorophenol	0.10 ppm
36	Pentachlorophenol	0.01 ppm

Legend #	Constituent Name	Concentration
37	Nickel	134 mg/l
38	Thallium	130 mg/l
39	Cyanide (Liquid)	1000 mg/l

CALIFORNIA LIST WASTES

TOXICITY CHARACTERISTIC ("TC") INSPECTION CHECKLIST

1. Does the facility generate waste exceeding the regulatory level for any constituent listed in Table I-TC?

Yes No

If no this checklist need not be completed.

2. Was the facility's waste(s) considered hazardous prior to the promulgation of the new TC requirement?

Yes No

If No, proceed to question number 3.

- a) Does the generator determine and list on its manifests all of it's waste(s) TC characteristics?

Yes No

Comments _____

- b) If the generator is also a TSD, has the owner or operator submitted a revised Part A permit application or if permitted, a permit modification request indicating the new hazardous constituent(s) found in their waste(s)?

Yes No

3. Is the waste properly managed as a hazardous waste?

Yes No

If No, this is a high priority violation. Be sure to obtain a detailed description of the waste's final disposition.

Comments _____

- a) If the generator is also a TSD, has the owner or operator submitted a revised Part A permit application or if permitted, a permit modification request for the previously unregulated waste which has become hazardous as a result of the TC Rule?

Yes No

EFFECTIVE DATES FOR COMPLIANCE WITH TC REQUIREMENTS

Generators of $\geq 1,000$ kg/mo. of hazardous waste
Generators of $< 1,000$ kg/mo. of hazardous waste

9/25/90
3/29/91

TABLE F-TC

TC Constituents and Their Regulatory Levels

<i>Newly Added Constituents</i>		<i>Constituent</i>	
<i>Constituent</i>	<i>Regulatory Level (mg/l)</i>	<i>Constituent</i>	<i>Regulatory Level (mg/l)</i>
D018 Benzene*	0.5	D032 Hexachlorobenzene	0.13
D019 Carbon Tetrachloride*	0.5	D033 Hexachloro-1, 3-Butadiene	0.5
D020 Chloroform	0.03	D034 Hexachloroethane	3.0
D021 Chlorobenzene	100.0	D035 Methyl Ethyl Ketone	200.0
D022 Chloroform	6.0	D036 Nitrobenzene	2.0
D023 O-Cresol	200.0	D037 Pentachlorophenol	100.0**
D024 M-Cresol	200.0	D038 Pyridine	5.0
D025 P-Cresol	200.0	D039 Tetrachloroethylene	0.7
D027 1, 4-Dichlorobenzene*	7.5	D040 Trichloroethylene*	0.5
D028 1, 2-Dichloroethane*	0.5	D041 2, 4, 5-Trichlorophenol	400.0
D029 1, 1-Dichloroethylene*	0.7	D042 2, 4, 6-Trichlorophenol	2.0
D030 2, 4-Dinitrotoluene	0.13	D043 Vinyl Chloride*	0.2
D031 Heptachlor	0.008	D026 Cresol	200.0

<i>EP Constituents (Being Retained at Current Levels)</i>		
<i>Constituent</i>	<i>Regulatory Level (mg/l)</i>	<i>Constituent</i>
D004 Arsenic*	5.0	D011 Silver*
D005 Barium*	100.0	D012 Endrin*
D006 Cadmium*	1.0	D013 Lindane*
D007 Chromium*	5.0	D014 Methoxychlor*
D008 Lead*	5.0	D015 Toxaphene*
D009 Mercury*	0.2	D016 2, 4-D*
D010 Selenium*	1.0	D017 2, 4, 5-TP (Silvex)*

*Regulated based on an MCL

**The Agency will propose a new (lower) regulatory level for this constituent, based on the latest toxicity information.

*** ACTIVITY REPORT ***

TRANSMISSION OK

TX/RX NO.	1969
CONNECTION TEL	716 226 2466 243
CONNECTION ID	
START TIME	09/23 14:07
USAGE TIME	02'44
PAGES	5
RESULT	OK



SENECA ARMY DEPOT

BLDG 123

ROMULUS, N.Y.

14541



DIRECTORATE of ENGINEERING and HOUSING

DATE: 23 SEP 91 TIME: 1200 # of PAGES W/ COVER SHT: 5

TO: JOE GAVIN

FROM: TOM GRASEK

OFFICE/CO.: N.Y.S.D.E.C.
REGION 8

SENECA ARMY DEPOT
FAX# (607) 869-1362
PHONE# (607) 869-1532

FAX# _____

COMMENTS: Here are copies of Dupont ~~Company~~ Company
TSDF ~~per~~ located in Deepwater, NJ. permit and what they are allowed
to treat reference NJA 0970113 manifest

also copies of certificate of Disposal for PCB Solids
reference NYB 132933 6 manifest

Reference our annual inspection on 17 Sep 91


CWM Chemical Services, Inc.

Model City Facility
 P.O. Box 200
 1550 Balmer Road
 Model City, New York 14107
 716/754-8231

EPA ID NUMBER: NYD049836679

DRMO SENECA ARMY DEPOT

-G-

ROMULUS, NY 14541

Attn: MARK R. PAPROCKI

CERTIFICATE OF DISPOSAL

CWM Chemical Services, Inc. located in Model City, N.Y. has disposed of the following waste in our Secure Landfill as of 06/25/91 in accordance with the 40 CFR part 761 as it pertains to the land disposal of Poly - Chlorinated Biphenyl contaminated transformers, equipment, solids, and sludges.

Hazardous Waste Manifest#: NYB1329336

CWM Profile Number: K51026

CWM Workorder Number: 169424

Identity of Waste: PCB HAZARDOUS WASTE SOLIDS (24 DRUMS)

Under civil and criminal penalties of law for the making or submission of false or fraudulent statements or representations (18 U.S.C. 1001 and 15 U.S.C. 2615) I certify that the information contained in or accompanying this document is true accurate and complete. As to the identified portions of this document for which I cannot personally verify truth and accuracy, I certify as the company official having supervisory responsibility for the persons who, acting under my direct instructions, made the verification that this information is true accurate and complete.

By:

(Kathleen J. Aragoni)

Title: Records Supervisor

Date: 07/23/91



CWM Chemical Services, Inc.
 Model City Facility
 P.O. Box 200
 1550 Balmer Road
 Model City, New York 13107
 716/754-8231

EPA ID. NUMBER: NYD040836670

DRMO SENECA ARMY DEPOT

-0-

ROMULUS, NY 14881

Attn: MARK R. PAPROCKI

CERTIFICATE OF DISPOSAL

CWM Chemical Services, Inc. located in Model City, N.Y. has disposed of the following waste in our Secure Landfill as of 06/24/91 in accordance with the 40 CFR part 781 as it pertains to the land disposal of Poly-Chlorinated Biphenyl contaminated transformers, equipment, solids, and sludges.

Hazardous Waste Manifest# NYB1329336

CWM Profile Number: K51028

CWM Workorder Number: 169424

Identity of Waste: PCB HAZARDOUS WASTE SOLIDS (18 DRUMS)

Under civil and criminal penalties of law for the making or submission of false or fraudulent statements or representations (18 U.S.C. 1001 and 15 U.S.C. 2615) I certify that the information contained in or accompanying this document is true accurate and complete. As to the identified section(s) of this document for which I cannot personally verify truth and accuracy, I certify as the company official having supervisory responsibility for the persons who, acting under my direct instructions, made the verification that this information is true accurate and complete.

By: _____

(Kathleen J. Arizoni)

Title: Records Supervisor

Date: 07/23/91



DuPont Company
 Chemicals & Pigments Department
 Chambers Works
 Technical Lab.
 Deepwater, N.J. 08023

WASTEWATER TREATMENT FACILITY

PERMIT NUMBERS

<u>Issuing or Permitting Agency</u>	<u>Type of Permit</u>	<u>Permit Number</u>	<u>Issue Date</u>	<u>Expiration Date</u>
NJDEP/EPA	Treatment Plant NJPSWA/DSW	NJ0005100	9/01/87	9/01/92
NJDEP	SWA/Certificate of Registration (Hazardous Waste Facility)	TOA 1713H	1/04/80	12/31/89 ¹
EPA	RCRA Part "A" I.D. Registra- tion	NJD 002385730	11/19/80	Indefinite ²
NJDEP/EPA	Secure Landfill Final RCRA Part B Permit	1708C1HP01	9/30/88	9/30/93

¹We are granted legal permit status in New Jersey on a yearly basis until new limits are issued.

²Part "B" permit application was submitted in August 1983. Completeness review is done, technical review complete (corrective action underway).

GTH:sab
 3/2/89
 005343



10-JAN-1991

F and K List - CW WWTP

D, F & K WASTE CODE STATUS AT WWTP THIRD THIRD FINAL UPDATE
 THESE PAGES ARE VALID ON NOVEMBER 8, 1990

WASTE CODE	PERMIT	ACCEPT	REASON	LDR FORMS	
				LDR	NOTIF. & CERT.
Multi-source groundwaters and leachates (NOW F039)	Y	Y	0	TT	Y
D001 Wastewater(WW)	Y	Y	8	TT	Y
D001 Nonwastewater(NWW)				TT	Y
Low TOC(<10%)	Y	Y	8	TT	Y
High TOC(>10%)	Y	N	3	TT	Y
D001 Oxidizers	Y	Y	8	TT	Y
D002 Acids	Y	Y	8	TT	Y
D002 Alkaline	Y	Y	8	TT	Y
D002 Other corrosive	Y	Y	8	TT	Y
D003 Reactive Cyanide	Y	N	6	TT	Y
D003 Reactive Sulfide	Y	Y	8	TT	Y
D003 Explosive	Y	N	8	TT	Y
D003 Water Reactive	Y	Y	6	TT	Y
D003 Other Reactive	Y	Y	8	TT	Y
D004	Y	Y	5	TT	Y
D005	Y	Y	5	TT	Y
D006	Y	Y	5	TT	Y
D007	Y	Y	5	TT	Y
D008	Y	Y	5	TT	Y
D009 Wastewaters	Y	Y	5	TT	Y
D009 NWW,Lo Hg subcat	Y	Y	5	TT	Y
D009 NWW,Hi Hg subcat	Y	N	6	TT	Y
D010	Y	Y	5	TT	Y
D011	Y	Y	5	TT	Y
D012	Y	N	3	TT	Y
D013	Y	N	3	TT	Y
D014	Y	N	3	TT	Y
D015	Y	N	3	TT	Y
D016	Y	N	3	TT	Y
D017	Y	N	3	TT	Y
D018	Y	Y			
D019	Y	Y			
D020	Y	Y			
D021	Y	Y			
D022	Y	Y			
D023	Y	Y			
D024	Y	Y			
D025	Y	Y			
D026	Y	Y			
D027	Y	Y			
D028	Y	Y			
D029	Y	Y			
D030	Y	Y			
D031	Y	Y			

*** ACTIVITY REPORT ***

TRANSMISSION OK

TX/RX NO.	2156
CONNECTION TEL	717172678264
CONNECTION ID	DESCOM-ENV
START TIME	10/31 16:11
USAGE TIME	02'21
PAGES	6
RESULT	OK



New York State Department of Environmental Conservation
6274 East Avon-Lima Road, Avon, NY 14414



Thomas C. Jorling
Commissioner

CERTIFIED MAIL, RETURN RECEIPT REQUESTED

October 17, 1991

Mr. Tom Grasek
Environmental Protection Specialist
Seneca Army Depot
Route 96
Romulus, NY 14581

Dear Mr. Grasek:

Re: Hazardous Waste Compliance Inspection Date:
September 16, 1991
Location of Handler: Same as Above

EPA Identification Number: NYO213820830

In order to determine compliance with the New York State Hazardous Waste Regulations, the New York State Department of Environmental Conservation conducted an inspection of your facility on the above referenced date.

As a result of that inspection, we believe that your facility is operating as a generator and a treater, storer, and/or disposer of hazardous waste.

6NYCRR Part 373-3.2(g)(1),(2),(3) requires that facility personnel must successfully complete a program of classroom instruction or on-the-job training that teaches them to perform their duties in a way that ensures the facility's compliance with the requirements of this subpart. In addition, the owner or operator must ensure that facility personnel take part in an annual review of the initial training required.

You have not met the above requirement and, therefore, are in violation of 6NYCRR Part 373-3.2(g)(1),(2),(3).

Please confirm in writing, within 30 days of the date of this letter, that the above referenced violations have been corrected and include supporting documentation. You MUST include your EPA

Mr. Grasek

-2-

October 17, 1991

Identification Number on all correspondence. This confirmation should be addressed to:

Dixon Rollins, P.E.
Regional Hazardous Substances Engineer
NYS Department of Environmental Conservation
Division of Hazardous Substances Regulation
6274 East Avon-Lima Road
Avon, NY 14414
(716) 226-2466
Attention: Mr. Joseph Gavin, Inspector

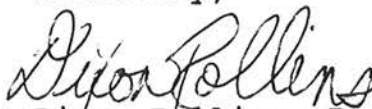
with a copy to:

Janakrai Desai
NYS Department of Environmental Conservation
Division of Hazardous Substances Regulation
Bureau of Hazardous Waste Facility Compliance
Compliance Inspection Section
50 Wolf Road - Room 208/204
Albany, NY 12233-7252
(518) 457-0532
Attention: Mr. Arvind Goswami, Reviewer

Please note that this inspection does not cover compliance with the mixed waste regulations.

If you have any questions about this notice or should you wish to discuss this matter further, please contact the Inspector or the Reviewer at the telephone number above. A copy of the Inspection Form is enclosed for your information.

Sincerely,



Dixon Rollins, P. E.
Regional Hazardous Substances
Engineer
Division of Hazardous
Substances Regulation

db
Enclosure

Mr. Grasek

-3-

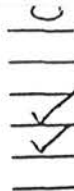
October 17, 1991

cc: Mr. Joseph Gavin, Inspector
Mr. Arvind Goswami, Reviewer
Seneca County Health Department



INSPECTION FORM

Region:
 LAND BASED TSDF
 COMMERCIAL TSDF
 OTHER TSDF
 TC GENERATOR
 OTHER GENERATOR



NEW YORK STATE INDUSTRIAL HAZARDOUS WASTE MANAGEMENT ACT
 (Chapter 639, Laws of 1978)

Prepared for:

Commissioner
 NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Send to: Division of Hazardous Substances Regulation
 Compliance Inspection Section
 50 Wolf Road - Room 208
 Albany, New York 12233-7252

EPA I.D. NUMBER: NY 021 382 0830

COMPANY NAME (Corporate):

Seneca Army Depot

(Division):

COMPANY MAILING ADDRESS:

Seneca Army Depot, Route 96

City & State

Romulus, NY Zip Code 14581

COMPANY LOCATION ADDRESS:

(if different than mailing)

City & State

NY Zip Code

COMPANY TELEPHONE NUMBER:

(607) 869-1281 Extension

FULL NAME OF COMPANY CONTACT: (Mr.) (Ms.) Tom Emsek

TITLE OF COMPANY CONTACT: Environmental Protection Specialist

INSPECTION DATE: 9/16/1991 TIME OF INSPECTION: 10 (a.m.) (p.m.)

INSPECTOR'S NAME: Joseph Gavin

TITLE: Environmental Engineer I

NAME: Darshan Patel

TITLE: Environmental Engineer I

REPORT PREPARED BY: Joseph Gavin

DATE: 10-1-91

REPORT APPROVED BY: Debra Rollins

DATE: 10-1-91

10
NA
Indicate:

Indicate:

X Violations

X Satisfactory
NA Not Applicable

2. written job description for each position - 373-3.2(g)(4)(ii) ✓
3. written description of the type and amount of both introductory and continuing training that will be given to each person related to hazardous waste management - 373-3.2(g)(4)(iii) ✓
4. records that document the training or job experience required has been given to and completed by facility personnel - 373-3.2(g)(4)(iv). ✓
- B. The training program is directed by a person trained in hazardous waste management procedures and must include instruction which teaches facility personnel hazardous waste management procedures (including contingency plan implementation) relevant to the positions in which they are employed. 373-3.2(g)(1)(i),(ii) and (iii). The components are: ✓
1. Procedures for using, inspecting, repairing and replacing facility emergency and monitoring equipment; ✓
2. Key parameters for automated waste feed cutoff systems; NA
3. Communications or alarm systems; ✓
4. Response to fires and explosions; ✓
5. Response to groundwater contamination incidents; and NA
6. Shutdown of operations. ✓
- C. Facility personnel have successfully completed the program by the effective date of these regulations or six months after the date of their employment. 373-3.2(g)(2). ✓
- D. Facility personnel have taken part in an annual review of the initial training required - 373-3.2(g)(3). —
- E. Training records on current personnel have been kept permanently at the facility (until closure) - 373-3.2(g)(5). ✓
- F. Training records on former employees have been kept for at least three years from the date the employee last worked at the facility - 373-3.2(g)(5). ✓

HEADQUARTERS
SENECA ARMY DEPOT
ROMULUS, NY 14541

*file
NW mgk
86*

Specific Procedure List
No. OE-04

15 December 86

DIRECTORATE FOR SUPPLY
INDUSTRIAL PLANT EQUIPMENT DIVISION
HAZARDOUS WASTE PROCEDURE

	Paragraph
Purpose	1
Scope	2
Definitions	3
Responsibilities	4
Procedures	5

1. Purpose. This procedure outlines the policies and responsibilities for handling and disposition of hazardous waste within the Industrial Plant Equipment (IPE) Division.

2. Scope. This procedure is applicable to the Industrial Plant Equipment Division, Directorate for Supply.

3. Definitions.

a. Generator - The foreman/supervisor of any IPE shop or activity generating hazardous waste.

b. Transporter - Any person transporting hazardous waste.

4. Responsibilities.

a. Mr. Randy Walter is the Hazardous Waste Officer for the IPE Division.

b. The Chief, IPE Division, is responsible for maintaining this procedure current in accordance with applicable regulations.

c. Generators and/or Responsible Supervisors will:

1. Request Hazardous Waste Determination from FED for all new materials purchased after 1 May 1981.

2. Make every attempt to decrease or eliminate the hazardous wastes they produce through recycling, reclaiming, reuse, or through alternate procedures.

3. Draw the proper containers and labels and mark same in accordance with 40 CFR Parts 260 through 263 and 49 CFR Parts 100 through 199.

4. Segregate wastes during accumulation and insure that they remain segregated.

5. Certify the contents of the waste container(s) and that the proper container has been used prior to storage in Building 307 by signing the SEAD Waste Certification.

This procedure supercedes Specific Procedure No. OE-4 dated 8 July 1985.

6. Be able to prove, beyond reasonable doubt, that all hazardous wastes have been managed and disposed of in accordance with federal and state regulations at the end of February of each year.

7. Have on hand at the generation site the appropriate equipment and absorbents necessary to clean up any hazardous waste spill.

5. Procedures.

a. Building 307 is the only authorized storage area for hazardous waste.

b. Generators will draw the proper containers and labels required to properly accumulate their wastes.

c. Generators will manage their wastes during accumulation in accordance with 40 CFR Parts 260 and 262 and certify the contents and containers by signing the SEAD Waste Certification Statement. Forward statement to his respective Hazardous Waste Committee member.

d. Each generator is responsible for the proper labeling of drums containing hazardous waste.

e. Each generator is responsible for preparing DA Form 4508, Transfer Record. This form will contain, as a minimum, the number/quantity of drums and the exact type of hazardous waste contained in each drum.

f. After completion of the Transfer Record, (DA Form 4508), the IPE Hazardous Waste Officer will be notified that material is ready for his inspection.

g. The IPE Hazardous Waste Officer will inspect drums for proper marking and make arrangements to have Building 307 opened by Mr. Randy Battaglia, the Depot Hazardous Waste Officer. All generators will be notified when the building will be opened and they will then proceed to have their drums moved to Building 307.

h. The personnel who transports drums to Building 307 will take the Transfer Records (DA Form 4508) with them. After drums are deposited in Building 307, the Depot Hazardous Waste Officer will sign receipt for them on the Transfer Form (DA Form 4508). The Transporter will detach two copies of the signed Transfer Record (DA Form 4508) and deliver one to the generator and one to the IPE Hazardous Waste Officer.

i. Each transporter has the responsibility for assuring that barricades are erected in the road on each side of Building 307 to stop traffic in the area while loading and unloading hazardous waste. If traffic persists in going around the barricade, Security Police will be notified to institute traffic control measures.

j. Each generator will maintain a log book of all hazardous waste transferred to Building 307. All transfers will be kept on file and disposed of in accordance with The Army Functional Files System (TAFFS). Record Book,

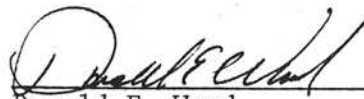
NSN 7530-00-222-3525, will be used for this purpose.

STEVEN L. CHAMBERLAIN
LTC, AV
Director of Supply

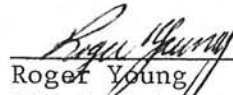
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Storage Branch (2)
Mat Spt & Plng Branch (2)
R. Walter
R. Battaglia
PP&C Div (4)
Inventory Div
Gen Supply Div
DPD
Transportation Div

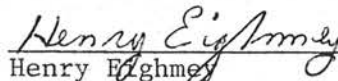
Concurrence:



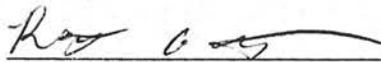
Donald E. Ward
Chief, IPE Division



Roger Young
Chief, Rehab Branch



Henry Eighmey
Chief, Storage Branch



Randy Walter
IPE Hazardous Waste Officer



Randall W. Battaglia
SEAD Hazardous Waste Officer

C

ROYAL CANADIAN MOUNTED POLICE
POLICE MONTREAL QUEBEC

AMCEN-A

18 NOV 1986

SUBJECT: Final Rule, Hazardous Waste Management System: Land Disposal Restrictions

Between 8 Nov 86 and 8 Nov 88, the above wastes may be disposed of in a landfill or surface impoundment only if the facility is in compliance with interim status or final permitting standards, whichever are applicable.

5. The U.S. EPA also established 8 Nov 88 as the effective date for the applicability of land disposal restriction regulations to dioxin-containing wastes (FO20, FO21, FO23, FO26, FO27, and FO28). Between 8 Nov 86 and 8 Nov 88, these wastes may be disposed of in a landfill or surface impoundment only if the facility is in compliance with interim status or final permitting standards, whichever are applicable.

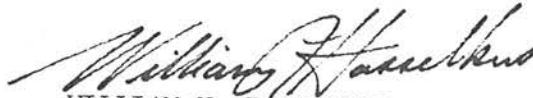
6. The U.S. EPA also promulgated the Toxicity Characteristic Leaching Procedure (TCLP) (Appendix I to Part 268 of referenced document) for use in determining whether the solvent and dioxin-containing wastes meet the applicable treatment standards.

7. Point of Contact at this headquarters is MAJ Jessie B. Cabellon, AMCEN-A, at AUTOVON 284-9016.

8. AMC - Providing Leaders the Decisive Edge.

FOR THE COMMANDER:

Encl



WILLIAM N. HASSELKUS
Chief, Environmental Quality Division
Office of the Deputy Chief
of Staff, Engineer

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Star



DEPARTMENT OF THE ARMY
HEADQUARTERS US ARMY MATERIEL DEVELOPMENT AND READINESS COMMAND
5001 EISENHOWER AVENUE, ALEXANDRIA, VA. 22333

AMCEN-A

18 NOV 1986

SUBJECT: Final Rule, Hazardous Waste Management System: Land Disposal Restrictions

In 11/20

SEE DISTRIBUTION

1. Reference Federal Register, Volume 51, Number 216, November 7, 1986, pages 40572-40654.
2. On 7 Nov 86, the U.S. Environmental Protection Agency (EPA) promulgated final regulations implementing the congressionally mandated prohibitions on the land disposal of hazardous waste. The regulations establish procedures for setting treatment standards for hazardous wastes, for granting nationwide variances from statutory effective dates, for granting extensions of effective dates on a case-by-case basis, for evaluating petitions for a variance from the treatment standard, and for evaluating petitions demonstrating that continued land disposal of hazardous wastes is protective of human health and the environment. A summary of the final rule is provided at enclosure 1 for your information and appropriate action.
3. Please note that the U.S. EPA has concluded that open detonation and open burning of explosive wastes do not constitute land disposal, except in cases where the residuals continue to exhibit one or more of the characteristics of hazardous waste.
4. The land disposal restrictions became effective on 8 Nov 86 for all F001-F005 solvent wastes, with the exception of the following wastes which will receive a 2-year variance that extends the effective date for the land disposal restrictions to 8 Nov 88:
 - a. Solvent wastes generated by small quantity generator of 100-1000 kilograms of hazardous waste per month.
 - b. Solvent wastes generated from, any response action taken under sections 104 or 106 under CERCLA or any corrective action taken under RCRA, that are not soil and debris.
 - c. Solvent waste which is a solvent-water mixture, a solvent-containing sludge, or a solvent-contaminated soil (non-CERCLA or RCRA corrective action) containing less than 1 percent total F001-F005 solvent constituents listed in Table CCWE of section 268.41 of the referenced document.

disposal environment. The screening levels specified maximum concentration levels of individual hazardous constituents in extracts of hazardous wastes. The Agency also noted that air emissions contamination was not addressed in the proposed framework. However, when work was completed on the air model, more stringent screening levels would be set, if necessary, to protect this media.

To ensure that the total risks to human health and the environment were not increased as a result of implementing the land disposal restrictions, the Agency proposed to compare the risks of managing wastes in land disposal units with the risks of managing wastes in alternative treatment technologies. Treatment technologies found to pose greater risks than those posed by land disposal of the waste would be considered unavailable for purposes of establishing RCRA section 3004(m) treatment standards.

The proposed rule set treatment standards in the following way. If application of BDAT treatment resulted in concentration levels equal to or lower than the screening levels, the Agency proposed to issue the screening level as the treatment standard, capping off required BDAT treatment at these protective levels. If application of BDAT treatment resulted in levels less stringent than the screening levels, but BDAT realized substantial reductions in toxicity or mobility and did not pose greater risks than land disposal, then the technology-based level would become the treatment standard and the screening level would remain as a goal that could be reached as new technologies emerged.

The Agency proposed to apply this framework to the waste codes specified in section 3004(e) (i.e., F020-F023, F026 and F027⁴ for dioxin-containing wastes, and F001-F005 and the corresponding constituents listed in 40 CFR 261.33 (e) and (f) for solvent-containing wastes⁵).

⁴ The Agency omitted F028 from the proposed rule because it is the residue from the thermal treatment of soils contaminated with other dioxin-containing wastes. This was an error, as this waste also is required to meet the treatment standard. F028 is included in today's final rule.

⁵ The solvent wastes are listed as P022, U002, U031, U037, U052, U057, U070, U080, U112, U117, U121, U160, U161, U158, U161, U169, U198, U216, U211, U220, U228, U228 and U239.

The screening levels for dioxin-containing wastes were below established detection limits achievable using standard EPA analytical methods, thus, the Agency proposed treatment standards based on the detection limits. The proposed treatment standards for solvents were derived from screening levels and the potential effects of solvents on synthetic and clay liners.

The Agency requested comments on an alternative approach, that of establishing treatment standards under RCRA section 3004(m) based solely on the performance of the best demonstrated available technology (BDAT).

2. Variance Based on Lack of National Capacity

Because no incinerator or thermal treatment facility has been approved by EPA to treat dioxin-containing wastes, the Agency proposed to grant a 2-year national variance for all dioxin-containing wastes subject to the restrictions. The Agency also proposed to grant a 2-year nationwide variance for F001-F005 solvent wastes containing less than 1 percent (by weight) total organic constituents, and solvent-contaminated soils, because of capacity limitations on alternative treatment, recovery, and disposal technologies.

3. Petition Process

The Administrator is authorized to find that land disposal of a particular waste will be protective of human health and the environment if an interested person demonstrates, to a reasonable degree of certainty, that there will be no migration of hazardous constituents from the land disposal unit or injection zone for as long as the wastes remain hazardous (RCRA sections 3004 (d)(1), (e)(1), and (g)(5), 42 U.S.C. (d)(1), (e)(1), and (g)(5)). Under the proposed rule, this demonstration was to be made in the form of a petition to the EPA Regional Administrator or authorized State program director. The applicant would have been required to prove that a specified waste could be contained safely in a particular type of disposal unit. The Agency proposed that the "no migration . . . for as long as the wastes remain hazardous" standard could be met if the petitioner demonstrated that, by the time the

constituent reached a point of potential human exposure, or a sensitive environment, it would be at a concentration level that did not threaten human health and the environment.

4. Storage of Prohibited Wastes

Section 3004(j) of RCRA specifies that any waste that is prohibited from one or more methods of land disposal also is prohibited from storage unless the storage is solely to accumulate sufficient quantities of the waste to allow for proper recovery, treatment, or disposal. The Agency interprets the statute to provide that the storage prohibition does not apply to wastes that have been treated in accordance with treatment standards or that have been subject to a successful petition demonstration. EPA proposed that generators and treatment, storage, and disposal facilities be allowed to accumulate prohibited wastes on-site for up to 90 days.

II. Summary of Today's Final Rule

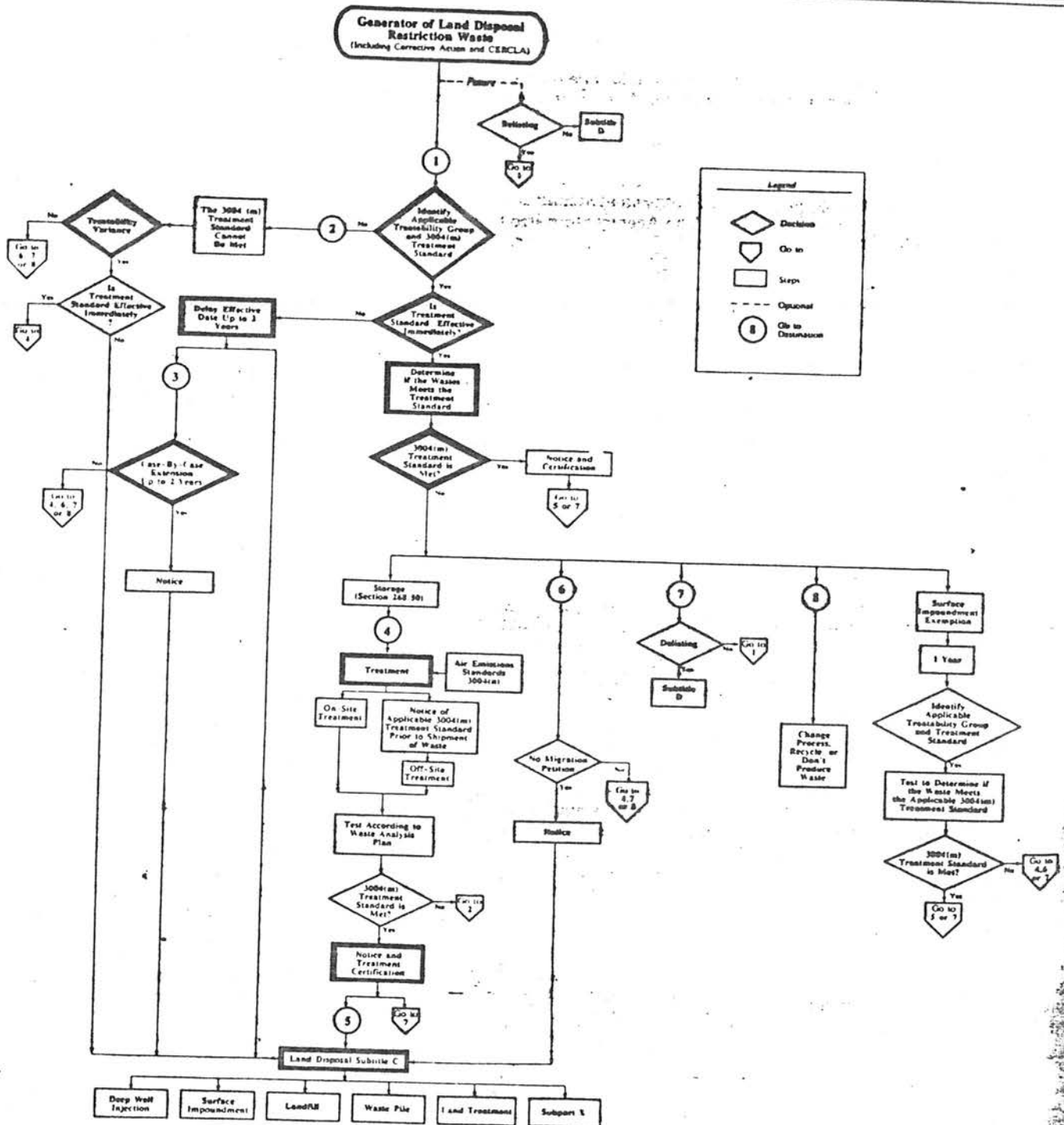
A. Regulatory Framework

The Agency is finalizing the regulatory framework for implementing the land disposal restrictions and promulgating treatment standards and associated effective dates for certain solvent- and dioxin-containing wastes.

By each statutory deadline, the Agency will promulgate the applicable treatment standards under Part 268 Subpart D for each hazardous waste. After the standards are effective, wastes may be disposed of in a Subtitle C facility if they meet the applicable treatment standard.

After the effective dates of the prohibitions, wastes that do not comply with the applicable treatment standards will be prohibited from continued placement in land disposal units unless a petition has been granted by the Administrator under § 268.6 demonstrating that continued management of specific hazardous wastes in land disposal units is protective of human health and the environment for as long as the waste remains hazardous. EPA may provide an extension of the statutory effective date under § 268.5.

BILLING CODE 6560-50-M



Applicability

1. Scope of Land Disposal Restrictions

The definition of land disposal is not being limited to placement in a landfill, surface impoundment, waste pile, injection well, land treatment facility, salt dome formation, salt bed formation, or underground mine or cave as specifically identified in RCRA section 3004(k). The Agency also considers placement in concrete vaults or bunkers intended for disposal purposes as methods of waste management subject to the land disposal restrictions, as proposed. The Agency, however, is departing from the proposed rule with respect to open detonation. For purposes of clarification, the final rule notes that the Agency interprets any reference to open detonation to include open burning (see Unit III.A.). The Agency has concluded that these methods do not constitute land disposal, except in cases where the residuals from open detonation and open burning of explosives continue to exhibit one or more of the characteristics of hazardous waste.

The Agency interprets the land disposal restriction adopted in today's final rule as applying prospectively to the affected hazardous wastes. In other words, hazardous wastes placed into land disposal units after the effective date are subject to the prohibitions, but wastes land disposed prior to the applicable effective date do not have to be removed or exhumed for treatment. Similarly, the Agency interprets the restrictions on storage of prohibited wastes to apply only to wastes placed in storage after the effective date of an applicable land disposal restriction. If, however, wastes subject to land disposal restrictions are removed from either a storage or land disposal unit after the effective date, subsequent placement of such wastes in or on the land would be subject to the restrictions and treatment provisions.

The provisions of today's final rule also apply to wastes produced by generators of 100 to 1000 kilograms of hazardous waste in a calendar month.

The land disposal restrictions apply to both interim status and permitted facilities. All permitted facilities are subject to the restrictions, regardless of existing permit conditions, because the provisions of RCRA require compliance by all facilities even though the requirements are not specifically referenced in the permit conditions. The land disposal restrictions supersede 40 CFR 270.4(a), which currently provides that compliance with a RCRA permit constitutes compliance with Subtitle C.

2. CERCLA Response Action and RCRA Corrective Action Wastes (restriction of waste from land disposal and standards for air emissions from land disposal).

Under section 3004(e)(3) Congress provided a 48-month exemption (until November 1988) from the land disposal restriction provisions for disposal of contaminated soil and debris from CERCLA 104 and 106 response actions and RCRA corrective actions. Because of this statutory exemption, today's final rule is not applicable to these wastes. The exemption covers the disposal of any soil and debris wastes under section 3004 (d) and (e). All other CERCLA response action wastes and RCRA corrective action wastes are subject to this rule.

CERCLA response actions and RCRA-corrective actions often address waste matrices different than those associated with industrial waste processes on which this rule is primarily based. These waste matrices are different in terms of chemical/physical composition, concentrations, and media within and among sites. The Agency anticipates that treatability variances may be needed for some soils, debris, and other similar wastes. Therefore, before November 8, 1988, the Agency plans to perform additional characterization of soils and debris and other similar wastes and, where necessary, amend the treatment standards by adding additional standards specifically for these wastes.

Today's final rule provides a 2-year national variance for wastes from CERCLA response actions and RCRA corrective actions that are not soil and debris. These wastes must be disposed of in facilities that are in compliance with the requirements of section 3004(o).

CERCLA and RCRA soil and debris wastes include but are not limited to soils, dirt, and rock as well as materials such as contaminated wood, stumps, clothing, equipment, building materials, storage containers, and liners. In many cases soils and debris will be mixed with liquids or sludges. The Agency will determine on a case-by-case basis whether all or portions of such mixtures should be considered soil or debris.

3. Air Emissions

The framework for restricting wastes from land disposal focuses primarily on the relationship between the land disposal of hazardous waste and ground water quality. However, the Agency also is concerned with air emissions from land disposal of these wastes. The Agency plans to address the issue of releases to the air in a broad context in response to various provisions in RCRA including section 3001 (characterization of waste as hazardous) and section 3004

(restriction of waste from land disposal and standards for air emissions from land disposal).

Historically, the Agency has developed and promulgated rules under section 3001 of RCRA classifying wastes as hazardous based on the potential of these wastes to cause harm to human health and the environment if managed improperly. These determinations have included the potential for harm as a result of reactivity, ignitability, corrosivity, and toxicity via the ground water or surface water pathway. While the Agency has consistently maintained that exposure from air emissions is a potential problem for wastes that are treated and disposed improperly, work to develop a characteristic based on potential for air contamination has not as yet been completed. The Agency plans, however, to propose an air toxicity characteristic in the future to provide a more complete definition of hazardous waste, including a list of hazardous constituents that are of concern based on their potential for air contamination.

In conjunction with the development of an air toxicity characteristic, the Agency also plans to propose criteria and performance standards for air emissions in its development of treatment standards for wastes in accordance with section 3004(m). The development of these criteria is tied to the characterization of wastes as hazardous and that portion of the land disposal restrictions framework related to the risks posed by air emissions from best treatment technologies.

Both the air toxicity characteristic and the criteria for treatment standards based on air emissions are related to both the development of air emission standards under section 3004(n) and the petition demonstration for continued land disposal under section 3004(d). With respect to the former, section 3004(n) requires the Administrator to promulgate standards for the control and monitoring of air emissions from treatment, storage and disposal facilities. These standards are currently under development.

In establishing a framework for dealing with air emissions under the RCRA statute, the Agency must also develop criteria under section 3004 (d), (e), and (g) for determining when the statutory standard of "no migration of hazardous constituents from the disposal unit or injection zone for as long as the waste remains hazardous" has been met. As with other portions of the statute dealing with air emissions, the standards and criteria to be applied to the petition demonstration are closely

related to the factors and criteria to be used to determine when a waste should be managed as hazardous under section 3001 of RCRA. EPA expects that the technical analysis of air emissions that will provide a basis for future rulemaking under sections 3001 and 3004(n) will also be used as a guide in making decisions on petitions addressing air emissions concerns.

Implementation of two portions of the regulatory program, nevertheless, must proceed as the air strategy is being developed. These include the issuance of permits to treatment, storage and disposal facilities and the establishment of corrective action requirements as a part of those permits. In these cases, it is expected that air contamination from operating and closed facilities will be addressed on a case-by-case basis as part of the permit process.

C. Section 3004(m) Treatment Standards

As discussed earlier, the Agency proposed two major approaches to setting treatment standards under section 3004(m). The first approach involved development of treatment standards based on either technology- or risk-based screening levels. The second approach was based entirely on technology-based standards expressed as BDAT. The Agency is promulgating the second approach as the framework under which disposal of solvents, dioxins, and the scheduled wastes will be evaluated.

The risk-based methodology proposed by the Agency considered the degree of hazard posed by wastes land disposed in Subtitle C facilities. This led to the development of "maximum acceptable contaminant concentrations" (or screening levels), which were based on the recognition that the potential for harm to human health and the environment will differ depending on the toxicity, mobility, and persistence of the waste stream. This approach also recognized that in some cases, any single technology-based level may provide more protection than is necessary, while in other cases, may provide insufficient safeguards for human health and the environment. Moreover, under the proposed approach, relatively "low hazard" wastes could be considered suitable for land disposal without any treatment at all.

Although a number of comments on the proposed rule favored the first approach; that is, the use of screening levels to "cap" treatment that can be achieved under BDAT, several commenters, including eleven members of Congress, argued strongly that this approach did not fulfill the intent of the law. They asserted that because of the

scientific uncertainty inherent in risk-based decisions, Congress expressly directed the Agency to set treatment standards based on the capabilities of existing technology.

The Agency believes that the technology-based approach adopted in today's final rule, although not the only approach allowable under the law, best responds to the above-stated comments. Accordingly, the final rule establishes treatment standards under RCRA section 3004(m) based exclusively on levels achievable by BDAT. The Agency believes that the treatment standards will generally be protective of human health and the environment. Levels less stringent than BDAT may also be protective.

The plain language of the statute does not compel the Agency to set treatment standards based exclusively on the capabilities of existing technology. RCRA section 3004(m) requires EPA to "promulgate regulations specifying those levels or methods of treatment, if any, which substantially diminish the toxicity of the waste or substantially reduce the likelihood of migration of hazardous constituents from the waste so that short-term and long-term threats to human health and the environment are minimized" (42 U.S.C. 6924(m)). By calling for standards that minimize threats to human health and the environment, the statute clearly allows for the kind of risk-based standard originally proposed by the Agency. However, the plain language of the statute does not preclude a technology-based approach. This is made clear by the legislative history accompanying the introduction of the final section 3004(m) language. The legislative history provides that "[T]he requisite levels of [sic] methods of treatment established by the Agency should be the best that has been demonstrated to be achievable" and that "[T]he intent here is to require utilization of available technology in lieu of continued land disposal without prior treatment" (Vol. 130, *Cong. Rec.* 9178, (daily ed., July 25, 1984)). Thus, EPA is acting within the authority vested by the statute in selecting to promulgate a final regulation using its proposed alternative approach of setting treatment standards based on BDAT.

The Agency believes that its major purpose in adopting the risk-based approach of the proposal (i.e., to allow different standards for relatively low-risk, low-hazard wastes) may be better addressed through changes in other aspects of its regulatory program. For example, EPA is considering the use of its risk-based methodologies to

characterize wastes as hazardous pursuant to section 3001.

D. Petition Procedures for Demonstrating Land Disposal To Be Protective of Human Health and the Environment ("No-migration" Petitions)

In carrying out the directives of RCRA sections 3004 (d)(1), (e)(1), and (g)(5), the Agency proposed to consider petitions to allow land disposal of restricted wastes, provided that petitioners demonstrated that any migration from the disposal site would be at concentrations that did not pose a threat to human health and the environment.

Today's final rule adopts the statutory language requiring petitioners to demonstrate "to a reasonable degree of certainty that there will be no migration of hazardous constituents from the disposal unit or injection zone for as long as the wastes remain hazardous." The Agency will allow continued land disposal of hazardous wastes without further treatment only where it can be demonstrated, to a reasonable degree of certainty, that the statutory standard will be met.

Since the Agency expects that there will be relatively few cases in which this demonstration can be made, and, therefore, that relatively few petitions might be submitted for review, the Agency is requiring that petitions be submitted to the Administrator rather than to permit writers in authorized States or Regional EPA offices as originally proposed. As noted in the proposed rule, a petition may be submitted at any time prior to or after the effective date of the ban (see Unit IV.G.). However, submission of a petition will not stay the effective date of the prohibitions.

E. Variance From the Treatment Standard

The Agency recognizes that there may exist unique wastes that cannot be treated to the levels specified as the treatment standard (or, in some cases, by the method specified). In such cases, generators or owners/operators may submit a petition to the Administrator requesting a variance from the treatment standard. Today's final rule includes procedures for obtaining such a variance (see Unit IV.H.). Following a restriction effective date and while the Agency is reviewing the request for a variance, the generator may not land dispose the waste. Alternatively, continued land disposal in surface impoundments meeting the standards of § 268.4(a)(3) may be feasible for some wastes.

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National Variance From the Effective Date

The Agency has the authority to grant national variances to the effective date based upon a lack of capacity to treat the wastes. The new effective date of the prohibition is to be established based on the earliest date on which treatment capacity that is protective of human health and the environment will be available. In no case can this extension be longer than 2 years. During the period of such a variance, the waste is not subject to the land disposal restrictions or any requirements relating to such restrictions. However, during the period of such an extension, the wastes must be managed in facilities that are in compliance with the requirements of section 3004(o) (42 U.S.C. 6924(o)).

G. Case-by-Case Extensions

The Agency will consider granting up to a 1-year extension (renewable once) of a ban effective date if the applicant demonstrates that a binding contract has been entered into to construct or otherwise provide alternative capacity that cannot reasonably be made available by the applicable effective date due to circumstances beyond the applicant's control. The Agency is departing from the procedures outlined in the proposed rule by deleting the proposed cancellation penalty clause for contracts to construct or provide capacity. The final rule makes it clear that in demonstrating that capacity cannot reasonably be available the applicant may show that it is not feasible to provide such capacity (see Unit IV.F.). During the period that the extension is in place, the waste is not subject to the land disposal restrictions; thus, the successful applicant also is exempt from the prohibition on storage under § 268.50. However, during the period of the extension, the wastes must be disposed of in facilities meeting the requirements of RCRA section 3004(o) (42 U.S.C. 6924(o)).

H. Storage of Prohibited Wastes

The Agency proposed a 90-day storage limit to allow the generator and owner/operator of a hazardous waste treatment, storage, or disposal facility time to accumulate sufficient quantities of wastes to allow for proper recovery, treatment, and disposal. Commenters to the rule stated that 90 days was insufficient and more time should be allowed for storage. In today's final rule the Agency is removing the 90-day storage limit for owners/operators. Owners/operators may store restricted wastes as needed to accumulate sufficient quantities to allow for proper

recovery, treatment, and disposal. However, where storage occurs beyond one year, the owner/operator bears the burden of proving that such storage is solely for the purpose of accumulating sufficient quantities to allow for proper recovery, treatment, or disposal. Generators who need to store restricted wastes for periods in excess of the accumulation time limits in 40 CFR 262.34 must obtain interim status and eventually a permit. The Agency is maintaining the proposed 10-day storage limit for restricted waste at transfer facilities. The prohibition on storage applies to restricted wastes, and does not apply to wastes that meet the treatment standard or are the subject of a successful petition under § 268.6 or extension under § 268.5.

I. Treatment Standards and Effective Dates for Solvents

The Agency proposed to establish treatment standards for F001, F002, F003, F004, and F005 solvent wastes and their corresponding P and U wastes (40 CFR 261.3 (e) and (f)) using screening levels and a liner protection threshold. Today's rule, however, addresses only the F001 through F005 solvent wastes (including solvent mixtures). The Agency will evaluate the P and U solvent wastes in accordance with the schedule for listed wastes. In today's rule, the Agency is promulgating technology-based treatment standards for the F001-F005 solvents. The Agency also is promulgating the effective dates for F001-F005 solvent wastes essentially as proposed, with modifications to the range of applicable wastes. The land disposal restrictions become effective on November 8, 1986, for all F001-F005 solvent wastes, with the exception of the following wastes which will receive a 2-year variance that extends the effective date for the land disposal restrictions to November 8, 1988:

(1) The generator of the solvent waste is a small quantity generator of 100-1000 kilograms of hazardous waste per month; or

(2) The solvent waste is generated from any response action taken under sections 104 or 106 of CERCLA or any RCRA corrective action, except where the waste is contaminated soil or debris not subject to the provisions of this chapter until November 8, 1988; or

(3) The solvent waste is a solvent-water mixture, a solvent-containing sludge, or a solvent-contaminated soil (non-CERCLA or RCRA corrective action) containing less than 1 percent total F001-F005 solvent constituents listed in Table CCWE of § 268.41.

J. Treatment Standards and Effective Dates for Dioxins

The proposed rule set treatment standards for dioxin-containing wastes (F020, F021, F022, F023, F026, F027) below the current detection limit of 1 ppb for each of the chlorinated dibenzop-dioxins (CDDs) and chlorinated dibenzofurans (CDFs) (i.e., all isomers of tetra-, penta-, and hexachlorodibenzo-p-dioxins and dibenzofurans, respectively), and the applicable detection limits for the specified chlorophenols.* The proposed standards required that these constituents be below the 1 ppb limit in the waste extract before being land disposed. Wastes having concentrations that meet or exceed the 1 ppb limit may be treated in accordance with the criteria established for incineration (40 CFR 264.343 and 265.352), and thermal treatment (40 CFR 264.383) for dioxins. The Agency is promulgating the dioxin treatment standards as proposed (see Unit VI). The Agency also is setting treatment standards for F028, which was not included in the proposed rule.

As proposed, the Agency is establishing a 2-year national variance from the effective date for all dioxin-containing wastes covered under today's final rule. Accordingly, treatment standards for dioxin-containing wastes will not take effect until November 8, 1988.

K. Rationale for Immediate Effective Dates

Today's rule provides for an effective date of November 8, 1986. It is clear from the statute that today's rule must go into effect no later than the effective date of the prohibition on solvents and dioxins in section 3004(e). Absent any regulations, the prohibition on solvents and dioxins in section 3004(e) takes effect automatically on November 8, 1986. Therefore, November 8, 1986 is the latest date for EPA to promulgate regulations that will prevent the "hammer" in section 3004(e) from falling. Section 3004(h) of RCRA provides that a prohibition in regulations under section 3004 (d), (e), (f), or (g) takes effect immediately upon promulgation. For section 3004(e), that date is November 8, 1986. Moreover, section 3004(m) provides that regulations setting treatment standards

* In addition to CDDs and CDFs, the constituents of concern for the dioxin-containing wastes also include 2,4,5-trichlorophenol, 2,4,6-trichlorophenol, 2,3,4,6-tetrachlorophenol, and pentachlorophenol (see Appendix VII to Part 261). The treatment standards for these constituents are 50, 50, 100, and 10 ppb, respectively.

must have the same effective date as the applicable regulation promulgated under subsection (d), (e), (f), and (g). Therefore, since the statute clearly provides that the regulations implementing section 3004(e) go into effect on November 8, 1986, EPA finds that good cause exists under section 3010(b)(3) of RCRA to provide for an effective date of **November 8, 1986. For the same reason, EPA finds that there is good cause under section 553(d)(3) of the Administrative Procedure Act, 5 U.S.C. § 553(d)(3), to waive the requirement that regulations be published at least 30 days before they become effective.**

III. Agency Response to Major Comments on Proposed Rule

EPA received approximately 200 comments responding to the proposed rule. Comments were submitted by treatment, storage, and disposal (TSD) facilities, environmental organizations, trade associations, companies, State and Federal regulatory agencies, and private citizens.

The Agency received considerable comment on all aspects of the proposed rule. In today's final rule, major comments on applicability, treatment alternatives (BDAT), capacity, petitions, storage, CERCLA interface, solvents, and dioxins are addressed. Responses to comments not addressed in today's rule are available in the background document to this rulemaking (see Comment Response Background Document For the Land Disposal Restrictions Volume I, November 7, 1986), available in the RCRA docket.

The Agency received numerous comments on the ground water back calculation model used in developing health-based screening levels. However, because the approach promulgated in today's rule does not employ screening levels, the Agency is not addressing these comments in the final rule. The Agency does anticipate using similar models in future regulatory actions. We will address the issues raised by the applicable comments in these future rulemaking activities.

A. Applicability

1. Open Burning and Open Detonation

The majority of the commenters were opposed to the inclusion of open detonation and open burning as forms of land disposal. It was argued that these two methods of waste management are treatment rather than disposal, as supported by the standards in 40 CFR 265.382 for owners and operators who thermally treat explosive wastes using open detonation or open burning. The commenters stated that most wastes

handled in this manner are hazardous because they exhibit the characteristic of reactivity (i.e., they are explosive), and when these wastes are open burned or detonated they are rendered nonreactive. The commenters also indicated that no other available technologies provide a safer alternative to handling these wastes.

Although the Agency did not specifically address open burning in the proposed rule, current EPA regulations classify both open detonation and open burning as types of thermal treatment under Subpart D of Part 265. Because open detonation and open burning are similar waste management methods for treatment of explosive wastes, the same regulatory requirements apply to both methods under 40 CFR 265.382. Therefore, we believe that considering open burning in conjunction with open detonation for purposes of this final rule is reasonable and consistent with the current regulatory structure.

Upon reevaluation, the Agency agrees that open burning and open detonation of explosive wastes does not constitute land disposal. EPA does not believe that Congress intended to prohibit these activities because open burning and open detonation are not included in the definition of land disposal in section 3004(k). They are primarily treatment processes that typically result in by-products which are no longer reactive and, therefore, are not considered hazardous. The Agency also agrees with commenters that open detonation and open burning may be the only safe waste management method for handling explosive wastes.

In view of these considerations, the Agency has concluded that the land disposal restrictions program is not applicable to open detonation and open burning.

2. Wastes Produced by Small Quantity Generators

While EPA is authorized to vary standards for small generators under RCRA section 3001(d), this authority is circumscribed by the need to protect human health and the environment. The Agency has carefully considered the risks posed by land disposal of small generator wastes and has weighed these against the impacts of the land disposal restrictions on these generators. Given the smaller aggregate amounts of hazardous waste produced by small generators, it is arguable that the relative risks of land disposal to human health and the environment are lower. However, the major concern with land disposal is the toxicity of the waste rather than the quantity. As EPA explained in a recent rulemaking

imposing certain RCRA regulatory requirements on generators of 100 to 1000 kg of hazardous waste per month, data from EPA's National Small Quantity Hazardous Waste Generator Survey indicate that both small and large quantity generators produce many of the same types of waste and use many of the same waste management practices. 50 FR 31285 (Aug. 1, 1985). Therefore, it is appropriate to include wastes produced by small quantity generators in the land disposal prohibitions.

B. Treatment Alternatives (BDAT)

1. BDAT Expressed as a Performance Standard

Generally, commenters supported the Agency's interpretation of section 3004(m) regarding the criteria for the selection of BDAT. The statute specifies that BDAT may be expressed as either a performance standard or a method of treatment. Wherever possible, the Agency prefers to establish BDAT treatment standards as performance standards rather than adopting an approach that would require the use of specific treatment methods. To date, all treatment technologies considered as BDAT can result in a wide range of performance values depending on the operation of the technology. EPA believes performance standards ensure that the technology is properly operated. Additionally, the Agency believes concentration-based performance standards offer the regulated community greater flexibility to develop and implement compliance strategies as well as incentive to develop innovative treatment technologies.

2. Process Variability

One commenter asserted that normal process variability has not been accounted for in the Agency's calculation of treatment standards. The commenter urged the Agency to calculate variability factors which account for variations in influent composition, system performance, sampling and analytical test methods, and site specific conditions. The commenter further stated that the variability factors should be used to develop BDAT treatment standards on a daily maximum basis.

The Agency agrees with the comments that treatment standards need to incorporate a variability analysis. Since variability in performance occurs even at facilities that are well designed and well operated, EPA believes it is appropriate to include such an analysis in the development of BDAT treatment

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AMSDS-RM-EFD (AMCEN-A/19 Mar 86) 1st End
SUBJECT: Final Rule, Identification and Listing of Spent Benzene, 2 -
Ethoxyethanol, 2 - Nitropropane, and 1, 1, 2 - Trichloroethane as
Hazardous Waste

Mr. Lowe/cm/AV 570-9531

*Tom info
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1988*

HQ, U.S. Army Depot System Command, Chambersburg, PA 17201-4170

28 MAR 1986

TO: SEE DISTRIBUTION

1. Basic correspondence is provided for your information and appropriate action.
2. Subject rule becomes effective on 25 Aug 86.
3. The POC at this headquarters is Mr. Stan Lowe, AV 570-9531.
4. "DESCOM - Providing Leaders the Decisive Edge."

FOR THE COMMANDER:

Encl
nc

Paul F. Topper
PAUL F. TOPPER
Chief, Facilities Engineering
and Management Division

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Steve Dutton

In 3/20

AMCEN-A

SUBJECT: Final Rule, Identification and Listing of Spent Benzene,
2 - Ethoxyethanol, 2 - Nitropropane, and 1, 1, 2 -
Trichloroethane as Hazardous Waste

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DEPARTMENT OF THE ARMY
HEADQUARTERS US ARMY MATERIEL DEVELOPMENT AND READINESS COMMAND
5001 EISENHOWER AVENUE, ALEXANDRIA, VA. 22333

AMCEN-A

19 MAR 1986


SUBJECT: Final Rule, Identification and Listing of Spent Benzene,
2 - Ethoxyethanol, 2 - Nitropropane, and 1, 1, 2 -
Trichloroethane as Hazardous Waste

SEE DISTRIBUTION

1. Reference Federal Register, Volume 51, Number 37, February 25, 1986, pages 6537 - 6542 (Enclosure).
2. As promulgated in the referenced document, the U.S. Environmental Protection Agency (EPA) has issued final rule listing as hazardous spent benzene, 2 - ethoxyethanol, 2 - nitropropane, and 1, 1, 2 - trichloroethane, and still bottoms from the recovery of these solvents. Waste that result from the use of these individual solvents, as well as waste that result from the use of solvents mixtures containing 10 percent or more of any of the listed solvents (before use), will be hazardous wastes. All of these wastes will be subject to regulation as hazardous waste under Title 40, Code of Federal Regulations, Parts 262 - 266, 270, 271, and 124. The regulation becomes effective on 25 August 1986.
3. A copy of the final rule is enclosed for your information and appropriate action.
4. Point of Contact at this headquarters is MAJ Jessie B. Cabellon, AMCEN-A, at AUTOVON 284-9016.
5. AMC - Providing Leaders the Decisive Edge.

FOR THE COMMANDER:

Encl


WILLIAM N. HASSELKUS
Chief, Environmental Quality Division
Office of the Deputy Chief
of Staff, Engineer

On page 3598 in the eighth line of the SUPPLEMENTARY INFORMATION in the second column, "s" should read "as".

BILLING CODE 1505-01-M

40 CFR Parts 261 and 271

[SWN-FRL-2973-4]

Hazardous Waste Management System; Identification and Listing of Hazardous Waste

AGENCY: Environmental Protection Agency.

ACTION: Final rule.

SUMMARY: The Environmental Protection Agency (EPA) today is amending its regulations under the Resource Conservation and Recovery Act (RCRA) by listing as hazardous four spent solvents and still bottoms from the recovery of these solvents. Wastes that result from the use of these individual solvents as well as wastes that result from the use of solvent mixtures containing 10 percent or more of any of the listed solvents (before use) will be hazardous wastes. Also, the Agency is amending the list of commercial chemical products which are hazardous wastes when discarded by adding one of these solvents, and amending the hazardous property of another of these solvents to include toxicity. Finally, two of these solvents are being added to the list of hazardous constituents in Appendix VIII of Part 261. The effect of this regulation is that all of these wastes will be subject to regulation as hazardous wastes under 40 CFR Parts 262-266, and Parts 270, 271, and 124.

DATES: Effective Date: This regulation becomes effective on August 25, 1986.

Compliance Dates. Notification—The Agency has decided not to require persons who generate, transport, treat, store, or dispose of these hazardous wastes to notify the Agency within 90 days of promulgation that they are managing these wastes. Three of the solvents listed in today's notice (benzene, 2-ethoxyethanol, and 2-nitropropane) exhibit the characteristic of ignitability. Furthermore, two of these solvents (benzene and 1,1,2-trichloroethane) previously have been included on the list of commercial chemical products which are hazardous wastes, if and when they are discarded, due to their toxicity. The Agency views the notification requirement to be unnecessary in this case, since we believe that most, if not all, persons who manage these wastes have already notified EPA and received an EPA identification number. In the event that

any person who generates, transports, treats, stores, or disposes of these wastes has not previously notified and received an identification number, he must get an identification number pursuant to 40 CFR 262.12 before he can generate, transport, treat, store, or dispose of these wastes.

Interim Status—All existing hazardous waste management facilities (as defined in 40 CFR 270.2) which treat, store, or dispose of hazardous wastes covered by today's rule, and which qualify to manage these wastes under interim status under section 3005(e) of RCRA, must file with EPA an amended Part A permit application by August 25, 1986, and meet the criteria in 40 CFR 270.72. Under the Hazardous and Solid Waste Amendments of 1984, a facility also is eligible for interim status if it was in existence on the effective date of any statutory or regulatory change under RCRA that requires it to obtain a section 3005 permit. See RCRA (amended) section 3005(e)(1)(A)(ii). Facilities which have qualified for interim status under section 3005(e)(1)(A)(ii) will not be allowed to manage the wastes covered by today's rule after August 25, 1986, unless they have an EPA identification number and they submit an amended Part A permit application with EPA by August 25, 1986.

If the facility has received a permit pursuant to section 3005, however, it will not be allowed to treat, store, or dispose of the wastes covered by today's rule until it submits an amended permit application pursuant to 40 CFR 124.5, and the permit has been modified pursuant to 40 CFR 270.41 to allow it to treat, store or dispose of these wastes.

ADDRESSES: The official public docket for this rulemaking is located in Room S-212, U.S. Environmental Protection Agency, 401 M Street, SW., Washington, DC 20460, and is available for viewing from 9:00 a.m. to 4:00 p.m., Monday through Friday, excluding holidays.

FOR FURTHER INFORMATION CONTACT: The RCRA Hotline at (800) 424-9345 or at (202) 382-3000. For technical information contact Mr. Robert Scarberry, Office of Solid Waste (WH-562B), U.S. Environmental Protection Agency, 401 M Street, SW., Washington, DC 20460, (202) 382-4761.

SUPPLEMENTARY INFORMATION:

I. Background

On July 30, 1985, EPA proposed to amend the regulations for hazardous waste management under RCRA by adding spent 1,1,2-trichloroethane and the still bottoms from the recovery of this spent solvent to the generic F002

listing, and benzene, 2-ethoxyethanol, and 2-nitropropane, as well as still bottoms from the recovery of these spent solvents to the generic F005 listing (See 50 FR 30908-30914). The hazardous constituents in these wastes are the solvents themselves, which are known to cause either carcinogenic, teratogenic, adverse reproductive, or other chronic toxic effects in laboratory animals. Also, benzene has been determined to cause leukemia in humans.

These solvents typically are present at concentrations ranging from 1 to 20 percent in the still bottoms and from 50 to 95 percent in the spent solvents. They are moderately to highly mobile in air and water, expected to be persistent in ground water, and can reach environmental receptors in harmful concentrations if these wastes are mismanaged. In addition, these solvents tend to degrade liners and, thus, may leach from land disposal facilities into ground or surface water, or form solutions of other hazardous substances, thereby rendering those compounds more mobile in the environment. Furthermore, three of these solvents (benzene, 2-ethoxyethanol, and 2-nitropropane) are also ignitable in their pure form and it is expected that the corresponding spent solvent will also exhibit the characteristic of ignitability, as these wastes typically contain significant concentrations of the solvent. On the other hand, the still bottoms from the recovery of the subject solvents typically contain a much lower concentration of these toxic solvents, and in general, are not expected to be ignitable. (See preamble to proposal (50 FR 30908-30914) and listing background document¹ for a more detailed explanation on the basis for listing these wastes.)

EPA has evaluated these wastes against the criteria for listing hazardous wastes provided in 40 CFR 261.11(a)(3), and has determined that these wastes are hazardous because they are capable of posing a substantial present or potential threat to human health and the environment when improperly treated, stored, transported, disposed of, or otherwise managed. Also, it should be noted that the Hazardous and Solid Waste Amendments of 1984 require the Agency to determine whether or not to list wastes from a number of industrial sectors and operations, including the use of solvents (see section 3001(e)(2)). This regulation responds to Congress' request to consider listing additional solvents.

¹ The listing background document is available in the public docket at the address cited above.

Today's listings cover the subject solvents when they are used for their solvent properties, that is, to solubilize (dissolve) or mobilize other constituents. For example, solvents used as a cleaning or degreasing agent, a medium for chemical reactions, an extraction agent, a diluent, and similar uses are covered under this listing when spent. These solvents are considered "spent" and are regulated under Subtitle C of RCRA when they no longer can be used because they have become contaminated with physical or chemical impurities and are no longer fit for use without being regenerated, reclaimed, or otherwise re-processed. This listing does not cover manufacturing process wastes that are contaminated with solvents when the solvents are used as reactants or ingredients in the formulation of commercial chemical products. Such wastes, if determined to be hazardous, would be listed individually.

These spent solvent listings apply to wastes that result from use of the subject solvents in the following situations:

- As pure or technical grade solvents;
- In mixtures or blends that contain, in total, 10 percent (or more) of one (or more) of the subject solvents (before use); and
- In mixtures or blends that contain, in total, 10 percent (or more) of one (or more) of the subject solvents and any of the solvents currently listed in F001, F002, or F005 (before use).

The Agency received no comments on our proposal to list spent benzene, 2-ethoxyethanol, and 1,1,2-trichloroethane; therefore, we are making the listing of these spent solvents final in today's notice. The Agency did receive several comments on the waste listing proposed for 2-nitropropane from the principal manufacturer of this solvent. These comments did not refute our decision to list this solvent; however, a number of minor changes were made in the supporting documentation. Consequently, this notice makes final the regulation as proposed on July 30, 1985, and outlines EPA's response to the comments received on that proposal.

II. Response to Comments

Comments were received on the proposed rule regarding the production rate, waste generation rate, and end uses of 2-nitropropane as well as its toxic effects, mobility, and persistence. This section summarizes these comments and presents the Agency's response.

A. Comments on Production Rate, Waste Generation Rate, and End Uses of 2-Nitropropane

The principal manufacturer of 2-nitropropane has commented that recent projected market demand indicates approximately 2270 kkg/year of 2-nitropropane were manufactured in 1985. This represents a decline of one-third in the production level estimated by the Agency. Also, the commenter stated that since the Agency calculates waste generation rates based on production levels, there would be a corresponding decrease in the amount of spent 2-nitropropane solvent generated. Furthermore, the commenter stated that they were unaware of any user who currently recovers 2-nitropropane from wastes; therefore, no still bottoms are generated. Finally, the commenter reported that the use of 2-nitropropane in inks has been discontinued, except in a few specialized applications, and that 2-nitropropane is no longer used in azeotropic distillation.

The Agency has revised the listing background document to reflect this recent information on production rate, waste generation rate, and end uses of 2-nitropropane.

In regard to the comment that no users of 2-nitropropane can be identified who generate still bottoms from 2-nitropropane recovery, the Agency cannot be certain that none of the hundreds of users of 2-nitropropane are not generating this waste stream or that they will not generate it in the future. Therefore, the Agency is making final the listing of still bottoms from 2-nitropropane recovery.

B. Comments on Effects of Concern

One commenter, noting that evidence of the carcinogenicity of 2-nitropropane was derived from animal studies involving inhalation exposure, argued that postulated exposure via drinking water should not be considered as a health effect of concern.

The Agency agrees that data obtained regarding toxic effects resulting from one exposure route (e.g., via inhalation exposure) cannot automatically be assumed to result in equivalent toxicity when exposure occurs by a different route (e.g., oral exposure). In the case of 2-nitropropane, however, there are sound reasons to expect that this substance, which has been demonstrated to be an inhalation carcinogen, may also be carcinogenic when ingested.

2-nitropropane is readily absorbed both from the lungs and from the gastrointestinal tract, and is metabolized, in part, in the liver (U.S.

EPA, 1977). Also, it has been speculated that N-nitrosocompounds (many of which are potent carcinogens) may be formed as metabolic intermediates. Furthermore, inhalation exposure to 2-nitropropane caused liver (rather than respiratory tract) tumors in animals in several studies (NIOSH, 1978; Griffin *et al.*, 1978). Therefore, it is reasonable to expect that ingestion of 2-nitropropane may result in carcinogenicity of the liver in much the same way as inhalation exposure.

C. Comments on Mobility of 2-Nitropropane

The commenter agreed with EPA that the high mobility of 2-nitropropane can be construed to imply rapid migration to potential receptors; however, the commenter also stated that the high mobility of 2-nitropropane means that it would rapidly disperse to levels low enough to be of no concern to said receptors. Further, the commenter argued that due to its high mobility, 2-nitropropane would be rapidly reduced to concentrations at which it is known to be easily assimilated by microorganisms.

The Agency disagrees with the commenter's conclusion that high mobility (due to relatively high solubility) means rapid dispersion of 2-nitropropane in ground water. The Agency maintains that substances with high solubilities, once released to the environment due to improper management at a disposal site or due to a spill, are more likely to leach out of the wastes, potentially contaminating ground water. The major factors which affect the migration of leachate plumes in ground water are hydraulic and lithologic conditions and leachate density, not solubility. Moreover, one of the basic hydrologic principles regarding the migration of leachate plumes in ground water is that the plume does not become diluted with the entire body of ground water, but tends to remain as an intact body with only slight dispersion and diffusion along the edges. Therefore, we continue to believe that 2-nitropropane's high mobility is an important basis for listing this spent solvent.

D. Comments on Persistence of 2-Nitropropane

A manufacturer who operates a nitroparaffins plant stated that they discharge wastewater containing "some 2-nitropropane" to their biological wastewater treatment plant and that it is subsequently degraded to a concentration less than the detection limit (the detection limit and analytical

method used are not specified). Furthermore, citing an eight-day residence time for biological degradation of 2-nitropropane in their system, the commenter states, ". . . there can be little reason to doubt that this rapid assimilation can be duplicated in the nature (sic) environment. . ."

The Agency disagrees with this conclusion regarding the assimilation of 2-nitropropane in the environment for several reasons. First, the subject waste (*i.e.*, still bottoms and spent solvent) would release 2-nitropropane to the environment at a concentration many times greater than the concentration found in the wastewater and, at such concentrations, the substance could reasonably be expected to kill many, if not all, species of microorganisms that would be able to metabolize it at lower concentrations. Second, the residence time of a substance in a biological--wastewater treatment system comprised of acclimated microorganisms is not an appropriate standard by which to estimate the rate at which unacclimated microorganisms would develop the ability to metabolize a substance. Third, were 2-nitropropane to enter the environment through ground water, the biodegradation of the compound in that medium would be very slow, since the concentration of microorganisms in ground water is many orders of magnitude less than that found in a biological treatment system. Also, the metabolic rates of microorganisms in ground water are significantly slower than those in other, more biologically active, media.

Finally, under the conditions known to prevail in ground water, hydrolysis would be the major mechanism of degradation. However, nitroparaffins do not readily undergo hydrolysis in the pH range associated with ground water. In fact, the routine manufacture of nitroparaffins such as 2-nitropropane involves steam distillation during purification and even contact with heated neutral water does not hydrolyze them significantly. Thus, the Agency predicts that 2-nitropropane will persist in ground water for years, allowing an ample period of time for migration to receptors.

III. Substances Added to 40 CFR 261.33(f)

On July 30, 1985, the Agency also proposed to add 2-ethoxyethanol to 40 CFR 261.33(f). There were no comments received on this proposed action; therefore, the Agency is making final the addition of 2-ethoxyethanol to § 261.33(f), the list of commercial chemical products or manufacturing chemical intermediates which are

identified as hazardous wastes when discarded.

IV. Toxicants Added to 40 CFR Part 261, Appendix VIII

In addition, the Agency proposed to add 2-nitropropane and 2-ethoxyethanol to Appendix VIII. There were no comments received on this part of the proposal; therefore, the Agency is making final this action.

V. Test Methods for New Appendices VII and VIII Compounds

In the July 30, 1985 proposal, the Agency proposed Method Number 8030, which involves the use of a gas chromatograph with a flame ionization detector (GC/FID), and Method Number 8240, which involves the use of a gas chromatograph with mass spectrometric detection (GC/MS), for use in analyzing both 2-ethoxyethanol and 2-nitropropane. The proposed rule also stated that previously established test methods for benzene (Method Numbers 8020 and 8240) and 1,1,2-trichloroethane (Method Numbers 8010 and 8240) would be appropriate for the subject wastes. No comments were received on this part of the proposal; therefore, the Agency is making final this action.

The methods cited above are described in "Test Methods for Evaluating Solid Waste: Physical/Chemical Methods", SW-846, 2nd ed., July 1982, as amended; copies are available from: Superintendent of Documents, Government Printing Office, Washington, DC 20402, (202) 783-3238, Document Number: 055-002-81001-2.

Persons wishing to submit delisting petitions are to use the methods listed in Appendix III to demonstrate the concentration of these toxicants in the waste.² See 40 CFR 260.22(d)(1) and 50 FR 28742. Among other things, petitioners should submit quality control data demonstrating that the methods they have used yield acceptable recovery (*i.e.*, > 50% recovery at concentrations above 1 µg/g) on spiked aliquots of their waste.

VI. CERCLA Impacts

All hazardous wastes designated by today's rule will, upon the effective date, automatically become hazardous substances under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA). (See CERCLA section 101(14).) CERCLA requires that persons in charge of vessels or facilities from

² Petitioners may use other test methods to analyze for these toxicants if they submit their quality control and quality assurance information along with their analytical data.

which hazardous substances have been released in quantities that are equal to or greater than the reportable quantities (RQs) immediately notify the National Response Center (at (800) 424-8802 or (202) 426-2675) of the release. (See CERCLA section 103 and 50 FR 13456-13522, April 4, 1985.)

RQs have already been promulgated for three of the four solvents addressed in today's rule: Benzene has an RQ of 1000 pounds, while 1,1,2-trichloroethane and 2-nitropropane have RQs of 1 pound (50 FR 13456-13522). (Since the methodology is currently being assessed for carcinogens, the RQ's for 2-nitropropane, benzene, and 1,1,2-trichloroethane and the RQs of the listed wastes are subject to change when the assessment is completed.) In the July 30, 1985 proposal, the Agency stated that statutory RQ's of 1 pound would be imposed pursuant to CERCLA section 102(b) for spent 2-ethoxyethanol and the still bottoms from its recovery as well as for the commercial chemical product 2-ethoxyethanol (which were proposed to be added to 40 CFR 261.33(f)). The Agency received no comments on these proposed RQs.

Although this rule is not changing Table 302.4 of 40 CFR 302.4, the RQs as stated here are effective upon the effective date of today's action, pursuant to the statutory requirements of CERCLA section 102(b). These listed wastes, as well as the commercial chemical product, 2-ethoxyethanol, and their RQs, will be added to Table 302.4 of § 302.4 at the time of its next publication in the Federal Register.

Finally, the Agency wishes to clarify that, except as noted below, all hazardous wastes newly designated under RCRA will have a statutorily imposed RQ of one pound until adjusted by regulation under CERCLA. See CERCLA section 102. If a newly listed hazardous waste stream has only one constituent of concern, the waste will have the same RQ as that of the constituent. (The RQ to be considered for this purpose would be the final RQ of the constituent, whether statutorily imposed or by regulation.) On the other hand, because the generic solvent listings now apply to mixtures of listed hazardous solvents (see 50 FR 53315, December 31, 1985), the wastes may contain more than one CERCLA hazardous substance. In these cases, the lowest RQ assigned to any one of the constituents present in the waste represents the RQ for the waste stream.

VII. State Authority

A. Applicability of Rules in Authorized States

Under section 3006 of RCRA, EPA may authorize qualified States to administer and enforce the RCRA program within the State. (See 40 CFR Part 271 for the standards and requirements for authorization.) Following authorization, EPA retains enforcement authority under sections 3008, 7003, and 3013 of RCRA, although authorized States have primary enforcement responsibility.

Prior to the Hazardous and Solid Waste Amendments of 1984 (HSWA) amending RCRA, a State with final authorization administered its hazardous waste program entirely in lieu of EPA administering the Federal program in that State. The Federal requirements no longer applied in the authorized State, and EPA could not issue permits for any facilities in the State which the State was authorized to permit. When new, more stringent Federal requirements were promulgated or enacted, the State was obligated to enact equivalent authority within specified time frames. New Federal requirements did not take effect in an authorized State until the State adopted the requirements as State law.

In contrast, under newly enacted section 3006(g) of RCRA, 42 U.S.C. 6926(g), new requirements and prohibitions imposed by the HSWA take effect in authorized States at the same time that they take effect in nonauthorized States. EPA is directed to carry out those requirements and prohibitions in authorized States, including the issuance of permits, until the State is granted authorization to do so. While States must still adopt HSWA-related provisions as State law to retain authorization, the HSWA applies in authorized States in the interim.

Today's rule is being added to Table 1 in § 271.1(j) which identifies the Federal program requirements that are promulgated pursuant to HSWA. The Agency believes that it is extremely important to clearly specify which regulations implement HSWA since these requirements are immediately effective in authorized States. States may apply for either interim or final authorization for the HSWA provisions identified in Table 1 as discussed in the following section of this preamble.

B. Effect on State Authorizations

Today's announcement promulgates regulations that are effective in all States since the requirements are imposed pursuant to section 222 of the

Hazardous and Solid Waste Amendments of 1984, 42 U.S.C. 6921(e)(2). Thus, EPA will implement the regulations in nonauthorized States, and in authorized States until they revise their programs to adopt these rules and the revision is approved by EPA.

A State may apply to receive either interim or final authorization under section 3006(g)(2) or 3006(b), respectively, on the basis of requirements that are substantially equivalent or equivalent to EPA's. The procedures and schedule for State revision under section 3006(b) are described in 40 CFR 271.21. The same procedures should be followed for section 3006(g)(2).

Applying § 271.21(e)(2), States that have final authorization must revise their programs within a year of promulgation of EPA's regulations if only regulatory changes are necessary, or within two years of promulgation if statutory changes are necessary. These deadlines can be extended in exceptional cases (40 CFR 271.21(e)(3)).

States with authorized RCRA programs may have requirements similar to those in today's rule. These State regulations have not been assessed against the Federal regulations being promulgated today to determine whether they meet the tests for authorization. Thus, a State is not authorized to implement these listings in lieu of EPA until the State program revision is approved. As a result, the regulations promulgated in today's rule apply in all States, including States with standards similar to those in today's rule. States with existing requirements may continue to administer and enforce their standards as a matter of State law. In implementing the Federal program, EPA will work with States under cooperative agreements to minimize duplication of efforts.

States that submit official applications for final authorization less than 12 months after promulgation of EPA's regulations may be approved without including standards equivalent to those promulgated. Once authorized, however, a State must revise its program to include standards substantially equivalent or equivalent to EPA's within the time period discussed above.

VIII. Regulatory Impact Analysis

Under Executive Order 12291, EPA must determine whether a regulation is "major" and, therefore, subject to the requirement of a Regulatory Impact Analysis. This rule is not a major rule because it is not expected to result in an effect on the economy of \$100 million or more. The Agency's preliminary screening analysis of the potential

impacts of today's rule indicates that the total impact will be less than \$7.5 million.³ This cost will be borne by approximately 1200 manufacturers of paint and coatings, inks, and organic chemicals. The analysis considered each of these industrial segments separately and found that today's rule will not result in either a significant increase in prices or a significant decrease in profits.

A worst-case scenario was used to provide a conservative cost estimate of the economic impact. The analysis included the costs associated with the following: Establishment of a manifest system, the maintenance of an on-site hazardous waste storage area, off-site incineration and transportation of the waste 250 miles to an incinerator, and initial costs of conducting chemical waste analysis and rewriting waste analysis plans.

The addition of the new hazardous constituents to Appendix VIII also will not result in any significant increased burden in groundwater monitoring or incineration monitoring requirements because the analytical techniques currently employed to test for the presence and concentration of other Appendix VIII hazardous constituents also would detect and quantify these additional compounds.

The cost of adding 2-ethoxyethanol to 40 CFR 261.33(f), the list of commercial chemical products which are hazardous wastes when discarded, also will be minimal because these commercial chemical products are rarely discarded, due to their inherent value. In addition, the Agency stated in the proposed rule that although some generators may be newly regulated, data from the RCRA notification data base indicate that many solvent generators also generate other RCRA hazardous wastes. Also, the Agency stated that it believes that many of the generators of the spent solvents in today's notice already manage these wastes in compliance with RCRA as three of the four solvents listed today exhibit the characteristic of ignitability. Furthermore, the Agency stated that this rule will minimize the competitive advantage experienced by those facilities that presently are not managing these solvent wastes as hazardous. The Agency did not receive any comments regarding these statements or on the preliminary screening analysis of the impact associated with today's rule.

³ A copy of the regulatory impact analysis is available in the public docket at the address cited above.

Finally, the Agency does not expect that there will be an adverse impact on the ability of the U.S.-based enterprises to compete with foreign-based enterprises in domestic or export markets. This rule is not a major regulation; therefore, no regulatory Impact Analysis has been conducted.

IX. Regulatory Flexibility Act

Pursuant to the Regulatory Flexibility Act, 5 U.S.C. 601-612, whenever an agency is required to publish a General Notice of Rulemaking for any proposed or final rule, it must prepare and make available for public comment, a regulatory flexibility analysis which describes the impact of the rule on small entities (i.e., small businesses, small organizations, and small governmental jurisdictions). No regulatory flexibility analysis is required, however, if the Administrator certifies that the rule will not have a significant impact on small entities.

Although some generators will be newly regulated and some will experience an increased regulatory burden, this amendment is not expected to have a significant economic impact on a substantial number of small entities. The Agency received no comments that small entities will dispose of these wastes in significant quantities. The largest costs are more likely to be borne by generators with large quantities of difficult-to-manage wastes (i.e., wastes not suitable for land disposal or recycling). Accordingly, I hereby certify that this regulation would not have a significant economic impact on a substantial number of small entities. This regulation, therefore, does not require a regulatory flexibility analysis.

X. Paperwork Reduction Act

This rule does not contain any information collection requirements subject to OMB review under the Paperwork Reduction Act of 1980, 44 U.S.C. 3501 et seq.

List of Subjects

40 CFR Part 261

Hazardous waste, Recycling.

40 CFR Part 271

Administrative practice and procedure, Confidential business information, Hazardous materials transportation, Hazardous waste, Indian lands, Intergovernmental relations, Penalties, Reporting and recordkeeping requirements, Water pollution control, Water supply.

Dated February 12, 1985.

Lee M. Thomas,
Administrator.

References

- Griffin, et al. 1978. Chronic inhalation toxicity of 2-nitropropane in rats. *Pharmacologist* 20(3): 145.
- NIOSH. 1978. NIOSH Current Intelligence Bulletin 17. National Institute for Occupational Safety and Health, U.S. Dept. of Health and Human Services, Rockville, MD.
- U.S. EPA. 1977. Chemical hazard information profile: 2-nitropropane. Washington, DC.

For the reasons set out in the preamble, Title 40 of the Code of Federal Regulations is to be amended as follows:

PART 261—IDENTIFICATION AND LISTING OF HAZARDOUS WASTE

1. The authority citation for Part 261 continues to read as follows:

Authority: Secs. 1006, 2002(a), 3001, and 3002 of the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act of 1976, as amended (42 U.S.C. 6905, 6912(a), 6921, and 6922).

2. In § 261.31, revise the following waste streams as shown in the subgroup 'Generic':

§ 261.31 [Amended]

Industry and EPA hazardous waste No.	Hazardous waste	Hazard code
--------------------------------------	-----------------	-------------

Generic:

F002..... The following spent halogenated solvents: tetrachloroethylene, methylene chloride, trichloroethylene, 1, 1, 1-trichloroethane, chlorobenzene, 1, 1, 2-trichloro-1, 2, 2-trifluoroethane, ortho-dichlorobenzene, trichlorofluoromethane, and 1, 1, 2-trichloroethane; all spent solvent mixtures/blends containing, before use, a total of ten percent or more (by volume) of one or more of the above halogenated solvents or those listed in F001, F004, or F005; and still bottoms from the recovery of these spent solvents and spent solvent mixtures.

(T)

F005..... The following spent non-halogenated solvents: toluene, methyl ethyl ketone, carbon disulfide, isobutanol, pyridine, benzene, 2-ethoxyethanol, and 2-nitropropane; all spent solvent mixtures/blends containing, before use, a total of ten percent or more (by volume) of one or more of the above non-halogenated solvents or those solvents listed in F001, F002, or F004; and still bottoms from the recovery of these spent solvents and spent solvent mixtures.

(I,T)

Industry and EPA hazardous waste No.	Hazardous waste	Hazard code
--------------------------------------	-----------------	-------------

§ 261.33 [Amended]

3. In § 261.33(f), add the following compounds in alphabetical order:

Hazardous waste No.	Substance
U359	2-Ethoxyethanol.
U359	Ethylene glycol monoethyl ether.

4. In § 261.33(f) change both entries for Hazardous Waste No. U171 from "2-Nitropropane (I)" and "Propane, 2-nitro-(I)" to: "2-Nitropropane (I,T)" and "Propane, 2-nitro-(I,T)", respectively.

5. Add the following hazardous constituents in alphabetical order to Table 1 of Appendix III of Part 261:

Appendix III—[Amended]

Compound	Method Nos.
2-Ethoxyethanol	8030, 8240
2-Nitropropane	8030, 8240

6. Revise the following entries in Appendix VII of Part 261 to read as follows:

Appendix VII—[Amended]

EPA hazardous waste No.	Hazardous constituents for which listed
F002	Tetrachloroethylene, methylene chloride, trichloroethylene, 1, 1, 1-trichloroethane, 1, 1, 2-trichloroethane, chlorobenzene, 1, 1, 2-trichloro-1, 2, 2-trichlorofluoroethane, ortho-dichlorobenzene, trichlorofluoromethane.
F005	Toluene, methyl ethyl ketone, carbon disulfide, isobutanol, pyridine, 2-ethoxyethanol, benzene, 2-nitropropane.

7. Add the following hazardous constituents in alphabetical order to Appendix VIII of Part 261:

Appendix VIII—Hazardous Constituents

Ethylene glycol monoethyl ether (Ethanol, 2-ethoxy)

2-Nitropropane (Propane 2-nitro)

PART 271—REQUIREMENTS FOR AUTHORIZATION OF STATE HAZARDOUS WASTE PROGRAMS

8. The authority citation for Part 271 continues to read as follows:

Authority: Sec. 1006, 2002(a) and 3006 of the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act of 1976, as amended (42 U.S.C. 6325, 6912(a), and 8926).

§ 271.1 [Amended]

9. Section 271.1(j) is amended by adding the following entry to Table 1 in chronological order by date of publication:

Table 1—Regulations Implementing the Hazardous and Solid Waste Amendments of 1984

Date	Title of regulation
February 25, 1986	Listing of four spent solvents and the still bottoms from their recovery.

[FR Doc. 86-3940 Filed 2-24-86; 8:45 am]
BILLING CODE 6560-50-M

DEPARTMENT OF THE INTERIOR

Bureau of Land Management

43 CFR Part 2800

[Circular No. 2575]

Principles and Procedures for Rights-of-Way Granted Prior to October 21, 1976

AGENCY: Bureau of Land Management, Interior.

ACTION: Final rulemaking.

SUMMARY: This final rulemaking amends the existing regulations in 43 CFR Part 2800 to clarify that its procedures are applicable to rights-of-way granted prior to October 21, 1976, under statutory provisions repealed by the Federal Land Policy and Management Act of 1976. This amendment will resolve questions raised since the promulgation of the existing regulations in 43 CFR Part 2800 on the administration of rights-of-way issued under the repealed statutes.

EFFECTIVE DATE: March 27, 1986.

ADDRESS: Any suggestions or inquiries should be sent to: Director (330), Bureau of Land Management, Room 3660, Main Interior Bldg., 1800 C Street, NW., Washington, D.C. 20240.

FOR FURTHER INFORMATION CONTACT: Theodore G. Bingham, (202) 343-5441.

SUPPLEMENTARY INFORMATION: A proposed rulemaking amending the existing regulations in 43 CFR Part 2800—Rights-of-Way, Principles and Procedures—was published in the Federal Register on July 2, 1985 (50 FR 27322), with a 60-day comment period. During the comment period, comments were received from seven sources, four from industry, one from an industry association, one from a local governmental entity and one from a Federal governmental entity.

All of the comments raised the issue of the need for the regulatory change contained in the proposed rulemaking. The comments expressed concern that the proposed rulemaking would, if adopted as a final rulemaking, diminish or reduce the rights conferred upon a holder of a right-of-way granted prior to October 21, 1976, as stated in the preamble to the proposed rulemaking. The procedures set forth in the proposed rulemaking would not be applicable in those instances where they are inconsistent with the provisions of a specific right-of-way grant or the statute under which it was granted. It was not the intent of the proposed rulemaking nor is it the intent of this final rulemaking, to diminish or reduce the rights conferred by a right-of-way granted prior to October 21, 1976. This is clearly stated in the new section 2801.4 that is added to 43 CFR Part 2800 by the proposed rulemaking. However, in an effort to further clarify this point, the final rulemaking has adopted a change to § 2801.4 using a combination of language from a couple of comments. The change adopted by the final rulemaking directly addresses the question of rights conferred by a right-of-way grant and should answer the objections raised in several of the comments. In addition, if questions should arise regarding the rights of a right-of-way grant holder under a grant or statute, the earlier editions of the Code of Federal Regulations on rights-of-way will remain available to assist in interpretation of the rights conferred by the grant or earlier statute.

One comment suggested that the Bureau of Land Management was in a better position than would be a holder of one or more of these right-of-way grants to identify each of the right-of-way grants and the statutes under which they were granted and describe the impact that the provisions promulgated by this final rulemaking might have on those grants. The comment suggested that this review should be made before the final rulemaking is issued. In order to comply with this suggestion, the Bureau would have to examine the files on several thousand right-of-way grants,

comparing each with various statutory provisions. On the other hand, a holder of a right-of-way grant would only have to deal with one or a few grants that are familiar because of use to determine whether the actions of the Bureau are diminishing or reducing the rights conferred by their particular grant(s). This suggestion has not been adopted.

The management procedures contained in the existing regulations in part 2800 will be used by the Department of the Interior to properly manage existing right-of-way grants and to meet its statutory responsibility to protect the public lands and their resources. Many of the provisions in the existing regulations are a restatement of those contained in the regulations they replaced and are those needed to properly administer the right-of-way. In carrying out the Department's management responsibilities, the authorized officer will be careful to avoid any action that will diminish or reduce the rights conferred under a right-of-way grant issued prior to October 21, 1976. Further, it is obvious that the holder of a right-of-way grant issued prior to October 21, 1976, will be alert to any action that appears to diminish or reduce the rights conferred by the grant and will challenge any such action. Therefore, the final rulemaking has adopted the provisions of the proposed rulemaking with certain changes to clarify the rights of holders of right-of-way grants issued prior to October 21, 1976.

The principal author of this final Rulemaking is Sheldon Weil, Division of Rights-of-Way, Bureau of Land Management, assisted by the staff of the Office of Legislation and Regulatory Management, Bureau of Land Management.

It is hereby determined that the publication of this final rulemaking is not a major Federal action significantly affecting the quality of the human environment, and that a detailed statement pursuant to section 102(2)(C) of the National Environmental Policy Act of 1969 (42 U.S.C. 4332(2)(C)) is not required.

The Department of the Interior has determined that this document is not a major rule under Executive Order 12291 and will not have a significant economic effect on a substantial number of small entities under the Regulatory Flexibility Act (5 U.S.C. 601).

The final rulemaking will clarify the Bureau of Land Management's authority to manage rights-of-way granted on or before October 21, 1976, removing questions that have arisen about that authority. The final rulemaking will

S: 1 May 87

AMSDS-RM-EFD (AMCEN-A/26 Feb 87) 1st End

S. Lowe/aw/AV 570-9531

SUBJECT: Hazardous Waste Management System: Land Disposal Restrictions

HQ, U.S. Army Depot System Command, Chambersburg, PA 17201-4170

16 MAR 1987

TO: SEE DISTRIBUTION

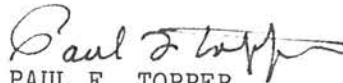
1. Basic correspondence is provided for your information and action.
2. In order to comply with basic letter, paragraph 4, request the following actions be taken.
 - a. Identify all land disposal units impacted by references 1a and 1b, basic letter.
 - b. For hazardous waste discharges into surface impoundments, characterize the waste stream for the parameters cited in reference 1a and 1b, basic letter, and determine respective concentrations.
 - c. For solvent-containing sludge, or solvent-contaminated soil that is not generated from the response actions under CERCLA 104 and 106 and RCRA corrective action, which are identified for land disposal, characterize the extract developed using the Toxicity Characteristic Leaching Procedure (TCLP) and determining percent total F001-F005 solvent constituents listed in Table CCWE of reference 1b, basic letter.
 - d. For free liquids associated with any solids or sludge containing cyanides and metals and identified for land disposal, characterize the free liquid for cyanides and the specified metals and determine respective concentrations.
3. If your waste analyses indicates that statutory violations are taking place or potential statutory violations will result by maintaining existing operations, one or more of the actions listed in basic letter, paragraph 5, must be taken.
4. Request a report of actions taken and results be provided to this headquarters ATTN: AMSDS-RM-EFD, by 1 May 87. The report should include a list of all impacted land disposal units and waste characterization results. Negative report is required.
5. The POC at this headquarters is Stan Lowe, AMSDS-RM-EFD, AV 570-9531.

AMSDS-RM-EFD (AMCEN-A/26 FEB 87) 1st End
SUBJECT: Hazardous Waste Management System: Land Disposal Restrictions

6. "DESCOM - Providing Soldiers the Decisive Edge."

FOR THE COMMANDER:

5 Encls


PAUL F. TOPPER
Chief, Facilities Engineering
and Management Division

DISTRIBUTION:

E (ATTN: Environmental Coordinators)

CF

Commanders

FWDA, ATTN: SDSTE-FW-AS

NADA, ATTN: SDSTE-AZXA-AS

PUDA, ATTN: SDSTE-PUI-F

SVDA, ATTN: SDSLE-VA

UMDA, ATTN: SDSTE-UAI-EO

STAN



DEPARTMENT OF THE ARMY
HEADQUARTERS, U. S. ARMY MATERIEL COMMAND
5001 EISENHOWER AVENUE, ALEXANDRIA, VA 22333-0001

S: 1 Jun 87

26 FEB 1987

AMCEN-A

SUBJECT: Hazardous Waste Management System: Land Disposal Restrictions

SEE DISTRIBUTION

1. Reference:

a. Federal Register, Volume 51, Number 238, December 11, 1986, pages 44714-44740.

b. Federal Register, Volume 51, Number 216, November 7, 1986, pages 40572-40654.

2. Reference 1a is a proposed rule codifying the statutory land disposal prohibition levels for a list of hazardous constituents known as the "California List" wastes. Section 3004(d) of the Resource Conservation and Recovery Act (RCRA) prohibits the land disposal of hazardous wastes containing the California list constituents in concentrations at or above specified levels after 8 July 1987. The list of California wastes and their respective proposed restriction levels are stipulated on pages 44739-44740 of reference 1a (see enclosure 1).

3. Reference 1b is a final rule implementing the first phase of the congressionally mandated land disposal prohibitions: certain dioxin and solvent-containing hazardous wastes. Spent solvent wastes specified in 40 CFR 261.31 as EPA Hazardous Waste Numbers F001, F002, F003, F004, and F005, and dioxin-containing wastes specified in 40 CFR 261.31 as EPA Hazardous Waste Numbers F020, F021, F023, F026, F027, and F028 are prohibited from land disposal on 8 Nov 86. Exceptions are stipulated on pages 40641-40642 of reference 1b (see enclosure 2).

4. In order to comply with the statutory deadline imposed by references 1a and 1b and to avoid potential significant adverse impact on AMC's mission, request the following actions be taken:

a. Identify subordinate installations which are impacted by the proposed and final rules. Land disposal is defined as placement in a landfill, surface impoundment, waste pile, injection well, land treatment facility, salt dome formation, underground mine or cave, and concrete vaults or bunkers (for disposal purposes only). The term "land disposal" encompasses treatment, storage, and disposal.

AMCEN-A

SUBJECT: Hazardous Waste Management System: Land Disposal Restrictions

b. For hazardous wastewater discharges into surface impoundments, characterize the waste stream for the parameters cited in references 1a and 1b, and determine respective concentrations.

c. For solvent-containing sludge, or solvent-contaminated soil that is not generated from response actions under CERCLA 104 and 106 and RCRA corrective action, which are identified for land disposal, characterize the extract developed using the Toxicity Characteristic Leaching Procedure (TCLP) described in Appendix I of reference 1b, and determine percent total F001-F005 solvent constituents listed in Table CCWE of reference 1b.

d. For free liquids associated with any solids or sludge containing cyanides and metals and identified for land disposal, characterize the free liquid for cyanides and the specified metals and determine respective concentrations. The term "free liquids" means liquids which readily separate from the solid portion of a waste under ambient temperature and pressure. The Paint Filter Liquids Test (Method 9095, "Test Methods for Evaluating Solid Wastes, Physical/ Chemical Methods", EPA Publication No. SW-846) is used to determine whether or not a waste is a liquid.

5. If your waste analysis indicates that statutory violations are taking place or potential statutory violations will result by maintaining existing operations, one or more of the following actions must be taken:

a. The wastes must be treated to meet the treatment standards specified in references 1a and 1b (see Encl 3). Bear in mind that reference 1a is a proposed rule. Treatment standards for cyanides and metals may be promulgated in the final rule.

b. Apply for a case-by-case extension to a land disposal prohibition effective date following the procedures described in reference 1b (see Encl 4).

c. Apply for a petition to allow land disposal of a waste prohibited from land disposal in accordance with the procedures described in reference 1b (see Encl 5).

6. Request a report of actions taken and results be provided to this headquarters, ATTN: AMCEN-A, by 1 Jun 87. Negative report is required.

7. Point of Contact at this headquarters is MAJ Jessie B. Cabellon, AMCEN-A, at AUTOVON 284-9016/9386.

AMCEN-A
SUBJECT: Hazardous Waste Management System: Land Disposal Restrictions

8. AMC - Providing Soldiers the Decisive Edge.

FOR THE COMMANDER:



DAVID L. EATON
Acting Deputy Chief of Staff
for Engineering, Housing and
Installation Logistics

5 Encl

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AMCI&SA (AMXEN)

(9) U.S. EPA "Assessment of Impacts of Land Disposal Restrictions on Ocean Dumping and Ocean Incineration of Solvents, Dioxins, and California List Wastes." U.S. EPA, OSW, Washington, DC, 1986

(10) U.S. EPA "Characterization of Mixed PCB/RCRA Hazardous Wastes" U.S. EPA, OSW, Washington, DC, 1985

(11) U.S. EPA "National Small Quantity Hazardous Waste Generator Survey." U.S. EPA, OSW, Washington, DC, 1985

(12) U.S. EPA "National Survey of Hazardous Waste Generators and Treatment, Storage and Disposal Facilities Regulated Under RCRA in 1981." U.S. EPA, OSW, Washington, DC, 1984

(13) Goldman, L.J. and Tatch, C.E., "Compatibility of Corrosive Acids with Codisposed Wastes," 1985

List of Subjects in 40 CFR Parts 260, 261, 262, 264, 265, 268, 270, and 271

Administrative practice and procedure, Confidential business information, Environmental protection, Hazardous materials, Hazardous materials transportation, Hazardous waste, Imports, Indian lands, Insurance, Intergovernmental relations, Labeling, Packaging and containers, Penalties, Recycling, Reporting and recordkeeping requirements, Security measures, Surety bonds, Waste treatment and disposal, Water pollution control, Water supply.

Dated: November 28, 1986.

Lee M. Thomas, Administrator.

Therefore, it is proposed that Chapter I of Title 40 be amended as follows:

PART 260—HAZARDOUS WASTE MANAGEMENT SYSTEM: GENERAL

1. The authority citation for Part 260 continues to read as follows:

Authority: Secs. 1006, 2002(a), 3001 through 3007, 3010, 3014, 3015, 3017, 3018, and 3019, Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act of 1976, as amended (42 U.S.C. 6905, 6912(a), 6921 through 6927, 6930, 6934, 6935, 6937, 6938, and 6939).

2. In § 260.11, paragraph (a) introductory text is revised to read as follows:

§ 260.11 References.

(a) When used in Parts 260 through 268 of this chapter, the following publications are incorporated by reference:

PART 268—LAND DISPOSAL RESTRICTIONS

1. The authority citation for Part 268 continues to read as follows:

Authority: Secs. 1006, 2002(a), 3001, and 3004 of the Solid Waste Disposal Act, as amended by the Resource Conservation and

Recovery Act of 1976, as amended (42 U.S.C. 6905, 6912(a), 6921, and 6924).

2. The Table of Contents for Subpart C is amended by adding an entry for § 268.32 to read as follows:

Subpart C—Prohibitions on Land Disposal

268.32 Waste specific prohibitions—California list wastes.

Subpart A—General

3. Section 268.3 is revised to read as follows:

§ 268.3 Dilution prohibited as a substitute for treatment.

No generator, transporter, handler, or owner or operator of a treatment, storage, or disposal facility shall in any way dilute a restricted waste or the residual from treatment of a restricted waste as a substitute for adequate treatment to achieve compliance with Subpart D of this part, to circumvent the effective date of a prohibition in Subpart C of this part, or to otherwise avoid a prohibition in Subpart C of this part.

4. In § 268.4, paragraph (a)(2) is revised and paragraph (b) is added to read as follows:

§ 268.4 Treatment surface impoundment exemption.

(a) . . .

(2) The residues of the treatment are analyzed, as specified in § 268.7, to determine if they meet the applicable treatment standards in Subpart D of this part, or, where no treatment standards have been established for the waste, the applicable prohibition levels specified in Subpart C of this part. The sampling method, specified in the waste analysis plan under § 264.13 or § 265.13, must be designed such that representative samples of the sludge and the supernatant are tested separately rather than mixed to form homogeneous samples. The treatment residues (including any liquid waste) that do not meet the treatment standards promulgated under Subpart D of this part, or the applicable prohibition levels promulgated under Subpart C of this part (where no treatment standards have been established), or which are not delisted under § 260.22 of this chapter, must be removed at least annually. These residues may not be placed in any other surface impoundment for subsequent management. If the volume of liquid flowing through the impoundment or series of impoundments annually is greater than the volume to the impoundment or impoundments, this flow-through constitutes removal of the supernatant for the purpose of this requirement. The procedures and

schedule for the sampling of impoundment contents, the analysis test data, and the annual removal of residue which does not meet the Subpart D treatment standards, or Subpart C prohibition levels where no treatment standards have been established, must be specified in the facility's waste analysis plan as required under § 260.13 or § 265.13 of this chapter.

(b) Evaporation of hazardous constituents is not considered treatment for purposes of an exemption under this section.

5. In § 268.5, paragraph (a)(2) is revised to read as follows:

§ 268.5 Procedures for case-by-case extensions to an effective date.

(a) . . .

(2) He has entered into a binding contractual commitment to construct or otherwise provide alternative treatment recovery (e.g., recycling), or disposal capacity that meets the treatment standards specified in Subpart D or, where treatment standards have not been specified, such disposal capacity protective of human health and the environment.

Subpart C—Prohibitions on Land Disposal

6. In Subpart C, § 268.32 is added to read as follows:

§ 268.32 Waste specific prohibitions—California list wastes.

(a) Effective July 8, 1987, the following liquid hazardous wastes are prohibited from land disposal (except in injection wells):

(1) Liquid hazardous wastes, including free liquids associated with any solid or sludge, containing cyanides at concentrations greater than or equal to 1,000 mg/l;

(2) Liquid hazardous wastes, including free liquids associated with any solid or sludge, containing the following metals (or elements) or compounds of these metals (or elements) at concentrations greater than or equal to those specified below:

- (i) Arsenic and/or compounds (as As) 500 mg/l;
- (ii) Cadmium and/or compounds (as Cd) 100 mg/l;
- (iii) Chromium [VI and/or compounds (as Cr VI)] 500 mg/l;
- (iv) Lead and/or compounds (as Pb) 500 mg/l;
- (v) Mercury and/or compounds (as Hg) 20 mg/l;

(vi) Nickel and/or compounds (as Ni) 134 mg/l;

(vii) Selenium and/or compounds (as Se) 100 mg/l; and

(viii) Thellium and/or compounds (as Tl) 130 mg/l;

(3) Liquid hazardous wastes having a pH less than or equal to two (2.0); and

(4) Liquid hazardous wastes containing halogenated organic compounds in total concentration greater than or equal to 1,000 mg/kg but less than 1%.

(b) The requirements of paragraph (a) of this section do not apply if:

(1) The wastes are treated to meet the standards of Subpart D of this part; or

(2) The wastes are disposed at a facility that has been granted a petition under § 268.6; or

(3) An extension has been granted under § 268.5; or

(4) The wastes are treated in surface impoundments pursuant to § 268.4.

(c) The requirements of paragraph (a) of this section do not apply until November 8, 1988 where the wastes are contaminated soil or debris resulting from a response action taken under section 104 or 106 of the Comprehensive Environmental Response,

Compensation, and Liability Act of 1980 or a corrective action required under RCRA Subtitle C.

(d) Effective July 8, 1989, the following wastes are prohibited from land disposal (subject to any regulations promulgated with respect to disposal in injection wells):

(1) Liquid hazardous wastes containing polychlorinated biphenyls at concentrations greater than or equal to 50 ppm;

(2) Non-liquid hazardous wastes containing halogenated organic compounds in total concentration greater than or equal to 1,000 mg/kg;

(3) Liquid hazardous wastes containing halogenated organic compounds in total concentration greater than or equal to 1%.

(e) The requirements of paragraph (d) of this section do not apply if:

(1) The wastes are treated to meet the standards of Subpart D of this part; or

(2) The wastes are disposed at a facility that has been granted a petition under § 268.6; or

(3) An extension has been granted under § 268.5; or

(4) The wastes are treated in surface impoundments pursuant to § 268.4.

(f) To determine whether or not the waste is a liquid under paragraphs (a) or (d) of this section, the following test must be used: Method 9095 (Paint Filter Liquids Test) as described in "Test Methods for Evaluating Solid Wastes, Physical/Chemical Methods," EPA

Publication No. SW-846 (incorporated by reference, see § 260.11(a)).

Subpart D—Treatment Standards

- 7. Section 268.42 is amended by adding paragraphs (a)(1) and (a)(2) and by revising paragraph (b) to read as follows:

§ 268.42 Treatment standards expressed as specified technologies.

-(a) . . .

(1) Liquid hazardous wastes containing polychlorinated biphenyls (PCBs) at concentrations greater than or equal to 50 ppm but less than 500 ppm must be incinerated in accordance with the technical requirements of 40 CFR 761.70 or burned in high efficiency boilers in accordance with the technical requirements of 40 CFR 761.60. Liquid hazardous wastes containing polychlorinated biphenyls (PCBs) at concentrations greater than or equal to 500 ppm must be incinerated in accordance with the technical requirements of 40 CFR 761.70.

(2) Non-liquid hazardous wastes containing halogenated organic compounds (HOCs) in total concentration greater than or equal to 1,000 mg/kg and liquid hazardous wastes containing HOCs in total concentration greater than or equal to 1% must be incinerated in accordance with the requirements of § 264.343 or § 265.343.

(b) The applicant must submit information demonstrating that his treatment method is in compliance with all federal, state, and local requirements and will not present an unreasonable risk to human health or the environment. The applicant must submit information demonstrating that his treatment method will not present an unreasonable risk to human health or the environment. On the basis of such information and any other available information, the Administrator may approve the use of the alternative treatment method if he finds that the alternative treatment method provides a level of performance equivalent to that achieved by methods specified in paragraph (a) of this section. Any approval must be stated in writing and may contain such provisions and conditions as the Administrator deems appropriate. The person to whom such certification is issued must comply with all limitations contained in such a determination.

8. 40 CFR 268.43 is added to read as follows:

§ 268.43 Treatment standards expressed as waste concentrations.

(a) Liquid hazardous wastes having a pH less than or equal to two (2.0) must

be treated in order to raise the pH of the waste to a level above two (2.0).

(b) [Reserved]

PART 270—EPA-ADMINISTERED PERMIT PROGRAMS: THE HAZARDOUS WASTE PERMIT PROGRAM

1. The authority citation of Part 270 continues to read as follows:

Authority: Secs. 1006, 2002, 3005, 3007, 3018, and 7004 of the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act of 1976, as amended (42 U.S.C. 6905, 6912, 6925, 6927, 6939 and 6974).

Subpart D—Changes to Permits

2. In § 270.42, paragraph (p) is added to read as follows:

§ 270.42 Minor modifications of permits.

(p) Allow changes at a permitted facility to treat or store in containers or tanks hazardous wastes subject to land disposal restrictions imposed by Part 268, provided that the permittee: requests a major permit modification pursuant to § 124.5 and § 270.41; demonstrates in the major permit modification request that the treatment or storage is necessary to comply with the land disposal restrictions of Part 268; and ensures that the added units comply with the applicable Part 264 standards pending final administrative disposition of the major permit modification request. The authorization to make changes conferred herein shall terminate upon final administrative disposition of the permittee's major modification request under § 270.41 or termination of the permit under § 270.43.

Subpart G—Interim Status

3. In § 270.72, paragraph (e) is revised to read as follows:

§ 270.72 Changes during interim status.

(e) In no event shall changes be made to an HWM facility during interim status which amount to reconstruction of the facility. Reconstruction occurs when the capital investment in the changes to the facility exceeds fifty percent of the capital cost of a comparable entirely new HWM facility. Changes prohibited under this paragraph do not include changes to treat or store in containers or tanks hazardous wastes subject to land disposal restrictions imposed under Part 268, provided that such changes are made solely for the purpose of complying with Part 268.

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(j) The petition granted by the Administrator does not relieve the petitioner of his responsibilities in the management of hazardous waste under 40 CFR Part 260 through Part 271.

(Approved by the Office of Management and Budget under control number 2050-0062)

§ 268.7 Waste analysis.

(a) The generator must test his waste or an extract developed using the test method described in Appendix I of this part, or using knowledge of the waste to determine if the waste is restricted from land disposal under this part.

(1) If a generator determines that he is managing a restricted waste under this part and the waste requires treatment prior to land disposal, for each shipment of waste the generator must notify the treatment facility in writing of the appropriate treatment standard set forth in Subpart D of this part. The notice must include the following information:

- (i) EPA Hazardous Waste Number;
- (ii) The corresponding treatment standard;
- (iii) The manifest number associated with the shipment of waste; and
- (iv) Waste analysis data, where available.

(2) If a generator determines that he is managing a restricted waste under this part, and determines that the waste can be land disposed without further treatment, for each shipment of waste he must submit, to the land disposal facility, a notice and a certification stating that the waste meets applicable treatment standards.

(i) The notice must include the following information:

- (A) EPA Hazardous Waste Number;
- (B) The corresponding treatment standard;
- (C) The manifest number associated with the shipment of waste;
- (D) Waste analysis data, where available.

(ii) The certification must be signed by an authorized representative and must state the following:

I certify under penalty of law that I personally have examined and am familiar with the waste through analysis and testing or through knowledge of the waste to support this certification that the waste complies with the treatment standards specified in 40 CFR Part 268 Subpart D. I believe that the information I submitted is true, accurate and complete. I am aware that there are significant penalties for submitting a false certification, including the possibility of a fine and imprisonment.

(3) If a generator's waste is subject to a case-by-case extension under § 268.5, a petition under § 268.6, or a nationwide variance under Subpart C, he must forward a notice to the land disposal

facility receiving his waste, stating that the waste is exempt from the land disposal restrictions.

(b) For wastes with treatment standards expressed as concentrations in the waste extract (§ 268.41), the owner or operator of the treatment facility must test the treatment residues according to the waste analysis plan under §§ 264.13 or 265.13, or an extract development using the test method described in Appendix I of this part to assure that the treatment residues extract meet the applicable treatment standards.

(10) A notice must be sent to the land disposal facility which includes the following information:

- (i) EPA Hazardous Waste Number;
- (ii) The corresponding treatment standard;
- (iii) The manifest number associated with the shipment of waste; and
- (iv) Waste analysis data, where available.

(2) The treatment facility must submit a certification for each shipment of waste or treatment residue of a restricted waste to the land disposal facility stating that the waste or treatment residue has been treated to the performance standards specified in Subpart D.

(i) For wastes with treatment standards expressed as concentrations in the waste extract or in the waste (§§ 268.41 or 268.43), the certification must be signed by an authorized representative and must state the following:

I certify under penalty of law that I have personally examined and am familiar with the treatment technology and operation of the treatment process used to support this certification and that, based on my inquiry of those individuals immediately responsible for obtaining this information, I believe that the treatment process has been operated and maintained properly so as to achieve the performance levels specified in 40 CFR Part 268 Subpart D without dilution of the prohibited waste. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment.

(ii) For wastes with treatment standards expressed as technologies (§ 268.42), the certification must be signed by an authorized representative and must state the following:

I certify under penalty of law that the waste has been treated in accordance with the requirements of 40 CFR 268.42. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment.

(c) The owner or operator of any land disposal facility accepting any waste subject to restrictions under this part

must have records of the notice and certification specified in either paragraph (a) or (b) of this section and obtain waste analysis data through testing of the waste to determine that the wastes are in compliance with the applicable treatment standards in § 268.41.

(Approved by the Office of Management and Budget under control number 2050-0062)

Subpart C—Prohibitions on Land Disposal

§ 268.30 Waste specific prohibitions—Solvent wastes.

(a) Effective November 8, 1986, the spent solvent wastes specified in 40 CFR 261.31 as EPA Hazardous Waste Nos. F001, F002, F003, F004, and F005, are prohibited from land disposal (except in an injection well) unless one or more of the following conditions apply:

(1) The generator of the solvent waste is a small quantity generator of 100-1000 kilograms of hazardous waste per month; or

(2) The solvent waste is generated from any response action taken under the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA) or any corrective action taken under the Resource Conservation and Recovery Act (RCRA), except where the waste is contaminated soil or debris not subject to the provisions of this chapter until November 8, 1988; or

(3) The solvent waste is a solvent-water mixture, solvent-containing sludge, or solvent-contaminated soil (non-CERCLA or RCRA corrective action) containing less than 1 percent total F001-F005 solvent constituents listed in Table CCWE of § 268.41 of this part.

(b) Effective November 8, 1988, the F001-F005 solvent wastes listed in paragraphs (a) (1), (2), and (3) of this section are prohibited from land disposal. Between November 8, 1986, and November 8, 1988, wastes included in paragraphs (a) (1), (2), and (3) of this section may be disposed of in a landfill or surface impoundment only if the facility is in compliance with the requirements specified in § 268.5(h)(2).

(c) The requirements of paragraphs (a) and (b) of this section do not apply if:

(1) The wastes are treated to meet the standards of Subpart D of this part; or

(2) The wastes are disposed at a facility that has been granted a petition under § 268.6; or

(3) An extension has been granted under § 268.5.

Small

§ 268.31 Waste specific prohibition Dioxin—containing wastes.

(a) Effective November 8, 1988 the dioxin-containing wastes specified in 40 CFR 261.31 as EPA Hazardous Waste Nos. F020, F021, F023, F026, F027, and F028, are prohibited from land disposal.

(b) The requirements of paragraph (a) of this section do not apply if:

(1) The wastes are treated to meet the standards of Subpart D of this part; or

(2) The wastes are disposed at a facility that has been granted a petition under § 268.6; or

(3) An extension has been granted under § 268.5.

(c) Between November 8, 1986, and November 8, 1988, wastes included in paragraph (a) of this section may be disposed of in a landfill or surface impoundment only if the facility is in compliance with the requirements specified in § 268.5(h)(2).

Subpart D—Treatment Standards

§ 268.40 Applicability of treatment standards.

A restricted waste identified in this subpart may be land disposed without further treatment only if an extract of the waste or of the treatment residual of the waste developed using the test method of Appendix I of this part does not exceed the value shown in Table CCWE of § 268.41 for any hazardous constituent listed in Table CCWE for that waste. A restricted waste for which a treatment technology is specified under § 268.42(a) may be land disposed after it is treated using that specified technology or an equivalent treatment method approved by the Administrator under the procedures set forth in § 268.42(b).

§ 268.41 Treatment Standards expressed as concentrations in waste extract.

(a) Table CCWE identifies the restricted wastes and the concentrations of their associated hazardous constituents which may not be exceeded by the extract of a waste treatment residual developed using the test method in Appendix I of this part for the allowable land disposal of such waste. (Appendix II of this part provides Agency guidance on treatment methods that have been shown to achieve the Table CCWE levels for the respective wastes. Appendix II is not a regulatory requirement but is provided to assist generators and owners/operators in their selection of appropriate treatment methods.)

TABLE CCWE—CONSTITUENT IN WASTE EXTRACT

F001—F005 spent solvents	Concentration (in mg/l)	
	Wastewaters containing spent solvents	All other spent solvent wastes
Acetone	0.05	0.59
n-Butyl alcohol	5.0	5.0
Carbon disulfide	1.05	4.81
Carbon tetrachloride	0.05	0.96
Chlorobenzene	15	0.05
Cresols (and cresylic acid)	2.82	0.75
Cyclohexanone	125	0.75
1,2-dichlorobenzene	65	125
Ethyl acetate	0.05	0.75
Ethyl benzene	0.05	0.53
Ethyl ether	0.05	0.75
Isobutanol	5.0	5.0
Methanol	25	0.75
Methylene chloride	20	0.96
Methylene chloride (from the pharmaceutical industry)	12.7	0.96
Methyl ethyl ketone	0.05	0.75
Methyl isobutyl ketone	0.05	0.33
Nitrobenzene	0.56	0.125
Pyridine	1.12	0.33
Tetrachloroethylene	0.079	0.05
Toluene	1.12	0.33
1,1,1-Trichloroethane	1.05	0.41
1,2,2-Trichloro-1,2,2-trifluoroethane	1.05	0.96
Trichloroethylene	0.062	0.091
Trichlorofluoromethane	0.05	0.36
Xylene	0.05	0.15

F020—F023 and F026—F028 dioxin containing wastes	Concentration
HxCDD—All Hexachlorodibenzo-p-dioxins	< 1 ppb
HxCDF—All Hexachlorodibenzofurans	< 1 ppb
PeCDD—All Pentachlorodibenzo-p-dioxins	< 1 ppb
PeCDF—All Pentachlorodibenzofurans	< 1 ppb
TCDD—All Tetrachlorodibenzo-p-dioxins	< 1 ppb
TCDF—All Tetrachlorodibenzofurans	< 1 ppb
2,4,5-Trichlorophenol	< 0.05 ppm
2,4,6-Trichlorophenol	< 0.05 ppm
2,3,4,6-Tetrachlorophenol	< 0.10 ppm
Pentachlorophenol	< 0.01 ppm

(b) When wastes with differing treatment standards for a constituent of concern are combined for purposes of treatment, the treatment residue must meet the lowest treatment standard for the constituent of concern.

§ 268.42 Treatment standards expressed as specified technologies.

(a) The following wastes must be treated using the identified technology or technologies, or an equivalent method approved by the Administrator.

(1) [Reserved]

(b) Any person may submit an application to the Administrator demonstrating that an alternative treatment method can achieve a level of performance equivalent to that achieved by methods specified in paragraph (a) of this section. The applicant must submit information demonstrating that his treatment method will not present an unreasonable risk to human health or the environment. On the basis of such information and any other available information, the Administrator may approve the use of the alternative treatment method if he finds that the alternative treatment method provides a

level of performance equivalent to that achieved by methods specified in paragraph (a) of this section. Any approval must be stated in writing and may contain such provisions and conditions as the Administrator deems appropriate. The person to whom such certification is issued must comply with all limitations contained in such determination.

§ 268.43 Treatment standards expressed as waste concentrations. [Reserved]

§ 268.44 Variance from a treatment standard.

(a) Where the treatment standard is expressed as a concentration in a waste or waste extract and a waste cannot be treated to the specified level, or where the treatment technology is not appropriate to the waste, the generator or treatment facility may petition the Administrator for a variance from the treatment standard. The petitioner must demonstrate that because the physical or chemical properties of the waste differs significantly from wastes analyzed in developing the treatment standard, the waste cannot be treated to specified levels or by the specified methods.

(b) Each petition must be submitted in accordance with the procedures in § 260.20.

(c) After receiving a petition for variance from a treatment standard, the Administrator may request any additional information or samples which he may require to evaluate the petition. Additional copies of the complete petition may be requested as needed to send to affected states and Regional Offices.

(e) The Administrator will give public notice in the Federal Register of the intent to approve or deny a petition and provide an opportunity for public comment. The final decision on a variance from a treatment standard will be published in the Federal Register.

(f) A generator, treatment facility, or disposal facility that is managing a waste covered by a variance from the treatment standards must comply with the waste analysis requirements for restricted wastes found under § 268.7.

(g) During the petition review process, the applicant is required to comply with all restrictions on land disposal under this part once the effective date for the waste has been reached.

Subpart E—Prohibitions on Storage

§ 268.50 Prohibitions on storage of restricted wastes.

(a) Except as provided for in paragraph (b) of this section, the storage

(vi) Nickel and/or compounds (as Ni) 134 mg/l;

(vii) Selenium and/or compounds (as Se) 100 mg/l; and

(viii) Thallium and/or compounds (as Tl) 130 mg/l;

(3) Liquid hazardous wastes having a pH less than or equal to two (2.0); and

(4) Liquid hazardous wastes containing halogenated organic compounds in total concentration greater than or equal to 1,000 mg/kg but less than 1%.

(b) The requirements of paragraph (a) of this section do not apply if:

(1) The wastes are treated to meet the standards of Subpart D of this part; or

(2) The wastes are disposed at a facility that has been granted a petition under § 268.6; or

(3) An extension has been granted under § 268.5; or

(4) The wastes are treated in surface impoundments pursuant to § 268.4.

(c) The requirements of paragraph (a) of this section do not apply until November 8, 1988 where the wastes are contaminated soil or debris resulting from a response action taken under section 104 or 106 of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 or a corrective action required under RCRA Subtitle C.

(d) Effective July 8, 1989, the following wastes are prohibited from land disposal (subject to any regulations promulgated with respect to disposal in injection wells):

(1) Liquid hazardous wastes containing polychlorinated biphenyls at concentrations greater than or equal to 50 ppm;

(2) Non-liquid hazardous wastes containing halogenated organic compounds in total concentration greater than or equal to 1,000 mg/kg;

(3) Liquid hazardous wastes containing halogenated organic compounds in total concentration greater than or equal to 1%.

(e) The requirements of paragraph (d) of this section do not apply if:

(1) The wastes are treated to meet the standards of Subpart D of this part; or

(2) The wastes are disposed at a facility that has been granted a petition under § 268.6; or

(3) An extension has been granted under § 268.5; or

(4) The wastes are treated in surface impoundments pursuant to § 268.4.

(f) To determine whether or not the waste is a liquid under paragraphs (a) or (d) of this section, the following test must be used: Method 9095 (Paint Filter Liquids Test) as described in "Test Methods for Evaluating Solid Wastes, Physical/Chemical Methods," EPA

Publication No. SW-846 (incorporated by reference, see § 260.11(a)).

✓ Subpart D—Treatment Standards

7. Section 268.42 is amended by adding paragraphs (a)(1) and (a)(2) and by revising paragraph (b) to read as follows:

§ 268.42 Treatment standards expressed as specified technologies.

{a} . . .

(1) Liquid hazardous wastes containing polychlorinated biphenyls (PCBs) at concentrations greater than or equal to 50 ppm but less than 500 ppm must be incinerated in accordance with the technical requirements of 40 CFR 761.70 or burned in high efficiency boilers in accordance with the technical requirements of 40 CFR 761.60. Liquid hazardous wastes containing polychlorinated biphenyls (PCBs) at concentrations greater than or equal to 500 ppm must be incinerated in accordance with the technical requirements of 40 CFR 761.70.

(2) Non-liquid hazardous wastes containing halogenated organic compounds (HOCs) in total concentration greater than or equal to 1,000 mg/kg and liquid hazardous wastes containing HOCs in total concentration greater than or equal to 1% must be incinerated in accordance with the requirements of § 264.343 or § 265.343.

(b) The applicant must submit information demonstrating that his treatment method is in compliance with all federal, state, and local requirements and will not present an unreasonable risk to human health or the environment. The applicant must submit information demonstrating that his treatment method will not present an unreasonable risk to human health or the environment. On the basis of such information and any other available information, the Administrator may approve the use of the alternative treatment method if he finds that the alternative treatment method provides a level of performance equivalent to that achieved by methods specified in paragraph (a) of this section. Any approval must be stated in writing and may contain such provisions and conditions as the Administrator deems appropriate. The person to whom such certification is issued must comply with all limitations contained in such a determination.

8. 40 CFR 268.43 is added to read as follows:

§ 268.43 Treatment standards expressed as waste concentrations.

(a) Liquid hazardous wastes having a pH less than or equal to two (2.0) must

be treated in order to raise the pH of the waste to a level above two (2.0).

(b) [Reserved]

PART 270—EPA-ADMINISTERED PERMIT PROGRAMS: THE HAZARDOUS WASTE PERMIT PROGRAM

1. The authority citation of Part 270 continues to read as follows:

Authority: Secs. 1006, 2002, 3005, 3007, 3019, and 7004 of the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act of 1976, as amended (42 U.S.C. 6905, 6912, 6925, 6927, 6939 and 6974).

Subpart D—Changes to Permits

2. In § 270.42, paragraph (p) is added to read as follows:

§ 270.42 Minor modifications of permits.

(p) Allow changes at a permitted facility to treat or store in containers or tanks hazardous wastes subject to land disposal restrictions imposed by Part 268, provided that the permittee: requests a major permit modification pursuant to § 124.5 and § 270.41; demonstrates in the major permit modification request that the treatment or storage is necessary to comply with the land disposal restrictions of Part 268; and ensures that the added units comply with the applicable Part 264 standards pending final administrative disposition of the major permit modification request. The authorization to make changes conferred herein shall terminate upon final administrative disposition of the permittee's major modification request under § 270.41 or termination of the permit under § 270.43.

Subpart G—Interim Status

3. In § 270.72, paragraph (e) is revised to read as follows:

§ 270.72 Changes during interim status.

(e) In no event shall changes be made to an HWM facility during interim status which amount to reconstruction of the facility. Reconstruction occurs when the capital investment in the changes to the facility exceeds fifty percent of the capital cost of a comparable entirely new HWM facility. Changes prohibited under this paragraph do not include changes to treat or store in containers or tanks hazardous wastes subject to land disposal restrictions imposed under Part 268, provided that such changes are made solely for the purpose of complying with Part 268.

[FR Doc. 86-27305 Filed 12-10-86, 8:45 am]
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salt dome formation, salt bed formation, underground mine or cave, concrete vault or bunker intended for disposal purposes, and placement in or on the land by means of open detonation and open burning where the residues continue to exhibit one or more of the characteristics of hazardous waste. The term "land disposal" does not encompass ocean disposal.

(b) All other terms have the meanings given under §§ 260.10, 261.2, 261.3, or 270.2 of this chapter.

§ 268.3 Dilution prohibited as a substitute for treatment.

No generator, transporter, handler, or owner or operator of a treatment, storage, or disposal facility shall in any way dilute a restricted waste or the residual from treatment of a restricted waste as a substitute for adequate treatment to achieve compliance with Subpart D of this part.

§ 268.4 Treatment surface impoundment exemption.

(a) The requirements of this part do not apply to persons treating hazardous wastes in a surface impoundment or series of impoundments provided that:

(1) Treatment of such wastes occurs in the impoundment;

(2) The residues of the treatment are analyzed, as specified in § 268.7, to determine if they meet the applicable treatment standards in § 268.41. The sampling method, specified in the waste analysis plan under § 264.13 or § 265.13, must be designed such that representative samples of the sludge and the supernatant are tested separately rather than mixed to form homogeneous samples. The treatment residues (including any liquid waste) that do not meet the treatment standards promulgated under Subpart D of this part, or are not delisted under § 260.22 of this chapter, must be removed at least annually. These residues may not be placed in any other surface impoundment for subsequent management. If the volume of liquid flowing through the impoundment or series of impoundments annually is greater than the volume of the impoundment or impoundments, this flow-through constitutes removal of the supernatant for the purpose of this requirement. The procedures and schedule for the sampling of impoundment contents, the analysis of test data, and the annual removal of residue which does not meet the Subpart D treatment standards must be specified in the facility's waste analysis plan as required under §§ 264.13 or 265.13 of this chapter;

(3) The impoundment must meet the design requirements of § 264.221(c) or § 265.221(a) of this chapter, regardless that the unit may not be new, expanded, or a replacement, and be in compliance with applicable ground water monitoring requirements of Subpart F of Part 264 or Part 264 of this chapter unless:

(i) Exempted pursuant to § 264.221 (d) or (e) of this chapter, or to § 265.221 (c) or (d) of this chapter; or,

(ii) Upon application by the owner or operator, the Administrator has granted a waiver of the requirements on the basis that the surface impoundment:

(A) Has at least one liner, for which there is no evidence that such liner is leaking;

(B) Is located more than one-quarter mile from an underground source of drinking water; and

(C) Is in compliance with generally applicable ground water monitoring requirements for facilities with permits; or,

(iii) Upon application by the owner or operator, the Administrator has granted a modification to the requirements on the basis of a demonstration that the surface impoundment is located, designed, and operated so as to assure that there will be no migration of any hazardous constituent into ground water or surface water at any future time.

(4) The owner or operator must submit to the Regional Administrator a written certification that the requirements of § 268.4(a)(3) have been met and submits a copy of the waste analysis plan required under § 268.4(a)(2). The following certification is required:

I certify under penalty of law that the requirements of 40 CFR 268.4(a)(3) have been met for all surface impoundments being used to treat restricted wastes. I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

§ 268.5 Procedures for case-by-case extensions to an effective date.

(a) Any person who generates, treats, stores, or disposes of a hazardous waste may submit an application to the Administrator for an extension to the effective date of any applicable restriction established under Subpart C of this Part. The applicant must demonstrate the following:

(1) He has made a good-faith effort to locate and contract with treatment, recovery, or disposal facilities nationwide to manage his waste in accordance with the effective date of the applicable restriction established under Subpart C of this Part;

(2) He has entered into a binding contractual commitment to construct or otherwise provide alternative treatment, recovery (e.g., recycling), or disposal capacity that meets the treatment standards specified in Subpart D;

(3) Due to circumstances beyond the applicant's control, such alternative capacity cannot reasonably be made available by the applicable effective date. This demonstration may include a showing that the technical and practical difficulties associated with providing the alternative capacity will result in the capacity not being available by the applicable effective date;

(4) The capacity being constructed or otherwise provided by the applicant will be sufficient to manage the entire quantity of waste that is the subject of the application;

(5) He provides a detailed schedule for obtaining required operating and construction permits on an outline of how and when alternative capacity will be available;

(6) He has arranged for adequate capacity to manage his waste during an extension and has documented in the application the location of all sites at which the waste will be managed; and

(7) Any waste managed in a surface impoundment or landfill during the extension period will meet the requirements of paragraph (h)(2) of this section.

(b) An authorized representative signing an application described under paragraph (a) of this section shall make the following certification:

I certify under penalty of law that I have personally examined and that I am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

(c) After receiving an application for an extension, the Administrator may request any additional information which he deems as necessary to evaluate the application.

(d) An extension will apply only to the waste generated at the individual facility covered by the application and will not apply to restricted waste from any other facility.

(e) On the basis of the information referred to in paragraph (a) of this section, after notice and opportunity for comment, and after consultation with appropriate State agencies in all affected States, the Administrator may grant an extension of up to 1 year from

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the effective date. The Administrator may review this extension for up to 1 additional year upon the request of the applicant if the demonstration required in paragraph (a) of this section can still be made. In no event will an extension extend beyond 24 months from the applicable effective date specified in Subpart C of Part 268. The length of any extension authorized will be determined by the Administrator based on the time required to construct or obtain the type of capacity needed by the applicant as described in the completion schedule discussed in paragraph (a)(5) of this section. The Administrator will give public notice of the intent to approve or deny a petition and provide an opportunity for public comment. The final decision on a petition will be published in the Federal Register.

(f) Any person granted an extension under this section must immediately notify the Administrator as soon as he has knowledge of any change in the conditions certified to in the application.

(g) Any person granted an extension under this section shall submit written progress reports at intervals designated by the Administrator. Such reports must describe the overall progress made toward constructing or otherwise providing alternative treatment, recovery or disposal capacity; must identify any event which may cause or has caused a delay in the development of the capacity; and must summarize the steps taken to mitigate the delay. The Administrator can revoke the extension at any time if the applicant does not demonstrate a good-faith effort to meet the schedule for completion, if the Agency denies or revokes any required permit, if conditions certified in the application change, or for any violation of this chapter.

(h) Whenever the Administrator establishes an extension to an effective date under this section, during the period for which such extension is in effect:

(1) The storage restrictions under § 268.50(a)(1) do not apply; and

(2) Such hazardous waste may be disposed of at a facility only if each new landfill or surface impoundment unit, each replacement of an existing landfill or surface impoundment unit, and each lateral expansion of an existing landfill or surface impoundment unit at the facility is in compliance with the following requirements:

(i) The landfill, if the interim status, is in compliance with the requirements of Subpart F of Part 265 and § 265.301 (a), (c), and (d) of this chapter; or,

(ii) The landfill, if permitted, is in compliance with the requirements of

Subpart F of Part 264 and § 264.301 (c), (d) and (e) of this chapter;

(iii) The surface impoundment, if in interim status, is in compliance with the requirements of Subpart F of Part 265 and § 265.221 (a), (c), and (d) of this chapter regardless that the unit is not new, expanded or a replacement; or,

(iv) The surface impoundment, if permitted, is in compliance with the requirements of Subpart F of Part 264 and § 264.221 (c), (d) and (e) of this chapter.

(j) Pending a decision on the application the applicant is required to comply with all restrictions on land disposal under this part once the effective date for the waste has been reached.

(Approved by the Office of Management and Budget under control number 2050-0062)

§ 268.6 Petitions to allow land disposal of a waste prohibited under Subpart C of Part 268.

(a) Any person seeking an exemption from a prohibition under Subpart C of this part for the disposal of a restricted hazardous waste in a particular unit or units must submit a petition to the Administrator demonstrating, to a reasonable degree of certainty, that there will be no migration of hazardous constituents from the disposal unit or injection zone for as long as the wastes remain hazardous. The demonstration must include the following components:

(1) An identification of the specific waste and the specific unit for which the demonstration will be made;

(2) A waste analysis to describe fully the chemical and physical characteristics of the subject waste;

(3) A comprehensive characterization of the disposal unit site including an analysis of background air, soil, and water quality.

(b) The demonstration referred to in paragraph (a) of this section must meet the following criteria:

(1) All waste and environmental sampling, test, and analysis data must be accurate and reproducible to the extent that state-of-the-art techniques allow;

(2) All sampling, testing, and estimation techniques for chemical and physical properties of the waste and all environmental parameters must have been approved by the Administrator;

(3) Simulation models must be calibrated for the specific waste and site conditions, and verified for accuracy by comparison with actual measurements;

(4) A quality assurance and quality control plan that addresses all aspects of the demonstration must be approved by the Administrator; and,

(5) An analysis must be performed to identify and quantify any aspects of the demonstration that contribute significantly to uncertainty. This analysis must include an evaluation of the consequences of predictable future events, including, but not limited to, earthquakes, floods, severe storm events, droughts, or other natural phenomena.

(c) Each petition must be submitted to the Administrator.

(d) Each petition must include the following statement signed by the petitioner or an authorized representative:

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this petition and all attached documents, and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

(e) After receiving a petition, the Administrator may request any additional information that reasonably may be required to evaluate the demonstration.

(f) If approved, the petition will apply to land disposal of the specific restricted waste at the individual disposal unit described in the demonstration and will not apply to any other restricted waste at that disposal unit, or to that specific restricted waste at any other disposal unit.

(g) The Administrator will give public notice in the Federal Register of the intent to approve or deny a petition and provide an opportunity for public comment. The final decision on a petition will be published in the Federal Register.

(h) The term of a petition granted under this section shall be no longer than the term of the RCRA permit if the disposal unit is operating under a RCRA permit, or up to a maximum of 10 years from the date of approval provided under paragraph (g) of this section if the unit is operating under interim status. In either case, the term of the granted petition shall expire upon the termination or denial of a RCRA permit, or upon the termination of interim status or when the volume limit of waste to be land disposed during the term of petition is reached.

(i) Prior to the Administrator's decision, the applicant is required to comply with all restrictions on land disposal under this part once the effective date for the waste has been reached.

the effective date. The Administrator may review this extension for up to 1 additional year upon the request of the applicant if the demonstration required in paragraph (a) of this section can still be made. In no event will an extension extend beyond 24 months from the applicable effective date specified in Subpart C of Part 268. The length of any extension authorized will be determined by the Administrator based on the time required to construct or obtain the type of capacity needed by the applicant as described in the completion schedule discussed in paragraph (a)(5) of this section. The Administrator will give public notice of the intent to approve or deny a petition and provide an opportunity for public comment. The final decision on a petition will be published in the **Federal Register**.

(f) Any person granted an extension under this section must immediately notify the Administrator as soon as he has knowledge of any change in the conditions certified to in the application.

(g) Any person granted an extension under this section shall submit written progress reports at intervals designated by the Administrator. Such reports must describe the overall progress made toward constructing or otherwise providing alternative treatment, recovery or disposal capacity; must identify any event which may cause or has caused a delay in the development of the capacity; and must summarize the steps taken to mitigate the delay. The Administrator can revoke the extension at any time if the applicant does not demonstrate a good-faith effort to meet the schedule for completion, if the Agency denies or revokes any required permit, if conditions certified in the application change, or for any violation of this chapter.

(h) Whenever the Administrator establishes an extension to an effective date under this section, during the period for which such extension is in effect:

- (1) The storage restrictions under § 268.50(a)(1) do not apply; and
- (2) Such hazardous waste may be disposed of at a facility only if each new landfill or surface impoundment unit, each replacement of an existing landfill or surface impoundment unit, and each lateral expansion of an existing landfill or surface impoundment unit at the facility is in compliance with the following requirements:

(i) The landfill, if the interim status, is in compliance with the requirements of Subpart F of Part 265 and § 265.301 (a), (c), and (d) of this chapter; or,

(ii) The landfill, if permitted, is in compliance with the requirements of

Subpart F of Part 264 and § 264.301 (c), (d) and (e) of this chapter;

(iii) The surface impoundment, if in interim status, is in compliance with the requirements of Subpart F of Part 265 and § 265.221 (a), (c), and (d) of this chapter regardless that the unit is not new, expanded or a replacement; or,

(iv) The surface impoundment, if permitted, is in compliance with the requirements of Subpart F of Part 264 and § 264.221 (c), (d) and (e) of this chapter.

(j) Pending a decision on the application the applicant is required to comply with all restrictions on land disposal under this part once the effective date for the waste has been reached.

(Approved by the Office of Management and Budget under control number 2050-0062)

§ 268.6 Petitions to allow land disposal of a waste prohibited under Subpart C of Part 268.

(a) Any person seeking an exemption from a prohibition under Subpart C of this part for the disposal of a restricted hazardous waste in a particular unit or units must submit a petition to the Administrator demonstrating, to a reasonable degree of certainty, that there will be no migration of hazardous constituents from the disposal unit or injection zone for as long as the wastes remain hazardous. The demonstration must include the following components:

- (1) An identification of the specific waste and the specific unit for which the demonstration will be made;
- (2) A waste analysis to describe fully the chemical and physical characteristics of the subject waste;
- (3) A comprehensive characterization of the disposal unit site including an analysis of background air, soil, and water quality.

(b) The demonstration referred to in paragraph (a) of this section must meet the following criteria:

- (1) All waste and environmental sampling, test, and analysis data must be accurate and reproducible to the extent that state-of-the-art techniques allow;
- (2) All sampling, testing, and estimation techniques for chemical and physical properties of the waste and all environmental parameters must have been approved by the Administrator;
- (3) Simulation models must be calibrated for the specific waste and site conditions, and verified for accuracy by comparison with actual measurements;
- (4) A quality assurance and quality control plan that addresses all aspects of the demonstration must be approved by the Administrator; and,

(5) An analysis must be performed to identify and quantify any aspects of the demonstration that contribute significantly to uncertainty. This analysis must include an evaluation of the consequences of predictable future events, including, but not limited to, earthquakes, floods, severe storm events, droughts, or other natural phenomena.

(c) Each petition must be submitted to the Administrator.

(d) Each petition must include the following statement signed by the petitioner or an authorized representative:

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this petition and all attached documents, and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

(e) After receiving a petition, the Administrator may request any additional information that reasonably may be required to evaluate the demonstration.

(f) If approved, the petition will apply to land disposal of the specific restricted waste at the individual disposal unit described in the demonstration and will not apply to any other restricted waste at that disposal unit, or to that specific restricted waste at any other disposal unit.

(g) The Administrator will give public notice in the **Federal Register** of the intent to approve or deny a petition and provide an opportunity for public comment. The final decision on a petition will be published in the **Federal Register**.

(h) The term of a petition granted under this section shall be no longer than the term of the RCRA permit if the disposal unit is operating under a RCRA permit, or up to a maximum of 10 years from the date of approval provided under paragraph (g) of this section if the unit is operating under interim status. In either case, the term of the granted petition shall expire upon the termination or denial of a RCRA permit, or upon the termination of interim status or when the volume limit of waste to be land disposed during the term of petition is reached.

(i) Prior to the Administrator's decision, the applicant is required to comply with all restrictions on land disposal under this part once the effective date for the waste has been reached.

(j) The petition granted by the Administrator does not relieve the petitioner of his responsibilities in the management of hazardous waste under 40 CFR Part 260 through Part 271

(Approved by the Office of Management and Budget under control number 2050-006.)

§ 268.7 Waste analysis.

(a) The generator must test his waste or an extract developed using the test method described in Appendix I of this part, or using knowledge of the waste to determine if the waste is restricted from land disposal under this part.

(1) If a generator determines that he is managing a restricted waste under this part and the waste requires treatment prior to land disposal, for each shipment of waste the generator must notify the treatment facility in writing of the appropriate treatment standard set forth in Subpart D of this part. The notice must include the following information:

- (i) EPA Hazardous Waste Number;
- (ii) The corresponding treatment standard;
- (iii) The manifest number associated with the shipment of waste; and
- (iv) Waste analysis data, where available.

(2) If a generator determines that he is managing a restricted waste under this part, and determines that the waste can be land disposed without further treatment, for each shipment of waste he must submit, to the land disposal facility, a notice and a certification stating that the waste meets applicable treatment standards.

(i) The notice must include the following information:

- (A) EPA Hazardous Waste Number;
- (B) The corresponding treatment standard;
- (C) The manifest number associated with the shipment of waste;
- (D) Waste analysis data, where available.

(ii) The certification must be signed by an authorized representative and must state the following:

I certify under penalty of law that I personally have examined and am familiar with the waste through analysis and testing or through knowledge of the waste to support this certification that the waste complies with the treatment standards specified in 40 CFR Part 268 Subpart D. I believe that the information I submitted is true, accurate and complete. I am aware that there are significant penalties for submitting a false certification, including the possibility of a fine and imprisonment.

(3) If a generator's waste is subject to a case-by-case extension under § 268.5, a petition under § 268.6, or a nationwide variance under Subpart C, he must forward a notice to the land disposal

facility receiving his waste, stating that the waste is exempt from the land disposal restrictions.

(b) For wastes with treatment standards expressed as concentrations in the waste extract (§ 268.41), the owner or operator of the treatment facility must test the treatment residues according to the waste analysis plan under §§ 264.13 or 265.13, or an extract development using the test method described in Appendix I of this part to assure that the treatment residues extract meet the applicable treatment standards.

(10) A notice must be sent to the land disposal facility which includes the following information:

- (i) EPA Hazardous Waste Number;
- (ii) The corresponding treatment standard;
- (iii) The manifest number associated with the shipment of waste; and
- (iv) Waste analysis data, where available.

(2) The treatment facility must submit a certification for each shipment of waste or treatment residue of a restricted waste to the land disposal facility stating that the waste or treatment residue has been treated to the performance standards specified in Subpart D.

(i) For wastes with treatment standards expressed as concentrations in the waste extract or in the waste (§§ 268.41 or 268.43), the certification must be signed by an authorized representative and must state the following:

I certify under penalty of law that I have personally examined and am familiar with the treatment technology and operation of the treatment process used to support this certification and that, based on my inquiry of those individuals immediately responsible for obtaining this information, I believe that the treatment process has been operated and maintained properly so as to achieve the performance levels specified in 40 CFR Part 268 Subpart D without dilution of the prohibited waste. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment.

(ii) For wastes with treatment standards expressed as technologies (§ 268.42), the certification must be signed by an authorized representative and must state the following:

I certify under penalty of law that the waste has been treated in accordance with the requirements of 40 CFR 268.42. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment.

(c) The owner or operator of any land disposal facility accepting any waste subject to restrictions under this part

must have records of the notice and certification specified in either paragraph (a) or (b) of this section and obtain waste analysis data through testing of the waste to determine that the wastes are in compliance with the applicable treatment standards in § 268.41.

(Approved by the Office of Management and Budget under control number 2050-006.)

Subpart C—Prohibitions on Land Disposal

§ 268.30 Waste specific prohibitions—Solvent wastes.

(a) Effective November 8, 1986, the spent solvent wastes specified in 40 CFR 261.31 as EPA Hazardous Waste Nos. F001, F002, F003, F004, and F005, are prohibited from land disposal (except in an injection well) unless one or more of the following conditions apply:

(1) The generator of the solvent waste is a small quantity generator of 100-1000 kilograms of hazardous waste per month; or

(2) The solvent waste is generated from any response action taken under the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA) or any corrective action taken under the Resource Conservation and Recovery Act (RCRA), except where the waste is contaminated soil or debris not subject to the provisions of this chapter until November 8, 1988; or

(3) The solvent waste is a solvent-water mixture, solvent-containing sludge, or solvent-contaminated soil (non-CERCLA or RCRA corrective action) containing less than 1 percent total F001-F005 solvent constituents listed in Table CCWE of § 268.41 of this part.

(b) Effective November 8, 1988, the F001-F005 solvent wastes listed in paragraphs (a) (1), (2), and (3) of this section are prohibited from land disposal. Between November 8, 1986, and November 8, 1988, wastes included in paragraphs (a) (1), (2), and (3) of this section may be disposed of in a landfill or surface impoundment only if the facility is in compliance with the requirements specified in § 268.5(h)(2).

(c) The requirements of paragraphs (a) and (b) of this section do not apply if:

(1) The wastes are treated to meet the standards of Subpart D of this part; or

(2) The wastes are disposed at a facility that has been granted a petition under § 268.6; or

(3) An extension has been granted under § 268.5.

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R. Battaglia

HEADQUARTERS
SENECA ARMY DEPOT
ROMULUS, NY 14541

Specific Procedure List
No. OE-04

16 March 1987

DIRECTORATE FOR SUPPLY
INDUSTRIAL PLANT EQUIPMENT DIVISION
HAZARDOUS WASTE PROCEDURE

Purpose	Paragraph 1
Scope	2
Definitions	3
Responsibilities	4
Procedures	5

1. Purpose. This procedure outlines the policies and responsibilities for handling and disposition of hazardous waste within the Industrial Plant Equipment (IPE) Division.

2. Scope. This procedure is applicable to the Industrial Plant Equipment Division, Directorate for Supply.

3. Definitions.

a. Generator - The foreman/supervisor of any IPE shop or activity generating hazardous waste.

b. Transporter - Any person transporting hazardous waste.

4. Responsibilities.

a. Mr. Randy Walter is the Hazardous Waste Officer for the IPE Division.

b. The Chief, IPE Division, is responsible for maintaining this procedure current in accordance with applicable regulations.

c. Generators and/or Responsible Supervisors will:

1. Request Hazardous Waste Determination from DEH for all new materials purchased after 1 May 1981.

2. Make every attempt to decrease or eliminate the hazardous wastes they produce through recycling, reclaiming, reuse, or through alternate procedures.

3. Draw the proper containers and labels and mark same in accordance with 40 CFR Parts 260 through 263 and 49 CFR Parts 100 through 199.

4. Segregate wastes during accumulation and ensure that they remain segregated.

5. Certify the contents of the waste container(s) and that the proper container has been used prior to storage in Building 307 by signing the SEAD Waste Certification.

This procedure supersedes Specific Procedure No. OE-4 dated 8 July 1985.

6. Be able to prove, beyond reasonable doubt, that all hazardous wastes have been managed and disposed of in accordance with federal and state regulations at the end of February of each year.

7. Have on hand at the generation site the appropriate equipment and absorbents necessary to clean up any hazardous waste spill.

5. Procedures.

a. Building 307 is the only authorized storage area for hazardous waste.

b. Generators will draw the proper containers and labels required to properly accumulate their wastes.

c. Generators will manage their wastes during accumulation in accordance with 40 CFR Parts 260 and 262 and certify the contents and containers by signing the SEAD Waste Certification Statement and forward statement to his respective Hazardous Waste Committee member.

d. Each generator is responsible for the proper labeling of drums containing hazardous waste.

e. Each generator is responsible for preparing DA Form 4508, Transfer Record. This form will contain, as a minimum, the number/quantity of drums and the exact type of hazardous waste contained in each drum.

f. After completion of the Transfer Record, (DA Form 4508), the IPE Hazardous Waste Officer will be notified that material is ready for his inspection.


g. The IPE Hazardous Waste Officer will inspect drums for proper marking and make arrangements to have Building 307 opened by Mr. Randy Battaglia, the Depot Hazardous Waste Officer. All generators will be notified when the building will be opened and they will then proceed to have their drums moved to Building 307.

h. The personnel who transports drums to Building 307 will take the Transfer Records (DA Form 4508) with them. After drums are deposited in Building 307, the Depot Hazardous Waste Officer will sign receipt for them on the Transfer Form (DA Form 4508). The Transporter will detach two copies of the signed Transfer Record (DA Form 4508) and deliver one to the generator and one to the IPE Hazardous Waste Officer.

i. Each transporter has the responsibility for assuring that barricades are erected in the road on each side of Building 307 to stop traffic in the area while loading and unloading hazardous waste. If traffic persists in going around the barricade, Security Police will be notified to institute traffic control measures.

j. Each generator will maintain a log book of all hazardous waste transferred to Building 307. All transfers will be kept on file and disposed of in accordance with The Army Functional Files System (TAFFS). Record Book,

NSN 7530-00-222-3525, will be used for this purpose.

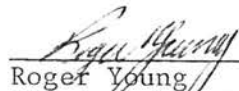

STEVEN L. CHAMBERLAIN
LTC, AV
Director of Supply


DISTRIBUTION:

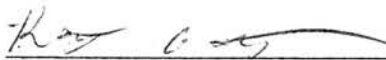
Rehab Branch (5)
Storage Branch (2)
Mat Spt & Plng Branch (2)
R. Walter
R. Battaglia
PP&C Div (4)
Inventory Div
Gen Supply Div
DPD
Transportation Div


Concurrence:


Donald E. Ward
Chief, IPE Division


Roger Young
Chief, Rehab Branch


Henry E. Egghme
Chief, Storage Branch


Randy Walter
IPE Hazardous Waste Officer


Randall W. Battaglia
SEAD Hazardous Waste Officer

POSITION FORM

Use of this form, see AR 340-15; the proponent agency is TAGO.

REFERENCE OR OFFICE SYMBOL

SDSSE-HE (200-1c)

SUBJECT

Hazardous Waste Management

TO Troop Command

FROM C, Eng/Env Mgt Div

DATE 16 May 88

CMT 1

S. Absolom/dk/41532

1. Enclosed is an example of an SOP for hazardous waste management.
2. Recommend an SOP for each company within Troop Command be prepared, defining specific procedures and responsibilities for each unit.
3. Paragraphs which are circled should be in each SOP; additional paragraphs should be included which are specific to each unit.
4. A Hazardous Waste Officer (HWO) for all of Troop Command may be designated to oversee Hazardous Waste Management for all units in addition to unit HWO's.
5. This document will formally assign responsibilities to positions and may serve as continuity with changes in personnel.
6. POC is Randall W. Battaglia, extension 41450.



STEPHEN M. ABSOLOM

C, Engineering/Environmental Management Div

Encl

HEADQUARTERS
SENECA ARMY DEPOT
ROMULUS, NY 14541

file NW 86

Specific Procedure List
No. OE-04

15 December 86

DIRECTORATE FOR SUPPLY
INDUSTRIAL PLANT EQUIPMENT DIVISION
HAZARDOUS WASTE PROCEDURE

	Paragraph
Purpose	1
Scope	2
Definitions	3
Responsibilities	4
Procedures	5

1. Purpose. This procedure outlines the policies and responsibilities for handling and disposition of hazardous waste within the ~~Industrial Plant Equipment (IPE) Division~~ *(Company name)*

2. Scope. This procedure is applicable to the ~~Industrial Plant Equipment Division, Directorate for Supply~~ *Company name, Troop Command*

3. Definitions.

a. Generator - The ~~foreman/supervisor of any IPE shop or activity~~ *CO of any* generating hazardous waste.

b. Transporter - Any person transporting hazardous waste.

4. Responsibilities.

a. ~~Mr. Randy Walter~~ *(designated person)* is the Hazardous Waste Officer for the ~~IPE Division~~ *(Company name)*.

b. The ~~Chief, IPE Division~~ *CO, (Company name)*, is responsible for maintaining this procedure current in accordance with applicable regulations.

c. Generators and/or Responsible Supervisors will:

1. Request Hazardous Waste Determination from ~~FED~~ *DEH* for all new materials purchased after 1 May 1981.

2. Make every attempt to decrease or eliminate the hazardous wastes they produce through recycling, reclaiming, reuse, or through alternate procedures.

3. Draw the proper containers and labels and mark same in accordance with 40 CFR Parts 260 through 263 and 49 CFR Parts 100 through 199.

4. Segregate wastes during accumulation and insure that they remain segregated.

5. Certify the contents of the waste container(s) and that the proper container has been used prior to storage in Building 307 by signing the SEAD Waste Certification, *DA 4508. JRM*

~~This procedure supercedes Specific Procedure No. OE-4 dated 8 July 1985.~~

6. Be able to prove, beyond reasonable doubt, that all hazardous wastes have been managed and disposed of in accordance with federal and state regulations at the end of February of each year.

7. Have on hand at the generation site the appropriate equipment and absorbents necessary to clean up any hazardous waste spill.

5. Procedures.

a. Building 307 is the only authorized storage area for hazardous waste.

b. Generators will draw the proper containers and labels required to properly accumulate their wastes.

c. Generators will manage their wastes during accumulation in accordance with 40 CFR Parts 260 and 262 and certify the contents and containers by signing the SEAD Waste Certification Statement. Forward statement to his respective Hazardous Waste Committee member.

d. Each generator is responsible for the proper labeling of drums containing hazardous waste.

e. Each generator is responsible for preparing DA Form 4508, Transfer Record. This form will contain, as a minimum, the number/quantity of drums and the exact type of hazardous waste contained in each drum.

f. After completion of the Transfer Record, (DA Form 4508), the ^{TC}~~IPE~~ Hazardous Waste Officer will be notified that material is ready for his inspection.

g. ^{TC}The ~~IPE~~ Hazardous Waste Officer will inspect drums for proper marking and make arrangements to have Building 307 opened by Mr. Randy Battaglia, the Depot Hazardous Waste Officer. All generators will be notified when the building will be opened and they will then proceed to have their drums moved to Building 307.

h. The personnel who transports drums to Building 307 will take the Transfer Records (DA Form 4508) with them. After drums are deposited in Building 307, the Depot Hazardous Waste Officer will sign receipt for them on the Transfer Form (DA Form 4508). The Transporter will detach two copies of the signed Transfer Record (DA Form 4508) and deliver one to the generator and one to the ~~IPE~~ Hazardous Waste Officer. ^{TC}

i. Each transporter has the responsibility for assuring that barricades are erected in the road on each side of Building 307 to stop traffic in the area while loading and unloading hazardous waste. If traffic persists in going around the barricade, Security Police will be notified to institute traffic control measures.

j. Each generator will maintain a log book of all hazardous waste transferred to Building 307. All transfers will be kept on file and disposed of in accordance with The Army Functional Files System (TAFFS). Record Book,

* Unit - specific operations / procedures / etc.
may be included here.

NSN 7530-00-222-3525, will be used for this purpose.

~~STEVEN L. CHAMBERLAIN~~
~~LTC, AV~~
~~Director of Supply~~

CO, TC

DISTRIBUTION:

- Rehab Branch (5)
- Storage Branch (2)
- Mat Spt & Plng Branch (2)
- R. Walter
- R. Battaglia
- PP&C Div (4)
- Inventory Div
- Gen Supply Div
- DPD
- Transportation Div

Concurrence:

[Signature]
Donald E. Ward
Chief, IPE Division *A*

[Signature]
Roger Young
Chief, Rehab Branch *Company HWO*

[Signature]
Henry Eighmey
Chief, Storage Branch *Company CO*

[Signature]
~~Randy Walker~~
IPE Hazardous Waste Officer

[Signature]
Randall W. Battaglia
SEAD Hazardous Waste Officer

TC
company unit
DE R. Battaglia
HWO-unit

Troop Command 

11

DISPOSITION FORM

For use of this form, see AR 340-15; the proponent agency is TAGO.

REFERENCE OR OFFICE SYMBOL

SUBJECT

SDSSE-HE

Hazardous Waste Management

TO THRU D/EH

FROMC, Eng/Env Mgt Div

DATE 14 Jan 87
RWBattaglia/nm/532

CMT 1

TO D/Supply

1. Reference :

- a. SEADR 420-2, Hazardous Waste (HW) Management.
- b. Para 7, Hazardous Materials (HM) Control, SEAD HAZMIN Plan. (encl 1)
- c. SEAD Spill Prevention, Control and Countermeasure Plan (SPCC).

2. IAW reference 1b, the goal of EM control under Seneca's HAZMIN Plan is to eliminate the generation of HW due to excess, off-specification or expired shelf life (EOE) hazardous materials through management procedures.

3. From 11 Dec 86 to 12 Jan 87, there were five (5) instances regarding EOE hazardous materials disposition/disposal. These involved overpacking, consolidation of materials in 55 gallon drums, expired shelf life materials and rejected materials from DRMO-Griffiss AFB due to leaking containers.

4. All disposal of EOE hazardous materials as hazardous wastes must be justified to AMC; HW minimization must be justified to regulators. Effective immediately, EOE hazardous materials will not be accepted to building 307 unless the following criteria are met:

- a. Prior notification of overpacking or consolidation/mixing of EOE hazardous materials.
- b. Documentation that Para 7(b)(4) of ref 1b is complied with.
- c. Documentation that on-post reutilization for the EOE hazardous material was attempted

5. EOE DS-2 decontaminant will not be accepted to building 307 as a hazardous waste. DRMO-Griffiss has stated this may be a saleable item, but they cannot presently store it there. Also, there are treatment processes within AMC to reclaim or otherwise process this material. Request that the disposition, uses, and status of this material at Seneca be provided this office.

6. Recommend that a written SOP for consolidation/mixing of such materials be prepared, including designated personnel and mixing areas.

7. Recommend that a HM control plan/procedure to be prepared to establish responsibilities and procedures for the minimization of EOE hazardous materials.

8. POC is Randall W. Battaglia, Ext. 450.

Encl

For Raymond Quabicki
STEPHEN M. ABSOLOM
C, Eng/Environmental Management Division

CF:
Safety Office
DEA

7. HAZMIN ACTIONS:

a. General: The actions taken to minimize the volume and toxicity of HW at Seneca will be IAW chapter 3 of the AMC HAZMIN Plan.

Seneca will use the 1985 NYS Facility Hazardous Waste Report (Appendix A) as its "baseline" HW data summary to assess changes in the volume and toxicity of Seneca's HW, IAW the AMC HAZMIN Plan.

Any use of a Hazardous Material, or Hazardous Material-Using Process that:

- (1) may produce a HW by excess materials and/or
- (2) will produce a (new) HW that is not on the 1985 Facility HW Report, and/or
- (3) will produce an increase in toxicity of HW's and/or
- (4) will produce an increase in the volume of HW's on Seneca's baseline,

must be approved by the SEAD HAZMIN Board. SPECIAL NOTE: On or off-post recycling of solvents are regulated as HW's under the RCRA, and as such are subject to approval under this plan.

ANY CHANGES TO THE BASELINE HW DATA MUST BE APPROVED PRIOR TO IMPLEMENTATION BY DESCOM, IAW THE AMC HAZMIN PLAN. ANY USE, NEW PROCESS, OR OTHER ACTIONS WHICH WILL PRODUCE AN INCREASE IN VOLUME OR TOXICITY IN SENECA'S HW BASELINE, THAT IS APPROVED BY THE SEAD HAZMIN BOARD, WILL BE REFERRED THROUGH ENVIRONMENTAL CHANNELS TO DESCOM FOR APPROVAL PRIOR TO IMPLEMENTATION.

The SEAD HAZMIN Board will:

- (1) Maintain a list of approved uses of hazardous materials (including authorized users).
- (2) Maintain a list of disapproved uses of hazardous materials.
- (3) Review all new HM Assessments for approval/disapproval.
- (4) Review all presently used HM.
- (5) Meet quarterly to review HM Use Assessment submittals (see appendix B).

Once a use of a HM is disapproved by either the SEAD HAZMIN Board or DESCOM, it will not be reviewed again by the SEAD HAZMIN Board.

b. Hazardous Materials Control:

(1) General: Close management of HM (not wastes) is an effective way to reduce the generation of HW. The following guidelines aid the minimization of excess, off-specification, or expired shelf-life HM:

- (a) Only authorized users can acquire HM.
- (b) Only those materials needed for a job are issued.
- (c) Issuing HM in the minimum quantity needed minimizes shelf-life expirations.
- (d) HM's are properly labelled.
- (e) Personnel receive training in how to use the HM's.
- (f) Personnel receive training in how to dispose of HM when they become wastes.

(2) Committee: The SEAD HAZMIN Board will act as the SEAD Hazardous Materials Control Committee (HMCC) IAW the AMC HAZMIN Plan, and will coordinate the management, use, and control of HM's on Seneca.

(3) Material Control: Excess, off-specification, and expired shelf-life (EOE) HM's often are disposed as HW. The goal of HM Control under this plan is to eliminate this source of HW through management procedures. For the purposes of this plan, any EOE HM's are presumed to be preventable. As a last resort, on-post reutilization, prior to turn-in to DRMO, should be explored in the interim to achieving the HAZMIN goal.

(4) Training and Responsibilities:

(a) Training: The HMCC will implement spill prevention training for personnel involved with HM handling. Although HM handling training is presently occurring, training, personal responsibilities, and formal procedures can prevent spills and the resultant HW residues.

(b) Responsibilities: The organization or activity and supervisors which are accountable for the HM, the storage of the HM, and/or the use of the HM, are responsible for elimination of EOE HM's, training personnel involved, and spill prevention.

(5) Hazardous Materials Control Officer: All organizations or activities on Seneca will establish a Hazardous Materials Control Officer IAW the AMC HAZMIN Plan.

(6) Procurement Guidelines: Procurement or acquisition specifications frequently do not address material composition. HM control can be accomplished by requiring the use where possible of non-hazardous or least hazardous materials to meet performance specifications. Diminishing delivery orders and suppliers' responsibilities to meet specifications may be used to control EOE HM's.

0-43

The contractor shall supply all necessary labor, equipment, and materials in connection with accomplishing the following: Bldg. 301 is a hazardous material storage building which houses transformers which contain PCB's. Before work is started, the contractor shall have the floors tested for PCB contamination. If PCB contamination is determined to be present, the contractor will stop work until the Seneca Army Depot has removed and disposed of the contaminated material, then the contractor can resume his operations. If no contamination is present, the contractor shall perform the contract with no interruption. See the specification for PCB testing. Time spent by the Seneca Army Depot to clean up contamination, if encountered, will not be charged against the completion date.

The contractor shall remove the existing 6 IN concrete floor and excavate to the proper subgrade elevation and compact. The contractor shall place 6 IN of crushed aggregate, graded and compacted as required. The contractor shall install the new 2 IN steel channels, continuously welded to the existing channels at the two overhead door locations. The contractor shall place the vapor barrier and install the reinforced concrete monolithic floor slab including the curbs and ramp. Provide expansion joints as shown and in accordance with the specifications. See the drawings for all details. The contractor shall adjust the overhead doors and tracks as required to make them function and lock properly. Install the asphalt concrete ramps at both overhead door locations, sloping away from the building to prevent rain from entering the building. Compaction of the asphalt concrete shall be accomplished by making several passes with a walk behind vibratory roller. See drawings and specifications for details. The contractor shall apply an epoxy sealant over the entire concrete slab, including the curbs and ramp. Application and coverage shall be done according to the manufacturer's recommendations. Also as part of this contract, the contractor shall provide the same epoxy sealant treatment to the monolithic concrete floor in Building 307. The dimensions of this slab are 40 FT X 50 FT with the same curb and ramp details.

All debris shall become the property of the contractor, except where noted, and shall be removed off site at the contractor's expense. Disposal of debris shall be in accordance with all Federal, State, Safety, and Environmental regulations. The contractor shall supply information (HT, WT, Eye Color, SSN, etc.) of all employees working on the project 5 days prior to the start of work. For a prebid visit to the job site, contact Bob Bero at (607) 869-1532. POC/COR for this project is Bob Bero. Once the contract is awarded, the contractor shall start work within 10 days and complete work within 60 days. To expedite payment, request DEH Supply Section be notified at (607) 869-1297 when starting and upon completion of the contract. Failure to do this will result in a delay on final payment. The cost of the project is estimated at \$16,500.00.

SV: Gary Veeder Construction

JO:

L.A. Johnson Construction

CC:

Massa Construction

EOE:

Containment

According to 40 CFR Part 761.65 C(1), the floor containment that must be provided is either two times the volume of the PCB container, or 25% of the total volume of all PCB containers stored, whichever is greater. The minimum curb height is stated to be 6 inches.

According to Seneca's Permit Application, RCRA Part B (NYS Part 373), maximum volume that could be stored in Bldg 301 is 2,375 gallons. The largest container stored has the capacity of approximately 400 gallons.

Largest Container: $400 \text{ gal} \times 2 = 800 \text{ gals} *$

or

25 % Total Volume: $2,375 \text{ gal} \times .25 = 600 \text{ gals}$

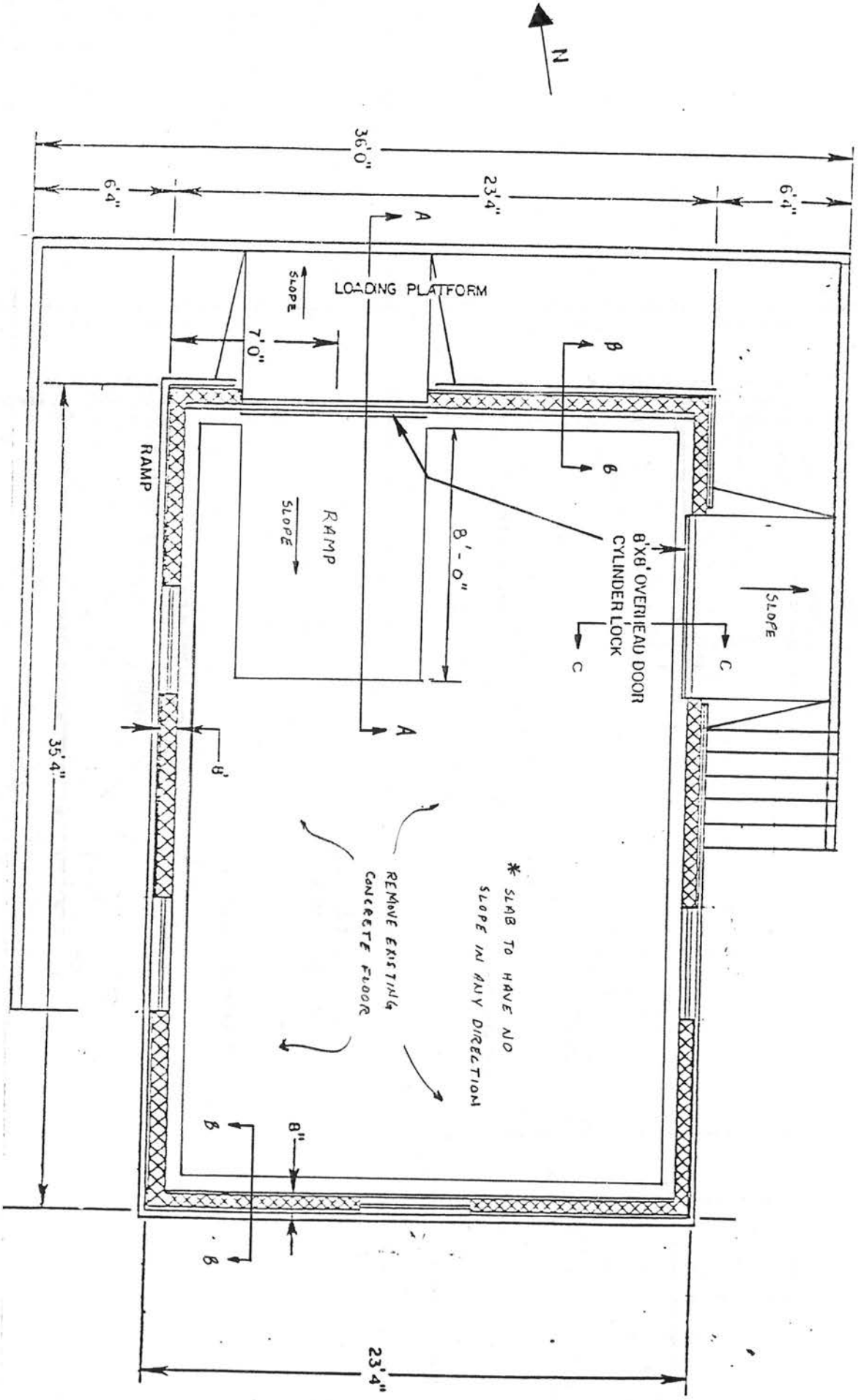
The minimum containment provided shall be 800 gals

Bldg 301: Inside dimension---34'0" x 22'0"

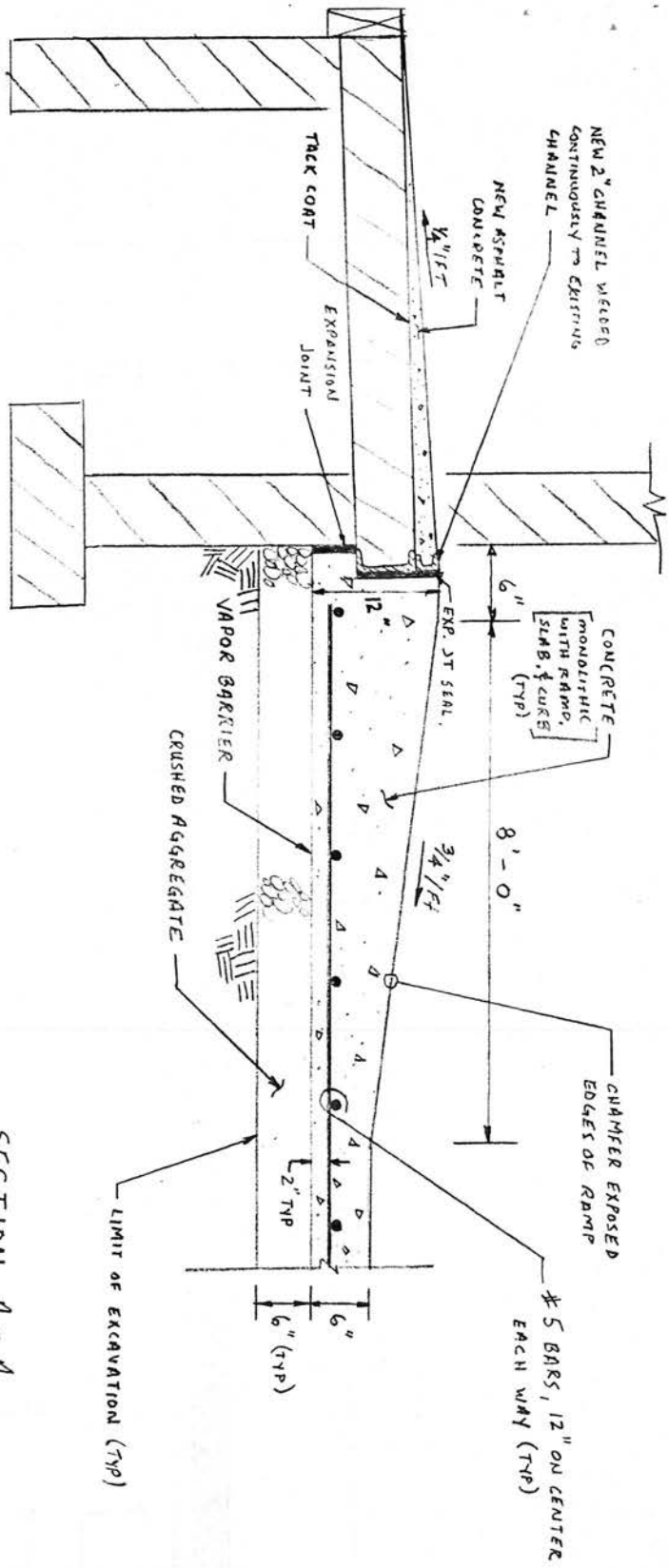
Subtract for 6" curb --- 33'0" x 21'0" = 693SF

Containment with 6" curbs: $693 \times 0.5 = 347-16(\text{ramp}) = 331\text{CF} = 2,476 \text{ gals}$

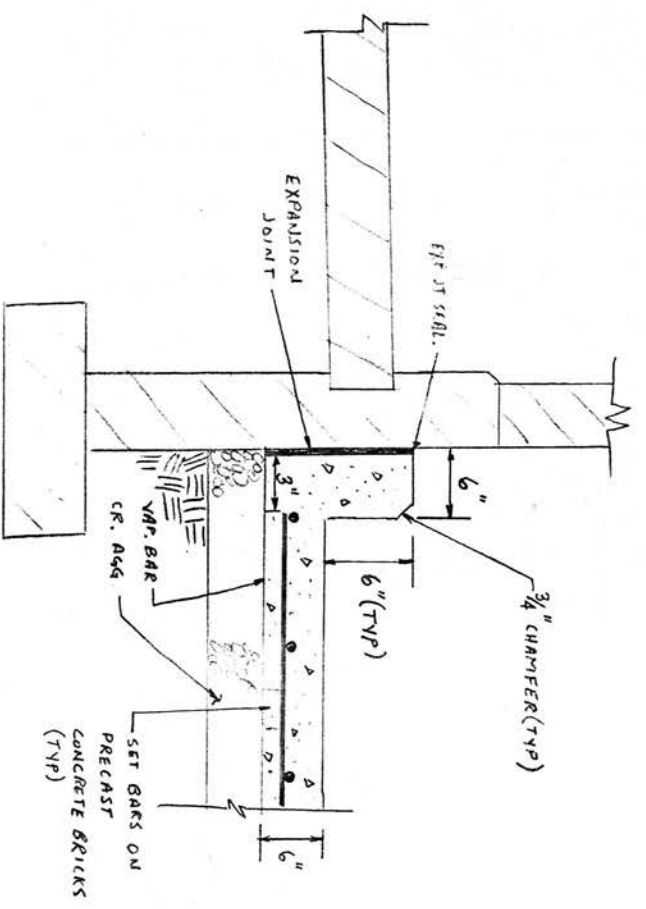
*The containment with the minimum 6" curb is sufficient



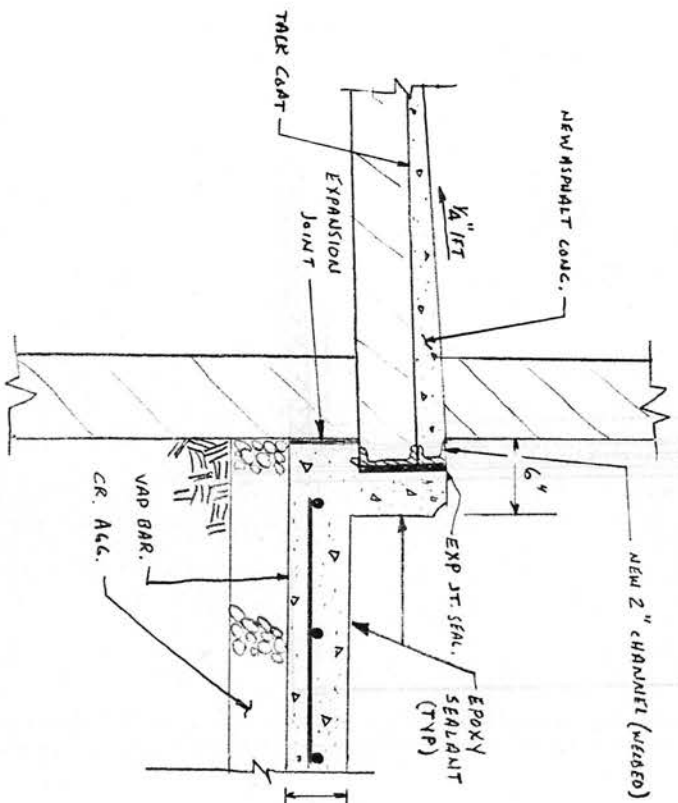
PLAN VIEW
BLDG. 301



SECTION A - A
NTS



SECTION B - B
NTS



SECTION C - C
NTS

TECHNICAL SPECIFICATIONS

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SECTION II

SECURITY REQUIREMENTS FOR CONTROLLED/LIMITED AREA

1. IDENTIFICATION OF EMPLOYEES:

1.1 The contractor shall furnish the Intelligence Officer, Seneca Army Depot, at least 72 hours prior to commencement of work under this contract, SDSSE-TIS Forms 268 containing the complete name and duties of each of his employees engaged in performance of work contemplated by this contract.

1.2 The contractor shall not assign any employee to the project if the Contracting Officer has made a determination that the assignment is detrimental to the interest of the government. The Contracting Officer shall give written notice to the contractor of any such determination or action.

1.3 In the event it becomes necessary for any reason to add employees or replace employees working for the contractor, the contractor shall advise the Intelligence Officer, Seneca Army Depot, of the change and shall provide notice of the new employee in the format prescribed in 1.1 above at least 72 hours prior to the arrival of the employee. The contractor must provide notice to the Intelligence Officer of the deletion of any employee from the job, regardless of whether the employee is replaced.

1.4 In the event visitations are required by employees of the contractor who are not permanently assigned to the work site or any other individuals sponsored by the contractor, 72 hours notification to the Intelligence Officer, Seneca Army Depot, Romulus, NY 14541, is required prior to their arrival on the premises.

1.5 Sub-contractors: The contractor shall furnish the Intelligence Officer, Seneca Army Depot, at least 72 hours prior to commencement of work under this contract, a list of all sub-contractors to be utilized on the project. This list will include the firm name and address and the name of a firm official or contact. All sub-contractor employees shall be identified to the Intelligence Office as stated in paragraph 1.1 above by either the contractor or a firm official representing the sub-contractor.

2. PROCEDURE TO ENTER AND DEPART WORK AREA:

2.1 The following description is provided to inform the bidder of the general nature of the identification and search procedures upon entering and leaving the work area. All established rules and regulations concerning entry and departure shall be strictly enforced. The bidder shall include all costs in the bid for time expended in the identification and search process for all persons who will be engaged in the work and who will enter the work area. No additional sums above the contract amount will be paid by the government to the contractor for time expended due to routine identification and search procedures.

2.2 Normally, all personnel involved in work under this contract will be identified as visitors when within the work area. At the entry control point to the work area, persons entering will be required to provide positive identification in the form of a driver's license or some other descriptive identification. When the individual is cleared for entrance into the work area, he will be logged in on the visitor log sheet and issued a controlled area visitor's badge. Upon completion of the work day, the individual(s) will depart through the entry control point and surrender the visitor's badge.

2.3 In some cases, the Security Officer may approve the issue of photographic controlled area badges to contractor personnel. In that event, the provisions of 2.2 above will not apply. The contractor shall be responsible and accountable for all badges issued to his employees or sub-contractor employees under his direction. The contractor shall report the loss of any badge issued and turn in any badge of an employee who leaves the employ of the contractor or otherwise is no longer engaged in conducting work under this contract. In the event an employee of the contractor loses a badge, the contractor shall pay a replacement fee of \$10 per badge to the depot. In the event the contractor fails to return the badge of any employee leaving the employ of the contractor or who otherwise no longer requires access to the Depot, the contractor shall also pay a replacement fee of \$10 per badge to the Depot.

2.4 Receipt of Supplies and Materials: The contractor shall notify the Intelligence Officer at least 48 hours in advance of the arrival of any shipment of supplies or materials. Notification shall include the type of material involved, the firm providing these supplies, and if possible, the name of the driver(s) who will be transporting the load. Suppliers who will have a recurring need for access may be identified as sub-contractors and their employees placed on permanent access rosters after identification to the Intelligence Officer as in paragraph 1.5.

2.5 All property, equipment, and miscellaneous items not considered normal working tools being transported into or out of the work area may be searched and are to be accompanied by DA Form 1818 issued by the Facilities Engineering Division.

2.6 Cameras, binoculars, or firearms shall not be brought on Depot unless prior authorization is received from the Security Officer.

3. VEHICLE REGISTRATION AND OPERATION:

3.1 Privately-owned vehicles to be operated on the Seneca Army Depot must be registered with the Security Officer's office within 48 hours after arrival at said installation. Evidence of compliance with the following automotive liability coverage must be presented upon application for vehicle registration of privately-owned vehicles.

Bodily Injury Liability	\$10,000 per person \$20,000 per accident
Property Damage	\$ 5,000 per accident

3.2 Privately-owned and contractor-owned vehicles operating on the Depot premises are required to display a valid mechanical inspection sticker. If the state in which the vehicle is licensed or registered does not require a mechanical safety inspection, the requirements of the State of New York in this respect will govern.

3.3 Should any contractor-owned vehicle or construction equipment be required to remain in the work area during non-working hours, it shall be rendered immobile.

4. WORK HOURS: The hours between 7:30 AM and 4:00 PM on Monday through Friday, excluding federal holidays, are the normal working hours of the Depot personnel. Weekend or holiday work shall require prior approval of the Security Officer.

5. PRE-BID SITE VISITATION:

5.1 Firms interested in visiting the work site prior to submission of bids may do so by calling the Eng/Env Control Branch at (607) 869-1532. Questions regarding security requirements should be directed to the Security Office at (607) 869-0202. Work site visitation is between the hours of 7:30 AM and 2:00 PM Monday through Friday, excluding federal holidays.

5.2 Interested bidders must submit to the Intelligence Officer, Seneca Army Depot, Romulus, NY 14541, written notice of their intent to visit at least three work days prior to their arrival. Such notice shall be on company letterhead and include the following:

5.2.1 Full names and social security number of all company representatives who desire to visit the site.

5.2.2 Date and time of visit.

6. PRIVACY ACT NOTICE: Authority for collection of the information specified in special provisions 1.4 and 5.2 above is title 10 US Code Chapters 303 and 3012. The information is collected as a notice of visitation in order that necessary access lists may be formulated prior to arrival of visitors. The information is transferred to access lists and/or cards which are maintained at entry control points. Disclosure of the information is voluntary, however, failure to provide will delay or preclude access to the installation.

SECTION 02233

GRADED-CRUSHED-AGGREGATE BASE COURSE

PART 1 - GENERAL

1. APPLICABLE PUBLICATIONS: The publications listed below form a part of this specification to the extent referenced. The publications are referred to in the text by basic designation only.

1.1 Military Standards (Mil. Std.):

MIL-STD-619B	Unified Soil Classification System for Roads, Airfields, Embankments and Foundations
MIL-STD-621A & Notices 1 & 2	Test Method for Pavement Subgrade, Subbase, and Base-Course Materials

1.2 American Society for Testing and Materials (ASTM) Publications:

C 29-78	Unit Weight and Voids in Aggregate
C 88-83	Soundness of Aggregates by Use of Sodium Sulfate or Magnesium Sulfate
C 117-84	Materials Finer Than 75-um (No. 200) Sieve in Mineral Aggregates by Washing
C 131-81	Resistance to Degradation of Small-Size Coarse Aggregate by Abrasion and Impact in the Los Angeles Machine
C 136-84	Sieve Analysis of Fine and Coarse Aggregates
D 75-82	Sampling Aggregates
D 1556-82	Density of Soil in Place by the Sand-Cone Method
D 2167-66 (R 1977)	Density of Soil in Place by the Rubber-Balloon Method
D 2922-81	Density of Soil and Soil-Aggregate in Place by Nuclear Methods (Shallow Depth)
D 3017-78	Moisture Content of Soil and Soil-Aggregate in Place by Nuclear Methods (Shallow Depth)

2. DEGREE OF COMPACTION: Degree of compaction is a percentage of the maximum density obtained by the test procedure presented in MIL-STD-621, Method 100, compaction effort designation CE 55, abbreviated herein as percent CE 55 maximum density.

3. EQUIPMENT: All plant, equipment, and tools used in the performance of the work will be subject to approval before the work is started and shall be maintained in satisfactory working condition at all times. The equipment shall be adequate and shall have the capability of producing the required compaction, meeting grade controls, thickness control, and smoothness requirements as set forth herein.

4. SAMPLING AND TESTING: Sampling and testing shall be the responsibility of the Contractor. Sampling and testing shall be performed by an approved commercial testing laboratory, or by the Contractor subject to approval. If the Contractor elects to establish testing facilities of his own, approval of such facilities shall be based on compliance with ASTM E 548, and no work requiring testing will be permitted until the Contractor's facilities have been inspected and approved. The first inspection of the facilities shall be at the expense of the Government and any subsequent inspections required because of failure of the first inspection will be at the expense of the Contractor. Such costs will be deducted from the total amount due the Contractor. The materials shall be tested to establish compliance with the specified requirements. Copies of test results shall be furnished to the Contracting Officer.

4.1 Samples: Samples for material gradation, liquid limit, and plastic limit tests shall be taken in conformance with ASTM D 75. When deemed necessary, the sampling will be observed by the Contracting Officer.

4.2 Tests:

4.2.1 Sieve Analyses: Sieve analyses shall be made in conformance with ASTM C 117 and C 136. Sieves shall conform to ASTM E 11.

5. WEATHER LIMITATION: Base courses shall be placed when the atmospheric temperature is above 35 degrees F. Areas of completed base course that are damaged by freezing, rainfall, or other weather conditions shall be corrected to meet specified requirement.

6. WAYBILLS AND DELIVERY TICKETS: Copies of waybills and delivery tickets shall be submitted during the progress of the work. Before the final statement is allowed, the Contractor shall file certified waybills and certified delivery tickets for all aggregates actually used.

7. MEASUREMENT: The quantity of graded-crushed-aggregate base course completed and accepted will be measured in square yards. The quantity of graded-crushed-aggregate base course completed and accepted will be measured in cubic yards. The volume of graded-crushed-aggregate base course in place and accepted will be determined by the average joint thickness obtained in accordance with paragraph THICKNESS CONTROL and the dimensions indicated. The tonnage of material used for stabilization will be the number of 2000-pound tons of aggregate, determined by the Contracting Officer, placed and accepted in the completed course or place

in authorized stockpiles. Deductions will be made for any material wasted, unused, rejected, or used for the convenience of the Contractor, and for water exceeding the specified amount at time of weighing.

8. N/A

PART 2 - PRODUCTS

9. AGGREGATES: Aggregates shall consist of clean, sound, durable particles of crushed stone, crushed slag, or crushed gravel, and screenings. The Contractor shall obtain materials that meet the specification and can be used to meet the grade and smoothness requirements specified herein, after all compaction and proof-rolling operations have been completed. Slag shall be an air-cooled, blast-furnace product having a dry weight of not less than 65 pcf as determined by ASTM C 29. The aggregates shall be free of silt and clay as defined by MIL-STD-619, vegetable matter, and other objectionable materials or coatings. The portion retained on the No. 4 sieve shall be known as coarse aggregate; that portion passing the No. 4 sieve shall be known as fine aggregate.

9.1 Fine Aggregate: Fine aggregate shall be angular particles produced by crushing stone, slag, or gravel that meets the requirements for wear and soundness specified for coarse aggregate. Fine aggregate shall be produced by crushing only particles larger than 0.187 inch (No. 4 sieve) in size. The fine aggregate shall contain at least 90 percent by weight of particles having two or more freshly fractured faces in the portion passing the No. 4 sieve and retained on the No. 10 sieve; and in the portion passing the No. 10 sieve and retained on the No. 40 sieve. Fine aggregate shall be manufactured from gravel particles 95 percent of which by weight are retained on the 1/2-inch sieve.

Section 9.2 Course Aggregates: Course aggregates shall be angular particles of uniform density. The course aggregates shall have a loss not greater than magnesium sulfate in accordance with ASTM C88. The course aggregates shall have a percentage of wear not to exceed 40% after 500 revolutions as determined by ASTM C131. The percentage of flat and/or elongated particles shall not exceed 20 in the fraction retained on the 1/2 inch sieve and in the fraction passing the 1/2 inch sieve. A flat particle is one having the ratio of width to thickness ≤ 3 ; an elongated particle is one having a ratio of length to width ≤ 3 . When the course aggregate is supplied from more than one source, aggregates from each source shall meet the requirements set forth herein. Crushed gravel shall be manufactured from gravel particles 90 percent of which by weight are retained on the maximum-size sieve listed in Table I. In the portion retained on each sieve specified, the crushed gravel shall contain at least 90 percent by weight of crushed pieces having two or more freshly fractured faces with the area of each face being at least equal to 75 percent of the smallest midsectional area of the piece. When two fractures are contiguous, the angle between planes of the fractures must be at least 30 degrees in order to count as two fractured faces.

Section 9.3 Gradation Requirements: Gradation requirements specified herein shall apply to the completed base course. The aggregates shall have a maximum size of 1 1/2 inches and be graded continuously well within the limits specified in Table I. Sieves shall conform to ASTM E 11.

TABLE I. GRADATION OF AGGREGATES

Percentage by Weight Passing Square-Mesh Sieve

Sieve Designation	No. 1	No. 2	No. 3
2-inch	100	---	---
1-1/2 inch	70-100	100	---
1-inch	45-80	60-100	100
1/2-inch	30-60	30-65	40-70
No. 4	20-50	20-50	20-50
No. 10	15-40	15-40	15-40
No. 40	5-25	5-25	5-25
No. 200	0-10	0-10	0-10

Note 1: Particles having diameters less than 0.02 mm shall not be in excess of 3 percent by weight of the total sample tested.

Note 2: The values are based on aggregates of uniform specific gravity, and percentages passing the various sieves may require appropriate correction by the Contracting Officer when aggregates of varying specific gravities are used.

PART 3 - EXECUTION

10. OPERATION OF AGGREGATE SOURCES: Clearing, stripping, and excavating shall be the responsibility of the Contractor. The aggregate sources shall be operated in such a manner as to produce the quantity and quality of base course materials meeting these specification requirements in the specified time limits. Upon completion of the work, the aggregate sources on Government reservations shall be conditioned to drain readily and be left in a satisfactory condition. Aggregate sources on private lands shall be conditioned in agreement with local laws or authorities.

11. STOCKPILING MATERIAL: Prior to stockpiling of material, storage sites shall be cleared and leveled by the Contractor. All materials, including approved material available from excavation and grading, shall be stockpiled in the manner and at the locations designated. Aggregates shall be stockpiled on the cleared and leveled areas designated by the

GRADED-CRUSHED-AGGREGATE BASE COURSE

Contracting Officer so as to prevent segregation. Materials obtained from different sources shall be stockpiled separately.

12. GRADE CONTROL: During construction, the lines and grades including crown and cross slope indicated for the base course shall be maintained by means of line and grade stakes placed by the Contractor in accordance with the SPECIAL PROVISIONS.

13. PLACING: The mixed material shall be placed on the prepared subgrade or subbase in layers of uniform thickness with an approved spreader. When a compacted layer 6 inches or less in thickness is required, the material shall be placed in a single layer. When a compacted layer in excess of 6 inches is required, the material shall be placed in layers of equal thickness. No layer shall exceed 6 inches or be less than 3 inches when compacted. The layers shall be so placed that when compacted they will be true to the grades or levels required with the least possible surface disturbance.

14. COMPACTION:

14.1 Requirements: Each layer of base course including shoulders shall be compacted as specified to produce an average field-measured density, through the full depth, of at least 100 percent of CE 55 maximum density obtained in the laboratory. Water content shall be maintained during the compaction procedure and subsequent proof rolling of designated areas such that the water content is within plus or minus 5 percent of optimum water content as determined from laboratory tests as specified in density test procedures listed in paragraph SAMPLING AND TESTING. In all places not accessible to the rollers, the base course material shall be compacted with mechanical tampers.

14.2 Finishing: The surface of top layer of base course shall be finished after final compaction, and proof rolled, where required, by cutting any overbuild to grade and rolling with a steel-wheeled roller. In no case will thin layers of material be added to the top layer of base course to meet grade. If the elevation of top layer of base course is 1/2 inch or more below the grade, the top layer of base shall be scarified to a depth of at least 3 inches, new material shall be added, and the layer shall be blended and recompactd to bring to grade. Adjustments in rolling and finishing procedures shall be made as may be directed to obtain grades. Material found unacceptable shall be removed and replaced, as directed, with acceptable material.

15. SMOOTHNESS TEST: The surface of the top layer shall not deviate more than 3/8 inch when tested with a 10-foot straightedge applied parallel with and at right angles to the centerline of the area to be paved. Deviations exceeding 3/8 inch shall be corrected as directed.

16. THICKNESS CONTROL: The completed thickness of the base course shall be within 1/2 inch of the thickness indicated. The thickness of the base course shall be measured at intervals providing at least one measurement for at least each 500 square yards of base course.

END OF SECTION 02233

SECTION 03300
CONCRETE FOR BUILDING CONSTRUCTION

1. APPLICABLE PUBLICATIONS: The publications listed below form a part of this specification to the extent referenced. The publications are referred to in the text by the basic designation only.

1.1 Federal Specifications (Fed. Spec.):

SS-S-1401C	Sealant, Joint, Non-Jet-Fuel-Resistant, Hot-Applied, for Portland Cement and Asphalt Concrete Pavements
CCC-C-467C	Cloth, Burlap, Jute (or Kenaf)

1.2 U.S. Department of Commerce, National Bureau of Standards (NBS) Product Standards:

PS 1-83	Construction and Industrial Plywood
PS 58-73	Basic Hardboard

1.3 American Concrete Institute (ACI) Standards:

211.1-81	Selecting Proportions for Normal, Heavyweight, and Mass Concrete
301-84	Structural Concrete for Buildings
318-83	Building Code Requirements for Reinforced Concrete

Commentary on Building Code Requirements for Reinforced Concrete (ACI-318-83) (First Printing, November 1983)

SP-66	ACI Detailing Manual - 1980
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1.4 American Iron and Steel Institute (AISI) Specification:

Specification for the Design of Cold-Formed Steel Structural Members (September 3, 1980, with Errata)

1.5 American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) Publication:

Handbook, Fundamentals (1981 and Errata)

1.6 American Society for Testing and Materials (ASTM) Publications:

A 82-79	Cold-Drawn Steel Wire for Concrete Reinforcement
A 615-84a	Deformed and Plain Billet-Steel Bars for Concrete Reinforcement
A 616-84	Rail-Steel Deformed and Plain Bars for Concrete Reinforcement
C 31-84	Making and Curing Concrete Test Specimens in the Field
C 33-84	Concrete Aggregates
C 39-83b	Compressive Strength of Cylindrical Concrete Specimens
C 42-84a	Obtaining and Testing Drilled Cores and Sawed Beams of Concrete
C 78-84	Flexural Strength of Concrete (Using Simple Beam With Third-Point Loading)
C 94-83	Ready-Mixed Concrete
C 109-80	Compressive Strength of Hydraulic Cement Mortars (Using 2-in. or 50-mm Cube Specimens)
C 143-78	Slump of Portland Cement Concrete
C 150-84	Portland Cement
C 165-83	Measuring Compressive Properties of Thermal Insulation
C 171-69 (R 1980)	Sheet Materials for Curing Concrete
C 172-82	Sampling Freshly Mixed Concrete
C 173-78	Air Content of Freshly Mixed Concrete by the Volumetric Method
C 192-81	Making and Curing Concrete Test Specimens in the Laboratory

- C 231-82 Air Content of Freshly Mixed Concrete
by the Pressure Method
- C 309-81 Liquid Membrane-Forming Compounds
for Curing Concrete
- D 98-80 Calcium Chloride
- D 1751-83 Preformed Expansion Joint Filler for
Concrete Paving and Structural
Construction (Nonextruding and
Resilient Bituminous Types)
- E 96-80 Water Vapor Transmission of Materials
- 1.7 American Welding Society, Inc. (AWS) Publication:
D1.4-79 Structural Welding Code - Reinforcing
Steel
- 1.8 National Ready-Mixed Concrete Association (NRMCA) Publication:
Certification of Ready-Mixed Concrete Production Facilities
(Jan 1, 1976)
- 1.9 Truck Mixer Manufacturers Bureau (TMMB) Publication:
Truck Mixer and Agitator Standards (Jan 1, 1981; 10th Rev)
- 2.

3. SUBMITTALS:

3.1 Certificates of Compliance: Certificates of compliance attesting that abrasive aggregate, reinforcement, ^{etc.} and premolded joint filler meet the requirements specified shall be furnished in accordance with the SPECIAL PROVISIONS. Certified copies of laboratory test reports, including all

test data, shall be submitted for aggregate, admixtures, cement, pozzolan, reinforcement, curing compound, and joint sealer. These tests shall be made by an approved commercial laboratory or by a laboratory maintained by the manufacturers of the material.

3.3 Submitting Mix Proportions: Prior to commencing operations, the Contractor shall furnish a statement giving the maximum nominal coarse aggregate size and the proportions of all ingredients that will be used in the manufacture of each strength of concrete, lightweight concrete, and insulating concrete proposed for use. Aggregate weights shall be based on the saturated surface dry condition. The statement shall be accompanied by test results from an independent commercial testing laboratory, attesting that the proportions selected will produce concrete of the qualities indicated. No substitutions shall be made in the materials used in the work without additional tests to show that the quality of the concrete is satisfactory.

4. STORAGE OF MATERIALS: Cement and pozzolan shall be stored in weathertight buildings, bins, or silos which will exclude moisture and contaminants. Aggregate stockpiles shall be arranged and used in a manner to avoid excessive segregation and to prevent contamination with other materials or with other sizes of aggregates. Reinforcing bars and accessories shall be stored above the ground on platforms, skids or other supports. Other materials shall be stored in such a manner as to avoid contamination and deterioration.

5. MATERIALS: Materials shall conform to the following requirements:

5.1 Admixtures:

5.1.1 Air-entraining admixture shall conform to ASTM C 260.

5.1.2 Accelerating admixture shall be calcium chloride conforming to ASTM D 98, Type 1 or 2.

5.1.3 Water-reducing or retarding admixtures shall conform to ASTM C 494, Type A, B or D.

5.2 Aggregates:

5.2.1 Abrasive aggregate shall consist of not less than 55 percent aluminum oxide or silicon-carbide abrasive ceramically bonded together to form a homogenous material sufficiently porous to provide a good bond with portland cement paste or shall be crushed, factory-graded emery aggregate, cubical or polyhedral in form, consisting of not less than 45 percent aluminum oxide and not less than 25 percent ferric oxide. The aggregate shall be well graded from particles retained on the No. 30 sieve to particles passing the No. 8 sieve.

5.2.2 Aggregates for normal weight concrete shall conform to ASTM C 33. Maximum nominal aggregate size shall be 3/4 inch.

5.4 Cementing Materials: Only one source and type of cement shall be used for exposed concrete surfaces of any structure. Pozzolan may be blended with Type I or II portland cement. Only one class of pozzolan, from a single source, may be used.

5.4.1 Portland cement shall conform to ASTM C 150, Type I or II.

5.4.2 High-early-strength portland cement shall conform to ASTM C 150, Type III.

5.4.3 Portland blast-furnace-slag cement shall conform to ASTM C 595, Type IS.

5.4.4 Portland-pozzolan cement shall conform to ASTM C 595, Type IP.

5.4.5 Slag cement shall conform to ASTM C 595, Type S.

5.4.6 Pozzolan shall conform to ASTM C 618.

5.5 Curing Materials:

5.5.1 Impervious sheet materials shall conform to ASTM C 171, type optional, except that polyethylene film, if used, shall be white opaque.

5.5.2 Burlap shall conform to Fed. Spec. CCC-C-467.

5.5.3 Membrane-forming curing compound shall conform to ASTM C 309, Type 1-D, Class A or B.

5.6 Epoxy Sealant: The floor sealant shall be an epoxy sealant with inert abrasives added for skid resistance. It shall be made to material quality of Vitricon Model "ViPoxy 260" or equal as follows:

Comply with Federal Spec. TT-C-550C

5.7 Joint Filler Strips:

5.7.1 Expansion-joint filler, premolded shall conform to ASTM D 1751 or ASTM D 1752, 3/8-inch thick, unless otherwise indicated.

5.8 Joint Sealants:

5.8.1 Hot-poured type shall conform to Fed. Spec. SS-S-1401.

5.9 Reinforcement:

5.9.1 Deformed bars shall conform to ASTM A 615.

5.10 Vapor Barrier: Polyethylene sheeting shall be at least 6 mils thick. Other similar materials shall have a vapor permeance rating not exceeding 0.5 perm as determined by ASTM E 96, Procedure E.

5.11 Water: Water shall be potable, except that non-potable water may be used if it produces mortar cubes having 7- and 28-day strengths at least 90 percent of the strength of similar specimens made with water from a municipal supply. The strength comparison shall be made on mortars, identical except for mixing water, prepared and tested in accordance with ASTM C 109. Water for curing shall not contain any substance injurious to concrete, or which causes staining.

6. CONCRETE STRENGTH AND USAGE:

6.1 Strength Requirements: Concrete for all work shall have a compressive strength of 4000 psi at 28 days as indicated on drawings.

6.2 High-Early Strength: Concrete made with high-early strength cement shall have a 7-day strength equal to the specified 28-day strength for concrete made with Type I or II portland cement.

7. PROPORTIONING OF NORMAL WEIGHT CONCRETE MIXES: Mixes shall be proportioned by weight, although water may be batched by volume if desired. Trial mixes and testing to meet requirements of the strengths of concrete specified shall be the responsibility of the Contractor. The design mix shall contain materials representative of those proposed for use in the work.

7.1 Admixtures: Concrete exposed to freeze-thaw-cycles shall contain

from 5 to 7 percent entrained air as determined by ASTM C 231. Air-entrained concrete also may be used in other parts of the work. Water reducing or set retarding admixtures may be used when approved provided the cement content is not reduced.

7.2 Slump: Slump shall be determined in accordance with ASTM C 143, and shall be within the following limits:

<u>Element</u>	<u>Slump, Inches</u>	
	<u>Minimum</u>	<u>Maximum</u>
Walls, columns and grade beams, 10-inch maximum thickness	2	4
Floors, exterior slabs and other building construction	1	3

Where pumping is approved, the maximum slump may be increased to 5 inches, except for floors and exterior slabs.

7.3 Mix Design: Trial mixes having proportions, air content and slump suitable for the work shall be based on ACI 211.1, using at least three different water-cement ratios which will produce a range of strength encompassing that required for the work. The mixes shall be designed for maximum permitted air and slump. For each water-cement ratio, at least three test cylinders for each test age shall be made and cured in accordance with ASTM C 192. They shall be tested at 7 and 28 days in accordance with ASTM C 39 or ASTM C 78, as applicable. From these test results, a curve shall be plotted showing the relationship between water-cement ratio and strength. For each strength of concrete, the maximum allowable water-cement ratio shall be that shown by these curves to produce an average compressive or flexural strength 15 percent greater than specified.

8. SAMPLING AND TESTING DURING CONSTRUCTION:

8.1 General: Testing is the responsibility of the Contractor and shall be performed by an approved testing agency at no additional cost to the Government.

8.2 Cement: For projects requiring more than 1,200 cubic yards of concrete, cement shall be sampled either at the mill or ready-mixed concrete plant. No cement shall be used until notice has been given by the Contracting Officer that the test results are satisfactory. Cement that has been stored, other than in bins at the mills, for more than 4 months after being tested shall be retested before use. Such cement and any other cement found by test to be unsuitable shall be removed from the mixing site.

8.3 Pozzolan: For projects requiring more than 1,200 cubic yards of concrete, pozzolan shall be sampled either at the source or ready-mixed concrete plant. Approval for use will be based on compliance with the

7-day lime-pozzolan strength requirements and other physical, chemical and uniformity requirements for which tests can be completed by the time the 7-day lime-pozzolan strength test is completed. Approval for use on the above basis will be contingent on continuing compliance with other requirements of the specifications. Pozzolan that is damaged in shipment, handling or storage shall be promptly removed from the mixing site.

8.4 Aggregates: Aggregates shall be tested as prescribed in ASTM C 33.

8.5 Admixtures: Admixtures which have been in storage at the project site for longer than 6 months or which have been subjected to freezing shall not be used until proved by retest to be satisfactory.

8.6 Tests on Fresh Concrete: Tests for slump and air content shall be made on concrete sampled at the form.

8.7 Concrete Strength Tests:

8.7.1 Frequency of Testing: The Contractor shall provide, for strength tests, concrete specimens. Samples for strength tests of concrete placed each day shall be taken not less than once a day nor less than once for each 250 cubic yards of concrete. When the total quantity of a given strength of concrete is less than 100 cubic yards, the strength tests may be waived by the Contracting Officer if adequate evidence of satisfactory strength is provided.

8.7.2 Testing Procedures: The samples for strength tests shall be taken in accordance with ASTM C 172. Cylinders and beams for acceptance tests shall be molded and cured in accordance with ASTM C 31. Cylinders shall be tested in accordance with ASTM C 39 and beams shall be tested in accordance with ASTM C 78, by an approved testing laboratory at no cost to the Government. Each strength test result shall be the average of two cylinders from the same concrete sample tested at 28 days, unless otherwise specified or approved.

8.7.3 Evaluation of Results: Concrete specified on the basis of comprehensive strength will be considered satisfactory if the averages of all sets of three consecutive strength test results equal or exceed the specified strength and no individual strength test result falls below the required strength by more than 500 psi. For flexural strength concrete, the strength level of the concrete will be considered satisfactory if the averages of all sets of five consecutive strength test results equal or exceed the required flexural strength, and not more than 20 percent of the strength test results fall below the required strength. If any of these requirements are not met, steps shall be taken immediately to raise the strength level.

8.7.4 Strength Tests: Strength tests of field cured specimens shall be made when directed, to check the adequacy of curing and protection of concrete in the structure, following the procedures in Section 8.4 of ASTM C 31.

8.8 Tests of Concrete in the Structure: When the results of the strength tests on control cylinders indicate that the concrete in place does not meet specification requirements, or if tests of field-cured cylinders indicate deficiencies in protection and curing, cores shall be drilled and tested in accordance with ASTM C 42. The cores shall be tested by and at the expense of the Contractor. If the results of the tests indicate that the concrete in place conforms to the specified strength within the tolerances stated in ACI 318, the cost of the tests will be borne by the Government. If the results indicate that the concrete does not meet the specified strength within the tolerances stated in ACI 318, the cost of the tests will be borne by the Contractor; in this case the Contractor shall correct the deficiency or he may submit a proposal for a load test. If this proposal approved, the load test shall be conducted by the Contractor at his expense, and the test results will be evaluated by the Contracting Officer in conformance with ACI 318 and Commentary on Building Code Requirements for Reinforced Concrete (ACI-318-83). If any concrete fails to meet all of the requirements of the load test, the deficiency shall be corrected in a manner satisfactory to the Contracting Officer and at no additional cost to the Government.

9. FORM WORK: Form work shall be designed and constructed so as to insure that the finished concrete members will conform accurately to the indicated dimensions, lines and elevations.

9.1 Design: Studs and wales shall be spaced to prevent deflection of form sheeting. Forms shall be sufficiently tight to prevent leakage of grout and cement past during placing of the concrete. The bottom of forms shall be accurately fitted and securely attached to the preceding lift so as to assure smooth, completed surfaces free from irregularities and offsets. Joints between form work panels shall be arranged vertically and horizontally to match architectural lines, vertical control joints and construction joints. Temporary openings shall be provided in wall and column forms where needed to facilitate cleaning and inspection. Forms shall be readily removeable without impact or damage to the concrete.

9.2 Concrete Surfaces Not Exposed to View: Concrete surfaces which will not be exposed to view in the finished work shall be formed with sound, tight lumber or other material producing equivalent finish.

9.3 Form Ties: Form ties shall be factory-fabricated, removeable or snap-off metal ties of a design that will not permit form deflection and will not spall concrete upon removal. Solid backing shall be provided for each tie. Ties shall be fitted with devices that will leave holes in the concrete surface not less than 1/4 inch nor more than 1 inch in diameter and not more than 1 inch deep. That proportion of the tie remaining permanently in the concrete shall not project beyond the surface that will be exposed, painted, dampproofed, or will receive direct applications of plaster. Bolts and rods that are to be completely withdrawn shall be coated with a nonstaining bond breaker.

10. REINFORCEMENT: Reinforcement shall be fabricated to the shapes and dimensions shown, and shall be placed where indicated. Reinforcing

steel shall not be bent or straightened in a manner injurious to steel or to the concrete. Bars with kinks or bends not shown on the drawings shall not be placed. The use of heat to bend or straighten reinforcing steel will be permitted only if the entire operation is approved. Bars shall be moved as necessary to avoid interference with other reinforcing steel, conduits, or embedded items. If bars are moved more than one bar diameter, the resulting arrangement of bars including additional bars necessary to meet structural requirements shall be approved before concrete is placed. In slabs, beams, and girders, reinforcing steel shall not be spliced at points of maximum stress unless otherwise indicated. Laps or splices shall conform to ACI 318. Welding shall comply with AWS D1.4. Tack welding to, or of, reinforcement is prohibited. Reinforcement shall be free from loose or flaky rust and mill scale, except tight mill scale, or any other coating which might reduce the bond to concrete. After any substantial delay in the work previously placed, reinforcing steel left for future bonding shall be inspected and cleaned.

10.1 Reinforcement Detailing and Placement: Reinforcement detailing and placement shall conform to ACI 318, except where otherwise indicated.

10.2 Supports Supports shall be provided in conformance with the ACI SP-66 detailing manual, unless otherwise indicated or specified. Wire ties, when used, shall be 16-gage black annealed wire and shall have ends pointing away from the form. Bar supports for formed surfaces exposed to view shall be plastic protected wire, stainless steel or precast concrete. Precast concrete supports shall be wedge-shaped, not larger than 3-1/2 by 3-1/2 inches, of thickness necessary to produce the required concrete cover, and with an embedded hooked tie wire for anchorage. If the formed surface is exposed to view, the concrete shall be the same quality, texture and color as the finish surface. On ground, precast concrete supports shall be used.

12. JOINTS: Reinforcement or other fixed metal items shall not be continuous through expansion joints, or through construction or contraction joints in slabs on grade. Reinforcement shall be 3 inches clear from the joint.

12.2 Premolded Expansion Joint Filler: Premolded expansion joint filler strips shall be used in slabs around columns and elsewhere as shown. The filler shall extend the full slab depth, unless otherwise indicated. The edges of the joint shall be neatly finished with an edging tool of 1/8-inch radius, except where a resilient floor surface will be applied. Where the joint is to receive a sealant, the filler strips shall be installed at the proper level below the finished floor with a slightly tapered, dressed-and-oiled wood strip temporarily secured to the top thereof to form a recess 3/4-inch deep to be filled with sealant. The wood strip shall be removed after the concrete has set.

13. PREPARATIONS FOR PLACING CONCRETE:

13.1 General: Water shall be removed from the excavation before placing concrete. Any flow of water shall be diverted through side drains without washing over freshly deposited concrete. Hardened concrete, debris and foreign material shall be removed from the interior of forms. Runways shall be provided for wheeled concrete-handling equipment; such equipment shall not be wheeled over reinforcement nor shall runways be supported on reinforcement. Reinforcement and embedded items shall be inspected and forms shall be retightened and checked, before placing concrete.

13.2 Concrete on Earth and Rock Foundations:

Care shall be taken not to disturb the prepared foundation. Surfaces shall be clean and free from frost, ice, mud and water.

13.2.1 Vapor barrier material shall be laid over dry or pervious surfaces to receive concrete slabs. Concrete footings and exterior may be laid directly on impervious surfaces which are thoroughly moistened but not muddy at the time of concrete placement.

14. BATCHING, MIXING AND TRANSPORTING CONCRETE: Ready-mixed concrete shall be batched, mixed and transported in accordance with ASTM C 94, except as otherwise specified. Truck mixers, agitators and non-agitating units shall comply with TMMB "Truck Mixer and Agitator Standards". Plant equipment and facilities shall conform to NRMCA "Certification of Ready Mixed Concrete Production Facilities".

14.1 Admixtures: Admixtures shall be batched within an accuracy of 3 percent. Where two or more admixtures are used in the same batch, they shall be batched separately and must be compatible.

14.2 Control of Mixing-Water: All materials shall be batched at the plant. However, where approved by the Contracting Officer, water may be added at the jobsite when the slump is less than specified and the water-cement ratio is less than the approved mix design permits. In this case, water may be added to bring the slump within the specified range without exceeding the approved water-cement ratio. The water shall be injected into the mixer under pressure, and the drum or blades turned a minimum of 30 additional revolutions at mixing speed. There shall be no further addition of water to the batch.

14.3 Site-Mixed Concrete: Site-mixed concrete shall comply with ACI 301.

15. CONVEYING CONCRETE: Concrete shall be conveyed from mixer to forms as rapidly as possible and within the time interval specified in paragraph PLACING CONCRETE by methods which will prevent segregation or loss of ingredients.

15.1 Chutes: When concrete can be placed directly from a truck mixer or other transporting equipment, the chutes attached to this equipment may be used. Separate chutes will not be permitted except when specifically approved.

15.2 Buckets: The bucket design shall be such that concrete of the required slump can be readily discharged. Bucket gates shall be essentially grout tight when closed. The bucket shall provide means for positive regulations of the amount and rate of deposit of concrete in each dumping position.

15.3 Belt Conveyors: Belt conveyors may be used when approved. Conveyors shall be designed and operated to assure a uniform flow of concrete to the final place of deposit without segregation or loss of mortar, and shall be provided with positive means for preventing segregation of the concrete at transfer points and point of placement.

15.4 Pumps: Concrete may be conveyed by positive displacement pumps when approved. The concrete mix shall be designed for pumping. The pump shall be the piston or squeeze pressure type. The pipeline shall be steel pipe or heavy duty flexible hose. The inside diameter of the pipe shall be at least three times the maximum size of the coarse aggregate. The distance to be pumped shall not exceed the limits recommended by the pump manufacturer. The concrete shall be supplied to the pump continuously. When pumping is completed, the concrete remaining in the pipeline shall be ejected without contaminating the concrete in place. After each operation, the equipment shall be thoroughly cleaned and flushing water shall be wasted outside the forms.

16. PLACING CONCRETE:

16.1 General: Concrete shall be handled from mixer to forms in a continuous manner until the approved unit of operation is completed. Placing will not be permitted when the sun, heat, wind, or limitations of facilities furnished by the Contractor prevent proper consolidation, finishing and curing. Concrete shall be deposited as close as possible

to its final position in the forms, and there shall be no vertical drop greater than 5 feet except where suitable equipment is provided to prevent segregation and where specifically authorized. Depositing of the concrete shall be so regulated that it will be effectively consolidated in horizontal layers not more than 12-inches thick, except that all slabs shall be placed in a single layer. Concrete to receive other construction shall be screeded to the proper level to avoid excessive shimming or grouting. Conduits and pipes shall not be embedded in concrete except where specifically indicated or approved.

16.2 Consolidation: Immediately after placing, each layer of concrete shall be consolidated by internal vibrators. The vibrators shall at all times be adequate in effectiveness and number to properly consolidate the concrete; a spare vibrator shall be kept at the jobsite during all concrete placing operations. The vibrations shall have a frequency of not less than 8000 vibrations per minute, and the head diameter and amplitude shall be appropriate for the concrete mix being placed. Vibrators shall be inserted vertically at uniform spacing over the area of placement. The distance between insertions shall be approximately 1-1/2 times the radius of action of the vibrator so that the area being vibrated will overlap the adjacent just-vibrated area by a few inches. The vibrator shall penetrate rapidly to the bottom of the layer and at least 6 inches into the preceding layer if there is such. It shall be held stationary until the concrete is consolidated and then withdrawn slowly. The use of form vibrators must be specifically approved. Vibrators shall not be used to transport concrete within the forms. Slabs 4 inches and less in thickness shall not be consolidated by internal vibration; properly designed vibrating screeds or other approved technique shall be used.

16.3 Time Interval Between Mixing and Placing: Mixed concrete which is transported in truck mixers or agitators, or concrete which is truck mixed, shall be discharged within 1-1/2 hours after introduction of the cement to the aggregates, except that when the concrete temperature exceeds 85 degrees F. this time shall be reduced to 45 minutes. Concrete shall be placed within 15 minutes after it has been discharged from the truck.

16.4 Cold Weather Requirements: Special protection measures, approved by the Contracting Officer, shall be used if freezing temperatures are anticipated before the expiration of the specified curing period. The ambient temperature of the space adjacent to the concrete placement and surfaces to receive concrete shall be maintained at not less than 40 degrees F. The temperature of the concrete when placed shall be not less than 50 degrees F. nor more than 75 degrees F. Heating of the mixing water or aggregate will be required to regulate the concrete placing temperature. Materials entering the mixer shall be free from ice, snow, or frozen lumps. Salt, chemicals or other materials shall not be incorporated in the concrete to prevent freezing. Upon written approval, calcium chloride may be used as an accelerator. The amount shall not exceed 2 percent by weight of the cement, and it shall be batched in solution form. Calcium chloride shall not be used where concrete will be in contact with aluminum or zinc-coated items, or where concrete should be sulfate resistant or will be prestressed.

16.5 Warm Weather Requirements: Concrete placed during warm weather shall have the lowest temperature practicable to produce under the conditions. The temperature of the concrete as placed shall not exceed 85 degrees F. except where an approved retarder is used. The mixing water and/or aggregates shall be cooled, if necessary, to maintain a satisfactory placing temperature. In no case shall the placing temperature exceed 95 degrees F.

17. TREATMENT OF FORMED SURFACES: Within 24 hours after forms are removed, surface defects shall be remedied as specified herein. For permanently exposed surfaces, fins shall be removed and holes left by removal of tie rods shall be reamed and filled by dry-packing. Holes left after the removal of form ties shall be cleaned and filled with concrete patching mortar. For all surfaces, honeycomb and other defective areas, including holes left by removal of tie rods, shall be cut back to sound concrete and to a depth of not less than 1 inch. The edges of the cut shall be perpendicular to the surface of the concrete. The prepared area shall be dampened and brush-coated with neat cement grout. The repair shall then be made using a stiff mortar, preshrunk by allowing the mixed mortar to stand for 45 minutes and then remixed, thoroughly tamped into place; in lieu of hand patching, a small shotcrete gun may be used. Patches shall be finished flush with adjacent surfaces. For surfaces permanently exposed to view, the cement used shall be a blend of job cement with white cement proportioned so that the final color after curing will be the same as the adjacent concrete. The temperature of concrete, mortar patching material and ambient air shall be above 50 degrees F. while making the repair and during the ensuing 72 hours moist curing period. Concrete with excessive honeycomb, or other defects which affect the strength of the member, will be rejected or the defects shall be corrected as directed by the Contracting Officer.

18. FLOOR SLABS ON GRADE:

18.1 Capillary Vapor Barrier: Immediately before placing concrete, the capillary water barrier or subgrade under slabs in buildings shall be covered with a vapor barrier. Punctures and tears during subsequent operations shall be patched. Edges shall be lapped not less than 4 inches and ends not less than 6 inches. Patches and lapped joints shall be sealed with a pressure-sensitive adhesive or pressure-sensitive tape, not less than 2 inches wide and compatible with the membrane.

18.2 Placement: Placement of concrete shall be continuous so that each unit of operation will be monolithic. Concrete shall be consolidated, screeded to grade, and prepared for the specified finish. Jointing shall be as shown on the drawings. be

18.4 Construction and Expansion Joints: Construction and expansion joints shall be finished with an edging tool having 1/8-inch radius, except where a floor covering will be applied.

18.5 Sealing Construction and Expansion Joints: Sealing contraction and expansion joints in slabs shall be filled with [Fed. Spec. SS-S-1401] joint sealant, except where floor covering is required. Joint surfaces shall be clean, dry and free of oil or other foreign material. Joint sealant shall be applied as recommended by the manufacturer of the sealant. All joints shall be completely filled with sealer, which shall be well bonded to the concrete and free from voids.

19. FINISHING CONCRETE FLOOR SLABS: In cold weather, the air temperature in areas where concrete is being finished shall not be less than 50 degrees F. In hot windy weather, a covering or windbreaks shall be provided as necessary to prevent premature setting and drying of the surface. The dusting of surfaces with dry materials or the addition of water during finishing will not be permitted. Finished surfaces shall be plane, with no deviation greater than 1/8 inch when tested with a 10-foot straightedge.

20.1 Rough Slab Finish: Immediately after consolidation, slabs shall be screeded with straightedges to bring the surface to the required finish level with no coarse aggregate visible. The resulting rough slab finish is suitable to receive fill and mortar setting beds.

20.2 Wood-Float Finish: The screeding shall be followed immediately by darbying or bull floating before bleeding water is present, to bring the surface to a true, even plane. After the concrete has stiffened so that it will withstand a man's weight without imprint and the water sheen has disappeared, it shall be wood floated.

20.3 Steel Trowel Finish: Immediately following the wood floating, the surface shall be steel-trowelled to produce a smooth, dense surface free from blemishes including trowel marks. In lieu of hand finishing, an approved power finishing machine may be used in accordance with the directions of the machine manufacturer. A final hard steel troweling shall be done by hand.

20.4. Epoxy Sealant: Contractor shall apply a textured, skid resistant, two component epoxy coating that gives an abrasive finish. It shall be unaffected by most acids, alkalies, solvents, grease and oils. The coating shall be in accordance with Fed. Spec. TT-C-550-C. Preparation and application shall be done according to manufacturer's recommendation.

21. CURING AND PROTECTION:

21.1 General: All concrete shall be cured by an approved method for the period of time given below:

Type III cement	3 days
Type I, II, IP or IS cement	7 days
Type I or Type II cement blended with pozzolan	12 days

Immediately after placement, concrete shall be protected from premature drying extremes in temperatures, rapid temperature change, mechanical injury and injury from rain and flowing water. All materials and

equipment needed for adequate curing and protection shall be available and at the placement prior to placing concrete. No fire or excessive heat shall be permitted near or in direct contact with the concrete at any time. Curing shall be accomplished by any of the following methods, or combination thereof, as approved.

21.2 Moist Curing: Concrete to be moist-cured shall be maintained continuously wet for the entire curing period. If water or curing materials used stains or discolors concrete surfaces which are to be permanently exposed, the concrete surfaces shall be cleaned. When wooden forms are left in place during curing, they shall be kept wet at all times. If the forms are removed before the end of the curing period, curing shall be carried out as on unformed surfaces, using suitable materials. Horizontal surfaces shall be cured by ponding, by covering with a 2-inch minimum thickness of continuously saturated sand, or by covering with waterproof paper, polyethylene sheet, polyethylene-coated burlap or saturated burlap.

21.3 Membrane Curing: Membrane curing shall not be used on surfaces that are to receive any subsequent treatment depending on adhesion or bonding to the concrete; except a styrene acrylate or chlorinated rubber compound meeting Class B requirements may be used for surfaces which are to be painted or are to receive bituminous roofing or waterproofing, or floors that are to receive adhesive applications of vinyl asbestos tile. Membrane curing compound shall not be used on surfaces that are maintained at curing temperatures with free steam. The curing compound shall be applied to formed surfaces immediately after the forms are removed and prior to any patching or other surface treatment except the cleaning of loose sand, mortar and debris from the surface. The surfaces shall be thoroughly moistened with water and the curing compound shall be applied to slab surfaces as soon as the bleeding water has disappeared, with the top of joints being temporarily sealed to prevent entry of the compound and to prevent moisture loss during the curing period. The compound shall be applied in a one-coat continuous operation by mechanical spraying equipment, at a uniform coverage in accordance with the manufacturer's printed instructions. Concrete surfaces which have been subjected to rainfall within 3 hours after curing compound has been applied shall be resprayed by the method as the coverage herein specified. On surfaces permanently exposed to view, the surface shall be shaded from direct rays of the sun for the duration of the curing period. Surfaces coated with curing compound shall be kept free of foot and vehicular traffic, and from other sources of abrasion and contamination during the curing period.

21.4 Cold Weather: The air and forms in contact with concrete shall be maintained at a temperature above 50 degrees F. for the first 3 days and at a temperature above 32 degrees F. for the remainder of the specified curing period.

END OF SECTION 03300

Section IV

Asphalt Concrete

Asphalt Concrete: Asphalt concrete pavement shall conform to NYS DOT Section 400, Bituminous Pavement, as follows:

Top course: DOT, Table 401.1, Type 7

<u>Screen Size</u>	<u>% Passing</u>	<u>Job Mix TOL. %</u>
1/2"	100	---
1/4"	90-100	---
1/8"	45-70	±6
No. 20	15-40	±7
No. 40	8-27	±7
No. 80	4-16	±4
No. 200	3-6	±2
Asphalt Content, %	6-8	±0.4
Asphalt Cement to be AC-10		
Mixing & Placing Temperature Range (°F):	250-325	

--Compaction as specified.

Section V
PCB Testing

Present floors and seams will be tested IAW 52 FR 10688-10710 PCB Spill Clean-up Policy, Final Rule. This will involve the following:

- a. A statistically based sampling scheme will be used to identify possible contaminated areas inside Bldg 301.
- b. A standard PCB wipe test will be used in sampling.
- c. A NYS certified laboratory will be used for sampling and testing. Standard QA/QC procedures will be used, IAW EPA SW-846, Test Methods for Evaluating Solid Waste, and Other applicable references.
- d. Laboratory will submit written results as well as documentation showing that applicable QA/QC procedures were followed.
- e. Areas which were determined to be contaminated will be resampled and retested after decontamination.

The government will decontaminate or remove and dispose of all PCB contaminated material. Contractor will remove and dispose of only non-contaminated materials.