

BCT Agenda
28 February 2006
1330- 1630 hours
1 March 2006
0830-1130 hours

28 Feb. 2005

Discuss proposed responses to comments for SEAD 121

Discuss SEAD 59 and 71 response to comments

Discuss the Delisting of Seneca Army Depot Activity

SEAD 4 CUG Memo

SEAD 25 and 26 Construction Completion Report

Discuss Ethanol Plant impacts to Seneca Army Depot Activity Clean up effort.

1 March 2006
0830-1130 All (except Parsons)
1230 – 1600 Army Only

Workshop for Seneca Army Depot Activity's Installation Action Plan (IAP)-
"The Path Forward" Army Environmental Center and E & E Inc.

IAP Workshop:

Installation Action Plans (IAPs) outline the total multi-year environmental cleanup program for an installation. The Army cleanup program includes the Defense Environmental Restoration Program (DERP), which is composed of the Installation Restoration Program (IRP) and the Military Munitions Response Program (MMRP), and the Compliance Cleanup Program. BRAC Installations that receive BRAC funding are required to submit an updated IAP annually to the US Army Environmental Center (USAEC). Action plans present an integrated, coordinated approach to achieving the installation's environmental restoration goals. The plans define all cleanup requirements, propose a comprehensive approach to conduct investigations and remedial actions, and identify possible removals and interim remedial actions at an installation.

The intended audience for this guidance is the installation Remedial Project Manager (RPM), their executing Project Managers, stakeholders, the USAEC, and Headquarters Department of the Army (HQDA)

The workshops provide a forum for stakeholders in the cleanup program to discuss and review the overall management, execution, and financial requirements of an installation's environmental cleanup program.

Excavation & Processing of Impacted Material

Reference Flow Diagram & Arrangement Drawings (Revised 2-27-06)

Flow Rate

The project will be worked 8 hrs/day with a 6 hrs effective work day that accounts for normal lost time. The equipment is sized to accommodate 350cy / 6hr processing period and will be operated at 300cy/6hr processing period.

Feed Stock

The material to be processed originates from the high density areas (> 600 anomalies per acre) (1) SEAD 46 -1200 cys (former Small Arms & 3.5" Rocket Range) and (2) SEAD 57 -10,900cys (former EOD range). The excavated material will be stockpiled in 300 cy lots at the processing site.

Based on previous investigations it is anticipated the material will contain 2 to 4% ferrous and non-ferrous material. The majority of the Munitions Debris (MD) is ferrous while the non-ferrous was determined to be fragments of aluminum originating from Slap Flares and fuses. The Explosive Safety Submission prepared by the USACE states the Most Probable Munitions (MPM) at SEAD 57 is the 37 mm MKII projectile with a Net Explosive Weight (NEW) of 0.527 lbs. of TNT. For SEAD 46 the Statement of Work (SOW) states the subsurface objects/anomalies are presumed to be Munitions Debris (MD) only. *This all has to be checked as the MPM is not consistent with what was found during the investigation.*

Excavation:

1. The kick out areas will be initially surveyed for any visible munitions by UXO personal. The survey will be conducted in a systematic manner and MEC will be flagged for removal. If MEC is discovered that is explosively configured the material will be removed and transported to a holding magazine. If MEC is encountered that can't be removed safely by hand all operations will be stopped. All personnel will evacuate to outside the MSD or will be relocated behind appropriate blast protection. ~~The MEC will be then be detonated in place by UXO personnel. Is this correct?~~
2. Once the initial survey is complete and all visible MEC is cleared standing vegetation will be mowed by a rotary mower which has been hardened in accordance with [redacted] standard.
3. The high density areas will then be laid out in 100' grids that are tied to the Seneca base coordinate system. Each grid will be shown on the as-built drawings and will be the basis of the tracking system for all removal activities.
4. Excavation will then proceed with a hydraulic excavator equipped with a smooth edge ditch bucket. The excavator will be hardened in accordance with [redacted] standard.

The areas will be excavated in 6" lifts and the material will be loaded onto tandem trucks for transportation to the storage area adjacent to the processing equipment line. Each grid totals 185 cy's so 1.6 grids will be excavated each day to maintain the 300 cy/ day process rate.

5. This activity will be constantly observed by a UXO technician who will monitor the excavation area for any MEC. If MEC is encountered that is explosively configured it will be removed by hand and taken to a holding magazine for further deposition. If MEC is encountered that can't be removed safely by hand all operations will be stopped. All personnel will evacuate to outside the MSD or will be relocated behind appropriate blast protection. ~~The MEC will be than be detonated in place by UXO personnel. Is this correct??~~
6. When the excavation (top 6") is complete UXO personnel will scan _____
~~This needs to be completed with the scanning and removal procedures.~~
7. The excavated material will be stored in stockpiles of 300 cy's which are bordered by "Jersey Barriers" on three sides. The stockpiled material and will be covered with tarps to control dust and runoff..

Processing:

1. Screening

The excavated material will be screened using a _____ with a _____ cut i.e. all material over _____ is considered oversize. The selection of this reject size is based on test areas that were excavated at the site and reviewed for MEC and data previously obtained from screening work at the site with a >50mV response. *(We have got to find out the min size of ferrous or aluminum which will cause a 50 mV signal. This will set the bottom screening size and reduce the total material to be processed)*

The oversize material will be evaluated continuously and if warranted will be fed back through the screening equipment for further processing. For example if there is material such as vegetation clumps that may contain MD it will be run through the system again to reduce the size. Material not requiring further treatment will be transferred to the storage area for backfill evaluation.

The material will be transferred from the storage pile to the screen by a rubber tired front end loader equal to a Cat 950 so as to maintain a feed rate of 300 cys/day.

The screened material will flow onto a 24" conveyor traveling at 70 lf/min, the bed depth of which will be approximately 3".

2. Ferrous Removal

The material will pass under a cross belt magnet which will remove the ferrous material. This ferrous material will be deposited onto a 36" wide variable speed conveyor set at 90 degrees to the main processing line. This conveyor will pass through a blast shield constructed of ~~This needs to be evaluated- can be sand bags- plywood/sand sandwich wall, mild steel plate or Precast concrete bin walls~~ . The blast shield will be large enough to protect the personnel working on the conveyor line from a potential detonation from other site areas.

Based on the estimated volume of metallic material the bed depth on the inspection conveyor will be a single layer at a belt speed of 25'/min. This inspection conveyor has an adjustable drive so the speed will be varied based on site conditions. The 25'/min is more than adequate belt speed to handle the material and allow the potentially MEC to be inspected and a decision made on disposition.

If MEC is discovered that is explosively configured the conveyor will be stopped and the material will be removed and transported to a holding magazine. If MEC is encountered on the conveyor that can't be removed safely by hand a master kill switch will be activated and all operations will be stopped. All personnel will evacuate to outside the MSD or will be relocated behind appropriate blast protection. The scrap holding container at the end of the conveyor will be removed and the bucket of a hardened front end loader will be positioned at the end of the conveyor. The inspection conveyor will then be remotely started and the MEC will be deposited into the bucket and relocated to the demolition area where it will be disposed of by the end of the work day.

If a smoking round is discovered on the belt the belt will be stopped and all operations will be halted. The MEC will be removed as described in the preceding paragraph. The MEC will be placed in a pail of water and transported to the demolition area where it will be allowed to burn out as necessary prior to being inspected by UXO personnel. It will be disposed of prior to the end of the work day as required.

Once problem MEC has been removed as described site operations will be allowed to continue.

The cross belt magnet is a Dings Model 22 self cleaning electro suspended overhead magnet. Reference attached Dings catalog cut # B18059 for detailed description and dimensions.

Material that passes the cross belt magnet will continue on the conveyor and pass over a magnetic head pulley which will remove any remaining pieces of scrap ferrous material. The purpose of this is to clean up the feed stream to reduce the abrasion on the nonferrous removal equipment. This ferrous material will be automatically separated and deposited into a holding container. Although it is highly unlikely MEC will pass the cross belt magnet the accumulated ferrous scrap removed by the head pulley will be inspected by UXO personnel as it is accumulated. If MEC is

encountered which is explosively configured it will be handled as previously described.

The magnetic head pulley is a Dings Model 12" diam x 24" belt width Heavy Duty Perma Pulley Magnetic Separator the specifications of which are contained in Ding's bulletin No. 2001 dated 4/95 which is enclosed.

3. Nonferrous Removal

Material passing the magnetic head pulley will be deposited onto a 36" vibrating feeder where it will be spread out to a shallow bed depth to facilitate nonferrous removal. The vibrating feeder is as manufactured by Carrier Vibrating Equipment Inc. Model FTD. The feeder then transfers the material to a Eddy Current separator that removes the non-ferrous material which is anticipated to be scrap aluminum.

This separator is a Dings 13" x 36" Deep Field Rare Earth Eddy Current Separator with a splitter assembly. Refer to drawings D12364 and D 12466.

Material that is removed from the feed stream is deposited into a scrap container which will be inspected by UXO personnel as it accumulates to insure there isn't any MEC which is explosively configured. If such material is encountered it will be removed as previously described..

4. Final Inspection

Material passing the Eddy Current separator will be deposited onto a 36" wide variable speed conveyor at 90 degrees to the main train of equipment. This material will pass through a final metal detector the signal of which will be calibrated to match the response generated by metal causing a 50 mV signal during the excavation process. If metal is detected an alarm will sound and the material on the belt will automatically be marked with a high visibility disc so it can be readily located.

When the alarm sounds the system will be stopped and UXO personnel will inspect the marked area for the tramp metal. The MD or other metal debris will be removed and placed in a scrap container for further processing. In the unlikely event MEC explosively configured is encountered it will be removed as previously described before processing continues.

The metal detector is a Advance Detection Systems, Model 9200 -8x42 equipped with a belt splice sensing system, alarm and marker for tramp metal. See enclosed data sheet for the detector and marking device.

5. Scrap Metal Processing

The material as generated on a daily basis classified 3X will be placed into a on-site heat treating furnace to achieve 5X clearance.. The furnace is propane fired batch operated; see enclosed sketches SK-3&4 for details.

The material will be placed into the furnace and the temperature will be elevated to 1200 degrees Fahrenheit ambient for 15 minutes which will be monitored by a thermometer with an internal probe in the furnace. This ambient temperature will achieve a 1000 degree surface temperature on the MD. The achievement of this temperature will be verified through the use of temperature sensitive marking crayons which change appearance at specific temperatures. The MD when treated to this temperature is considered to have achieved 5X clearance. When the treatment is complete a UXO specialist will certify each batch is 5X clean.

Material when required will be processed through a Hammer Mill to render the material unrecognizable as munitions debris. This Hammer Mill will be a Schutte-Buffalo model WA-30-H or equal. The model of mill may be adjusted based on the test results on typical material. ~~(The manufacturer offers this service at no charge if we can provide the material)~~

The 5x cleared MD will than be sent in batch lots to a local smelter where the material will be recycled and placed back into commerce. The smelter will issue a certification of smelting for each batch of material

6. Processed Material Disposition

Material passing the metal detector will be transferred to a radial stacking conveyor which will transfer the material into storage bins (300 cy +/- daily production lots). The bins will be constructed out of pre-cast concrete Jersey barriers. The stockpiled material in each bin will be sampled on a composite basis and tested at an offsite lab for metals Sample results will be available on a 72 hour turn- around subsequently five (5) separate storage bins will be required. .

Soil meeting the clean up criteria based on background information previously approved by the regulators will be used as on site backfill. Soil exceeding the background standards will be disposed off site at a non-hazardous disposal facility. Refer to table attached for these standards ~~(Todd we have to supply this)~~ It is anticipated that 500 tons of processed soil will require off site disposal.

7. Backfill

Processed material which is cleared for use as backfill will be loaded onto tandem trucks and taken to the excavated area. There it will be dumped and graded with a D-5 dozer (or equivalent) to preclude ponding. This material will be compacted by walking the material in with three passes of the dozers tracks. Imported fill if necessary will be consistent with the native material.

8. Offsite Disposal.

Material exceeding TAGM standards will be disposed at an off site fully permitted landfill appropriate for the contamination level in the material. It is anticipated all material requiring offsite disposal although not meeting TAGM standards will be non-hazardous. Material will be loaded out in truck load lots as accumulated for disposal. Loads will be checked to make sure they pass the paint filter test prior to loading. All manifests will be signed by the site manager for the army as the generator.

9. Site Restoration.

When the removal action is completed all areas affected by the remedial action will be dressed and cleaned up. They will then be seeded with a field mix to reestablish vegetation consistent with the surrounding areas.

10. Demobilization.

The entire processing line will be cleaned, decontaminated, disassembled and transported to the selected on site storage facility as determined by the site manager. That material handling equipment will also be decontaminated and returned to the rental/leasing agency including site storage trailers. Utilities will be removed back to the point of origin at the start of the project. The entire area will be "policed" and left "broom" clean.

REMEDIATION PLAN AND TRANSFER SCHEDULE
February 13, 2006

PID / WHSE Area

SEAD 59 & SEAD 71- PAINT DISPOSAL AREAS

Acreage: 8 acres

Site History: Site consists of fill areas that debris was placed in.

Risk: Potential Ground water contamination from petroleum contamination found in the soil. No risk remains from soils in fill areas.

Status of Remediation: Removal action of the contaminated soil is complete. Evaluation of GW is underway. RI has been prepared and demonstrates there is no risk from site for and industrial setting. NFA PRAP and ROD is planned by the Army.

Funds: On Hand

RIP/RC: April 2006

FOST: June 2006

Deed: September 2006

SEAD 001-R (SEAD 16)- ABANDONED DEACTIVATION FURNACE

Acreage: 6.6 acres.

Site History: This unit was used to destroy small arms ammunition.

Risk. SEAD 16 Abandoned Deactivation Furnace: Facility has residual powder in piping and OE scrap that has potential for explosive residuals. There is heavy metals contamination in the soil.

Status of Remediation: Final Proposed Remedial Action Plan has been agreed to. The Final Record of Decision is under review. A performance based contract is being procured to take site through to response complete.

Funds: November 07

RIP/RC Completion Date: June 2008

FOST: July 2008

Deed: September 2008

SEAD 001-R (SEAD 17) - DEACTIVATION FURNACE

Acreage: 7.7 acres

Site History: This unit was used to destroy small arms ammunition.

Risk. SEAD 17 Deactivation Furnace: Facility has OE scrap that has potential for explosive residuals. There is heavy metals contamination in the soil.

Status of Remediation: Final Proposed Remedial Action Plan has been agreed to. The Record of Decision is under review. A performance based contract is being procured to take site through to response complete.

Funds: November 07
RIP/RC Completion Date: June2008
FOST: July 2008
Deed: September 2008

SEAD 25 - FIRE DEMONSTRATION AREA

Acreage: 7.7 acres.
Site History: This site was used to demonstrate the installation fire fighting capability.
Risk: Volatiles in the soil contributing to GW contamination. Semi- volatiles in ditch line poses limited long term risk to child.
Status of Remediation: ROD signed, Remedial Design is complete and Remedial Action is underway

Funds: Dec 2004
RIP/RC Completion Date: April 2006
FOST June 2006
Deed: September 2006

SEAD 26 - FIRE TRAINING AREA

Acreage: 8.2 acres.
Site History: This site was used to practice fire-fighting capability.
Risk: Semi-volatiles in surface soil and ditch line along railroad pose limited long term risk to child.
Status of Remediation: ROD signed, Remedial Design is complete and Remedial Action is underway

Funds: Dec 2004
RIP/RC Completion Date: April 2006
FOST: June 2006
Deed: September 2006

SEAD 121 - EBS SITE – INDUSTRIAL

Acreage: 25 Acres
Site History: DRMO yard and cosmoline steam cleaning site.

These sites have had a site investigation performed. PAHs (Semi-volatiles) have been found. Solvents have been found in the ground water around the DRMO yard.

Risk: Soil contamination may pose threat under the residential scenario but not the industrial scenario.

Status of Remediation: RI report has been submitted and under review.

Funds: November 2005

RIP/RC Completion Date: December 2006

FOST: June 2006

Deed: September 2006

SEAD 50 - TANK FARM STORAGE

SEAD 54 - ASBESTOS STORAGE

SITE COMPLETE

Acreage: 26 acres

Sites History: These sites are where the Army stored material in above ground steel tanks. Movement of the material resulted in contamination of the soil.

Status of Remediation: These two sites have a removal action underway. The action consists of excavation and disposal by land-filling the soil, which are contaminated with heavy metals.

Status: ROD signed 28 Sep 2005

Funds: Available

RIP/RC date: March 2005

FOST: Dec 2003

Deed: April 2004

SEAD 39 - BUILDING 121 BOILER BLOW DOWN PIT

SEAD 40 - BUILDING 319 BOILER BLOW DOWN PIT

Acreage: 1 acre combined

Site History: These sites consist of contamination resulting in the blow down of the central boilers, which was discharged to the ground. SEAD 38 is also included in the SEAD 4 Area of concern.

Risk: Petroleum products may pose risk.

Status of Remediation: A removal action is complete. Final report is under review. An Institutional Control PRAP has been prepared limiting use to industrial operations.

Funds: Available

RIP/RC date: April 2006
FOST: June 2006
Deed: September 2006

SEAD 5 - SLUDGE PILES

Acreage: 3 acres

Site History: This site is a result of the storage of domestic sewage sludge from the sewer treatment plant drying beds. The investigation revealed that the sludge has elevated level of heavy metals in it.

Risk: Heavy metals may pose a risk under the residential scenario.

Status of Remediation: Removal action is underway.

Funds: Available
RIP/RC date: March 2006
FOST: June 2006
Deed: September 2006

SEAD 67 - DUMPSITE EAST OF STP4

Acreage: 2 acres

Site History: This site is identified as a location where unknown material was dumped. The site investigation revealed that the soil is contaminated with metals and the contaminants were localized.

Risk: Soil contamination has been removed from the site

Status of Remediation: Removal action complete. IC PRAP has been prepared limiting use to industrial operations

Funds: Available
RIP/RC date: March 2006
FOST: May 2006
Deed: September 2006

SEAD 1 and 2 – RCRA STORAGE FACILITIES

Acreage: .5 acres

Site History: These facilities, building 301 and 307 were used to storage hazardous waste pending shipment to a permitted facility. These sites were listed in the Federal Facilities Agreement even though they were regulated under RCRA.

Risk: none

Status of Remediation: RCRA permit has been closed. An institutional control PRAP and ROD will be prepared to close out these sites.

Funds: Available
RIP/RC date: September 2005
FOST: May 2006
Deed: September 2006

DECOMMISSIONING SURVEYS (PID / Whse Area)

Size: 2 buildings (306 and 5)

Site History: Seneca has a NRC license that requires termination prior to allowing unrestricted access to the inside of the buildings. Field survey work completed. Final evaluation of risk is pending final approval of objectives. Final report and approval is required before transfer.

Risk: Residual depleted uranium material could impact interior surface of structure. (None was found during field investigation)

Status of Remediation: Fieldwork Complete. Final Report has been submitted

Funds: Available

Site Work Completion Date: N/A

License Termination Date: Mar 2006

CONSERVATION AREA SITES

SEAD 003-R-01 (SEAD 57) - AMMUNITION DESTRUCTION AREAS

Acreage: 57 acres

Site History: This site is where the Army performed destruction of ammunition by detonation or discharge. The site investigation of these sites revealed contamination of MEC and heavy metals.

Risk: Sites have MEC scrap that has potential for explosive residuals. There is heavy metals contamination in the soil.

Status of Remediation: Field investigation has initiated. A removal contract is being procured to take site through response in place.

Funds: November 2009
RIP/RC date: December 2011
FOST: May 2012
Deed: September 2012

SEAD 48 - PITCHBLEND E ORE STORAGE

Acreage: 31 acres

Site History: This site consists of 11 igloos that were used to store pitchblende ore. The igloos were decommissioned in the mid 1980s. Unrestricted access approval is on file from NRC, NYS and EPA. An extensive removal occurred during the decommissioning process however there is a concern for residuals under current standards. Further investigation will determine whether additional work is required.

Risk: Residual left from previous removal may have long term impact for residence.

Status of Remediation: Final Field Survey is under review.

Funds: November 2005

RIP/RC date: December 2006

FOST: March 2007

Deed: September 2007

DECOMMISSIONING SURVEYS (Conservation Area)

Size: 105 igloos and 4 buildings

Site History: Seneca has a NRC license that requires termination prior to allowing unrestricted access to the inside of the buildings. Field survey work completed. Final evaluation of risk is pending the final approval of the cleanup objectives. Evaluation of results will be completed and approved before final transfer.

Risk: Residual depleted uranium material could impact interior surface of structure (none was found during the fieldwork).

Status of Remediation: Fieldwork Complete. Final report has been submitted

Funds: Available

Site Work Completion Date: N/A

License Termination Date: Mar 2006

SEAD 63 - MISCELLANEOUS COMPONENTS BURIAL SITE

Acreage: 15 acres

History of Site: This site was use by the Army to bury classified military unique components.

Risk: Military unique items to be removed which have the potential to contain low-level radiological contamination. Some heavy metal contamination may be present.

Status of Remediation: Removal action completed. Final report being prepared. NFA , PRAP has been prepared.

Funds: Available

RIP/RC date: May 2006

FOST: June 2006
Deed: September 2006

SEAD 6 - ASH LANDFILL (including SEADs 3,8,14,15)

Acreage: 45 Acres

Site History: Site is former municipal waste disposal area. Heavy metals remain in the soil. TCE (solvent) is found in the ground water.

Risk: Ecological risk exists. Ground water wells will not be permitted.

Status of Remediation: ROD is signed. Remedial design is underway and the remedial action is pending for next summer.

Funds: Available
RIP/RC date: Jun 2006
FOST: July 2006
Deed: September 2006

SEAD 11 - OLD LANDFILL

Acreage: 7.7 acres

History of Site: Construction debris and other unknown items were disposed of at this site.

A site investigation conducted revealed contamination and unknown anomalies.

Risk: Heavy metals and solvent in the soil, unknown items in the fill area.

Status of Remediation: An Interim removal action is planned so that a No Further Action Determination can be made. A performance based contract is being procured to take this site through response complete.

Funds: January 2005
RIP/RC date: February 2007
FOST: June 2007
Deed: September 2007

SEAD 13 - INHIBITED RED FUMING NITRIC ACID (IRFNA)

Acreage: 11.5 acres

History of Site: This site was used by the Army to neutralize IRFNA, a liquid propellant constituent. The acid was poured into a trench filled with limestone and water and was neutralized. Process resulted in nitrogen compounds being introduced into the ground water. This site is expected to require land use controls only.

Risk: Has excess nitrates above drinking water standards

Status of Remediation: Field work for base line complete. Decision Document has been reviewed and comments are being addressed. IC PRAP/ROD has been prepared

Funds: Available
RIP/RC date: May 2006
FOST: July 2006
Deed: September 2006

**SEAD 4 - MUNITIONS WASHOUT FACILITY
SEAD 38- BOILER BLOW DOWN PIT**

Size: 50 acres

Site History: This site was used by the Army to wash out shell casing to remove explosives. Heavy metal contamination has been found in the soil.

Risk: None for industrial future use. Contaminants pose ecological concerns

Status of Remediation: The project is in the FS has been prepared, commented on and responses being prepared. A performance based contract is being procured to take this site through response complete.

Funds: November 2005
RIP/RC date: April 2007
FOST: May 2007
Deed: September 2007

SEAD 12 - RADIATION SITE

Size: 49 acres

History of Site: This site consists of the former Special Weapons Storage Area. Three areas where military unique items were buried and a localized groundwater plume contaminated with TCE was found during the remedial investigation. SEAD 72- Mixed Waste Storage Bldg. regulated under the Interim Status Hazardous Waste Permit will be closed out and incorporated into the ROD of the SEAD 12. There is potential to accelerate cleanup upon completion of the additional work that required.

Risk: Groundwater has localized TCE (solvent) plume

Status of Remediation: The site is in the RI/FS process. FS is being prepared.

Funding: November 2008
RIP/RC date: December 2009
FOST: March 2010
Deed: September 2010

SEAD 23 - OPEN BURNING GROUNDS

Acreage: 30 acres

Site History: The Army used this site for burning propellant, explosives and pyrotechnics to destroy unstable items. This site is within the boundary described by SEAD 115

Risk: See SEAD 115

Status of Remediation: The Record of Decision has been signed. The remedial action is complete and final completion report is under review.

Funds: Available

RIP/RC date: September 2004

FOST: April 2012

Deed: September 2012

SEAD 002-R-01 (SEAD118) – EAST EOD RANGES

Acreage: 144 acres

Site History: This site represents 2 areas where MEC was found as a result of record search and site investigations. It is proposed to perform removal actions at the three locations and restrict the land use to surface activity.

Mission: site is 2 locations. Site 2 and 3 are adjacent each other and were used by EOD units for training. These sites have MEC scrap that may have residual explosive contamination.

Risk: Sites that have MEC scrap have potential for explosive residuals.

Status of Remediation: Remedial Action/Investigation is scheduled for FY 06.

A removal contract is being procured to take this site through response complete.

Funds: November 2005

RIP/RC date: June 2006

FOST: August 2006

Deed: September 2006

SEAD 007-R-01 (SEAD118) RIFLE GRENADE RANGE

Acreage: 42 acres

Site History: This site represents an area where MEC was found as a result of record search and site investigations.

Mission: The site was a training range where 40 mm training grenades and 37 mm LAW sub-caliber training rounds were fired. Training rounds have small explosive charge that create the “puff of smoke” to indicate the location of round. This site has MEC scrap that has residual explosive contamination.

Risk: Sites that have MEC scrap have potential for explosive residuals.

Status of Remediation: Remedial Action/Investigation is scheduled for funding in FY 06. A removal contract is being procured to take this site through response complete.

Funds: November 2005

RIP/RC date: November 2006

FOST: August 2007

Deed: September 2007

SEAD 24 - POWDER BURNING AREA

Acreage: 9.1 acres

Site History: This site was used in the late 40s early 50s to burn black powder and propellants. Investigation shows heavy metal contamination in the soil.

Risk: Soil contamination may pose a risk in the residential scenario.

Status of Remediation: A removal action at this site is complete and Draft completion report is being prepared.

Funds: Available

RIP/RC date: April 2006

FOST: May 2006

Deed: September 2006

SEAD 006-R-01 (SEAD115) - OPEN BURNING / OPEN DETONATION

Acreage: 390 acres

Site History: This site is where the Army performed destruction of ammunition by detonation or discharge. The site investigation of this site revealed contamination of ordnance residual and heavy metals. This is a RCRA permitted site

Risk: Site has MEC scrap that has potential for explosive residuals. There is heavy metals contamination in the soil.

Status of Remediation: No work underway at this time.

Funds: November 2009

RIP/RC date: December 2012

FOST: April 2013

Deed: September 2013

SEAD 64B- GARBAGE DISPOSAL AREA

Acreage: 0.1 acres

Site History: This site is where the Army disposed of approximately 1 truckload of municipal garbage in the early 70's. The material is located under 10 feet of soil cover and requires closure as an inactive solid waste site.

Status of Remediation: IC PRAP and ROD has been prepared

Funds: Available

RIP/RC date: May 2006

FOST: June 2006

DEED: September 2006

SEAD 64D- GARBAGE DISPOSAL AREA

Acreage: 0.56 acres

Site History: This site is where the Army disposed of approximately 1 truckload of municipal garbage in the early 70's. The material is located under 10 feet of soil cover and requires closure as an inactive solid waste site.

Status of Remediation: IC PRAP and ROD has been prepared

Funds: Available

RIP/RC date: May 2006

FOST: June 2006

DEED: September 2006

SEAD 70- CONSTRUCTION DEBRIS AREA

Acreage: 4.4 acres

Site History: This site is where the Army disposed of construction debris such as fencing posts, concrete etc.

Risk: Site has a single sample that should elevated arsenic in the soil. No other contaminates were at levels of concern.

Status of Remediation: A performance based contract is being procured to take this site through response complete.

Funds: Available

RIP/RC date: December 2006

FOST: August 2007

DEED: September 2007

SEAD 27, 64A, 66 - IC ROD SITES

COMPLETED

PID sites with no risk for industrial operations.

ROD - Signed September 29, 2004

RD - 15 Feb 2005

RA- N/A

Transfer completed 30 Sep 2005

SEAD 122B AIRFIELD SMALL ARMS RANGE and SEAD 122E DEICING LOCATIONS

Acreage- 3

Site History: Small arms range for weapons qualifications. State Police intend to use range for like use. The parking apron adjacent the tower structure has elevated semivolatile organic compounds.

Risk: Contamination from lead in soil. No ground water contamination found. The SVOCs may pose a risk under a residential scenario

Status of Remediation: Treatability study removed contamination from the Range. A Institutional Control PRAP and ROD has been prepared and is included with SEAD 67, 39, and 40.

Funds: Available

RIP/RC date: September 2005

FOST amendment: May 2005

Deed: September 2006

SEAD 44A, 43, 52, and 69 PRISION PARCEL SITES

Acreage- 25

Site History: SEAD 44B was a function test range. SEAD 43,52,69 were sites with no risk for future use as a prison, and these sites were transferred in Aug 2002.

Risk: UXO contamination for practice grenades

Remediation Status: UXO has been removed. SEAD 44A NFA PRAP and ROD has been prepared and is included with SEAD 67, 39, and 40.

Funds: Available

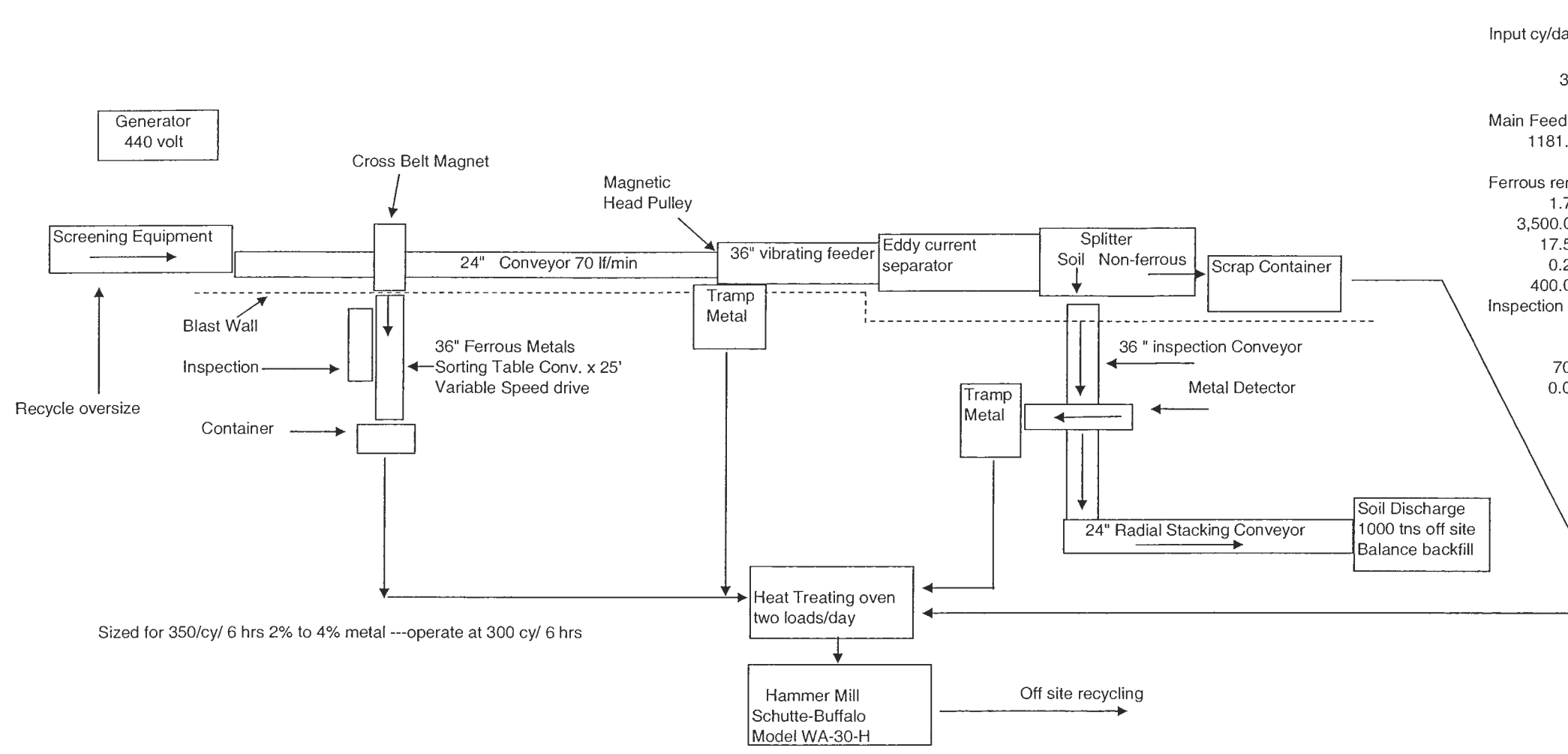
RIP/RC date: Sept 2004

FOST: Aug 2005

Deed: September 2006

Seneca Army Depot IAP Process Timeline

☑	Action Item	Deadline	IAP Guidance Requirement
☐	USAEC (EEI) sends draft to the installation	3/16/2006	(14 days after WS)
☐	Seneca Army Depot finalizes CTC and enters all data in AEDB-R/CC	4/1/2006	(30 days after WS)
☐	Seneca Army Depot submits all comments and changes to USAEC	4/30/2006	(59 days after WS)
☐	USAEC (EEI) sends the Final IAP to the installation for signature	6/5/2006	(95 days after WS)
☐	USAEC (EEI) sends the Public IAP to the installation for review by PAO/Security	6/5/2006	(95 days after WS)
☐	Seneca Army Depot submits signed approval page to USAEC/CC Program Managers	6/30/2006	(120 days after WS)
☐	Seneca Army Depot sends PAO/Security Approved Public IAP to USAEC	7/30/2006	(150 days after WS)



Input cy/day	density/cy	Tons/day	per 6 hrs	screen Fraction	tns/hr	Ferrous Fraction	tn/hr	Non-Ferrous Fraction	tn/hr
350	1.5	525	88	75%	66	2.00%	1.75	2.00%	1.75

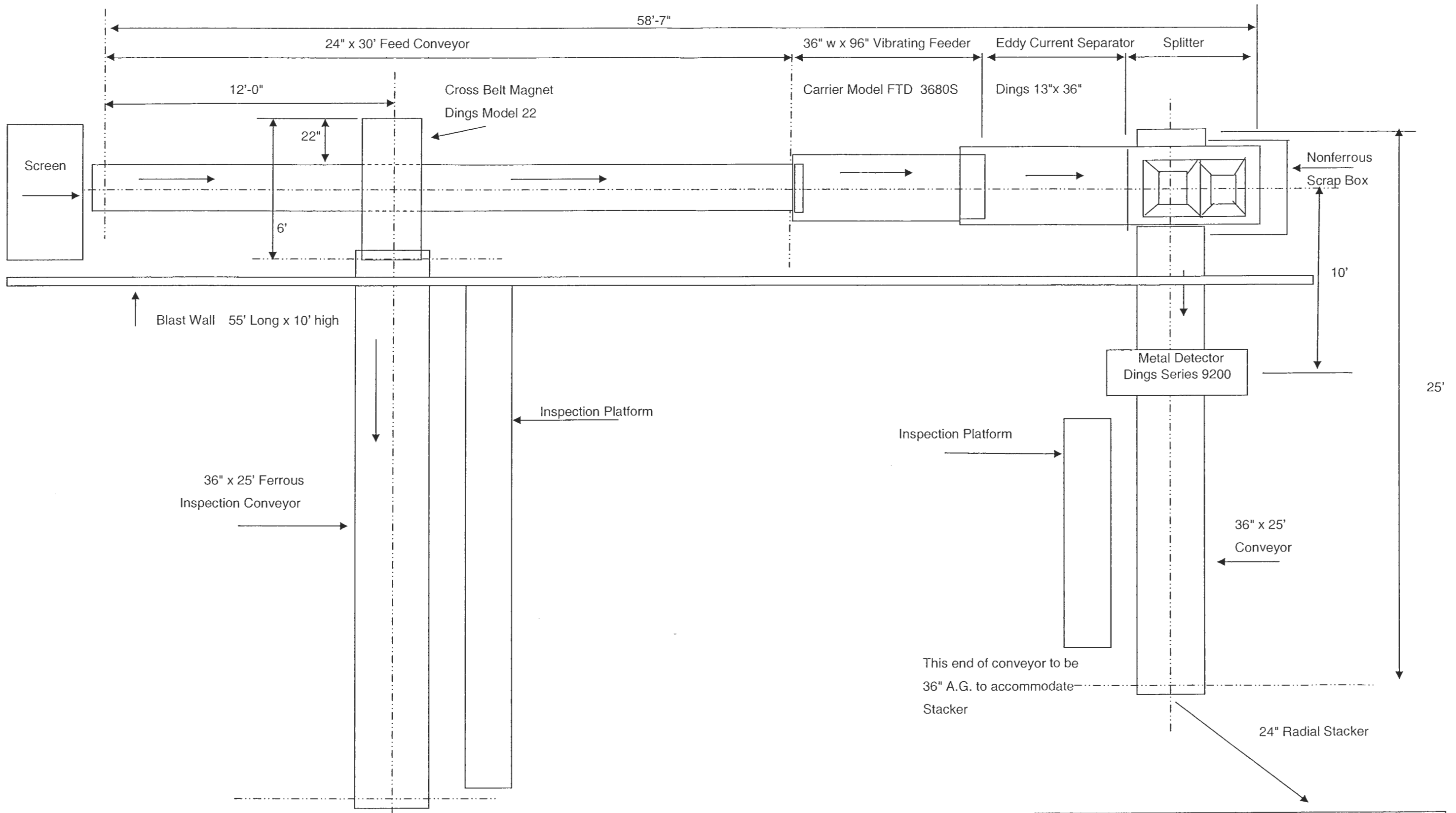
Main Feed Conveyor	20 deg idlers	70'/min	Belt Speed
1181.25 cf/ hr	Bed Depth	3.2"	

Ferrous removed by cross belt magnet	1.75 tns/hr
3,500.00 lbs/hr	
17.50 cf/hr	200 lb/cf
0.29 cf/min	
400.00 ft/min	belt speed
Inspection Belt 36" wide	25 belt speed f/min
	3 ft belt width
	70% loading % of width
	0.07 inches-bed depth

Non Ferrous- Eddy Current separator w/ vibratory feeder total feed	66 tns/hr
	43.75 cy/hr
	1181.25 cf/hr
	9.45 required separator width in inches
Use a 36" wide separator (ECS) for practicality	
36" Vibratory feeder	
36" Eddy Current Separator	
Feed	20 cf/min
belt speed	400 ft/min
bed depth	0.20 inches

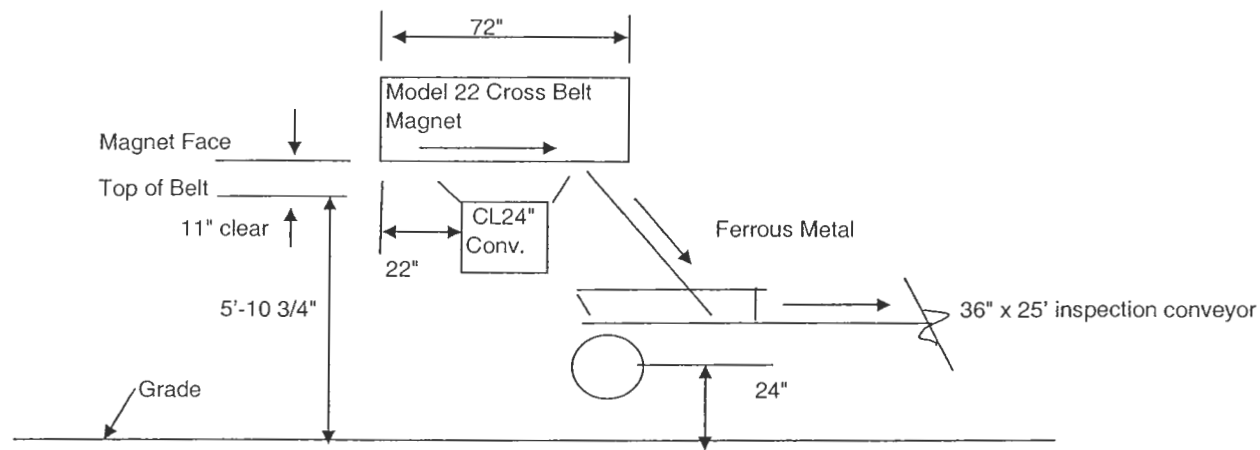
**Seneca Army Depot UXO Project
Process Diagram**

SK-1 2/27/06

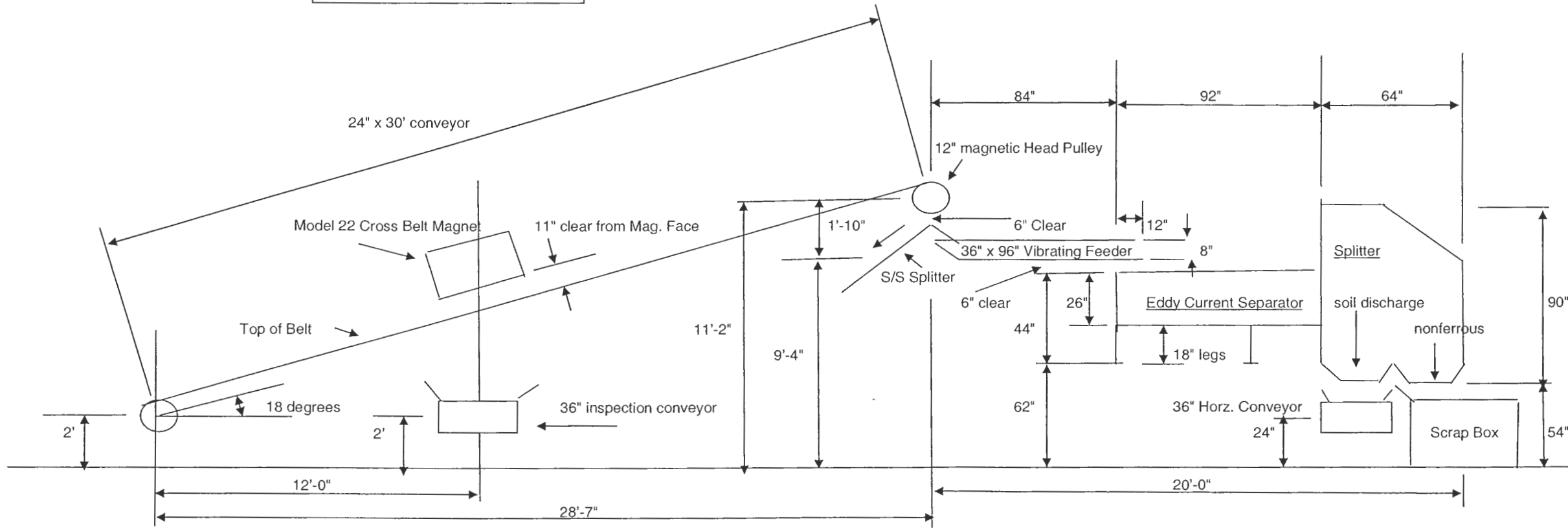


**Seneca Army Depot UXO Project
Processing Equipment Plan**

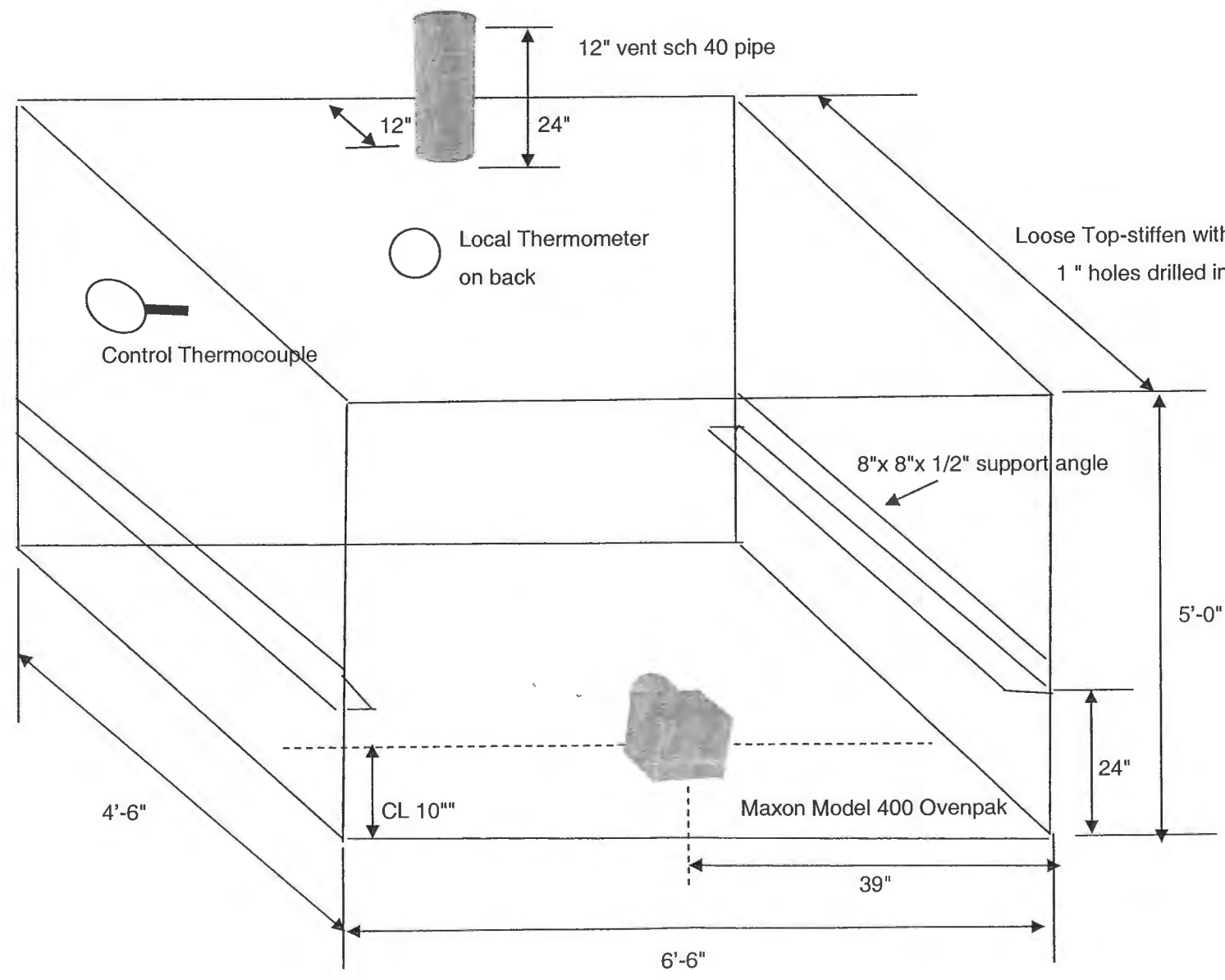
1/4"=1'-0" SK-2 2/27/06



Cross Belt Magnet Section



Seneca Army Depot
 Processing Equipment Elevation
 1/4"=1'-0" SK-3 2/27/06



Loose Top-stiffen with 4 pcs of 4x4x3/8" angle equally spaced.
1" holes drilled in ends of outside angle for lifting.

Total Weight	
Top- 1/2" Plate-	775 lbs
Stiffeners	260 lbs
Bottom	4200 lbs

Notes:

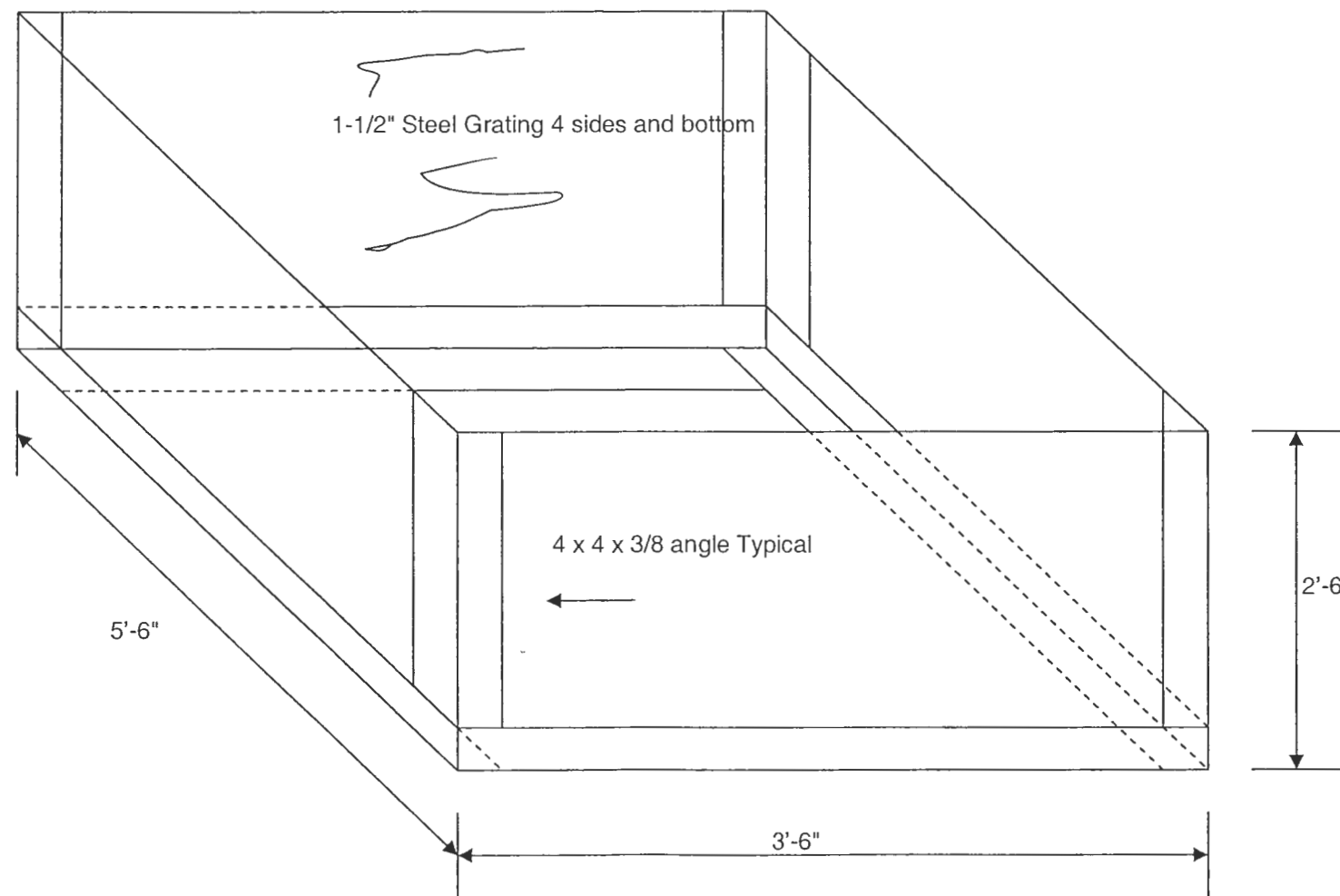
- 1 Decon oven constructed of 3/8" plate-welded const.
- 2 Burner- Maxon Model 400 Ovenpak
Propane fuel. 500,000 BTU/hr max with turn down to 15,000 BTU/hr. Complete w/ packaged gas train
- 3 MD placed in steel containers w/ grated bottom
- 4 Temperature elevated to 1200 degrees F for 15 min.
- 5 24" up the sides plus the bottom has 2" of castable refractory.

**Parsons
Decontamination Oven
Seneca Army Depot**

3/4"=1'-0"

2/27/2006

SK 4



Notes:

- 1 Angle frame all welded construction
- 2 Grating welded to angle frame
- 3 All constructed from carbon steel
- 4 Three (3) units required

**Parsons
Seneca Army Depot
Heating Basket**

3/4"=1'-0"

2/27/2006

SK 5

DRAFT
BCT Agenda
20 June 2006
1330- 1630 hours
21 June 2006
0830-1130 hours

June 20, 2006

Discuss EPA comments on SEAD 12 Supplemental RI report

Review Remedial Design for Institutional Controls

Complete accomplishments questionnaire DOD/EPA

June 21, 2006
0900-1130

Tour project sites:

Munitions Response efforts underway – 1100 hours Detonation shot.

1230 – 1500 - Army Only Meeting

Seneca Army Depot

Site # 8-50-006

06/08/2006

epaou	OU	DESCRIPTION	Site Char	R/IFS	IRM	RD	RA	OM&M	COMMENTS
1	1	Ash Landfill		completed 8/89 to 9/04		1/04 - 12/05	9/05 - 9/06	12/06 - 12/11	SEAD 3,6,8,14,15 sign ROD
1	1A	Soil Removal			completed 1995	completed 10/93 - 9/94	completed 9/94 - 6/95		
1	1B	Pilot Test of Barrier Wall		completed 11/98 - 3/04					
1	1C	Biowall Pilot study				5/05-11/06			
2	2	Open Burning Grounds		completed 8/89 - 3/99		completed 9/99 - 3/00	9/99-10/06		SEAD 23
3	3	Fire Training Area & Burn Pits		completed 9/95 - 7/03		10/04 - 11/05	11/05-09/06		SEAD 25, 26 sign ROD
4	5	Deactivation Furnaces		in progress 4/95 - 9/05		9/06- 09/07			SEAD 16, 17 EPA to sign ROD
5	4	Radiation Sites		in progress 12/95- 12/06		11/06-5/07			SEAD 12A, 12B, Building 804
	4A	Debris Removal				12/98 - 3/02	3/02-11/05		SEAD 12
5	39	SEAD 72 #803 MixWastStorageFac		01/05- 09/06					SEAD72 & #803
6	10	Paint Disposal Area		in progress 2/96- 6/06					SEAD 59,71 Projected ROD6/06
6	10A	Removal Action			completed 2003	4/02 - 9/02	9/02 - 3/03		
7	6	Munition Washout Facility		in progress 10/95 - 6/06		01/06 to 6/07			SEAD 4, 38 Projected ROD6/06
8	7	Construction Debris Landfill		in progress 6/95 - 9/06		12/98 - 12/06			SEAD 11
8A	7A	Debris Removal			in progress		04/06 - 12/06		
9	8	Red Fuming Nitric Acid Disposal Area		in progress 11/95 - 12/05					SEAD 13
10	9	Ammo Breakdown Area		PRAP for SEAD 52 in progress 12/05					SEAD 52, 60 Building 608 & 612
11	26	Ammunition Destruction Area	1/10 - 1/12						SEAD 46
11	27	Ammunition Destruction Area	6/10 - 6/15						SEAD 57
12	18	PID Office and Warehouse Areas		completed 1/96 - 3/04				9/04 - 9/24	SEAD-27,64A,66, I/C only, sign ROD
12	19	Garbage Disposal Area, Steam		completed 2/94 - 3/04				9/04 - 9/24	SEAD 64A, 66,27
12	20	Steam Cleaning Waste Tank		completed 7/95 - 3/04				9/04 - 9/24	SEAD 27, building 360
12	21	Pesticide storage Building		Completed 12/93- 3/04				9/04-9/24	building 586 SEAD 66
13	16	Pitchblend Storage		in progress 4/03 - 6/06					SEAD 48 Projected ROD
14	17	20 NA & 8 NFA Sites		completed 5/02 - 10/03					NA-7, 9, 10, 18, 19, 20, 21, 22, 23, 35, 36, 37, 42, 47, 49, 51 NFA- 28, 29, 30, 31, 32, 34, 60, 61
14	38	SEAD 53 "D Area Ditches"	06/00 - 11/05						SEAD 53
15	14	Tank Farm Area		in progress 11/02 - 3/05					SEAD 50, 54 EPA to sign ROD
	14A	Soil Removal			completed 2004	11/02 - 11/02	11/02 - 4/04		
16	30	Powder Burning Area	6/03 - 11/05	11/05 to 5/07					SEAD 24
	30A	Soil Removal					6/03-09/06		
17	22	Boiler Blowdown Pit-Bldg. 121	6/03 - 6/06	5/05 to 6/06					SEAD 39
17A	22A	Soil Removal					6/03-9/06		
17	23	Boiler Blowdown Pit-Bldg. 319	6/03 - 6/06	2/05 to 11/05					SEAD 40
17B	23A	Soil Removal					6/03 - 9/06		
17	31	Garbage Disposal Area	6/03 - 12/05						SEAD 64B
17	24	Sludge Piles		1/07 to 12/07					SEAD 5
17C	24A	Soil Removal					6/03 - 12/06		
17	25	Dumpsite East of STP 4	6/03 - 12/05	12/05 to 6/07					SEAD 67
17D	25A	Soil Removal					6/03 - 9/06		
17	32	Garbage Disposal Area	6/03 - 12/05						SEAD 64D
17	34	Small Arms Range	6/02 - 5/04	5/04 to 11/05					SEAD 122B & 122E
17E	34A	Treatability Study					completed 12/03 - 5/04		
18	28	Components Burial Site	6/03 - 12/05	1/06 to 7/07					SEAD 63 & 58
	28A	Soil Removal					5/04-9/06		
19		East EOD Range UXO & Rifle Grenade							SEAD 002 & 007
20		Bldg 2110-Fill Area							SEAD 70
21	13	DRMO Yard & Cosmoline Area	11/02-3/05	in progress 11/02 - 4/06					2 EBS sites 121 I & 121C
22	11	Open Detonation Grounds		in progress 2/96- 6/2012					SEAD 44,45,115
41	15	Lake Shore Small Arms Range	in progress 11/02 - 12/04						
42	29	Grenade Range	12/05 - 4/06						SEAD 118
43	33	Construction Debris Area	11/00 - 9/06						SEAD 70
44	35	Mound Area	1/04-3/05						EBS Site 109(7)
45	36	Indian Creek Burial Area	06/00 - 11/05						SouthEast of SEAD 57
46	37	Demo Range se of sead 57	06/00 - 11/05						SEAD -5,13,39,40,41,43/56/69, 44A,44B,52,62,64B 64C,64D,67,122B & 122E, Bldg 307, Bldg 301
9&17	40	Pro Plan I/C-SEADs		09/05-06/06					

DOCUMENTS NEEDED FOR D-LISTING

SEAD-01-004 SWMU Classification Report (2 Vols) - Final, September 1994

SEAD-01-009 Expanded Site Inspection Eight Moderately Low Priority Areas of Concern - SEADs 5, 9, 12 (A and B), 43,56, 69, 44 (A and B), 50, 58, and 59 - (Draft Final-2 Vols), December 1995

BRAC-01-001 Environmental Baseline Survey Report (Final), March 1997

SEAD-01-014 Final Investigation of Environmental Baseline Survey Non-Evaluated Sites, SEAD-199A, SEAD-122 (A, B, C, D, E), and SEAD-123 (A, B, C, D, E, F), SEAD-46, SEAD-68 and SEAD-120 (A, B, C, D, E, F, G, H, I, J), SEAD-121 (A, B, C, D, E, F, G, H, I), Seneca Army Depot Activity, May 1999

SEAD-05-006 FINAL Decision Document Twenty-Two No Further Action Sites (SEAD 1, 2, 7, 10, 18, 19, 20, 21, 22, 29, 30, 31, 32, 35, 36, 37, 42, 49, 55, 60, 61, & 65, March 2002

SEAD-05-005 Decision Document Mini Risk Assessment (SEAD 9, 27, 28, 32, 33, 34, 43, 44A, 44B, 52, 56, 58, 62, 64A, 64B, 64C, 64D, 66, 68, 69, 72, and 120B,) (FINAL), [CD], May 2002

SEAD-05-004 Action Memorandum and Decision Document for Time-Critical Removal Actions Four Metal Sites (SEAD-24, 50/54 & 67, (FINAL) August 2002

SEAD-05-006 FINAL Record of Decision (ROD) Twenty No Action SWMUs (SEAD-7, 9, 10, 18, 19, 20, 21, 22, 33, 35, 36, 37, 42, 47, 49, 51, 53, 55, 60, 61, 65 and 68) and Eight No Further Action SWMUs (SEADs 28, 29, 30, 31, 32, 34, 60 and 61) and [CD], September 2003

SEAD-05-07 Final Completion Removal Report, Time Critical Removal Action Metal Sites, SEAD-50/54, December 2003

SEAD-05-006 FINAL Record of Decision (ROD) for No Further Action SWMU's (SEAD 50/54) at Seneca Army Depot Activity, Distributed, Final Signature 28SEP05, [CD], May 2005.

March 14, 2005

Mr. Scott Bradley
U.S. Army Corps of Engineers
Engineering and Support Center, Huntsville
Attn: CEHNC-ED-CS-P
4820 University Square
Huntsville, AL 35816-1822

**Subject: Final Feasibility Study for the Munitions Washout Facility (SEAD-4),
Seneca Army Depot Activity**

Dear Mr. Bradley:

Parsons is pleased to submit the Final Feasibility Study at the Munitions Washout Facility (SEAD-4) at the Seneca Army Depot Activity (SEDA) located in Romulus, New York. The Final Feasibility Study incorporates (1) results from test pitting and groundwater sampling completed during 2004 supplemental field activities, and (2) results of the sensitivity analysis conducted, which compared the mass of soil removed to its relative cost for a range of soil cleanup goals. Please find enclosed replacement pages and update instructions. A CD is enclosed which includes the Final Feasibility Study in its entirety.

This work was performed in accordance with the Scope of Work (SOW) for Delivery Order 0016 under Contract DACA87-95-D-0031.

Should you have any questions, please do not hesitate to call me at (617) 449-1405 to discuss them.

Sincerely,



Todd Heino, P.E.
Program Manager

Enclosures

cc: Mr. S. Absolom, SEDA
Mr. T. Enroth, USACE
Mr. K. Hoddinott, USACIIPPM (PROV)
Mr. C. Boes, USAEC

March 14, 2005

Mr. Julio Vazquez
USEPA Region II
Superfund Federal Facilities Section
290 Broadway, 18th Floor
New York, NY 10007-1866

Mr. Kuldeep K. Gupta, P.E.
New York State Department of Environmental Conservation (NYSDEC)
Division of Environmental Remediation
Remedial Bureau A, Section C
625 Broadway
Albany, NY 12233-7015

**Subject: Final Feasibility Study for the Munitions Washout Facility (SEAD-4),
Seneca Army Depot Activity
EPA Site ID: NY0213820830 - NY Site ID: 8-50-006;**

Dear Mr. Vazquez/Mr. Gupta:

Parsons is pleased to submit the Final Feasibility Study at the Munitions Washout Facility (SEAD-4) at the Seneca Army Depot Activity (SEDA) located in Romulus, New York. The Final Feasibility Study incorporates (1) results from test pitting and groundwater sampling completed during 2004 supplemental field activities, and (2) results of the sensitivity analysis conducted, which compared the mass of soil removed to its relative cost for a range of soil cleanup goals. Please find enclosed replacement pages and update instructions. A CD is enclosed which includes the Final Feasibility Study in its entirety.

Should you have any questions, please do not hesitate to call me at (617) 449-1405 to discuss them.

Sincerely,



Todd Heino, P.E.
Program Manager

Enclosures

cc: S. Absolom, SEDA
T. Enroth, USACE
E. Kashdan
C. Bethoney, NYSDOH

C. Boes, USAEC
K. Hoddinott, USACHPPM (PROV)
S. Bradley, USACE

February 12, 2003

Mr. Julio Vazquez
USEPA Region II
Superfund Federal Facilities Section
290 Broadway, 18th Floor
New York, NY 10007-1866

Ms. Alicia Thorne
New York State Department of Environmental Conservation (NYSDEC)
Bureau of Eastern Remedial Action
Division of Hazardous Waste Remediation
625 Broadway 11th Floor
Albany, NY 12233-7015

SUBJECT: Seneca Army Depot Activity, Response to Comments on Draft Final Feasibility Study and Revised Final Remedial Investigation for SEAD-4

Dear Mr. Vazquez/Ms. Thorne:

Parsons is pleased to submit the attached response to comments on the Draft Final Feasibility Study (FS) and Revised Final Remedial Investigation (RI) at SWMU SEAD-4 at the Seneca Army Depot Activity (SEDA) located in Romulus, New York.

The responses were prepared based on comment letters from the New York State Department of Environmental Conservation (NYSDEC) and the United States Environmental Protection Agency (USEPA) dated April 2, 2002 and March 14, 2002, respectively. The responses are submitted for review prior to providing the revised document. The Army believes that the document revision/review process can be streamlined by submitting comment responses for general review prior to revising the document. Following general agreement on the provided responses, the Army will submit the Final Feasibility Study at SWMU SEAD-4 for formal review and comment.

Should you have any questions, please do not hesitate to call me at (617) 457-7905 to discuss them.

Sincerely,



Todd Heino, P.E.
Program Manager

Enclosure

cc: S. Absolom, SEDA
E. Kashdan, Gannett Fleming
T. Matthews, OSC
M. Greene, USACE
K. Hoddinott, USACHPPM
T. Enroth, USACE
C. Boes, AEC



PARSONS ENGINEERING SCIENCE, INC.

30 Dan Road • Canton, Massachusetts 02021-2809 • (781) 401-3200 • Fax: (781) 401-2575

January 28, 2002

Commander
U.S. Army Corps of Engineers
Engineering and Support Center, Huntsville
Attn: CEHNC-OE-DC (Marshall Greene)
4820 University Square
Huntsville, Alabama 35816-1822

**SUBJECT: Seneca Army Depot Activity – Romulus, New York
Draft Final Feasibility Study Report for SEAD-4**

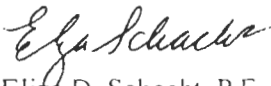
Dear Major Sheets:

Parsons Engineering Science (Parsons) is pleased to submit the Draft Final Feasibility Study Report for SEAD-4, the Munitions Washout Facility, at the Seneca Army Depot Activity located in Romulus, New York. This work was performed in accordance with the Scope of Work (SOW) for Delivery Order 00016 to the Parsons Contract DACA87-95-D-0031. This submittal has also been provided under separate cover to Mr. Julio Vasquez at the USEPA and Ms. Alicia Thorne at NYSDEC.

Parsons appreciates the opportunity to work with USACE on this project and looks forward to a continued relationship on this and other projects. Please feel free to call me at (781) 401-2361 if you have any questions or comments.

Sincerely,

PARSONS ENGINEERING SCIENCE, INC.



Eliza D. Schacht, P.E.
Task Order Manager

cc: S. Absolom, SEDA
T. Enroth
K. Healy
K. Hoddinott, USACHPPM
C. Kim, USAEC
B. Wright, USAIOC
M. Brock, USACOE, New England

July 26, 2001

Commander
U.S. Army Corps of Engineers
Engineering and Support Center, Huntsville
Attn: CEHNC-OE-DC (Major David Sheets)
4820 University Square
Huntsville, Alabama 35816-1822

**SUBJECT: Seneca Army Depot Activity – Romulus, New York
Draft Feasibility Study Report for SEAD-4**

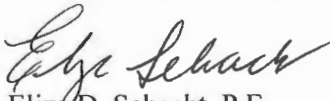
Dear Major Sheets:

Parsons Engineering Science (Parsons ES) is pleased to submit the Draft Feasibility Study Report for SEAD-4, the Munitions Washout Facility, at the Seneca Army Depot Activity located in Romulus, New York. This work was performed in accordance with the Scope of Work (SOW) for Delivery Order 00016 to the Parsons ES Contract DACA87-95-D-0031. This submittal has also been provided under separate cover to Mr. Julio Vasquez at the USEPA and Ms. Alicia Thorne at NYSDEC.

Parsons ES appreciates the opportunity to work with the USACE on this project and looks forward to a continued relationship on this and other projects. Please feel free to call me at (781) 401-2361 if you have any questions or comments.

Sincerely,

PARSONS ENGINEERING SCIENCE, INC.



Eliza D. Schacht, P.E.
Task Order Manager

cc: S. Absolom, SEDA
T. Enroth
K. Healy
K. Hoddinott, USACHPPM
C. Kim, USAEC
B. Wright, USAIOC
M. Brock, USACOE, New England

July 26, 2001

Mr. Julio Vasquez
USEPA, Region II
Superfund Federal Facilities Section
290 Broadway, 18th Floor
New York, NY 10007-1866

Ms. Alicia Thorne
New York State Department of Environmental Conservation
Division of Hazardous Waste Remediation
Bureau of Eastern Remedial Action
625 Broadway, 11 th Floor
Albany, NY 12233-7015

**SUBJECT: Seneca Army Depot – Romulus, New York
Draft Feasibility Study Report SEAD-4**

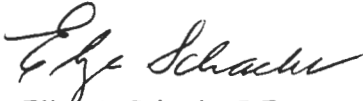
Dear Mr. Vasquez/Ms. Thorne:

Parsons Engineering Science (Parsons ES) is please to submit the Draft Feasibility Study Report at SEAD-4, the Munitions Washout Facility, at the Seneca Army Depot Activity located in Romulus, New York.

Parsons ES appreciates the opportunity to provide you with this report. Please feel free to call me at (781) 401-2361 if you have any questions or comments.

Sincerely,

PARSONS ENGINEERING SCIENCE, INC.



Eliza D. Schacht, P.E.
Task Order Manager

cc: S. Absolom, SEDA
T. Enroth, USACOE
K. Healy, USACOE
K. Hoddinott, USACHPPM
C. Kim, USAEC
B. Wright, USAIOC
M. Brock, USACOE, New England



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 2
290 BROADWAY
NEW YORK, NY 10007-1866

Fax To

FODD

Chris

File

SEAD 17

JUN - 9 2006

BRAC Environmental Coordinator
Seneca Army Depot Activity
Attn: Stephen Absolom
PO Box 9
5786 State Route 96
Romulus, NY 14541-0009

Re: *Draft Final Supplemental RI for SEAD-12*
Seneca Army Depot Activity, Romulus, New York

Dear Steve:

This is in reference to the subject document dated February 23, 2006. Although some of the original concerns triggering this supplemental remedial investigation (RI) have been successfully addressed, there are still areas that need further explanation and/or investigation.

GENERAL COMMENTS

- Both, the New York State Department of Environmental Conservation (NYSDEC) and the U.S. Environmental Protection Agency (EPA), generated comments on the *Draft Supplemental Remedial Investigation for SEAD-12*, dated May 2005. These comments and responses to these comments are included in Appendix H of the *Draft Final Supplemental Remedial Investigation for SEAD-12* (Report). It appears that several issues have not yet been resolved. Although NYSDEC and EPA requested post-excavation groundwater sampling; the facility did not propose further groundwater sampling for two reasons, as stated on the first page of the response to EPA Comments:
 - No exceedances of TCE were detected in wells other than MW12-37 during the Supplemental RI, and
 - MW12-37 has been removed and all soils surrounding this well have been removed.

Agreed to
No more
Sampling
AF BCT
ASKED ABOUT
TEMP WELLS
TO BECOME
PERMANENT
UPPER G.W.
BUILDING
SERVES AS
CAP

These reasons do not appear to provide adequate justification for not collecting post-excavation confirmatory groundwater samples. No evidence has been provided to show that the excavation was successful at remediating groundwater to below action levels. As noted on Page 4-2, confirmatory soil samples collected adjacent to the north side of the building, TP813-10F and TP813-12F, exhibited trichloroethene (TCE) concentrations (4,800 ug/kg and 1,000 ug/kg, respectively) in excess of the NYSDEC Technical and Administrative Guidance Memorandum (TAGM) soil action level of 700 ug/kg, which is the soil cleanup goal for the protection of groundwater quality. Since soil in these locations could not be removed without compromising the integrity of the building foundation, there is still potential for contaminated soil in this area to contribute to groundwater contamination.

SPACE / INFORMATION ...
CONSIDER S

... Limit
STR DOES NOT
... ..

It should also be noted that a majority of the groundwater data obtained during the temporary well installations reported detection limits above the NYSDEC Class GA Groundwater Standards. If these wells exhibited low levels of volatile organic compound (VOC) contamination, the analyses may not have detected the contamination, even if applicable standards were exceeded.

... as per
TAKEN to
... ..
SAMPLE

Furthermore, excavation is an intrusive activity that likely has altered the subsurface make-up of the area north of the building. The potential exists for previously immobile contaminants to have become mobile and migrated beyond the known areas of groundwater contamination. As previously stated, at least one additional groundwater monitoring well pair located in the immediate downgradient location of former monitoring well MW12-37 should be installed to further characterize the residual source area contributions, and determine the success of the removal action.

2. In the previous comments included in Appendix H, EPA also expressed concern that the final excavation limits appeared to be arbitrary, and were sometimes based upon data apparently collected from elevations above potential areas of significant impact (EPA General Comment 3). There still seems to be a disconnect between the facility's response and the depths at which confirmatory sidewall samples were collected. All of the confirmatory samples that define the western, northern, and eastern boundaries of the excavation were collected at 3-4 feet (ft) below ground surface (bgs) (samples TP813-13F, TP813-6F, and TP813-5F). Samples that reported exceedances of TAGM values were collected primarily at deeper depths (between 5 and 7.5 ft bgs.) The reported exceedances appear to correlate to some extent with the depth of the potential source of the contamination, a pipe in which the invert of the pipe was found approximately 4 to 5 ft bgs. The shallower sidewall samples may not have been adequate to assess the horizontal extent of the contamination.

However, it is noted that the excavation was advanced to bedrock, and at the western boundary, the depth of the excavation was approximately 5 feet (ft) below ground surface (bgs). Therefore, a sidewall sample (TP813-13F) was collected at 3-4 ft bgs along the western boundary. It is also noted that this western boundary sample was guided by previous results at TW12-6. According to the well completion report for TW12-6, this well was advanced to at least 10 ft below grade to the depth of refusal, which is assumed to be the depth of bedrock. It is not clear why a deeper sidewall sample could not be collected along the western boundary if previous sampling at TW12-6 did not detect bedrock until 10 ft bgs. Please address this discrepancy, and provide additional clarification for the selection of sidewall sample depths on the western, northern, and eastern excavation boundaries. Additional investigations may be necessary in order to confirm that the contamination has been removed at the depths at which it was primarily detected.

3. Both NYSDEC and EPA have indicated in their comments in Appendix H that the proposed deed restriction does not address the risk of potential vapor intrusion to indoor

air. The facility has not proposed any additional investigations to assess the potential risk to future occupants of the building based on the assumption that there are no current or future occupants of the building. However, the planned future land use for SEAD-12 is institutional training, and unless this building is slated for demolition, and no buildings will be built in its place, there is potential for this building to be used and occupied in the future. EPA's *OSWER Draft Guidance for Evaluating the Vapor Intrusion to Indoor Air Pathway from Groundwater and Soils* (November 2002) and NYSDEC's Proposed *Program Policy for Evaluating the Potential for Vapor Intrusion at Past, Current, and Future Sites* (November 2004) should be reviewed for additional information and guidelines for assessing potential vapor intrusion.

4. All the wells installed as part of this investigation were overburden wells, advanced to the top of bedrock. The Report does not discuss the potential for contamination within the bedrock aquifer, and it appears that this has not been assessed. Given the physical and chemical properties of TCE (i.e. most notably, a greater density than water) and the TCE exceedances identified in MW12-37 which was screened at the base of the overburden aquifer, the potential for dissolved phase TCE to migrate vertically through the weathered bedrock and the secondary porosity of the more competent bedrock should be examined.

See
Section
3.4.4.
of
RI

SPECIFIC COMMENTS

- 1. Executive Summary, Page ES-1.** The second paragraph notes that an abandoned sewer pipe exiting the building was identified as a potential source of the TCE contamination in the vicinity of monitoring well MW12-37. Section 2.2.3.2 (Phase II Test Pitting) and Section 2.2.3.3 (Phase III Test Pitting) note observations of both a 6-inch clay sewer pipe, appearing to run north from the building, and a 4-inch ductile iron pipe, found extending from the building's foundation. Please clarify which pipe, or both of them, is the suspected source of contamination.
- 2. Section 1.3: Site Physical Characteristics, Page 1-3.** This section of the Report describes the site physical characteristics, including topography; however, a topographic map of SEAD-12 has not been provided in the Report. A topographic map is a useful visual aid to support a discussion of surface elevation. Please provide a topographic map of the SEAD-12 area. *SEE Figure 1-4; Sec 3.1.1; Fig 3.1*
- 3. Section 1.3: Site Physical Characteristics, Page 1-3.** Since a specific section for hydrogeological characteristics is not included in this Report, this section on site physical characteristics may be appropriate for a discussion of the groundwater flow direction at SEAD-12. Although Figures 2-1 and 2-2 of this Report do include groundwater contours from data collected in 1999, the Report has not explicitly discussed groundwater flow direction and how it has been calculated. It is also not clear whether more recent groundwater elevation measurements may have been collected to refine the contours shown on Figures 2-1 and 2-2, perhaps using data from the temporary well installations. Please revise the Report to include a discussion of the groundwater flow direction, and indicate whether any post-1999 groundwater elevation measurements have been collected. *see section 3.4 of RI Report*

remove
suspected
source
comment

4. **Section 2.2.1.2: Groundwater Sampling, Page 2-2.** The second paragraph notes that wells were sampled using low-flow procedures and “in general, each well was purged and sampled using a bladder pump.” According to the groundwater sampling records in Appendix B, temporary well TW12-9 could not be sampled via low-flow procedures since there was not enough water in the well. Instead, the well was sampled using a bailer. Deviations from proposed sampling techniques should be presented within the text of the Report. The Report should also discuss the potential effects of any deviations on the reported results, such as potential loss of volatile compounds. Please revise Section 2.2.1.2 to include a discussion of the sampling procedures used at temporary well TW12-9.
5. **Section 2.2.1.3: Sample Analysis, Page 2-3.** It is noted that attempts were made to identify and quantify 10 volatile tentatively identified compounds (TIC) of greatest concentrations, but the outcome of this evaluation does not appear to have been provided in this section or Section 3.0. Please indicate whether any of the volatile TICs were identified or quantified.
6. **Section 2.2.2: Surface Water/Ditch Soil Investigation, Page 2-3.** The description of the surface water/ditch soil samples provided in this section does not appear to correlate with the sample locations shown on Figure 2-3. For example, it is noted that sample SW/SD 12-69 was cited to re-examine RI sample location SW/SD12-30. According to Figure 2-3 (Temporary Well and Surface Water/Ditch Soil Sample Locations), sample SW/SD12-69 is shown in the northern portion of the ditch, just west of temporary well sample location TW12-7. This location appears to be located nearly 300 feet away from sample SW/SD12-30, which is shown south of buildings 813 and 814 on Figure 2-1 (TCE Detected During RI). It is also noted in the text that surface water samples SW12-72 and 73 were both collected to the northwest of the elevated TCE detection at MW12-37. Figure 2-3 shows surface water samples SW-1272 and 73 more than 200 feet south of MW12-37. Please revise Section 2.2.2 so that the sample identifications used in the description correlate with the sample identifications shown on Figure 2-3.
7. **Section 2.2.3.2: Phase II Testing Pitting – November 10 and 11, 2004, Page 2-5.** Soil sample TP813-4F was collected during test pitting activities, but this sample does not appear to be shown on any figures. Figure 2-4 (Sample Locations from Test Pit at Buildings 813 and 814) should be updated to show the location of TP813-4F.
8. **Section 3.1: Groundwater Results, Page 3-1.** The Report notes that there were no exceedances of NYSDEC Class GA Groundwater Standards in the groundwater samples collected from the Phase I temporary wells. However, Table 3-1 and Appendix E also show that the detection limits for a majority of the VOCs sampled were greater than the applicable groundwater standards or action levels. The detection limit for TCE was 10 ug/l whereas the groundwater standard is only 5 ug/l. The detection limit for vinyl chloride, a daughter product of TCE, was also 10 ug/l, although the groundwater standard

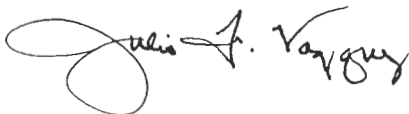
is 2 ug/l. Please provide a discussion of how this may affect an interpretation of the results.

9. **Section 3.1: Groundwater Results, Page 3-1.** Low concentrations of TCE were detected in temporary wells TW12-1 and TW12-3. Elevated TCE concentrations were also detected in this area during the soil gas survey, particularly in the vicinity of SG12-147 (as shown on Figure 1-4). Please indicate whether a source for this contamination has been identified, particularly since it appears to be located upgradient of the contamination identified north of the buildings near well MW12-37.

10. **Section 3.3.2: Stockpiles, Page 3-4.** After re-sampling Phase II and Phase III stockpiles in July and November 2005, it was determined that the samples from the Phase II stockpile and the Phase IIIA stockpiles did not contain TCE above action levels. Therefore, it is noted that these soils will be backfilled into the excavation. The text refers one to Figure 3-3 for the locations of the random grid samples that were collected within the Phase II stockpile, but Figure 3-3 does not show the locations of these samples in relation to samples previously collected in 2004. It is not clear whether concentrations have decreased due to natural processes over the past year or whether samples were collected at completely different locations. Please address this issue prior to backfilling the excavation with the Phase II and IIIA stockpile soil. Additionally, please indicate whether there was still any indication of visual impacts to the Phase II stockpile soil, and if so, whether any samples were collected in areas that were visually impacted.

A facsimile of this letter will be transmitted forth to you today. If you have any questions on the above please call me at (212) 637-4323.

Sincerely,



Julio F. Vazquez, RPM
Federal Facilities Section

cc: K. Gupta, NYSDEC
C. Bethoney, NYSDOH
T. Heino, Parsons
R. Battaglia, USACE

bcc: J. Malleck, SPB-FFS
J. Vazquez, SPB-FFS



ACQUISITION,
TECHNOLOGY
AND LOGISTICS

OFFICE OF THE UNDER SECRETARY OF DEFENSE
3000 DEFENSE PENTAGON
WASHINGTON, DC 20301-3000

JUN 12 2006

MEMORANDUM FOR DEPUTY ASSISTANT SECRETARY OF THE ARMY
(ENVIRONMENT, SAFETY, & OCCUPATIONAL HEALTH)
DEPUTY ASSISTANT SECRETARY OF THE NAVY
(ENVIRONMENT)
DEPUTY ASSISTANT SECRETARY OF THE AIR FORCE
(ENVIRONMENT, SAFETY, & OCCUPATIONAL HEALTH)

SUBJECT: DoD and EPA BRAC Management Review

In accordance with our September 2005 BRAC Memorandum of Understanding (MOU) with EPA, DoD and EPA will conduct biannual Management Reviews. The first Management Review will be held in July 2006. As discussed in the MOU, DoD and EPA will analyze data collected through the attached Installation Appraisal forms to clarify site issues and develop recommendations for improving the program, including performance objectives and interim milestones. This first Management Review will be a senior staff level meeting. Senior staff will report on progress to DoD and EPA senior leadership at the second Management Review in late fall of 2006.

As provided for in the BRAC MOU, in preparation for the Management Review, we are asking selected installations (attached) to complete an Installation Appraisal (attached). These installations were nominated by DoD and EPA Headquarters for a variety of reasons such as: the use of innovative approaches, unmet BRAC goals, and the identification of specific issues impeding the cleanup process.

We ask that each installation's EPA Remedial Project Manager and DoD Base Environmental Coordinator work together to complete the Installation Appraisal. The Installation Appraisal contains basic questions designed to identify base-specific issues, evaluate budget and funding dynamics, and assess the level of coordination amongst stakeholders.

Information from the completed Installation Appraisals will be used at the July Management Review to inform senior staff about potential causes for delays in cleanup and reuse at installations that have not met planned goals or to illustrate successful strategies that may be leveraged by other installations. If an installation is selected for discussion at the July meeting, they will be notified no later than July 1st to participate in the Management Review via conference call. Please distribute the Installation Appraisals to your installations and submit the completed Installation Appraisal to Mr. Vic Wieszek at victor.wieszek@osd.mil by close of business on June 23, 2006.



We believe this Management Review will facilitate DoD and EPA working together more effectively to reach our shared goals.



Alex A. Beehler
Assistant Deputy Under Secretary of Defense
(Environment, Safety, and Occupational Health)

Attachments:
As stated.

Cc:
Bill Judkins, OASM(I&E)
Gerald Johnson, AFRPA
Karen Wilson, ACSIM, DAIM-FDC
James Woolford, EPA, FFRRO

**Installations Selected to Complete Installation Appraisals for the
July BRAC I-IV Management Meeting
June 12, 2006**

	<u>Installation</u>	<u>Region</u>
1.	Adak Naval Air Station	10
2.	Alameda Naval Air Station	9
3.	Castle Air Force Base	9
4.	Cecil Field Naval Air Station	4
5.	Chanute Air Force Base	5
6.	Davisville Naval Construction Battalion Center	1
7.	Defense Depot Memphis Tennessee	4
8.	Fort McClellan	4
9.	Fort Wingate Depot Activity	6
10.	George Air Force Base	9
11.	Letterkenny Army Depot	3
12.	Long Beach Naval Station	9
13.	Mare Island Naval Ship Yard	9
14.	Mather Air Force Base	9
15.	McClellan Air Force Base	9
16.	Savanna Depot Activity	5
17.	Seneca Army Depot Activity	2
18.	South Weymouth Naval Air Station	1
19.	Treasure Island Naval Station	9
20.	Treasure Island Naval Station - Hunters Point Annex	9

DRAFT FINAL

DRAFT FINAL
Land Use Control Remedial Design
For
SEAD 27, 66, and 64A
Seneca Army Depot Activity
Romulus, New York

Prepared by
Seneca Army Depot Activity

(June 2006)

**Land Use Control Remedial Design
For
Planned Industrial/Office Development or Warehousing Areas
Seneca Army Depot Activity
Romulus, New York
(June 2006)**

1. Purpose:

The Record of Decision (ROD) Sites Requiring Institutional Controls in the Planned Industrial/Office Development or Warehousing Areas dated July 2004 (PID/Warehouse Area ROD) recommended establishing institutional controls (ICs) in the form of a Remedial Design ("RD") containing land use controls (LUCs) for SEAD sites 27, 66, and 64A ("Sites"). The LUCs were recommended to be applied to the entire PID/Warehouse. These ICs were chosen in accordance with the Comprehensive Environmental Response, Compensation, and Liability Act ("CERCLA") and, to the extent practicable, the National Oil and Hazardous Substances Pollution Contingency Plan. These ICs are intended to be protective of human health and the environment under the current and anticipated future land use of the site.

2. Land Use Control (LUC) Objectives and Specific Restrictions:

The PID/Warehouse Area ROD LUC Objectives at the Sites which will also be incorporated into deeds, easements, and/or leases for the PID/Warehouse Area are as follows:

- Prevent residential housing, elementary and secondary schools, childcare facilities and playground activities.
- Prevent access to or use of the groundwater until NYS Class GA Groundwater Standards are met.
- Prevent unauthorized excavation at the SEAD 64A site (See Section 5 for SEAD 64A site excavation approval procedures).

Specifically, the real property comprising the PID/Warehouse Area may be used for commercial/industrial use as long as the following long-term institutional controls are employed at and on such property:

(1) Commercial/Industrial Use Restriction.

The real property comprising the PID/Warehouse Area shall be used solely for commercial and industrial purposes and not for residential purposes, such real property having been remediated only for commercial and industrial uses. Commercial and industrial uses include, but are not limited to, administrative/office space, manufacturing, warehousing, restaurants, hotels/motels, and retail activities. Residential use includes, but is not limited to: housing; day childcare facilities; schools (excluding education and training programs for persons over 18 years of age); assisted living facilities; and outdoor recreational activities (excluding recreational activities by employees and their families incidental to authorized commercial and industrial uses on the Controlled Property).

(2) Groundwater Restriction.

Other than for the installation of and sampling from groundwater monitoring wells, there shall be no access to or use of the groundwater on the PID/Warehouse Area real property for any purpose without the prior written approval of the U.S. Department of the Army (the "Army"), the U.S. Environmental Protection Agency Region II ("USEPA Region II"), and the future property owner or owners.

(3) Excavation Restriction.

No digging or excavation shall be permitted on that portion of PID/Warehouse Area parcel identified as SEAD 64A without prior written approval of the Army, USEPA Region II, and the future property owner or owners.

A map showing the location of the PID/Warehouse Area and land use restrictions is attached hereto as the Land Use Restriction Map (Enclosure 1).

Note - The PID/Warehouse Area ROD proposed establishment of an area-wide set of land use restrictions for the PID/Warehouse Area. The area-wide land use restrictions will simplify IC implementation by having a single set of land use restrictions for the Parcel and are consistent with the future anticipated land use of the property. The PID/Warehouse Area ROD also includes No Action/No Further Action ("NA/NFA") sites. Upon request by a future property owner, the Army, USEPA Region II, and the New York State Department of Environmental Conservation ("NYSDEC") will evaluate requested variances for land use restrictions in a NA/NFA site on a site-by-site basis.

3. LAND USE CONTROL (LUC) IMPLEMENTATION ACTIONS:

The following LUC Implementation Actions will be achieved and implemented to prevent future violation of the LUC restrictions:

A. Lease restrictions – Prior to the Army transferring the PID/Warehouse Area, the Army will include lease restrictions that are no less restrictive than the use restrictions and controls described above to implement the LUC Objectives. These lease restrictions shall remain in place until the PID/Warehouse Area is transferred by deed, at which time they will be superseded by the deed restrictions.

B. (1) Deed restrictions – The PID/Warehouse Area property will be transferred with the land use restrictions, consistent with the above LUC Objectives. These LUC Restrictions will be set forth in the deed or deeds for the PID/Warehouse Area property. The deed(s) will be recorded in the Seneca County Clerk's Office. The Army shall provide a copy of the executed PID/Warehouse Area deed(s) to USEPA Region II and NYSDEC.

(2) Each deed and related environmental easement will include a CERCLA 120(h)(3) covenant which will have a description of the residual contamination on the subject property and the environmental use restrictions thereon, expressly prohibiting activities inconsistent with the performance measure goals and objectives. The environmental restrictions are included in a section of the CERCLA 120(h)(3) covenant that the United States is required to include in the deed and related environmental easement for any property that has had hazardous substances stored for one year or more, known to have been released or disposed of on the property. Each deed will also contain a reservation of access to the property for the Army, USEPA Region II, and NYSDEC, and their respective officials, agents, employees, contractors, and subcontractors for purposes consistent with the Seneca Federal Facilities Agreement. The deed will contain any appropriate provisions to ensure that the restrictions continue to run with the land and are enforceable.

C. Environmental Easement - The Army will prepare an environmental easement consistent with N.Y. Code Env. Section 27-1318(b), providing the NYSDEC with the over-site responsibility of LUCs established by State law, which will be recorded immediately prior to the transfer of the PID/Warehouse Area property from the federal government. -The environmental easement will ensure the ability of NYSDEC to enforce the LUC Restrictions in the future. A notification about the existence of the environmental easement will be identified in the deed associated with the parcel transfer. The Easement does not negate or change the Army's responsibility under section of the CERCLA 120(h)(3) and the FFA.

D. Zoning - The PID/Warehouse Area property is subject to the Town of Romulus zoning code. The Town of Romulus zoning code establishes land uses for conservation/recreation, residential, and commercial/-industrial activity in the Town. The Parcel is currently zoned by the Town of Romulus as commercial/industrial. See Romulus Zoning Map (figure 2).

Note – The Paragraph D “Zoning” is provided for information purposes only since the Town of Romulus is responsible for local zoning.

E. Annual Certification – The Army and or future property owner shall annually, or within such time as NYSDEC may allow, submit to NYSDEC, with a copy to the USEPA and the US Army, a written statement by an expert the NYSDEC may find acceptable certifying under penalty of perjury that the controls employed at the Controlled Property are unchanged from the previous certification or that any changes to the controls employed at the Controlled Property were approved by the NYSDEC, and that nothing has occurred that would impair the ability of such control to protect the public health and environment or constitute a violation or failure to comply with this Land Use Control Remediation plan ~~any Site Management Plan~~ for such controls and giving access to such Controlled Property to evaluate continued maintenance of such controls.

F. Five -Year Review - The Army will review the LUC remedy as part of the five-year review and report. The report will address the effectiveness of the LUC remedy and whether any LUC Mechanism should be modified.

4. LAND USE CONTROLS (LUC) ENFORCEMENT

A. The Army LUC Enforcement. If the Army become aware of a LUC Objective violation, It will attempt to resolve the matter informally with the party responsible for the violation (i.e., the property owner or occupant). The Army will notify USEPA Region II and NYSDEC of the LUC Objective violation and nature of its resolution (e.g., corrective action) within 14 days of discovery of the LUC Objective violation.

B. The NYSDEC LUC Enforcement. If a LUC Objective violation is discovered by the NYSDEC, NYSDEC will attempt to resolve the matter in accordance with the enforcement procedures set forth in the Environmental Easement.). The NYSDEC will notify the Army and

USEPA Region II of the LUC Objective violation and the nature of its resolution (e.g., corrective action) within 14 days of becoming aware of the LUC Objective violation.

If LUC Objective violation cannot be resolved informally within 14 days of discovery, the Army, USEPA Region II, and NYSDEC will consult on appropriate enforcement actions. Nothing in this provision shall be construed to limit the ability of the Army, USEPA Region II, and NYSDEC to take appropriate enforcement measures against the party responsible for LUC Objective violations.

5. LAND USE CONTROLS MODIFICATION

Future property owners may seek to modify this RD by requesting a modification of the LUC Objectives (e.g., approval to excavate at Site 64A) or Mechanisms (e.g., changing the frequency of the annual certification) in writing to the Army, USEPA Region II, and NYSDEC. If the Army, USEPA Region II, and NYSDEC determine that it is appropriate to modify the LUC Objectives or Mechanisms, the Army, USEPA Region II, and NYSDEC will provide written approval of the modification request and the Army will revise the RD accordingly.

Note –To the extent that modification of this RD requires a concurrent amendment to the Environmental Easement, it should be noted that the Environmental Easement may be amended only by a written amendment executed by the NYSDEC Commissioner and filed with the Seneca County Clerk's Office.

6. LUC RD SUPPLEMENTATION

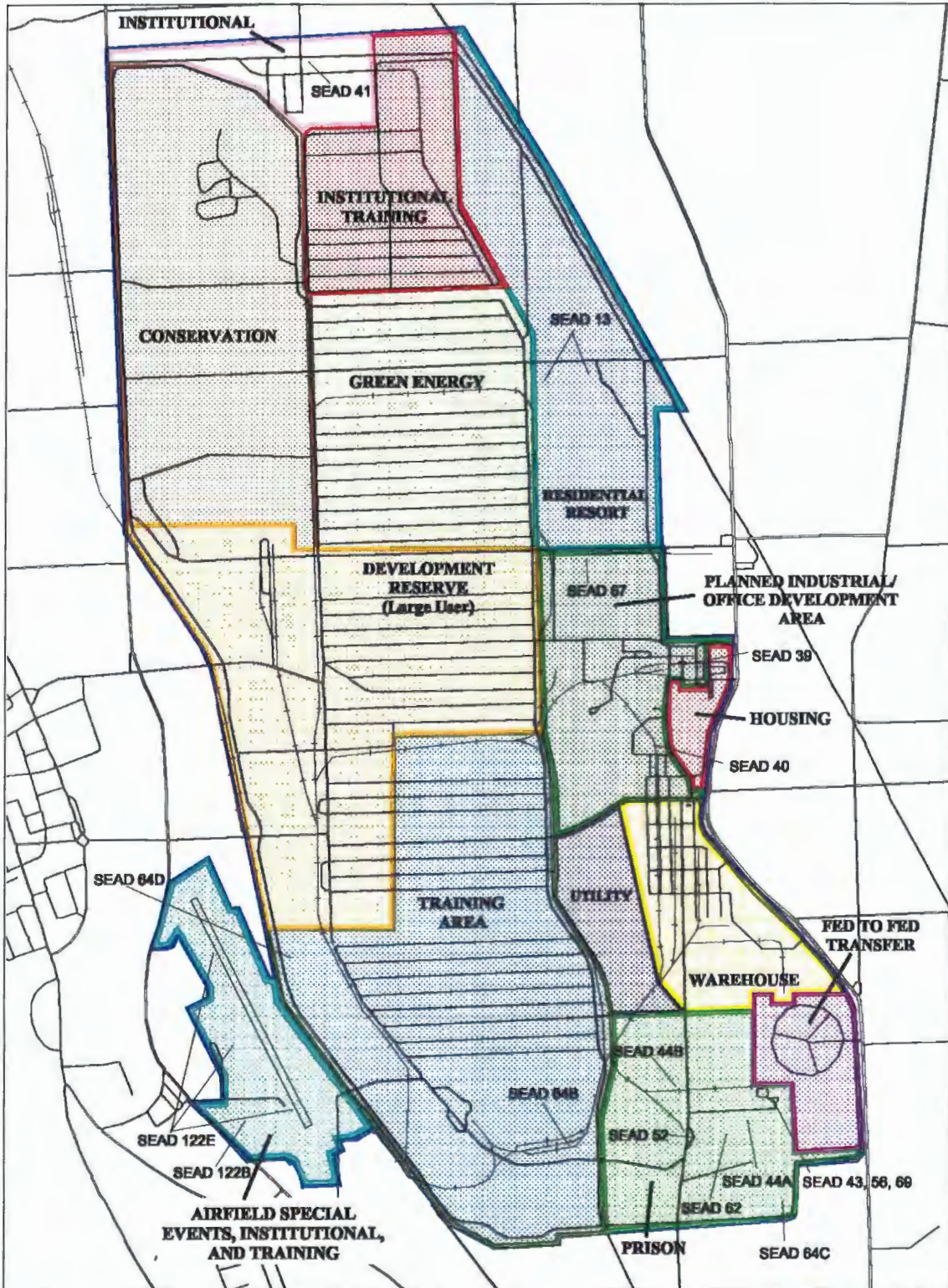
The PID/Warehouse Area includes 14 sites that have been retained by the Army pending completion of ongoing and scheduled investigations and remedial actions by the Army at such sites ("Army Retained Sites). The Army Retained Sites are not part of this ROD and are not addressed by these LUCs. However, the Army Retained Sites include appropriate fencing and/or warning signs to control unauthorized access. Upon completion of the Army investigation and remedial actions for the Army Retained Sites, they will be transferred to the Seneca County Industrial Development Authority. The Army Retained Sites will be addressed by future RODS, and are identified on the Land Use Restriction Map (Enclosure 1).

7. LUC RD TERMINATION

This LUC RD shall remain in effect until such time as the Army, USEPA Region II, and NYSDEC agree that concentrations of hazardous wastes or hazardous constituents have been reduced to levels that allow for unrestricted use of and unrestricted exposure at the property on which or at which they apply (e.g., the groundwater contamination levels are below the New York State groundwater quality standards and the soil contamination levels are below levels that equate to an excess lifetime cancer risk between 1×10^{-4} and 1×10^{-6} and a Hazard Index of 1.0 or less). If the results of inspections indicate that the remedial objectives are nearing completion and that specific LUC mechanisms may no longer be needed, Army will request a meeting with USEPA Region II and NYSDEC to determine whether the terms of this LUC RD may be modified.

~~Neither the Army nor NYSDEC~~~~The Army~~ shall not modify or terminate LUCs, implementation actions, or land uses hereunder without approval by the Army, USEPA Region II and NYSDEC. ~~The Army or NYSDEC, which ever is seeking change shall seek prior~~obtain concurrence from the Army, NYSDEC, and USEPA Region II before any anticipated action that may disrupt the effectiveness of the LUCs or any action that may alter or negate the need for LUCs set forth in this LUC RD.

The Environmental Easement associated with LUC implementation actions may be extinguished only by a release executed, after the termination of this Plan IAW the FFA, by the Commissioner of the New York State Department of Environmental Conservation and filed with the office of the recording officer for the county or counties where the Controlled Property is situated in the manner prescribed by Article 9 of the Real Property Law.



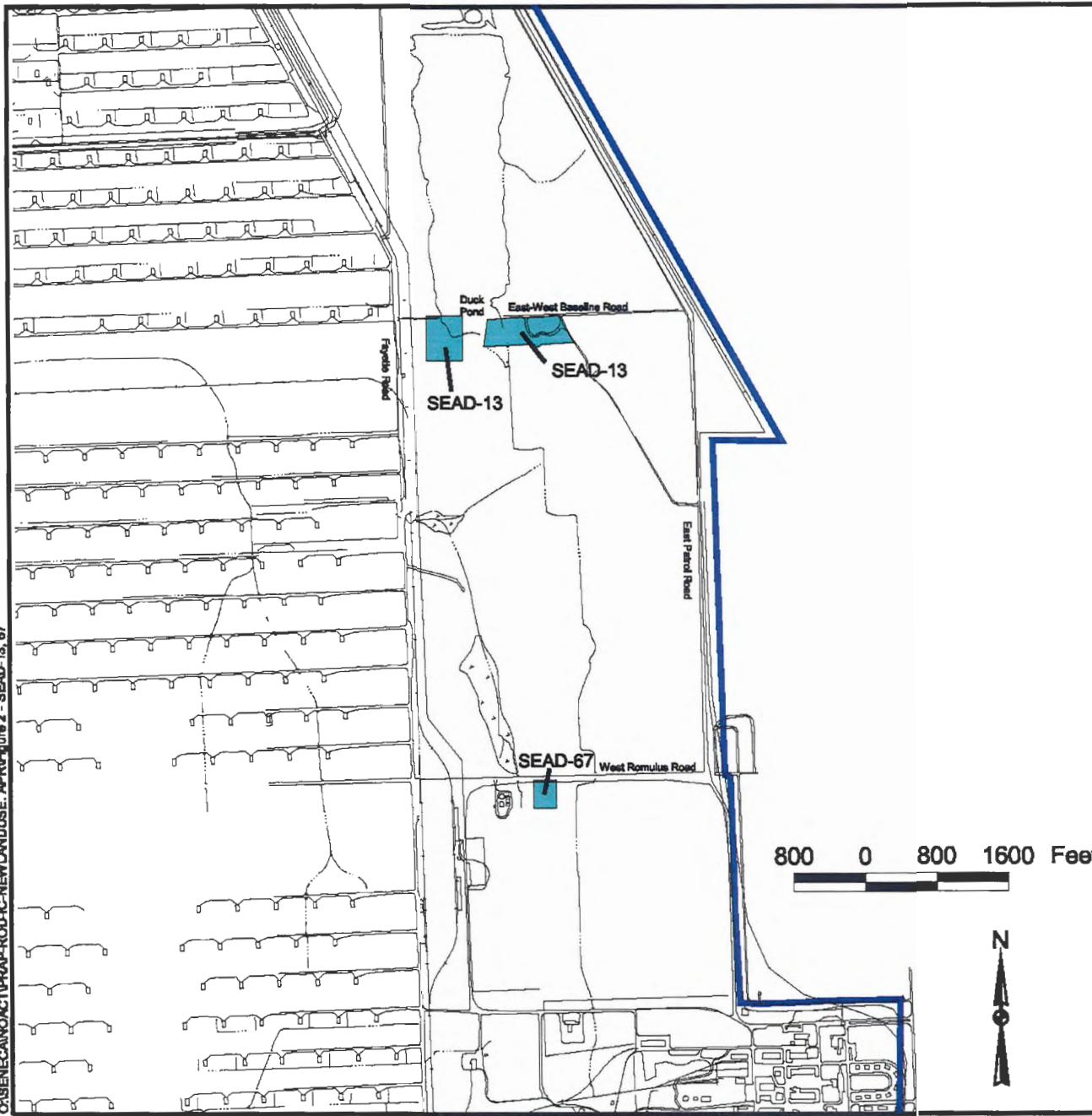
0:\SENeca\MOA\CT\PRAP-ROD-IC-NEW\LANDUSE_APR\Figure 1 - Future Land Use Layout



LEGEND

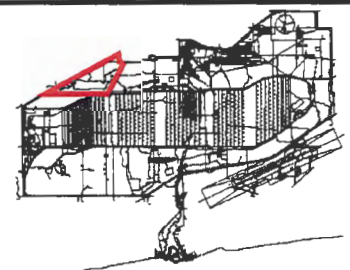


PARSONS
 SENeca ARMY DEPOT
 PROPOSED PLAN FOR 17
 SWMUs REQUIRING ICs
 Figure 1
 Future Land Use and
 Location of IC GWRIUs
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C:\SENECA\NOACT\PRAP-ROD-IC-NEW\LANDUSE_APR\Figure 2 - SEAD-13, 67



-  SEDA Boundary
-  SEAD Boundary



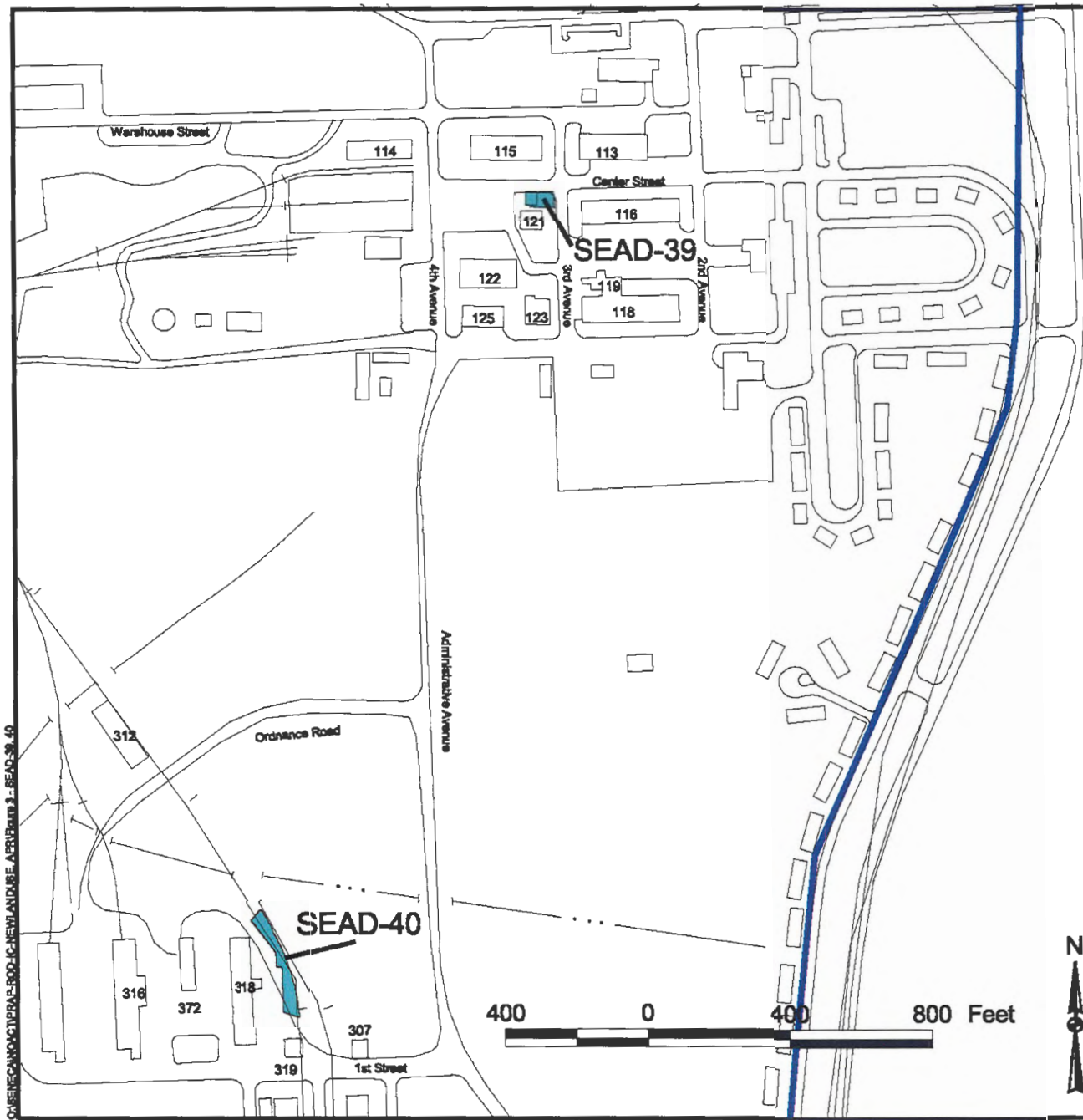
PARSONS

**SENECA ARMY DEPOT
PROPOSED PLAN FOR 17
SWMU's REQUIRING IC's**

**Figure 2
Location of SEADs 13 and 67**

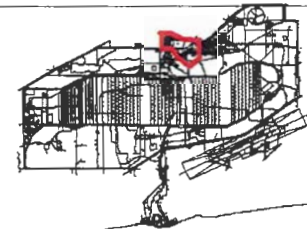
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- SEDA Boundary
- SEAD Boundary



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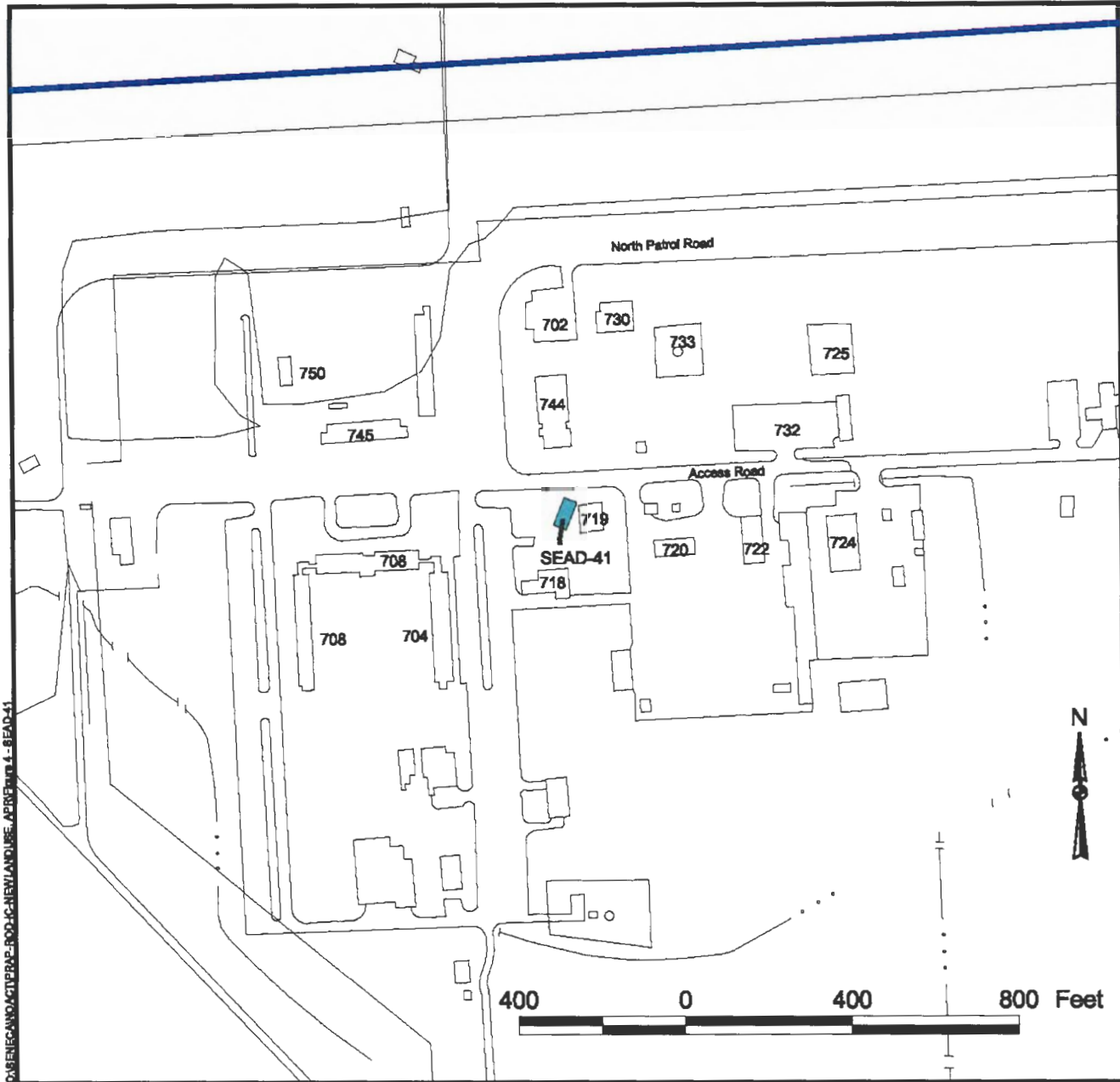
**SENECA ARMY DEPOT
PROPOSED PLAN FOR 17
SWMU's REQUIRING IC's**



**Figure 3
Location of SEAD-39 and SEAD-40**

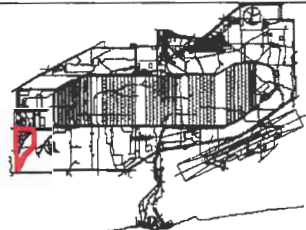
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-  SEDA Boundary
-  SEAD Boundary



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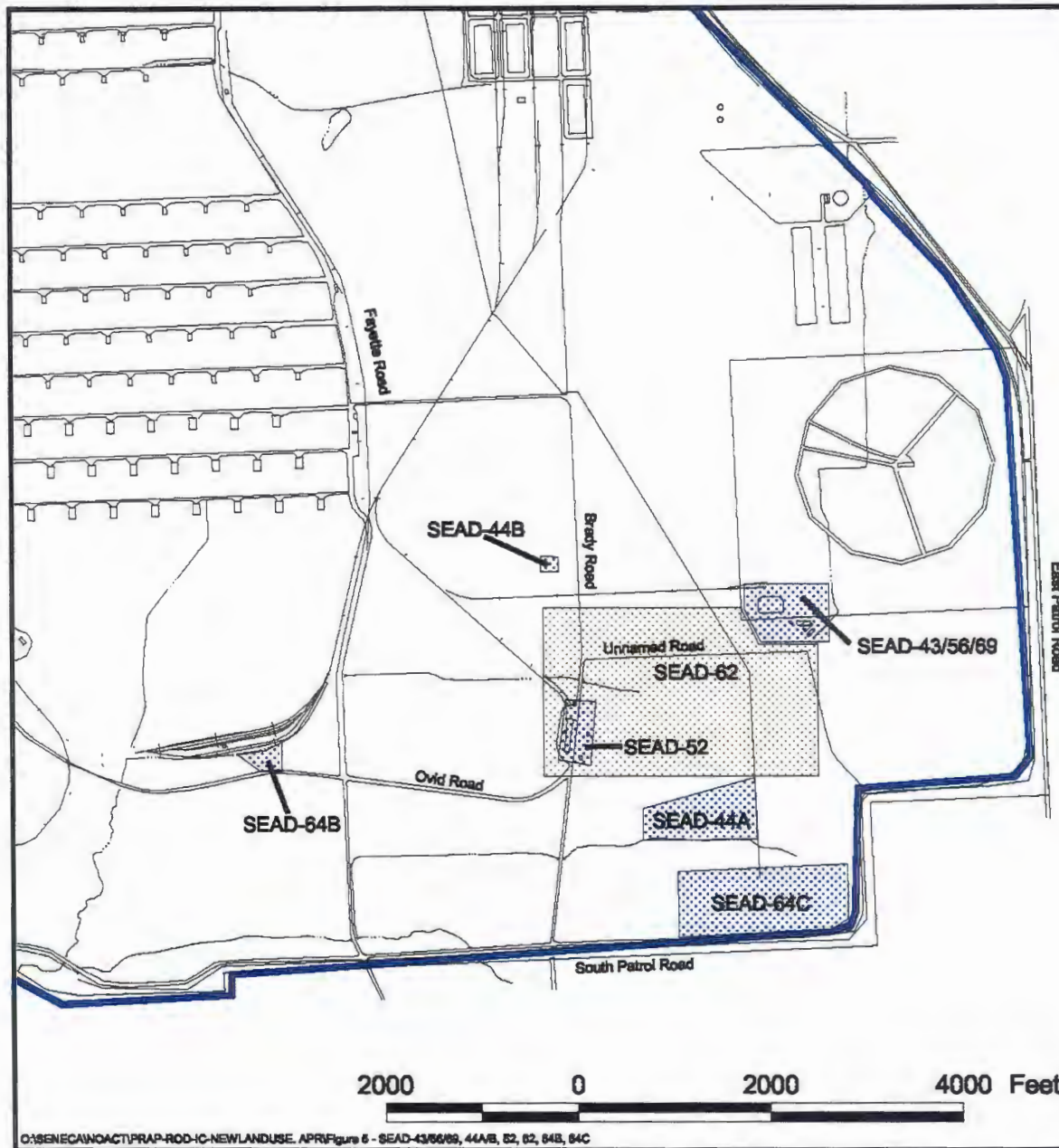
**SENECA ARMY DEPOT
PROPOSED PLAN FOR 17
SWMUs REQUIRING ICs**



**Figure 4
Location of SEAD-41**

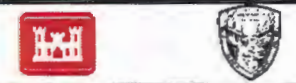
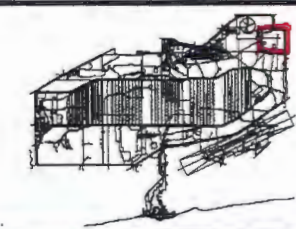
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D:\SENECA\ACT\PRAC-ROD-C-NEW\ANDURE_APR\FIG 4 - SEAD-41



-  SEDA Boundary
-  SEAD Boundary



PARSONS

**SENECA ARMY DEPOT
PROPOSED PLAN FOR 17
SWMUs REQUIRING ICs**

**Figure 5
Location of SEADs 43/56/69,
44A, 44B, 52, 62, 64B, and 64C**

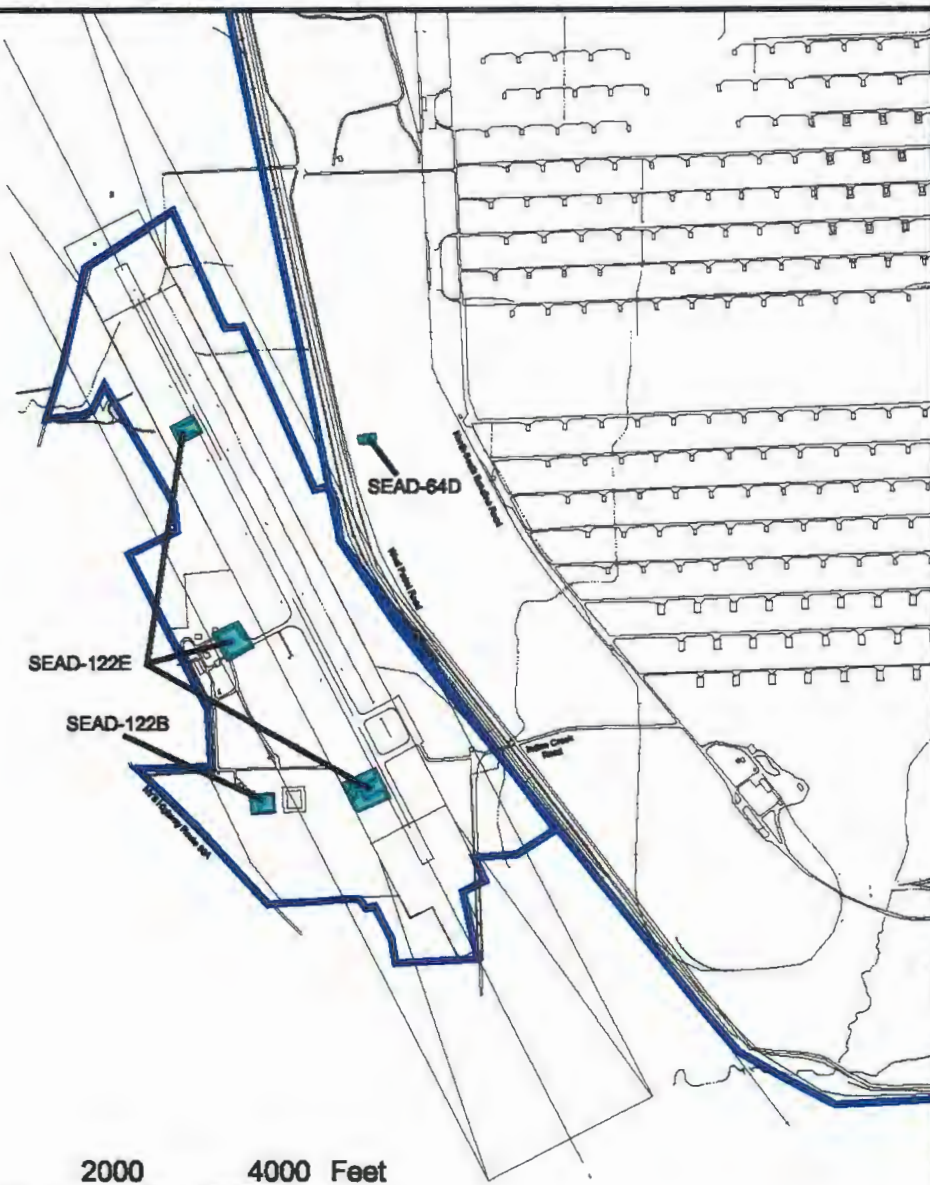
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C:\SENECA\NOACT\PRAP-ROD-IC-NEW\LANDUSE_APR\Figure 6 - SEAD-43/56/69, 44A/B, 52, 62, 64B, 64C

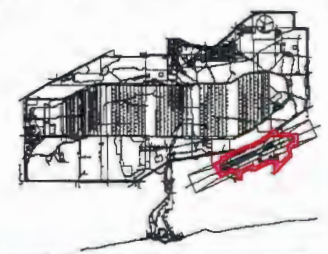
C:\SENCA\NACT\PRAP-ROD-IC-NEW\LANDUSE_APR\Figures 6 - SEAD-64D, 122E



2000 0 2000 4000 Feet



-  SEDA Boundary
-  SEAD Boundary



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**SENECA ARMY DEPOT
PROPOSED PLAN FOR 17
SWMUs REQUIRING ICs**

Figure 6
Location of SEADs 64D,
122B, and 122E

Scale - 1/2"=100'

OCTOBER 2005

Proposed Plan for Seventeen Sites Requiring Institutional Controls

SEADs 13, 39, 40, 41, 43/56/69, 44A, 44B, 52,
62, 64B, 64C, 64D, 67, 122B, and 122E

Seneca Army Depot Activity
Romulus, New York

Presentation: June 20, 2006

PARSONS



Outline

- Brief Introduction - SEADs 13, 39, 40, 41, 43/56/69, 44A, 44B, 52, 62, 64B, 64C, 64D, 67, 122B, and 122E
- Risk Assessment Introduction
- Individual Site Discussions
- Recommendation for Individual Sites



Brief Introduction of 17 Sites

- SEAD-13 in the area designated as Residential / Resort (formerly Conservation/Recreational).
- SEAD-41 located in the area designated as Institutional Area (Hillside Children's Center).
- SEADs 39, 40, and 67 located in the area designated as Planned Industrial / Office Development (PID) Area.



Brief Introduction of 17 Sites

- SEADs 43/56/69, 44A, 44B, 52, 62, and 64C located in area designated as Prison (Five Points Correctional Facility).
- SEADs 64B and 64D located in area designated as Training Area (formerly Conservation / Recreational).
- SEADs 122B and 122E located in area designated as Airfield Special Events/Institutional/Training.



Risk Assessment Introduction

Human Health (HH) Risk Assessment

Reasonable Maximum Human (RME) Exposure:

- The maximum detected concentration or the 95th UCL of the sample population's mean.
- Reasonable maximum exposure scenario (extended duration, frequency and intakes).

Acceptable Risk Limits:

- Cancer: less than 10^{-4} ~ 10^{-6} .
- Non-cancer: HIs less than 1.



HH Risk Assessment Receptors

- Residential/Resort – SEAD-13 (Conservation / Recreational):
Park Worker (PW), Construction Worker (CW), Recreational Visitor – Child (RV-C), Adult Resident (AR), Child Resident (CR).
- Planned Industrial/Office Development – SEADs 39, 40, & 67:
Industrial Worker, Construction Worker, Daycare Worker (DCW), Daycare Child (DCC).
- Training - SEADs 64B & 64D (Conservation/Recreational):
Park Worker, Construction Worker, Recreational Visitor - Child.
- Prison – SEADs 43/56/69, 44A, 44B, 52, 62 & 64C:
Prison Inmate (PrI), Prison Worker (PrW), Construction Worker, Daycare Worker, Daycare Child.
- Special Events/Institutional/Training – SEADs 122B & 122E:
Industrial Worker, Construction Worker, Daycare Worker, Daycare Child, Adult Resident, Child Resident.



Risk Assessment Introduction

Ecological Risk Assessment

- Characterization of the unit and the ecological communities it may affect.
- Exposure Assessment – RME:
 - The maximum detected concentration as exposure point concentration.
 - Reasonable maximum exposure scenario.

- Toxicity Assessment.
- Risk Characterization.



SEAD-13; Inhibited Red Fuming Nitric Acid (IRFNA) Disposal Site

Background Information

- Site Name: Inhibited Red Fuming Nitric Acid (IRFNA) Disposal Area.
- Future Land Use: Residential / Resort (previously Conservation / Recreational).
- Contaminants: Metal and salt compounds.
- Description: Two disposal pits used during the 1960s to dispose of unserviceable IRFNA. IRFNA was mixed with water and limestone in the pits for neutralization.



SEAD-13 IRFNA Disposal Site

Previous Investigations

- 93/94 Expanded Site Investigation (ESI) and 01/02 Supplemental Site

Investigations:

- Soil: PAHs/metals above TAGMs.
- Groundwater (GW): BEHP, metals and NO_3 exceed GA standards.
- Surface water/Sediment (SW/SED) impacted by metals.



SEAD-13 IRFNA Disposal Site Site Risks/Recommendation

- HH Risk: Residential and Conservation / Recreational Scenarios:
 - Total cancer risks for residents $> 1E^{-04}$ due to ingestion of NO_3 in GW.
 - Total non-cancer HI greater than 1 due to ingestion of NO_3 in GW.
- Recommendation: No Action (NA) with GW access/use restriction.



SEAD-39; Building (Bldg) 121 Boiler Blowdown Leach Pit

Background Information

- Site Name: Building 121 Boiler Blowdown Leach Pit.
- Future Land Use: Planned Industrial / Office Development (PID).
- Contaminants: PAH and metal compounds.
- Description: Flat earthen area located exterior and north of Building 121 where prior to 79/80 boiler blowdown liquids were discharged and allowed to leach into ground. Liquids presumed to contain water, tannins, NaOH, NaPO_4 .



SEAD-39, Bldg 121 Boiler Blowdown Leach Pit Site

Previous Investigations

- 93/94 Limited Site Investigation (LSI), 2003
Time Critical Removal Action (TCRA),
Proposed 2006 TCRA (10 cy).
- 2003 TCRA removed 40 tons of soil to landfill.
 - Soil Chemistry:
 - Total Recoverable Petroleum Hydrocarbons (93/94).
 - Average BTEQs > 10 ppm; some cPAHs above EPA and NYS guidance levels (2003).
 - Average benzo(a)pyrene toxicity equivalents (BTEQs) < 4 ppm; some cPAHs above NYS guidance levels, Human Health Risk Assessment meets EPA 10^{-4} – 10^{-6} guidance if planned TCRA performed.



SEAD-39, Bldg 121 Boiler Blowdown Leach Pit Site Risks/Recommendation

- Assuming 2006 removal action - HH Risk: Industrial Scenarios, 95th UCL RME, 15 Confirmation Soil Samples:
 - Total cancer risks for all receptors $< 7E-05$.
 - Daycare Child @ $1E-04$.
 - Total non-cancer HI < 1 .

- Recommendation: No Further Action (NFA) with residential use and GW access/use restriction.



SEAD-40; Bldg 319 Boiler Blowdown Leach Pit Background Information

- Site Name: Bldg 319 Boiler Blowdown Leach Pit.
- Future Land Use: Planned Industrial / Office Development.
- Contaminants: PAH and metal compounds.
- Description: Drainage ditch north of Bldg 319, near RR tracks and parking area. where prior to 79/80 boiler blowdown liquids were discharged and allowed to leach into ground. Liquid presumed to contain water, tannins, NaOH, NaPO₄.



SEAD-40, Bldg 319 Boiler Blowdown Leach Pit Site Previous Investigations

- 93/94 LSI and 2003 TCRA.
- TCRA removed 40 tons of soil to landfill.
 - Soil Chemistry:
 - Total Recoverable Petroleum Hydrocarbons (93/94).
 - Average BTEQs < 7.5 ppm; some individual BTEQs, cPAHs and metals above EPA and NYS guidance levels (2003).



SEAD-40, Bldg 319 Boiler Blowdown Leach Pit Site Risks/Recommendation

- HH Risk: Industrial Scenarios, 95th UCL RME, 40+ Confirmation Soil Samples:
 - Total cancer risks for all Industrial receptors < $7E^{-05}$.
 - Daycare Child @ $1E^{-04}$.
 - Total non-cancer HI < 1.
- Recommendation: NFA with residential use and GW access/use restriction.



SEAD-41; Bldg 718 Boiler Blowdown Leach Pit Background Information

- Site Name: Bldg 718 Boiler Blowdown Leach Pit.
- Future Land Use – Institutional, currently Hillside Children’s Center.
- Contaminants: TRPH, VOCs and SVOCs.
- Description: Earthen area located exterior and west of Building 718 where prior to 79/80 boiler blowdown liquids were discharged and allowed to leach into ground. Liquids presumed to contain water, tannins, NaOH, NaPO₄. Bldg 718 and surrounding area transferred and demolished by SCIDA/KidsPeace.



SEAD-41, Bldg 718 Boiler Blowdown Leach Pit Site Previous Investigations

- 93/94 LSI, 00 TCRA.
- TCRA removed 8 tons of soil to LTTD.
 - Soil Chemistry:
 - Total Recoverable Petroleum Hydrocarbons (93/94).
 - Some VOCs and SVOCs (PAHs/cPAHs) (00).
- Bldg 718 demolished and surrounding area was regraded and covered with topsoil as part of KidsPeace takeover of property.



SEAD-41, Bldg 718 Boiler Blowdown Leach Pit Site Risks/Recommendation

- Mini-Risk: Institutional, Max Value RME, 5
Confirmation Soil Samples:
 - Total cancer risks for all receptors $< 3E-05$.
 - Total non-cancer HI < 1 .
- Recommendation: NFA with GW
notification in deed.



SEAD 43/56/69, Bldg 606: Old Missile Propellant Test Lab/Herb & Pest Storage/Disposal Area Background Information

- Site Name: SEAD-43 Bldg 606, Old Missile Propellant Test Laboratory / SEAD-56 Herbicide and Pesticide Storage / SEAD-69 Disposal Area.
- Future Land Use – Prison, currently in Five Points Correctional Facility site.
- Contaminants: IRFNA and other propellants, pesticides and herbicides.



SEAD 43/56/69, Bldg 606: Lab/Storage/Disposal Area Background Information

Description:

- In the 60s, SEAD-43 Bldg 606, the missile propellant testing lab, was used QA surveillance testing of military ordnance. IRFNA stored in adjacent metal shed on concrete pad. Concrete pad used to aerate spill residues of IRFNA and liquid propellants.
- In 1976, SEAD-56 Bldg 606 used for pesticide and herbicide storage and mixing facility. Storage at old foundation west of Bldg 606. Concrete UST used for intermittent storage of wastewater from rinsing portable truck mounted tank used for spraying Depot sites.
- SEAD-69 is disposal area southeast of Bldg 606. Approx. 100' x 100' in size contains construction debris and possibly IRFNA and pesticides/herbicide residues.



SEAD 43/56/69, Bldg 606: Lab/Storage/Disposal Area Previous Investigations

- 1994 ESI.
 - Soil: SVOCs and metals above TAGMs; Some low VOCs and pesticides below TAGMs; NO₃ also.
 - GW: Silvex found once above GA; Some metals above GA; Nitrate/nitrite-nitrogen (NO₃/NO₂-N).
 - SW: BEHP and metals above Class C; NO₃/NO₂-N observed.
 - SED: Herbicides, Metals, trace HMX, and NO₃/NO₂-N.



SEAD-43/56/69

Site Risks/Recommendation

- Mini-Risk: Prison Scenario, Max Value used, RME:
 - Total cancer risks for all receptors $< 2E^{-05}$.
 - Total non-cancer HI < 1 .
- Eco risk: No contaminants of concern (CoCs) identified.
- Recommendation: NA with reversionary deed.
 - “ ... the property shall not be sold, leased, mortgaged, assigned or otherwise disposed of” without the consent of the Government.



SEAD 44A: Quality Assurance (QA) Test Lab - Background Information

- Site Name: SEAD-44A, QA Test Laboratory.
- Future Land Use – Prison, currently in Five Points Correctional Facility site.
- Contaminants: Metals, CN-, Munitions and Explosives of Concern (MEC) and Materials Potentially Presenting an Explosive Hazard (MPPEH).
- Description: Consisted of Bldg 416 and a number of earthen berms that were used for testing ordnance items including pyrotechnics, firing devices, 40mm practice/chemical smoke (CS) grenades, and landmines.



SEAD 44A: QA Test Lab

Previous Investigations

- 1993/94 LSI and 2000/2002 TCRA:
 - 1993/94 ESI:
 - Soil: Some SVOCs & metals above TAGMs. Low pesticides, and 2,4,6-TNT also found.
 - GW: Some metals above GA; low VOCs.
 - SW: Some metals above Class C.
 - SED: Some metals above NYS sediment criteria.
 - 2000/2002 TCRA:
 - Site-wide UXO & OE clearance and removal and soil remediation.
 - 27,000 yd³ of soil excavated, screened to remove oversize (>1") materials.
 - 27 UXO/OE items recovered/managed.



SEAD-44A, QA Test Lab

Site Risks/Recommendation

- Mini-Risk: Prison Scenario, Max Value used, RME:
 - Total cancer risks for all receptors $< 9E^{-06}$.
 - Total non-cancer HI < 1 .
- Eco risk: No CoCs identified.
- Recommendation: NA with reversionary deed.
 - “ ... the property shall not be sold, leased, mortgaged, assigned or otherwise disposed of” without the consent of the Government.



SEAD 44B: QA Test Lab

Background Information

- Site Name: SEAD-44B, QA Test Laboratory.
- Future Land Use – Prison, currently in Five Points Correctional Facility site.
- Contaminants: Metals, MEC and MPPEH.
- Description: Historically consisted of two Bldgs that were part of QA test area for pyrotechnics, CS grenades, and other fire devices. Area relatively flat except for two distinct earthen berms (1' – 2' high).



SEAD 44B: QA Test Lab

Previous Investigations

- 93/94 ESI:
 - Soil: SVOCs, 1 pesticide, and metals above TAGMs; $\text{NO}_3/\text{NO}_2\text{-N}$.
 - GW: Some metals above GA.
 - SW: Some metals above Class C.
 - SED: Metals above NYS sediment criteria; $\text{NO}_3/\text{NO}_2\text{-N}$.



SEAD-44B, QA Test Lab

Site Risks/Recommendation

- Mini-Risk: Prison Scenario, Max Value used, RME:
 - Total cancer risks for all receptors $< 3E^{-06}$.
 - Total non-cancer HI < 1 .
- Eco risk: No CoCs identified.
- Recommendation: NA with reversionary deed.
 - “ ... the property shall not be sold, leased, mortgaged, assigned or otherwise disposed of” without the consent of the Government.



SEAD 52: Bldgs 608 & 612 – Ammunition Breakdown Area Background Information

- Site Name: SEAD 52, Bldgs 608 & 612 – Ammunition Breakdown Area.
- Future Land Use – Prison, currently in Five Points Correctional Facility site.
- Contaminants: Explosives.
- Description: Active from mid 50s to late 90s. Four Bldgs and numerous drainage ditches: 608, storage of ammunition magazines; 610, ammunition powder collection; 611, storage of equip, paint, solvents; 612; breakdown / maintenance of ammunition.



SEAD 52: Bldgs 608 & 612 – Ammunition Breakdown Area Previous Investigations

- 1993 LSI:
 - Soil:
 - 2,4-DNT found at up to 2,100 ug/Kg in 10 samples.
 - 2,4,6-TNT found twice and tetyl found once.



SEAD 52: Bldgs 608 & 612 – Ammunition Breakdown Area Site Risks/Recommendation

- Mini-Risk: Prison Scenario, Max Value used, RME:
 - Total cancer risks for all receptors $< 2E^{-06}$.
 - Total non-cancer HI < 1 .
- Eco risk: No CoCs identified.
- Recommendation: NA with reversionary deed.
 - “ ... the property shall not be sold, leased, mortgaged, assigned or otherwise disposed of” without the consent of the Government.



SEAD 62: Nicotine Sulfate Disposal Area near Bldgs 606 & 612 – Background Information

- Site Name: SEAD 62: Nicotine Sulfate Disposal Area near Bldgs 606 & 612.
- Location: Southeastern corner of the Depot, SE of Brady Road, between SEADs 43/56/69, 44A, 44B and 52.
- Future Land Use – Prison, currently in Five Points Correctional Facility site.
- Contaminants: Nicotine Sulfate.
- Description: Predominantly undeveloped area measuring 0.5 mi x 0.25 mi with exception of bunkers and Bldgs on western edge (SEAD-52).



SEAD 62: Nicotine Sulfate Disposal Area near Bldgs 606 & 612 – Previous Investigations

- 1994 ESI:
 - Soil: Some metals above TAGMs; low SVOCs and herbicides.
 - GW: Some metals and benzene above GA standards.



SEAD 62: Nicotine Sulfate Disposal Area near Bldgs 606 & 612 – Site Risks/Recommendation

- Mini-Risk: Prison Scenario, Max Value used, RME:
 - Total cancer risks for all receptors < $1E^{-06}$.
 - Total non-cancer HI < 1.
- Eco risk: No CoCs identified.
- Recommendation: NA with reversionary deed.
 - “ ... the property shall not be sold, leased, mortgaged, assigned or otherwise disposed of” without the consent of the Government.



SEAD-64B: Garbage Disposal Area

Background Information

- Site Name: SEAD-64B: Garbage Disposal Area near Ovid Road and Bldg 2086.
- Future Land Use – Training Area (Conservation / Recreational).
- Contaminants: Metals, VOCs and SVOCs.
- Description: Garbage disposal from 1974 to 1979, when SEDA's solid waste incinerator not operational. Undeveloped land with two covered piles of household wastes. NYS Solid Waste landfill closure approval pending.



SEAD 64B: Garbage Disposal Area – Previous Investigations

- 1994 ESI:
 - Soil: One metal above TAGMs.
 - GW: Some metals above GA standards.
 - SW: Two metals above Class C standards.
 - SED: Three pesticides and some metals above NYS sediment guidance.



SEAD 64B: Garbage Disposal Area - Site Risks/Recommendation

- Mini-Risk: Conservation/Recreational Scenario, Max values used, RME:
 - Total cancer risks for all receptors $< 2E^{-07}$.
 - Total non-cancer HI < 1 .
- Eco risk: No CoCs identified.
- Recommendation: NA with unauthorized digging restriction.



SEAD 64C: Garbage Disposal Area - Background Information

- Site Name: SEAD 64C: Garbage Disposal Area at intersection of E. Patrol Rd. and S. Patrol Rd.
- Future Land Use – Prison, currently in Five Points Correctional Facility site.
- Contaminants: Metals, VOCs, SVOCs.
- Description: Garbage disposal from 1974 to 1979, when SEDA's solid waste incinerator not operational. Two small concrete pads in SE portion of site accessed by 75' crushed shale road. Area vegetated by grass and brush. NYS Solid Waste landfill closure approval pending.



SEAD 64C: Garbage Disposal Area – Previous Investigations

- 94 ESI; Soil and GW collected; analyzed for TAL/TCL VOCs, SVOCs, pests/PCBs, metals and CN:-
 - Soil: Some metal above TAGMs.
 - GW: Phenol and some metals above GA standards.



SEAD 64C: Garbage Disposal Area - Site Risks/Recommendation

- Mini-Risk: Prison Scenario, Max Value used, RME:
 - Total cancer risks for all receptors $< 6E^{-08}$.
 - Total non-cancer HI < 1 .
- Eco risk: No CoCs identified.
- Recommendation: NA with reversionary deed and unauthorized digging restriction.
 - “... the property shall not be sold, leased, mortgaged, assigned or otherwise disposed of” without the consent of the Government.



SEAD 64D: Garbage Disposal Area

Background Information

- Site Name: SEAD-64D: Garbage Disposal Area located between N-S Baseline Rd. and W. Patrol Rd.
- Location: West, southwestern portion of the Depot.
- Future Land Use – Training Area (Conservation / Recreational).
- Contaminants: TCL/TAL analytes.
- Description: Garbage disposal from 74 – 79, when SEDA's solid waste incinerator not operational. Elongated E/W trending mound (75') surrounded by three surface depressions (2-4') with metal and other surface debris present. NYS Solid Waste landfill closure approval pending.



SEAD-64D: Garbage Disposal Area – Previous Investigations

- 1994 ESI:
 - Soil: 3 SVOCs and 9 metals above TAGMs.
 - GW: Six metals above GA standards; low flow sampling techniques were not used.
 - SW: Two metals above Class C standards.
 - SED: Three pesticides and some metals above NYS sediment guidance.



SEAD 64D: Garbage Disposal Area - Site Risks/Recommendation

- Mini-Risk: Conservation/Recreational Scenario,
Max values used, RME:

- Total cancer risks for all receptors $< 4E^{-07}$.
- Total non-cancer HI = 3 PW and 1 RV-C due to ingestion of Fe + Mn in GW.

- Eco risk: No CoCs identified.

- Recommendation: NA with ICs prohibiting unauthorized digging and use/access to GW.



SEAD-67; Dump Site E of STP #4

Background Information

- Site Name: SEAD-67, Dump Site East of Sewage Treatment Plant No. 4.
- Location: North-central portion of the Depot, south of W. Romulus Rd.
- Future Land Use – Planned Industrial / Office Development.
- Contaminants: Metals and SVOCs.
- Description: Undeveloped and heavily vegetated area containing five waste piles and two earthen berms. The origin of waste piles and berms unknown.



SEAD-67, Dump Site E of STP #4

Previous Investigations

- 1993 ESI and 2002/2003 TCRA.
 - 1993 ESI indicated:
 - Soils: impacted by SVOCs (cPAHs) and Hg.
 - GW: Some metals above standards.
 - SW: Two metals above Class C standards.
 - Sed: SVOCs, pesticides and metals above guidance values.
 - TCRA removed 250 cy of soil from and beneath piles and berms to offsite landfill.
 - Confirmation samples showed PAHs present above TAGMs, but BTEQ < 10 ppm.



SEAD-67, Dump Site E. of STP #4

Risks/Recommendation

- Risk: Industrial Scenario, 95th UCL Value RME, Confirmation Soil Samples:
 - Total cancer risks for all receptors $< 8E-06$.
 - Total cancer risk for IW & CW $< 2E-06$.
 - Total non-cancer HI for all < 1 .

• Recommendation: NFA with ICs prohibiting residential use and GW access/use for potable water.



SEAD-122B; Small Arms Range, Airfield - Background Information

- Site Name: SEAD-122B, Small Arms Range, Airfield.
- Future Land Use – Airfield Special Events / Institutional / Training.
- Contaminants: Metals.
- Description: Twenty lane, small arms range and two lane machine gun firing ranges built in 50s. Three sides consisted of earthen berms, measuring up to 28' tall and 8' – 16' thick. Footer drains underlying ranges for water drainage.



SEAD-122B, Small Arms Range, Airfield - Previous Investigations

- 98 EBS, 02 Investigation and 04 Treatability Study.
 - 98 EBS indicated:
 - Soils: Some metals above TAGMs.
 - 02 Investigation indicated:
 - Soils: impacted by Pb at levels up to 88,700 ppm.
 - GW: Upgradient well showed highest levels of metals, some above GA standards.
 - Treatability Study ~ 500 cy of soil excavated from area where Pb > 400 ppm found. Screened and disposed at offsite landfill.
 - Confirmation samples showed residual soil Pb < 400 ppm.



SEAD-122B, Small Arms Range, Airfield – Future Use/Recommendation

- Future Use: State Police Small Arms Range.
- No Risk Assessment performed since residential lead goal met.
- Recommendation: NFA with ICs prohibiting any residential use.



SEAD-122E; Plane Deicing Area, Airfield - Background Information

- Site Name: SEAD-122E, Plane Deicing Areas, Airfield.
- Future Land Use – Airfield Special Events / Institutional / Training.
- Contaminants: Metals and PAHs.
- Description: Three separate refueling areas at the airfield where fueling and deicing occurred.



SEAD-122B, Plane Deicing Area, Airfield - Previous Investigations

- 98 EBS included analysis of soils for SVOCs and principal components of deicing solution (i.e., alcohols/glycols) in 6 soil and 4 GW samples:
 - One surface soil sample near pavement had all maximum detections of PAHS.
 - No deicing chemicals identified.
 - BEHP found in all GW samples and blank; lab contaminant. SVOCs found in well at location where all high SVOCs detected, but not above standards.



SEAD-122B, Plane Deicing Area, Airfield – Risks/Recommendation

- Mini-Risks: Institutional Scenario, Max Value used, RME:
 - Total cancer risks for IW and CW $< 8E^{-05}$.
 - Total cancer risk for all others (AR, CR, DC-W, & DC-C) $\geq 1E^{-04}$.
 - Total non-cancer HI < 1 .
- Recommendation: NA with ICs prohibiting any residential use.



Summary of Army's Recommendations

Site ID	Recommendation	Institutional Controls
• 13	NA	No GW access/use
• 39, 40 & 67	NFA	No GW access/use & No Residential Activities
• 41	NA	GW Notification in Deed
• 43/56/69, 44B, 52 & 62	NA	Reversionary Deed
• 44A	NFA	Reversionary Deed
• 64B	NA	No Digging
• 64C	NA	Reversionary Deed & No Digging
• 64D	NA	No GW access/use & No Digging
• 122B	NFA	No Residential Activities
• 122E	NA	No Residential Activities



Institutional Controls

The Army shall implement, inspect, report, and enforce the ICs described in the Record of Decision in accordance with the approved IC Remedial Design. Although the Army may later transfer these responsibilities to another party by contract, property transfer agreement, or through other means, the Army shall retain ultimate responsibility for remedy integrity.

PARSONS



New York State Department of Environmental Conservation
Division of Environmental Remediation
Remedial Bureau A
625 Broadway, 11th Floor
Albany, New York 12233-7015
Phone: (518) 402-9625 • **Fax:** (518) 402-9022
Website: www.dec.state.ny.us



June 19, 2006

Mr. Stephen Absolom
Chief, Engineering and Environmental Division
Seneca Army Depot Activity (SEDA)
5786 State Route 96
Romulus, NY 14541-5001

Re: Seneca Army Depot Activity,
Site #850006
Draft proposed Plan for Seventeen SWMUs Requiring Institutional
Controls (SEADs 13, 39,40,41,43/56/69, 44A, 44B,52,62,
64B,64C,64D,67, 122B and 122E.

Dear Mr. Absolom:

The New York State Department of Environmental Conservation (NYSDEC) and Department of Health (NYSDOH) have reviewed the draft Proposed Plan for Seventeen SWMUs Requiring Institutional Controls (SEADs 13, 39, 40, 41, 43, 56, 69, 44A, 44B, 52, 62, 64B, 64C, 64D, 67, 122B and 122E) for the Seneca Army Depot site and have the following comments:

Section 4.7

Indicates that the area contains possible UXO debris. However, under the site investigation Section 5.7, this UXO issue is not discussed. Clarification is requested.

Section 5.2, third paragraph

The statement "Carcinogenic PAH (cPAH) concentrations were compared to NYSDEC's recommended screening level of 10 mg/kg benzo(a) pyrene toxicity equivalent (BTE)" is misleading. There is no NYSDEC recommended screening level for BTE. This is an inappropriate reference to this number as screening level.

Page 17, top of the page

Three references to "TRPH" are stated. I believe that this is an editorial error and it should be stated as "TPH". Revisions are requested if this is indeed an editorial error. If not, clarification is requested.

Section 6.4, Page 33, SEAD 41

"No Risk Assessment was performed" statement needs to be modified. Army has submitted Mini Risk Assessment report on May 8, 2006 by e-mail. This is new data generated in Tables and has to be added in the Proposed Plan.

Section 6.9 and Section 7.0, SEAD-62

According to our review Army has not identified which Institutional Control (I/C) is provided for this SEAD.in the Table at page 36.

Section 6.13, Page 35,

SEAD 67 The language needs to be modified for reflecting PAH data, the most recent one from the tables. Please see the USEPA comments to be addressed

Section 5.13 and 6.13

Please revise the wording and clarify the report with response to NYSDEC comments June, 2005 on Final Completion Report for Time Critical Removal Action Metal Site.

Section 6.14

Please clarify why there is no Risk Assessment, Was this due to the soil being excavated in the 2004?.

Table , Page 36

I 'm confused as to how the SEAD- 56 & SEAD-69 were placed here as the Proposed Plan has no discussion on SEAD 56 & SEAD-69. I believe that the Table should be modified.

Tables

In multiple instances, under "Notes" the statement "USEPA Risk Based Residential Cleanup Goal for lead" is used. First, I suggest that the reference number be placed within the table under the NYSDEC TAGM 4046 column, next to the "400" number. Second, revisions to the "Note" are requested as this is not a Residential Cleanup Goal, it is the USEPA's Lead Hazard Standard in bare soil in children's play areas. In addition, clarification is requested to the reason why this 400 mg/kg number for lead is used in some tables and in others, the NYSDEC TAGM 4046 number of site background for lead is used. Consistency between the tables is requested.

Although I do not disagree that this proposed plan is appropriate for the SWMUs stated, I do not intend to present it for management concurrence prior to receiving an approved final copy of the SEAD 39 and SEAD 40 Completion Report.

DRAFT
BCT Agenda
16 May 2006
1330- 1630 hours
17 May 2006
0830-1130 hours

May 16, 2006

Establish a path forward and establish milestone points for the partial delisting Seneca Army Depot Activity

Update reuse efforts for Ethanol Plant

Discuss PID and Conservation Area FOST Amendments and associated property transfer for the FY

Review Status of the FSS for SEAD 48

Review Status of PRAP for 17 IC sites

Review Status of Supplemental RI report for SEAD 12

Status of OB Grounds Long Term monitoring plan

May 17, 2006
0830-1130

Discuss Ash Landfill Treatability Study and Design Work Plan

Review proposed responses to comments on SEAD 25 and 26 Construction Completion Report

Discuss the Munitions Response efforts underway

1230 – 1600 - Army Only Meeting

Seneca Army Depot

Site # 8-50-006

05/15/2006

epaou	OU	DESCRIPTION	Site Char	RI/FS	IRM	RD	RA	OM&M	COMMENTS
1	1	Ash Landfill		completed 8/89 to 9/04		1/04 - 12/05	9/05 - 9/06	12/06 - 12/11	SEAD 3,6,8,14,15 sign ROD
1	1A	Soil Removal			completed 1995	completed 10/93 - 9/94	completed 9/94 - 6/95		
1	1B	Pilot Test of Barrier Wall		completed 11/98 - 3/04					
1	1C	Blowall Pilot study				5/05-11/06			
2	2	Open Burning Grounds		completed 8/89 - 3/99		completed 9/99 - 3/00	9/99-10/06		SEAD 23
3	3	Fire Training Area & Burn Pits		completed 9/95 - 7/03		10/04 - 11/05	11/05-09/06		SEAD 25, 26 sign ROD
4	5	Deactivation Furnaces		in progress 4/95 - 9/05		9/06 - 09/07			SEAD 16, 17 EPA to sign ROD
5	4	Radiation Sites		in progress 12/95-12/06		11/06-5/07			SEAD 12A,12B, Building 804
	4A	Debris Removal				12/98 - 3/02	3/02-11/05		SEAD 12
5	39	SEAD 72 #803 MixWastStorageFac		01/05- 09/06					SEAD72 & #803
6	10	Paint Disposal Area		in progress 2/96-6/06					SEAD 59,71 Projected ROD6/06
6	10A	Removal Action			completed 2003	4/02 - 9/02	9/02 - 3/03		
7	6	Munition Washout Facility		in progress 10/95 - 6/06		01/06 to06/07			SEAD 4, 38 Projected ROD6/06
8	7	Construction Debris Landfill		in progress 6/95 - 9/06		12/98 - 12/06			SEAD 11
8A	7A	Debris Removal			in progress		04/06 -12/06		
9	8	Red Fuming Nitric Acid Disposal Area		in progress 11/95 - 12/05					SEAD 13
10	9	Ammo Breakdown Area		PRAP for SEAD 52 in progress12/05					SEAD 52, 60 Building 608 & 612
11	26	Ammunition Destruction Area	1/10 - 1/12						SEAD 46
11	27	Ammunition Destruction Area	6/10 - 6/15						SEAD 57
12	19	Garbage Disposal Area		completed 2/94 - 3/04				9/04 - 9/24	SEAD 64A, 66,27
12	20	Steam Cleaning Waste Tank		completed 7/95 - 3/04				9/04 - 9/24	SEAD 27, building 360
13	16	Pitchblend Storage		in progress 4/03 - 6/06					SEAD 48Projected ROD
14	17	20 NA & 8 NFA Sites		completed 5/02 - 10/03					NA-7 ,9, 10, 18, 19, 20, 21, 22, 23, 35, 36, 37,42,47,49,51 NFA-28, 29, 30, 31, 32, 34, 60, 61
14	38	SEAD 53 "D Area Ditches"	06/00 - 11/05						SEAD 53
15	14	Tank Farm Area		in progress 11/02 - 3/05					SEAD 50, 54 EPA to sign ROD
	14A	Soil Removal			completed 2004	11/02 - 11/02	11/02 -4/04		
16	30	Powder Burning Area	6/03 - 11/05	11/05 to 5/07					SEAD 24
	30A	Soil Removal					6/03-09/06		
17	22	Boiler Blowdown Pit-Bldg. 121	6/03 - 6/06	5/05 to 6/06					SEAD 39
17A	22A	Soil Removal					6/03-9/06		
17	23	Boiler Blowdown Pit-Bldg. 319	6/03 - 6/06	2/05 to 11/05					SEAD 40
17B	23A	Soil Removal					6/03 - 9/06		
17	31	Garbage Disposal Area	6/03 -12/05						SEAD 64B
17	24	Sludge Piles		1/07 to 12/07					SEAD 5
17C	24A	Soil Removal					6/03 - 12/06		
17	25	Dumpsite East of STP 4	6/03 - 12/05	12/05 to 6/07					SEAD 67
17D	25A	Soil Removal					6/03 - 9/06		
17	32	Garbage Disposal Area	6/03 -12/05						SEAD 64D
17	34	Small Arms Range	6/02 - 5/04	5/04 to 11/05					SEAD 122B &122E
17E	34A	Treatability Study					completed 12/03 - 5/04		
18	28	Components Burial Site	6/03 - 12/05	1/06 to 7/07					SEAD 63 & 58
	28A	Soil Removal					5/04-9/06		
19		East EOD Range UXO & Rifle Grenade							SEAD 002 & 007
20		Bldg 2110-Fill Area							SEAD 70
21	13	DRMO Yard & Cosmoline Area	11/02-3/05	in progress 11/02 - 4/06					2 EBS sites 121 I & 121C
22	11	Open Detonation Grounds		in progress 2/96-6/2012					SEAD 44,45,115
41	15	Lake Shore Small Arms Range	in progress 11/02 - 12/04						
42	18	PID Office and Warehouse Areas		completed 1/96 - 3/04				9/04 - 9/24	SEAD-27,64A,66, I/C only, sign ROD
43	21	Pesticide storage Building		Completed 12/93-3/04				9/04-9/24	building 5&6
44	29	Grenade Range	12/05 - 4/06						SEAD 118
45	33	Construction Debris Area	11/00 - 9/06						SEAD 70
46	35	Mound Area	1/04-3/05						EBS Site 109(7)
47	36	Indian Creek Burial Area	06/00 - 11/05						
48	37	Demo Range se of sead 57	06/00 - 11/05						SouthEastofSEAD 57
9&17	40	Pro Plan I/C-SEADs		09/05-06/06					SEAD -5,13,39,40,41,43/56/69, 44,44A,44B,52,62,64B, 64C,64D,67,122B &122E, Bldg 307, Bldg 301

ADDENDUM NUMBER 1
TO
FINDING OF SUITABILITY TO TRANSFER (FOST)
SENECA ARMY DEPOT ACTIVITY (SEDA)
Conservation/Recreation Area

1. Purpose. This addendum updates the Conservation Area FOST to reflect the completion of the SEAD 63 Miscellaneous Components Burial Site, SEAD 48 Pitchblende Ore Storage Site and SEAD 24 Abandoned Powder Burning Area. Enclosure 1 provides the location of the sites

2. Background. In September 2003, the Army prepared the Conservation Area FOST to support the transfer of approximately 6800 acres at SEDA to the Seneca County Industrial Development Agency (SCIDA). The FOST included the SEAD 63 (BRAC parcel number 103 (6)HR), SEAD 48 (BRAC Parcel Number 49(5) HS, and SEAD 24 (BRAC parcel number 55 (6) PR/HR) that the Army retained pending completion of the necessary interim removal activities. SEAD 63 consisted of approximately 15 acres of undeveloped land. SEAD 48 consists of approximately 31 acres of developed land. SEAD 24 consisted of approximately 9 acres of undeveloped land. See Table 1 for description of Property.

3. Removal Activity

SEAD 63

- a. SEAD 63 site was used by the Army from approximately 1960 to 1987 for The disposal of miscellaneous components of classified activity in the Special Weapons Storage Area. Components were demilitarized to render them ~~unrecognizable~~ and then they were buried.
- b. From April through June 2004, the ^{usable} Army through a contract with Plexus Scientific Corp. conducted a removal action. The purpose of the action was to remove the military unique items buried at this site. A total of 5131 tons of non hazardous solid waste was removed from the site and disposed of at an approved landfill.
- c. In the Plexus final completion report "Non-Time Critical Removal Action Miscellaneous Components Burial Sites (SEAD 63)dated November 2005, the Army concluded that all military unique items had been removed and that the confirmation testing demonstrated that the site was available for unrestricted activity.
- d. The Army has a copy of the Plexus report on file at SEDA in the Administrative Record.

SEAD 24

- a. SEAD 24 site was used by the Army in the late 40s and early 50s to burn obsolete or off specification black powder and propellants.
- b. From Dec 2002 through Dec 2005, the Army through a contract with Weston Solutions conducted a removal action. The purpose of the action was to remove soil contaminated with arsenic, lead and zinc from this site and dispose of it at an approved and permitted landfill. A total of 5376 tons of non hazardous soil was removed from the site and disposed of at an approved landfill.

- c. In the Weston final completion report “Time Critical Removal Action Metals Sites- SEAD 24 dated March 2006, the Army concluded that all impacted soil had been removed from the site and that the confirmation testing demonstrated that the site was available for unrestricted activity. See Table 2
- d. The Army has a copy of the Weston report on file at SEDA administrative record.

SEAD 48

- a. SEAD 48 site was used by the Army in the 1940s for the storage of pitchblende ore.
- b. In July 1985, the Army performed decontamination/remediation activities inside and around the entrance pads to the SEAD 48 storage structures. The NRC conducted a follow-up post remediation inspection in October 1987 and subsequently released the structures for unrestricted activity.
- c. Subsequently, the NYSDOH conducted investigations in 1993 and indicated there may be residual radioactive contamination in the structures. The Army through a contract with Parsons, conducted a Final Status Survey in 2003. That final survey dated March 2006 concluded that the structures were suitable for unrestricted activity.
- d. The Army has a copy of the Parson report on file at SEDA administrative record

4. Regulatory/Public Comment – The Army distributed for review and comment a copy of this FOST Addendum to the United States Environmental Protection Agency Region II, the New York State Department of Environmental Conservation, and the transferee. PENDING

5. Findings of Suitability to Transfer. As a result of the completed removal action, the Army has made the determination that the property may be released for unrestricted use. The site is suitable to transfer subject to the terms and conditions set forth in the Environmental Protection Provisions included in the Conservation Recreation Area FOST. A copy of this FOST Addendum will be included with the Conservation/Recreation Area FOST.

Thomas Lederle
Director, Hampton Field Office
Base Realignment and Closure Division

Date: _____

ENCLOSURE 1
SITE LOCATIONS

ENCLOSURE 2

ENVIRONMENTAL PROTECTION PROVISIONS

The following CERCLA Notice, Covenant, and Access Provisions and Environmental Protection Provisions will be placed in the deed in a substantially similar form to ensure protection of human health and the environment and to preclude any interference with ongoing or completed remediation activities.

The Grantor acknowledges that Seneca has been identified as a National Priorities List (NPL) site under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended, (hereinafter referred to as "CERCLA"). The Grantee acknowledges that the Grantor has provided it with a copy of the Seneca Federal Facility Agreement (hereinafter referred to as the "FFA") entered into by the United States Environmental Protection Agency, Region II, the State of New York, and the Department of the Army, effective January 23, 1993, and will provide the Grantee or the then record owner(s) of the Property with a copy of any amendments thereto. The Grantee, for itself, its successors and assigns, further agrees that notwithstanding any other provisions of this Deed, the Grantor assumes no liability to the Grantee, its successors and assigns, should implementation of the FFA interfere with their use of the Property. The Grantee, its successors and assigns, shall have no claim on account of any such interference against the Grantor or any officer, agent, employee or contractor thereof. The Grantor shall, however, comply with the provisions of paragraph III.B, below, in carrying out its responsibilities under the FFA.

I. CERCLA NOTICE, COVENANT AND RIGHT OF ACCESS

Pursuant to Section 120(h)(3) of CERCLA:

A. Notice and Covenant

1. The Grantor hereby notifies the Grantee that to the extent such information is available on the basis of a complete search of agency files, there was storage for a year or more, release or disposal of hazardous substances, petroleum, petroleum products or their derivatives on certain portions of the Property. For the purpose of this Deed, "hazardous substances" shall have the same meaning as in section 101(14) of CERCLA. Available information regarding the type, quantity, and location of the hazardous substances found on the Property, the time at which such storage, release or disposal took place, and the remedial action taken is contained in Exhibit C hereof. The information regarding said storage, release or disposal indicates that there is no threat to human health or the environment on the Property.
2. The Grantor hereby covenants that:
 - a. On those portions of the Property where there was the storage, release or disposal of hazardous substances, all remedial action necessary to protect human health and the environment with respect to any such hazardous substances remaining on the Property has been taken before the date of this Deed; and

b. Any additional remedial action found to be necessary after the date of this Deed with regard to any hazardous substances remaining on the Property as a result of activities of the Grantor shall be conducted by the Grantor. This covenant shall not apply to the extent that any such remedial actions are required as a result of activities of the Grantee, its successors, or assigns.

B. Right of Access

The Grantor reserves a perpetual and assignable right and easement for access to the Property in any case in which remedial action or corrective action is found to be necessary after the date of this Deed. In exercising these rights of access, except in case of imminent endangerment to human health or the environment, the Grantor shall give the Grantee, or the then record owner, at least thirty (30) days prior written notice of actions to be taken in remediation of the Property, and shall use reasonable means, without significant additional cost to the Grantor, to avoid and/or minimize interference with the use of the Property by the Grantee, its successors and assigns. Furthermore, any such actions undertaken by the Grantor pursuant to this paragraph III.B will, to the maximum extent practicable, be coordinated with a representative of the Grantee, its successors and assigns. Grantee agrees, notwithstanding any other provisions of this Deed, that the Grantor assumes no liability to the Grantee, its successors and assigns, or any other person, should remediation of the Property interfere with the use of the Property by the Grantee, its successors and assigns.

C. Transfer Documents

The Grantee and its successors and assigns covenant and agree that all leases, transfers or conveyances of the Property occurring subsequent to the date of this Deed shall be made expressly subject to, and shall have the benefit of, the provisions contained in this paragraph III.

II. ENVIRONMENTAL BASELINE SURVEY (“EBS”) AND FINDING OF SUITABILITY TO TRANSFER (“FOST”)

The Grantee has received the technical environmental reports, including the EBS for the Property, dated March 22, 1996, and as revised on October 30, 1996 and the FOST for SEDA Planned industrial Development and Warehouse Area, dated July 2002, prepared by the Grantor, and agrees, to the best of the Grantee’s knowledge, that they accurately describe the environmental condition of the Property. The Grantee has inspected the Property and accepts the physical condition and current level of environmental hazards on the Property and deems the Property to be safe for the Grantee’s intended use. If an actual or threatened release of a hazardous substance or petroleum product is discovered on the Property after the date of the conveyance, whether or not such substance was set forth in the technical environmental reports, including the EBS, Grantee or its successors or assigns shall be responsible for such release or newly discovered substance unless Grantee is able to demonstrate that such release or such newly discovered substance was due to Grantor’s activities, ownership, use, or occupation of the Property. Grantee, its successors and assigns, as consideration for the conveyance, agree to release Grantor from any liability or responsibility for any claims arising solely out of the release of any hazardous substance or petroleum product on the Property occurring after the date of this Deed, where such substance or product was placed on the Property by the Grantee, or its successors, assigns, employees, invitees, agents or contractors, after the conveyance. This Article III shall not affect the Grantor’s

responsibilities to conduct response actions or corrective actions that are required by applicable laws, rules and regulations, or the Grantor's indemnification obligations under applicable laws.

III. MUNITIONS AND EXPLOSIVES OF CONCERN (MEC)

A. Based on a review of existing records and available information, there is no evidence that Munitions and Explosives of Concern (MEC) may be present on the Property. The term "MEC" means military munitions that may pose unique explosives safety risks, including: (A) unexploded ordnance (UXO), as defined in 10 U.S.C. § 101(e)(5); (B) discarded military munitions (DMM), as defined in 10 U.S.C. § 2710(e)(2); or (C) munitions constituents (e.g., TNT, RDX), as defined in 10 U.S.C. § 2710(e)(3), present in high enough concentrations to pose an explosive hazard.

B. The Grantee, its successors and assigns, are hereby notified that the Property was previously part of the Seneca Army Depot which was used for receipt, storage, maintenance, and issue of military munitions from 1941 to 2000. Based upon a comprehensive archive records search, the Grantor has determined that there is no evidence of munitions and explosives of concern (MEC) (formerly referred to as OE) on the Property.

C. Notwithstanding the comprehensive archive records search, the Grantor and Grantee acknowledge that there is a possibility that MEC may exist on the Property due to the former use of the Property as an active military installation. If the Grantee, any subsequent owner, or any other person should find any MEC on the Property, they shall immediately stop any intrusive or ground-disturbing work in the area or in any adjacent areas and shall not attempt to disturb, remove or destroy it, but shall immediately notify the Local Police Department so that appropriate explosive ordnance disposal personnel can be dispatched to address such MEC as required under applicable law and regulations.

D. The Grantee acknowledges receipt of the Seneca Depot Activity (SEDA) Ordnance and Explosives Archive Search Report dated December 1998

IV. NOTICE OF WETLANDS

The Property contains wetlands protected under state and federal laws and regulations. Applicable laws and regulations restrict activities that involve draining wetlands or the discharge of fill materials into wetlands, including, without limitation, the placement of fill materials; the building of any structure; the placement of site-development fills for recreational, industrial, commercial, residential, and other uses; the placement of causeways or road fills; and the construction of dams and dikes.

V. INDEMNIFICATION

Notwithstanding any other provision of this Deed, the Grantor recognizes its obligation to comply with Section 330 of the Department of Defense Authorization Act of 1993, as amended.

Table 1 Description of Property

Building No. and Property Description	BRAC Parcel Number	Condition Category *	Environmental Condition of Property and Remedial Actions
Miscellaneous components burial site SEAD 63 15 acres	103(4) HR	4	<ul style="list-style-type: none"> Burial site for classified components. Components were removed and disposed of at an approved landfill
Powder Burning Pad SEAD 24 9 Acres	55 (4) PR/HR	4	<ul style="list-style-type: none"> Black powder and propellants were open burning. Removed contaminated soil from the site.
Pitchblende Ore Storage Structures 31 Acres	49 (4) HS	4	<ul style="list-style-type: none"> Structures E0801-E0811 remediated in 1985. Radioactive construction material removed and disposed of off Seneca Army Depot Activity.

The Environmental Condition Codes include:

Category 1: Areas where no release or disposal of hazardous substances or petroleum products has occurred (including no migration of these substances from adjacent properties). However, the area may have been used to store hazardous substances or petroleum products.

Category 2: Areas where only release or disposal of petroleum products (including migration of petroleum products from adjacent property).

Category 3: Areas where storage, release, disposal, or migration of hazardous substances has occurred, but at concentrations that do not require a removal or remedial action.

Category 4: Areas where storage, release, disposal, or migration of hazardous substances has occurred, and all removal or remedial actions to protect human health and the environment have been taken.

TABLE 2 – NOTIFICATION OF HAZARDOUS SUBSTANCE STORAGE, RELEASE OR DISPOSAL

Building Number	Name of Hazardous Substance(s)	Date of Storage, Release, or Disposal	Remedial Actions
SEAD 24	Black powder and other propellants	1945-1955	Removal action. Soil excavated and disposed of at an approved landfill. Site suitable for unrestricted activity.
SEAD 48	Pitchblende Ore	1940s (3 months)	Removal action. Concrete and soil were removed and disposed of at an approved facility. Site is suitable of unrestricted activity.

* The information contained in this notice is required under the authority of regulations promulgated under section 120(h) of the Comprehensive Environmental Response, Liability, and Compensation Act (CERCLA or ‘Superfund’) 42 U.S.C. §9620(h). This table provides information on the storage of hazardous substances for one year or more in quantities greater than or equal to 1,000 kilograms or the hazardous substance’s CERCLA reportable quantity (which ever is greater). In addition, it provides information on the known release of hazardous substances in quantities greater than or equal to the substances CERCLA reportable quantity. See 40 CFR Part 373.

ENCLOSURE 3

COMMENTS

ENCLOSURE 4
RESPONSE TO COMMENTS

ADDENDUM NUMBER 2
TO
FINDING OF SUITABILITY TO TRANSFER (FOST)
SENECA ARMY DEPOT ACTIVITY (SEDA)
Planned Industrial Development and Warehouse Area
(PID FOST)

1. Purpose. This addendum updates the PID FOST to reflect the completion of the SEAD 1 Hazardous Waste Storage Bldg, SEAD 2 PCB Storage Bldg, SEAD 25 Fire Training Area, SEAD 26 Fire Demonstration Area, SEAD 67 Dump Site East of Sewage Treatment Plant 4, SEAD 5, Sludge Piles, SEAD 39 Boiler Blow Down Pit Bldg 121 and SEAD 40, Boiler Blowdown Pit Bldg 319.

2. Background. In June 2003, the Army prepared the PID FOST to support the transfer of approximately 967 acres at SEDA to the Seneca County Industrial Development Agency (SCIDA). The FOST included SEAD 25 and 26 (BRAC parcel numbers 79 (6)HR and 66 (6) HR respectively), SEAD 67 (BRAC parcel 96 (6) HR), SEAD 5 (BRAC parcel 81(6) HS/HR), SEAD 39 (BRAC parcel 87(6) PS/PR/HR(P)), SEAD 40 (BRAC Parcel 50(5) PS/PR/HR(P)), SEAD 1 (BRAC parcel 10(3)HS/HR) and SEAD 2 (No BRAC parcel designation) that the Army retained pending completion of the necessary remedial action. SEAD 25 consisted of approximately 7.7 acres, SEAD 26 consisted of 8.2 acres, SEAD 67 consisted of 1.7 acres SEAD 5 consisted of approximately 3 acres, SEAD 39 consisted of approximately 0.1 acre, SEAD 40 consisted of 0.1 acre SEAD 1 consisted of approximately. See Table 1 for property descriptions

3. Remedial Activity

A. SEAD 25 and SEAD 26

1. SEAD 25 and 26 were sites used by the Army for fire fighting training and demonstrations. As a result of these activities, volatile organic compounds (VOCs) and semivolatile organic compounds (SVOCs) were found in the soils and ground water at SEAD 25 and SVOCs were found at SEAD 26.

2. From November through December 2005, the Army through a contract with Parsons performed the agreed on remedial action. The purpose of the action was to remove contaminated soil and treat ground water removed during the excavation. A total of 3841 tons of non-hazardous soil was excavated from the site and disposed of at an approved landfill. A total of 13,000 gallons of contaminated water was removed from the excavation at SEAD 25 and disposed of at a public wastewater treatment plant.

3. In the Parson completion report "Draft Construction Completion Report for the Fire Training and Demonstration Pad (SEAD 25) and The Fire Training Pit and area (SEAD 26) dated February 2006, the Army concluded that the remedy in place goal had been achieved and the Long Term Monitoring of both sites with a restriction for the use of groundwater as agreed to in the Record of Decision Dated Sep 2004 would have to be accomplished at time of property transfer.

4. A copy of the Completion report is on file at SEDA in the Administrative Record.

B. SEAD 67

1. SEAD 67 was a dump-site where dirt was placed from unknown sources. Testing showed the dirt piles had elevated levels of heavy metals.
2. From November 2002 through July 2003, the Army through a contract with Weston Solutions performed an interim removal action. The purpose of the action was to remove contaminated soil from the site. A total of 2,104 tons of soil was excavated and disposed of at an approved and permitted of-site landfill.
3. In the Weston completion report “ Seneca Army Depot Activity Time Critical Removal Action, Metals sites – SEAD 67” dated Feb 2005, the Army concluded that the clean up goals had been met and that no further action is required at this site.
4. A copy of the Completion Report is on file at SEDA at in the Administrative Record.

C. SEAD 39 and 40

1. SEAD 39 and 40 were boiler blow down pits where in through the late 70’s, boiler blowdown was discharged into a pit adjacent the boiler building. Testing showed the pits had elevated levels of total petroleum hydrocarbons (TPH) an indicator compound that a release may have occurred.
2. From August 2003 through Feb 2006, the Army, through a contract with Weston Solutions, performed an interim removal action. The purpose of the action was to remove contaminated soil from the two sites. A total of 35 cubic yards of soil was excavated and disposed of at an approved and permitted off-site landfill.
3. In the Weston completion report “ Seneca Army Depot Activity SEAD 39 and 40 Time Critical Removal Action,” dated Feb 2006, the Army concluded that the clean up goals had been met and that only a land use control restricting residential activity was required at this site.
4. A copy of the Completion Report is on file at SEDA at in the Administrative Record

D. SEAD 5

1. SEAD 5 was a sludge stockpile site were sludge from the installation waste water plants was stored. Testing showed the piles had elevated levels of heavy metals and semivolitile organic compounds.
2. From August 2003 through Feb 2006, the Army, through a contract with Weston Solutions, performed an interim removal action. The purpose of the action was to remove contaminated soil from the site. A total of 2313 tons of soil was excavated and disposed of at an approved and permitted of-site landfill.
3. In the Weston completion report “ Seneca Army Depot Activity Industrial Waste Site (sludge piles)-SEAD 5 Time Critical Removal Action,” dated Feb 2006, the Army concluded that the clean up goals had been met and that only a land use control restricting residential activity was required at this site.
4. A copy of the Completion Report is on file at SEDA at in the Administrative Record

B. SEAD 67

1. SEAD 67 was a dump-site where dirt was placed from unknown sources. Testing showed the dirt piles had elevated levels of heavy metals.
2. From November 2002 through July 2003, the Army through a contract with Weston Solutions performed an interim removal action. The purpose of the action was to remove contaminated soil from the site. A total of 2,104 tons of soil was excavated and disposed of at an approved and permitted off-site landfill.
3. In the Weston completion report "Seneca Army Depot Activity Time Critical Removal Action, Metals sites – SEAD 67" dated Feb 2005, the Army concluded that the clean up goals had been met and that no further action is required at this site.
4. A copy of the Completion Report is on file at SEDA at in the Administrative Record.

C. SEAD 39 and 40

1. SEAD 39 and 40 were boiler blow down pits where in through the late 70's, boiler blowdown was discharged into a pit adjacent the boiler building. Testing showed the pits had elevated levels of total petroleum hydrocarbons (TPH) an indicator compound that a release may have occurred.
2. From August 2003 through Feb 2006, the Army, through a contract with Weston Solutions, performed an interim removal action. The purpose of the action was to remove contaminated soil from the two sites. A total of 35 cubic yards of soil was excavated and disposed of at an approved and permitted off-site landfill.
3. In the Weston completion report "Seneca Army Depot Activity SEAD 39 and 40 Time Critical Removal Action," dated Feb 2006, the Army concluded that the clean up goals had been met and that only a land use control restricting residential activity was required at this site.
4. A copy of the Completion Report is on file at SEDA at in the Administrative Record

D. SEAD 5

1. SEAD 5 was a sludge stockpile site where sludge from the installation waste water plants was stored. Testing showed the piles had elevated levels of heavy metals and semivolatile organic compounds.
2. From August 2003 through Feb 2006, the Army, through a contract with Weston Solutions, performed an interim removal action. The purpose of the action was to remove contaminated soil from the site. A total of 2313 tons of soil was excavated and disposed of at an approved and permitted off-site landfill.
3. In the Weston completion report "Seneca Army Depot Activity Industrial Waste Site (sludge piles)-SEAD 5 Time Critical Removal Action," dated Feb 2006, the Army concluded that the clean up goals had been met and that only a land use control restricting residential activity was required at this site.
4. A copy of the Completion Report is on file at SEDA at in the Administrative Record

D. SEAD 1 and SEAD 2

1. SEAD 1 and 2 were permitted hazardous waste storage facilities under 6 New York Code of Rules and Regulations subpart 373. See table 2 for HW storage discription. As such these facilities were required to be closed.
2. From Dec 2002 through Sep 2005, the Army through a contract with Parsons performed closure efforts on these facilities. The purpose of the action was to close the site IAW Title 6 New York Code of Rules and Regulations subpart 373.
3. Parsons, in the “RCRA Closure Report, Building 307 Hazardous Waste Container Storage Facility, Building 301 Transformer Storage Building” dated September 2003 conclude that closure requirements had been met. New York State Department of Environmental Conservation concurred September 2005 with a land use control being applied to the property
4. A copy of the closure report is on file at SEDA at in the Administrative Record.

4. Regulatory/Public Comment – The Army distributed for review and comment a copy of this FOST Addendum to the United States Environmental Protection Agency Region II, the New York State Department of Environmental Conservation, and the transferee. PENDING

5. Findings of Suitability to Transfer. As a result of the completed action and the placement of an environmental easement on the property upon transfer to SCIDA, the Army has made the determination that the property may be released for restricted use. The site is suitable to transfer subject to the terms and conditions set forth in the Environmental Protection Provisions included in the PID FOST. A copy of this FOST Addendum will be included with the PID FOST.

Thomas Lederle
Director, Hampton Field Office
Base Realignment and Closure Division

Date: _____

Supporting Environmental Documents

1. Seneca Army Depot Activity Time Critical Removal Action Metals Sites- SEAD 67 Feb 2005
2. Draft Construction Completion Report for the Fire Training and Demonstration Pad (SEAD 25 and the Fire Training Pit and Area (SEAD 26) Dated February 2006
3. Seneca Army Depot Activity SEAD 39 and 40 Time Critical Removal Action, dated Feb 2006
4. Seneca Army Depot Activity Industrial Waste Site (Sludge Piles)-SEAD 5 Time Critical Removal Action,” dated Feb 2006
5. RCRA Closure Report, Building 307 Hazardous Waste Container Storage Facility, Building 301 Transformer Storage Building, dated Sep 2003

ENCLOSURE 1:

SITE MAP

ENCLOSURE 2: ENVIRONMENTAL PROTECTION DEED PROVISIONS

The following CERCLA Notice, Covenant, and Access Provisions and Environmental Protection Provisions will be placed in the deed in a substantially similar form to ensure protection of human health and the environment and to preclude any interference with ongoing or completed remediation activities.

The Grantor acknowledges that Seneca has been identified as a National Priorities List (NPL) site under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended, (hereinafter referred to as “CERCLA”). The Grantee acknowledges that the Grantor has provided it with a copy of the Seneca Federal Facility Agreement (hereinafter referred to as the “FFA”) entered into by the United States Environmental Protection Agency, Region II, the State of New York, and the Department of the Army, effective January 23, 1993, and will provide the Grantee or the then record owner(s) of the Property with a copy of any amendments thereto. The Grantee, for itself, its successors and assigns, further agrees that notwithstanding any other provisions of this Deed, the Grantor assumes no liability to the Grantee, its successors and assigns, should implementation of the FFA interfere with their use of the Property. The Grantee, its successors and assigns, shall have no claim on account of any such interference against the Grantor or any officer, agent, employee or contractor thereof. The Grantor shall, however, comply with the provisions of paragraph III.B, below, in carrying out its responsibilities under the FFA.

I. CERCLA NOTICE, COVENANT AND RIGHT OF ACCESS

Pursuant to Section 120(h)(3) of CERCLA:

A. Notice and Covenant

1. The Grantor hereby notifies the Grantee that to the extent such information is available on the basis of a complete search of agency files, there was storage for a year or more, release or disposal of hazardous substances, petroleum, petroleum products or their derivatives on certain portions of the Property. For the purpose of this Deed, “hazardous substances” shall have the same meaning as in section 101(14) of CERCLA. Available information regarding the type, quantity, and location of the hazardous substances found on the Property, the time at which such storage, release or disposal took place, and the remedial action taken is contained in Exhibit C hereof. The

information regarding said storage, release or disposal indicates that there is no threat to human health or the environment on the Property.

2. The Grantor hereby covenants that:

a. On those portions of the Property where there was the storage, release or disposal of hazardous substances, all remedial action necessary to protect human health and the environment with respect to any such hazardous substances remaining on the Property has been taken before the date of this Deed; and

b. Any additional remedial action found to be necessary after the date of this Deed with regard to any hazardous substances remaining on the Property as a result of activities of the Grantor shall be conducted by the Grantor. This covenant shall not apply to the extent that any such remedial actions are required as a result of activities of the Grantee, its successors, or assigns.

B. Right of Access

1. The Grantor reserves a perpetual and assignable right and easement for access to the Property in any case in which remedial action or corrective action is found to be necessary after the date of this Deed. In exercising these rights of access, except in case of imminent endangerment to human health or the environment, the Grantor shall give the Grantee, or the then record owner, at least thirty (30) days prior written notice of actions to be taken in remediation of the Property, and shall use reasonable means, without significant additional cost to the Grantor, to avoid and/or minimize interference with the use of the Property by the Grantee, its successors and assigns. Furthermore, any such actions undertaken by the Grantor pursuant to this paragraph III.B will, to the maximum extent practicable, be coordinated with a representative of the Grantee, its successors and assigns. Grantee agrees, notwithstanding any other provisions of this Deed, that the Grantor assumes no liability to the Grantee, its successors and assigns, or any other person, should remediation of the Property interfere with the use of the Property by the Grantee, its successors and assigns.

C. Transfer Documents

The Grantee and its successors and assigns covenant and agree that all leases, transfers or conveyances of the Property occurring subsequent to the date of this Deed shall be made expressly subject to, and shall have the benefit of, the provisions contained in this paragraph III.

II. ENVIRONMENTAL BASELINE SURVEY (“EBS”) AND FINDING OF SUITABILITY TO TRANSFER (“FOST”)

The Grantee has received the technical environmental reports, including the EBS for the Property, dated March 22, 1996, and as revised on October 30, 1996 and the FOST for SEDA Planned industrial Development and Warehouse Area, dated July 2002, prepared by the Grantor, and agrees, to the best of the Grantee's knowledge, that they accurately describe the environmental condition of the Property. The Grantee has inspected the Property and accepts the physical condition and current level of environmental hazards on the Property and deems the Property to be safe for the Grantee's intended use. If an actual or threatened release of a hazardous substance or petroleum product is discovered on the Property after the date of the conveyance, whether or not such substance was set forth in the technical environmental reports, including the EBS, Grantee or its successors or assigns shall be responsible for such release or newly discovered substance unless Grantee is able to demonstrate that such release or such newly discovered substance was due to Grantor's activities, ownership, use, or occupation of the Property. Grantee, its successors and assigns, as consideration for the conveyance, agree to release Grantor from any liability or responsibility for any claims arising solely out of the release of any hazardous substance or petroleum product on the Property occurring after the date of this Deed, where such substance or product was placed on the Property by the Grantee, or its successors, assigns, employees, invitees, agents or contractors, after the conveyance. This Article III shall not affect the Grantor's responsibilities to conduct response actions or corrective actions that are required by applicable laws, rules and regulations, or the Grantor's indemnification obligations under applicable laws.

III. NOTICE OF THE PRESENCE OF LEAD BASED PAINT AND COVENANT AGAINST THE USE OF THE PROPERTY FOR RESIDENTIAL PURPOSES.

A. The Grantor covenants that the Property was not used as "Residential Real Property". The Grantee covenants that the Property is not intended to be used a "Residential Real Property" or occupied by children under 6 years of age. "Residential Real Property" means any housing constructed prior to 1978, except housing for the elderly (households reserved for and composed of one or more persons 62 years of age or more at the time of initial occupancy) or persons with disabilities (unless any child who is less than 6 years of age resides or is expected to reside in such housing) or any 0-bedroom dwelling).

B. The Grantee is hereby informed and does acknowledge that all buildings on the Property, which were constructed or rehabilitated prior to 1978, are presumed to contain lead-based paint. Lead from paint, paint chips, and dust can pose health hazards if not managed properly. The Grantee is notified that the Property may present exposure to lead from lead-based paint that may place young children at risk of developing lead poisoning. Lead poisoning in young children may produce permanent neurological damage, including learning disabilities, reduced intelligence quotient, behavioral problems, and impaired memory. Lead poisoning also poses a particular risk to pregnant women. Under federal law, the seller of any interest in residential real property is required to provide the buyer with any information on lead-based

paint hazards from risk assessments or inspections in the seller's possession and notify the buyer of any known lead-based paint hazards.

C. Available information concerning known lead-based paint and/or lead-based paint hazards, the location of lead-based paint and/or lead-based paint hazards, and the condition of painted surfaces is contained in the Environmental Baseline Survey dated March 22, 1996. The Grantee hereby acknowledges receipt of all of the Environmental Baseline Survey. In addition, the Grantee acknowledges that it has received the opportunity to conduct its own risk assessment or inspection for the presence of lead-based paint and/or lead-based paint hazards prior to execution of this document.

D. The Grantee further agrees to indemnify and hold harmless the Army, its officers, agents and employees, from and against all suits, claims, demands, or actions, liabilities, judgments, costs and attorney's fees arising out of, or in a manner predicated upon personal injury, death or property damage resulting from, related to, caused by or arising out of lead-based paint or lead-based paint hazards on the Property if used for Residential Real Property. The Grantee shall not be responsible for indemnifying or holding the Grantor harmless from any suits, claims, demands, actions, liabilities, judgments, costs and attorney's fees arising out of exposure to lead-based paint occurring prior to the date of the lease in furtherance of conveyance for the Property dated October 4, 1999.

E. The Grantee, its successors and assigns, covenants that it will include the LBP notice set forth in paragraph III.B. in all subsequent transfers, leases, or conveyance documents that include Residential Real Property.

IV. NOTIFICATION OF THE PRESENCE OF RADON AND COVENANT

The property are not occupied buildings and have not been sampled for The Grantee, its successors and assigns, covenant that they will include this radon notice in all subsequent conveyance documents that include said untested buildings and/or structures, or any portion thereof.

V. MUNITIONS AND EXPLOSIVES OF CONCERN (MEC)

A. Based on a review of existing records and available information, there is no evidence that Munitions and Explosives of Concern (MEC) may be present on the Property. The term "MEC" means military munitions that may pose unique explosives safety risks, including: (A) unexploded ordnance (UXO), as defined in 10 U.S.C. § 101(e)(5); (B) discarded military munitions (DMM), as defined in 10 U.S.C. § 2710(e)(2); or (C) munitions constituents (e.g., TNT, RDX), as defined in 10 U.S.C. § 2710(e)(3), present in high enough concentrations to pose

an explosive hazard.

B. The Grantee, its successors and assigns, are hereby notified that the Property was previously part of the Seneca Army Depot which was used for receipt, storage, maintenance, and issue of military munitions from 1941 to 2000. Based upon a comprehensive archive records search, the Grantor has determined that there is no evidence of munitions and explosives of concern (MEC) (formerly referred to as OE) on the Property.

C. Notwithstanding the comprehensive archive records search, the Grantor and Grantee acknowledge that there is a possibility that MEC may exist on the Property due to the former use of the Property as an active military installation. If the Grantee, any subsequent owner, or any other person should find any MEC on the Property, they shall immediately stop any intrusive or ground-disturbing work in the area or in any adjacent areas and shall not attempt to disturb, remove or destroy it, but shall immediately notify the Local Police Department so that appropriate explosive ordnance disposal personnel can be dispatched to address such MEC as required under applicable law and regulations.

D. The Grantee acknowledges receipt of the Seneca Depot Activity (SEDA) Ordnance and Explosives Archive Search Report dated December 1998

VI. INDEMNIFICATION

Notwithstanding any other provision of this Deed, the Grantor recognizes its obligation to comply with Section 330 of the Department of Defense Authorization Act of 1993, as amended.

VII. LAND USE RESTRICTIONS

The Deed shall include the following statement in at least a 15 pitch bold wording. The Proposed easement is Enclosure 4.

This Property is subject to an environmental easement held by the New York State Department of Environmental Conservation pursuant to Title 36 of Article 71 of the Environmental Conservation Law.

ENCLOSURE 3

TABLE 2 – NOTIFICATION OF HAZARDOUS SUBSTANCE STORAGE, RELEASE OR DISPOSAL

Building Number	Name of Hazardous Substance(s)	Date of Storage, Release, or Disposal	Remedial Actions
307	Paint, solvents, petroleum products, acids, pesticides, caustics	1980-2000	Bldg 307 was SEDA's HW storage facility. It was used to store HW until shipment was scheduled.
301	PCB oil, PCB solvent, PCB petroleum products	1980-2000	Bldg 301 was SEDA's PCB HW storage facility. It was used to store PCB contaminated waste until shipment.

* The information contained in this notice is required under the authority of regulations promulgated under section 120(h) of the Comprehensive Environmental Response, Liability, and Compensation Act (CERCLA or 'Superfund') 42 U.S.C. §9620(h). This table provides information on the storage of hazardous substances for one year or more in quantities greater than or equal to 1,000 kilograms or the hazardous substance's CERCLA reportable quantity (which ever is greater). In addition, it provides information on the known release of hazardous substances in quantities greater than or equal to the substances CERCLA reportable quantity. See 40 CFR Part 373.

Table 1 Description of Property			
Building No. and Property Description	BRAC Parcel Number	Condition Category *	Environmental Condition of Property and Remedial Actions
BLDG 307 .25 acres.	10(3)HS/ HR	4	<ul style="list-style-type: none"> • Bldg 307 was closed IAW 6NYCRR part 373. • Area is within the PID area and subject to the Environmental easement
BLDG 301 0.25 acres	N/A	4	<ul style="list-style-type: none"> • Bldg 301 was closed IAW 6NYCRR Part 373 • Area is within the PID area and subject to the Environmental easement
Boiler Blow Down Pits SEAD 39 and 40. 0.02 acres	87 (4) PS/PR/HR (p) and 50 (4) PS/PR/HR (p)	4	<ul style="list-style-type: none"> • Removal action removed impacted soil from Blowdown operations. • Residual PAH contamination poses risk to resident child. • Area is with the PID area and subject to the Environmental easement
Waste piles SEAD 67 1.7 acres	96 (4) HR	4	<ul style="list-style-type: none"> • Area had earth pile from unknown source. Heavy metal contamination found. Soil was excavated and disposed of • Area is within the PID area and subject to the Environmental easement
Fire Training Areas SEAD 25 and 26 25 acres	79 (4) HR and 66 (4) HR	4	<ul style="list-style-type: none"> • Petroleum and Chlorinated solvents used at the site for as fuel for Training. PAH contamination from fires • GW has petroleum and chlorinated solvent contamination. • Area is within the PID area and subject to the Environmental easement
Sludge Piles SEAD 5 3 acres	81 (4) HS/HR	4	<ul style="list-style-type: none"> • Wastewater sewage sludge placed on site after drying. Heavy metal contamination existed. Sludge has been removed • Area is within the PID area and subject to the Environmental easement

The Environmental Condition Codes include:

Category 1: Areas where no release or disposal of hazardous substances or petroleum products has occurred (including no migration of these substances from adjacent properties). However, the area may have been used to store hazardous substances or petroleum products.

Category 2: Areas where only release or disposal of petroleum products (including migration of petroleum products from adjacent property).

Category 3: Areas where storage, release, disposal, or migration of hazardous substances has occurred, but at concentrations that do not require a removal or remedial action.

Category 4: Areas where storage, release, disposal, or migration of hazardous substances has occurred, and all removal or remedial actions to protect human health and the environment have been taken.

ENCLOSURE 4

ENVIRONMENTAL EASEMENT

THIS INDENTURE made this ____ day of _____, 2006, between The United States of America, acting by and through the Deputy Assistant Secretary of the Army (Installations and Housing) (the “Grantor”), and the People of the State of New York (the “Grantee”), acting through their Commissioner of the Department of Environmental Conservation (the “Commissioner”, or “NYSDEC” or “Department” as the context requires) with its headquarters located at 625 Broadway, Albany, New York 12233.

WHEREAS, the Legislature of the State of New York has declared that it is in the public interest to encourage the remediation of abandoned and likely contaminated properties (“brownfield sites”) that threaten the health and vitality of the communities they burden while at the same time ensuring the protection of public health and the environment; and

WHEREAS, the Legislature of the State of New York has declared that it is in the public interest to establish within the Department a statutory environmental remediation program that includes the use of environmental easements as an enforceable means of ensuring the performance of operation, maintenance, and/or monitoring requirements and of ensuring the potential restriction of future uses of the land, when an environmental remediation project leaves residual contamination at levels that have been determined to be safe for a specific use, but not all uses, or which includes engineered structures that must be maintained or protected against damage to perform properly and be effective, or which requires groundwater use or soil management restrictions; and

WHEREAS, the Legislature of the State of New York has declared that “Environmental Easement” shall mean an interest in real property, created under and subject to the provisions of Article 71, Title 36 of the New York State Environmental Conservation Law (“ECL”) which contains a use restriction and/or a prohibition on the use of land in a manner inconsistent with engineering controls which are intended to ensure the long term effectiveness of a brownfield site remedial program or eliminate potential exposure pathways to the hazardous waste or petroleum; and

WHEREAS, the Grantor, is the owner of real property located in the Town of Romulus, Seneca County, New York known and designated on the tax map of the Town of Romulus as contained in tax map parcel numbers 3-1-89.11, 8-1-1.11, and 12-1-1, being a portion of the

property identified as Military Lot Numbers 68, 75, 81 and 82 as recorded in the land records of Seneca County, New York, at _____, comprised of approximately _____ acres, and hereinafter more fully described and attached hereto and made a part hereof (the "Controlled Property"); and

WHEREAS, the Commissioner does hereby acknowledge that the Department accepts this Environmental Easement in order to ensure the protection of human health and the environment and to achieve the requirements for remediation established at this Controlled Property until such time as this Environmental Easement is extinguished pursuant to ECL Article 71, Title 36.

NOW THEREFORE, in consideration of the covenants and mutual promises contained herein and the terms and conditions of the Record of Decision entitled, "Sites Requiring Institutional Controls in the Planned Industrial/Office Development or Warehousing Areas" dated July 2004, Grantor grants, conveys and releases to Grantee a permanent Environmental Easement pursuant to Article 71, Title 36 of the ECL in, on, over, under, and upon the Controlled Property as more fully described herein ("Environmental Easement").

1. Purposes. Grantor and Grantee acknowledge that the Purposes of this Environmental Easement are: to convey to Grantee real property rights and interests that will run with the land in perpetuity in order to provide an effective and enforceable means of encouraging the reuse and redevelopment of this Controlled Property at a level that has been determined to be safe for a specific use while ensuring the performance of operation, maintenance, and/or monitoring requirements; and to ensure the potential restriction of future uses of the land that are inconsistent with the above-stated purpose.

2. Institutional and Engineering Controls. The following controls apply to the use of the Controlled Property, run with the land, and are binding on the Grantor and the Grantor's successors and assigns, and are enforceable in law or equity against any owner of the Controlled Property, any lessees, and any person using the Controlled Property:

A. The Controlled Property may be used for commercial/industrial use as long as the following long-term institutional controls are employed:

(1) Commercial/Industrial Use Restriction.

The Controlled Property shall be used solely for commercial and industrial purposes and not for residential purposes, the Controlled Property having been remediated only for commercial and industrial uses. Commercial and industrial uses include, but are not limited to, administrative/office space, manufacturing, warehousing, restaurants, hotels/motels, and retail activities. Residential use includes, but is not limited to, housing; childcare facilities; schools (excluding education and training programs for persons over 18 years of age), assisted living facilities; and outdoor recreational activities (excluding recreational activities by employees and their families incidental to authorized commercial and industrial uses on the Controlled Property).

(2) Ground Water Restriction.

There shall be no access to or use of the ground water on the Controlled Property for any purpose without the prior written approval of the Grantee, the U.S. Environmental Protection Agency Region II ("USEPA Region II"), and the U.S. Department of the Army ("Army"). However, any owner, lessee, or other person using the Controlled Property is authorized to install monitoring wells with the prior written approval of the Grantee, USEPA Region II, and the Army which approval shall not be unreasonably withheld. For the purpose of this restriction, "ground water" shall have the same meaning as in section 101(12) of the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA), as amended.

B. The Controlled Property may not be used for a higher level of use such as residential use and the above-stated institutional controls may not be discontinued without an amendment or extinguishment of this Environmental Easement.

C. The Grantor covenants and agrees for itself, its successors and assigns that until such time as the Environmental Easement is extinguished in accordance with the requirements of Article 71, Title 36 of the ECL, the property deed and all subsequent instruments of conveyance relating to the Controlled Property shall state in at least fifteen-point bold-faced type:

This property is subject to an environmental easement held by the New York State Department of Environmental Conservation pursuant to Title 36 of Article 71 of the Environmental Conservation Law.

D. The Grantor covenants and agrees for itself, its successors and assigns that this Environmental Easement shall be incorporated in full or by reference in any leases, licenses, or other instruments granting a right to use the Controlled Property.

E. The Grantor covenants and agrees for itself, its successors and assigns that the owner of the Controlled Property shall annually, or within such time as NYSDEC may allow, submit to NYSDEC, and provide a copy to USEPA Region II and the Army, a written statement by an expert the NYSDEC may find acceptable certifying under penalty of perjury that the controls employed at the Controlled Property are unchanged from the previous certification or that any changes to the controls employed at the Controlled Property were approved by the NYSDEC, and that nothing has occurred that would impair the ability of such control to protect the public health and environment or constitute a violation or failure to comply with any Site Management Plan for such controls and giving access to such Controlled Property to evaluate continued maintenance of such controls.

3. Right to Enter and Inspect. The Grantee, its agents, employees, or other representatives of the State may enter and inspect the Controlled Property in a reasonable manner and at reasonable times to assure compliance with the above-stated restrictions.

4. Reserved Grantor's Rights. The Grantor reserves for itself, its assigns, representatives, and successors in interest with respect to the Controlled Property, all rights as fee owner of the Controlled Property, including:

1. Use of the Controlled Property for all purposes not inconsistent with, or limited by the terms of this Environmental Easement; and

2. The right to give, sell, assign, or otherwise transfer the underlying fee interest to the Controlled Property by operation of law, by deed, or by indenture, subject and subordinate to this Environmental Easement.

5. Enforcement.

A. This Environmental Easement is enforceable in law or equity in perpetuity by the Grantor, the Grantee, or any affected local government, as defined in ECL Section 71-3603, against the owner of the Controlled Property, any lessees, and any person using the Controlled Property. Enforcement shall not be defeated because of any subsequent adverse possession, laches, estoppel, or waiver. It is not a defense in any action to enforce this Environmental Easement that: it is not appurtenant to an interest in real property; it is not of a character that has been recognized traditionally at common law; it imposes a negative burden; it imposes affirmative

obligations upon the owner of any interest in the burdened property; the benefit does not touch or concern real property; there is no privity of estate or of contract; or it imposes an unreasonable restraint on alienation.

B. The Grantee shall notify the Grantor and the owner of the Controlled Property of a breach or suspected breach of any of the terms of this Environmental Easement. Such notice shall set forth how the owner of the Controlled Property can cure such breach or suspected breach and give the owner of the Controlled Property a reasonable amount of time from the date of receipt of notice in which to cure. At the expiration of such period of time to cure, or any extensions granted by Grantee, the Grantee shall notify the Grantor and the owner of the Controlled Property of any failure to adequately cure the breach or suspected breach. The owner of the Controlled Property shall then have a reasonable amount of time from receipt of such notice to cure. At the expiration of said second period, the Grantee may commence any proceedings and take any other appropriate action reasonably necessary to remedy any breach of this Environmental Easement in accordance with applicable law to require compliance with the terms of this Environmental Easement.

C. The failure of Grantee to enforce any of the terms contained herein shall not be deemed a waiver of any such term nor bar its enforcement rights in the event of a subsequent breach of, or noncompliance with, any of the terms of this Environmental Easement.

6. Notice. Whenever notice to the State (including the annual certification) or approval from the State, USEPA Region II or the Army is required, the Party providing such notice or seeking such approval shall identify the Controlled Property by referencing its County tax map number or the Liber and Page or computerized system tracking/identification number and address its correspondence to:

Division of Environmental Enforcement
Office of General Counsel
New York State Department of Environmental Conservation
625 Broadway
Albany, New York 12233-5500

U.S. Environmental Protection Agency Region II
Emergency & Remedial Response Division
290 Broadway, 18th Floor, E-3
New York, New York 10007-1866

Headquarters, Department of the Army
ATTN: DAIM-ZA
600 Army Pentagon
Washington, DC 20310-0600

Such correspondence shall be delivered by hand, or by registered mail or by certified mail and return receipt requested. The Parties may provide for other means of receiving and communicating notices and responses to requests for approval.

7. Recordation. The Grantor shall record this instrument within thirty (30) days of execution of this instrument by the Commissioner or her/his authorized representative in the office of the recording officer for the

county or counties where the Controlled Property is situated in the manner prescribed by Article 9 of the Real Property Law.

8. Amendment. This Environmental Easement may be amended only by an amendment executed by the Commissioner of the New York State Department of Environmental Conservation and filed with the office of the recording officer for the county or counties where the Controlled Property is situated in the manner prescribed by Article 9 of the Real Property Law.

9. Extinguishment. This Environmental Easement may be extinguished only by a release executed by the Commissioner of the New York State Department of Environmental Conservation and filed with the office of the recording officer for the county or counties where the Controlled Property is situated in the manner prescribed by Article 9 of the Real Property Law.

10. Joint Obligation. If there are two or more parties identified as Grantor herein, the obligations imposed by this instrument upon them shall be joint and several.

11. Grantor and USEPA Region II Opportunity to Review and Comment. The Grantee shall provide the Grantor and USEPA Region II with a notice of, and a reasonable opportunity to review and comment upon, requested approvals or actions under this Environmental Easement, including without limitation requests for amendment pursuant to Paragraph 8 hereof and extinguishment pursuant to Paragraph 9 hereof.

IN WITNESS WHEREOF, the Grantor has caused this instrument to be signed in its name.

UNITED STATES OF AMERICA

By: _____
Joseph W. Whitaker
Deputy Assistant Secretary of the Army
(Installations and Housing)
OASA(I&E)

**THIS ENVIRONMENTAL EASEMENT IS HEREBY ACCEPTED
BY THE PEOPLE OF THE STATE OF NEW YORK**, Acting By and
Through the Department of Environmental Conservation

By: _____
Denise M. Sheehan
Acting Commissioner

Date: _____

Grantor's Acknowledgment

COMMONWEALTH OF VIRGINIA)

) ss:

COUNTY OF ARLINGTON)

Before me, the undersigned, a Notary Public in and for the Commonwealth of Virginia, County of Arlington, personally appeared Joseph W. Whitaker, personally known to me or proved to me on the basis of satisfactory evidence to be the individual whose name is subscribed to the within instrument and acknowledged to me that he executed the same in the capacity therein stated, and that by his signature on the instrument, the United States of America, upon behalf of which the individual acted, executed the instrument.

Given under my hand and seal this _____ day of _____ 2005.

(SEAL)

Notary Public

My commission expires on _____.

Grantee's Acknowledgment

STATE OF NEW YORK)
) ss:
COUNTY OF)

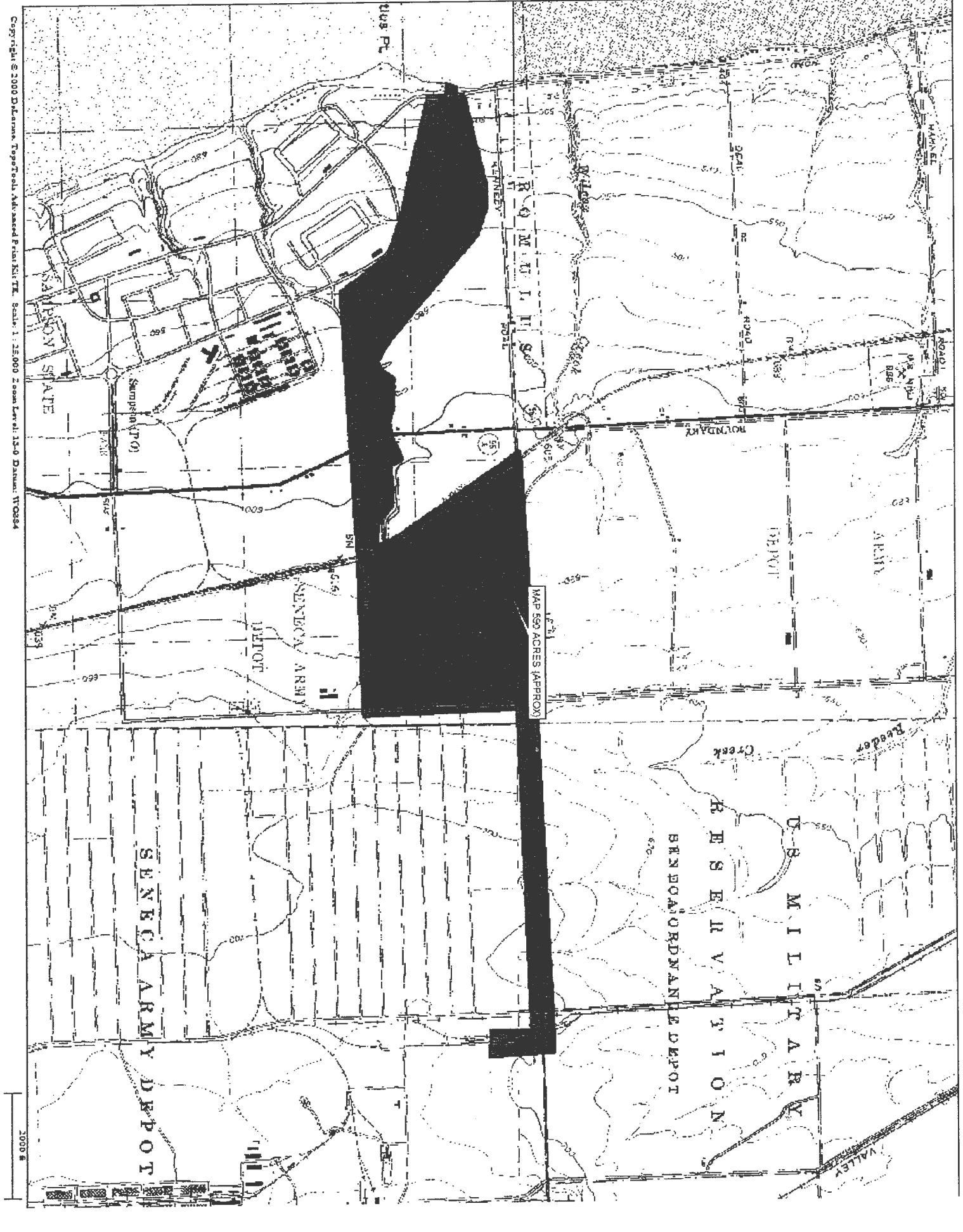
On the _____ day of _____, in the year 2005, before me, the undersigned, personally appeared Denise M. Sheehan, personally known to me or proved to me on the basis of satisfactory evidence to be the individual whose name is subscribed to the within instrument and acknowledged to me that she executed the same in her capacity as Commissioner of the State of New York Department of Environmental Conservation, and that by her signature on the instrument, the People of the State of New York, upon behalf of which the individual acted, executed the instrument.

Notary Public - State of New York

ENCLOSURE 5

COMMENTS

**ENCLOSURE 6
RESPONSE TO COMMENTS**



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MAP 630 ACRES (APPROX)

2000 8

US PL

SAMPSON STATE

SENeca ARMY DEPOT

SENeca ARMY DEPOT

WILSON CREEK

D-S MILITARY RESERVE DIVISION

SENeca ARMY DEPOT

VALLEY

RD. 11

RD. 12

RD. 13

RD. 14

RD. 15

RD. 16

RD. 17

RD. 18

RD. 19

RD. 20

RD. 21

RD. 22

RD. 23

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RD. 90

RD. 91

RD. 92

RD. 93

RD. 94

RD. 95

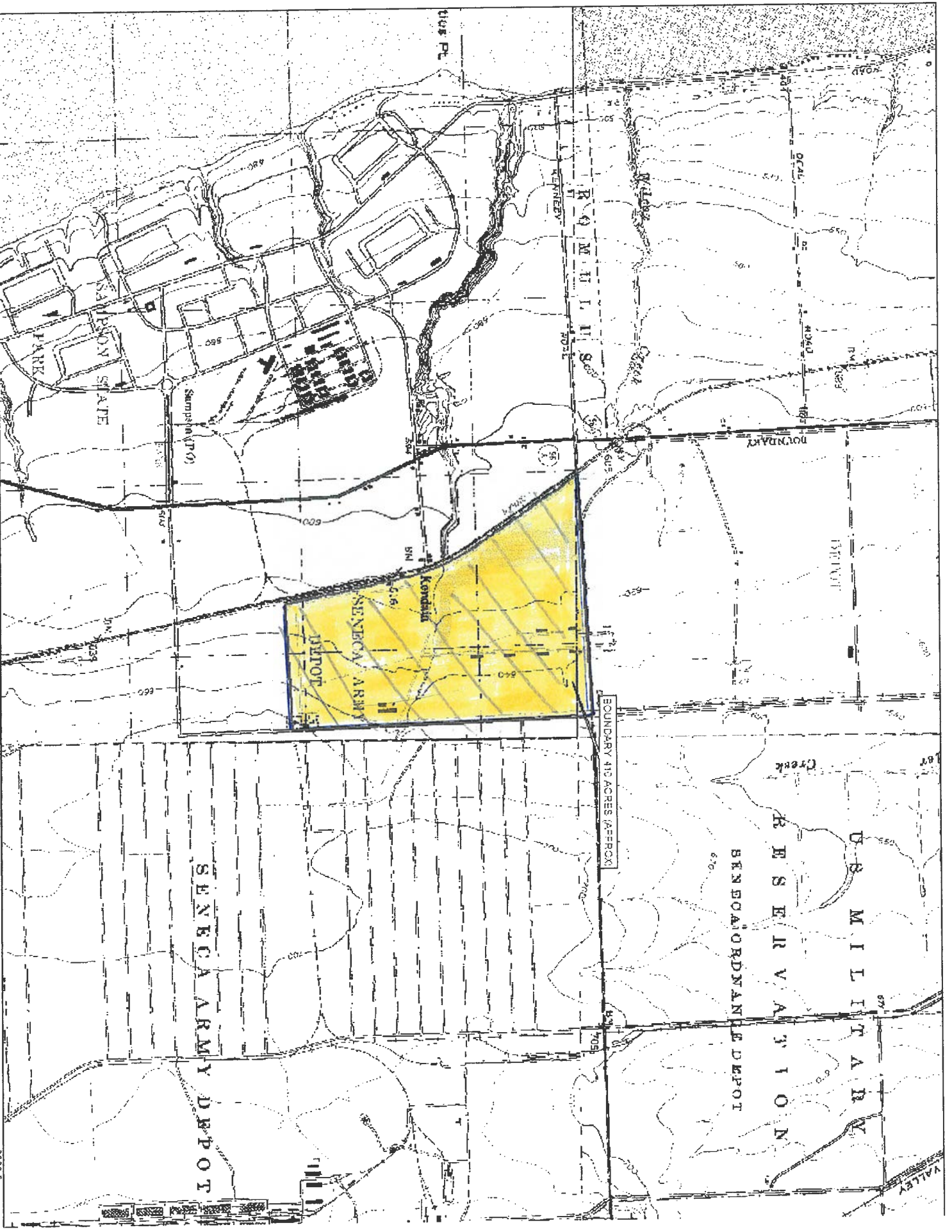
RD. 96

RD. 97

RD. 98

RD. 99

RD. 100



VALLEY

RESERVOIR

BENSON JORDAN DEPOT

SENeca ARMY DEPOT

BOUNDARY AND ACRES (APPROX)

ROAD

PORTNARY

SAMPSON STATE PARK

2000 FT

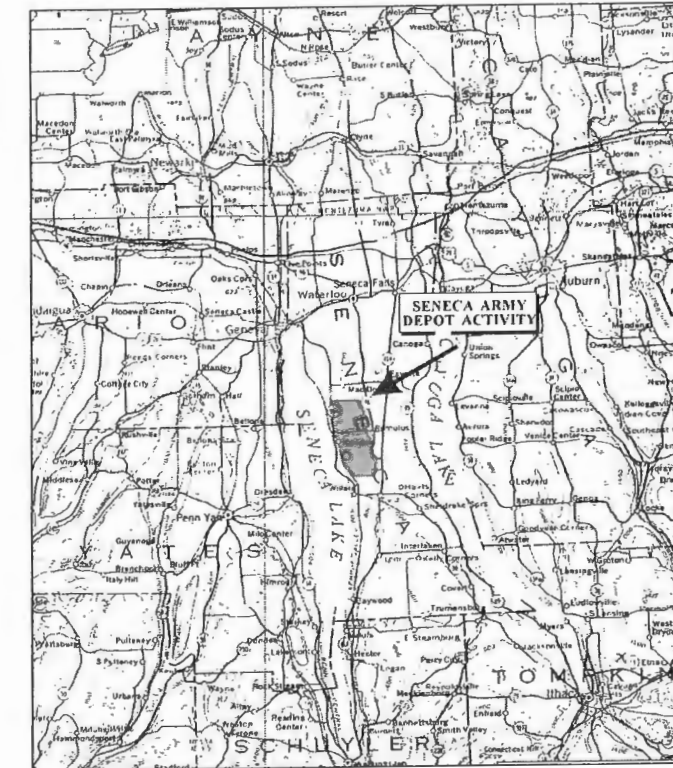
PREPARED FOR:

AIR FORCE CENTER OF ENVIRONMENTAL EXCELLENCE

REMEDIAL DESIGN FOR THE ASH LANDFILL SITE

SENECA ARMY DEPOT
ROMULUS, NEW YORK

DRAFT DESIGN DRAWINGS
(MAY 2006)



LOCATION MAP

DRAWING LIST

<u>SHEET NO.</u>	<u>REVISION NO.</u>	<u>DESCRIPTION</u>
C-1		TITLE SHEET
C-2		EXISTING CONDITIONS PLAN
C-3		SOIL REMEDIATION: EXCAVATION AND GRADING PLAN
C-4		GROUNDWATER REMEDIATION: BIOWALLS LAYOUT
C-5		DETAILS



SITE PLAN
NTS

P:\PIT\Projects\Seneca PBC \Remedial Design\Ash Landfill\Preliminary Design\Cad\C-1.dwg



PARSONS



CLIENT/PROJECT TITLE

**SENECA ARMY DEPOT
ASH LANDFILL**

DEPT. ENVIRONMENTAL ENGINEERING

Dwg. No. 744538-01400

C-1
TITLE SHEET

SCALE

NA

DATE

MAY 2006

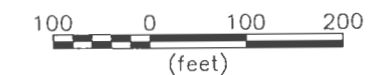
REV

-



LEGEND:

- PAVED ROAD
- DIRT ROAD
- GROUND CONTOUR AND ELEVATION
- TREE
- WETLAND & DESIGNATION
- BRUSH
- CHAIN LINK FENCE
- UTILITY POLE
- APPROXIMATE LOCATION OF FIRE HYDRANT
- FUEL OR UNDERGROUND STORAGE TANK
- SURVEY MONUMENT
- MONITORING WELL AND DESIGNATION
- RAILROAD TRACKS
- WATER MAIN



CLIENT/PROJECT TITLE
**SENECA ARMY DEPOT
ASH LANDFILL**

DEPT. ENVIRONMENTAL ENGINEERING Dwg. No. 744538-01400

**C-2
EXISTING CONDITIONS
PLAN**

SCALE 1" = 200' DATE MAY 2006 REV -

P:\PIT\Projects\Seneca PBC\Remedial Design\Ash Landfill\Preliminary Design\Cad\C-2.dwg

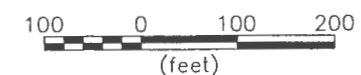


LEGEND:

- PAVED ROAD
- DIRT ROAD
- GROUND CONTOUR AND ELEVATION
- TREE
- WETLAND & DESIGNATION
- BRUSH
- CHAIN LINK FENCE
- UTILITY POLE
- APPROXIMATE LOCATION OF FIRE HYDRANT
- FUEL OR UNDERGROUND STORAGE TANK
- SURVEY MONUMENT
- MONITORING WELL AND DESIGNATION
- RAILROAD TRACKS
- WATER MAIN

NOTES:

1. REMOVE ALL AREA DEBRIS IN WORK AREAS.
2. CUT TREES AND BRUSH FROM THE LANDFILLS AND THE COOLING POND PRIOR TO COVERING OR BACKFILLING, RESPECTIVELY.
3. THE DEBRIS PILES SHALL BE EXCAVATED UNTIL ALL VISIBLE DEBRIS ARE REMOVED, BASED ON THE ENGINEERS VISUAL OBSERVATION. THE ENGINEER SHALL MAKE THE FINAL DETERMINATION THAT EXCAVATION IS COMPLETE ONCE ALL DEBRIS IS REMOVED. THE GENERAL AREAS WHERE THE DEBRIS PILES ARE PRESENT ARE SHOWN.
4. INCINERATOR COOLING WATER POND SHALL BE BACKFILLED WITH APPROVED FILL MATERIAL TO MEET THE SURROUNDING GRADE.
5. TWELVE INCH SOIL COVER CAPABLE OF SUSTAINING VEGETATIVE GROWTH SHALL BE PLACED OVER THE ASH LANDFILL AND THE NCF. THE COVER SHALL BE SEED TO PROMOTE VEGETATIVE GROWTH AND PREVENT EROSION. LIMITS OF THE COVERS ARE SHOWN ON THIS DRAWING.



PARSONS



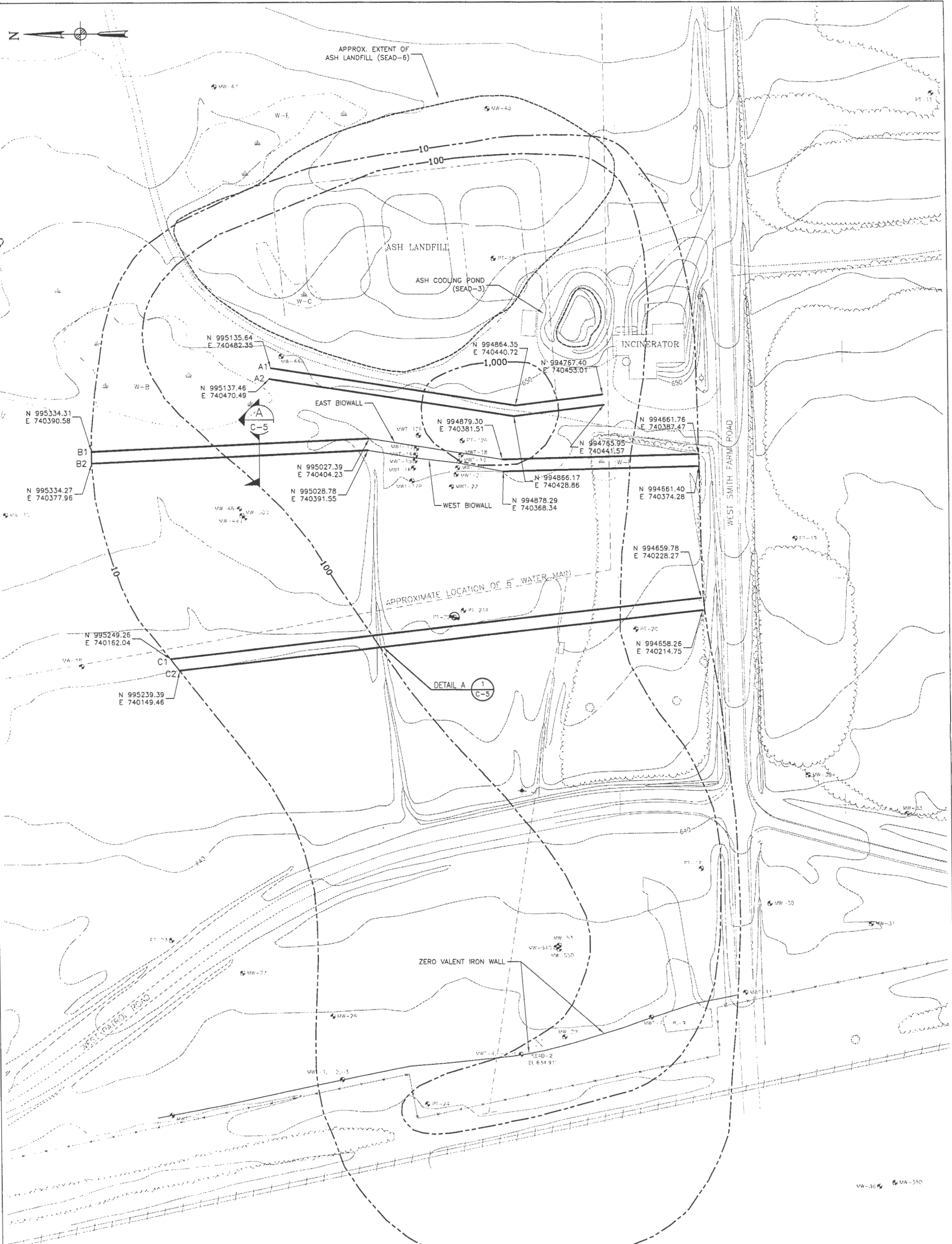
CLIENT/PROJECT TITLE
**SENECA ARMY DEPOT
 ASH LANDFILL**

DEPT. ENVIRONMENTAL ENGINEERING Dwg. No. 744538-01400

C-3
 SOIL REMEDIATION:
 EXCAVATION AND GRADING PLAN

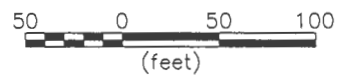
SCALE 1" = 200' DATE MAY 2006 REV -

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NOTES:

1. TOTAL CHLORINATED ETHENES ISOCONTOURS ARE BASED ON SAMPLES COLLECTED IN JANUARY 2003.



LEGEND:

- | | | | | | |
|--|---------------------------------|--|--------------------------------------|--|-------------------------------|
| | PAVED ROAD | | BRUSH | | WATER MAIN |
| | DIRT ROAD | | CHAIN LINK FENCE | | PROPOSED BIOWALL |
| | GROUND CONTOUR AND ELEVATION | | UTILITY POLE | | EXISTING TREATMENT WALL |
| | TREE | | APPROXIMATE LOCATION OF FIRE HYDRANT | | GROUNDWATER ISOCONTOUR (UG/L) |
| | WETLAND & DESIGNATION | | FUEL OR UNDERGROUND STORAGE TANK | | |
| | MONITORING WELL AND DESIGNATION | | SURVEY MONUMENT | | |
| | RAILROAD TRACKS | | | | |



PARSONS



CLIENT/PROJECT TITLE

**SENECA ARMY DEPOT
ASH LANDFILL**

DEPT. ENVIRONMENTAL ENGINEERING

Dwg. No. 744538-01400

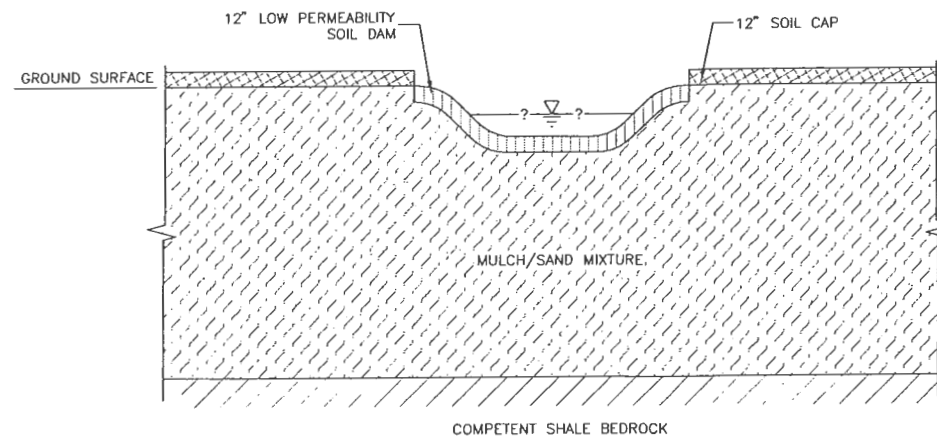
**C-4
GROUNDWATER REMEDIATION:
BIOWALLS LAYOUT**

SCALE

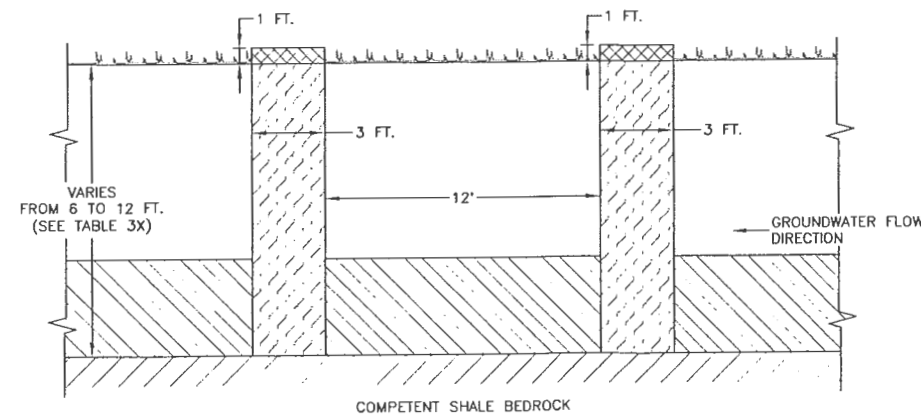
DATE

TRPV

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DETAIL A - BIOWALL INSTALLATION IN AREA OF DRAINAGE DITCH 1
C-4
N.T.S.



SECTION A - BIOWALL PAIRS
N.T.S.

LEGEND:

- BACKFILL
- MULCH/SAND MIXTURE COATED WITH SOYBEAN OIL
- COMPETENT BEDROCK
- WEATHERED SHALE
- TILL
- LOW PERMEABILITY MATERIAL



PARSONS



CLIENT/PROJECT TITLE
**SENECA ARMY DEPOT
ASH LANDFILL**

DEPT. ENVIRONMENTAL ENGINEERING Dwg. No. 744538-01400

**C-5
DETAILS**

SCALE NA DATE MAY 2006 REV -

DRAFT
BCT Agenda
23 August 2006
0830-1100 Hours

August 23, 2006

Discuss acceptability of GIS map for delisting and data collection form

Review response to comments on Ash Landfill RD

Review response to comments on DRAFT ROD for SEAD 58 and 63

Review responses to comments on the DRAFT ROD for 17 Sites

Discuss SEAD 12 and the indoor Air Sampling effort

Project review (if time permits)



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 2
290 BROADWAY
NEW YORK, NY 10007-1866

AUG 15 2006

BRAC Environmental Coordinator
Seneca Army Depot Activity
Attn: Stephen Absolom
PO Box 9
5786 State Route 96
Romulus, NY 14541-0009

Re: *Draft Record of Decision (ROD) for SEAD-58 and SEAD-63
Seneca Army Depot Activity, Romulus, New York*

Dear Steve:

This is in reference to the subject document received on July 31, 2006.

GENERAL COMMENTS

1. The section, **Appendix D – Response to Comments**, should be completely removed from this document. Pertinent information within Appendix D can be incorporated into the body of the document as appropriate.

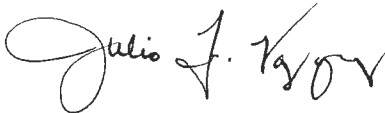
SPECIFIC COMMENTS

1. **Page 1-1 and 1-2: State Concurrence.** The only State concurrence needed for this document should come from the New York State Department of Environmental Conservation (NYSDEC) as the designated party of our Federal Facility Agreement (FFA). Please modify the pertinent paragraphs to reflect that NYSDEC is the only authorized State agency that can formally concur with the remedy.
2. **Page 3-1: Site History.** In the middle of the second paragraph, after “Federal Facilities Agreement,” are some acronyms that seem out of place. This sentence needs rewording.

3. **Page 3-2: Site History.** Please add to the history for SEAD-63 that EPA required a post-excavation groundwater sample to confirm the Army's position that levels of metals found at SEAD-63 are within Seneca Army Depot's background range, and refer to the results table.
4. **Section 7. Summary of Site Risks.** Please add the discussion of risks for both Areas of Concern (AOC) included within the Response to Comments, Appendix D. The added discussion should include, at a minimum, the groundwater concerns with metals for SEAD-63, the sediment PAH risks of 1×10^{-4} for the residential child at SEAD-63, and the DDT explanation of lab analysis for SEAD-58.
5. **Page 7-5: Risks for SEAD-63.** Delete the sentence regarding "planned future use does not include residential..." The proposed action for SEAD-63 is for unrestricted use, which includes residential use. This sentence is not relevant.
6. **Table RTC-1: SEAD-63 Groundwater.** The fifth column should read "results exceeding maximum criteria," not "results exceeding maximum concentration." Also, please add a reference to this table within the body of the document as stated above, and re-label the table according to the reference.

There are a number of additional typographical errors that are best to be discussed over the telephone. Please call me at your earliest convenience to discuss.

Sincerely,



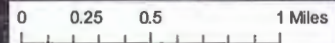
Julio F Vazquez, RPM
USEPA-Region 2
Emergency and Remedial Response Division

cc: K. Gupta, NYSDEC
C. Bethoney, NYSDOH
T. Heino, Parsons
R. Battaglia, USACE



Note:
 (R) - Retained Site

- Seneca Army Depot (SEAD) Areas of Concern
- Areas to be Deleted *Deleted*
- Areas Excluded from Transfer *Delisting*
- Seneca Army Depot Property Boundary



MALCOLM
 PIRNIE

DELISTING ~~DELETION~~ PLAN

JULY 2008 0217032 SENeca ARMY DEPOT - ROMULUS, NY
 SENeca COUNTY INDUSTRIAL DEVELOPMENT AGENCY, FLAUM MANAGEMENT COMPANY, AND EMPIRE BIOFUELS, LLC

Appendix G – Partial Site Deletion Data Collection Form

Seneca Army Depot

NY0213820830

Empire Biofuels Redevelopment,
Flaum Management Company Redevelopment, and
Seneca Army Public Safety Building and Jail

EPA Region 2, New York

1. Basic Identifying Information

1.1 Site Name: Seneca Army Depot

1.2 CERCLIS ID#: NY0213820830

1.3 NPL Site Location:

City: Romulus

County: Seneca

State: New York

Zip Code: 14541

1.4 Name Given to Deleted Portion of the Site:

- Empire Biofuels Redevelopment

- Flaum Management Company Redevelopment

- Seneca Army Public Safety Building and Jail

1.5 Is this the first, second, third, etc. partial deletion at the site? (Enter the deletion number): 1

1.6 Name of Person(s) Completing Form: Kent McManus, on behalf of Empire Biofuels, LLC, Flaum Management Company, Inc., and the Seneca County Industrial Development Agency.

Affiliation (agency/company): Malcolm Pirnie, Inc.

Phone Number: (716) 667-6607

1.7 Name of Person(s) Completing Electronic Locational Data: Joel Harden, on behalf of Empire Biofuels, LLC, Flaum Management Company, Inc., and the Seneca County Industrial Development Agency.

Affiliation (agency/company): Malcolm Pirnie, Inc.

Phone Number: (716) 667-6664

1.8 Brief Partial Deletion Narrative. Provide a brief narrative describing the location and extent of the release to be deleted. Include a discussion of the location data and method(s) used to delineate the deleted release. Attach additional pages if necessary:

The proposed partial deletion includes three separate areas within the Seneca Army Depot site, namely the Empire Biofuels Redevelopment, Flaum Management Company Redevelopment, and Seneca Army Public Safety Building and Jail. Each area contains multiple environmental Areas of Concern (designated as numbered SEADs), which were identified through historic information and field investigations. The SEADs are further defined as (R)etained by the United States Army (Army), or transferred to the Seneca County Industrial Development Agency (SCIDA).

- Retained SEADs have not completed their final closure, and as such are not proposed for deletion at this time. These areas were delineated for exclusion from the deletion process based on coordinates provided by the Army. The coordinates were originally prepared by the Army based on historic information and analytical data to facilitate their exclusion (i.e., retention) from a property transfer to the SCIDA.
- The SEADs that have been transferred to the SCIDA were delineated based on mapping provided by the Army, which was based on historic information and analytical data. Since those areas were not part of the property transfer to the SCIDA more detailed coordinate data was not available.

1.9 Party Requesting ~~Deletion~~^{De-listing} Which party or parties requested the partial deletion (check all that apply):

- Developer
 - Empire Biofuels, LLC
 - Flaum Management Company, Inc.
- Property Owner/Operator
- City/Municipality
 - Seneca County
- State
- Citizen Group
- Other Interest Party
- Individual
- EPA
- Other Federal program (specify)
- Other (specify)
- Unknown

1.10 Reason for Partial Deletion: Which reason or reasons best justify the partial deletion (check all that apply):

- Contamination not found
- Cleaned up
- Deferred to RCRA
- Deferred to other Agency (specify)
- Incorrectly included in site boundaries

- Other (specify)

2.1 Which of the following items have been provided in the partial deletion package?:

- ~~_____~~ Notice of Intent to Delete
- ~~_____~~ Map of the entire site and deleted portion (Electronic and Hard Copy)
- ✓ Draft Appendix G - Partial Site Deletion Data Collection Form

2.2 Which locational data fields have been provided in both electronic and printout form? (Check only the fields that apply)

*See Attached, NPL-GIS.doc.

- ✓ Projection of data
- ✓ Units of measure
- ✓ Projection spheroid
- ✓ Projection zone
- ✓ Horizontal datum
- ✓ XShift / YShift
- ✓ Source
- ✓ Source Scale
- ✓ Point-Line-Area
- Method of collection
- Description and structure of the data and any attribute information
- Accuracy value and unit
- Xmin, Ymin, Xmax, Ymax of data layer
- Precision of data
- Source projection
- Source units of measure
- Source projection spheroid
- Source horizontal datum

2.3 In which format(s) were the partial deletion electronic files submitted?

- ARC/INFO native or export (.E00)
- ✓ ArcView shape files
- MapInfo native Map Info Interchange Format (MIF)
- MapInfo Boundary Interchange (MBI)
- MapInfo Map Interchange (MMI)
- ✓ GIS+ native (Mr. SID Raster)
- AutoCAD DXF
- ASCII delimited file (include data structure and format for re-creation)

2.4 NPL Site Coordinates: See Attached, GIS Coordinates.xls

2.5 Deleted Portion Coordinates: See Attached, GIS Coordinates.xls

2.2 Which locational data fields have been provided in both electronic and printout form?

SEAD – GIS Layers

Data Layer: Areas to be Deleted (AOI_sites.shp)

Projection: NAD_1983

Units of Measure: Feet

Projection Spheroid: Transverse_Mercator

Projection Zone: New_York_Central

Horizontal Datum: North_American_1983

False Northing: 0.00000000

False Easting: 820208.33333333

Source: “Seneca Army Depot” (Michael D. Karlsen, Surveyor; Scale 1” = 400’); Seneca Army Depot SWMU Classification Report (Parsons Engineering; Scale 1” = 1000’)

Point-Line-Area: Area

Method of collection: Hardcopy drawings were scanned and georeferenced to align with aerial photography; Areas to be Deleted were then digitized in shapefile format

Attributes: Label, Acres

Data Layer: Seneca Army Depot Property Boundary (Boundary-Seneca-Depot.shp)

Projection: NAD_1983

Units of Measure: Feet

Projection Spheroid: Transverse_Mercator

Projection Zone: New_York_Central

Horizontal Datum: North_American_1983

False Northing: 0.00000000

False Easting: 820208.33333333

Source: Seneca Army Depot SWMU Classification Report (Parsons Engineering; Scale 1” = 1000’)

Point-Line-Area: Area

Method of collection: Hardcopy map showing outline was scanned and georeferenced to align with aerial photography; Seneca Army Depot Property Boundary was then digitized in shapefile format

Attributes: Label

Data Layer: Areas Excluded from Transfer (Retained_Areas.shp)

Projection: NAD_1983

Units of Measure: Feet

Projection Spheroid: Transverse_Mercator

Projection Zone: New_York_Central

Horizontal Datum: North_American_1983

False Northing: 0.00000000

False Easting: 820208.33333333

Source: “Seneca Army Depot” (Michael D. Karlsen, Surveyor, 2002; Scale 1” = 400’)

Point-Line-Area: Area

Method of collection: Hardcopy maps delineating areas to be excluded from transfer were scanned and georeferenced to align with aerial photography; these areas were then digitized in shapefile format

Attributes: Acres

Data Layer: Seneca Army Depot Areas of Concern (SEAD.shp)

Projection: NAD_1983

Units of Measure: Feet

Projection Spheroid: Transverse_Mercator

Projection Zone: New_York_Central

Horizontal Datum: North_American_1983

False Northing: 0.00000000

False Easting: 820208.33333333

Source: Seneca Army Depot SWMU Classification Report (Parsons Engineering; Scale 1" = 1000'); Seneca Army Depot Activity – SEADs Under Investigation/Remediation – Retained Sites (Parsons; Scale 1:1000, February 2004)

Point-Line-Area: Area

Method of collection: Hardcopy maps delineating areas of concern were scanned and georeferenced to align with aerial photography; these areas were then digitized in shapefile format

Attributes: Label

Data Layer: Aerial Photograph - Romulus

Projection: NAD_1983

Units of Measure: Feet

Projection Spheroid: Transverse_Mercator

Projection Zone: New_York_Central

Horizontal Datum: North_American_1983

False Northing: 0.00000000

False Easting: 820208.33333333

Source: New York State GIS Clearinghouse download

Source Scale: 2 ft. resolution

Point-Line-Area: Raster

Method of collection: Aerial photography for the Town of Romulus was downloaded from the New York State GIS Clearinghouse; GeoExpress was used to mosaic individual tiles together into one raster covering the entire Town

Attributes: None

Data Layer: Aerial Photograph - Varick

Projection: NAD_1983

Units of Measure: Feet

Projection Spheroid: Transverse_Mercator

Projection Zone: New_York_Central

Horizontal Datum: North_American_1983

False Northing: 0.00000000

False Easting: 820208.33333333

Source: New York State GIS Clearinghouse download

Source Scale: 2 ft. resolution

Point-Line-Area: Raster

Method of collection: Aerial photography for the Town of Romulus was downloaded from the New York State GIS Clearinghouse; GeoExpress was used to mosaic individual tiles together into one raster covering the entire Town

Attributes: None

2.4 NPL Site Coordinates

Latitude	Longitude
42d 47' 17.400"	76d 53' 52.099"
42d 47' 22.722"	76d 51' 43.300"
42d 45' 56.712"	76d 50' 35.180"
42d 45' 5.806"	76d 50' 31.750"
42d 45' 5.674"	76d 50' 28.532"
42d 44' 40.568"	76d 50' 27.482"
42d 44' 40.863"	76d 50' 2.384"
42d 44' 29.255"	76d 50' 1.864"
42d 44' 26.984"	76d 50' 2.565"
42d 44' 14.487"	76d 50' 9.856"
42d 43' 58.947"	76d 50' 11.806"
42d 43' 48.485"	76d 50' 11.391"
42d 43' 29.743"	76d 49' 48.303"
42d 43' 24.370"	76d 49' 40.437"
42d 43' 16.704"	76d 49' 30.558"
42d 43' 2.773"	76d 49' 14.524"
42d 42' 18.112"	76d 49' 12.227"
42d 42' 16.895"	76d 49' 37.468"
42d 42' 1.940"	76d 49' 36.919"
42d 41' 59.231"	76d 51' 7.758"
42d 41' 57.108"	76d 51' 7.749"
42d 41' 56.274"	76d 51' 39.755"
42d 42' 57.386"	76d 52' 42.757"
42d 42' 59.855"	76d 52' 44.749"
42d 43' 3.621"	76d 52' 47.022"
42d 44' 33.609"	76d 53' 11.908"
42d 45' 9.089"	76d 53' 45.393"

2.5 Deleted Portion Coordinates:

Empire Biofuels Redevelopment

Latitude	Longitude
42d 45' 2.749"	76d 52' 34.379"
42d 44' 9.149"	76d 52' 31.598"
42d 44' 8.357"	76d 53' 3.379860"
42d 44' 18.555"	76d 53' 6.560"
42d 44' 24.055"	76d 53' 7.670"
42d 44' 32.660"	76d 53' 9.157"
42d 44' 34.521"	76d 53' 10.370"
42d 44' 36.075"	76d 53' 11.860"
42d 44' 51.914"	76d 53' 26.863"
42d 44' 53.107"	76d 53' 25.981"
42d 44' 53.910"	76d 53' 25.943"
42d 44' 55.364"	76d 53' 24.945"
42d 45' 1.183"	76d 53' 25.251"
42d 45' 1.115"	76d 53' 22.422"

Seneca County Public Safety Building and Jail

Latitude	Longitude
42d 43' 32.874"	76d 49' 57.636"
42d 43' 19.777"	76d 49' 38.461"
42d 43' 19.032"	76d 49' 56.972"

Flaum Management Company Redevelopment

Latitude	Longitude
42d 44' 41.098"	76d 50' 28.313"
42d 44' 39.745"	76d 50' 28.307"
42d 44' 40.329"	76d 50' 3.243"
42d 44' 37.447"	76d 50' 3.145"
42d 44' 37.391"	76d 50' 10.241"
42d 44' 33.244"	76d 50' 10.090"
42d 44' 33.242"	76d 50' 10.921"
42d 44' 27.613"	76d 50' 10.711"
42d 44' 27.434"	76d 50' 10.711"
42d 44' 26.703"	76d 50' 11.805"
42d 44' 26.659"	76d 50' 13.842"
42d 44' 26.796"	76d 50' 14.405"
42d 44' 26.713"	76d 50' 15.799"
42d 44' 24.877"	76d 50' 15.710"
42d 44' 24.541"	76d 50' 24.765"
42d 44' 11.170"	76d 50' 24.255"
42d 44' 9.730"	76d 50' 23.686"
42d 44' 8.941"	76d 50' 23.093"
42d 44' 1.945"	76d 50' 16.259"
42d 44' 0.268"	76d 50' 15.610"
42d 43' 58.984"	76d 50' 15.444"
42d 43' 58.994"	76d 50' 12.486"
42d 43' 54.708"	76d 50' 13.101"
42d 43' 48.153"	76d 50' 12.696"
42d 43' 17.058"	76d 49' 32.238"
42d 43' 6.235"	76d 49' 20.219"
42d 43' 5.424"	76d 49' 37.529"
42d 43' 4.428"	76d 49' 37.475"
42d 43' 4.463"	76d 49' 38.326"
42d 43' 15.678"	76d 49' 39.021"
42d 43' 15.290"	76d 49' 48.027"
42d 43' 11.084"	76d 49' 47.860"
42d 43' 11.120"	76d 49' 48.461"
42d 43' 5.032"	76d 49' 48.136"
42d 43' 3.753"	76d 50' 26.035"
42d 43' 6.381"	76d 50' 28.874"
42d 43' 54.217"	76d 50' 43.942"
42d 43' 49.836"	76d 50' 52.017"
42d 43' 46.754"	76d 51' 1.866"
42d 43' 45.793"	76d 51' 5.534"
42d 43' 45.436"	76d 51' 8.253"
42d 44' 3.986"	76d 51' 9.149"
42d 44' 16.011"	76d 51' 13.079"
42d 44' 39.773"	76d 51' 14.241"
42d 44' 39.484"	76d 51' 2.852"
42d 44' 39.579"	76d 50' 56.046"
42d 44' 40.270"	76d 50' 56.129"

***Areas excluded from Flaum Management Company Redevelopment**

Area	Latitude	Longitude
SEAD-2(R)	42d 44' 10.962"	76d 51' 10.338"
	42d 44' 10.104"	76d 51' 10.090"
	42d 44' 9.951"	76d 51' 11.099"
	42d 44' 10.810"	76d 51' 11.379"
SEAD-17(R)	42d 44' 23.417"	76d 50' 53.9176"
	42d 44' 23.063"	76d 50' 47.553"
	42d 44' 17.897"	76d 50' 47.960"
	42d 44' 18.087"	76d 50' 57.184"
SEAD-16(R)	42d 44' 29.819"	76d 50' 43.006"
	42d 44' 23.552"	76d 50' 41.335"
	42d 44' 21.701"	76d 50' 44.044"
	42d 44' 28.907"	76d 50' 50.223"
SEAD-5(R) & 59(R)	42d 44' 30.994"	76d 50' 36.075"
	42d 44' 28.149"	76d 50' 35.849"
	42d 44' 28.639"	76d 50' 28.701"
	42d 44' 25.900"	76d 50' 28.475"
	42d 44' 25.567"	76d 50' 35.838"
	42d 44' 25.039"	76d 50' 35.907"
	42d 44' 25.155"	76d 50' 41.762"
	42d 44' 30.451"	76d 50' 43.223"
SEAD-71(R)	42d 44' 33.753"	76d 50' 27.864"
	42d 44' 31.803"	76d 50' 27.928"
	42d 44' 30.994"	76d 50' 36.075"
	42d 44' 30.695"	76d 50' 40.010"
SEAD-33(R), 36(R), & 39(R)	42d 44' 33.696"	76d 50' 29.866"
	42d 44' 33.137"	76d 50' 20.828"
	42d 44' 32.332"	76d 50' 20.746"
	42d 44' 32.360"	76d 50' 21.019"
SEAD-25(R)	42d 44' 33.135"	76d 50' 21.920"
	42d 44' 24.272"	76d 50' 25.751"
	42d 44' 18.844"	76d 50' 25.586"
	42d 44' 18.781"	76d 50' 30.233"
	42d 44' 18.567"	76d 50' 30.233"
	42d 44' 18.772"	76d 50' 34.094"
	42d 44' 18.821"	76d 50' 35.667"
	42d 44' 19.872"	76d 50' 37.244"
SEAD-34(R), 37(R), & 40(R)	42d 44' 24.209"	76d 50' 30.113"
	42d 44' 11.929"	76d 50' 30.705"
	42d 44' 10.478"	76d 50' 30.193"
	42d 44' 10.401"	76d 50' 30.627"
SEAD-1(R)	42d 44' 11.841"	76d 50' 31.129"
	42d 44' 10.038"	76d 50' 28.630"
	42d 44' 10.041"	76d 50' 27.564"
	42d 44' 9.037"	76d 50' 27.547"
	42d 44' 9.035"	76d 50' 28.620"

SEAD-27(R), 28(R), & 121C(R)	42d 44' 16.170"	76d 50' 42.805"	
	42d 44' 15.915"	76d 50' 39.301"	
	42d 44' 12.700"	76d 50' 39.144"	
	42d 44' 12.383"	76d 50' 39.429"	
	42d 44' 12.381"	76d 50' 40.430"	
	42d 44' 11.641"	76d 50' 41.571"	
	42d 44' 7.952"	76d 50' 41.198"	
	42d 44' 7.144"	76d 50' 49.058"	
	42d 44' 8.457"	76d 50' 51.137"	
	42d 44' 13.849"	76d 50' 43.653"	
	42d 44' 14.483"	76d 50' 43.227"	
	SEAD-121I(R)	42d 43' 56.141"	76d 50' 20.631"
		42d 43' 30.917"	76d 50' 19.479"
		42d 43' 30.768"	76d 50' 23.291"
SEAD-26(R)	42d 43' 55.992"	76d 50' 24.538"	
	42d 43' 30.136"	76d 50' 23.383"	
	42d 43' 17.699"	76d 50' 22.951"	
	42d 43' 17.418"	76d 50' 22.759"	
	42d 43' 16.995"	76d 50' 23.425"	
	42d 43' 16.362"	76d 50' 23.708"	
	42d 43' 16.501"	76d 50' 24.566"	
	42d 43' 16.429"	76d 50' 25.233"	
	42d 43' 16.850"	76d 50' 25.521"	
	42d 43' 17.060"	76d 50' 25.903"	
South End Water Tower	42d 43' 30.059"	76d 50' 26.147"	
	42d 44' 38.910"	76d 50' 19.169"	
	42d 44' 38.417"	76d 50' 18.569"	
	42d 44' 37.986"	76d 50' 19.272"	
Hancock Park Fitness Center	42d 44' 38.490"	76d 50' 19.870"	
	42d 44' 28.440"	76d 50' 20.274"	
	42d 44' 25.117"	76d 50' 20.140"	
	42d 44' 24.925"	76d 50' 24.767"	
	42d 44' 26.350"	76d 50' 24.810"	
Reservoir Bldg	42d 44' 28.360"	76d 50' 24.093"	
	42d 44' 5.073"	76d 50' 22.228"	
	42d 44' 2.638"	76d 50' 22.190"	
Ore Pile (North)	42d 44' 2.526"	76d 50' 25.944"	
	42d 44' 5.023"	76d 50' 25.982"	
	42d 43' 49.656"	76d 50' 21.513"	
	42d 43' 43.440"	76d 50' 21.423"	
Ore Pile (South)	42d 43' 43.404"	76d 50' 23.187"	
	42d 43' 49.589"	76d 50' 23.384"	
	42d 43' 36.820"	76d 50' 21.054"	
	42d 43' 30.630"	76d 50' 20.948"	
	42d 43' 30.611"	76d 50' 22.821"	
Alternate Reservoir	42d 43' 36.786"	76d 50' 22.987"	
	42d 43' 19.706"	76d 49' 37.923"	
	42d 43' 19.176"	76d 49' 37.324"	
	42d 43' 18.168"	76d 49' 37.271"	
	42d 43' 16.403"	76d 49' 39.650"	
	42d 43' 16.286"	76d 49' 42.857"	
	42d 43' 19.567"	76d 49' 43.069"	

*Note that the Seneca County Public Safety Building and Jail is wholly encompassed by the Flaum Management Company Redevelopment Area.

DRAFT U.S. Army's Vapor Intrusion Policy

This policy applies to all active and Base, Realignment and Closure (BRAC) Army Installations and Formerly Used Defense Sites (FUDS) located within the United States and provides authority for the Army's Installation Restoration program and Compliance Cleanup Programs. While a legal driver exists to evaluate and respond to releases into the environment *that present an unacceptable risk*,¹ vapor intrusion is a developing field of science. Risk assessment methodologies for determining unacceptable risk and methods to distinguish indoor air emissions from vapor intrusion are still in development.

1. Regulatory Drivers (CERCLA/RCRA):

Legal drivers under CERCLA or RCRA corrective action

Vapor intrusion is the migration of volatile chemicals from the subsurface into overlying buildings.² A vapor intrusion exposure pathway can be evaluated and addressed under CERCLA or RCRA corrective action.³ The broad mandate in CERCLA and RCRA corrective action to protect human health supports the evaluation of a vapor intrusion exposure pathway when appropriate given the specific site circumstances. Vapor intrusion involves a release to soil and/or groundwater that then migrates into buildings. Thus a "release" into the "environment" has been met and CERCLA or RCRA corrective action can be legal drivers for a response necessary to protect human health from unacceptable risks. This investigation and any necessary response should not include emissions solely from indoor sources (i.e., that are not "releases" to the "environment"). EPA has interpreted "ambient air" referenced in CERCLA's definition of "environment"⁴ to exclude air that is "completely enclosed in a building or structure."⁵ Several court cases have upheld that "environment" referred to in CERCLA does not include "air within a building."⁶ There is also a limitation on response action for products which are part of a structure and result in exposure within buildings.⁷

Federal and State Vapor Intrusion Guidance

¹ For example, the excess upper bound lifetime cancer risk to an individual is greater than 10^{-4} , and the Hazard Quotient/Hazard Index for non-cancer adverse effects is greater than 1.

² USEPA, *Draft Guidance for Evaluating The Vapor Intrusion to Indoor Air Pathway From Groundwater and Soils*, Nov 2002, page 4.

³ RCRA corrective action is not applicable at all Army sites, for example, Formerly Used Defense Sites (FUDS).

⁴ 42 U.S.C. 9601(8), emphasis added: The term "environment" means (A) the navigable waters, the waters of the contiguous zone, and the ocean waters. . . and (B) any other surface water, ground water, drinking water supply, land surface or subsurface strata, or *ambient air* within the United States. . . .

⁵ 50 FR 13456 (April 4, 1985) [Final rule on CERCLA release reporting].

⁶ For example, *Stevens Creek Assoc v. Barclays Bank of California*, 915 F.2d 1355, 1360 (9th Cir 1990).

⁷ 42 USC 9604(a)(3)(B).

Federal and State guidance on vapor intrusion is under development. In 2002, EPA published *Draft Guidance for Evaluating the Vapor Intrusion to Indoor Air Pathway From Groundwater and Soils (Subsurface Vapor Intrusion Guidance)*.⁸ This draft guidance has not been finalized. The draft guidance states that it “does not impose any requirements or obligations on EPA, states, or the regulated community”⁹ and the draft guidance “is not designed” to assist in “a more detailed (e.g., site-specific) assessment of current and future risks.”¹⁰ Additionally, the draft guidance “is not designated to be used during the process for determining whether, and to what extent, cleanup action is warranted.”¹¹ Several States have issued or are in the process of issuing vapor intrusion guidance. While the federal and State guidances may be a useful resource, they do not qualify as an Applicable or Relevant and Appropriate Requirements (ARAR) under CERCLA or as a “media cleanup standard” under RCRA corrective action.

2. Air Concentration Models are Screening Tools, Not a Risk Assessment.

The draft EPA guidance recommends modeling of air concentrations as a screening tool that indicates whether potential risk exists. As stated in this EPA guidance, when volatile constituents are within 100 feet of an existing building, this conservative, screening-level model can be used to evaluate the potential for human health risk from inhalation of VOC vapors in existing and future buildings. The model’s intended use is to screen out sites where vapors are not problematic. “Risk “calculated above the target range is not to be taken as actual risk or “unacceptable risk” but is an indication of the potential for risk. The model indicates whether the migration of vapors into certain existing and future buildings and trenches could potentially reach levels that could pose a threat to human health. The model uses samples taken from the shallow saturated zone [soil gas?] to estimate the transport of contaminant vapors from a subsurface source into indoor air space. This vapor intrusion modeling can be used to indicate the need for more detailed evaluation of the potential for risk rather than the need for remedial action. Rather than attempt further evaluation of the potential for risk in future buildings, it is Army policy that a Land Use Control will be utilized to mitigate this potential risk. In existing buildings at active and transferring Army properties, as a matter of Army policy, we will conduct indoor air sampling and conduct a risk assessment (which considers EPA IRIS values^{*12}) and explore ventilation actions to mitigate unacceptable risks identified in a risk assessment.

Modeled air concentrations should not be used as the basis for quantitative risk calculations and subsequent risk management decisions when there is low confidence in their certainty. When there is high confidence in air contaminant

Comment [I1]: EPA defines this a little more spatially and I was wondering if we should be specific in our policy:

“We recommend that an inhabited building generally be considered “near” subsurface contaminants if it is located within approximately 100 ft laterally or vertically of known or interpolated soil gas or groundwater contaminants listed in Table 1 (or others not included in table 1 – see Question 1) and the contamination occurs in the unsaturated zone and/or the uppermost saturated zone. If the source of contamination is groundwater, we recommend migration of the contaminant plume be considered when evaluating the potential for future risks. The distance suggested above (100 feet) may not be appropriate for all sites (or contaminants) and”.

Comment [I2]: I’m not sure this correct. Depending on what spreadsheet of the model you use it looks to me like it might be different. To play it say I would say “the model uses soil gas samples taken from the Vadose Zone...”.

⁸ 67 Federal Register 71169 (Nov. 29, 2002).

⁹ USEPA, *Draft Guidance for Evaluating The Vapor Intrusion to Indoor Air Pathway From Groundwater and Soils (Subsurface Vapor Intrusion Guidance)*, Nov 2002, page 2.

¹⁰ *Id.* page 10.

¹¹ *Id.*

¹² EPA Human Health Toxicity Values in Superfund Risk Assessments. [Insert something on use Cal EPA number for TCE]

concentrations; modeled or actual, those concentrations may be used with standard guidance for risk assessment and EPA guidance for toxicity value identification to estimate risk to human receptors."¹³

3. Technical Vapor Intrusion Guidance is Under Development

[The Tri-Service Environmental Risk Assessment Working Group, composed of technical experts from multi DOD components, is developing a technical guidance document for the assessment of the VI pathway. Air Force, Army, and Navy each have draft guidance documents that will be merged to form a Tri-Service consensus approach on evaluation of this pathway. This guidance document is expected in early 2007.

4. CERCLA Five-Year Review

If an existing CERCLA ROD does not evaluate potential vapor intrusion risks and volatile constituents exist within 100 feet of an existing building, these risks will be evaluated as part of the CERCLA five-year review. An industrial hygiene survey for indoor air concerns can be conducted at any time.

5. Army Point of Contact

For questions concerning this policy, and any requests for deviations, should be referred to Mr. Charles George, Office of the Director of Environmental Programs (ODEP), Assistant Chief of Staff for Installation Management (ACSIM), (703)601-1597 and email charles.george@hqda.army.mil.

¹³ OSWER Directive 9285.7-53 *Human Health Toxicity Values in Superfund Risk Assessments*

**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY**

REGION 2
290 BROADWAY
NEW YORK, NY 10007-1866

AUG 18 2006

BRAC Environmental Coordinator
Seneca Army Depot Activity
Attn: Stephen Absolom
PO Box 9
5786 State Route 96
Romulus, NY 14541-0009

Re: *Draft Record of Decision (ROD) for the 17 IC Sites
Seneca Army Depot Activity, Romulus, New York*

Dear Steve:

This is in reference to the subject document received on August 14, 2006.

GENERAL COMMENTS

1. The section, **Appendix D – Response to Comments**, should be completely removed from this document. Pertinent information within Appendix D can be incorporated into the body of the document as appropriate.

SPECIFIC COMMENTS

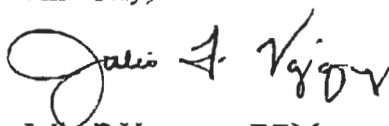
1. **Page 1-2 and 1-7: State Concurrence.** The only State concurrence needed for this document should come from the New York State Department of Environmental Conservation (NYSDEC) as the designated party of our Federal Facility Agreement (FFA). Please modify the pertinent paragraphs to reflect that NYSDEC is the only authorized State agency that can formally concur with the remedy.
2. **Page 1-3: Group I IC.** Duration of the IC is missing. Please add the statement that controls will be maintained until hazardous substances reach levels that allow for unrestricted use and exposure. This same piece of information is missing for SEAD-64C, and SEAD-64B.

3. **Page 1-4: SEAD-13.** Please describe the vehicle/means of the groundwater use restriction (i.e., deed, easement, etc.).
4. **Page 1-7. ¶ following the bullet.** The restrictions are not to "...satisfy State Law...." EPA does not consider this State Law an ARAR. Please modify the sentence to say that the Army shall prepare and submit to EPA for review and approval a LUC remedial design that shall contain implementation and maintenance actions, including periodic inspections pursuant to the FFA, Section 14.4."
5. **Figure 2-2 through 2-6.** These maps do not delineate the boundaries of the reversionary deeds (e.g., Prison Parcel, North End Parcel, PID/Warehouse Area). The Maps should show the boundaries of the land use controls in addition to the SEADs boundaries.
6. **Tables for Section 7.** Risk tables for SEAD-67 and 122B are missing from the document. Please add the missing tables or explain why they are not necessary.

Review of the subject document is still underway by other internal offices. These comments are offered in advance to start discussion of the concerns during our next BCT meeting.

There are a number of additional typographical errors that are best to be discussed over the telephone. Please call me at your earliest convenience to discuss.

Sincerely,



Julio F Vazquez, RPM
USEPA-Region 2
Emergency and Remedial Response Division

cc: K. Gupta, NYSDEC
C. Bethoney, NYSDOH
T. Heino, Parsons
R. Battaglia, USACE



**U.S. Environmental Protection Agency
Region 2
290 Broadway
New York, New York 10007**

TO: Steve Absolom, Kuldeep Gupta
OFFICE: Seneca Army Depot, NYSDEC
PHONE: 607-869-1309, 518-402-9622
FAX: 607-869-1362, 518-402-9022

FROM: Julio F. Vazquez
OFFICE: US EPA - Region 2
PHONE: 212-637-4323
FAX: 212-637-3256
DATE: August 18, 2006
SUBJECT: Draft ROD for THE 17 IC Sites
Number of Pages (including cover sheet): 3

Message:

Stephen Absolom

From: "Minvielle, David P Mr OTJAG" <David.Minvielle@hqda.army.mil>
To: "Stephen Absolom" <stephen.m.absolom@us.army.mil>
Sent: Tuesday, August 22, 2006 11:13 AM
Attach: support_cc1_magnese_ccl_regdet.pdf
Subject: RE: DRAFT ROD (UNCLASSIFIED)

Classification: **UNCLASSIFIED**

Caveats: NONE

Steve,

Sorry for being non-responsive until now. No harm done, as ELD concurs in the responses to the state's and EPA's comments. Please inform me/keep me informed of the outcome of EPA's comments and SEDA's disagreement with same.

Could you please explain to me the human health risk drivers for manganese and iron.

I know about the welding rod litigation and the alleged neurological effects of manganese and I wonder how much of this is driven by that litigation. I am unaware of any EPA concern regarding manganese except via inhalation exposure. I'm uncertain why we are still trying to complete water pathways for this non-volatile metal. Several years ago EPA concluded that there is no significant health effects from ingestion of a heavy metal whose natural abundance is second only to iron! Manganese isn't even a primary drinking water standard, and I have included EPA's determination not to list manganese as a primary drinking water standard. It may be of help to you.

What is the driver for iron? It's not even on EPA's CCL list and was not even ever considered. If there are significant human health effects from iron then I guess everyone will have to rip out there plumbing! (There's manganese in them there pipes too!)

I'd appreciate if you could enlighten me on why these chemicals are even up for discussion.

David P. Minvielle
Environmental Law Attorney
US Legal Services Agency
901 North Stuart Street
Suite 420
Arlington, VA
Telephone: 703.696.1597

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From: Stephen Absolom [mailto:stephen.m.absolom@us.army.mil]
Sent: Monday, July 31, 2006 9:01 AM
To: Minvielle, David P Mr OTJAG; Citron, Stan Civ AMCCC
Subject: DRAFT ROD

8/22/2006

David,
Stan,

Attached is a draft Record of Decision for two sites one of which is a no action site and the other is a no further action site. Please review and provide comments. AEC and USACHPPM are also reviewing at the same time. If you have any questions, please let me know.

Steve
SM Absolom
Installation Manager
Seneca Army Depot Activity
(607) 869-1309
(315) 406-4737 Cell
(607) 869-1362 fax

Classification: **UNCLASSIFIED**

Caveats: NONE

DRAFT
BCT Agenda

17 October 2006 1330 - 1630 Hours

18 October 2006 0830 - 1130 Hours

October 17

Project Review by OU

Ash Landfill Update

Discuss RD/RA schedule for SEAD 16 and 17

Status update of Munitions Response Work

October 18, 2006

Site tour of Ash Landfill RA

Site tour of SEAD 11

General tour for DOH Rep.

1.0 DECLARATION OF THE RECORD OF DECISION

Site Names and Location

Seneca Army Depot Activity
CERCLIS ID# NY0213820830
Romulus, Seneca County, New York

Seventeen solid waste management units (SWMUs) requiring Land Use Controls (LUCs):

- SEAD-13, Inhibited Red-Fuming Nitric Acid (IRFNA) Disposal Site;
- SEAD-39, Building 121 Boiler Blowdown Leach Pit;
- SEAD-40, Building 319 Boiler Blowdown Leach Pit;
- SEAD-41, Building 718 Boiler Blowdown Leaching Pit;
- SEADs-43/56/69, Building 606 – Old Missile Propellant Test Laboratory/Herbicide and Pesticide Storage/Disposal Area;
- SEAD-44A, Quality Assurance Test Laboratory;
- SEAD-44B, Quality Assurance Test Laboratory;
- SEAD-52, Buildings 608 and 612 – Ammunition Breakdown Area;
- SEAD-62, Nicotine Sulfate Disposal Area near Buildings 606 or 612;
- SEAD-64B, Garbage Disposal Area;
- SEAD-64C, Garbage Disposal Area;
- SEAD-64D, Garbage Disposal Area;
- SEAD-67, Dump Site East of Sewage Treatment Plant No. 4;
- SEAD-122B, Small Arms Range, Airfield Parcel; and
- SEAD-122E, Plane Deicing Area.

Statement of Basis and Purpose

This decision document presents the U.S. Army's (Army's) and the U.S. Environmental Protection Agency's (USEPA's) selected remedy for SEADs 13, 39, 40, 41, 43/56/69, 44A, 44B, 52, 62, 64B, 64C, 64D, 67, 122B, and 122E (or the Sites), located at the Seneca Army Depot Activity (SEDA or the Depot) in the Towns of Romulus and Varick, Seneca County, New York. The decisions were developed in accordance with the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) as amended, 42 U.S.C. §9601 et seq., and, to the extent practicable, the National Oil and Hazardous Substances Pollution Contingency Plan (NCP), 40 CFR Part 300. The Base Realignment and Closure (BRAC) Environmental Coordinator, the Chief, Alpha Branch, Army BRAC Division, and the USEPA Region 2 have been delegated the authority to approve this Record of Decision (ROD).

This ROD is based on the Administrative Record that has been developed in accordance with Section 113(k) of CERCLA. The Administrative Record is available for public review at the Seneca Army Depot Activity, 5786 State Route 96, Building 123, Romulus, NY 14541. The

Administrative Record Index identifies each of the items considered during the selection of the remedial action. This index is included in **Appendix A**.

The New York State Department of Environmental Conservation (NYSDEC) has concurred with the selected remedy. The NYSDEC Declaration of Concurrence is provided in **Appendix B** of this ROD.

Site Assessment

The response action selected for each SWMU identified in this ROD is necessary to protect human health or the environment from actual or threatened releases of hazardous substances into the environment or from actual or threatened releases of pollutants or contaminants from these Sites, which may present an imminent and substantial endangerment to public health or welfare.

Description of the Selected Remedy

The Army's selected remedy for each of the 16 SWMUs discussed in this ROD relies on the establishment, maintenance and monitoring of Land Use Controls (LUCs) at the sites. At one site (SEAD 13) the Army's selected remedy is monitored natural attenuation. At 12 of the sites (i.e., SEADs 39, 40, 41, 43/56/69, 44A, 44B, 52, 62, 64C, and 67), LUCs previously documented by the Army will be imposed. The Army is also recommending that new LUCs previously not documented, be imposed at the remaining 4 sites (i.e., SEADs 64B, 64C, 122B and 122E) that are subject of this ROD.

The Army has previously documented and imposed LUCs within three portions of the former Depot: in the southeastern corner of the Depot where the Five Points Correctional Facility ("Prison Parcel") currently is located; in the east central portion of the Depot where the Planned Industrial/Office Development (PID Area) and Warehousing Area is located; and, in the north-central portion (i.e., "North End Barracks" Parcel) of the Depot where the Hillside Children's Center is currently located. One or more of the 12 sites defined above (i.e., SEADs 39, 40, 41, 43/56/69, 44A, 44B, 52, 62, 64C, and 67) are located within land covered by the existing LUCs imposed for these three parcels within the former Depot. Within this ROD, the Army formalizes and documents its intention to impose the existing LUCs on sites located within each of these parcels as its final determination under CERCLA. Land within the "Prison Parcel" and the area currently occupied by the Hillside Children's Center have been transferred to the community [State of New York and Seneca County Industrial Development Agency (SCIDA), respectively] under deeds that have been recorded by the Seneca County Clerk. Land within the PID and Warehousing Area of the Depot has not yet been transferred to the community, but LUCs including a residential use restriction and an use of/access to groundwater restriction have been identified and documented within the "Final, Record of Decision for Site Requiring Institutional Controls in the Planned Industrial/Office Development or Warehousing Area, Seneca Army Depot Activity" (September 2004).

New LUCs are proposed for the remaining four sites (SEADs 64B, 64D, 122B, and 122E) discussed within this ROD. The LUCs proposed for SEAD-13 (groundwater use/access restriction),

Deleted: 17

Deleted: five

Deleted: 13,

Deleted: five

Deleted: 13,

SEAD-122E (residential use/activity restriction), result from the Army's determination that potential risks to human health or the environment exist due to the presence of hazardous substances at the sites. The Army further recommends that the residential use/activity restriction proposed for SEAD-122E be imposed throughout the area occupied by the former Sampson / Seneca Army Depot Airfield to facilitate its transfer to the SCIDA; this LUC would encompass the entire parcel known as the Airfield. The LUC proposed for implementation at SEAD-64B (no unauthorized excavation and maintenance of cover) results from historic requirements of New York State Solid Waste Management Regulations; the LUC will also be applied along with the groundwater access/use restriction at SEAD-64D.

Comment [s1]: why are we making a note that at least Part of SEAD 64 D has a LUC. Doesn't the entire site have the LUC proposed. If not how do we differentiate the area?

Deleted: and at least in part for SEAD-64D (groundwater use/access restriction),

The specific ICs selected by the Army for each SWMU are summarized in **Table 1-1** and described more completely as follows:

“Prison Parcel” Land Use Controls (SEADs 43/56/69, 44A, 44B, 52, 62, and 64C):

Existing Deed with Reversionary Clause

The “Prison Parcel” property was transferred under a public benefit conveyance. A Deed with a reversionary clause, which was required under the Public Benefit conveyance law, and used to convey land in the southeastern part of the former Depot (i.e., Prison Area, see **Figure 1-1**) to the State of New York for the construction of the Five Points Correctional Facility. It includes language that requires that the “property shall be used and maintained for a correction facility in perpetuity” and that “the property shall not be sold, leased, mortgaged, assigned or otherwise disposed of” without the prior consent of the Government. In the event that any term of the deed is breached, the property and all improvements shall revert to the Government. Provisions of the Deed apply to the following SWMUs, which were transferred prior to a ROD being prepared and, are currently located within the bounds of the State of New York’s Five Points Correctional Parcel:

- SEAD-43: Building 606 – Old Missile Propellant Test Laboratory
- SEAD-44A: Quality Assurance Test Laboratory
- SEAD-44B: Quality Assurance Test Laboratory
- SEAD-52: Buildings 608 and 612 – Ammunition Breakdown Area
- SEAD-56: Building 606 – Herbicide and Pesticide Storage
- SEAD-62: Nicotine Sulfate Disposal Area near Buildings 606 or 612
- SEAD-64C: Garbage Disposal Area
- SEAD-69: Building 606 – Disposal Area

Hazardous substances may be present at one or more of the listed historic SWMUs at concentrations that prevent its unrestricted use. However, based on the results of previous investigations, mini risk assessments, and/or removal actions, these sites do not pose a risk or threat to human health and the environment, given consideration of the area’s continuing restricted use as a state maximum security correctional facility. The deed with the reversionary clause was recorded by the Seneca County Clerk on 26 September 2000 (see Liber 612 Page 014

through page 031). Pursuant to the terms of the Deed, the prison use restriction at these sites remains in effect in perpetuity, or the property legally reverts to the U.S. Government.

“PID Area” Parcel Land Use Controls (SEADs 39, 40 and 67):

Residential Use and Groundwater Access/Use Restrictions

A ROD was previously signed by the Army and USEPA in 2004 for land within the Planned Industrial/Office Development (PID) Area (see **Figure 1-1**) of the former Depot. The PID Area encompasses numerous historic Seneca Army Depot SWMUs. The PID Area-wide land use restriction imposes ICs that:

- Prevent residential housing, elementary and secondary schools, childcare facilities and playgrounds activities; and,
- Prevent access to or use of the groundwater until Class GA Groundwater Standards are met.

These ICs are documented in the “Final, Record of Decision for Site Requiring Institutional Controls in the Planned Industrial/Office Development or Warehousing Area, Seneca Army Depot Activity” (September 2004).

These use restrictions result from determinations made specifically for SWMUs designated as SEAD-27 (Building 360 Steam Cleaning Waste Tank), SEAD-64A (Garbage Disposal Area), and SEAD-66 (Pesticide Storage near Buildings 5 and 6) in the PID Area. The Army has now determined that these land use restrictions will be applied to the sites discussed in this Record of Decision and designated as:

- SEAD-39 (Building 121 Boiler Blow Down Pit);
- SEAD-40 (Building 319 Boiler Blow Down Pit); and,
- SEAD-67 (Dump Site East of Sewage Treatment Plant No. 4).

Future land owners or users of sites located in the PID Area may request variances to the ICs identified on a site-by-site basis. However, the future owner/user seeking the variance will need to provide relevant data to substantiate the validity of their request. Once a request is received, the Army, USEPA, and NYSDEC will evaluate requests for variance in the PID Area on a site-by-site basis. Otherwise, the ICs will remain in effect until the concentrations of hazardous substances in the soil and the groundwater beneath the sites have been reduced to levels that allow for unlimited exposure and unrestricted use of the sites.

“North End Barracks” Parcel Land Use Controls (SEAD-41):

Existing Deed with Groundwater Notification

A deed was used to document the transfer of the land currently used for the Hillside Children’s Center (i.e., former “North End Barracks” Area, see **Figure 1-1**) at the north end of the former Depot to the SCIDA. In the deed, the Army notified SCIDA that groundwater contamination had been identified in the vicinity of the former Building 718. This determination was made based on the results of historic groundwater sampling data that was collected during the investigation of SEAD-41, which indicated that total petroleum hydrocarbons (TPH, 690 ppb) were present in the upper aquifer of the groundwater. The Army applied the deed notification, based on the water quality from sampling, to all property located within the “North End Barracks” parcel. A public water supply services the entire parcel. This includes the area of the former SWMU SEAD-41, Building 718 Boiler Blowdown Pit.

The reported level of TPH exceeds the New York State Public Water System standards for unspecified organic contamination of 100 ppb. The deed further states “The Grantee, its successors and assigns, agree that in the event they use the groundwater as a public water supply source at the Property, they will comply with all applicable laws and regulations.” Under New York regulations, future owners or occupants of the area would need to confirm the quality and acceptability of the groundwater as a source of potable water before it could be used for such a purpose. The Army recommends that the LUC documented in the existing deed for the “North End Barracks” parcel be continued until the concentration of hazardous substances in groundwater beneath have been reduced to levels that allow for unrestricted use.

Monitored Natural Attenuation at SEAD 13

The Selected Remedy for SEAD-13 addresses groundwater. The Selected Remedy includes groundwater monitoring for contaminants of concern (COCs) to demonstrate that additional impacts to groundwater are mitigated. The use of groundwater will be restricted until such time that the levels of groundwater contaminants are below groundwater cleanup standards. Groundwater access will be restricted until the clean up goals have been achieved. The cleanup goals for all media of concern are presented in **Table 1-1A**.

Land Use Controls (SEADs 64B, 64D, 122B and 122E):

Residential Use Restriction (SEAD-122B and SEAD-122E)

A residential use restriction is recommended for:

- SEAD-122B: Small Arms Range, Airfield Parcel
- SEAD-122E: Plane Deicing Area

The proposed IC will be implemented over the entire Airfield Parcel, including land associated with SEAD-122B and SEAD-122E, to prohibit the development and use of the property for

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A groundwater use restriction is also proposed at the following site:
<#>SEAD-13: Inhibited Red-Fuming Nitric Acid (IRFNA) Disposal Site.
The proposed groundwater use restriction will eliminate contact with groundwater as an exposure pathway for human health risk, thereby reducing risk to within acceptable levels for potential human receptors. There is risk associated with the use of the groundwater at SEAD-13, driven by the concentrations of nitrate, aluminum, and manganese identified. The Army believes that the risk due to the presence of metals is associated with the suspended solids contained in the collected groundwater samples, and is aware that the nitrate probably is related to past activities conducted in the area. The nitrate concentrations are naturally attenuating, and will continue to diminish with time. ¶
Therefore, the Army is proposing that an IC will be implemented over the geographic area of SEAD-13 to prevent access to or use of the groundwater. The IC will remain in effect until the concentrations of hazardous substances in groundwater beneath the site have been reduced to levels that allow for unlimited exposure and unrestricted use. Once groundwater cleanup standards are achieved, the groundwater use restrictions may be eliminated, with USEPA approval.¶

residential housing, elementary and secondary schools, child care facilities, playgrounds, etc. This IC will be applied to all areas within the Airfield Parcel until such time as a future owner may present new data which is developed by the owner, and approved by the Army, the USEPA and NYSDEC to confirm that portions of the overall property are suitable for unrestricted use. The boundary of the Airfield Parcel is defined as the boundary of the Airfield Special Events, Institutional, and Training area highlighted on **Figure 1-1**.

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Unauthorized Digging Restriction (SEAD-64B)

The Army recommends that an IC that prohibits unauthorized digging and excavations within the bounds of the SWMU be imposed for:

- SEAD-64B: Garbage Disposal Area.

SEAD-64B is a former solid waste disposal area that was closed by the Army prior to 1979. As a historic solid waste landfill, this SWMU is subject to requirements of the New York State's Solid Waste Regulations (6 NYCRR Part 360), in effect at the date of closure. Under the Solid Waste regulations effective in 1979, a soil and vegetative cover was required to be placed on and maintained above the closed landfill. The proposed IC would prohibit digging within the bounds of the former solid waste site. The IC will continue in perpetuity or until solid wastes are removed from the site, which would allow for unrestricted use.

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Unauthorized Digging and Groundwater Access/Use Restriction (SEAD-64D)

The Army recommends that ICs that restrict unauthorized excavation within the bounds of, and access to and use of groundwater be imposed in:

- SEAD-64D: Garbage Disposal Area.

Results of the mini risk assessment indicate that ingestion of groundwater could pose a risk to future receptors. Furthermore, as a historic solid waste landfill, this SWMU is subject to requirements of the New York State's Solid Waste Regulations (6 NYCRR Part 360), as in effect in 1979 when it was closed. Under the Solid Waste regulations effective in 1979, a soil and vegetative cover must be placed on and maintained above the closed landfill.

The proposed groundwater use/access restriction will be implemented over the geographic area of SEAD-64D to prohibit access to or use of the groundwater until the levels of hazardous substances are reduced to levels that allow for unrestricted access and use. The groundwater access/use restriction will remain in effect until data is provided that verifies that groundwater does not to pose an unacceptable level of risk to human health or the environment. The proposed restriction to prohibit unauthorized excavation. The IC will continue in perpetuity or until solid wastes are removed from the site, and it is proven that ground water no longer poses a risk, which would allow for unrestricted use.

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Land Use Control Performance Objectives

The land use control (LUC) performance objectives at these 16 SWMUs are as follows and will be (or have been) incorporated into leases and/or deeds for this property, as appropriate:

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- Comply with the use limitations documented and imposed in the Deed used to transfer property containing SEADs 43/56/69, 44A, 44B, 52, 62 and 64C from the U.S. Government to the State of New York for the construction of a correctional facility (See Liber 612 Page 014 through 031 at Seneca County Clerk Office);
- Prohibit access to or use of groundwater at SEADs 39, 40, 41, 64D, and 67 until concentrations of hazardous substances contained are reduced to levels that allow unrestricted use;
- Prevent residential housing, elementary and secondary schools, childcare facilities, and playgrounds activities at SEADs 39, 40, 67, 122B, and 122E until levels of hazardous substances found at the sites allow for unrestricted use; or
- Prevent unauthorized excavation at SEADs 64B and 64D.

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The Army's recommended remedial actions for all sites discussed in this ROD include LUCs. To implement the Army's recommended remedy at the sites discussed (i.e., SEADs 39, 40, 41, 43/56/69, 44A, 44B, 52, 62, 64B, 64C, 64D, 67, 122B, and 122E) as defined above, a LUC Remedial Design (RD) for each LUC combinations identified (e.g., reversionary deed only; groundwater restriction only; groundwater and residential restriction; residential restriction only; digging restriction only; and digging and groundwater restriction) will be prepared to satisfy the applicable requirements of Paragraphs (a) and (c) of Environmental Conservation Law (ECL) Article 27, Section 1318: Institutional and Engineering Controls. The LUC RD Plan will include: a Site Description; the Land Use Restrictions; the Mechanism to ensure that the land use restrictions are not violated in the future; and Reporting/Notification requirements. In addition, the Army will prepare an environmental easement for each site needed, consistent with Section 27-1318(b) and Article 71, Title 36 of ECL, in favor of the State of New York and the Army, which will be recorded at the time of transfer of the sites from federal ownership. A schedule for completion of the draft LUC RD covering the individual sites will be completed within 21 days of the ROD signature, consistent with Section I4.4 of the Federal Facilities Agreement (FFA). In accordance with the FFA and CERCLA §121(c), the remedial action (including ICs) will be reviewed no less often than every 5 years. After such reviews, modifications may be implemented to the remedial program, if appropriate.

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The Army shall implement, inspect, report, and enforce the ICs described in this ROD in accordance with the approved LUC RD. Although the Army may later transfer these responsibilities to another party by contract, property transfer agreement, or through other means, the Army shall retain ultimate responsibility for remedy integrity.

State Concurrence

NYSDEC forwarded a letter of concurrence to the USEPA regarding the selection of a remedial action in the future. This letter of concurrence has been placed in **Appendix B**.

Declaration

CERCLA and the NCP require each selected remedy to be protective of human health, public welfare, and the environment; cost effective; comply with other statutory laws; and use permanent solutions, alternative treatment technologies, and resource recovery options to the maximum extent practicable. CERCLA and the NCP also state a preference for treatment as a principal element for the reduction of toxicity, mobility, or volume of the hazardous substances.

The selected remedies described above are consistent with CERCLA and the NCP and are protective of human health and the environment, comply with Federal and State requirements that are applicable or relevant and appropriate to the remedial action, and are cost-effective. These remedies have been evaluated against toxicity, mobility, or volume of hazardous substances, pollutants, or contaminants.

The remedies identified may result in hazardous substances, pollutants, or contaminants remaining on-site above levels that allow for unlimited use and unrestricted exposure for an indeterminate period, a review will be conducted within 5 years after initiation of the remedial action at each site to ensure that the remedy is, or will be, protective of human health and the environment, with consideration given to each site's continuing and planned future use.

The estimated cost for implementing the groundwater monitoring of the natural attenuation of the nitrate plume at SEAD-13, the Inhibited Red Fuming Nitric Acid Disposal Site, is \$2,012,000 over a 20 year period. The estimated cost associated with implementing, monitoring, assessing and reporting on the continued suitability of the recommended actions at SEADs 39, 40, 41, 43/56/69, 44A, 44B, 52, 62, 64B, 64C, 64D, 122B, and 122E is \$311,000 in aggregate. The total combined estimated cost of the recommended remedial actions for all sites included in this ROD is \$2,323,000.

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1.0 DECLARATION OF THE RECORD OF DECISION

Site Names and Location

Seneca Army Depot Activity
CERCLIS ID# NY0213820830
Romulus, Seneca County, New York

Seventeen solid waste management units (SWMUs) requiring Land Use Controls (LUCs):

- SEAD-13, Inhibited Red-Fuming Nitric Acid (IRFNA) Disposal Site;
- SEAD-39, Building 121 Boiler Blowdown Leach Pit;
- SEAD-40, Building 319 Boiler Blowdown Leach Pit;
- SEAD-41, Building 718 Boiler Blowdown Leaching Pit;
- SEADs-43/56/69, Building 606 – Old Missile Propellant Test Laboratory/Herbicide and Pesticide Storage/Disposal Area;
- SEAD-44A, Quality Assurance Test Laboratory;
- SEAD-44B, Quality Assurance Test Laboratory;
- SEAD-52, Buildings 608 and 612 – Ammunition Breakdown Area;
- SEAD-62, Nicotine Sulfate Disposal Area near Buildings 606 or 612;
- SEAD-64B, Garbage Disposal Area;
- SEAD-64C, Garbage Disposal Area;
- SEAD-64D, Garbage Disposal Area;
- SEAD-67, Dump Site East of Sewage Treatment Plant No. 4;
- SEAD-122B, Small Arms Range, Airfield Parcel; and
- SEAD-122E, Plane Deicing Area.

Statement of Basis and Purpose

This decision document presents the U.S. Army's (Army's) and the U.S. Environmental Protection Agency's (USEPA's) selected remedy for SEADs 13, 39, 40, 41, 43/56/69, 44A, 44B, 52, 62, 64B, 64C, 64D, 67, 122B, and 122E (or the Sites), located at the Seneca Army Depot Activity (SEDA or the Depot) in the Towns of Romulus and Varick, Seneca County, New York. The decisions were developed in accordance with the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) as amended, 42 U.S.C. §9601 et seq., and, to the extent practicable, the National Oil and Hazardous Substances Pollution Contingency Plan (NCP), 40 CFR Part 300. The Base Realignment and Closure (BRAC) Environmental Coordinator, the Chief, Alpha Branch, Army BRAC Division, and the USEPA Region 2 have been delegated the authority to approve this Record of Decision (ROD).

This ROD is based on the Administrative Record that has been developed in accordance with Section 113(k) of CERCLA. The Administrative Record is available for public review at the Seneca Army Depot Activity, 5786 State Route 96, Building 123, Romulus, NY 14541. The

Administrative Record Index identifies each of the items considered during the selection of the remedial action. This index is included in **Appendix A**.

The New York State Department of Environmental Conservation (NYSDEC) has concurred with the selected remedy. The NYSDEC Declaration of Concurrence is provided in **Appendix B** of this ROD.

Site Assessment

The response action selected for each SWMU identified in this ROD is necessary to protect human health or the environment from actual or threatened releases of hazardous substances into the environment or from actual or threatened releases of pollutants or contaminants from these Sites, which may present an imminent and substantial endangerment to public health or welfare.

Description of the Selected Remedy

The Army's selected remedy for each of the 16 SWMUs discussed in this ROD relies on the establishment, maintenance and monitoring of Land Use Controls (LUCs) at the sites. At one site (SEAD 13) the Army's selected remedy is monitored natural attenuation. At 12 of the sites (i.e., SEADs 39, 40, 41, 43/56/69, 44A, 44B, 52, 62, 64C, and 67), LUCs previously documented by the Army will be imposed. The Army is also recommending that new LUCs previously not documented, be imposed at the remaining 4 sites (i.e., SEADs 64B, 64C, 122B and 122E) that are subject of this ROD.

The Army has previously documented and imposed LUCs within three portions of the former Depot: in the southeastern corner of the Depot where the Five Points Correctional Facility ("Prison Parcel") currently is located; in the east central portion of the Depot where the Planned Industrial/Office Development (PID Area) and Warehousing Area is located; and, in the north-central portion (i.e., "North End Barracks" Parcel) of the Depot where the Hillside Children's Center is currently located. One or more of the 12 sites defined above (i.e., SEADs 39, 40, 41, 43/56/69, 44A, 44B, 52, 62, 64C, and 67) are located within land covered by the existing LUCs imposed for these three parcels within the former Depot. Within this ROD, the Army formalizes and documents its intention to impose the existing LUCs on sites located within each of these parcels as its final determination under CERCLA. Land within the "Prison Parcel" and the area currently occupied by the Hillside Children's Center have been transferred to the community [State of New York and Seneca County Industrial Development Agency (SCIDA), respectively] under deeds that have been recorded by the Seneca County Clerk. Land within the PID and Warehousing Area of the Depot has not yet been transferred to the community, but LUCs including a residential use restriction and an use of/access to groundwater restriction have been identified and documented within the "Final, Record of Decision for Site Requiring Institutional Controls in the Planned Industrial/Office Development or Warehousing Area, Seneca Army Depot Activity" (September 2004).

New LUCs are proposed for the remaining four sites (SEADs 64B, 64D, 122B, and 122E) discussed within this ROD. The LUCs proposed for SEAD-13 (groundwater use/access restriction),

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SEAD-122E (residential use/activity restriction), result from the Army's determination that potential risks to human health or the environment exist due to the presence of hazardous substances at the sites. The Army further recommends that the residential use/activity restriction proposed for SEAD-122E be imposed throughout the area occupied by the former Sampson / Seneca Army Depot Airfield to facilitate its transfer to the SCIDA; this LUC would encompass the entire parcel known as the Airfield. The LUC proposed for implementation at SEAD-64B (no unauthorized excavation and maintenance of cover) results from historic requirements of New York State Solid Waste Management Regulations; the LUC will also be applied along with the groundwater access/use restriction at SEAD-64D.

The specific ICs selected by the Army for each SWMU are summarized in **Table 1-1** and described more completely as follows:

“Prison Parcel” Land Use Controls (SEADs 43/56/69, 44A, 44B, 52, 62, and 64C):

Existing Deed with Reversionary Clause

The “Prison Parcel” property was transferred under a public benefit conveyance. A Deed with a reversionary clause, which was required under the Public Benefit conveyance law, and used to convey land in the southeastern part of the former Depot (i.e., Prison Area, see **Figure 1-1**) to the State of New York for the construction of the Five Points Correctional Facility. It includes language that requires that the “property shall be used and maintained for a correction facility in perpetuity” and that “the property shall not be sold, leased, mortgaged, assigned or otherwise disposed of” without the prior consent of the Government. In the event that any term of the deed is breached, the property and all improvements shall revert to the Government. Provisions of the Deed apply to the following SWMUs, which were transferred prior to a ROD being prepared and, are currently located within the bounds of the State of New York's Five Points Correctional Parcel:

- SEAD-43: Building 606 – Old Missile Propellant Test Laboratory
- SEAD-44A: Quality Assurance Test Laboratory
- SEAD-44B: Quality Assurance Test Laboratory
- SEAD-52: Buildings 608 and 612 – Ammunition Breakdown Area
- SEAD-56: Building 606 – Herbicide and Pesticide Storage
- SEAD-62: Nicotine Sulfate Disposal Area near Buildings 606 or 612
- SEAD-64C: Garbage Disposal Area
- SEAD-69: Building 606 – Disposal Area

Hazardous substances may be present at one or more of the listed historic SWMUs at concentrations that prevent its unrestricted use. However, based on the results of previous investigations, mini risk assessments, and/or removal actions, these sites do not pose a risk or threat to human health and the environment, given consideration of the area's continuing restricted use as a state maximum security correctional facility. The deed with the reversionary clause was recorded by the Seneca County Clerk on 26 September 2000 (see Liber 612 Page 014

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through page 031). Pursuant to the terms of the Deed, the prison use restriction at these sites remains in effect in perpetuity, or the property legally reverts to the U.S. Government.

“PID Area” Parcel Land Use Controls (SEADs 39, 40 and 67):

Residential Use and Groundwater Access/Use Restrictions

A ROD was previously signed by the Army and USEPA in 2004 for land within the Planned Industrial/Office Development (PID) Area (see **Figure 1-1**) of the former Depot. The PID Area encompasses numerous historic Seneca Army Depot SWMUs. The PID Area-wide land use restriction imposes ICs that:

- Prevent residential housing, elementary and secondary schools, childcare facilities and playgrounds activities; and,
- Prevent access to or use of the groundwater until Class GA Groundwater Standards are met.

These ICs are documented in the “Final, Record of Decision for Site Requiring Institutional Controls in the Planned Industrial/Office Development or Warehousing Area, Seneca Army Depot Activity” (September 2004).

These use restrictions result from determinations made specifically for SWMUs designated as SEAD-27 (Building 360 Steam Cleaning Waste Tank), SEAD-64A (Garbage Disposal Area), and SEAD-66 (Pesticide Storage near Buildings 5 and 6) in the PID Area. The Army has now determined that these land use restrictions will be applied to the sites discussed in this Record of Decision and designated as:

- SEAD-39 (Building 121 Boiler Blow Down Pit);
- SEAD-40 (Building 319 Boiler Blow Down Pit); and,
- SEAD-67 (Dump Site East of Sewage Treatment Plant No. 4).

Future land owners or users of sites located in the PID Area may request variances to the ICs identified on a site-by-site basis. However, the future owner/user seeking the variance will need to provide relevant data to substantiate the validity of their request. Once a request is received, the Army, USEPA, and NYSDEC will evaluate requests for variance in the PID Area on a site-by-site basis. Otherwise, the ICs will remain in effect until the concentrations of hazardous substances in the soil and the groundwater beneath the sites have been reduced to levels that allow for unlimited exposure and unrestricted use of the sites.

“North End Barracks” Parcel Land Use Controls (SEAD-41):

Existing Deed with Groundwater Notification

A deed was used to document the transfer of the land currently used for the Hillside Children’s Center (i.e., former “North End Barracks” Area, see **Figure 1-1**) at the north end of the former Depot to the SCIDA. In the deed, the Army notified SCIDA that groundwater contamination had been identified in the vicinity of the former Building 718. This determination was made based on the results of historic groundwater sampling data that was collected during the investigation of SEAD-41, which indicated that total petroleum hydrocarbons (TPH, 690 ppb) were present in the upper aquifer of the groundwater. the Army applied the deed notification, based on the water quality from sampling, to all property located within the “North End Barracks” parcel. A public water supply services the entire parcel. This includes the area of the former SWMU SEAD-41, Building 718 Boiler Blowdown Pit.

The reported level of TPH exceeds the New York State Public Water System standards for unspecified organic contamination of 100 ppb. The deed further states “The Grantee, its successors and assigns, agree that in the event they use the groundwater as a public water supply source at the Property, they will comply with all applicable laws and regulations.” Under New York regulations, future owners or occupants of the area would need to confirm the quality and acceptability of the groundwater as a source of potable water before it could be used for such a purpose. The Army recommends that the LUC documented in the existing deed for the “North End Barracks” parcel be continued until the concentration of hazardous substances in groundwater beneath have been reduced to levels that allow for unrestricted use.

Monitored Natural Attenuation at SEAD 13

The Selected Remedy for SEAD-13 addresses groundwater. The Selected Remedy includes groundwater monitoring for contaminants of concern (COCs) to demonstrate that additional impacts to groundwater are mitigated. The use of groundwater will be restricted until such time that the levels of groundwater contaminants are below groundwater cleanup standards. Groundwater access will be restricted until the clean up goals have been achieved. The cleanup goals for all media of concern are presented in **Table 1-1A**.

Land Use Controls (SEADs 64B, 64D, 122B and 122E):

Residential Use Restriction (SEAD-122B and SEAD-122E)

A residential use restriction is recommended for:

- SEAD-122B: Small Arms Range, Airfield Parcel
- SEAD-122E: Plane Deicing Area

The proposed IC will be implemented over the entire Airfield Parcel, including land associated with SEAD-122B and SEAD-122E, to prohibit the development and use of the property for

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A groundwater use restriction is also proposed at the following site:
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The proposed groundwater use restriction will eliminate contact with groundwater as an exposure pathway for human health risk, thereby reducing risk to within acceptable levels for potential human receptors. There is risk associated with the use of the groundwater at SEAD-13, driven by the concentrations of nitrate, aluminum, and manganese identified. The Army believes that the risk due to the presence of metals is associated with the suspended solids contained in the collected groundwater samples, and is aware that the nitrate probably is related to past activities conducted in the area. The nitrate concentrations are naturally attenuating, and will continue to diminish with time. ¶
Therefore, the Army is proposing that an IC will be implemented over the geographic area of SEAD-13 to prevent access to or use of the groundwater. The IC will remain in effect until the concentrations of hazardous substances in groundwater beneath the site have been reduced to levels that allow for unlimited exposure and unrestricted use. Once groundwater cleanup standards are achieved, the groundwater use restrictions may be eliminated, with USEPA approval.¶

residential housing, elementary and secondary schools, child care facilities, playgrounds, etc. This IC will be applied to all areas within the Airfield Parcel until such time as a future owner may present new data which is developed by the owner, and approved by the Army, the USEPA and NYSDEC to confirm that portions of the overall property are suitable for unrestricted use. The boundary of the Airfield Parcel is defined as the boundary of the Airfield Special Events, Institutional, and Training area highlighted on **Figure 1-1**.

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Unauthorized Digging Restriction (SEAD-64B)

The Army recommends that an IC that prohibits unauthorized digging and excavations within the bounds of the SWMU be imposed for:

- SEAD-64B: Garbage Disposal Area.

SEAD-64B is a former solid waste disposal area that was closed by the Army prior to 1979. As a historic solid waste landfill, this SWMU is subject to requirements of the New York State's Solid Waste Regulations (6 NYCRR Part 360), in effect at the date of closure. Under the Solid Waste regulations effective in 1979, a soil and vegetative cover was required to be placed on and maintained above the closed landfill. The proposed IC would prohibit digging within the bounds of the former solid waste site. The IC will continue in perpetuity or until solid wastes are removed from the site, which would allow for unrestricted use.

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Unauthorized Digging and Groundwater Access/Use Restriction (SEAD-64D)

The Army recommends that ICs that restrict unauthorized excavation within the bounds of, and access to and use of groundwater be imposed in:

- SEAD-64D: Garbage Disposal Area.

Results of the mini risk assessment indicate that ingestion of groundwater could pose a risk to future receptors. Furthermore, as a historic solid waste landfill, this SWMU is subject to requirements of the New York State's Solid Waste Regulations (6 NYCRR Part 360), as in effect in 1979 when it was closed. Under the Solid Waste regulations effective in 1979, a soil and vegetative cover must be placed on and maintained above the closed landfill.

The proposed groundwater use/access restriction will be implemented over the geographic area of SEAD-64D to prohibit access to or use of the groundwater until the levels of hazardous substances are reduced to levels that allow for unrestricted access and use. The groundwater access/use restriction will remain in effect until data is provided that verifies that groundwater does not to pose an unacceptable level of risk to human health or the environment. The proposed restriction to prohibit unauthorized excavation. The IC will continue in perpetuity or until solid wastes are removed from the site, and it is proven that ground water no longer poses a risk, which would allow for unrestricted use.

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Land Use Control Performance Objectives

The land use control (LUC) performance objectives at these 16 SWMUs are as follows and will be (or have been) incorporated into leases and/or deeds for this property, as appropriate:

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- Comply with the use limitations documented and imposed in the Deed used to transfer property containing SEADs 43/56/69, 44A, 44B, 52, 62 and 64C from the U.S. Government to the State of New York for the construction of a correctional facility (See Liber 612 Page 014 through 031 at Seneca County Clerk Office);
- Prohibit access to or use of groundwater at SEADs 39, 40, 41, 64D, and 67 until concentrations of hazardous substances contained are reduced to levels that allow unrestricted use;
- Prevent residential housing, elementary and secondary schools, childcare facilities, and playgrounds activities at SEADs 39, 40, 67, 122B, and 122E until levels of hazardous substances found at the sites allow for unrestricted use; or
- Prevent unauthorized excavation at SEADs 64B and 64D.

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The Army's recommended remedial actions for all sites discussed in this ROD include LUCs. To implement the Army's recommended remedy at the sites discussed (i.e., SEADs 39, 40, 41, 43/56/69, 44A, 44B, 52, 62, 64B, 64C, 64D, 67, 122B, and 122E) as defined above, a LUC Remedial Design (RD) for each LUC combinations identified (e.g., reversionary deed only; groundwater restriction only; groundwater and residential restriction; residential restriction only; digging restriction only; and digging and groundwater restriction) will be prepared to satisfy the applicable requirements of Paragraphs (a) and (c) of Environmental Conservation Law (ECL) Article 27, Section 1318: Institutional and Engineering Controls. The LUC RD Plan will include: a Site Description; the Land Use Restrictions; the Mechanism to ensure that the land use restrictions are not violated in the future; and Reporting/Notification requirements. In addition, the Army will prepare an environmental easement for each site needed, consistent with Section 27-1318(b) and Article 71, Title 36 of ECL, in favor of the State of New York and the Army, which will be recorded at the time of transfer of the sites from federal ownership. A schedule for completion of the draft LUC RD covering the individual sites will be completed within 21 days of the ROD signature, consistent with Section 14.4 of the Federal Facilities Agreement (FFA). In accordance with the FFA and CERCLA §121(c), the remedial action (including ICs) will be reviewed no less often than every 5 years. After such reviews, modifications may be implemented to the remedial program, if appropriate.

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The Army shall implement, inspect, report, and enforce the ICs described in this ROD in accordance with the approved LUC RD. Although the Army may later transfer these responsibilities to another party by contract, property transfer agreement, or through other means, the Army shall retain ultimate responsibility for remedy integrity.

State Concurrence

NYSDEC forwarded a letter of concurrence to the USEPA regarding the selection of a remedial action in the future. This letter of concurrence has been placed in **Appendix B**.

Declaration

CERCLA and the NCP require each selected remedy to be protective of human health, public welfare, and the environment; cost effective; comply with other statutory laws; and use permanent solutions, alternative treatment technologies, and resource recovery options to the maximum extent practicable. CERCLA and the NCP also state a preference for treatment as a principal element for the reduction of toxicity, mobility, or volume of the hazardous substances.

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The remedies identified may result in hazardous substances, pollutants, or contaminants remaining on-site above levels that allow for unlimited use and unrestricted exposure for an indeterminate period, a review will be conducted within 5 years after initiation of the remedial action at each site to ensure that the remedy is, or will be, protective of human health and the environment, with consideration given to each site's continuing and planned future use.

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1.0 DECLARATION OF THE RECORD OF DECISION

Site Names and Location

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CERCLIS ID# NY0213820830
Romulus, Seneca County, New York

Seventeen solid waste management units (SWMUs) requiring Land Use Controls (LUCs):

- SEAD-13, Inhibited Red-Fuming Nitric Acid (IRFNA) Disposal Site;
- SEAD-39, Building 121 Boiler Blowdown Leach Pit;
- SEAD-40, Building 319 Boiler Blowdown Leach Pit;
- SEAD-41, Building 718 Boiler Blowdown Leaching Pit;
- SEADs-43/56/69, Building 606 – Old Missile Propellant Test Laboratory/Herbicide and Pesticide Storage/Disposal Area;
- SEAD-44A, Quality Assurance Test Laboratory;
- SEAD-44B, Quality Assurance Test Laboratory;
- SEAD-52, Buildings 608 and 612 – Ammunition Breakdown Area;
- SEAD-62, Nicotine Sulfate Disposal Area near Buildings 606 or 612;
- SEAD-64B, Garbage Disposal Area;
- SEAD-64C, Garbage Disposal Area;
- SEAD-64D, Garbage Disposal Area;
- SEAD-67, Dump Site East of Sewage Treatment Plant No. 4;
- SEAD-122B, Small Arms Range, Airfield Parcel; and
- SEAD-122E, Plane Deicing Area.

Statement of Basis and Purpose

This decision document presents the U.S. Army's (Army's) and the U.S. Environmental Protection Agency's (USEPA's) selected remedy for SEADs 13, 39, 40, 41, 43/56/69, 44A, 44B, 52, 62, 64B, 64C, 64D, 67, 122B, and 122E (or the Sites), located at the Seneca Army Depot Activity (SEDA or the Depot) in the Towns of Romulus and Varick, Seneca County, New York. The decisions were developed in accordance with the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) as amended, 42 U.S.C. §9601 et seq., and, to the extent practicable, the National Oil and Hazardous Substances Pollution Contingency Plan (NCP), 40 CFR Part 300. The Base Realignment and Closure (BRAC) Environmental Coordinator, the Chief, Alpha Branch, Army BRAC Division, and the USEPA Region 2 have been delegated the authority to approve this Record of Decision (ROD).

This ROD is based on the Administrative Record that has been developed in accordance with Section 113(k) of CERCLA. The Administrative Record is available for public review at the Seneca Army Depot Activity, 5786 State Route 96, Building 123, Romulus, NY 14541. The

Administrative Record Index identifies each of the items considered during the selection of the remedial action. This index is included in **Appendix A**.

The New York State Department of Environmental Conservation (NYSDEC) has concurred with the selected remedy. The NYSDEC Declaration of Concurrence is provided in **Appendix B** of this ROD.

Site Assessment

The response action selected for each SWMU identified in this ROD is necessary to protect human health or the environment from actual or threatened releases of hazardous substances into the environment or from actual or threatened releases of pollutants or contaminants from these Sites, which may present an imminent and substantial endangerment to public health or welfare.

Description of the Selected Remedy

The Army's selected remedy for each of the 16 SWMUs discussed in this ROD relies on the establishment, maintenance and monitoring of Land Use Controls (LUCs) at the sites. At one site (SEAD 13) the Army's selected remedy is monitored natural attenuation. At 12 of the sites (i.e., SEADs 39, 40, 41, 43/56/69, 44A, 44B, 52, 62, 64C, and 67), LUCs previously documented by the Army will be imposed. The Army is also recommending that new LUCs previously not documented, be imposed at the remaining 4 sites (i.e., SEADs 64B, 64C, 122B and 122E) that are subject of this ROD.

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The Army has previously documented and imposed LUCs within three portions of the former Depot: in the southeastern corner of the Depot where the Five Points Correctional Facility ("Prison Parcel") currently is located; in the east central portion of the Depot where the Planned Industrial/Office Development (PID Area) and Warehousing Area is located; and, in the north-central portion (i.e., "North End Barracks" Parcel) of the Depot where the Hillside Children's Center is currently located. One or more of the 12 sites defined above (i.e., SEADs 39, 40, 41, 43/56/69, 44A, 44B, 52, 62, 64C, and 67) are located within land covered by the existing LUCs imposed for these three parcels within the former Depot. Within this ROD, the Army formalizes and documents its intention to impose the existing LUCs on sites located within each of these parcels as its final determination under CERCLA. Land within the "Prison Parcel" and the area currently occupied by the Hillside Children's Center have been transferred to the community [State of New York and Seneca County Industrial Development Agency (SCIDA), respectively] under deeds that have been recorded by the Seneca County Clerk. Land within the PID and Warehousing Area of the Depot has not yet been transferred to the community, but LUCs including a residential use restriction and an use of/access to groundwater restriction have been identified and documented within the "Final, Record of Decision for Site Requiring Institutional Controls in the Planned Industrial/Office Development or Warehousing Area, Seneca Army Depot Activity" (September 2004).

New LUCs are proposed for the remaining four sites (SEADs 64B, 64D, 122B, and 122E) discussed within this ROD. The LUCs proposed for SEAD-13 (groundwater use/access restriction),

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SEAD-122E (residential use/activity restriction), result from the Army's determination that potential risks to human health or the environment exist due to the presence of hazardous substances at the sites. The Army further recommends that the residential use/activity restriction proposed for SEAD-122E be imposed throughout the area occupied by the former Sampson / Seneca Army Depot Airfield to facilitate its transfer to the SCIDA; this LUC would encompass the entire parcel known as the Airfield. The LUC proposed for implementation at SEAD-64B (no unauthorized excavation and maintenance of cover) results from historic requirements of New York State Solid Waste Management Regulations; the LUC will also be applied along with the groundwater access/use restriction at SEAD-64D.

Comment [s1]: why are we making a note that at least Part of SEAD 64 D has a LUC. Doesn't the entire site have the LUC proposed. If not how do we differentiate the area?

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The specific ICs selected by the Army for each SWMU are summarized in **Table 1-1** and described more completely as follows:

“Prison Parcel” Land Use Controls (SEADs 43/56/69, 44A, 44B, 52, 62, and 64C):

Existing Deed with Reversionary Clause

The “Prison Parcel” property was transferred under a public benefit conveyance. A Deed with a reversionary clause, which was required under the Public Benefit conveyance law, and used to convey land in the southeastern part of the former Depot (i.e., Prison Area, see **Figure 1-1**) to the State of New York for the construction of the Five Points Correctional Facility. It includes language that requires that the “property shall be used and maintained for a correction facility in perpetuity” and that “the property shall not be sold, leased, mortgaged, assigned or otherwise disposed of” without the prior consent of the Government. In the event that any term of the deed is breached, the property and all improvements shall revert to the Government. Provisions of the Deed apply to the following SWMUs, which were transferred prior to a ROD being prepared and, are currently located within the bounds of the State of New York’s Five Points Correctional Parcel:

- SEAD-43: Building 606 – Old Missile Propellant Test Laboratory
- SEAD-44A: Quality Assurance Test Laboratory
- SEAD-44B: Quality Assurance Test Laboratory
- SEAD-52: Buildings 608 and 612 – Ammunition Breakdown Area
- SEAD-56: Building 606 – Herbicide and Pesticide Storage
- SEAD-62: Nicotine Sulfate Disposal Area near Buildings 606 or 612
- SEAD-64C: Garbage Disposal Area
- SEAD-69: Building 606 – Disposal Area

Hazardous substances may be present at one or more of the listed historic SWMUs at concentrations that prevent its unrestricted use. However, based on the results of previous investigations, mini risk assessments, and/or removal actions, these sites do not pose a risk or threat to human health and the environment, given consideration of the area’s continuing restricted use as a state maximum security correctional facility. The deed with the reversionary clause was recorded by the Seneca County Clerk on 26 September 2000 (see Liber 612 Page 014

through page 031). Pursuant to the terms of the Deed, the prison use restriction at these sites remains in effect in perpetuity, or the property legally reverts to the U.S. Government.

“PID Area” Parcel Land Use Controls (SEADs 39, 40 and 67):

Residential Use and Groundwater Access/Use Restrictions

A ROD was previously signed by the Army and USEPA in 2004 for land within the Planned Industrial/Office Development (PID) Area (see **Figure 1-1**) of the former Depot. The PID Area encompasses numerous historic Seneca Army Depot SWMUs. The PID Area-wide land use restriction imposes ICs that:

- Prevent residential housing, elementary and secondary schools, childcare facilities and playgrounds activities; and,
- Prevent access to or use of the groundwater until Class GA Groundwater Standards are met.

These ICs are documented in the “Final, Record of Decision for Site Requiring Institutional Controls in the Planned Industrial/Office Development or Warehousing Area, Seneca Army Depot Activity” (September 2004).

These use restrictions result from determinations made specifically for SWMUs designated as SEAD-27 (Building 360 Steam Cleaning Waste Tank), SEAD-64A (Garbage Disposal Area), and SEAD-66 (Pesticide Storage near Buildings 5 and 6) in the PID Area. The Army has now determined that these land use restrictions will be applied to the sites discussed in this Record of Decision and designated as:

- SEAD-39 (Building 121 Boiler Blow Down Pit);
- SEAD-40 (Building 319 Boiler Blow Down Pit); and,
- SEAD-67 (Dump Site East of Sewage Treatment Plant No. 4).

Future land owners or users of sites located in the PID Area may request variances to the ICs identified on a site-by-site basis. However, the future owner/user seeking the variance will need to provide relevant data to substantiate the validity of their request. Once a request is received, the Army, USEPA, and NYSDEC will evaluate requests for variance in the PID Area on a site-by-site basis. Otherwise, the ICs will remain in effect until the concentrations of hazardous substances in the soil and the groundwater beneath the sites have been reduced to levels that allow for unlimited exposure and unrestricted use of the sites.

“North End Barracks” Parcel Land Use Controls (SEAD-41):

Existing Deed with Groundwater Notification

A deed was used to document the transfer of the land currently used for the Hillside Children’s Center (i.e., former “North End Barracks” Area, see **Figure 1-1**) at the north end of the former Depot to the SCIDA. In the deed, the Army notified SCIDA that groundwater contamination had been identified in the vicinity of the former Building 718. This determination was made based on the results of historic groundwater sampling data that was collected during the investigation of SEAD-41, which indicated that total petroleum hydrocarbons (TPH, 690 ppb) were present in the upper aquifer of the groundwater. the Army applied the deed notification, based on the water quality from sampling, to all property located within the “North End Barracks” parcel. A public water supply services the entire parcel. This includes the area of the former SWMU SEAD-41, Building 718 Boiler Blowdown Pit.

Comment [s2]: This statement sounds like the Army didn't do its job which is not true.

The reported level of TPH exceeds the New York State Public Water System standards for unspecified organic contamination of 100 ppb. The deed further states “The Grantee, its successors and assigns, agree that in the event they use the groundwater as a public water supply source at the Property, they will comply with all applicable laws and regulations.” Under New York regulations, future owners or occupants of the area would need to confirm the quality and acceptability of the groundwater as a source of potable water before it could be used for such a purpose. The Army recommends that the LUC documented in the existing deed for the “North End Barracks” parcel be continued until the concentration of hazardous substances in groundwater beneath have been reduced to levels that allow for unrestricted use.

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A groundwater use restriction is also proposed at the following site:¶
<#>SEAD-13: Inhibited Red-Fuming Nitric Acid (IRFNA) Disposal Site.¶
The proposed groundwater use restriction will eliminate contact with groundwater as an exposure pathway for human health risk, thereby reducing risk to within acceptable levels for potential human receptors. There is risk associated with the use of the groundwater at SEAD-13, driven by the concentrations of nitrate, aluminum, and manganese identified. The Army believes that the risk due to the presence of metals is associated with the suspended solids contained in the collected groundwater samples, and is aware that the nitrate probably is related to past activities conducted in the area. The nitrate concentrations are naturally attenuating, and will continue to diminish with time. ¶
Therefore, the Army is proposing that an IC will be implemented over the geographic area of SEAD-13 to prevent access to or use of the groundwater. The IC will remain in effect until the concentrations of hazardous substances in groundwater beneath the site have been reduced to levels that allow for unlimited exposure and unrestricted use. Once groundwater cleanup standards are achieved, the groundwater use restrictions may be eliminated, with USEPA approval.¶

Monitored Natural Attenuation at SEAD 13

The Selected Remedy for SEAD-13 addresses groundwater. The Selected Remedy includes groundwater monitoring for contaminants of concern (COCs) to demonstrate that additional impacts to groundwater are mitigated. The use of groundwater will be restricted until such time that the levels of groundwater contaminants are below groundwater cleanup standards. Groundwater access will be restricted until the clean up goals have been achieved. The cleanup goals for all media of concern are presented in **Table 1-1A**.

Land Use Controls (SEADs 64B, 64D, 122B and 122E):

Residential Use Restriction (SEAD-122B and SEAD-122E)

A residential use restriction is recommended for:

- SEAD-122B: Small Arms Range, Airfield Parcel
- SEAD-122E: Plane Deicing Area

The proposed IC will be implemented over the entire Airfield Parcel, including land associated with SEAD-122B and SEAD-122E, to prohibit the development and use of the property for

residential housing, elementary and secondary schools, child care facilities, playgrounds, etc. This IC will be applied to all areas within the Airfield Parcel until such time as a future owner may present new data which is developed by the owner, and approved by the Army, the USEPA and NYSDEC to confirm that portions of the overall property are suitable for unrestricted use. The boundary of the Airfield Parcel is defined as the boundary of the Airfield Special Events, Institutional, and Training area highlighted on **Figure 1-1**.

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Unauthorized Digging Restriction (SEAD-64B)

The Army recommends that an IC that prohibits unauthorized digging and excavations within the bounds of the SWMU be imposed for:

- SEAD-64B: Garbage Disposal Area.

SEAD-64B is a former solid waste disposal area that was closed by the Army prior to 1979. As a historic solid waste landfill, this SWMU is subject to requirements of the New York State's Solid Waste Regulations (6 NYCRR Part 360), in effect at the date of closure. Under the Solid Waste regulations effective in 1979, a soil and vegetative cover was required to be placed on and maintained above the closed landfill. The proposed IC would prohibit digging within the bounds of the former solid waste site. The IC will continue in perpetuity or until solid wastes are removed from the site, which would allow for unrestricted use.

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Unauthorized Digging and Groundwater Access/Use Restriction (SEAD-64D)

The Army recommends that ICs that restrict unauthorized excavation within the bounds of, and access to and use of groundwater be imposed in:

- SEAD-64D: Garbage Disposal Area.

Results of the mini risk assessment indicate that ingestion of groundwater could pose a risk to future receptors. Furthermore, as a historic solid waste landfill, this SWMU is subject to requirements of the New York State's Solid Waste Regulations (6 NYCRR Part 360), as in effect in 1979 when it was closed. Under the Solid Waste regulations effective in 1979, a soil and vegetative cover must be placed on and maintained above the closed landfill.

The proposed groundwater use/access restriction will be implemented over the geographic area of SEAD-64D to prohibit access to or use of the groundwater until the levels of hazardous substances are reduced to levels that allow for unrestricted access and use. The groundwater access/use restriction will remain in effect until data is provided that verifies that groundwater does not to pose an unacceptable level of risk to human health or the environment. The proposed restriction to prohibit unauthorized excavation, The IC will continue in perpetuity or until solid wastes are removed from the site, and it is proven that ground water no longer poses a risk, which would allow for unrestricted use.

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Land Use Control Performance Objectives

The land use control (LUC) performance objectives at these 16 SWMUs are as follows and will be (or have been) incorporated into leases and/or deeds for this property, as appropriate:

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- Comply with the use limitations documented and imposed in the Deed used to transfer property containing SEADs 43/56/69, 44A, 44B, 52, 62 and 64C from the U.S. Government to the State of New York for the construction of a correctional facility (See Liber 612 Page 014 through 031 at Seneca County Clerk Office);
- Prohibit access to or use of groundwater at SEADs 39, 40, 41, 64D, and 67 until concentrations of hazardous substances contained are reduced to levels that allow unrestricted use;
- Prevent residential housing, elementary and secondary schools, childcare facilities, and playgrounds activities at SEADs 39, 40, 67, 122B, and 122E until levels of hazardous substances found at the sites allow for unrestricted use; or
- Prevent unauthorized excavation at SEADs 64B and 64D.

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The Army's recommended remedial actions for all sites discussed in this ROD include LUCs. To implement the Army's recommended remedy at the sites discussed (i.e., SEADs 39, 40, 41, 43/56/69, 44A, 44B, 52, 62, 64B, 64C, 64D, 67, 122B, and 122E) as defined above, a LUC Remedial Design (RD) for each LUC combinations identified (e.g., reversionary deed only; groundwater restriction only; groundwater and residential restriction; residential restriction only; digging restriction only; and digging and groundwater restriction) will be prepared to satisfy the applicable requirements of Paragraphs (a) and (c) of Environmental Conservation Law (ECL) Article 27, Section 1318: Institutional and Engineering Controls. The LUC RD Plan will include: a Site Description; the Land Use Restrictions; the Mechanism to ensure that the land use restrictions are not violated in the future; and Reporting/Notification requirements. In addition, the Army will prepare an environmental easement for each site needed, consistent with Section 27-1318(b) and Article 71, Title 36 of ECL, in favor of the State of New York and the Army, which will be recorded at the time of transfer of the sites from federal ownership. A schedule for completion of the draft LUC RD covering the individual sites will be completed within 21 days of the ROD signature, consistent with Section 14.4 of the Federal Facilities Agreement (FFA). In accordance with the FFA and CERCLA §121(c), the remedial action (including ICs) will be reviewed no less often than every 5 years. After such reviews, modifications may be implemented to the remedial program, if appropriate.

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The Army shall implement, inspect, report, and enforce the ICs described in this ROD in accordance with the approved LUC RD. Although the Army may later transfer these responsibilities to another party by contract, property transfer agreement, or through other means, the Army shall retain ultimate responsibility for remedy integrity.

State Concurrence

NYSDEC forwarded a letter of concurrence to the USEPA regarding the selection of a remedial action in the future. This letter of concurrence has been placed in **Appendix B**.

Declaration

CERCLA and the NCP require each selected remedy to be protective of human health, public welfare, and the environment; cost effective; comply with other statutory laws; and use permanent solutions, alternative treatment technologies, and resource recovery options to the maximum extent practicable. CERCLA and the NCP also state a preference for treatment as a principal element for the reduction of toxicity, mobility, or volume of the hazardous substances.

The selected remedies described above are consistent with CERCLA and the NCP and are protective of human health and the environment, comply with Federal and State requirements that are applicable or relevant and appropriate to the remedial action, and are cost-effective. These remedies have been evaluated against toxicity, mobility, or volume of hazardous substances, pollutants, or contaminants.

The remedies identified may result in hazardous substances, pollutants, or contaminants remaining on-site above levels that allow for unlimited use and unrestricted exposure for an indeterminate period, a review will be conducted within 5 years after initiation of the remedial action at each site to ensure that the remedy is, or will be, protective of human health and the environment, with consideration given to each site’s continuing and planned future use.

The estimated cost for implementing the groundwater monitoring of the natural attenuation of the nitrate plume at SEAD-13, the Inhibited Red Fuming Nitric Acid Disposal Site, is \$2,012,000 over a 20 year period. The estimated cost associated with implementing, monitoring, assessing and reporting on the continued suitability of the recommended actions at SEADs 39, 40, 41, 43/56/69, 44A, 44B, 52, 62, 64B, 64C, 64D, 122B, and 122E is \$311,000 in aggregate. The total combined estimated cost of the recommended remedial actions for all sites included in this ROD is \$2,323,000.

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