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**SUBJECT: Seneca Army Depot Activity, Closure Plans, Burn Tray at OB Grounds and Building 803 – Mixed Waste Storage Facility at Seneca Army Depot Activity, Romulus, New York**

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Dear Mr. Vazquez / Mr. Gupta:

On behalf of the U.S. Army (Army), Parsons Infrastructure & Technology Group Inc. (Parsons) is pleased to provide each of you with copies of Closure Plans for the Burn Tray at the Open Burning (OB) Grounds and Building 803, the Mixed Waste Storage Facility (SEAD-72) at the Seneca Army Depot Activity in Romulus, New York. The Army has prepared these plans to address the requirements of the Resource Conservation and Recovery Act (RCRA), but intends to complete the required closure of the two previously RCRA-regulated solid waste management units (SWMUs) as part of its ongoing Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) investigations and remedial actions that are being completed at associated facilities. Under the Federal Facilities Agreement (FFA) that was negotiated and mutually agreed to by the Army, the U.S. Environmental



Protection Agency (EPA), and the New York State Department of Environmental Conservation (NYSDEC), the Army's RCRA corrective actions obligations and CERCLA response obligations are integrated. As such, any remedial action selected, implemented, and completed under the terms of the FFA will be protective of human health and the environment such that remediation of releases covered by the FFA shall obviate the need for further corrective action under RCRA for those releases.

The OB Burn Tray is currently located at the OB Grounds (SEAD-23), and has been retained and may be used pending the completion of CERCLA remedial actions that are required at the Open Detonation Grounds (SEAD-115, pending) and other ordnance sites at the Depot. As is indicated in the attached plan, the tray will be used if needed during the remedial actions, and then be cleaned before recycle. As the tray is located in an area subject to CERCLA action, impacts to the area surrounding the tray will be addressed under CERCLA. SEAD-72, the Mixed Waste Storage Building is located within SEAD-12 at the Depot. Continuing remedial investigations and actions are ongoing within SEAD-12, including both chemical and radiological components. Eventually, a proposed plan and record of decision will be prepared to address the closure of SEAD-12. RCRA closure will consist of building interiors only. The surrounding grounds and radiological concerns will be addressed through the CERCLA for SEAD-12.

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

Sincerely,



Todd Heino, P.E.  
Project Manager

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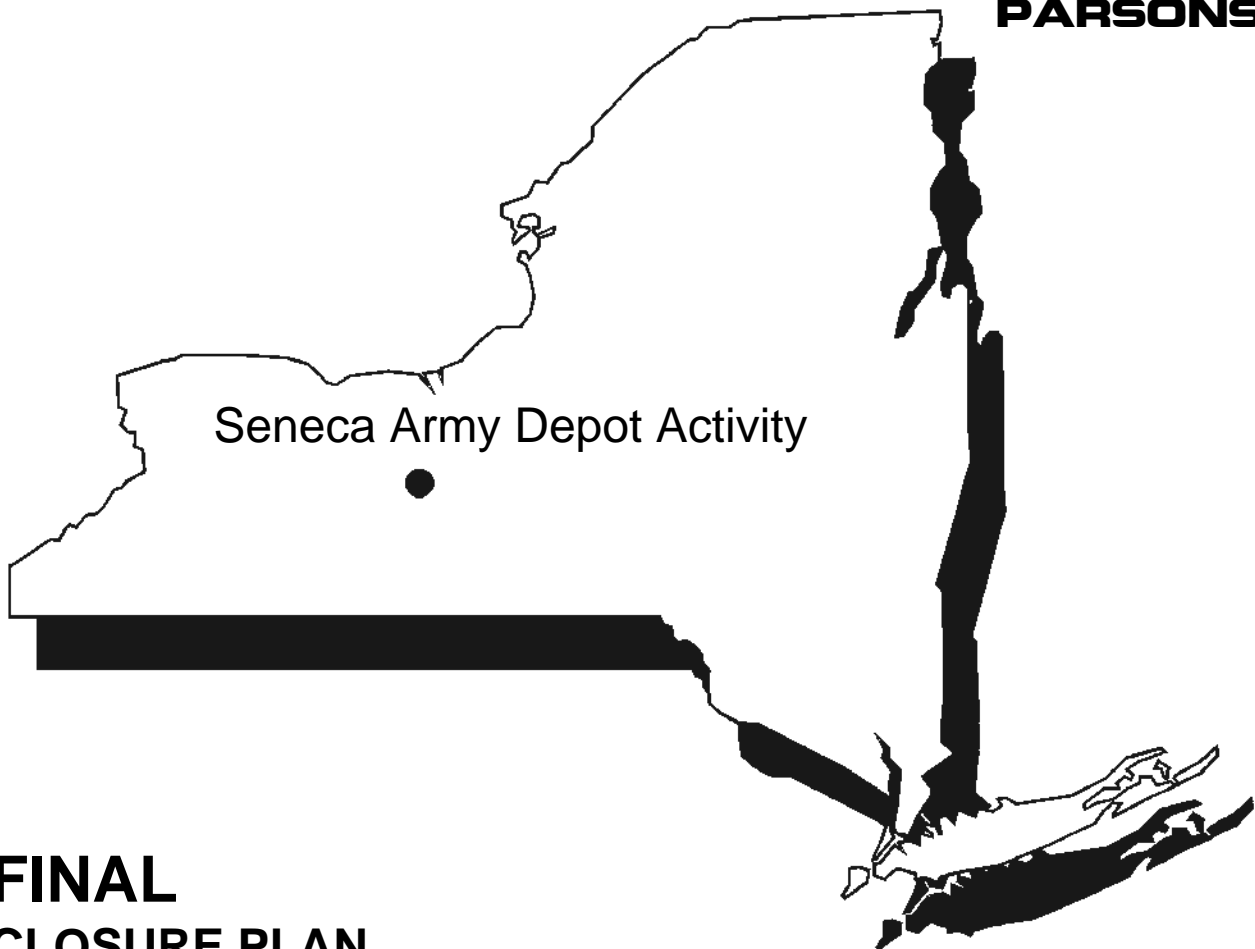
US Army, Engineering & Support Center  
Huntsville, AL

00485



Seneca Army Depot Activity  
Romulus, NY

**PARSONS**



**FINAL  
CLOSURE PLAN  
OPEN BURN TRAY  
IN SOLID WASTE MANAGEMENT UNIT – SEAD-23  
SENECA ARMY DEPOT ACTIVITY**

EPA Site ID# NY0213820830  
NY Site ID# 8-50-006  
CONTRACT NO. DACA87-95-D-0031  
DELIVERY ORDER NO. 0025

October 2005

**Closure Plan  
Open Burn Tray**

**Prepared for:  
Seneca Army Depot Activity  
Romulus, New York**

**and  
US Army, Engineering and Support Center  
Huntsville**

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**EPA Site ID# NY0213820830**

**NY Site ID# 8-50-006**

**Contract No.: DACA87-95-D-0031, Delivery Order No.: 25, Job 739263**

**October 2005**

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## **1.0 INTRODUCTION**

### **1.1 PURPOSE AND SCOPE**

This document defines work that the Army plans to conduct to close the Open Burning Grounds Burn Tray (Burn Tray) that is located in the former Open Burning (OB) Grounds (SEAD-23) at the Seneca Army Depot Activity (SEDA or the Depot) in Romulus, New York. The closure of the Burn Tray will be performed under Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) actions that are pending at the Depot, but will be consistent with the requirements of the Resource Conservation and Recovery Act (RCRA). The Army, the New York State Department of Environmental Conservation, and the Environmental Protection Agency, Region II have agreed that all remaining RCRA obligations at the Depot will be resolved and closed under pending CERCLA actions. This Closure Plan has been prepared by Parsons Infrastructure & Technology Group Inc. (Parsons) on behalf of the U.S. Army (Army).

Other historic Solid Waste Management Units (SWMUs) previously subject to RCRA regulations are also located at the SEDA. These include:

- Building 307 – Hazardous Waste Container Storage Facility (SEAD-1)
- Building 301 – PCB Transformer Storage Building (SEAD-2)
- Ammunition Peculiar Equipment (APE) 1236 Deactivation Furnace (SEAD-17)
- Open Burn Grounds (SEAD-23)
- Open Detonation Area (SEAD-45)
- Building 803 – Mixed Waste Storage Facility (SEAD-72)

The OB Grounds (SEAD-23) was a RCRA-regulated Solid Waste Management Unit (SWMU) under the Depot's former RCRA Part B permit. Necessary remedial actions required for the OB Grounds, exclusive of the Burn Tray, were undertaken under a prior CERCLA remedial response performed between 1999 and 2005. The goals and objectives of the CERCLA remedial action undertaken at the OB Grounds were documented in the "*Final Open Burning (OB) Grounds Record of Decision*" (Parsons, Feb. 1999). The Draft Completion Report summarizing remedial actions performed for the OB Grounds was submitted in June 2005 and is entitled "*Soil and Sediment Remediation, Open Burning Grounds*" (Weston Solutions, June 2005).

The Army has not yet closed the Open Burn Tray, as it may need to be used during future remedial

actions anticipated at the Depot (e.g., Open Detonation Area (SEAD-45)) to treat munitions or unexploded ordnance identified during the pending CERCLA remedial actions.

The Army performed closure activities for Building 307 (SEAD-1) and Building 301 (SEAD-2) between April of 2003 and September 2005. Reports describing the activities conducted and the results of the closure actions were submitted to the New York Department of Environmental Conservation (NYSDEC) and the U.S. Environmental Protection Agency (USEPA) in August of 2003, and in September 2005. The Army received notification of NYSDEC's approval of the RCRA Closure Certification for these two former solid waste management units (SWMUs) on September 29, 2005.

At present, it is the US Army's intention to precede with the closure of the SEAD-17, SEAD-45, and SEAD-72 facilities under the continuing CERCLA actions that are pending at the Depot. A closure plan is currently under preparation for Building 803, the Mixed Waste Storage Facility (SEAD-72) and will be submitted as a separate document. Closure activities required for SEAD-17, the Existing Deactivation Furnace have been incorporated into the Proposed Plan and the "*Final Record of Decision for the Abandoned Deactivation Furnace (SEAD-16) and the Existing Deactivation Furnace (SEAD-17)* (Parsons August 2005)," which are currently undergoing final regulatory agency review. Closure actions and other remedial actions required at the Open Detonation Area (SEAD-45) will be the subject of future CERCLA actions at the Depot.

Within Section 2 of this document, a list of steps, which will need to be completed to achieve closure for the Open Burn Tray that is consistent with the requirements under RCRA, is provided. It is the Army's intention to perform the closure of the OB Tray subsequent to the closure of the Open Detonation Area (SEAD-45). A tentative schedule showing the anticipated time to affect closure of the Burning Tray is also provided. As the State of New York Department of Environmental Conservation has primacy for the closure of RCRA units within the state, the proposed RCRA closure work will be consistent with the Title 6 New York Code of Rules and Regulations (6 NYCRR) Subpart 373-3, Interim Status Standards for Owners and Operators of Hazardous Waste Facilities (New York State Department of Environmental Conservation (NYSDEC), March 15, 2002).

## 1.2 ORGANIZATION OF DOCUMENT

**Section 1.0** provides an introduction to this report. **Section 2.0** presents the closure plan for the OB Tray and the underlying concrete pad. **Section 2.0** contains subsections that provide a brief description and overview of the OB Grounds and the operational history of the tray, states the closure performance

standard for the facility, and presents the closure plan for this unit. The closure plan provides the details of how the closure will be performed, the anticipated schedule for the closure effort, and the estimated cost. The provided schedule does not take into account a specific start date, as there is a requirement that the tray is available for burning operations until all ordnance and explosives (OE) work at the Depot is complete. The schedule is only intended to provide a timetable for the necessary closure activities.

## **2.0 CLOSURE PLAN FOR THE OPEN BURN TRAY**

### **2.1 GENERAL FACILITY DESCRIPTION AND OVERVIEW OF HISTORIC OPERATIONS**

The Open Burn Tray is located within the Open Burn Grounds (SEAD-23) in the northwestern portion of SEDA, approximately 3.5 miles northwest of the Depot's main entry gate off New York State Highway Route 96 (**Figure 2-1**). The land at the OB Grounds was used for demilitarization of munitions for approximately fifty years. The original open burning procedure involved the preparation of combustible beds of pallets and wooden boxes on one of the nine designated burn pads followed by the placement of ammunition or the components to be demilitarized on the beds. A trail of propellant was placed on the ground leading to the combustible bed. Once ignited the energetic material was allowed to burn until only ash and empty casings remained. Items burned included various military munitions such as propellants and projectiles.

Designated munitions waste was open-burned on the nine separate burning pads comprising the OB grounds until 1987. After 1987, munitions were destroyed by burning them within an above ground steel tray mounted atop a concrete pad to minimize the impact of the burning on the environment. The OB Tray measures 8 ft in width, 40 ft in length, and 2 ft in depth. The tray sat atop concrete blocks on top of a concrete pad measuring approximately 40 ft by 65 ft by approximately 1ft. thick. The maximum OB treatment capacity, proposed in SEDA's 1987 application for a RCRA Part A and Part B permit, was 5000 lb/day with a maximum of 80 burn days/year. The tray has not been used on a consistent basis since the closure of the Depot in 1995; however, it is still used sporadically to dispose of burnable items recovered during unexploded ordnance (UXO) clearance work performed at sites around the Depot.

The Army intends to close the OB Tray and its underlying concrete pad upon completion of ongoing UXO clearance work at the Depot. Until that time, the tray will be maintained in its current state for use with any burnable waste generated during CERCLA cleanup actions. It is expected that the closure of this facility will take approximately four months following the Army's announcement of the pending closure. A schedule of the planned closure activities is provided in **Figure 2-2**. The 30-acre Open Burning Grounds facility surrounding the tray has been remediated in accordance with a Record of Decision (ROD) under CERCLA, which was reviewed for adequacy under RCRA.

### **2.2 CLOSURE PERFORMANCE STANDARD**

RCRA regulations basically present two closure options for regulated units: clean closure (i.e., removal of contamination), or closure as a landfill (i.e., containment and long-term maintenance of the contamination

that is left in place). The NYSDEC, the USEPA and the Army, under a Federal Facility Agreement (FFA), have agreed that all cleanup operations proceed under CERCLA and that RCRA requirements are met concurrently. CERCLA remediation under the FFA meets clean closure requirements. Therefore, the closure plan for the OB Tray and its underlying concrete pad has been developed to achieve clean closure. A systematic approach will be followed such that the tray and concrete pad will be suitably decontaminated to eliminate or minimize the need for further maintenance, threats to human health and the environment, and the release of hazardous constituents to groundwater, surface waters, or the atmosphere. As stated in **Section 1**, SEAD-23 has been closed separately from the Burn Tray itself. Therefore, the soil and groundwater immediately surrounding the OB Tray and concrete pad have been dealt with in accordance with the ROD for the Open Burning Grounds. If the Army finds that its clean closure goal for the Open Burn Tray and underlying concrete pad is non-achievable, this closure plan will be modified in accordance with the requirements of 6 NYCRR § 373-3.7(h).

## **2.3 CLOSURE PLAN**

The following section outlines the procedures to be followed to close the Open Burn Tray and concrete pad in accordance with the requirements of 6 NYCRR Part 373-3.7, the Closure Performance Standard.

### **2.3.1 Maximum Inventory**

The Open Burn Tray will be empty of any munitions prior to commencement of final closure activities. The Open Burn Tray may be used again prior to its closure to dispose of ordnance recovered during OE removal actions ongoing at the Depot; however, following completion of the activities it is expected that all left over materials will be removed from the tray. Future uses of the Open Burn Tray will not occur in the OB Grounds; as such actions could result in the recontamination of the OB Grounds.

The maximum inventory of hazardous wastes ever present in the burn tray during its active life is estimated as approximately 5,000 lbs of propellant, which was the maximum weight requested in the RCRA Part A and Part B permit application. The propellant would have been present in many of the extremely varied types of munitions stored at the Depot.

Two days prior to the initiation of closure activities at the tray and/or the concrete pad, a meeting will be held between the Army and the disposal contractor. At this time, a thorough inspection of the tray and/or concrete pad will be performed to (1) verify that no hazardous waste remains; (2) ascertain the condition of any residual materials present in the tray; and (3) review the contractor's responsibilities in conforming to all aspects of the closure plan, including waste manifesting, spill prevention, and safety.

### **2.3.2 Removal of Hazardous Waste Inventory**

Any remaining hazardous waste inventory present in the tray and/or concrete pad will be removed during a planned one-day event. Prior to the scheduled decontamination activities, the Army or its designated agent, and the disposal contractor will inspect the tray and/or the concrete pad on which it formerly sat for evidence of accumulated hazardous substances. A team of professional hazardous waste removal technicians will conduct the removal of any remaining hazardous waste inventory identified. The disposal contractor will use appropriate absorbent compounds to contain and clean up any spilled liquids, and solid materials will be swept up and placed in Department of Transportation (DOT)-approved, steel 55-gallon drums. Stains observed anywhere on either the tray or pad will be noted on a plans of these structures and marked. Stained areas will receive extra attention during the planned decontamination sequence and subsequent confirmational sampling event.

Necessary licensed, hazardous waste transport vehicles will be staged in close proximity to the burn tray and/or concrete pad for the duration of the transfer and loading operations. Access and egress paths between the transport vehicles and the tray and/or concrete pad will be clearly marked and cordoned off to limit unnecessary vehicular and pedestrian traffic throughout the period of the transfer and loading operations.

Personnel performing the transfer and loading operations will wear acid/solvent resistant overalls, head and eye protection, chemical resistant gloves and boots, and be provided full-face respirators fitted with organic vapor and acid gas filter cartridges. Use of respiratory protective equipment is not currently anticipated during the removal and transfer operation; thus this equipment will be available to each member of the removal team as a safety precaution. Additionally, backup health and safety equipment (e.g., adsorbent materials and pads, neutralization chemicals, eyewash stations, first-aid kits, emergency evacuation air packs or self-contained breathing apparatus, drum overpacks, etc.) will be staged in close proximity of the tray for the duration of the removal and decontamination operation as a safeguard in the event that they are needed.

All waste identified in the tray will be collected and drummed for transportation to an off-site facility for disposal. Prior to their movement, all drums containing hazardous waste will be re-inspected to ensure that their contents are clearly and legibly identified, and that all bungs and caps are securely fastened. All drums to be included in a shipment will also be clearly listed on the hazardous waste manifest that will accompany the shipment from the Depot to the designated treatment, storage, and disposal facility (TSDF) or facilities. As is appropriate, incompatible hazardous wastes will be segregated as they are

placed onto the transport trucks. As the drums are moved, their identity will be cross-checked against the manifest to ensure that all drums are properly organized.

Drums containing hazardous liquids and sludges will be transported to a permitted and approved secure off-site facility for treatment or disposal. Empty drums will preferably be transferred to an approved drum reconditioning facility, or crushed/shredded and disposed of off-site in a secure land burial facility. In the event that an accident (e.g., spill) occurs during the transfer of hazardous wastes from the tray to the transport truck, the area surrounding the spill will immediately be cordoned off, and necessary containment measures will be implemented to contain and minimize the extent of the event. Recoverable liquid will be captured and transferred to suitable containment drums, while solid hazardous wastes or adsorbent materials will be swept or scrapped up and added to other containment drums. These drums will then be re-inventoried and added to the planned shipment.

Samples from the area where the spill event occurred will then be collected and these samples will be analyzed to document the extent of the impact to the area.

Disposable personal protective equipment worn by workers will be collected and placed in drums for subsequent disposal as a hazardous waste at a permitted and approved off-site disposal site. Reusable personnel protective equipment will be decontaminated at the end of each day, and all wash and rinse solutions and adsorbent materials will be collected and containerized for disposal off-site as hazardous waste.

### **2.3.3 Decontamination of the Open Burn Tray and Concrete Pad**

All personnel involved in the decontamination process will wear Tyvek® disposable coveralls, head and eye protection, chemical-resistant gloves and boots, and be provided full-face respirators fitted with organic vapor and acid gas filter cartridges.

Once emptied, the OB Tray and the associated concrete pad will be decontaminated. Prior to decontamination activities, the location of any visible organic or oily stains remaining in the tray or on the concrete pad will be annotated on a figure of each for future reference.

At this time, the Army's plan is to decontaminate the Open Burn Tray and concrete pad underneath using a High Efficiency Particulate Air (HEPA) vacuuming process. All hoses, containers and equipment used during the proposed decontamination operations at the Burn Tray will be decontaminated after use by triple flushing/rinsing all exposed or wetted surfaces, followed by the capture and containerization of the

recovered flush/rinse solution. If there is any residual doubt as to the degree of decontamination achieved for any piece of equipment, the equipment will be properly disposed of.

Disposable personnel protective equipment (PPE) worn by workers will be collected and placed in drums for subsequent disposal. Reusable personnel protective equipment will be decontaminated at the end of each day, and all wash and rinse solutions and adsorbent materials will be collected and containerized for proper disposal. The proper disposal of PPE and PPE rinse water may include disposal as hazardous waste at a TSDF if any of the PPE is visibly contaminated during the decontamination operation.

### **Open Burn Tray**

If any oily stain or residue is identified on the metal Open Burning Tray, it will be removed by wiping it clean with a rag wetted with the minimal amount of an appropriate solvent such as hexane (preferred), methanol, or isopropanol. The solvent wetted, stained rag will be recovered and placed into a DOT approved drum for subsequent disposal at a hazardous waste landfill.

Once obvious stains are removed, the solvent wetted metal will be allowed to air dry, before the tray will be vacuumed clean using a vacuum fitted with a HEPA filter. The Open Burn Tray itself will be considered clean once it has been inspected for evidence of residual oily stain or residue, after any identified stain or residue has been removed using a solvent (hexane preferred) wetted rag, and once the metal tray has been vacuumed clean. Once the operation is complete, the tray will be sent to a metal recycler as a recyclable metal.

### **Concrete Pad**

Prior to decontamination, the integrity of the concrete pad will be inspected. Signs of obvious stains or cracks in the pad will be documented on a figure of the pad for future reference. If any oily stain or residue is identified on the Open Burn Grounds concrete pad, it will be removed by wiping it clean with a rag wetted with the minimal amount of an appropriate solvent such as hexane (preferred), methanol, or isopropanol. The solvent wetted, stained rag will be recovered and placed into a DOT approved drum for subsequent disposal at a hazardous waste landfill. If rust colored stains are noted, they will be cleaned by scrubbing using a stiff bristled brush and a water and detergent solution that will subsequently be vacuumed dry with the HEPA vacuum.

Once obvious stains are removed, the solvent or water wetted concrete will be allowed to air dry. The concrete pad will then be marked off to divide the pad into 12 equally sized rectangular segments, each



measuring approximately 13.3 ft by 15 feet in size. Each one of these segments represents approximately 15 tons of concrete debris. Once marked off, the concrete pad will be vacuumed clean using a vacuum fitted with a HEPA filter. Once vacuumed, one sample of the top 1 to 2 inches of the concrete will be collected from random locations within each of the 12 rectangular segments and sent to the laboratory for analysis of the Toxicity Characteristic (TC). Procedures used to sample and analyze the concrete pad are discussed below in **Section 2.3.4**. Each of the collected samples will be directly correlated to one of the 12 rectangular segments, and the results of the chemical analysis will determine if the 13.3 ft by 15 ft segment is disposed of as construction debris or handled as hazardous waste.

When the results of the TC analysis are available, determinations will be made about which materials will be disposed of as construction debris and which requires handling as hazardous waste. Rectangular segments that are found to be free of contamination will be separated from contaminated segments, if any are identified, and shipped off-site to C&D landfills. Segments found to exhibit the Toxicity Characteristic will be transported off-site and disposed at a hazardous waste landfill. The concrete pad will be demolished using a jack hammer or backhoe, and the concrete rubble and rebar debris (if any) will be collected and stockpiled in lined and covered roll-offs. Based on the size of the concrete pad (40 ft. x 65 ft. x 1 ft.), it is anticipated that 12 roll-off containers will be required to store all of the rubble and debris requiring disposal.

#### **2.3.4 Confirmatory Sampling**

##### **Open Burn Tray**

As it is expected that no contaminants have been absorbed by the metal tray, the tray will be considered clean and will be recycled once the HEPA vacuuming has been completed.

##### **Concrete Pad**

Samples of the concrete pad will be collected for subsequent analysis at the laboratory for the Toxicity Characteristic. Sampling locations will be selected by overlaying a 100 square grid on each of the 13.3 ft. by 15 ft. rectangular pad segments, followed by the generation of a two digit random number. The required concrete sample will then be collected from locations near the center of the identified grid cell per the procedure identified below. At least one sample duplicate will be collected for each 18 field samples or less collected during this program; 12 samples are currently expected, so 12 samples and at least one sample duplicate will be collected during this program. The sample duplicate will be selected from a second grid cell within the 13.3 ft. by 15 ft. pad segment that is selected based on a second random

number. If the random numbering process used to select sampling locations designates the same grid cell for the collection of the sample duplicate, the drilling locations will be moved to the perimeter of the grid cell. An example of the sampling grid and potential sampling locations is shown in **Figure 2-2**.

Samples of the concrete will be obtained either by drilling holes in the surface of the concrete pad to a final depth of between 2 and 3 inches (i.e., for metals, chlorinated herbicides and pesticides, and Semivolatile organics) or by chipping pieces of concrete off of the surface of the pad with a hammer and cold chisels (for volatile species).

Drilling will be completed using a clean 0.5 to 2-inch (nominal) carbide drill bit or equivalent and extend into the pad to a depth of 2 to 3 inches. Based on the 1.5-inch diameter and 2-inch depth, approximately 4 ounces (e.g. approximately 100 grams) of concrete powder or dust are expected to result from the each drill hole. The concrete dust or powder from the first borehole will be collected and placed into a labeled sample bottle that will be submitted for the analysis of Toxicity Characteristic Leaching Procedure (TCLP) semivolatile organic, chlorinated pesticide, chlorinated herbicide and metal compounds. The sample collected for these compounds will be placed into a clean, labeled four to eight ounce glass bottle that is fitted with a Teflon lined cap, and once packaged it will immediately be placed on ice to cool it to 4°C (38°F) +/- 2°C (3.6°F).

The sample collected for volatile compound determination will then be collected by chipping pieces of concrete from the surface of the pad using a hammer and cold chisel. Samples for volatiles can either be chipped from a location immediately adjacent to the hole(s) drilled for the collection of the non-volatile components, as this will allowed layers of concrete to be removed more easily. More than 100 grams of concrete should be collected and the sample collected for volatile organic compounds should be placed into a separate clean, labeled four to eight ounce glass bottle that is fitted with a Teflon lined cap, and once packaged it must immediately be placed on ice to cool to 4°C (38°F) +/- 2°C (3.6°F).

Concrete samples collected for TC determinations will be shipped to the laboratory under chain of custody.

### **Grounds Surrounding the Open Burn Tray**

As stated previously, the Army is currently involved in the remediation of the Open Burn Grounds (SEAD-23) under CERCLA actions proceeding in that area. Over the course of this remediation, the grounds surrounding the burn tray will be remediated in accordance with the ROD developed for this area, which has been reviewed for adequacy under RCRA and found to be acceptable. As it is not the

Army's intention to close this area at the same time as the tray and the pad, no samples will be collected in the vicinity of or underneath the burn tray or the concrete pad.

### **2.3.5 Analytical Procedure**

The concrete powder/dust or chip samples will be submitted and analyzed by Toxicity Characteristic Leaching Procedure (TCLP) (EPA Method 1311) in accordance with "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication SW-846 (Third Edition (November 1986), as amended by Updates: I (July 1992), II (September 1994), IIA (August 1993), IIB (January 1995), III (December 1996), and IIIA (April 1998), and later approved revisions), hereinafter referred to as "SW-846"; Appendix 19 of 6NYCRR Part 371; or an equivalent method approved by the NYSDEC. The analysis of the extract for volatile organic compounds will be completed using SW-846 Method 8260B; semivolatile organic compound determinations will be completed by SW-846 Method 8270C; chlorinated pesticides will be determined by SW-846 Method 8081A; chlorinated herbicides will be characterized by SW-846 Method 8151A; and metals will be analyzed via Methods SW-846 Method 6010B and 7470A (mercury only). It is estimated that twelve samples and one QA/QC duplicate sample will be collected from the concrete pad. Sample analytes to be determined via these analytical procedures are listed in **Table 2-1**.

### **2.3.6 Laboratory Data Deliverable**

The laboratory deliverables will be consistent with the NYSDEC ASP requirements, presented in Appendix B of the ASP. All data shall be reported using the ASP Category B and all deliverables will be in the CLP or CLP equivalent format. The chemistry data package will contain adequate information and be presented in a clear, legible, concise, and consecutively paginated manner. The data package will include a sample data summary package and a sample data package. Raw data (including electronic media) of all field samples, QC samples, standards, and blanks should be archived and be available upon request for 5 years from the date of generation in accordance with the USEPA (2004) requirement.

The laboratory selected to perform the chemical analyses required under this program will be certified by the State of New York as an Environmental Laboratory Approval Program (ELAP) Contract Laboratory Protocol (CLP) laboratory that is qualified to perform the TCLP analysis.

### **2.3.7 Data Validation**

Data validation for laboratory data will be performed for all definitive sample results in accordance with the requirements contained in the analytical method, the NYSDEC ASP, the USEPA Region 2 SOPs, the USEPA National Functional Guidelines for Data Review (USEPA, 2005b, 2004a). One hundred percent (100%) data validation will be manually performed by the project chemist or personnel trained by the project chemist. The project chemist is responsible for overseeing the data validation process and he/she will review at least 20% of the data validated by the trained personnel. In performing the data validation, the raw data are spot-checked in accordance with the Region 2 SOP to evaluate whether there is any transcription error. The review of laboratory data will focus on the following subjects, as applicable:

- COC forms;
- Holding times, sample preservation, and sample conditions (e.g., percentage of solids);
- Instrument calibration and performance;
- Method blanks, trip blanks, equipment/rinsate blanks;
- Method detection limits and laboratory-established reporting limits;
- Analytical batch control records including laboratory spike recoveries and spike duplicate results, and matrix spike recoveries and spike duplicate results;
- Surrogate standard recoveries;
- Internal standard areas and RTs;
- Confirmation results for explosives;
- Chromatograms and mass spectrums;
- Corrective actions;
- Formulas used for analyte quantitation;
- Laboratory and field duplicate results;
- Calculations supporting analyte quantitation;
- ICP serial dilution;
- interference check sample results;
- ICP linear range; and,
- Completeness of data.

### **2.3.8 Data Analysis**

Analytical results from concrete samples will be reviewed and compared to the TCLP limits set forth in 40 CFR 261.24 and 6NYCRR 371.3 (e) and a decision will be made as to how to proceed with the disposal of the concrete and rebar debris. If the sample results indicate that a segment of the former pad

rubble is non-hazardous, the stockpiled remnants will be taken to a construction debris landfill for disposal. If results indicate that elevated concentrations of contaminants are still present in the rubble from a particular segment of the pad, the debris will be disposed of as a hazardous waste. The portion of the debris deemed hazardous will be removed to landfill specializing in hazardous waste disposal with the remainder of the pad remnants disposed of as non-hazardous industrial waste. Prior to the removal of the concrete pad, the results of the analyses will be provided to and reviewed with NYSDEC to confirm that clean closure of the pad has been achieved.

### **2.3.9 Certification of Closure**

Within 60 days of completion of final closure of the Open Burn Tray, the Army will submit to the NYSDEC commissioner, by registered mail, a certification that the tray and pad has been closed in accordance with the specifications in the closure plan, which must be approved by NYSDEC. The certification must be signed by appropriate representative of the Army and by an independent professional engineer registered in New York. Documentation supporting the independent registered professional engineer's certification must be furnished to the commissioner upon request until the commissioner releases the Army from the financial assurance requirements for closure under NYCRR § 373-3.8(d).

### **2.3.10 Schedule**

The Army plans to begin closure of the Open Burn Tray when OE removal operations have been completed at the Depot. The anticipated timetable for closure of this facility is depicted in **Figure 2-3**. As shown, closure and certification of the closure of the Open Burn Tray is expected to be completed within 150 days of the Army's notification of its intention to close the tray.

### **2.3.11 Closure Costs**

An estimate of the costs to close the Open Burn Tray has been developed using MCACES. Costs projected for this activity have been derived based on the Army retaining a third-party consultant to oversee the proposed closure of the tray and to collect the necessary samples for analysis, and a third-party organization being retained to complete all of the required decontamination and hazardous waste removal operations. All decontamination wastes will be disposed of properly.

The estimated cost for closing the Open Burn Tray is approximately \$46,564. This cost is exclusive of the removal and disposal of any residual drummed quantities of hazardous waste other than wastes

generated during the proposed decontamination process. Details of this estimate are summarized in **Table 2-2**. This estimate assumes that one of the 12 roll-offs of concrete pad rubble will need to be disposed of as hazardous waste. Details of the estimate are provided in **Appendix A** of this closure plan.

## **TABLES**

**Table 2-1**

**Toxicity Characteristic Leaching Procedure  
Sampling and Analysis Information**

**Metals**

Extract Method SW-846 1311, Analysis Method SW-846 6010B/7470A (Mercury, Hg)

Holding Times: 180 (28 for mercury) days from sample to TCLP extract; 180 (28 for Hg) days from TCLP extract to analysis.

Arsenic	Chromium	Selenium
Barium	Lead	Silver
Cadmium	Mercury	

**Volatile Organic Compounds**

Extract Method SW-846 1311 by Zero Head Extraction, Analysis Method SW-846 8260B

Holding Times: 14 days from sample to TCLP extract; 14 days from TCLP extract to analysis.

Benzene	Chloroform	Trichloroethene
2-Butanone (Methyl ethyl ketone)	1,2-Dichloroethane	Vinyl Chloride
Carbon Tetrachloride	1,1-Dichloroethene	
Chlorobenzene	Tetrachloroethene	

**Semivolatile Organic Compounds**

Extract Method SW-846 1311, Analysis Method SW-846 8270C

Holding Times: 14 days from sample to TCLP extract; 7 days from TCLP extract to Preparative extract; 40 days from Preparative extract to analysis.

2-Methylphenol (o-cresol)	Hexachlorobenzene	Pyridine
3-Methylphenol (m-cresol)	Hexachlorobutadiene	2,4,5-Trichlorophenol
4-Methylphenol (p-cresol)	Hexachloroethane	2,4,6-Trichlorophenol
1,4-Dichlorobenzene	Nitrobenzene	
2,4-Dinitrotoluene	Pentachlorophenol	



### **Chlorinated Pesticides**

Extract Method SW-846 1311, Analysis Method SW-846 8081A

Holding Times: 14 days from sample to TCLP extract; 7 days from TCLP extract to Preparative extract; 40 days from Preparative extract to analysis.

Chlordane

Lindane

Endrin

Methoxychlor

Heptachlor (and its epoxide)

Toxaphene

### **Chlorinated Herbicides**

Extract Method SW-846 1311, Analysis Method SW-846 8151A

Holding Times: 14 days from sample to TCLP extract; 7 days from TCLP extract to Preparative extract; 40 days from Preparative extract to analysis.

2,4-D

2,4,5-T

**TABLE 2-2**

**EXPECTED CLOSURE COSTS – OPEN BURN TRAY**

**SENECA ARMY DEPOT ACTIVITY – ROMULUS, NEW YORK**

<b>Closure Activity</b>	<b>Estimated Costs (Dollars)</b>
33.15 Decon/Disposal of Burn Tray	\$ 4,520
33.17 Demolition/Disposal Concrete Pad	\$22,095
33.20 Sample Collection and Analysis – Concrete Pad	\$6,211
33.22 Closure Certification	\$ 8,340
33.26 Project Management/Procurement	\$ 5,400
<b>Total</b>	<b>\$46,564</b>

## **FIGURES**

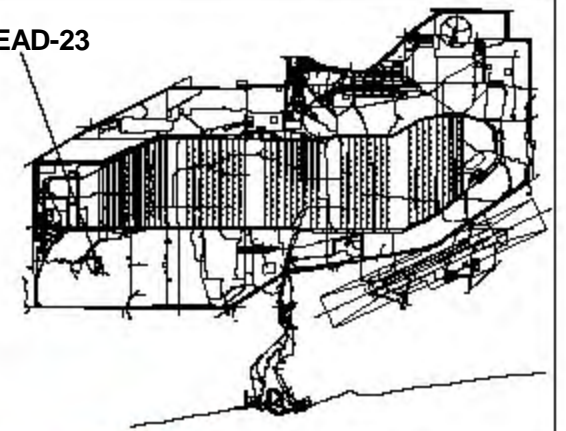


LEGEND



100 0 100 Feet

SEAD-23



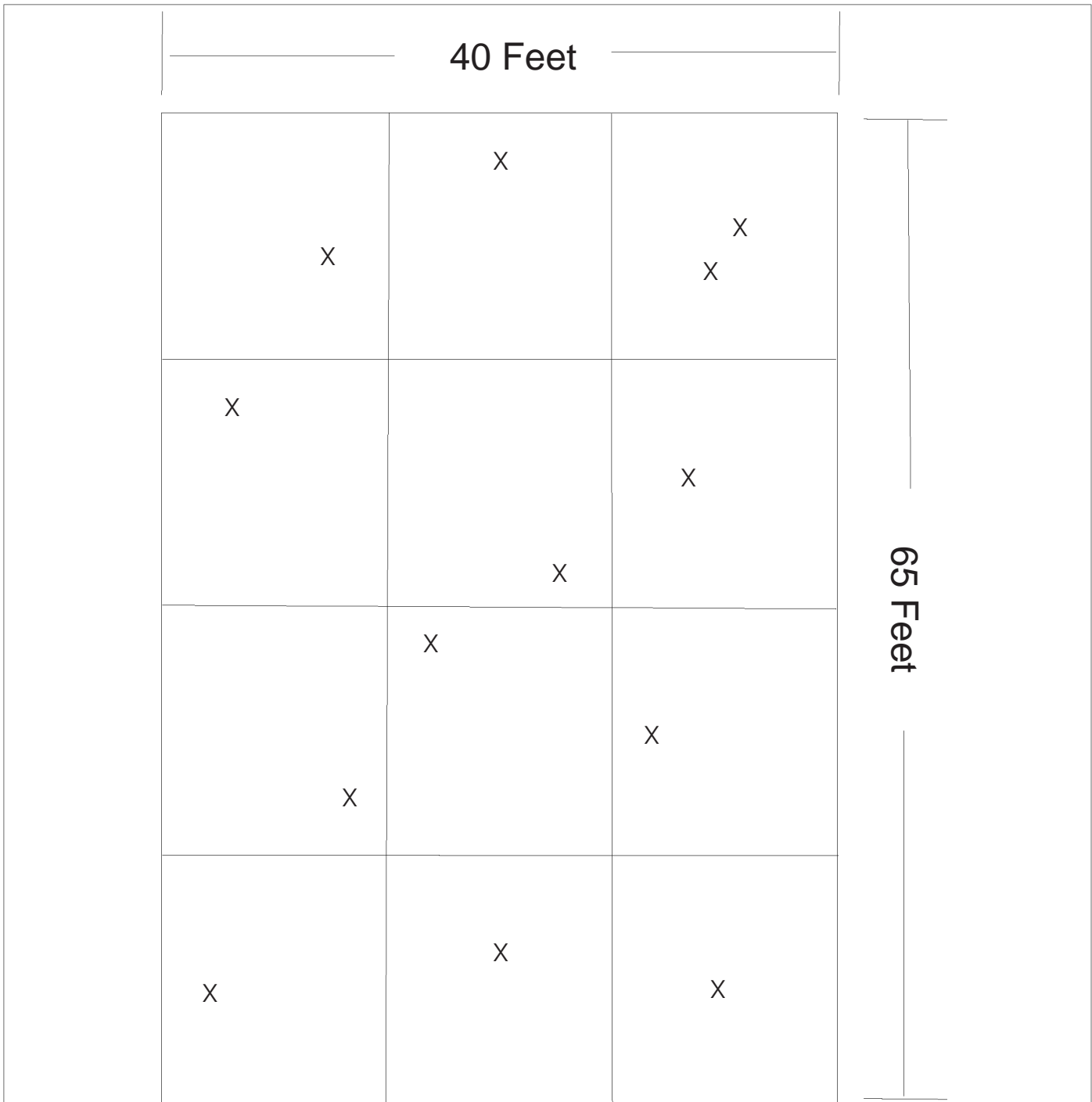
**PARSONS**

SENECA ARMY DEPOT ACTIVITY  
OPEN BURN TRAY  
RCRA CLOSURE PLAN

**FIGURE 2-1  
OPEN BURN TRAY  
LOCATION MAP**

1" = 100'

OCTOBER 2005



**12 concrete pad segments  
each divided into 100 cells.**

X Potential sample locations  
within concrete pad segment  
selected using random numbers to  
identify grid cell within sub grid.

**PARSONS**

CLIENT/PROJECT TITLE

**SENECA ARMY DEPOT ACTIVITY  
OB GROUNDS BURN TRAY  
CLOSURE PLAN**

DEPT.

ENVIRONMENTAL ENGINEERING

DWG NO.

739263-01002

**FIGURE 2-2  
CONCRETE PAD GRID**

SCALE

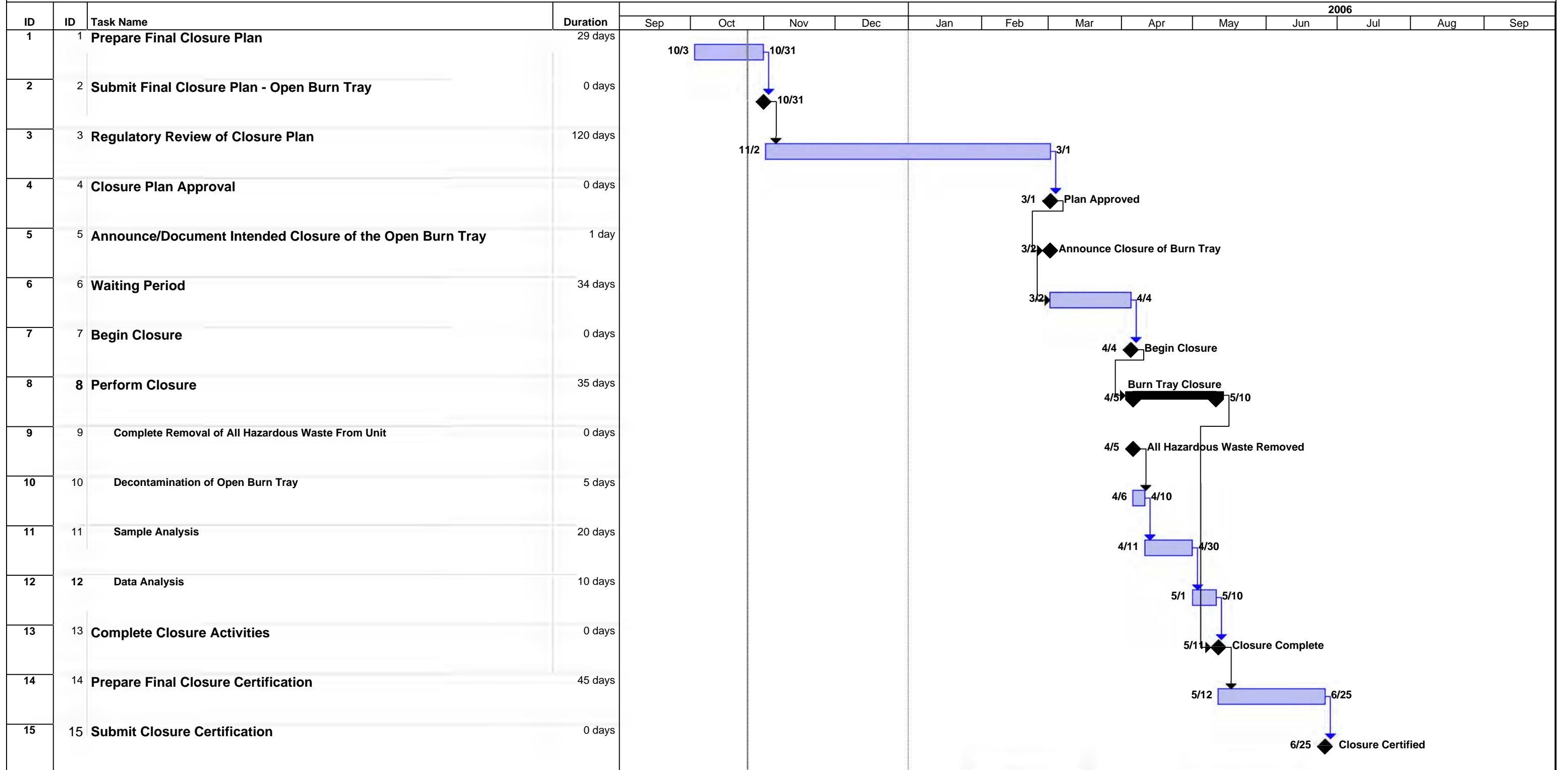
NONE MILES APPROX.

DATE

OCTOBER 2005

**FIGURE 2-3  
TENTATIVE CLOSURE SCHEDULE - OPEN BURN TRAY**

**Seneca Army Depot Activity - Romulus, New York**



Project: Figure2\_3  
Date: Tue 10/25/05

Task		Milestone		Rolled Up Task		Rolled Up Progress		External Tasks		Group By Summary	
Progress		Summary		Rolled Up Milestone		Split		Project Summary			

## **APPENDIX A**

Mon 17 Oct 2005  
Eff. Date 10/03/96

Tri-Service Automated Cost Engineering System (TRACES)  
PROJECT BURNTR: Estimate Closure Cost - Decon the burn tray and dispose  
Closure Costs, Open Burn Tray, Haz Waste Con

TIME 15:28:29

TITLE PAGE 1

---

Estimate Closure Cost  
Decon the burn tray and dispose  
offsite; demolish the concrete  
pad and collect material samples

Designed By: Parsons  
Estimated By: Parsons

Prepared By: Parsons

Preparation Date: 08/17/00  
Effective Date of Pricing: 10/03/96  
Est Construction Time: 90 Days

Sales Tax: 7.0%

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Software Copyright (c) 1985-1997  
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Release 1.2



PROJECT BREAKDOWN:

The estimate is structured as follows and uses a 2 digit number at each level. The 2 digit numbers for the first 3 title levels are taken from the HTRW Remedial Action Work Breakdown Structure. The 2 digit numbers for the remaining title levels are user defined. The detail items are at LEVEL 6.

- LEVEL 1 - WBS Level 1 (Account)
- LEVEL 2 - WBS Level 2 (System)
- LEVEL 3 - WBS Level 3 (Subsystem)
- LEVEL 4 - User Defined (Assembly Category or Other)
- LEVEL 5 - User Defined (Assembly or Other)

PROJECT DESCRIPTION:

Estimated Closure Costs for Open Burn Tray and the Open Buring (OB) Grounds (SEAD-23).

HEPA Vac the burn tray and recycle the metal.

Demolition the concrete pad and dispose offsite. Collect 4 samples plus QA/QC for TCLP.

Validate Data and Prepare Closure Certificate.

Procure Vendor Services.

PRODUCTIVITY:

Productivity, as a baseline and as taken from the Unit Price Book (UPB) Database, assumes a non-contaminated working environment with no level of protection productivity reduction factors. When required, productivity for appropriate activities will be adjusted for this project as follows:

1. Level of Protection A - Productivity \_\_\_%
2. Level of Protection B - Productivity \_\_\_%
3. Level of Protection C - Productivity \_\_\_%
4. Level of Protection D - Productivity 85%.

All activities are conducted in Level of Protection D.

The following daily time breakdown was assumed.

	Level A	Level B	Level C	Level D
Available Time (minutes)	480	480	480	480

Non-Productive Time (minutes):

Safety meetings	20	20	10	10
Suit-up/off	60	60	40	10
Air tank change	160	20	0	0
*Breaks	60	60	40	30
Cleanup/decontamination	20	20	20	20
<hr/>				
Productive Time (minutes)	160	300	370	410
Productivity:	160/480	300/480	370/480	410/480
	X100%	X100%	X100%	X100%
	33%	63%	77%	85%
Example:				
Normal Production Rate (CY/HR)	250	250	250	250
X Productivity	.33	.63	.77	.85
=Reduced Production Rate(CY/HR)	83	158	193	213
* Break time ranges (minutes)	60-140	60-140	40-140	30-70

Contractor costs are calculated as a percentage of running total as  
 5 % for field office support  
 15 % for home office support  
 10 % for profit  
 4 % for bond

OTHER GOVERNMENT COSTS:

Other Government Costs consist of:

*Engineering and Design During Construction (EDC)	1.5%
As-Builts	0.5%
Operation and Maintenance (O&M) Manuals	0.5%
Laboratory Quality Assurance	1.0%
	----
Total, use	3.5%

33.15. Decon/disposal of Burn Tray		QUANTY	UOM	MANHOUR	LABOR	EQUIPMNT	MATERIAL	SUBCONTR	TOTAL COST	UNIT COST
33. Open Burn Tray at OB Grounds										
33.15. Decon/disposal of Burn Tray										
USR	<02083 5214 >	HW packaging, DOT steel drums, 55gal, closed only	2.00	EA	0	0	110	0	110	55.16
USR	<DRILL 03 >	Decon equipment including cost of renting decon equipment	20.00	HR	0	0	0	3,000	3,000	150.00
USR	<DRILL 02 >	Construct temporary decon pad	1.00	EA	0	0	0	150	150	150.00
USR	<DRILL 03 >	Provide empty drums	2.00	EA	0	0	0	100	100	50.00
L AFH	<01957 3114 >	Recycle scrap metal (Quote Alpco Recycling 2002)	1.00	EA	0	0	0	250	250	250.00
AFH	<13278 8312 >	transport, dispose scrap 200-299 miles, mileage charge, van trailer	200.00	MI	0	0	0	510	510	2.55
RSM	<02092 5000 >	Decontn contain area dml, HEPA vacuum -	650.00	SF	9	356	7	35	398	0.61
33.17. Demolition/disposal concrete pad										
USR	<DRILL 05 >	Move drums when full, 100 ft to central storage location	2.00	EA	0	0	0	50	50	25.00
USR	<13278 5103 >	HTRW, dispose haz waste, drums, disposal taxes & fees, state	1.00	EA	0	0	0	26	26	25.70
USR	<13278 8311 >	HTRW, dispose haz waste, min charge, mileage charge, van trailer	1.00	EA	0	0	0	683	683	683.33
USR	<02083 7301 >	Shipping HW, subcontracted transport 80 55gal drums of soil	400.00	MI	0	0	0	600	600	1.50
USR	<PA >	transport & dispose non haz portion of pad (Earthwatch)	200.00	TON	0	0	0	6,300	6,300	31.50
MIL	<02046 2115 >	Site dml, conc, 7" to 24" thick, reinf, w/backhoe	96.00	CY	274	8,023	1,185	0	9,207	95.91
HTW	<02083 7133 >	Shipping HW, open top roll-off container, 18' long x 5' high,	1.00	EA	0	0	5,229	0	5,229	5228.56
33.20. Samp Coll. & Anal - concrete pad										
USR	<01954 6112 >	Testing, misc sample collection (shallow), daily rate, subcontra	6.00	EA	0	0	0	3,798	3,798	633.00
USR	<01954 6121 >	Testing, misc sample collection (shallow), van or pickup rental	6.00	DAY	0	0	193	0	193	32.09
USR	<01954 6132 >	Testing, misc sample collection (shallow), pickup mileage charge	100.00	MI	0	0	86	0	86	0.86
USR	<01954 6145 >	Field samples, sample collection, contaminated soils	15.00	EA	8	253	157	0	410	27.34
AFH	<01954 7427 >	Testing, LAS, HW RCRA eval, TCLP, TCLP (RCRA) (EPA 1311)	15.00	EA	0	0	0	1,725	1,725	115.00
33.22. Closure Certification										
USR	<01956 1111 >	Reporting	60.00	HR	0	0	0	4,500	4,500	75.00
USR	<01956 1113 >	Submittals, tech plans-defines where samps taken, soil sampling	24.00	HR	0	0	0	1,800	1,800	75.00
USR	<01956 1114 >	Submittals, tech plans-defines quality	24.00	HR	0	0	0	2,040	2,040	85.00

33.36. Project management / Procurement		QUANTY	UOM	MANHOUR	LABOR	EQUIPMNT	MATERIAL	SUBCONTR	TOTAL COST	UNIT COST
33.36. Project management / Procurement										
USR	<01956 1115 >	Submittals, tech plans,requires incl hygenist,site safety&healt	2.00	HR	0	0	0	200	200	100.00
USR	<01956 1112 >	Submittals, tech rep, Sampling Plan	16.00	HR	0	0	0	1,200	1,200	75.00
USR	<01956 1115 >	Project Management / Procure health	32.00	HR	0	0	0	3,200	3,200	100.00
USR	<01956 1115 >	Site Health & Saftey Plan health	8.00	HR	0	0	0	800	800	100.00
TOTAL Estimate Closure Cost					291	8,632	1,348	5,652	30,932	46,564

Mon 17 Oct 2005  
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Tri-Service Automated Cost Engineering System (TRACES)  
PROJECT BURNT: Estimate Closure Cost - Decon the burn tray and dispose  
Closure Costs, Open Burn Tray, Haz Waste Con  
\*\* PROJECT OWNER SUMMARY - ACCOUNT (Rounded to 10's) \*\*

TIME 15:28:29

SUMMARY PAGE 1

	QUANTY	UOM	CONTRACT	DES CONT	ESCALATN	CON CONT	OTHER	CON MGMT	TOTAL COST	UNIT COST
33 Open Burn Tray at OB Grounds	1.00	EA	46,560	0	0	0	0	0	46,560	46563.92

Mon 17 Oct 2005  
 Eff. Date 10/03/96

Tri-Service Automated Cost Engineering System (TRACES)  
 PROJECT BURNT: Estimate Closure Cost - Decon the burn tray and dispose  
 Closure Costs, Open Burn Tray, Haz Waste Con  
 \*\* PROJECT OWNER SUMMARY - SYSTEM (Rounded to 10's) \*\*

TIME 15:28:29

SUMMARY PAGE 2

		QUANTY	UOM	CONTRACT	DES CONT	ESCALATN	CON CONT	OTHER	CON MGMT	TOTAL COST	UNIT COST
33 Open Burn Tray at OB Grounds											
33.15	Decon/disposal of Burn Tray	1.00	EA	4,520	0	0	0	0	0	4,520	4517.86
33.17	Demolition/disposal concrete pad	1.00	EA	22,090	0	0	0	0	0	22,090	22094.83
33.20	Samp Coll. & Anal - concrete pad	1.00	EA	6,210	0	0	0	0	0	6,210	6211.24
33.22	Closure Certification	1.00	EA	8,340	0	0	0	0	0	8,340	8340.00
33.36	Project management / Procurement	1.00	EA	5,400	0	0	0	0	0	5,400	5400.00
TOTAL Open Burn Tray at OB Grounds		1.00	EA	46,560	0	0	0	0	0	46,560	46563.92

Mon 17 Oct 2005  
Eff. Date 10/03/96

Tri-Service Automated Cost Engineering System (TRACES)  
PROJECT BURNT: Estimate Closure Cost - Decon the burn tray and dispose  
Closure Costs, Open Burn Tray, Haz Waste Con  
\*\* PROJECT INDIRECT SUMMARY - ACCOUNT (Rounded to 10's) \*\*

TIME 15:28:29

SUMMARY PAGE 3

	QUANTITY	UOM	DIRECT	FIELD OH	HOME OFC	PROFIT	BOND	TOTAL COST	UNIT COST
33	Open Burn Tray at OB Grounds	1.00 EA	46,560	0	0	0	0	46,560	46563.92

Mon 17 Oct 2005  
Eff. Date 10/03/96

Tri-Service Automated Cost Engineering System (TRACES)  
PROJECT BURNTR: Estimate Closure Cost - Decon the burn tray and dispose  
Closure Costs, Open Burn Tray, Haz Waste Con  
\*\* PROJECT INDIRECT SUMMARY - SYSTEM (Rounded to 10's) \*\*

TIME 15:28:29

SUMMARY PAGE 4

-----									
	QUANTY	UOM	DIRECT	FIELD OH	HOME OFC	PROFIT	BOND	TOTAL COST	UNIT COST
-----									
33 Open Burn Tray at OB Grounds									
33.15	Decon/disposal of Burn Tray	1.00	EA	4,520	0	0	0	4,520	4517.86
33.17	Demolition/disposal concrete pad	1.00	EA	22,090	0	0	0	22,090	22094.83
33.20	Samp Coll. & Anal - concrete pad	1.00	EA	6,210	0	0	0	6,210	6211.24
33.22	Closure Certification	1.00	EA	8,340	0	0	0	8,340	8340.00
33.36	Project management / Procurement	1.00	EA	5,400	0	0	0	5,400	5400.00
-----									
	TOTAL Open Burn Tray at OB Grounds	1.00	EA	46,560	0	0	0	46,560	46563.92



Mon 17 Oct 2005  
Eff. Date 10/03/96  
ERROR REPORT

Tri-Service Automated Cost Engineering System (TRACES)  
PROJECT BURNT: Estimate Closure Cost - Decon the burn tray and dispose  
Closure Costs, Open Burn Tray, Haz Waste Con

TIME 15:28:29

ERROR PAGE 1

-----  
No errors detected...

\* \* \* END OF ERROR REPORT \* \* \*

---

SUMMARY REPORTS	SUMMARY PAGE
PROJECT OWNER SUMMARY - ACCOUNT.....	1
PROJECT OWNER SUMMARY - SYSTEM.....	2
PROJECT INDIRECT SUMMARY - ACCOUNT.....	3
PROJECT INDIRECT SUMMARY - SYSTEM.....	4

DETAILED ESTIMATE	DETAIL PAGE
33. Open Burn Tray at OB Grounds	
15. Decon/disposal of Burn Tray.....	1
17. Demolition/disposal concrete pad.....	1
20. Samp Coll. & Anal - concrete pad.....	1
22. Closure Certification.....	1
36. Project management / Procurement.....	2

No Backup Reports...

\* \* \* END TABLE OF CONTENTS \* \* \*

## **APPENDIX B**

## Response to Comments from the New York State Department of Environmental Conservation

**Subject:** RCRA Closure Plan  
Open Burn Tray – SWMU OU2 (SEAD-23)  
Seneca Army Depot  
Romulus, New York

**Comments Dated:** May 27, 2005

**Date of Comment Response:** October 31, 2005

### Army's Response to Comments

The New York State Department of Environmental Conservation has reviewed the RCRA Closure Plan for the Closure of Open Burn Tray OU2 (SEAD-23). Based upon this review, for the most part, we found that they are technically complete except for the few items discussed below:

**Comment 1:** On Page 2-4 & Page 2-5: specify all the concerned contamination constituents for Confirmatory Sampling as it will produce more reproducible results than does the testing of the rubble samples from the waste stockpiled before disposal.

#### **Response 1:**

The contaminants of concern that will be quantified in the Toxicity Characteristics determination will include those shown in the following table.

Arsenic	1,4-Dichlorobenzene	Methyl ethyl ketone
Barium	1,2-Dichloroethane	Nitrobenzene
Benzene	1,1-Dichloroethylene	Pentachlorophenol
Cadmium	2,4-Dinitrotoluene	Pyridine
Carbon tetrachloride	Endrin	Selenium
Chlordane	Heptachlor (and its epoxide)	Silver
Chlorobenzene	Hexachlorobenzene	Tetrachloroethylene
Chloroform	Hexachlorobutadiene	Toxaphene
Chromium	Hexachloroethane	Trichloroethylene
o-Cresol	Lead	2,4,5-Trichlorophenol
m-Cresol	Lindane	2,4,6-Trichlorophenol
p-Cresol	Mercury	2,4,5-TP (Silvex)
Cresol	Methoxychlor	Vinyl chloride
2,4-D		

**Comment 2:** Review of this Plan found that there was no Quality Assurance Project Plan (QAPP) included with the document. Draft DER-10, Division of Environmental Remediation Technical Guidance for Site Investigation and Remediation dated 12/25/02.

<http://www.dec.state.ny.us/website/der/guidance/der10dr.pdf> outlines the information that should be included in a QAPP. For your convenience the pertinent section is copied below.

## 2.2 Quality assurance project plan

(a) All work plans are to address quality assurance procedures. A generic QAPP should be submitted in advance for sampling using a dynamic work plan. These procedures may be incorporated into the work plan or be supplied as a separate stand alone document. If a separate QAPP is required, the sampling requirements must also be shown in the work plan. The person responsible for conducting the investigation and/or remediation will submit necessary information in a format that corresponds directly to the outline of this section. For ease of reading, QAPP means the section or document that addresses how data will be quality assured. For large, complicated sites, the DER may require a separate QAPP. The following should be included in the Quality Assurance Project Plan:

1. The project's scope and project goals as well as how the project relates to the overall site investigation or remediation strategy;
2. Project organization, including the designation of a Project Manager, Quality Assurance Officer and Field Analyst (if field analysis is planned). Resumes of these individuals may be requested by the DER.
3. Sampling procedures and equipment decontamination procedures.
4. Site map showing sample locations.
5. An "Analytical Methods/Quality Assurance Summary Table" which should include the following information for all environmental, performance evaluation, and quality control samples:
  - i. Matrix type;
  - ii. Number or frequency of samples to be collected per matrix;
  - iii. Number of field and trip blanks per matrix;
  - iv. Analytical parameters to be measured per matrix;
  - v. Analytical methods to be used per matrix;
  - vi. The number and type of matrix spike and matrix spike duplicate samples to be collected;
  - vii. The number and type of duplicate samples to be collected;
  - viii. The number and type of split samples to be collected;
  - ix. The number and type of performance evaluation samples to be analyzed;
  - x. Sample preservation to be used per analytical method and sample matrix;
  - xi. Sample container volume and type to be used per analytical method and sample matrix;
  - and
  - xii. Sample holding time to be used per analytical method and sample matrix.
6. A detailed description of site specific sampling methods to be used, sample storage in the field and sampling handling time requirements.

**Response 2:**

The Army has prepared and submitted a Generic Sampling and Analysis Plan (SAP) including detailed information about the Quality Assurance and Quality Control (QA/QC) measures that will be implemented and maintained during ongoing investigations, studies and remedial actions at the Seneca Army Depot. This document was provided to the NYSDEC and USEPA in June 2005, and comments have been received pursuant to this document from the USEPA at this time. Specific information requested in the question above is presented and discussed in the Generic SAP, and thus will not be reiterated in the site specific RCRA Closure plan for the OB Tray.

Specific response to numbered issues.

1. Closure of Open Burn Tray and Pad.
2. Todd Heino is Parsons' Program Manager for Seneca Actions. James Lowerre is the QA Officer for the Parsons' Seneca Actions. The Task Manager has not been identified at this time and field analyses are not anticipated.
3. Grab sampling of concrete rubble from demolished concrete pad.
4. Provided in Figures 2-1 and 2-2.
5. See Section 2.3.4 for sampling information as amended by analyte list provided in response to comment 1 above. Additional responses provided below.
6. Information about the sampling procedure for concrete has been added to the text of the closure plan. Please see Section 2.3.4 and Table 2-1.

**Comment 3:** Additionally, statements should be added to the Plan that the laboratory to be used for sample analysis should be NYSDOH ELAP CLP Tier certified in the appropriate categories and that a NYSDEC Analytical Services Protocol (ASP) Category B data deliverable will be provided for preparation of a Data Usability Summary Report as described in the attached Division of Environmental Remediation QA Guideline for the Development of Data Usability Summary Reports.

Note that a separate NYSDOH ELAP certification for the Category – TCLP is required by the laboratory to provide TCLP analytical results.

**Response 3:**

Agreed.