SECTION 3

NATURE AND EXTENT OF CONTAMINATION

3.1 INTRODUCTION

3.1.1 This section presents the RI strategy, scope of work, and results for sampling of soil, surface water, sediment, and groundwater at each AOC. Tables 3.1a, 3.1b, and 3.1c present a summary of the sampling and analysis program for the initial RI and subsequent data gap investigations. This section is organized by AOC, following an initial discussion of the background sample collection and results. For each AOC, the description of the sampling strategy, scope and results is supported by summary tables that list all compounds detected in the samples, and figures that display the most relevant results in graphical form. Compounds that were not detected in specific samples are listed as not detected (ND) in the summary tables. A complete list of compounds and detection limits are included in the Data Validation Reports in Appendix B. Tentatively identified compounds (TICs) were analyzed during the initial round of RI sampling and analysis. However, because TICs are not definitively identified, they are not compared to regulatory criteria. TICs were not included in subsequent phases of the RI as their inclusion in earlier phases identified no new contaminants of concern. Quality assurance/quality control (QA/QC) sample results were evaluated as part of the data validation process and QA/QC results are included in the Data Validation Reports in Appendix B. The quality assurance program and data validation procedures are discussed at the end of Section 3.

3.1.2 Analytes detected at each AOC were compared to applicable NYSDEC criteria and upstream or background sample concentrations by media. Surface water criteria were determined using measured hardness values. Surface water sample results were compared to site-specific upstream concentrations and NYSDEC Class C and Class A surface water standards and guidance values for the protection of human health and aquatic life (NYSDEC 1998). Sediment sample results were compared to site-specific background/upstream ranges and sediment screening criteria, which were adjusted for background total organic carbon (TOC) concentrations (NYSDEC, 1999). The NYSDEC sediment screening criteria are for protection of aquatic life, and for protection of human health via the fish ingestion pathway. Sediment screening criteria for protection of human health via direct contact or ingestion of sediments are not available. Soil results were compared to NYSDEC's Technical and Administrative Guidance Memorandum (TAGM) 4046 recommended soil clean up criteria and site-specific background concentration ranges (NYSDEC, 1994). NYSDEC's recommended soil cleanup criteria are for protection of human health and for protection of groundwater quality. Groundwater results were compared to NYSDEC Class GA groundwater standards and guidance values (NYSDEC, 1998). NYSDEC Class GA groundwater criteria are for protection of human health. Analytical data tables at the end of Section 3 include the NYSDEC criteria and background ranges for sediment and surface water. NYSDEC soil and groundwater criteria are included on the soil and groundwater analytical tables. Analytical results that exceed the criteria and background are considered to be potentially "impacted". Impacts may be attributed to site-related sources or activities, non-site related sources or activities, or to naturally-occurring deviations from background ranges. The discussions for each AOC relate the identified impacts to the most likely sources. Results that exceed the NYSDEC criteria and background concentrations are shaded on the data tables and figures.

3.1.3 The identification of impacted samples is used to assess the nature and extent of contamination at each AOC, and the need for further characterization and/or a feasibility study.

3.2 SI SCOPE OF WORK AND RESULTS BY AOC

3.2.1 Background Sample Collection and Results

Upstream and background surface water, sediment, and soil samples were collected to identify background conditions at locations in the Guilderland area, outside the influence of SADVA activities.

3.2.1.1 Background Surface Water Sampling Strategy and Scope

3.2.1.1.1 Black Creek flows through the SADVA and eventually joins the Bozenkill before emptying into the Watervliet Reservoir. In the immediate vicinity of the SADVA, Black Creek is classified by NYSDEC as a Class C surface water body. Class C waters are suitable for fishing, fish propagation, and primary and secondary recreation. One stretch of Black Creek, downstream of the SADVA near the Bozenkill, is classified as a Class B surface water body. This stretch of Black Creek has reportedly been used as a water source by some nearby residents (Town of Guilderland, 2000). Class B waters are suitable for primary contact recreation and any other uses except as a source of water supply for drinking, culinary or food processing purposes. The Watervliet Reservoir is classified as a Class A surface water body. The Watervliet Reservoir is a Class A water body used as a drinking water source for approximately 46,000 people.

3.2.1.1.2 Because the AOCs being investigated as part of this RI are located adjacent to Black Creek, they are considered to have a potential to impact Black Creek, NYSDEC Wetland V-19, the Bozenkill, and the Watervliet Reservoir. To help evaluate potential impacts, three surface water samples (SW21, 22 and 23) were proposed in the SADVA RI Field Sampling Plan and were collected south of the SADVA to characterize upstream surface water quality. Two additional upstream samples (AOC8-SW28 and SD-SW28) were added at the recommendation of the RAB and NYSDEC. SW21, SW22 and SW23 were collected from Black Creek in NYSDEC Wetland V-19 south of Route 201. Sample AOC8-SW28 was collected from Black Creek near Route 202 and SD-SW28 was collected upstream of Route 202. Background surface water sample locations are shown on Figure 3.1.

3.2.1.2 Background Surface Water Sample Results

Background surface water samples SW21, SW22, SW23, and AOC8-SW28 were analyzed for Target Compound List (TCL) VOCs, SVOCs, pesticides, PCBs, and Target Analyte List (TAL) metals. The SW-28 location was resampled in 2004 at a spot farther upstream from Meadowdale Road (Route 202) to ensure the road runoff had not impacted the sampling location. That sample, SD-SW28, was analyzed for SVOCs and metals only. Upstream surface water samples results are compared to NYSDEC Class C surface water standards. NYSDEC Class C surface water standards for metals were determined using site-specific hardness values. Results are presented on Table 3.2. Background surface water results are summarized below:

- No VOCs were detected above Class C surface water standards.
- BEHP was one of only two SVOCs detected. BEHP was detected in four samples at concentrations above Class C surface water standards. The other SVOC, di-n-butyl phthalate, was detected at a low concentration in one sample.
- No pesticides or PCBs were detected.
- Iron was detected above Class C standards in all five samples. Mercury was detected above the Class C standards in four of the five samples and aluminum was detected above the Class C standards in AOC8-SW28 and SD-SW28.

3.2.1.3 Background Sediment Sampling Strategy and Scope

Sediment samples were collected from the same locations as the upstream surface water samples. Three sediment samples (SD21, SD22 and SD23) were collected south of the SADVA from Black Creek in NYSDEC Wetland V-19 south of Route 201. Samples SD28 and SD-SD-28-0-0.5 were collected from Black Creek near Route 202, and upstream of Route 202, respectively, at the recommendation of the RAB and NYSDEC. Background sediment sample locations are shown on Figure 3.1.

3.2.1.4 Background Sediment Results

Upstream sediment samples were analyzed for TCL VOCs, SVOCs, pesticides, PCBs, and TAL metals. SD-SD28-0-0.5 was not analyzed for VOCs because VOCs were not present in significant concentrations in other background sediment samples collected during an earlier RI phase. Upstream sediment sample results are compared to NYSDEC sediment criteria (NYSDEC, 1999). NYSDEC sediment criteria were calculated using the site-specific average TOC concentration of 1.43 percent from background sediment samples. Background sediment results are presented on Table 3.3. Sediment results are summarized below:

- No VOCs were detected above NYSDEC sediment criteria.
- Fifteen SVOCs were detected; seven were above sediment criteria in sample SD28. Six of those compounds were CPAHs. Six CPAHs were in sample SD28 collected near Route 202 and one was in SD-SD28-0-0.5 collected farther upstream. SD28 also contained seven other PAHs at concentrations below sediment screening criteria. PAHs and CPAHs are a byproduct of the combustion of organic compounds, and have a variety of natural and man-made sources, including vehicle exhaust, power plant emissions, forest fires, cigarette smoke, charcoal fires, etc.
- No pesticides or PCBs were detected above NYSDEC sediment criteria.
- Five metals were detected above NYSDEC sediment criteria. Sample SD22 contained the greatest number of metals above sediment criteria (five), and generally had the highest concentrations of all samples.

3.2.1.5 Background Soil Sampling Strategy and Scope

Nine background surface soil sample locations beyond the limits of the SADVA were chosen to characterize background conditions in the area. The nine background locations were chosen in the field with the concurrence of NYSDEC, NYSDOH and the RAB. The surface soil locations are located east, south, and west of the SADVA as shown on Figure 3.1. The background soil samples were analyzed for TCL VOCs, SVOCs, pesticides, PCBs, TAL metals and TOC (note that HP112 is a field duplicate of HP12). The average TOC concentration (3.7 percent) in the background samples was used to determine site-specific NYSDEC soil criteria (NYSDEC, 1994). The results from the background soil sampling are presented on Table 3.4.

3.2.1.6 Background Soil Results

The results from the background soil samples were compared to the NYSDEC recommended soil cleanup criteria. None of the detected VOC, SVOC, or pesticide concentrations was above the soil criteria (Figure 3.2 and Table 3.4). PCBs were not detected. The NYSDEC recommended cleanup criteria for metals include provisions for using site-specific background concentrations, as well as reference concentrations for eastern US soils. The background metals concentrations were integrated into the NYSDEC soil criteria using the guidance provided by NYSDEC in TAGM 4046. The higher of the reference eastern US soil concentrations and the site-specific background concentration for each metal was accepted as the "RI background concentration" for comparison purposes during the RI.

3.2.2 AOC 1 U.S. ARMY SOUTHERN LANDFILL

3.2.2.1 Introduction

AOC 1 is the former U.S. Army Southern Landfill, located in the southeastern portion of the former SADVA. Figure 1.2 shows the location of AOC 1 and Figure 3.3 shows the general layout of AOC 1. The U.S. Army Southern Landfill has a NYSDEC Class 2 ranking. This indicates that the site is a significant threat to public health and the environment and requires environmental action.

3.2.2.2 Site History

3.2.2.2.1 A 1980 report by the Albany County Environmental Management Council (ACEMC) prompted environmental concern at the former SADVA (ACEMC, 1980). This report described aerial photographs showing excavation and disposal activities that occurred in the southeastern areas of the former SADVA. The air photos indicated activity prior to 1942 and extending through 1968, based on 1942, 1952, 1963, and 1968 aerial photographs. The landfill appeared to be inactive between 1973 and 1995, based on 1973, 1978, 1982, 1986, and 1995 aerial photographs. It is not possible to document activities conducted at the U.S. Southern Landfill during time gaps in the aerial photograph coverage. Most activities occurred during the time SADVA was operated by DoD. However, according to a report by the U.S. Army Toxic and Materials Agency (1980), no written records were found that would indicate that disposal of wastes occurred at the former depot. Written waste disposal records are important for helping to assess responsibility for an AOC. However, it is not unusual for there to be few, if any, written records of waste disposal for sites of this age and type. For this reason, historical aerial photos are an important tool to help identify periods of site disturbance that could correspond to waste disposal activities.

3.2.2.2.2 The site background and previous investigations were discussed in detail in the Remedial Investigation Field Sampling Plan (Parsons, 2000). An Investigation Report-Archival Search of the Former SADVA presents a comprehensive site history based on documents relating to SADVA obtained from federal, state, and local agencies. The Final Archival Search Report was prepared by EA Engineering, Science, and Technology (EAEST) in 2003 (EAEST, 2003). The following is a list of major investigations that have characterized the U.S. Army Southern Landfill:

1. "Report of Findings Environmental Liability Review Northeast Industrial Park" for the Galesi Group (ERM-Northeast, 1990).
2. Phase II Investigation for the U.S. Army Corps of Engineers (OHM Remediation Services, 1991).
3. "Final Limited Remedial Investigation Report, Former Voorheesville Army Depot, U.S. Army Southern Disposal Landfill, Guilderland, New York" (Malcolm-Pirnie, 1997).
4. Preliminary Contamination Evaluation (Metcalf and Eddy, Inc. 1998).

3.2.2.2.3 In 1990, ERM-Northeast conducted investigations for the Galesi Group, owners of NEIP. Buried drums, C&D debris, ash, metal debris, chemical solvent odors, floating product, and oil-saturated sand above the water table were observed in test pits. ERM-Northeast recommended quantification of the buried wastes. The 1990 ERM-Northeast report stated that concentrations of arsenic, copper, and nickel exceeded NYSDEC criteria for sediments. In 1991, OHM Remediation Services Company conducted a Phase II investigation for the USACE. Contaminants detected in soils included acetone, chlorobenzene, toluene, xylenes, trichloroethene (TCE) and its derivatives, and PAHs. Contaminants detected in groundwater included acetone, ethylbenzene, xylenes, TCE and its derivatives, and several metals. OHM recommended a second round of groundwater sampling and additional characterization of the bedrock water-bearing zone.

3.2.2.2.4 The USACE developed a Scope of Work dated April 27, 1995 for a Limited Remedial Investigation/Feasibility Study (LRI/FS) to be performed at the former SADVA under USACE Contract No. DACA31-94-D-0017 by Malcolm Pirnie, Inc. (MPI). MPI subcontracted URS Consultants, Inc. (URS) to conduct the field investigation to assess the migration pathways and to evaluate potential remedial actions as per the Scope of Work.

3.2.2.2.5 The 1997 LRI report concluded the following:

- PAHs and metals were detected above NYSDEC criteria in surface soils. The extent of PAH, arsenic, chromium, and silver contamination in surface soils was reportedly localized.
- VOCs, including chlorinated hydrocarbons and fuel-related compounds, PAHs, pesticides, and metals were detected in subsurface soils. Chlorinated hydrocarbons,

fuel-related analytes, and pesticides were only present in subsurface soil samples from the southern portion of the landfill, just south of the pond. The highest concentrations of PAHs and TPH were observed in samples collected from this same area.

- The horizontal extent of groundwater contamination was limited to an area of approximately two acres within the southern portion of the landfill (Figure 3.3). The contamination consisted chiefly of chlorinated hydrocarbons *(i.e.,* TCE and its derivatives) and, to a lesser degree, benzene, acetone, arsenic, and lead. The contamination was reportedly restricted to the shallow perched water table, which reportedly discharges to adjacent surface water bodies around the landfill. Since ACE2 contained high VOC concentrations and the adjacent bedrock well AMW-2 did not contain any contamination, the bedrock aquifer was reportedly not impacted. MPI concluded the acetone reported in bedrock monitoring well sample AMW-11 was attributed to either laboratory contamination or localized shallow water-table contamination which migrated into this well through a compromised bedrock seal.
- The historical surface water analytical data indicates virtually no impact to surface water from the landfill. The VOCs detected previously in the pond at the site were not detected during the LRI sampling.

3.2.2.2.6 The 1998 Metcalf and Eddy, Inc. investigation at the U.S. Army Southern Landfill consisted of a preliminary contamination evaluation. The evaluation concluded that contamination existed in groundwater and recommended further investigation to determine the extent of groundwater contamination.

3.2.2.2.7 USACE contracted with EA Engineering, Science and Technology to conduct an investigation to identify and delineate wetlands in AOCs 1, 2 and 4. The Revised Draft Investigation Report was issued in June 1999. The limits of mapped wetland areas in AOCs 1, 2 and 4 were determined in the field and recommendations were made to protect and enhance wetland areas in the event remedial actions were considered in these AOCs.

3.2.2.3 Conceptual Site Model

3.2.2.3.1 The conceptual site model is based on extensive data from previous investigations as discussed above. The U.S. Army Southern Landfill is a long, narrow fill area located at the southern end of the former SADVA. It is bordered by County Route 201 on the south and a set of active railroad tracks to the northeast. It is bordered on the southwest by New York State Wetland V-19 and railroad tracks that enter the former SADVA. The fill area is identified on Figure 3.3.

3.2.2.3.2 The U.S. Army Southern Landfill reportedly contains C&D debris, industrial and domestic wastes, and wastes from the former burning pit area. Test pits and soil borings completed during the MPI RI characterized the nature and extent of the fill. The fill consists of black ash, slag, metallic debris, steel cable, C&D material, wood, asphalt, red brick, black fill, and sludge-like materials (MPI, 1997). The fill ranges from less than one foot thick along the northeastern side to approximately 13 feet thick along the northwestern side. The presence of VOCs, PAHs, and metals in surface soil, subsurface soil and groundwater has been detected, particularly in the southern section where the fill was approximately five feet deep.

3.2.2.3.3 A potential migration pathway is groundwater that discharges to surface water and sediment in or near Black Creek. Water in Black Creek ultimately flows to the Watervliet Reservoir, which is one of the local drinking water supplies. Direct contact with the surface soils, surface water, and sediment is a potential exposure pathway. However, there is minimal flow from the ponded areas during normal conditions. There could be limited discharge to Black Creek during storm events; however, the increased flow into the system may dilute any elevated concentrations of metals before leaving the ponded areas. Fish were present in the larger pond between the U.S. Army Southern Landfill and the railroad tracks, indicating conditions are suitable for fish survival and propagation.

3.2.2.3.4 Mechanical transport as suspended sediment is a secondary migration pathway. The initial deposition of contaminated sediments may have occurred when the landfill was active and there was minimal vegetation and erosion control. However, in the present pond setting, mechanical transport of sediments could occur only during high flow periods like storms or spring runoff.

3.2.2.3.5 Much is known about the nature and extent of contaminants at AOC 1, based upon the extensive site investigations conducted previously. Additional data were needed to assess impacts to the groundwater, surface water and sediments in areas surrounding the landfill. This RI is intended to supplement and complement the existing data to allow for a feasibility study, if needed. The scope of this supplemental RI is not intended to confirm or repeat previous characterization activities.

3.2.2.4 RI Project Objectives

This RI was intended to fill data gaps for the groundwater and surface water/sediment pathways. The objectives of this RI are as follows:

1. Characterize the surface water and sediment in the pond and wetlands adjacent to the U.S. Army Southern Landfill. The contaminants of potential concern are VOCs, SVOCs, and metals. Assess the biological diversity and health of the pond.
2. Survey for any drainage structures along the railroad tracks (not in Conrail easement) as potential migration pathways adjacent to the U.S. Army Southern Landfill. The adjacent railroad bed is a stable berm with no known drainage pathways. Any drainage pathways found should be documented for future sampling.
3. Abandon and replace monitoring well AMW-11. Obtain a groundwater sample to evaluate whether the leaking bedrock seal from AMW-11 has introduced contamination from the overburden into the bedrock aquifer.
4. Investigate the shallow hydrogeology at AOC 1 to assess whether there is hydraulic communication between the shallow water-bearing zone and the deeper bedrock water-bearing zone, and whether contaminants are present along the eastern property line, adjacent to the fill areas.
5. Assess the presence and risks, if any, posed by a small concrete bunker found west of the AOC 1 area.

3.2.2.5 RI Sampling Strategy, Scope and Results

3.2.2.5.1 The following subsections present the sampling strategy, scope of work, and results for each migration pathway sampled at AOC 1 during this RI. Tables 3.5, 3.6a, 3.6b, 3.8a, 3.8b, 3.8c, 3.8d and 3.9 present the analytical results of sampling, and Table 3.7 presents groundwater elevation data. Analytes not detected in a specific sample are listed as ND in the summary tables. A full list of analytes and their detection limits are included in Appendix B. Surface water and sediment sample results are compared to the applicable NYSDEC criteria and upstream sample concentrations. Shaded sample results on the analytical data tables indicate that NYSDEC criteria and upstream concentrations have been exceeded. Surface water criteria were determined using measured hardness values. Sediment screening criteria were adjusted for background TOC concentrations. Groundwater samples are compared to NYSDEC Class GA groundwater standards and guidance values.

Surface Water Sampling Strategy and Scope

3.2.2.5.2 AOC 1 is located in the southern end of the former SADVA, within the Black Creek drainage area. The main Black Creek channel is located approximately 1,500 feet west of AOC 1. In the immediate vicinity of the former SADVA, Black Creek is a Class C water body. Class C waters are suitable for fishing and fish propagation and primary and secondary recreation, even though other factors may limit the use for that purpose. Individuals were known to withdraw water from Black Creek just south of the Bozenkill (Guilderland Water Department, 2000). That stretch of the Black Creek is classified as a Class B waterway by the NYSDEC. Class B waters are considered suitable for primary contact recreation and any other uses except as a source of water supply for drinking, culinary or food processing purposes. Farther downstream, the Watervliet Reservoir is a Class A water body, and is used as a drinking water source. For the RI, surface water sample results are compared to Class A and Class C criteria. The comparison of site samples to Class A criteria has been made for information purposes only to address RAB concerns that water in Black Creek makes its way to the Watervliet Reservoir drinking water supply.

3.2.2.5.3 The Black Creek channel is surrounded by New York State wetland V-19. Wetland V-19 extends east of Black Creek and is adjacent to the western side of AOC 1. There is a pond and seasonally wet area on the eastern side of AOC 1. This area is connected to wetland V-19 and Black Creek by a drainage ditch.

3.2.2.5.4 Four surface water samples (SW04 through SW07) were proposed to be collected in the pond between the U.S. Army Southern Landfill and the railroad tracks, the adjacent seasonally wet area, and the "standing surface water" in the forested area between the U.S. Army Southern Landfill and wetland V-19. Three of the four surface water samples (SW04 and SW06 from the main pond and SW07 from the seasonally wet area west of the gravel road) were collected as planned. SW05 was not collected from the forested area north of the C&D landfill, because there was no standing water present during the investigation period. This area was checked for standing water multiple times, but none was observed.

3.2.2.5.5 Background surface water samples were collected from Black Creek, upstream of the former SADVA. These background locations are south and southwest of AOC 1 as shown on Figure 3.1. Three background samples were collected from Black Creek near Route 201 and two additional samples were collected from Black Creek near Route 202 and upstream of Route 202. The background surface water analytical results are presented at the beginning of Section 3, and the range of background sample results are presented with the AOC 1 results for comparison purposes

3.2.2.5.6 All of the surface water samples were analyzed for TCL VOCs, SVOCs, pesticides, PCBs, TAL metals and hardness (Table 3.5). Sample locations and results are summarized on Figure 3.4. Both the NYSDEC Class A and Class C surface water criteria are shown on Table 3.5 for comparison to the sample results.

Surface Water Sample Results

3.2.2.5.7 Three VOCs were detected in surface water samples. All of the concentrations were below the NYSDEC Class C surface water standards, where available (Figure 3.4 and Table 3.5).

3.2.2.5.8 One SVOC, BEHP, was detected at two sample locations at concentrations ranging from 16 μg/L to 73 μg/L. BEHP is a compound used in the production of plastic products. All of the concentrations were above NYSDEC Class C surface water standards. However, only sample SW08 exceeded the range of upstream concentrations.

3.2.2.5.9 No pesticides or PCBs were detected.

3.2.2.5.10 Metals concentrations in all samples were below the background ranges and the NYSDEC criteria at AOC 1.

Sediment Sampling Strategy and Scope

3.2.2.5.11 Seven locations (SD04, SD06 and SD08 through SD12) in the pond between the U.S. Army Southern Landfill and the railroad tracks were sampled for chemical characterization of sediments. Six additional sediment samples (SD13 through SD18) were collected from two locations in the pond to assess the diversity and conditions of macroinvertebrate life. Shallow (0 to 0.2 feet) sediment samples were collected at SD04 and SD06, and shallow (0 to 0.2 feet) and deep (0.5 to approximately 0.75 feet) samples were collected at SD08 through SD12. The sediment sampling tube encountered refusal or dense till-type material (non-sediment) at approximately 0.75 feet beneath the sediment surface. Water depths in the pond ranged up to 2.5 feet. One sample (SD05) was collected in the seasonally wet area just west of the access road, and one sediment sample (SD07) was collected in the intermittently flooded forested area between the Southern Landfill and the C&D Landfill. Sediment samples SD04 through SD07 were collected in 2000 and analyzed for TCL VOCs, SVOCs, pesticides, PCBs, and TAL metals (Table 3.6a). SD08 through SD12 were collected in 2004 and analyzed for the same parameter list, with the exception of VOCs (Table 3.6b). Sample locations and results are shown on Figure 3.5. The sediment samples were collected as per the Field Sampling Plan using stainless steel spoons and bowls.

3.2.2.5.12 The sediment sample results were compared to NYSDEC sediment screening criteria and the upstream (background) samples. Upstream sediment results are presented at the beginning of Section 3, and the range of background concentrations is presented on Table 3.6a and Table 3.6b for comparison to the AOC 1 sample results.

Sediment Sample Results

3.2.2.5.13 Only one VOC was detected. Acetone was detected in two samples at concentrations within the background range. There are no NYSDEC sediment screening criteria for acetone.

3.2.2.5.14 Nine SVOCs were detected above background ranges and regulatory criteria in sediment sample SD04 and duplicate sample SD08, collected from the pond shore adjacent to the fill area. All nine SVOCs are PAHs. SVOCs and PAHs were not detected, or concentrations were below the regulatory criteria and/or background ranges, in the other 13 samples.

3.2.2.5.15 Up to four pesticides were detected above background ranges and regulatory criteria in eight of the sediment samples. The highest concentrations of 4,4'-DDE, 4,4'-DDD, and 4,4'-DDT were detected in shallow sediment sample SD06, located at the northern end of the pond. Pesticide concentrations above sediment criteria were limited to the shallow samples collected from depths of 0 to 0.2 feet.

3.2.2.5.16 Eleven of the 12 sediment samples collected from the pond had at least one metal above regulatory criteria and background ranges. Sample SD05, located in the wooded area north of the U.S. Army Southern Landfill, did not have any metal concentrations that exceeded both the background range and regulatory criteria. The highest metal concentrations were in SD04 located in the main pond adjacent to the U.S. Army Southern Landfill. Metals concentrations were generally higher in the shallow sample interval from 0 to 0.2 feet than in the corresponding deeper samples collected from 0.5 to 0.75 feet.

3.2.2.5.17 The PAHs, PCBs, and metals detected in the sediments may have originated from the soils and fill adjacent to the pond or from fill deposited in the edge of the pond. Many of the same compounds were detected in both the soils/fill and the sediments, and at comparable concentrations. However, it is possible that frequent train traffic could have contributed constituents to the pond as well. The compounds detected above criteria in the sediment samples were not detected above criteria in the surface water samples, indicating these constituents are not adversely impacting surface water.

Aquatic Life Diversity and Condition Characterization

3.2.2.5.18 To supplement the chemical characterization of water and sediment quality, an assessment of the diversity and condition of aquatic life in the pond was conducted. This was accomplished through two activities. First, a biologist inspected the pond and shore area within 100 feet of the water's edge, and made a qualitative assessment of the diversity and health of aquatic life in and around the pond, using the Step 1 procedure as described in the NYSDEC's "Fish and Wildlife Impact Analysis for Inactive Hazardous Waste Sites" guidance document (NYSDEC, 1994). The inspection resulted in the following observations:

- A grayish-white film coating the bottom of the pond and a bluish color and oily sheen in the feeder ditches were observed during the field visit on June 22, 2004. Otherwise, no further signs of stress were observed at the pond. The pond water was clear and odorless. No fish or wildlife carcasses were found. The observed species composition was appropriate for the habitat conditions present. All species present appeared active, and looked and behaved in a normal fashion. A copy of this report, including photos of the pond, is presented in Appendix H.

3.2.2.5.19 The second method to assess the diversity and health of the pond was a lab-based assessment of aquatic life present in the pond sediments. Six sediment samples were collected from the pond and sent to Ichthyological Associates, Inc. (IA) in Lansing, NY to conduct an assessment of the biological condition of the pond. This assessment was based on the composition of the aquatic macroinvertebrate community of the pond. The assessment used rapid biological assessment protocols developed by the NYSDEC for evaluating the health of the state's surface waters.

3.2.2.5.20 The sampling was intended to characterize two areas (sampling "stations") of the pond (Figure 3.5). IA sorted and identified aquatic macroinvertebrates from the samples following NYSDEC methods for soft sediments. The level of taxonomic analysis followed that recommended by the referenced method, which generally corresponds to genus/species level identification.

3.2.2.5.21 A series of measures (metrics) reflecting the biological integrity of the aquatic macroinvertebrate community was calculated for each sample. The mean metric values for each sampling station were used to calculate the level of impairment (if any) of the aquatic macroinvertebrate community for each of the sampling stations. The metrics used were those recommended by the referenced method, and included species richness, species diversity, Hilsenhoff biotic index, Dominance-3, and percent model affinity. A copy of this report is presented in Appendix C. A summary of the assessment results is as follows:

- Despite minor differences in water quality parameters at the two stations, water quality values were in a range that could support a desirable aquatic community.

- The biological assessment profile analysis indicates that the aquatic macroinvertebrate community at both stations is *slightly impaired*. Water and sediment quality is generally good, but the macroinvertebrate community is significantly altered from the pristine state. The level of impairment of the aquatic macroinvertebrate community was more pronounced at Station 2 than at Station 1, which is consistent with Station 2 being located closer to the shoreline of the southern landfill.

- The biological assessment of the two sampling stations as *slightly impaired* is not unexpected given the water body sampled. The pond appears to be a man-made environment, and as such is inherently a disturbed site. The shoreline and pond bottom are structurally monotonous, and the aquatic plant community is dominated by a single species, bladderwort. The land surrounding the pond also is not in a naturally-occurring state, having been disturbed by landfilling and other activities. These over-arching habitat limitations are likely a contributing factor to the *slightly impaired* assessment of the pond's biological community.

Groundwater Sampling Strategy and Scope

3.2.2.5.22 In the vicinity of AOC 1, groundwater had been used by the Voorheesville Depot (AOC 5) for washing and septic purposes. Bottled drinking water was used at the Voorheesville Depot. The Voorheesville Depot is now inactive. Most residents are now on the Town of Guilderland public water supply (Guilderland, 2000). The Town of Guilderland public water supply lines run along Route 201 as far as the railroad tracks west of the intersection of Ostrander Road and Route 201 (Figure 2.1). The former SADVA is supplied by the Town of Guilderland Water Department, as are most residents west and south of the area. The homes and businesses east of AOC 1 may still use wells for drinking water supplies. Met Weld Inc. is a manufacturing plant that fabricates and welds fluid processing skids, gas process skids, and stand-alone electrical control buildings. Met Weld Inc. is located east of AOC-1 near the intersection of Ostrander Road and Depot Road (County Route 201). Met Weld Inc. uses groundwater. Groundwater sampling results from the Met Weld well are summarized with other groundwater results later in this section.

3.2.2.5.23 The planned scope of the groundwater investigation for AOC 1 included abandoning and replacing well AMW-11, sampling the new well, and conducting a hydrogeologic investigation to establish the presence or absence of hydraulic communication between the overburden and bedrock water-bearing zones. The objective of the shallow hydrogeologic investigation (stress test/pump test and two weeks of groundwater elevation monitoring) was to establish the presence or absence of hydraulic communication between the overburden and bedrock water-bearing zones. Based upon findings from the abandonment of AMW-11 and redrilling of GW-11R, the groundwater recovery rate assessment and the two weeks of elevation monitoring was not conducted. A bedrock aquifer capable of producing measurable quantities of water was not encountered at GW-11R, which precluded completion of the pump test and two weeks of groundwater elevation monitoring.

3.2.2.5.24 It was believed that the construction of the original well AMW-11 allowed vertical migration of contaminants, because acetone was detected in a previous groundwater sample collected from AMW-11. Existing well AMW-11 was sampled prior to abandoning the well. No VOCs were detected; however, the well was apparently plugged or had filled-in above its reported total depth when constructed. Sediment was encountered within the well at a depth of 34 feet bgs. The sediment was flushed out of the well to a depth of 62 feet. A hard bottom was encountered at 62 feet. A sampler was lowered to the bottom and recovered shale and other rock chips. The well was abandoned from 62 feet to the ground surface by flushing the well casing, filling the casing with cement grout, removing the top five feet of casing and filling the hole with grout.

3.2.2.5.25 Replacement monitoring well (GW-11R) was completed as an open-hole bedrock well. A boring was drilled using the mud-rotary method to five feet below the top of bedrock (67 feet). A six-inch steel casing was then grouted in place. After the grout had set, the bedrock was drilled to 145 feet. The well depth was extended beyond the proposed 85-foot depth because measurable groundwater was not encountered in the bedrock. Polyvinyl chloride (PVC) casing and screen were not installed because the well did not appear to be capable of producing quantities of water sufficient for sampling.

3.2.2.5.26 The well was monitored during drilling, the following day, and six days later. The water level in the well increased very slowly from 144.62 feet below the top of casing on July 11, 2000 to 140.63 feet below the top of casing on July 17, 2000. A groundwater sample was not collected from GW-11R in July 2000 because there was not sufficient groundwater present. The depth to water on November 30, 2000 was 100.06 feet below the top of casing. GW11R was sampled on January 11, 2001. The well recovered very slowly after being purged. It was allowed to recover over night before sampling was conducted. Just enough water was recovered to fill most sample bottles. The well was purged and resampled on July 22, 2004. The well was very slow to recover after purging. It was monitored and allowed to recover until July 28, 2004. The well was sampled using a low-flow pumping method even though it still had not returned to static conditions.

3.2.2.5.27 Subsequent work at AOC 1 included installing three monitoring wells along the east fence line (GW12, GW13 and GW14) to determine whether there was contaminant migration to the east that might be leaving the property.

Groundwater and Surface Water Flow Directions

3.2.2.5.28 Water levels in twelve monitoring wells in the vicinity of the U.S. Army Southern Landfill were measured five times between June 29, 2000 and December 7, 2004 (Table 3.7). During the initial site visit on June 29, 2000, the wells were located and identified, and the current condition of each of the wells was assessed. The wells were in acceptable condition with the exception of AMW-11, which was replaced as discussed above. The water levels in the wells were monitored with an electronic water level indicator.

3.2.2.5.29 A staff gauge was installed in the main pond adjacent to the U.S. Army Southern Landfill so that water level elevations in the pond could be measured and compared with groundwater elevations. The pond elevation (ice elevation) on the staff gauge on December 5, 2000 was 321.69 feet AMSL. A surface water elevation measured in July 2000 was 320.49 feet AMSL. The pond elevation fluctuated approximately 1 foot over the seven-month period.

3.2.2.5.30 Shallow groundwater elevations were mapped for three different dates (Figures 3.6A, 3.6B, and 3.6C). The groundwater flow directions and patterns are similar for all three measurement dates. A groundwater mound is present in the area of the U.S. Army Southern Landfill. Local shallow groundwater flow at AOC 1 is toward Black Creek, and there is a localized flow component toward the pond between the U.S. Army Southern Landfill and the railroad tracks. Groundwater elevations were compared in shallow and deep well pair ACE-2 and AMW-2 on each monitoring date. There is an upward hydraulic gradient at those locations. The upward hydraulic gradients indicate the potential for groundwater movement is from the bedrock upward to the overburden, and therefore downward migration of contaminants is not likely. There is no evidence that dense nonaqueous phase liquids (DNAPL) exist. DNAPLs could migrate opposite to the direction of groundwater flow.

Groundwater Sample Results – June 2000

3.2.2.5.31 During water-level measurements, the water level indicator was examined for the presence of odor, staining, and separate-phase petroleum products. No field evidence of separate-phase petroleum products was observed. Furthermore, there was no field evidence of separate-phase petroleum products in the five wells during well purging and sampling events.

3.2.2.5.32 Five groundwater samples were collected from existing monitoring wells on June 29, 2000 and analyzed for TCL VOCs as an initial screening. Based on the impacts previously identified in AOC 1, three shallow wells (ACE-2, ACE-6, and AMW-1) and two deeper wells (AMW-11 and AMW-2) were sampled to assess the status of groundwater quality at AOC 1. The groundwater sample results were compared to NYSDEC Class GA groundwater standards. A background groundwater sample was not collected because the landfill appears to act as a groundwater mound and there was no groundwater flow into the landfill from surrounding or upgradient areas. Three VOCs were detected in the two shallow wells (ACE-2 and AMW-1) located close to the base of the fill near the pond (Table 3.8a and Figure 3.7A). 1,2-Dichloroethene (1,2-DCE), TCE, and vinyl chloride were detected above Class GA groundwater standards in both wells. No VOCs were detected in the two deeper wells and the other shallow well (ACE-6). The three VOCs detected are chlorinated hydrocarbons. 1,2-DCE and vinyl chloride are breakdown products of TCE. TCE and 1,2-DCE are persistent in groundwater and tend to migrate by dispersion and diffusion (Arthur D. Little, 1985). Vinyl chloride is more likely to volatilize.

3.2.2.5.33 Localized groundwater flow is toward the pond at AOC 1, based on groundwater elevations measured on each of the rounds of water level monitoring. The VOCs detected in groundwater in June 2000 were not detected in surface water samples collected from the pond (SW04 and SW06) in July 2000.

3.2.2.5.34 Malcolm Pirnie concluded in the 1997 LRI that "The horizontal extent of groundwater contamination is limited to an area of approximately two acres located in the southern portion of the landfill (*i.e.,* near AMW-1 and ACE-2). The contamination is limited to the shallow perched water-table which discharges to adjacent surface water bodies around the site". The distribution and concentrations of certain VOCs detected in June 2000 were consistent with those detected in July 1996 by Malcolm Pirnie/URS. However, benzene, toluene, ethylbenzene and xylene (BTEX), and acetone were detected in 1996 but were not detected in the June 2000 samples.

3.2.2.5.35 The deeper groundwater sample from AMW-2 did not contain any VOCs. The lack of VOCs in AMW-2 suggests the VOCs in the shallow zone have not migrated downward at that location. This is supported by the upward gradients measured in well pair ACE-2 and AMW-2 during each of the rounds of monitoring.

Groundwater Sample Results – January 2001

3.2.2.5.36 Table 3.8b and Figure 3.7A present the January 2001 sample results for GW-11R. Acetone and toluene were detected at concentrations below the Class GA criteria. Five metals were detected at concentrations above the Class GA criteria.

Groundwater Sample Results – 2004

3.2.2.5.37 The deep replacement well GW11R and newly installed shallow well GW13 were sampled for TCL VOCs, SVOCs, pesticides, PCBs, and TAL metals in July 2004 and December 2004, respectively. The deep well sample had BEHP and four metals above NYSDEC Class GA groundwater standards (Table 3.8c and Figure 3.7A). BEHP has been widely detected during the RI. The shallow water sample from GW13 did not contain any VOCs or SVOCs above groundwater standards. It contained one pesticide and two metals above the groundwater standards. Newly installed wells GW12 and GW14 were dry at the time groundwater sampling was conducted in December 2004. Very tight glacial till was encountered during the drilling of these wells. The lack of water in these wells indicates shallow groundwater in the vicinity of GW-12 and GW-14 is not migrating to the east from the AOC-1 landfill.

Groundwater Sample Results – 2006

3.2.2.5.38 Eleven shallow wells were sampled in 2006 and analyzed for VOCs; four wells were also analyzed for natural attenuation parameters. The four wells were selected to be inside and outside the VOC plume. The purpose of the 2006 sampling event was to get a more comprehensive picture of the extent of the VOC plume, and an updated picture of VOC concentrations. Natural attenuation parameters were added to help assess whether the water chemistry was indicative of natural attenuation processes, where TCE is naturally degraded over time. The 2006 sample results are presented on Table 3.8d and Figure 3.7A. The VOC concentrations in wells ACE-2 and AMW-1 have substantially reduced since the 200 sampling event. VOC concentrations in all other wells were not detected or were below the applicable NYSDEC Class GA groundwater criteria. One exception is the concentration of vinyl chloride in AMW-104, a field duplicate from AMW-4. The vinyl chloride concentration in AMW-104 (3.4 ug/l) is slightly above the Class GA criterion (2 ug/l). The vinyl chloride concentration in the AMW-4 sample is 1 ug/l. The natural attenuation parameter results suggest natural attenuation is occurring, based on the following:

- levels of chlorinated ethenes (TCE, DCE, VC) have decreased from 2000 to 2006;
- ethenes and ethanes in wells ACE-2 and AMW-1 are higher than outside the VOC plume;
- total alkalinity in ACE-2 and AMW-1 is higher than outside the VOC plume; and
- methane in ACE-2 and AMW-1 is higher than outside the VOC plume.

Offsite Groundwater Quality

3.2.2.5.39 Met Weld Inc. has a groundwater well that is used to supply water to the facility at the intersection of Ostrander Road and Depot Road. A 1996 report of sampling data listed the well depth as 150 feet with a casing set to 40 feet. Beginning in the November 1999 report of sampling data, the well depth was listed as 230 feet with a casing set to 200 feet. Groundwater sampling results for August 26, 1996, December 28, 1999, and February 4, 2002 were obtained from NYSDOH and reviewed. The samples were analyzed for VOCs, pesticides, PCBs, metals, nitrates, and coliform. The only compounds above criteria were chlorides, sodium, and fluoride. The only restriction for the consumption of water from the Met Weld well identified by the NYSDOH may be related to individuals on a sodium-restricted diet. There were no apparent impacts associated with AOC-1 identified in the Met Weld groundwater results.

3.2.2.5.40 In August 1990, Albany County Health Department (ACHD) conducted a sanitary survey and sampled wells at three residences along Depot and Ostrander Roads (Figure 3.7B). Well depths range from 60 to 300 feet. The well samples were analyzed for volatile halogenated organic compounds, aromatic purgeable organic compounds, organochlorine pesticides and PCBs, and Priority Pollutant acid extractable and base neutral (semivolatile) organic compounds. With the exception of chloroform (2 ug/l) at Residence # 1, all sample concentrations were below the limit of detection.

3.2.2.5.41 Under a contract with USACE Omaha District, OHM conducted groundwater sampling at residences along Depot Road in 1991. The residences were located between Hennessey Road and Ostrander Road. Three residences along Ostrander Road were also sampled. The stretch of Depot Road is adjacent to the Southern Landfill (AOC 1) and the DNSC Voorheesville Depot (AOC 5). Twenty-one samples were collected, and the locations are shown on Figure 3.7C. Well depth information was not provided. Groundwater samples were analyzed for VOCs, base/neutral SVOCs, and metals. The sample results are presented in the Final Archival Search Report (EAEST, 2003). Zinc exceeded the groundwater criteria in one sample collected near the intersection of Depot Road (County Route 201) and Stone Road. The concentrations of zinc, arsenic, chromium and copper in all other well samples were below the referenced screening criteria. Three VOCs were detected; acetone, methylene chloride and chloroform. Acetone and methylene chloride were detected in every sample, including laboratory blank samples, suggesting the presence of these VOCs may be attributable to laboratory contamination. The concentrations of chloroform in all samples were below groundwater screening criteria or were not detected. All of these residential sampling locations are likely to be upgradient of the SADVA because the well locations are upstream along the Black Creek, or are topographically higher than the wetland areas surrounding Black Creek at the southern end of the SADVA.

3.2.2.5.42 In response to a data request to support the SADVA RI, ACHD provided records of residential well sampling for residences located near the SADVA (Figure 3.7d). ACHD provided records for seven residential wells that were sampled and analyzed between 1991 and 2004. Well depths range from 78 to 327 feet. The well samples were analyzed for several metals (iron, manganese and sodium) and other general water quality parameters (alkalinity, hardness, nitrate, chloride, sulfate and fluoride). Figure 3.7D shows the locations of the residences and lists the analytes with concentrations that exceed the referenced acceptable range, as provided on the analytical results reports provided by ACHD. Iron was most frequently detected at concentrations above the acceptable range. All of the sample locations are likely to be upgradient of the SADVA, because they are topographically higher and east of Black Creek (which is likely a shallow groundwater boundary), or are upstream of the SADVA along Black Creek.

Soil Pathway

3.2.2.5.43 During the Parsons RI monitoring well installations in 2004, one soil sample was collected from each of the well borings (GW12 and GW14) at AOC 1. These two well borings are just outside the limit of the landfill. The soil samples were analyzed for TCL VOCs, SVOCs, pesticides, PCBs, and TAL metals. No VOCs, pesticides, or PCBs were detected in the soil samples from GW12 and GW14 (Table 3.9 and Figure 3.8). BEHP was detected below NYSDEC soil criteria in sample GW14DE. Beryllium and copper were detected slightly above the NYSDEC soil criteria in both soil samples.

3.2.2.5.44 VOCs, SVOCs, and metals were detected in surface soils, and VOCs and metals were detected in subsurface soils during an earlier RI in 1997 (Malcolm Pirnie, 1997). Malcolm Pirnie concluded that analytes detected in the site surface soils (in particular arsenic, chromium, and TCE), and VOCs and some metals in subsurface soils, have migrated to the shallow groundwater through leaching processes. The contaminants cited by Malcolm Pirnie were above site background concentrations and some also exceeded NYSDEC soil criteria. The 1997 RI soil data have been used in the human health risk assessment for AOC 1, described in Section 4.

Bunker Assessment

3.2.2.5.45 A partially buried structure of unknown size and use, referred to as a bunker, was identified during a site walkover by Parsons and the USACE. The bunker is located along Third Street (formerly called Robbins Street) near the intersection with a dirt road that runs between the railroad tracks and Levee P-63 (also called Levee 101). The approximate location of the bunker is shown on Figure 1.2. There was an earth-sheltered entry built into the levee. The entry appeared to be unstable so the bunker was not investigated at the time of discovery. There was a metal vent pipe protruding from the top of the levee.

3.2.2.5.46 The history and usage of the bunker is unknown. During an interview and site walkover with a former SADVA employee, it was speculated that columbium and tantalum ore might have been stored there. These ores contain low levels of naturally-occurring uranium and thorium. No documentation was found to corroborate the information. The bunker was investigated on November 17, 2004. The intent of the investigation was to develop an understanding of the bunker's physical structure, to screen the bunker and surroundings for radioactivity, and to collect confirmatory samples.

3.2.2.5.47 A backhoe was used to clear debris from the entryway of the bunker. The entryway was constructed with wood timbers stacked to make walls supported by soil on the back sides. Timbers spanned from one timber wall to the other to make a roof. The roof was also covered with soil. The fallen roof timbers, upper wall timbers and associated soil were pulled away from the entrance of the bunker. The bunker itself appeared to be a steel tank standing on end. The bunker was approximately eight feet in diameter and 10 feet tall. The bunker was set into the berm of the levee. A door had been cut into the side of the bunker. The door was hinged so it could be closed and padlocked. The bunker contained some old car parts and a wooden pallet. The bunker was padlocked closed at the conclusion of the investigation.

3.2.2.5.48 There was no visual evidence of contamination in or around the bunker. The bunker and adjacent soils were screened for the presence of radiation with a 2x2 NaI gamma scintillator (for gamma radiation) and a GM Pancake probe (for alpha, beta, and gamma radiation). No readings above background were observed during the initial entry. Six small scans of accessible surfaces within the bunker were conducted using the GM pancake probe. Ten smears were collected from various surfaces within the tank and counted for gross alpha and beta radiation. Two radon detectors were installed in the bunker. All these results were similar to background levels. The radiation survey results lead to the conclusion that there was no radioactive contamination at the bunker. Results are presented in Appendix G.

3.2.2.6 AOC 1 Summary

This RI was intended to fill several data gaps in the characterization of groundwater and surface water/sediment pathways. The objectives and associated findings of the RI at AOC 1 are as follows:

Objective 1) *Characterize the surface water and sediment in the pond and wetlands adjacent to the U.S. Army Southern Landfill. The contaminants of potential concern are VOCs, SVOCs, and metals. Assess the biological diversity and health of the pond.*

Thirteen sediment samples and three surface water samples were collected from the large and small ponds adjacent to the U.S. Army Southern Landfill. One additional sediment sample was collected from the forested area to the north that has seasonally high water. BEHP was detected above NYSDEC criteria and upstream ranges in surface water at the south end of the pond, near the landfill. PAHs, pesticides, PCBs and up to 10 metals were present above NYSDEC criteria and background in sediments from the main pond. The sediment is about 0.75 feet thick; the top 0.5 feet tends to have the highest concentrations of detected analytes.

The biological assessment of the pond indicates that the aquatic macroinvertebrate community at both stations is slightly impaired. Water and sediment quality is generally good, but the macroinvertebrate community is significantly altered from the pristine state. The level of impairment of the aquatic macroinvertebrate community was more pronounced at Station 2 than at Station 1, which is consistent with Station 2 being located closer to the southern landfill. The pond appears to be a man-made environment and as such is inherently a disturbed site. The pond morphology, vegetation and surroundings are not diverse or naturally-occurring. These over-arching habitat limitations are likely a contributing factor to the slightly impaired condition of the pond's biological community.

Objective 2) *Survey for any drainage structures along the railroad tracks (not in Conrail easement) as potential migration pathways adjacent to the Southern Landfill. The adjacent railroad bed is a stable berm with no drainage pathways. Any drainage ways found should be documented for future sampling.*

The area along the railroad tracks was visually surveyed for drainage structures on June 29, 2000. No structures were identified.

Objective 3) *Abandon and replace monitoring well AMW-11. Obtain a groundwater sample to evaluate whether the leaking bedrock seal from AMW-11 has introduced contamination from the overburden into the bedrock water-bearing zone.*

Well AMW-11 was sampled on June 29, 2000. No VOCs were detected. The well had apparently filled in to some extent. AMW-11 was abandoned on July 11, 2000. Replacement well GW-11R was completed on July 11, 2000. However, a bedrock aquifer capable of producing suitable quantities of water for sampling was not encountered during drilling. Replacement well GW-11R was sampled on January 11, 2001 after enough groundwater had accumulated in the well to allow purging and sampling. Acetone and toluene were detected at concentrations below Class GA criteria. Five metals were above Class GA criteria. GW11R was sampled again on July 28, 2004. BEHP and four metals were detected at concentrations above the groundwater criteria.

Objective 4) *Investigate the shallow hydrogeology in the vicinity at AOC 1 to assess whether there is hydraulic communication between the shallow water-bearing zone and the deeper bedrock water-bearing zone, and whether contaminants are present along the eastern property line.*

The hydraulic communication between the shallow water-bearing zone and bedrock was not evaluated by pump test analysis and continuous monitoring because insufficient water was encountered in AMW-11 and replacement well GW-11R. The presence of acetone and toluene in well GW-11R suggests there may be a connection between the bedrock and shallow overburden water-bearing zones at that location. However, any connection between the two zones is restricted by the presence and size of bedrock fractures that allow groundwater to flow into and through the bedrock. At GW-11R, there is minimal groundwater available in the bedrock. The overburden materials between the shallow water-bearing zone and the bedrock were a dense till with silt and clay. Groundwater elevations measured in well pair ACE-2 and AMW-2 indicate that groundwater flows from the bedrock upward toward the overburden in the area of this well pair.

The extent of VOC compounds detected in groundwater in June 2000 was limited to the same area of the Southern Landfill that was identified in 1997. BTEX and acetone, detected in 1997, were not detected in the same wells during the 2000 sampling event. VOC concentrations within the plume area declined significantly between the 1997 RI and the 2006 sampling event. The three shallow monitoring wells (GW12, GW13, and GW14) were installed along the east side of AOC 1 in 2004. The sampling results for these wells indicate VOCs are not migrating offsite to the east in the shallow water table. VOCs were not detected in the three wells (GW12, GW13, and GW14) during the 2006 sampling event.

3.2.3 AOC 2 BIVOUAC AREA/BASE COMMANDER'S LANDFILL

3.2.3.1 Introduction

3.2.3.1.1 AOC 2 is the former Bivouac Area located west of County Route 201 (Figure 1.2). This 40.6-acre parcel was part of the SADVA from its inception until its sale to a private landowner in 1963. Historical information indicates the parcel was used as a transit troop bivouac area and officer's family housing area in the 1950s and 1960s. After purchasing the property in 1963, the new owners noticed a disposal area (later referred to as the Post Commander's Landfill). The existence of the landfill was subsequently reported to the NYSDEC. This AOC 2 assessment incorporates data collected during the initial RI beginning in July 2000 and ending with a data gap investigation in November 2004. Figure 3.9 shows the area of the Post Commander's Landfill and RI sample locations.

3.2.3.1.2 The RI was designed to supplement site characterization data collected during past investigations at the site. Following completion of the RI field work, and after assessment of the resulting analytical data, the USACE directed Parsons to complete a quantitative human health risk assessment and Engineering Evaluation/Cost Analysis for AOC 2, and a non-time critical removal action was subsequently performed. The AOC 2 area has since been remediated via removal of the waste materials and impacted soils. Subsequent to the removal action, groundwater quality will be monitored to ensure that the removal action was effective at mitigating groundwater contamination. The following subsections provide details of the process and findings that led to remediation of AOC 2.

3.2.3.2 Site History

3.2.3.2.1 The following summary of the AOC 2 site history is based on information from the Final Archival Search Report (EAEST, 2003). Much of the site history has been developed from interpretations of historical aerial photographs. These aerial photographs represent periodic snapshots in time. Identification of activities conducted between dates of aerial photograph coverage is not possible. AOC 2 was agricultural land with farm buildings, open areas, orchards, and a dirt path leading to afour-acre wooded area until 1943. In the 1943 air photo, approximately one acre of the wooded area had been cleared. A 1952 air photo showed a 0.5-acre excavation that contained a ponded area. Storage containers were not observed. By 1961, the excavation had been backfilled and was nearly completely vegetated. A 0.75-acre area north of the original area had been cleared and a building had been constructed. Small circular areas near the loop in the dirt path/road and southwest of the building appear to be disturbed areas. In 1963, the building was gone and the excavated area was being backfilled and the vegetation was encroaching on the cleared area. By 1968 the area was inactive. Three slightly depressed areas were still visible. A small stream ran between the former excavation areas and a wetland to the west. The property was purchased by private individuals on May 31, 1963. The property has been used as a residence and family farm from 1963 through the present.

3.2.3.2.2 The site background and previous investigations were discussed in detail in the Remedial Investigation Field Sampling Plan (Parsons, 2000). The following reports describe investigations that have characterized AOC 2, the Post Commander's Landfill/Bivouac Area:

1. NYSDEC Letter Report dated January 11, 1982 (NYSDEC, 1982).
2. Albany County Department of Health (ACDH) Letter Report dated January 10, 1983, (ACDH, 1983) (Appendix C).
3. Evaluation of Analytical Chemical Data From Burns' Property, Guilderland, NY dated April 11, 1983, (USEPA/NUS Corporation, 1983).
4. Phase I Investigation Report, Northeast Industrial Park (Formerly Voorheesville General Depot) Albany County, New York dated September 1984 (Wehran Engineering, P.C., 1984).
5. Site Inspection by Wehran Engineering, Albany County DOH, and NYSDEC (Wehran, date unknown).
6. Environmental Site Assessment for the Galesi Group prepared by Kaselaan and D'Angelo Associates Report dated August 12, 1988, (Kaselaan, 1988).
7. Engineering Final Report Site Investigation. Contamination Evaluation at the Former Schenectady Army Depot, New York by Metcalf & Eddy, Inc. prepared February 1988 (Metcalf & Eddy, 1988).
8. "Phase I Draft Report, Schenectady Army Depot Site, Voorheesville, Guilderland, New York" by OHM Remediation dated June 1991, (OHM, 1991).
9. Geophysical Investigation by Quantum Geophysics, Inc. conducted April 1997, (Quantum Geophysics, April 1997).
10. EM Investigation by USACE, May 1999, (USACE, 1999).

3.2.3.2.3 The previous investigations listed above led to the following information about the former Bivouac Area. The NYSDEC collected samples of small vials containing pharmaceutical pills and noted areas devoid of vegetation in 1979 and 1980. An ACDH letter dated January 10, 1983 indicated that the concentrations of Priority Pollutants at the Bivouac Area were not of concern and analyses of the pills indicated they were salt tablets. The GSA and ACHD indicated that they were unable to find any record of disposal activities at the Bivouac Area.

3.2.3.2.4 Representatives from Fred C. Hart of the USEPA field investigation team (FIT) collected seven soil and three groundwater samples on October 20, 1982 for the USEPA. NUS FIT evaluated the analytical data in a report dated April 11, 1983 (USEPA/NUS, 1983). Seven soil samples were collected from the fill areas west of the barn on the Burns property. Three groundwater samples were collected from nearby domestic wells including the Burns' well, Rivers' well, and Dwyer's well. The Burns and Dwyer wells are located near Depot Road in the vicinity of the each respective home. The Rivers well is located west of the house and south of the fill area in a farm field. The soil samples were analyzed for Priority Pollutants and opiate drugs (codeine, morphine, cocaine, meperidine, and papaverine). The presence of small glass pill bottles and past storage of opiate drug derivatives at SADVA led to the inclusion of opiates in the analyses. The report included the following findings/conclusions:

1. Lead was detected above average naturally-occurring ranges in three samples collected from the fill areas (54 mg/kg to 174 mg/kg). Background ranges used during this RI are 16.5 mg/kg to 60.9 mg/kg, as listed in Table 3.4.

2. No opiate derivatives were detected in the soil samples. The results were qualified as tentative.

3. The groundwater sample from the Burns well included bis(2-ethylhexyl)phthalate, phenol, 4-methylphenol and nickel. These results are above Class GA groundwater standards. Phenol, bis(2-ethylhexyl)phthalate, and 4-methylphenol were not detected in the Rivers and Dwyer wells. Nickel was detected below the groundwater standards in these two wells.

4. The report concluded the Burns' property may present a public health problem to the Guilderland community. There is unlimited access to the pills, powders, and drums on-site. Analytical data from the Burns' well suggests a groundwater contamination problem which may impair the potability of the area's groundwater. During times of high surface water runoff, Black Creek, the receiving surface water body, may receive contaminated runoff from the Burns property.

5. The Hazard Ranking System (HRS) score was recalculated based on the sampling results.

3.2.3.2.5 A Phase I investigation report prepared by Wehran Engineering, P.C. in September 1984 indicated that there was evidence of waste dumping in the western portion of the Bivouac area. Observations included areas of stressed vegetation, oily material, discolored water, "paint-like" odors, a mounded area, pharmaceutical pill bottles, approximately 10 metal drums (15- to 50-gallon), scattered amber glass laboratory bottles, stained soil areas, broken concrete pads, and a small building foundation.

3.2.3.2.6 In February 1988, the "Engineering Final Report Site Investigation, Contamination Evaluation at the Former Schenectady Army Depot, New York; Submitted by Metcalf and Eddy, Inc." identified two areas of possible buried metal. Abandoned 55-gallon drums were sampled and found to contain light fuel oil, and concentrations of barium, chromium, and lead. Soil borings were drilled and one monitoring well was installed. A groundwater sample contained chromium at a concentration below the MCL. In June 1991, a "Phase I Draft Report, Schenectady Army Depot Site, Voorheesville, Guilderland, New York", was prepared by OHM and reported xylenes were present in one surface soil sample and total petroleum hydrocarbon (TPH) was present in three more samples. Chromium, lead, and zinc were present in another sample. The surface sample results were thought to indicate possible subsurface contamination. A 1997 resistivity survey conducted by Quantum Geophysics, Inc. concluded there was no contaminant plume present in the subsurface. However, the survey results were erratic because of the nearby overhead electrical lines.

3.2.3.3 Conceptual Site Model

3.2.3.3.1 Previous use of the Bivouac Area included the disposal of drums and various wastes in a portion of the 40-acre site. The disposal site was backfilled and covered with vegetation consisting of grass and thick brush. However, some of the contaminant containers may have leaked, thereby posing a potential hazard. Evidence of the disposal activities were present at the time of the RI, consisting of small vials that were observed sporadically around the area. Part of a drum was visible at the ground surface and dark oily residues were visible downhill of the drum. An area of ground where standing water had been observed during rainy periods had produced discolored soil and runoff.

3.2.3.3.2 Results of previous surface soil samples have detected petroleum hydrocarbons, xylenes and metals contamination. Results of groundwater samples collected downgradient of the disposal area in 1988 only detected chromium, which was below the groundwater standard. The disposal area is approximately 1,000 feet west of the residence. A drinking water well is located on the property, which was used by the residents at one time but is no longer used for domestic purposes (EAEST, 2003). The exposure pathway for soil, surface water, and sediment consists of direct contact with, and possible ingestion or inhalation of, soil, water, or sediment. The characterization of the surface soil, sediment, surface water, and groundwater pathways are not complete. Data gaps exist for each of the four potential exposure pathways. Possible receptors at this site include the residents, persons disturbing or using the soil or water, and farm animals coming in contact with soil and water. This RI was designed to supplement the existing site data.

3.2.3.4 RI Project Objectives

The overall objective of the RI was to assess the nature and extent of contamination at AOC 2 by means of the following:

1. Locate and characterize the extent of fill in the area known as the Post Commander's Landfill within the former Bivouac Area.
2. Analyze surface soil samples for VOCs, SVOCs, dioxins, and metals to assess the potential dermal and ingestion exposure pathways by humans and fauna.
3. Locate and characterize residual subsurface soil contamination and the nature of fill as a source for VOCs, SVOCs and metals.
4. Locate and characterize residual groundwater contamination; analyze samples for VOCs, SVOCs and metals.
5. Investigate potential Army ownership of abandoned drum remains at the base of the hill, northwest of the pill bottles. Unless there are markings or labels on the drums indicating otherwise, the debris will be assumed to be under Army ownership.
6. Properly abandon existing well MW-05.
7. Characterize surface water/sediment in the drainage way leading from the disposal area westward toward swampy areas that connect to Black Creek.
8. Sample the residential well located on the property (designated GW01).

3.2.3.5 RI Sampling Strategy, Scope of Work and Results

3.2.3.5.1 The following subsections present the sampling strategy, scope of work, and results for each media sampled at AOC 2 during this RI. Tables 3.10a, 3.10b, 3.11a, 3.11b, 3.13a, 3.13b and 3.14a and 3.14b present the analytical results of the surface water, sediment, groundwater, and soil sampling, respectively. Table 3.12 presents groundwater elevation data. Table 3.15 presents soil results for dioxins and furans, and Tables 3.16a and 3.16b present results from the analyses of pill bottle contents. Tables 3.17a and 3.17b present waste characterization data. Compounds not detected in a specific sample are listed as ND in the summary tables. A full list of compounds and their detection limits are included in Appendix B. Sample results are compared to the applicable NYSDEC standards and criteria and upstream/background samples. Shaded sample results on the data tables and figures indicate those samples that exceed both NYSDEC criteria and upstream/background concentrations. Surface water standards were determined using measured hardness values. Sediment and soil criteria were determined using background TOC concentrations. Groundwater samples are compared to NYSDEC Class GA groundwater standards.

3.2.3.5.2 During the RI a series of test pits were excavated, as described later in this section. The test pits identified numerous areas of waste disposal, as identified on the AOC 2 figures. Paint residue, tar buckets, drums, pill bottles and solvent-filled bottles were found in separate and distinct areas, with limits as indicated on the figures. As noted in this section, the sampling at AOC 2 was expanded to address the waste disposal areas found during the course of the RI.

3.2.3.5.3 All environmental media have been sampled at AOC 2 to characterize the nature and extent of contamination. The limited sampling of the pill bottles was preformed for screening purposes only, and was not meant to be fully representative of the contents of all bottles found at AOC 2. The pill analyses confirmed the suspicion that the bottles contained salt or iodine tablets. The bottles sent for analysis included one each of four different bottle types found at AOC 2. One sample was analyzed for sodium and the others were analyzed for iodine, cyanide, sodium, and chloride. Five composite samples were analyzed for pH as a predictor of corrosivity.

Surface Water Sampling Strategy and Scope

3.2.3.5.4 AOC 2 is located west of Route 201 within the Black Creek drainage area. The western portion of AOC 2 lies within New York State Wetland V-19. Surface water entering Wetland V-19 flows either north or south, and exits via two Black Creek tributaries. Surface water exiting via the southern tributary flows southeast through Wetland V-19, and then north through the former SADVA near AOC 1, and ultimately into the Bozenkill and the Watervliet Reservoir. The surface water exiting via the northern tributary flows generally north and joins Black Creek at New York State Wetland V-18, located downstream of the former SADVA and upstream of the Bozenkill. These tributaries of Black Creek are classified as Class C waters, suitable for fishing and fish propagation and primary and secondary recreation. These tributaries enter Black Creek upstream of a stretch of Black Creek that is classified as Class B. Class B waters are suitable for primary contact recreation and any other uses except as a source of water supply for drinking, culinary or food processing purposes (NYSDEC, 1985). There may be residences using surface water from this stretch of Black Creek (Town of Guilderland, 2000).

The Watervliet Reservoir is a Class A water body used as a drinking water source for a population of over 40,000 people. One tributary to Black Creek located upstream of AOC 2 is classified as Class C(T). Class C(T) streams are suitable for trout habitation. This tributary also flows into Wetland V-19. The surface water results have been compared to Class A (drinking water) and Class C (fish consumption and propagation) criteria even though the surface water in the hardwood swamp at AOC 2 is seasonal. Applying Class A and Class C standards may be inappropriate, given these uses do not apply to the ephemeral water in the hardwood wetland. However, since this area is connected to Black Creek, the same criteria that have been applied to Black Creek have been used.

3.2.3.5.5 In the RI Field Sampling Plan, five surface water samples (SW1 through SW5) were proposed to determine if there is contamination downgradient from the Post Commander's Landfill area and in the discolored and visibly stressed drainage way. SW1 was not collected due to the lack of water at that location during the sampling event in August 2000. Ten additional surface water samples were collected at AOC 2 in 2004 to supplement the original samples and to fill data gaps. Samples SW2 through SW7 and SW10 through SW14 were collected from the wetland area at the base of the hill, below the Post Commander's Landfill (Figure 3.10). WTP27 was collected from rainwater that collected in the Test Pit 27 excavation at the base of the hill. SW08 was collected from a small ponded area within the defoliated drainage way between the Post Commander's Landfill and the swamp area. SW9 was collected from the farm pond behind the Burns home. Surface water samples SW2 through SW9 were analyzed for TCL VOCs, SVOCs, pesticides, PCBs, TAL metals, and hardness. Samples SW10 through SW14 were not analyzed for VOCs because VOCs were not detected above criteria during the initial surface water sampling round in 2000. Surface water results are compared to NYSDEC Class A and Class C surface water standards (NYSDEC, 1998) and upstream ranges (Table 3.10a and 3.10b). The surface water analytical program is summarized on Table 3.1a, Table 3.1b, and Table 3.1c. Surface water sample locations and key results are shown on Figure 3.10.

3.2.3.5.6 Upstream or "background" surface water samples were collected from Black Creek, upstream of the former SADVA, for comparison with the AOC 2 samples. Three upstream samples were collected from Black Creek near Route 201, and two additional samples were collected from Black Creek near and upstream of Route 202 (Figure 3.1). Upstream surface water results were presented at the beginning of Section 3.

Surface Water Results

3.2.3.5.7 No VOCs were detected above New York State surface water standards (Tables 3.10a and 3.10b). One SVOC (BEHP) was detected above New York State Class A and C surface water criteria and upstream concentrations in two samples (SW7 and SW14). SW07 was collected from the wetland area near some large metallic vessels, near the utility right-of-way. SW14 was also collected in the wetland in the area where glass bottles containing apparent solvent liquids were found. Ten pesticides were detected at low concentrations but above the Class A and C surface water criteria. Pesticides were detected throughout the wetland area at the base of the hill and in the defoliated drainage area. No PCBs were detected. No VOCs, SVOCs, pesticides or PCBs were detected above Class A or C surface water criteria in SW9, the sample collected from the farm pond behind the residence.

3.2.3.5.8 Eight metals were detected above Class A and C surface water criteria and upstream concentrations (Table 3.10a and Table 3.10b). SW6 had the greatest number of metals above criteria (seven) and generally had the highest detected concentrations. SW6 was collected in the wetland area at the base of the hill. Aluminum and iron were the metals most frequently detected above criteria. No metals were detected above Class A or C surface water criteria in SW9, the sample collected from the pond behind the residence.

Sediment Sampling, Strategy and Scope

3.2.3.5.9 In the RI Field Sampling Plan, five sediment samples were proposed to determine if there is contamination in the discolored and visibly stressed drainage way downgradient from the disposal area. Nine sediment samples were added in 2004 to fill data gaps and further evaluate potential impacts of the disposal area on the wetland at the base of the hill. Eight of the additional samples (SD6 through SD8 and SD10 through SD14) were collected from areas that contained debris or had other visual indications that impacts might be present at, or downhill from, these areas. One additional sample (SD9) was collected from the farm pond behind the Burns home to evaluate potential exposure risks to the residents. Sediment samples SD1 through SD9 were analyzed for TCL VOCs, SVOCs, pesticides, PCBs, TAL metals, and TOC. Sediment samples SD10 through SD14 were analyzed for metals only, on the basis of the initial sediment sample results. The analytical program is summarized on Tables 3.1a, 3.1b and 3.1c. Sample locations are shown on Figure 3.11. The site setting and sample locations are the same as those discussed above for AOC 2 surface water samples.

Sediment Results

3.2.3.5.10 Sediment results are presented in Tables 3.11a and 3.11b, and are summarized on Figure 3.11. VOCs and PCBs were not detected in the sediment samples from AOC 2. One SVOC, bis(2-ethylhexyl) phthalate, was only detected at a concentration below the NYSDEC sediment criteria in SD8. One pesticide, alpha-chlordane, was detected above NYSDEC sediment criteria only in SD4. The other six pesticides detected in various samples were at concentrations below the NYSDEC sediment criteria. There was no consistent pattern between the pesticides detected in the sediment samples and surface water samples. Nine metals were detected at concentrations above the NYSDEC sediment criteria and background. Lead was the metal most frequently detected (six samples) above the sediment criteria, followed by zinc (three samples), and iron and copper (in two samples each). SD8 and SD13 contained the greatest number of metals (four) above the sediment criteria. SD8 was collected from the defoliated drainage way and SD13 was collected at the base of the hill near the pint-sized “solvent bottles”. No VOCs, SVOCs, pesticides or PCBs were detected and no metals were detected above sediment criteria in SD9, the sediment sample collected from the farm pond behind the residence.

Groundwater Sampling Strategy and Scope

3.2.3.5.11 The scope of the groundwater investigation for AOC 2 included the collection of groundwater samples using Hydropunch technology from the nine "HP" borings drilled in the cross formation over a suspected source area identified by a 1997 geophysical survey. Five monitoring wells were subsequently installed upgradient (GW03) and in the vicinity of, or downgradient of, defoliated and fill areas (GW04 through GW07). Existing monitoring well MW-5, located west of the Post Commander's Landfill, had been damaged by frost heave, and was removed. Well MW-5 was abandoned by removing the outer protective casing. The inner PVC well casing was pulled from the ground and then the remaining hole was grouted to the surface.

3.2.3.5.12 HP groundwater samples were collected from just below the top of the water table at depths ranging from 1 to 11.5 feet. Groundwater samples were collected from HP01, HP07, and HP09 located on the perimeter of the anomalous area indicated by the geophysical survey, and from HP04 located in the center of the anomalous area. A groundwater sample was collected from the residential well on the AOC 2 property (GW01), and from the residential well on the neighboring property located downhill from AOC 2 (GW02), on the south side. Water from this well was reportedly pumped up the hill to the well adjacent to the residence (Rivers, 2000). It was used mainly during dry periods to replenish the well close to the house, when that well was not capable of supplying sufficient quantities of water. Groundwater samples were also collected from wells GW03 through GW07. These wells had screens in the shallow water table.

Groundwater and Surface Water Flow Directions

3.2.3.5.13 Local groundwater flow at AOC 2 is to the northwest based on groundwater measurements taken on December 6, 2004 in wells installed during the RI. Table 3.12 presents groundwater elevation measurements and Figure 3.12 presents the shallow groundwater elevation map. The shallow groundwater flow is toward New York State Wetland V-19. The hill east of GW03 is likely a shallow groundwater divide. Groundwater seeps are located along the western slope of the landfill area, and flow toward New York State Wetland V-19.

Groundwater Results

3.2.3.5.14 Groundwater samples were collected from four Hydropunch borings, five monitoring wells and two nearby domestic wells. Groundwater samples were analyzed for TCL VOCs, SVOCs, pesticides, PCBs, and TAL metals. Samples collected from GW03, GW04, and GW05 in 2004 were not analyzed for pesticides or PCBs because they were not detected in the earlier HP and domestic well samples collected in 2000. Groundwater results are presented in Table 3.13a and Table 3.13b, and key results are posted on Figure 3.13. Groundwater results are compared to NYSDEC Class GA groundwater criteria and the upgradient concentrations in GW03.

3.2.3.5.15 Eight VOCs were detected, but only benzene was detected above Class GA criteria (in HP01 and GW06). No VOCs were detected above groundwater criteria in the two domestic wells. SVOCs were detected above NYSDEC groundwater criteria in three of four HP groundwater samples and in one monitoring well (GW04). BEHP was detected in four samples above the groundwater criterion, and phenol was detected above the groundwater criterion in HP01. SVOCs were not detected in the two domestic wells. Four pesticides were detected at low concentrations, below groundwater criteria, in samples GW06 or GW07. Both wells are located downgradient of fill areas. PCBs were not detected in any groundwater samples collected during this investigation.

3.2.3.5.16 Up to six metals were detected above groundwater criteria and upgradient concentrations. Iron was most frequently detected above the groundwater criterion and the upgradient concentration (five samples), followed by magnesium (four samples). A residential well (GW02) had three metals above standards (iron, magnesium, and sodium). Concentrations were below Class GA criteria for all analytes in the other residential well sample (GW01).

Surface Soil Sampling Strategy and Scope

3.2.3.5.17 Eleven surface soil samples (HP01A through HP09A and SB01A and SB02A) were collected from 0 to 1 foot bgs to characterize surface soil conditions and the associated direct contact exposure pathway. Surface soil samples SB01A (duplicate sample SB03A) and SB02A were collected to further characterize the southern portion of AOC 2. Surface soil samples were collected before the drilling of corresponding soil borings, using stainless steel spoons and bowls. Surface soil samples were analyzed for TCL VOCs, SVOCs, pesticides, PCBs, TAL metals and dioxin. Soil results are compared to NYSDEC soil criteria and background soil ranges. Soil results are presented on the Tables 3.14a and 3.14b and are summarized on Figure 3.14. Background surface soils samples (HP10 through HP18) were collected east, south, and west of AOC 2 as shown on Figure 3.1. Background surface soil results were discussed at the beginning of Section 3.

Surface Soil Results

3.2.3.5.18 Only two VOCs were detected; both were in surface soil sample SB01A located in the defoliated area where pill bottles had been found. The concentrations were below soil criteria. Only one SVOC (BEHP) was detected; and in all three soil samples (HP01, HP02, and HP03) the concentrations were below NYSDEC soil criteria. The three samples were collected on the northern side of the anomalous area identified by the geophysical survey. Pesticides were detected in all eleven surface soil samples but all concentrations were below the NYSDEC soil criteria. No PCBs were detected in any surface soil samples at AOC 2.

3.2.3.5.19 Dioxin samples were collected at each of the 11 surface soil locations. None of the individual dioxin concentrations exceeded the NYSDEC soil criteria (Table 3.15). To further evaluate the dioxin data, toxicity equivalents (TEQs) were calculated. TEQs factor in all dioxin-like compound concentrations, and convert those concentrations to equivalents of dioxin. For comparison purposes, two TEQs were calculated for each sample using two different methods. The first method utilized an estimated detection limit of 0 while the second was calculated by taking half the estimated detection limit as identified by the laboratory (Table 3.15). The TEQ values represent an overall total concentration of dioxin for data evaluation purposes. Based upon review of the data by the NYSDOH, the dioxin results do not indicate a threat to human health or the environment. No further action is necessary based on the dioxin results. It is also noteworthy that no other organic compound concentrations in these samples exceeded NYSDEC soil criteria.

3.2.3.5.20 Up to six different metals were detected above NYSDEC soil criteria. HP04A and HP06A, located on the southern side of the anomaly area, had the most metals detected above criteria. There was no field evidence of contamination at HP04A and HP06A; both locations were heavily vegetated.

3.2.3.5.21 The contents of four pill bottles (Pill-2 through Pill-5) were analyzed for iodide, cyanide, sodium, and chloride to identify the contents. The bottles sent for analysis were one each of the different types found at AOC 2. A photograph of the four pill bottles is provided below. One additional pill bottle (Pill-1; not pictured) was analyzed for sodium. Results are presented in Table 3.16a. Sodium was detected in all five samples at concentrations ranging from 27,000 milligrams per kilogram (mg/kg) to 120,000 mg/kg. Sodium was detected at 110,000 milligrams per liter (mg/L) in Pill-1. No cyanide was detected. Chloride was detected in all four samples at concentrations ranging from 2,000 mg/kg to 9,900 mg/kg. Iodide was detected in three of four samples at concentrations ranging from 2,000 to 87,000 mg/kg. The pill bottles are suspected to contain salt and/or iodine tablets. Five additional composite samples were submitted for analysis to determine whether the bottle contents are corrosive. The contents of similar bottles were extracted and composited before submittal to the laboratory. Four samples consisted of white pills and one sample consisted of reddish-brown pills. Results are presented in Table 3.16b. The composite samples Pills-1 through Pills-5 had pH values ranging from 2.7 to 6.2 indicating they are acidic and would contribute to corrosion. Two composite samples (SS-COMP1-0-0.5 and SS-COMP2-0-0.5) were collected adjacent to the pill bottles to characterize soils that are in contact with the bottles. The samples were analyzed for TCLP VOCs, SVOCs, pesticides, herbicides, PCBs, metals, and waster characteristics. All of the parameters detected were below the TCLP criteria and the soil is considered nonhazardous (Table 3.17a).

Subsurface Soil Sampling Strategy and Scope

3.2.3.5.22 Nine sets of subsurface soil samples were collected using split spoons and Hydropunch technology at AOC 2 (HP01 through HP09). Based on the shape of the geophysical anomaly area, sample locations were shifted into a cross pattern on 10-foot spacing to provide better coverage of this area. Two additional soil borings (SB01 and SB02) were added to the scope to further evaluate the southern portion of AOC 2 where a large defoliated area was present (Figure 3.14). These two borings were sampled at the surface and at two subsurface depths similar to the HP borings. Two subsurface soil samples were collected at each sample location; samples were collected from the fill material, if present, or from the soil sample exhibiting the greatest field evidence of contamination (odor, staining, sheen, or elevated photoionization detector (PID) readings). A second sample from each location was collected from undisturbed soil beneath the fill zone and above the water table to assess the vertical extent of contamination, if present.

3.2.3.5.23 The upper subsurface soil sample was collected from depths ranging from two to eight feet and the deeper sample was collected at depths ranging from six to eighteen feet. Soil samples were analyzed for TCL VOCs, SVOCs, pesticides, PCBs, and TAL metals. Subsurface soil results are compared to NYSDEC soil criteria and background soil ranges. Subsurface soil results are presented in Table 3.14a and 3.14b and are summarized on Figure 3.14.

Subsurface Soil Results

3.2.3.5.24 VOCs, SVOCs, pesticides and PCBs were not detected above NYSDEC soil criteria. Between one and eight metals were detected above NYSDEC soil criteria in subsurface soil samples. The samples with the greatest number of metals above the soil criteria were HP05F, HP06F, and HP07I. These three borings are located along an east/west line in the geophysical anomaly area. Sodium was elevated in SB01B and SB02B, located within the defoliated area. This is consistent with the area where the salt/iodine pill bottles were found.

Test Pit Sampling Strategy and Scope

3.2.3.5.25 Fifty test pits were dug to characterize the fill areas at AOC 2. During the investigation, additional areas of interest at AOC 2 were identified through the review of newly identified historical documents, aerial photographs, and input by the RAB. A total of ten subsurface soil samples (TP3B, TP3C, TP5B, TP5C, TP7B, TP7C, TP11B, TP11C, TP14B, and TP14C) were collected from five test pits (TP3, TP5, TP7, TP11, and TP14) during the initial RI field investigation to characterize site soils. Many of the test pits were excavated for visual characterization of the lateral and vertical extent of fill materials. The test pit excavations identified separate areas with different types of waste materials, as identified on Figure 3.15. Paint residue, tar buckets, deteriorated drums, pill bottles and solvent-filled bottles were found in separate and distinct areas, with limits as indicated on Figure 3.15. Test pit locations and sample results are plotted on Figure 3.15. Laboratory results are presented on Table 3.14a following the HP and SB soil results, and on Table 3.14b. The "B" samples were collected from the fill zone and the "C" sample was collected from below the fill zone. The other test pits contained materials similar to those sampled in the five test pits or did not contain any evidence of fill materials or contamination. In those cases, soil samples were not collected. Test pits were excavated using a rubber-tire backhoe. Test pit soil samples were collected using stainless steel spoons and bowls. Samples were collected by reaching into the test pit from above or by collecting the soil from the center of the backhoe bucket. Test pit soil samples were analyzed for TCL VOCs, SVOCs, pesticides, PCBs, and TAL metals. Test pit soil results are compared to NYSDEC soil criteria (including background); concentrations exceeding criteria are highlighted on Tables 3.14a and 3.14b and Figure 3.15.

Test Pit Results

3.2.3.5.26 Fourteen test pits were dug on August 14, 2000 to evaluate the nature and extent of fill material at AOC 2. Test pits TP-3, TP-5, TP-7, TP-8, TP-10, TP-11, TP-13, and TP-14 contained fill material. The fill consisted of small pill bottles containing white, brown and red tablets. Partial labels were present on some bottles. One label read, "November 1952" and another read, "use when water is discolored". The latter label suggests iodine tablets may have been used for water purification. Traces of paper, nails, and wood were observed in TP-5. The fill was covered and mixed with wet gray clay and silt. Perched water entered some of the shallow excavations. The fill ranged from six inches below the ground surface to as deep as 4.5 feet in TP-5.

3.2.3.5.27 VOCs were detected in samples from only one test pit; sample TP-14B had a total VOC concentration of 99.6 μg/kg, and sample TP-14C had total VOCs detected at 2.8 μg/kg. The VOCs in TP-14B were primarily xylenes (73 μg/kg) and ethylbenzene (24 μg/kg). The detected concentrations did not exceed NYSDEC soil criteria in either sample. SVOCs were detected in five of ten test pit samples; however, none of the SVOCs detected were above NYSDEC soil criteria. Pesticides were detected in the five shallow samples collected in the fill but were not detected in the deeper samples collected below the fill. All pesticide concentrations were below NYSDEC soil criteria. As in the HP and SB borings, pesticide concentrations decreased with depth.

3.2.3.5.28 Two to nine metals were detected above NYSDEC soil criteria (background) in test pit soil samples. In general, metals concentrations were similar in the shallow fill samples and the corresponding deeper soil samples collected below the fill. Sodium concentrations decreased in each of the deeper samples. The pill bottles are a likely source of sodium.

3.2.3.5.29 Based on a review of the 1983 USEPA report (USEPA/NUS, 1983), field observations, and input from the RAB, TP-15 through TP-36 were dug on June 23, 2004 and June 24, 2004. These test pits focused on areas adjacent to the defoliated drainage area where mounds of soil had been observed in the overgrowth, and the area west of the large defoliated area. The test pits were examined for visual evidence of contamination and screened with a PID to determine whether VOCs were present. Characterization samples were collected from test pits with visual evidence of contamination. Analytical parameters were selected based upon field observations and the types of fill material encountered. TP-15 was dug at the top of the hill to confirm whether the hill consisted of fill material or was a native feature. The materials in TP15 were native; no indications of fill or contamination were identified. TP-16 through TP-19 were dug to characterize the mounds and defoliated drainage area. Test pits TP-16 through TP-19 did not encounter fill material or indications of contamination. The mounded areas appeared to be soil piles.

3.2.3.5.30 Two primary areas were investigated west of the defoliated area; the area immediately downhill of the defoliated area (Areas B, C and D), and the area at the base of the hill at the edge of the hardwood wetland (Area F). Tar-like material had been encountered during the first attempt to install a well downgradient of the defoliated area near TP-20. Dark oily staining and indications of seeps were identified on the slope west of the defoliated area near TP31. As a result, TP-20 through TP-23, TP-28 through TP-33, and TP-35 and TP-36 were dug to characterize these areas and to determine the extent of fill. Test pits TP-24 through TP-27 and TP-34 were dug to characterize the area containing pint-sized, solvent-filled glass bottles at the base of the hill, at the edge of the hardwood wetland.

3.2.3.5.31 TP-20 through TP-23 encountered 5-gallon metal pails that contained material similar to roofing tar or asphalt sealer. TP-23 encountered other fill materials that appeared to be solid green paint residue and office waste including small ink bottles. A sample of the green paint residue was submitted for TCLP metals analysis (Table 3.17a). Five metals were detected including lead but none of the metals exceeded the TCLP criteria. TP-33 defined the southern extent of this fill. Two samples of the tar-like material in boring GW04 (2-4 feet) and TP20 (2-3 feet) were submitted for analysis by TCLP VOCs, SVOCs, pesticides, herbicides, metals, and waste characteristics. One SVOC and three to five metals were detected at concentrations below TCLP criteria. None of the waste characteristics in these two samples exceeded the TCLP criteria (Table 3.17a).

3.2.3.5.32 TP-28, TP-29, and TP-30 were dug south of the intermittent ponded water in the defoliated drainage area, in the soil mounds, and downhill from TP-20 through TP-23. These test pits did not encounter fill. TP-31, TP-31a, and TP-32 (in Area D) encountered drums containing solvent or solvent residues, oily liquid, vapors with strong odors, and stained soil. Samples TP-31-0-2 and TP31-SEEP were collected to characterize the liquids and soils adjacent to the drums. TP31-0-2 was analyzed for TCL VOCs, SVOCs, pesticides, PCBs, TAL metals and TCLP VOCs, SVOCs, pesticides, herbicides, metals, and waste characteristics. The sample contained xylenes, 2-4, dimethylphenol and seven metals above NYSDEC soil criteria; however, none of the parameters in the TCLP analyses exceeded the TCLP criteria (Table 3.17a). Sample TP31-SEEP was analyzed for TCL VOCs, SVOCs, pesticides, PCBs, TAL metals and TCLP waste characteristics. Benzene, ethylbenzene, toluene, xylenes, 2-methylnaphthalene, naphthalene, and copper, lead, and mercury exceeded NYSDEC soil criteria (Table 3.17a). The material had a flash point below the hazardous waste characteristics criteria, and is considered a flammable hazardous waste.

3.2.3.5.33 TP-24 and TP25 were dug in an area of fill consisting of pint-size glass bottles (Area F). Many of the bottles contained clear liquid with reddish residues, similar to used paint remover solution. The contents have a strong odor of volatiles. A sample of the liquid (OL-TP-25) was submitted for TCL VOC, SVOC, TAL metals, and TCLP VOCs, SVOCs, pesticides, herbicides, metals and flashpoint and pH analysis. Benzene, ethylbenzene, toluene, xylenes, and phenol were detected, as were most of the metals on the TAL list (Table 3.17b). Benzene exceeded the TCLP criteria and the sample had a flash point below the hazardous waste characteristics criteria, and is considered a flammable hazardous waste.

3.2.3.5.34 Test Pits TP-37 through TP-50 were dug on November 17, 2004 and November 18, 2004 to investigate additional areas of interest. The RAB requested additional test pits be dug to assess additional areas not previously investigated that may have ties to SADVA usage. TP-37 and TP-38 were dug near large metal vessels at the base of the hill, at the edge of the hardwood wetland and near the utility right of way in the southwest corner of AOC 2. No visual evidence of fill or residues, or elevated VOC concentrations were observed near the metal vessels. The soils appeared to be native and undisturbed. Test Pits TP-44 and TP-45 were dug in the northeast corner of AOC 2, that appeared to be disturbed on a 1960 aerial photograph. No visual evidence of disturbance or fill was observed in the test pits and the soils appeared to be native. Test Pits TP-39 through TP-43 were dug adjacent to concrete foundations located between the defoliated area and the top of the hill in the southeast corner of AOC 2. The RAB requested this area be investigated. The test pits along the eastern side and southern side of the concrete pads encountered native material that did not exhibit visual evidence of contamination. The test pits TP-42 and TP-43 along the western side of the concrete pads encountered small pill bottles, similar to those encountered to the west in the defoliated area. Some of these bottles were collected for analysis for corrosivity as described above. TP-42 and TP-43 define the eastern limit of the small pill bottles. The concrete structures appear to be concrete slabs approximately four inches thick. There were concave concrete troughs observed. These structures may have been the floors of sheds for farm animals. TP-46 and TP-47 were dug adjacent to a concrete foundation near the driveway entrance to the property along Depot Road. There are presently two small sheds on part of the slab. No fill material was encountered in the test pits. An old stacked stone foundation was present below the edge of the concrete slab. TP-48, TP-49, and TP-50 were dug on the east, south, and west sides of the current pole barn.

Historical aerial photographs indicate possible disturbance of this area. The soils appeared to be native and no fill or visual contamination was observed.

3.2.3.6 AOC 2 Summary

3.2.3.6.1 The overall objective was to assess the nature and extent of contamination at AOC 2. The objectives and findings of the RI are as follows:

Objective 1) Locate and characterize the extent of fill in the area known as the Post Commander's Landfill within the former Bivouac area.

The lateral and vertical extent of identified fill areas were determined using Hydropunch borings, soil borings, and test pits.

Objective 2) Analyze surface soil samples for VOCs, SVOCs, pesticides, PCBs, dioxins, and metals to assess the potential dermal and ingestion exposure pathways by humans and fauna.

No surface soil samples contained VOCs, SVOCs, pesticides, or PCBs at concentrations above applicable NYSDEC criteria. Up to six metals were detected in surface soil samples above NYSDEC soil criteria. Based upon review of the data by the NYSDOH, the dioxin results for surface soils in this area do not indicate a threat to human health or the environment.

Objective 3) Locate and characterize residual subsurface soil contamination and the nature of fill as a source for VOCs, SVOCs, pesticides, PCBs, and metals.

Subsurface soil samples were collected from the "fill zones" and the native soil beneath in Hydropunch borings, soil borings, and test pits. Test pits encountered fill areas containing 5-gallon pails of tar-like material, paint residue, office-type waste, drums containing solvent or solvent residues, and pint-sized glass bottles of solvent or gasoline-type liquids. Soil collected adjacent to the solvent drums contained xylenes, 2-4, dimethylphenol and five metals at concentrations above applicable NYSDEC criteria. A sample collected from a seep coming from the solvent drums contained BTEX, three SVOCs, and three metals above NYDEC soil criteria. The seep sample failed TCLP criteria for flash point. The sample collected from the pint-sized glass bottles contained benzene above the TCLP criteria and failed TCLP criteria for flash point. Up to nine metals were detected in other subsurface soils above NYSDEC soil criteria (background concentrations).

Objective 4) Locate and characterize residual groundwater contamination for VOCs, SVOCs, pesticides, PCBs and metals.

VOCs, SVOCs, and metals were detected above NYSDEC Class GA groundwater standards near the fill areas.

Objective 5) Investigate potential Army ownership of abandoned drum remains at the base of the hill, northwest of the pill bottles. Unless there are markings or labels on the drums indicating otherwise, the debris will be assumed to be under Army ownership.

The area at the base of the hill was explored during the site reconnaissance, during surface water and sediment collection, and during test pit excavation. The metal containers and debris did not have any identifying features that would allow the determination of ownership. The debris is assumed to be under Army ownership. A rusted and deteriorated drum found next to well MW-05 was partially filled with soil that possibly contained soil cuttings from the installation of MW-05. The soil was sampled and sample results for DRM1 are presented on Table 3.14a. VOCs, SVOCs, and PCBs were not detected. One pesticide (delta-BHC) was detected at a concentration below the NYSDEC soil criterion. Eight metals were detected above the NYSDEC soil criteria; however, none of the metals concentrations were excessively high. The contents were disposed along with the other investigation-derived waste from this RI.

Objective 6) Properly abandon existing well MW-05.

MW-05 was abandoned by removing the PVC well and grouting the well borehole.

Objective 7) Characterize surface water and sediment in the drainage-way leading from the disposal area westward toward Black Creek.

Fourteen surface water samples were collected. No VOCs or PCBs were detected above surface water criteria. SVOCs and pesticides were detected above surface water criteria in two and eight samples, respectively. Two to seven metals were detected above criteria in surface water samples. No VOCs, SVOCs, pesticides, PCBs, or metals were detected above Class A or C surface water standards in SW9, the surface water sample collected from the pond behind the residence.

Fourteen sediment samples were collected. No VOCs, SVOCs, or PCBs were detected above NYSDEC sediment criteria in sediment samples. Pesticides were detected above criteria in one sample. Up to nine metals were detected above criteria in sediment samples. No VOCs, SVOCs, pesticides or PCBs were detected and no metals were detected above sediment criteria in SD9, the sediment sample collected from the pond behind the residence.

Objective 8) Sample the residential well located on the property (designated GW01).

Two residential wells were sampled. The well on the property to the south was also sampled and designated as GW02. The wells were sampled for VOCs, SVOCs, pesticides, PCBs, and metals. There were no compounds or metals detected above Class GA groundwater standards in GW01, the onsite residential well. Three metals were detected above groundwater standards in GW02.

3.2.3.6.2 The RI conducted adequately assessed AOC 2 and provided the necessary data to support a quantitative HHRA. In 2005, USACE contracted with Parsons to complete a quantitative HHRA for AOC 2. The full HHRA report is provided in Appendix A. The surface soil and mixed (surface and subsurface) soil posed unacceptable cancer risks and non-cancer hazards, primarily from the incidental ingestion pathway. Ingestion of groundwater posed an unacceptable non-cancer hazard. The residence at AOC 2 was not expected to be affected by vapor intrusion from the source area at AOC 2 because the residence is located more than 500 feet upgradient of the source area, the residential well was sampled during the RI and did not contain VOCs, and there is a small hill between the former source area and the residence that prevents surface water from flowing from the source area toward the residence.

3.2.3.6.3 On the basis of the HHRA and the hazardous wastes found at AOC 2, USACE contracted with Parsons to prepare an EECA for AOC 2 (Parsons, 2005). The objectives of the AOC 2 EECA were as follows:

1) Complete a streamlined qualitative risk evaluation for AOC 2, and assess the need for remediation at the site to ensure protection of human health and the environment.
2) Identify the general volumetric quantities of soil or other materials that may need to be addressed to accomplish site remediation.
3) Establish remedial action objectives (RAOs), develop alternatives to satisfy the RAOs, and make a recommendation for future action, if any, at AOC 2.

3.2.3.6.4 Section 104(a)(1)(A) of CERCLA provides that removal actions may be conducted “whenever any hazardous substance is released or there is a substantial threat of such release into the environment”. The driver for this EECA, and the recommendation for remedial action, is the presence of a release of hazardous substances into the environment, or the substantial threat of a release of hazardous substances into the environment. Therefore, the EECA focused on the presence of waste sources that contain hazardous substances, and the potential for those substances, if present, to be released to the environment.

3.2.3.6.5 The EECA resulted in the following:

- Chemical-specific, action-specific, and location-specific standards, criteria, and guidelines (SCGs) applicable to AOC 2 were identified.
- Remedial action technologies applicable to AOC 2 were identified and screened based on implementability, effectiveness, and relative cost. Select remedial action technologies were retained for development of remedial action alternatives.
- Three remedial action alternatives were developed: Alternative 1 (No Action) Alternative 2 (Soil Containment) and Alternative 3 (Soil Removal and Offsite Disposal). These three alternatives were evaluated based on the following CERCLA criteria: protection of human health and the environment; compliance with SCGs; long-term effectiveness and permanence; implementability; reduction of toxicity, mobility, or volume; short-term effectiveness, and; cost.
- Based on the evaluation of the above remedial action alternatives, Alternative 3 was recommended. Alternative 3 was a non-time critical removal action that consisted of the following three components:
    1. Remove approximately 1,130 cubic yards of co-mingled waste and soil in four areas that contain hazardous wastes and hazardous substances including tar buckets, spent drums, lead paint residue, solvent bottles, and visible staining. Removal of the waste source and co-mingled soil will reduce the threat of

hazardous substance releases to the environment, and further impacts on groundwater, surface water and sediment quality at the site.

2. Transport excavated material offsite to a permitted landfill for proper disposal.
3. Replace excavated material with clean fill to pre-excavation grade. Provide proper drainage and vegetation.

- Alternative 3 was recommended because it would achieve the RAOs and, to the maximum extent, would mitigate risks to human health associated with wastes and impacted soils without the need for long-term post-remediation monitoring. Alternative 3 would also eliminate the ongoing and the substantial threat of releases of hazardous substances at the site.

3.2.3.6.6 In August 2005, USACE prepared a Non-Time Critical Removal Action Memorandum, and subsequently contracted with Shaw Environmental, Inc. to conduct remedial activities at AOC 2. During the period September 19, 2005 to October 25, 2006, Shaw completed remediation at AOC 2, including the following:

- Removal and offsite disposal of 2,791 tons of non-hazardous soils
- Removal and offsite of 40 cubic yards of RCRA-regulated debris/drum carcasses
- Removal and offsite disposal of 61 drums overpacked in protective containers
- Removal and offsite disposal of 1,072 tons of non-hazardous soils with pill bottles
- Disposal of 204,000 gallons of collected storm water

3.2.3.6.7 Upon completion of the removal activities, confirmatory soil samples were collected from the excavations to ensure that all impacted soil had been removed. Once the extent of removal was completed and confirmed, the site was restored by backfilling the excavated areas, placing topsoil, grading the area and seeding the site. A post-remediation monitoring plan for AOC 2 will be developed by USACE in concert with NYSDEC (Shaw, 2007).

3.2.3.6.8 Following the remediation of AOC 2, a quantitative HHRA was completed, using the confirmatory soil data. The objective was to demonstrate that the remedial action was successful in eliminating the unacceptable cancer risk and non-cancer hazards previously posed by the site. A copy of the post-remediation risk assessment is provided in Appendix A. The post-remediation HHRA confirmed that the soils at AOC 2 no longer pose any unacceptable cancer risk or non-cancer hazard to human health. Additional groundwater data are being collected to assess the post-remediation groundwater quality. A post-remediation HHRA for the groundwater pathway will be completed and issued as a supplement to this RI Report during 2008.

3.2.4 AOC 3 FORMER BURN PIT AREA

3.2.4.1 Introduction

3.2.4.1.1 AOC 3, the Former Burn Pit Area, is an area of less than 10 acres located in the north end of SADVA. Figure 1.2 shows the location of AOC 3. Figure 3.16 shows the general historical layout of AOC 3, and Figure 3.17 is a site plan showing the recent layout. Historical records and interviews with former employees of SADVA indicate the burn pits were a disposal area where materials were burned or otherwise disposed. Historical aerial photographs suggest this area has been the site of numerous dump areas, pits, or scarred areas that are thought to have been locations where wastes were burned.

3.2.4.1.2 The RI was designed to supplement site characterization data collected during past investigations at the site. Following completion of the RI field work, and after assessment of the resulting analytical data, the USACE directed Parsons to complete a feasibility study for AOC 3, and a rapid response remedial action was subsequently performed. The AOC 3 area has since been remediated via removal of the source waste materials. Also, evidence of DoD disposal actions were found on the Guilderland School property proximate to the northwest fence line. An interim removal action of those disposed items, along with impacted soils, took place in 2002. Subsequent to these removal actions, groundwater quality was monitored to ensure that the removal action was effective at mitigating an existing groundwater contaminant plume. The following subsections provide details of the process and findings that led to remediation of AOC 3.

3.2.4.2 Site History

3.2.4.2.1 The Final Archival Search Report (EAEST, 2003) and the ACEMC (ACEMC, 1980) included interpretations of historical aerial photographs and site history. This section presents a summary of those historical findings for the former Burn Pit Area.

3.2.4.2.2 The Burn Pit Area was located in the northern part of SADVA, west of the sewage treatment plant (Figure 3.16). Albany County noted that, based on a review of a 1940s aerial photograph, a 0.25-acre circular depression existed at this site (ACEMC, 1980). The aerial photograph analysis noted a circular and unpaved road network surrounding the Salvage Building (T-62). At the center of the road was a dark feature, which appeared to be a storage tank. The area south of the Salvage Building appeared disturbed with possible debris or material piles. The road network extended southward, combining with a second circular road complex containing equipment or vehicles. In a 1943 aerial photograph, the second circular road complex appeared to be more disturbed.

3.2.4.2.3 Albany County noted that, based on a review of a 1952 aerial photograph, the former depression in this area had been reduced slightly in size. In addition, two new rectangular depressions 0.25 acres in size were present, southwest of the former depressions. Storage containers were reportedly observed throughout this site, and two buildings had been constructed north of the site. The aerial photograph analysis completed as part of the archival search noted that, based on a review of a 1952 aerial photograph, the burn pits appeared as shallow, darkened areas which were rectangular in shape (with dimensions of 50 feet by 50 feet) and which straddled the access road. East of the access road and south of the burn pits was a possible drum storage area, and further south of the burn pit area, on the west side of the access road, was an open storage area containing crates and other oblong-shaped containers and stacked materials.

3.2.4.2.4 The Final Archival Search Report indicated that although burn pits were located in the upper northeast section of SADVA, no information was found indicating what types of material were burned in the pits. Interviews with former employees conducted by Parsons and USACE did not identify any further specifics of what materials were burned or disposed in this area. In addition, the report indicated that in the 1950s, latent fires occasionally occurred spontaneously in the pit area and that patrols were assigned responsibility for checking the pits at the end of each workday and again at midnight.

3.2.4.2.5 Albany County reported that, based on a review of aerial photographs from 1961, 1963, and 1968, the initial depression observed in the 1940s aerial photographs was no longer present. In a 1961 photograph, the area had been almost entirely filled in and was partially vegetated. A pathway to one of the existing depressions was evident. Two active depressions contained white circular objects, which the County report said were possible storage containers. A number of black circular objects in rows were located west of the inactive depression area. Buildings north of the site had been removed, and the area where the buildings were located had been backfilled. In a 1963 photograph, the initial depression was inactive. The other circular areas still existed, but no containers were present within these circular areas. Storage containers were still stored west of the initial depression. In a 1968 aerial photograph, the debris was located within the more recent depression areas. The remaining areas surrounding the depression areas consisted of open space. According to an analysis of 1960 and 1969 aerial photographs conducted as a part of the archival search, the burn pits appeared as distinct circular features. In relation to the 1952 aerial photographs, the area appeared less active in 1960 with fewer discernible roadways, vehicles, and structures. Possible drum storage and other areas that contained open crate and equipment storage in 1952 were absent in 1960 aerial photography. An oblong scarred area was visible along the present-day North Road, approximately 750 feet south of the burn pits.

3.2.4.2.6 In 1960, three buildings were visible in the area. By 1969, the buildings had been removed and the surrounding areas began to show light vegetative cover. There was no open storage of equipment or staining observed in this area in 1969. Scarred and bare areas noted in the 1960 photograph appeared overgrown in the 1969 photo.

3.2.4.2.7 Albany County noted, based on a review of aerial photographs from 1974 and 1977, no changes were observed in the former dump areas. In 1974 aerial photographs, three small dump areas had developed west of the inactive area. A 2-acre dumpsite had developed adjacent to the road lying northwest of the major dumping areas. In 1977 aerial photographs, two dumpsites remained active but were being filled in. Debris was situated within the remaining depression areas. The new areas, developed previous to the 1974 aerial photograph, were now inactive and had been backfilled and vegetated. According to an interpretation of 1973, 1978, 1982, 1986, and 1995 aerial photography conducted as a part of the archival search, the two burn pits and the entire area appeared inactive. The area remained undeveloped and only faint traces of the former burn pits were visible in the 1995 aerial photographs.

3.2.4.2.8 In addition to the 1980 ACEMC report and the Final Archival Search Report prepared by EAEST in 2003, the following investigations have characterized AOC 3:

- Preliminary Contamination Evaluation (Metcalf and Eddy, 1988)
- "Sampling and Analysis of Groundwater, Northeast Industrial Park" for the Galesi Group (Empire Soils Investigations, Inc., September 29, 1989)
- "Report of Findings Environmental Liability Review Northeast Industrial Park" for the Galesi Group (ERM-Northeast, March 15, 1990)
- Geophysical Investigation (Quantum Geophysics, Inc., 1999)

3.2.4.2.9 In 1988, Metcalf & Eddy installed a monitoring well (MW-4-2) close to AOC 3; it is about 600 feet north-northeast. A soil sample collected from the well boring at a depth of 8 to 13 feet contained phenol, arsenic, chromium, and mercury above NYSDEC soil criteria. A groundwater sample collected from this well in 1988 contained arsenic, chromium, and lead above NYSDEC Class GA groundwater standards. A groundwater sample collected by ERM-Northeast in 1990 did not contain any compounds or metals above Class GA groundwater standards. A groundwater sample collected by Empire Soils in 1998 contained lead above Class GA groundwater standards. The well was screened in a permeable sand and gravel aquifer. The water level in the well was 13 feet below the ground surface. Two soil borings were also drilled south of this well to monitor for contamination from the former Burn Pits. No drill logs are available for the well or borings, although the report states that cobbles were encountered at a depth of 30 feet and drilling could not be advanced.

3.2.4.2.10 In 1989, ERM conducted geophysical surveys at AOC 3 to determine the location of buried metal debris, if any. The results of the geophysical surveys revealed anomalies representing possible buried metals and debris. Additionally, anomalous readings were recorded outside of the suspected burn pit areas, suggesting the potential for buried metals in those areas also. All areas of electromagnetic anomalies were small and localized, indicating disposal of small amounts of debris.

3.2.4.2.11 ERM conducted test pit excavations to determine the nature of the subsurface materials in the areas of anomalies. Test pits were excavated at the two burn pit areas to depths of approximately 25 feet. These depths corresponded to the vertical extent of buried materials at those locations. The burn pits were circular, having a diameter of approximately 35 feet as judged from a visible ground surface depression. Materials encountered within the limits of the suspected burn pits were composed of ash deposits, domestic waste, and industrial debris. A two-foot thick lens of oily soil was encountered at the base of one test pit. A total of eight test pits were excavated in the remainder of AOC 3. Minor amounts of near-surface debris (e.g., nails, bolts, and reinforcing bar) were encountered in these test pits. Native soils, free of debris, were found at depths of six to 18 inches below grade. Three soil samples were collected from the various test pits; the highest concentration of PAHs in the three samples was 22.8 mg/kg. Based on the investigation results, ERM recommended further investigation of this area.

3.2.4.2.12 In April 1999, Quantum Geophysics, Inc. completed a geophysical investigation under contract to USACE. The purpose of the investigation was to: 1) locate large metallic or other objects in the subsurface, 2) identify the horizontal and vertical boundaries of the former burn areas, particularly the depth to and/or thickness of fill layers, 3) locate the shallow aquifer and evaluate the continuity of any confining layers, and 4) determine if a contaminant plume is present. The investigation incorporated an EM61 metal detector survey, an EM31 ground conductivity survey, and an electrical resistivity imaging survey. The Burn Pit Area was originally thought to be 0.5 acres in extent, but was increased to approximately 5.8 acres due to multiple pits seen in aerial photographs during the archival search (Figure 3.16). A total of 11 anomalies corresponding to "probable disposal areas" were identified in the Burn Pit Area. Nine of the probable disposal areas appeared to be caused by buried metal debris. Two probable disposal areas were thought to be caused by a non-metallic, conductive material. The water table depth was estimated at 16 to 49 feet below ground surface (bgs), although some of this variation in the depth estimate may have been due to interference by metallic debris. No suggestion of a contaminant plume was indicated by the geophysical surveys.

3.2.4.3 Conceptual Site Model

The conceptual site model was based on the previous investigations discussed above. The Burn Pit Area contained contaminants in surface and subsurface soils from the burning or disposal of wastes. The potential contaminant migration pathways were soils to groundwater, groundwater to surface water, and soils to surface water. The possible exposure pathways were direct contact with, or ingestion of, soil, groundwater and surface water. Possible receptors are persons working at, or visiting the NEIP. To assess the potential for exposure, surface and subsurface soils and groundwater were sampled in and around AOC 3. This RI was designed to build upon previous information and fill data gaps. The scope of this RI was not intended to confirm previous investigation results.

3.2.4.4 RI Project Objectives

The overall objective was to assess the nature and extent of contamination at AOC 3 by means of the following tasks:

1. Delineate the presence and vertical extent of surface and subsurface soil contamination in geophysical anomalies at the Burn Pit Area.
2. Characterize shallow groundwater quality at the Burn Pit Area.

3.2.4.5 RI Sampling Strategy, Scope, and Results

3.2.4.5.1 The following subsections present the sampling strategy, scope, and results for each matrix sampled at AOC 3 during the RI. Figure 3.17 is a Site Plan that shows the locations of soil borings and monitoring wells completed during the RI. Tables 3.18 and 3.19 present the analytical results of soil sampling, and Table 3.21 presents groundwater results. Analytes not detected in a specific sample are listed as ND in the summary tables. A full list of compounds and their detection limits are included in Appendix B. Soil sample results are compared to NYSDEC soil criteria (including background). Groundwater sample results are compared to NYSDEC Class GA groundwater standards. Sample concentrations exceeding these criteria are shaded on the tables.

3.2.4.5.2 By the time the RI field work had started in 2000, the Galesi Group had built a warehouse and parking lot over the southwestern portion of the Burn Pit Area. Earth-work for another new warehouse was being conducted during the site investigation. The topsoil had been stripped off the area and was staged in a large pile. The topsoil pile was later moved to a new location on the NEIP. The subsoil was being reworked and leveled in preparation for the construction of the new warehouse (the northernmost warehouse shown on Figure 3.17). USACE/Parsons worked in cooperation with the Galesi Group to complete the RI sampling while minimizing impediments to the warehouse construction. This new warehouse was planned to be located over the main part of the Burn Pit Area. At the suggestion of the USACE, the Galesi Group reduced the size of the planned new warehouse and moved the warehouse footprint to the north. This was done to ensure the warehouse would not be constructed over the main source areas at AOC 3. By January 11, 2001, the new warehouse foundation was completed, and the steel framing was under construction.

Soil Sampling Strategy and Scope

3.2.4.5.3 In the RI Field Sampling Plan, soil samples were proposed at ten soil boring locations. Soil samples were proposed to be collected at the surface and at two-foot intervals until groundwater was encountered to characterize the site geology. Three samples for laboratory analysis were proposed from each of the ten borings; the samples to be analyzed by the laboratory were: 1) at the surface (top 2 inches) for dioxin, TCL VOCs, SVOCs, pesticide/PCBs, and TAL metals; 2) within the fill zone to characterize the fill (TCL/TAL analyses); and 3) in native soil immediately beneath the base of the fill, or at the water table interface (which ever occurred first) with analysis for TCL/TAL parameters. The objectives of this sampling scheme were to characterize the surface soils for direct contact risks, to characterize the fill material and the contaminants present, and to identify the lower extent of contamination by sampling beneath the fill zone. At four other locations (one upgradient and three downgradient), groundwater samples were originally proposed to be collected using Hydropunch methods. Groundwater samples were to be analyzed for TCL/TAL parameters (Tables 3.1a and 3.1b). Prior to collecting the groundwater samples, the depth to water was to be measured through the drill rod.

3.2.4.5.4 The ten proposed soil borings were drilled and soils were sampled and analyzed as planned. Based upon observations of an oily soil layer, 22 additional borings were drilled. These soil borings were sampled and screened for evidence of contamination using the same methods as the original ten soil borings. Soil samples were collected from 28 of the 32 soil borings and from five monitoring well borings to further characterize AOC 3. The samples collected and their depths are listed on Tables 3.1a and 3.1b and results are presented on Tables 3.18 and 3.19. Boring locations are shown on Figure 3.17.

Soil Results

3.2.4.5.5 A total of 32 soil borings were drilled to delineate the presence and vertical extent of subsurface soil contamination in geophysical anomalies at the Burn Pit Area.

3.2.4.5.6 At six boring locations, the surface had been covered by soil being used to level the site for the subsequent construction of the new warehouse. At these locations, a subsurface sample was collected at a depth of approximately 5 feet, the approximate depth to the original ground surface. The other surface soil samples were at locations where the original topsoil layer had been stripped off by the Galesi Group as part of the site preparation for the warehouse construction. The original topsoil material was placed in a large pile near the western side of AOC 3. During the RI investigation, the topsoil pile was moved to another area at the NEIP. Due to the earth moving activities during the RI, the soil horizon sampled at the surface was actually a former subsurface layer exposed after the initial excavation. The relative sample depths reported on Tables 3.18 and 3.19 are no longer relevant due to additional earth-moving associated with the construction of the new warehouse. The presence of metallic debris, small sheet metal triangles, railroad track, railroad spikes, and compressed gas cylinders, were observed on the ground surface or in the near surface soils exposed by construction excavation. The compressed gas cylinders observed in this area were apparently staged by the owner's construction crew during earthwork activities for the construction of the new warehouse.

3.2.4.5.7 Soil borings were drilled through the fill zone and into "clean material" below, or to the top of the water table. Boring logs for each location are included in Appendix I. Soil boring depths ranged from 10 to 32 feet. The borings encountered reworked till (silt, fine to coarse gravel, rock fragments, with varying amounts of clay) that graded into undisturbed till. Fill material encountered in the borings included ash, cinders, coal, glass, brick, wood, plastic, and packaging materials. Some of the wood was charred. Some fill materials were oily, or had black stains, sheens, and residues. The fill and soils that exhibited field evidence of contamination were in a line of borings that trended northwest to southeast and were centered on SB06 (Figure 3.17).

3.2.4.5.8 VOCs, SVOCs, pesticides, PCBs and/or metals were detected above NYSDEC soil criteria and background in samples from eight soil borings. The samples that exceeded soil criteria occurred in two areas within the former Burn Pit Area. The southern area was centered on SB06 and trended from southeast to northwest. The northern area was generally centered on SB21, located on the west side of the new warehouse. The southern area was originally within the footprint of the proposed new warehouse.

3.2.4.5.9 VOCs were detected above NYSDEC soil criteria in three samples from the southern Burn Pit Area. The highest VOC concentrations were detected in deeper samples collected near the top of the water table. SB14L contained the highest VOC concentrations [25,900 micrograms per kilogram (ug/kg)] and was collected from a depth of 22 to 24 feet. The VOCs detected were generally BTEX compounds, chlorinated solvents, and chlorinated solvent breakdown products.

3.2.4.5.10 Most of the SVOCs detected above NYSDEC soil criteria were PAHs. CPAHs were detected above soil criteria in two surface soil samples and one shallow subsurface sample (SB18A, SB21A, and SB19C) collected from the northern Burn Pit Area and in two deeper subsurface soil samples (SB06H and SB06K) collected in the middle of the southern Burn Pit Area. The highest CPAH concentrations were detected in SB06H (124,400 ug/kg) collected from 14 to 16 feet. Concentrations of NPAHs were above the soil criteria in SB06H (264,710 ug/kg) and SB06K (46,240 ug/kg).

3.2.4.5.11 Total pesticide concentrations were above NYSDEC soil criteria in three soil samples. SB01A and duplicate sample SB101A (27,800 ug/kg and 47,800 ug/kg) and SB01D (16,900 ug/kg) were collected from the surface and from six to eight feet below the ground surface, respectively, in the northern Burn Pit Area.

3.2.4.5.12 PCBs were detected above NYSDEC soil criteria in one soil sample. Soil sample SB03A was collected from the surface in the southern Burn Pit Area and contained PCBs at a concentration of 5,300 ug/kg. PCB concentrations decreased with depth.

3.2.4.5.13 Metals were detected above NYSDEC soil criteria in all soil samples collected from AOC 3 (Table 3.18). Sample locations SB01 and SB06 stand out as having metals concentrations that are orders of magnitude higher than soil criteria and all the other samples. The sample from 0 to 0.2 feet at SB01 had concentrations of antimony, copper, lead, mercury, and silver that were anomalously high. Samples SB06H (from 14 feet) and SB06K (from 20 feet) had as many as nine metals which were anomalously high (antimony, barium, cadmium, copper, lead, mercury, silver, and zinc).

3.2.4.5.14 Dioxin data are presented on Table 3.19. None of the sample concentrations exceeded NYSDEC soil criteria and the results did not indicate a threat to human health or the environment.

Groundwater Sampling Strategy and Scope

3.2.4.5.15 The groundwater investigation scope for AOC 3 included the drilling and sampling of four Hydropunch borings, one soil boring, and three monitoring wells to characterize shallow groundwater at the Burn Pit Area. One existing monitoring well at AOC 3 (MW-4-2) was also sampling during each of the groundwater sampling events. Three monitoring wells on the Guilderland High School grounds were added during a supplemental investigation.

3.2.4.5.16 The four proposed Hydropunch groundwater samples (HP01, HP02, HP03 and HP04) were collected as planned (Figure 3.17). One additional groundwater sample was collected to characterize groundwater at the bottom of boring SB06, which displayed strong odors, sheens, and oily staining. Groundwater samples were analyzed for TCL VOCs, SVOCs, pesticides, PCBs, and TAL metals. Due to the presence of the oily soil layer identified in the soil borings, groundwater characterization was supplemented by the installation of three groundwater monitoring wells to determine if contaminants were entering or leaving AOC 3. Groundwater samples were collected from the three new wells (MW-1, MW-2, and MW-3) and one existing well (MW-4-2) during October 31 - November 1, 2000 (Figure 3.17). A second round of groundwater samples was collected from the four wells on January 10, 2001. These samples were also analyzed for TCL VOCs, SVOCs, pesticides, PCBs, and TAL metals.

Groundwater Elevations

3.2.4.5.17 Groundwater measurements are presented on Table 3.20 and groundwater elevation contour maps are presented on Figures 3.18A, 3.18B, 3.18C, 3.18D, and 3.18E. Local groundwater flow at AOC 3 varies, but the dominant direction is to the northwest. Gradients at the site are low and ranged from 0.001 feet per foot in November 2000 to 0.0002 feet per foot in January 2001.

Groundwater Results

3.2.4.5.18 The groundwater sample results for the Hydropunch samples (HP01, HP02, HP03, HP04, and SB06) collected July 2000 and for two rounds of monitoring well samples (MW-1, MW-2, MW-3, and MW-4-2) collected October 31 - November 1, 2000 and January 10, 2001 are presented below.

Hydropunch Groundwater Sample Results

3.2.4.5.19 Groundwater samples were collected from Hydropunch borings between July 20 and July 24, 2000. Results are presented in Table 3.21 and are summarized on Figure 3.19. Total VOC concentrations ranged from 25.6 ug/L in HP02 to 658.9 ug/L in SB06. Nine VOCs (BTEX, chlorinated solvents, and breakdown products) were detected above Class GA groundwater standards in SB06R, located in the center of the burn pit area. TCE was detected above NYSDEC Class GA groundwater standards in sample HP02, located along the western side of AOC 3. One SVOC (BEHP) was detected above groundwater standards in three (HP01, HP02 and HP04) of the four HP samples. Two SVOCs (1,2-dichlorobenzene and 2-methylphenol) were detected above groundwater standards in SB06R. Pesticides were not detected above groundwater standards in any samples. PCBs were not detected in any samples. Lead, iron, magnesium, manganese and sodium were detected above groundwater standards in SB06R. Iron, manganese and sodium were detected above the groundwater standard in at least one of the five Hydropunch sample locations. Metals concentrations in the Hydropunch borings may be attributed to turbidity in the samples. Hydropunch groundwater samples were collected through temporary screens inserted into the borings. The Hydropunch borings were sampled as an initial screening of groundwater quality. Based upon preliminary results, monitoring wells were installed and sampled as presented below.

Monitoring Well Sample Results – Round 1 (October 2000)

3.2.4.5.20 Groundwater results from four monitoring wells are presented in Table 3.21 and are summarized on Figure 3.19. Two VOCs, acetone and TCE, were detected below the NYDSEC Class GA groundwater standards in MW-2. VOCs were not detected in MW-1, MW3, and MW-4-2. SVOCs, pesticides, and PCBs were not detected in the four well samples. Chromium, iron, lead, manganese and sodium were detected above groundwater standards in at least one of the four wells.

Monitoring Well Sample Results – Round 2 (January 2001)

3.2.4.5.21 Groundwater results from the four monitoring wells are presented in Table 3.21 and are summarized on Figure 3.19. TCE was detected below the NYSDEC Class GA groundwater standard in MW-2. BEHP was detected above groundwater standards in MW-1 and

MW-3. Pesticides or PCBs were not detected in the four groundwater samples. Antimony, arsenic, beryllium, chromium, iron, lead, magnesium, manganese, and sodium were detected above groundwater standards in at least on of the four wells.

Groundwater Results Summary

3.2.4.5.22 The initial RI groundwater sample results suggested the presence of a groundwater plume at AOC 3 extending northwestward from the burn pit area. TCE was detected in both rounds of groundwater samples collected from the western side of AOC 3. Chlorinated solvents were detected in HP02 and SB06R at concentrations above NYSDEC Class GA groundwater standards.

3.2.4.6 Supplemental Remedial Investigation

3.2.4.6.1 The initial RI results at AOC 3 indicated the vertical extent of contamination in soil and groundwater had not been fully defined. Soil sampling was recommended in a deeper soil boring to define the vertical extent of contamination in the center of the AOC 3 source area. Monitoring wells were also recommended for the Guilderland High School grounds and downgradient of MW-2 and HP02 to determine the lateral extent of the groundwater plume. The additional work for the Supplemental RI was conducted in 2001 to fill these data gaps and to aid the FS in evaluating clean-up options for AOC 3.

Sampling and Analysis

3.2.4.6.2 The Supplemental RI was conducted in the immediate vicinity and downgradient of the source area at AOC 3. The scope included installing one soil boring (SB-32) to identify the vertical extent of the source material. The intent was to assess whether, and to what depth, the source material extended beneath the water table. This boring was drilled at the same location as SB06, where VOCs and PAHs were originally encountered above criteria (Figure 3.17). In addition, three shallow water table wells (MW-5, 6, and 7) were installed on the Guilderland High School property to characterize the lateral extent of the groundwater plume. Following receipt of analytical results from sampling of these wells, two additional wells (MW-8 and MW-9) were added to further define the plume. One well was located along the western fence line of the NEIP and the other was on Guilderland High School property near the bus garage parking lot and Black Creek (Figure 3.17). The wells were intended to detect any migration of the groundwater plume from AOC 3 toward the high school and/or Black Creek. All five wells were surveyed relative to the existing datum at the SADVA site.

3.2.4.6.3 Thirteen soil samples were collected as part of the Supplemental RI. Three soil samples were collected from the SB-32 boring and two samples were collected from each of the well borings. The well boring samples included one surface sample from 0-0.2 ft bgs and another from the screened interval of each well boring. All soil samples were analyzed for TCL VOCs, SVOCs, pesticides, PCBs, and TAL metals. The samples from the screen intervals of wells MW-5, MW-6, and MW-7 were also analyzed for grain size characteristics.

3.2.4.6.4 The third round of groundwater sampling was conducted in May of 2001 and included wells MW-1, 2, 3, 4-2, 5, 6, and 7. All groundwater samples were analyzed for TCL VOCs, SVOCs, pesticides, PCBs, and TAL metals. Following the installation of MW-8 and

MW-9, the fourth round of sampling was conducted in November of 2001. This round of sampling included MW-1, 2, 3, 4-2, 8, and 9. The MW-5, 6, and 7 wells could not be sampled because the water table had dropped significantly during the fall of 2001, causing the wells to go dry.

Soil Boring SB-32 Drilling Results

3.2.4.6.5 Soil boring SB-32 was completed at the same location as SB-06 to determine the vertical extent of contamination in this area. This boring was drilled and sampled to a depth of 35 feet using hollow stem augers and split spoon samplers (Appendix I). Each split spoon was screened for the presence of contamination using a PID and visual observations. The sample exhibiting the greatest field evidence of contamination (SB-32L) was collected from 23 to 25 feet bgs. The second sample from this boring, which did not exhibit any field evidence of contamination, was collected from 27-29 feet bgs (SB-32N). A third sample (SB-32P) was collected from 31-33 feet bgs to confirm the depth to clean soil beneath the source area.

3.2.4.6.6 Sample SB-32L exhibited black staining, odors, slight sheen, and elevated PID readings. The contamination extended approximately seven to eight feet into the water table. The contaminated water inside the augers coated the split spoon samplers, making it difficult to determine the actual lower limit of contamination. The low levels of contamination detected in SB-32N are likely attributed to contamination coating the sampling equipment and not to actual contamination present in the formation at that depth. SB-32 was backfilled with a cement/bentonite grout after sampling was completed.

3.2.4.6.7 Soil samples SB-32L, SB-32N, and SB-32P were analyzed for TCL VOCs, SVOCs, pesticides, PCBs, and TAL metals. Soil sample results are presented on Table 3.18. Sample SB-32L contained a total VOC concentration of 21.1 ug/kg and a total NPAH concentration of 33,960 ug/kg. The compounds detected in these samples were similar to those in SB-06, but at lower concentrations. Sample SB-32L was collected deeper than the samples from SB-06 and was apparently below the worst of the contamination. SB-32N contained low concentrations of TCE (2.8 ug/kg), which were likely carry-down from above. VOCs and PAHs were not detected in SB-32P. Pesticides and PCBs were detected in SB-32L at concentrations below NYSDEC soil criteria. The pesticide concentrations decreased with depth. PCBs were not detected in SB-32N and SB-32P. Chromium, copper, iron, magnesium, and nickel were detected above the soil criteria and background ranges in at least one of the three samples collected from the SB-32 boring.

Monitoring Well Borings

3.2.4.6.8 The five new monitoring wells installed as part of the Supplemental RI are shown on Figure 3.17. Monitoring well borings were drilled using hollow stem augers and split spoon samplers in May 2001 (MW-5, 6, and 7) and October 2001 (MW-8 and MW-9). Soils were screened for the presence of contamination using a PID and visual/olfactory observations during the drilling of each of the wells. One surface soil sample from 0-0.2 feet and one subsurface soil sample from the screened zone in each well were submitted for laboratory analyses. The PID screening results for the soils were very low and no visual or olfactory evidence of contamination was identified. Boring logs for each of the well borings are presented in Appendix I.

3.2.4.6.9 The soil samples from the five well borings were analyzed for TCL VOCs, SVOCs, pesticides, PCBs, and TAL metals. Soil results are presented on Table 3.18. Two VOCs were detected in the well boring soil samples (TCE and 1,2-DCE). TCE was present in the MW-5I sample at 16-18 ft (5.5 ug/kg), in MW-8N at 26-30 ft (2.1 ug/kg), and in MW-9M at 24-28 ft (18 ug/kg). 1,2-DCE was also detected in MW-9M at 14 ug/kg. All these concentrations are well below the NYSDEC soil criteria.

3.2.4.6.10 SVOCs, pesticides, and PCBs were not detected above the NYSDEC soil criteria. Eleven metals were detected above the soil criteria in one or more of the soil samples collected from the five additional monitoring wells.

3.2.4.6.11 The MW-5, 6, and 7 borings were also analyzed for grain size parameters. Results from the grain size analyses indicate the soils in the screened zone in MW-5 and MW-7 are gravel with some sand and little clay, and the soils in MW-6 are sand and gravel with some clay. Geotechnical laboratory results are included in Appendix I.

Monitoring Well Construction

3.2.4.6.12 Monitoring wells MW-5, 6, 7, 8, and 9 were constructed similar to MW-1, 2, and 3 located at AOC 3. Each well was constructed with 2-inch ID PVC well screen and riser. The well screens had 0.01-inch slots. Each well has a 10-foot well screen set to straddle the water table. Each well was constructed with a uniform sand pack and bentonite seal. Each well has a protective curb box with locking inner well cap or a locking well stand with bollard posts. Well construction logs for all wells installed as part of this RI are included in Appendix I.

3.2.4.6.13 Prior to the installation of wells MW-8 and MW-9, it was noted that the protective curb box had been removed from MW-5 located on the Guilderland High School property. The curb box had apparently been hit by a payloader while a school employee was moving wood and debris in the area. The PVC well casing was inspected and found to be intact. A PVC extender was connected to the existing well casing and a protective well stand was installed around the well with three bollard posts for protection. A sample was not collected from this well during the fourth round of sampling in November 2001 because the well was dry.

Groundwater Elevations

3.2.4.6.14 Following the installation of wells MW-5, MW-6, and MW-7 on the Guilderland High School property, water levels were measured on May 21, 2001 in the four existing wells at AOC 3, in the three new wells on the high school grounds, in four existing wells on the high school grounds located near the bus garages, and at one stream gauge location in Black Creek near the bus garage. A groundwater elevation map was constructed based on these data (Figure 3.18D). The groundwater flow direction on the Guilderland High School property is northerly toward Black Creek, while the flow in AOC 3 at the NEIP is more to the west. The water table near the bus garage (area of GMW-4 and GMW-6) is depressed, most likely due to the school operating the irrigation well located near the bus garage. This well is used to water the athletic fields and wash the school buses and was operating while the water levels were collected. It is also noteworthy that the elevation of Black Creek is higher than the water table elevations at AOC 3 and the Guilderland School property, indicating that Black Creek may be a "losing" stream in this area (recharges groundwater).

3.2.4.6.15 A fifth round of water levels were collected on November 7, 2001 following the installation of the wells MW-8 and MW-9 and two additional staff gauges in Black Creek (Figure 3.18E). Due to the drought conditions during that time frame, water levels could not be measured in wells MW-5, 6, and 7 because the water table had dropped below the screened intervals. The water levels ranged from 21.02 ft to 26.57 ft bgs during the fifth round of water level readings. Data from the three staff gauges suggest that this portion of Black Creek is a "losing" stream, thus contributing to groundwater recharge. The hydraulic gradients identified during the fourth and fifth round of water levels were very low, ranging from 0.0002 feet per foot in May 2001 to 0.003 feet per foot in November 2001.

Groundwater Sample Results

Monitoring Well Sample Results – Round 3 (May 2001)

3.2.4.6.16 Groundwater samples were collected from the four existing wells at AOC 3 and the MW-5, 6, and 7 wells on the school grounds from May 21-22, 2001. Each sample was analyzed for TCL VOCs, SVOCs, pesticides, PCBs, and TAL metals. Groundwater sample results are presented on Figure 3.19 and in Table 3.21. None of the groundwater samples contained VOCs above NYSDEC Class GA groundwater standards. MW-5 did contain low concentrations of TCE (4.8 ug/L) and 1,2-DCE (1.7 ug/L). TCE was also detected in MW-2 (1.8 ug/L) at concentrations similar to those detected during sampling Rounds 1 and 2. MW-1, MW-3, MW-4-2, and MW-6 did not contain detectable VOCs.

3.2.4.6.17 MW-7 contained one SVOC (BEHP) at 5.2 ug/L, which is slightly above the NYSDEC Class GA groundwater standard of 5 ug/L. No other SVOCs, pesticides, or PCBs were present at concentrations above the applicable groundwater criteria.

3.2.4.6.18 The metals concentrations in the downgradient monitoring wells installed on the school grounds (MW-5, MW-6, and MW-7) were below groundwater criteria, with the exception of iron, manganese, and sodium. These three metals are naturally-occurring in soil and groundwater, and may not be related to any site contamination. The metals concentrations in groundwater samples at the AOC 3 site were generally similar to, or lower than, those detected during previous sampling. The one exception was MW-4-2, which had consistently higher concentrations of metals than in past sampling rounds. MW-4-2 was found to be damaged with a constriction in the riser pipe, which prevented a bailer from being inserted into the well for sampling. The well was sampled using smaller diameter tubing with a foot-valve that was already present in the well. The method yielded a more turbid sample than the samples collected from the other wells sampled with bailers. The elevated metals could be due to turbidity and not to groundwater contamination.

Monitoring Well Sample Results – Round 4 (November 2001)

3.2.4.6.19 The fourth round of sampling was conducted in November 2001 following the installation of the MW-8 and MW-9 wells at AOC 3 and the Guilderland High School, respectively. Groundwater samples were collected from the four existing wells at AOC 3, along with newly installed wells MW-8 and MW-9. The MW-5, MW-6, and MW-7 wells on the school grounds could not be sampled because the water table had dropped below the well screen elevations. Each sample was analyzed for TCL VOCs, SVOCs, pesticides, PCBs, and TAL metals. Groundwater sample results are presented on Figure 3.19 and in Table 3.21.

3.2.4.6.20 Results from MW-8, located adjacent to the western fence line of AOC 3, had concentrations of TCE (8.1 ug/L) and 1,2-DCE (5.3 ug/L) above the groundwater standard. TCE was also detected above the groundwater standard in MW-9 at a concentration of 5.3 ug/L. No other VOCs, SVOCs, pesticides, or PCBs were detected at concentrations above the groundwater criteria.

3.2.4.6.21 With the exception of iron, manganese and sodium, the metals concentrations in MW-8 and MW-9, and the existing four wells at AOC 3, were below the groundwater criteria.

Air Monitoring Results

3.2.4.6.22 Perimeter air monitoring was conducted during the drilling of well borings MW-5, MW-6, and MW-7 at the Guilderland High School to insure there were no releases that could possibly impact students at the school. Perimeter monitoring was conducted at upwind and downwind locations with a MiniRAE 2000 photoionization detector and a MIE Personal DataRAM real-time aerosol meter to determine whether any VOCs, aerosols or dust were present in the air. No releases were observed during the well drilling. Low PID readings observed around the rig were attributed to the rig exhaust and not to releases from the soil borings or soil cuttings. A table of air monitoring results is included as Appendix D.

3.2.4.6.23 Based on the results of air monitoring during the drilling of well borings MW-5, MW-6, and MW-7 on the school property, it was deemed unnecessary to conduct similar monitoring during the drilling of well borings MW-8 and MW-9 in October 2001.

NYSDOH Groundwater Sampling

3.2.4.6.24 Based upon the analytical results from the first two rounds of groundwater sampling at AOC 3, the NYSDOH collected a groundwater sample from the Guilderland High School irrigation well. The well was used by the school for washing buses and for watering the athletic fields and is located near the bus garage. The sample was collected on April 4th, 2001 and analyzed for TCL VOCs, SVOCs, pesticides, PCBs, and Inductively Coupled Argon Plasma (ICP) metals. Sample results indicated that all VOCs, pesticides, and PCB concentrations were below detection. One SVOC was detected (BEHP) at a concentration well below the NYSDEC Class GA groundwater criterion (0.3 ug/L). Sodium was the only metal detected above the Class GA groundwater criteria (38,000 ug/L). The complete results are presented in Appendix E.

Focused Feasibility Study March 2002

3.2.4.6.25 Based on the analytical results discussed above, a FFS was completed in March 2002). The FFS objectives were to:

- Assess and, as needed, mitigate the potential impacts on groundwater at the adjacent Guilderland School District property.
- Expedite addressing AOC 3 to allow the current property owner to continue use of the property.
- Work with the NYSDEC and NYSDOH to develop a preferred method of remediating AOC 3.

3.2.4.6.26 The FFS developed chemical-specific, action-specific, and location-specific SCGs applicable to AOC 3. Remedial action technologies applicable to AOC 3 were identified and screened based on implementability, effectiveness, and relative cost. Three remedial action alternatives were developed. Based on the criteria, a remedial alternative was selected that included:

- A 100-foot by 100-foot cover (soil or asphalt) west of the warehouse.
- Removal of approximately 2,200 cubic yards of soil.
- Transporting contaminated soil to an appropriate landfill based on contaminant concentrations and regulations.
- Replace excavated soil with clean fill to pre-excavation grade and provide proper drainage and cover (vegetate or pave).
- Conduct quarterly groundwater monitoring for up to two years in six monitoring wells in the area.
- Implement institutional controls to restrict groundwater use in areas where groundwater concentrations are above Class GA groundwater standards.

3.2.4.6.27 An IAP was developed to implement the recommendations of the FFS (July 2002). The IAP included permitting, notification requirements, and a remedial design. The remedial design included decontamination requirements, site preparation, excavation plan, restoration plan, transport and disposal of excavated soil, storm water and erosion and sediment control, and treatment and discharge of construction water during remediation. The remediation was conducted between August 27, 2002 and July 29, 2003 by Shaw Environmental & Infrastructure for the USACE under Rapid Response Contract No. DACA45-98-D-0003, Task Order No. 105.

3.2.4.6.28 Three areas at AOC 3 (ED-1, ED-2, and ED-3) were identified for the IRMs. The IRMs included excavation and removal of stained soils and debris, and backfilling and compacting soils after confirmation sampling. Confirmation sampling results were compared to the PRGs for the project. The IRMs are documented in "Interim Remedial Measure Area of Concern No. 3 Former Schenectady Army Depot-Voorheesville Area, Guilderland Center, NY" (Shaw, 2004). The IRMs included the following activities:

- ED-1 – Soils were removed from a 100-foot by 100-foot by 6-inch deep area west of the newly-built warehouse to remove the direct contact risks from pesticides and metals in the surface soils. Four confirmatory soil samples were collected. Composite samples were collected for waste characterization. The soils were disposed of at the Albany and Colonie landfills. The excavation was backfilled with clean soil and compacted.
- ED-2 – Soils were removed from a 50-foot by 50-foot by 16-foot deep excavation to remove VOC-contaminated soils. This area was identified during RI borings. The soils were screened with a PID and sampled. No debris was encountered in the excavation. Based on the screening and sampling, it was determined the concentrations in the soils were below the PRGs so the excavation was backfilled with the soils and compacted.
- ED-3 – Soils were removed from a 60-foot by 50-foot by 20-foot deep excavation to remove stained soils containing VOCs, SVOCs, pesticides, metals and a large volume of debris. Light nonaqueous phase liquid was collected using hydrophobic absorbent pads. The soils, absorbent pads, and debris were segregated for disposal. Two rounds of confirmatory sampling were conducted during the excavation work to verify PRG goals were met. The soils were disposed of at the Albany and Colonie landfills. The excavation was backfilled with clean soil and compacted.
- Plasma Bottle Removal – Test pit excavations were dug at AOC 3 adjacent to the debris removal area on the Guilderland School grounds in May 2003. Medical supply bottles were encountered. The bottles and associated materials were removed on July 22, 2003. An excavation was dug vertically to approximately 17 to 18 feet and laterally until no evidence of bottles was found. The fill material was separated from the soils. The fill material was crushed and rendered unrecognizable and then disposed at a landfill. The soils were placed back into the hole and compacted.
- Emergency Response Action - An emergency debris removal was conducted at the Guilderland Central School grounds during the period September 17, 2002 to November 27, 2002. The removal activities are documented in the Guilderland High School Emergency Response Completion Report (Shaw, 2003). During construction of a new bus garage, contractors unearthed buried debris from two different areas at the Guilderland Central School grounds. Labeling found on the debris was used to identify the material as medical supplies formerly stored at the SADVA by the DoD. The materials consisted of calcium hypochlorite ampules, British anti-lewisite (BAL) ointment tubes, calcium hypochlorite jars and pill bottles, 5-gallon metal buckets filled with a black oily material, various decomposed paint cans, various lab glassware filled with laboratory dyes, and metallic cans containing bottles of distilled water with a weak citric acid solution, tubing, and needles used to transfer the water to other containers. These kits were used to hydrate human blood plasma for subsequent human injection. Glass bottles of dried, irradiated, human blood plasma were also found in the excavation. A total of 1347 tons of soil and waste materials were excavated and disposed at off-site, regulated disposal facilities.

3.2.4.6.29 As part of the remedial actions, soil samples were collected in the excavations to confirm that all waste and contaminated soil had been removed. Following the remedial actions, groundwater monitoring began to assess the groundwater quality over time and demonstrate that the remedial action was effective in controlling the groundwater VOC plume. A two-year program of quarterly groundwater monitoring was completed in July 2005, and a final groundwater sampling report was prepared and submitted for NYSDEC review (Shaw, 2006). After reviewing the groundwater data, NYSDEC requested two additional quarterly rounds of groundwater sampling. These two rounds were completed in November 2006. With completion of the ten quarterly rounds of groundwater sampling, USACE has requested approval from NYSDEC to pursue a record of decision for the site (USACE, 2007).

3.2.4.6.30 In 2006, USACE contracted with Parsons to complete a post-remediation quantitative HHRA to demonstrate whether unacceptable human health cancer risks and non-cancer hazards exist at AOC 3 following the remedial action. The post-remediation quantitative HHRA demonstrated that no unacceptable carcinogenic risks are present for soil and groundwater at AOC 3. For the non-carcinogenic chemicals detected in mixed soils, there was no unacceptable risk for potential industrial receptors. Unacceptable non-carginogenic hazards were calculated in monitoring well MW-2. The risk was driven almost entirely by 1,3,5-trimethylbenzene. In addition, a hazard associated with lead exists in five wells. Screening criteria to evaluate vapor intrusion of VOCs from shallow groundwater into buildings were based on USEPA (2002) target groundwater concentrations. The target groundwater concentrations are calculated to correspond to target indoor air concentrations that are protective of human health if vapor intrusion occurs. In the vapor intrusion analysis, two VOCs were found to be above the target screening value. These chemicals were hexachlorobutadiene in one sample collected from MW-2 in September 2004, and trichloroethene from two samples collected at the Supply Well in March 2005 and July 2005.

3.2.4.7 AOC 3 Summary

3.2.4.7.1 This RI was intended to assess the nature and extent of contamination at AOC 3 by means of the following tasks:

Objective 1) *Delineate the presence and vertical extent of surface and subsurface soil contamination in geophysical anomalies at the Burn Pit Area.*

Ten soil borings and 22 supplemental soil borings were drilled and sampled to characterize the surface and subsurface conditions and contamination at AOC 3. Constituents (CPAHs, pesticides, PCBs) in surface soils posed a direct contact exposure risk to site workers.

Subsurface contamination was detected and delineated in site soils. VOC, CPAH, NPAH, pesticide, and metals contamination was detected. The former burn pit area near SB-06 was the most heavily contaminated. Other hot spots were also identified. The lateral extent of contamination in soils was delineated. The vertical extent of contamination at SB06 and SB14 was identified by the additional soil boring completed in this area. Results from SB-32 indicate the onsite contamination extended eight feet into the top of the water table to a depth of 25 feet bgs.

Objective 2) *Characterize shallow groundwater quality at the Burn Pit Area.*

Four Hydropunch groundwater samples were collected. One additional groundwater sample was collected from a soil boring exhibiting visual evidence of contamination. Three monitoring wells were subsequently installed to further characterize site groundwater. VOC, SVOC, and lead concentrations above NYSDEC groundwater standards were present at the site in SB06R and at the western property line in HP02 and MW-2. A plume appeared to be moving offsite in a north-northwesterly direction.

As a result of the initial RI findings, five monitoring wells were installed; four on the adjacent school property and one additional well near the western fence line of the NEIP. Results from MW-5, 7, 8, and 9 indicated the presence of TCE, 1,2-dichloroethane, and/or BEHP in the soil and/or groundwater. While the concentrations at the fence line were low, the groundwater plume appeared to extend beyond the fence line onto the school grounds for a short distance. MW-6, which is located farther west near the running track, did not contain any VOCs or SVOCs above the regulatory criteria in the groundwater or in the soils.

3.2.4.7.2 Based on the RI results, an FFS and IAP were prepared. The IAP was implemented and IRMs were conducted to address identified direct contact exposure risks and subsurface contamination that would impact the future use of the site by the present site owners. Ten rounds of quarterly groundwater were also completed to evaluate the effectiveness of the IRMs. An HHRA was completed and demonstrated that no unacceptable human health cancer risks remain at the site. The HHRA also demonstrated that no non-cancer hazards exist in soil for industrial land users at AOC 3. There is an unacceptable noncaner risk if groundwater in several wells at AOC 3 were to be used as a drinking water source.

3.2.5 AOC 4 Signal Building S-69 and Construction and Demolition Landfill

3.2.5.1 Introduction

AOC 4 is a construction and demolition (C&D) landfill located at the south end of SADVA (Figure 1.2 and Figure 3.20). The GURA purchased the inactive SADVA in 1969. Review of historical aerial photos suggests C&D activities postdate the Army's release of the SADVA property in 1969. Signal Building S-69 was present at AOC 4 during the years of DoD ownership and was presumably used by DoD.

3.2.5.2 Site History

The United States Army Toxic and Hazardous Materials Agency (USATHAMA) conducted an assessment of SADVA in 1980 using historical documents from various agencies, and aerial photographs from 1940, 1952, 1961, 1963, 1968, 1974, and 1977. The historical documents did not acknowledge any dumping by the Army during its operations at AOC 4. USATHAMA reports that the AOC 4 area was open space and inactive, based on air photos from 1940, 1952, 1961, and 1963. Active dumping and expansion at AOC 4 reportedly began following DoD ownership of the property, and continued through 1989. The Archival Search Report indicates that the sequence of available imagery suggests that activity at this site commenced sometime between October 1969 and 1973, after the DoD relinquished ownership of the property. No further investigation was recommended at AOC 4 as part of the RI planning process, because DoD has no responsibility for the present condition of this area. However, in response to requests by the RAB, the USACE agreed to conduct a limited characterization of AOC 4 to address concerns that the materials disposed in AOC 4 may have included Army materials left behind in the warehouses after the sale of the property.

3.2.5.3 Site Conceptual Model

The site conceptual model is based on limited data from the interpretation of aerial photographs (USATHAMA, 1980). Land filling was conducted at AOC 4 beginning between 1969 and 1973 and continued through 1989. The land filling activity was not shown to be related to DoD activity. However, there was speculation that some of the material in the landfill was DoD materials left when operations of SADVA ceased. The use of Signal Building S-69 and the adjacent sump-like structure are not well documented. The Archival Search Report refers to the sump being used by a tenant of the NEIP to test pumping systems on fire trucks.

3.2.5.4 RI Objectives

The investigation at AOC 4 was designed to assess the possibility that the C&D landfill may contain hazardous materials that were left in warehouses at the time the Army released the property, and to assess the water and sediment quality in the “sump-like” structure adjacent to Signal Building S-69.

3.2.5.5 RI Sampling Strategy and Results

3.2.5.5.1 Three surface and one subsurface soil samples were collected at AOC 4 near Building S-69. Surface soil sample SS2 (sample ID SS2-0-0.5) was analyzed for TCL volatiles, semivolatiles, pesticide/PCBs, and TAL metals. Surface and subsurface soil samples from well boring GW02 were analyzed for SVOCs only. SS1 (sample ID SS1-0-0.5) was analyzed for Toxicity Characteristic Leaching Procedure for volatiles, semivolatiles, pesticides, herbicides and metals to assess if the materials could be classified as a hazardous waste.

3.2.5.5.2 The surface soil sample from SS2 (SS2-0-0.5) contained one SVOC (benzo(a)pyrene at 120 ug/kg) and one metal (zinc at 651 mg/kg) at concentrations above NYSDEC soil criteria (Table 3.22a and Figure 3.21). The surface sample from GW02 (GW02-0-0.5) was collected at the location of monitoring well GW02. This sample contained four SVOCs (all are CPAHs) at concentrations above soil criteria (Table 3.22b and Figure 3.21). The subsurface soil sample from GW02 was collected at a depth of 38-40 feet bgs, and no SVOCs were detected. The TCLP waste characterization soil sample (SS1-0-0.5) did not exceed any of the criteria for classification as a hazardous waste (Table 3.23). During the sampling and other work in the AOC 4 area, no waste materials that had any obvious markings or other connection to Army activities were found.

3.2.5.5.3 To assess the water and sediment quality present in the “sump-like” structure on the northwest side of Building S-69, one surface water/sediment sample pair was collected and analyzed for TCL volatiles, semivolatiles, and pesticide/PCBs, and TAL metals (Figure 3.20).

The standing water and sediment samples from the sump are not highly contaminated with organic compounds or metals. Only dieldrin and zinc exceeded the Class C surface water criteria and upstream (Black Creek) concentrations (Table 3.24a and Figure 3.22). Only zinc exceeded the sediment criteria and upstream (Black Creek) concentrations (Table 3.24b and Figure 3.23). The zinc may be attributed to the galvanized corrugated metal that lines the sump structure. The surface water and sediment criteria do not apply to the sump samples but were used for comparison purposes to assess the presence of contamination.

3.2.5.5.4 One groundwater sample was collected from GW02 and analyzed for SVOCs and metals. This well was installed as part of the AOC 7 investigation. However, its location also provides information for AOC 4. Sample GW02-AOC-7 did not contain any SVOCs above NYSDEC Class GA groundwater standards (Figure 3.22 and Table 3.25). Iron was the only metal detected above groundwater standards.

3.2.5.6 AOC 4 Summary

The limited characterization at AOC 4 met the objectives of assessing the possibility that the landfill may contain hazardous materials that were left in warehouses at the time the Army released the property, and of assessing the water and sediment quality in the "sump-like" structure adjacent to Signal Building S-69. The soil, groundwater, sediment and surface water samples do not indicate the presence of high levels of contamination, or a direct connection with former SADVA activities.

3.2.6 AOC 5 DNSC Voorheesville Depot

3.2.6.1 Introduction

3.2.6.1.1 AOC 5, the Voorheesville Depot, is currently owned by the General Services Administration (GSA) and is operated by the DNSC. The facility is operated under the National Stockpile Program for the purpose of storing metallurgical ores and materials necessary for manufacturing defense materials, or strategic materials used in national defense. Although AOC 5 was investigated as part of the SADVA RI, it is not part of the FUDS program because it is currently owned and operated by the Federal Government. DNSC has ended its operations at Voorheesville Depot, and is assessing the environmental condition of the property in anticipation of closing the site and returning the property to the GSA. Because DNSC's planned assessment of the Voorheesville Depot was concurrent with the planning for the SADVA RI, AOC 5 was included in this RI to facilitate the public participation process that is an integral part of the FUDS program, as well as DNSC's public outreach efforts. However, now that the process of closing the Voorheesville Depot has begun, DNSC has chosen to address the environmental assessment of Voorheesville Depot in a separate, independent RI Report. AOC 5 will continue to be addressed in this SADVA RI Report only to the extent that AOC 5 is a potential source of contaminants for other AOCs, including AOC 8 – Black Creek.

3.2.6.1.2 The Voorheesville Depot is situated adjacent to the southwest corner of the former SADVA. The Depot is bounded on the north by open land of the former SADVA, on the northeast by the NEIP, and on the east by open land and a wooded area. Figure 3.24 shows the site layout of the Voorheesville Depot. Black Creek enters the SADVA site approximately 1,600 feet east of the Voorheesville Depot. County Route 201 is located along the southern and western boundaries of the site.

3.2.6.1.3 Operations at the Voorheesville Depot consisted entirely of outdoor storage of strategic ores and metals. The facility occupies approximately 35.5 acres and contained four buildings during its active operating period: a guard trailer, an administration trailer, and two equipment storage garages. Three workers were typically present at the site; a 24-hour contract security guard and two DLA workers. The entire site is relatively flat and covered with gravel. The site is surrounded by a six-foot high chain-link fence topped with three strands of barbed wire. As of late 1998, approximately 249,577 square feet of the 1,243,698 square feet of usable open storage area was occupied. By 2001, this occupied area was reduced to 18,535 square feet through the sale of commodities (DNSC, 2001). By the end of 2006, all commodities had been removed from the site.

3.2.6.2 Site History

3.2.6.2.1 During World War II, the United States became critically short of chrome and manganese ores used in the manufacturing of steel for the war effort. The National Stockpile Program was developed to create depots strategically located across the country. The Voorheesville Depot was originally part of SADVA from 1941 to 1969, but subsequently became a separate 35.5-acre parcel owned by the GSA and operated by the DNSC as a satellite storage area for the DNSC Scotia, NY Depot. AOC 5 appeared, from historical aerial photos, to have been a borrow pit and equipment storage area for SADVA until the late 1940s or early 1950s. A 1952 aerial photo shows AOC 5 being used for open storage of crated materials. AOC 5 has been used as an open storage area for metals and ores since that time.

3.2.6.2.2 Materials that have been stored at the Voorheesville Depot in outdoor stockpiles or in drums included aluminum, aluminum oxide, columbium/tantalum, copper, ferrochrome, lead, and zinc. Most of the ground surface at the Depot has been covered by stockpiled materials at one time or another.

3.2.6.2.3 DNSC's operations at the Depot consisted of maintenance and movement of the stockpiled materials from one depot to another, or sale of the commodities. All supporting operations related to maintenance of the Voorheesville Depot were conducted out of the Scotia Depot. Approximately 60,046 tons of ferrochrome, aluminum oxide, lead and zinc were stored at the Voorheesville Depot as of January 3, 2001 (DNSC, 2001). Lead (ingots), zinc (slabs), aluminum oxide (in drums), and ferrochrome (in drums) were stored outdoors on gravel surfaces as well as on wood pallets. By spring 2005, all commodities had been removed from the site, with the exception of ferrochrome ore. Ferrochrome ore was stored outdoors on concrete pads. By the end of 2006, all ferrochrome had been removed from the site.

Regulatory Status

3.2.6.2.4 There have never been any USTs at the Voorheesville Depot. Hazardous waste materials were not typically generated during site operations, and no onsite hazardous waste disposal has been documented. There were periodic inspections of the stockpiled materials at the

Depot by DNSC personnel. Documentation of these inspections is available in the facility records at Scotia Depot.

3.2.6.2.5 Low-level radioactive columbium/tantalum ore was stored in drums at the site from June 1988 to August 1990. The DNSC has a low-level radioactive license (STC 133) from the Nuclear Regulatory Commission (NRC) that lists each facility containing radioactive materials. After the drummed materials were removed from the Voorheesville Depot, a closeout radiological survey was conducted in late 1990 and early 1991. The Voorheesville Depot was officially removed from the NRC license in 1994.

3.2.6.2.6 The U.S. Department of Interior, Fish and Wildlife Service and New York State National Heritage Program were contacted in 1998 to confirm that "There are no habitats for threatened and endangered species within 0.5 miles of the Depot."

Previous Investigations

3.2.6.2.7 A site visit conducted on June 2, 1998 by Parsons assessed the potential for stockpiled materials to be released to the environment. The visit focused on identifying site activities that could result in a potential threat to human health and the environment. The assessment was performed using the United States Environmental Protection Agency (USEPA) Guidance for Performing Preliminary Assessments (PAs) under CERCLA (EPA/540/6-91/013).

3.2.6.2.8 A PA Report for the Voorheesville Depot, issued in December 1998, developed hypotheses concerning the potential for contamination to exist, and concluded a site investigation was necessary to test the hypotheses (Parsons, 1998). Collection of samples of various environmental media was proposed to identify the presence and migration of contamination. The RI for AOC 5 was designed to assess the presence and extent of contamination.

Storm Water Management History

3.2.6.2.9 Because the site was originally used as a borrow area for the SADVA, the Voorheesville Depot ground surface is lower than the surrounding land, and also receives storm water inflow from the storm sewer system along Route 201. Those conditions have led to periodic flooding conditions at the site which severely hampered site operations. To alleviate those conditions, DNSC arranged for excavation of perimeter ditches and retention ponds to improve site drainage in the spring of 1999. Figure 3.24A presents the site conditions at the start of the RI in 2000. Due to continued site flooding, DNSC arranged for the existing retention ponds to be enlarged, and a new pond to be added in 2004. The current site conditions are reflected on the updated site plan on Figure 3.24B.

3.2.6.2.10 Construction of the retention ponds in 2004, and continuing operation of the ponds, were covered by a NYSDEC State Pollutant Discharge Elimination System (SPDES) Permit #4-0130-00211/00001 (SPDES Site Number 0268305). That SPDES permit has since been deleted by NYSDEC.

3.2.6.2.11 The excavation of the new and expanded ponds included blasting to fracture the shale bedrock that is present at shallow depths (less than two feet in most areas) onsite.

Approximately 10,000 cubic yards of soil and shale bedrock were excavated from the “Northeast Pond”, and were placed in the area immediately west of the pond (Figure 3.24B). This pond was excavated to about five feet below the existing ground surface.

3.2.6.2.12 Approximately 13,000 cubic yards of soil and shale bedrock were removed from the “South Pond”, and were placed in the area immediately west of the pond (Figure 3.24B). This pond was excavated about four feet below the existing ground surface. The original pond that existed in the southern corner of the site had an area of approximately 11,000 square feet. The expanded “South Pond” has an area of approximately 87,000 square feet.

3.2.6.2.13 Finally, about 25 cubic yards of soil were removed from a drainage swale that runs from the South Pond onto NEIP property, toward the Black Creek ditch drainage system. The excavated soil was placed in the area immediately west of the South Pond (Figure 3.24B).

3.2.6.3 Conceptual Site Model

3.2.6.3.1 Based on the results of the PA, the primary pathways by which hazardous substances may have been released to the environment include soils, groundwater and surface water/sediment. The air pathway was not considered to have the potential for a release or for contaminant migration. Resources stored at the Depot are either stored in drums or are in solid metal form and therefore are unlikely to undergo erosion; therefore, air samples were not collected during this investigation. However, it is possible that contaminated soil, if present, could become airborne and migrate offsite as fugitive dust. This pathway was investigated by assessing surface soil quality.

3.2.6.3.2 The hazardous substance release mechanism is the same for all three pathways. It was hypothesized in the PA report that the hazardous substances from the outdoor metals stockpiles could be leached by exposure to precipitation and enter the surrounding soil, surface water/sediment and groundwater via storm water runoff and infiltration. To test this hypotheses and the suspected source area releases, this RI included an environmental sampling and analysis program for soil, groundwater, and surface water (and associated sediment) pathways. The scope of this RI was intended to provide the data necessary to determine if releases have occurred and whether a feasibility study is necessary.

3.2.6.4 Project Objective

The project objective is to assess whether the metals and ore stockpiles within AOC 5 are leaching, or have leached, metals into the soil, groundwater, and surface water/sediments.

3.2.6.5 RI Sampling Strategy, Scope and Results

3.2.6.5.1 The following paragraphs present the sampling strategy, scope, and results for each migration pathway sampled at AOC 5 during this RI. A summary of the samples collected and analyzed at AOC 5 is presented on Table 3.1. Surface water and sediment sample results are compared to the applicable NYSDEC standards and criteria and upstream concentrations. Surface water standards were determined using measured hardness values. Sediment criteria were determined using background total organic carbon concentrations. Groundwater sample results are compared to NYSDEC Class GA groundwater standards. Soil sample results are compared to background and NYSDEC soil clean-up criteria.

Soil Sampling Strategy and Results

3.2.6.5.2 Nine "area" background surface soil sample locations, beyond the limits of the SADVA, were chosen to characterize background soil conditions in the area. The nine background locations were chosen as part of the SADVA RI with the concurrence of NYSDEC, NYSDOH and the Restoration Advisory Board. The surface soil locations are located east, south, and west of the SADVA as shown on Figure 3.2. Three additional "site-specific" background surface soil samples were collected at Voorheesville Depot upwind and upgradient of the outdoor storage areas, immediately behind the security/office trailers (SS08, SS09, and HP01 as noted on Figure 3.25). All twelve background soil samples were collected from the top two inches of soil, with the exception of HP01, which was collected at two to four feet below ground surface. This location was originally planned as a Hydropunch boring, however because of the site conditions, the boring was drilled using hollow stem augers and sampled with split spoons. All twelve background samples were analyzed for TAL metals (note that HP112 is a field duplicate of HP12).

3.2.6.5.3 The results of the area and site-specific background soil sampling are presented on Table 3.26a. The results from the area and site-specific background soil samples were compared to the NYSDEC recommended soil cleanup criteria in TAGM 4046 (NYSDEC, 1994). The metals criteria in TAGM 4046 are not health-based, but rather are based on site-specific and regional soil background concentrations. The NYSDEC recommended cleanup criteria for metals in TAGM 4046 include provisions for using site-specific background concentrations, as well as reference concentrations for eastern U.S. soils. The background metals concentrations were integrated into the NYSDEC soil criteria using the guidance provided by NYSDEC. The higher of the referenced eastern U.S. soil concentrations and the site-specific/area background concentration for each metal was accepted as the "NYSDEC Soil Criteria" for characterization purposes during the RI at AOC 5.

3.2.6.5.4 As described in the PA Report, the potential existed for metals from the metal and ore stockpiles to have been leached by exposure to precipitation, and to have entered the surrounding soil via infiltration. To test this hypothesis, two soil sample depth intervals were sampled to assess the presence and vertical migration of the metals potentially leaching from the stockpiles. The zero to two-inch sample depth interval is intended to assess the possible direct contact or fugitive dust threats (wind-blown soil leaving the site and being inhaled). The sample depth interval below two feet is intended to assess whether the metals are migrating downward through the soil column. The subsurface soil samples were collected beneath the limestone and cobbles that have been placed on the ground surface by DNSC to provide a solid foundation for the metals/ore stockpiles and associated operations. A backhoe was used to excavate small trenches to allow sampling of subsurface soils.

3.2.6.5.5 Three soil sample locations (SS01, SS02, and SS03) were intended to assess areas where metals and ore stockpiles were located at the time of sampling (Figure 3.25). Two sample locations (SS05 and SS06) were intended to assess areas where stockpiles were historically located. Note that metal and ore stockpiles have been located over the entire site at one time or another; therefore, the locations of specific stockpiles have not been shown on the site figures. SS04 and SS07 are located in the former drum sand-blasting and painting areas, respectively, to assess those areas for residual impacts on soil quality. Three additional subsurface soil samples were collected from three planned Hydropunch (HP) borings that were drilled for collection of groundwater samples (HP02, HP03 and HP04). These groundwater borings were originally planned as Hydropunch borings; however, because of the dense, compacted ground surface conditions, the borings were drilled using hollow stem augers and sampled with split spoons. All the samples were analyzed for TAL metals.

3.2.6.5.6 The results for all soil samples are compared to the NYSDEC Soil Criteria on Table 3.26b. Metals that were not detected in a specific sample are listed as "ND" in the summary table. Sample concentrations that exceed the NYSDEC soil criteria are highlighted on Table 3.26b.

3.2.6.5.7 Two of the metals stored at the site, copper and chromium, were detected above NYSDEC soil criteria in 13 and 14 soil samples, respectively. Nickel and iron were also detected throughout the site in a large number of samples at concentrations above NYSDEC soil criteria. Lead and zinc were detected above soil criteria far less frequently.

3.2.6.5.8 The soil data set was originally thought to be adequate to characterize the site surface and subsurface soil quality. However, during a meeting with DNSC at the site in May 2006, NYSDEC requested additional surface soil samples be collected in areas where spoils had been placed during excavation of the expanded and new retention ponds in 2004. The pond spoils are a mixture of the former pond bottom sediments and undisturbed soil/bedrock that was excavated to construct the new/enlarged ponds. In June 2006, Parsons collected six additional surface soil samples from the top six inches of the pond spoils areas (Figure 3.26). These samples were designated SS-1, 2, 3, 4, 5 and 6. The sample depth was increased to the top six inches due to the large amount of gravel in the upper portion of the spoils piles. Three other supplementary soil samples were collected from the top six inches of soil, and were designated SS-7, 8 and 9. These supplementary soil samples were intended to provide additional characterization of the metals storage area, former sand blasting area (SS-7), former drum painting area (SS-8) and metals storage area (SS-9). These nine supplementary soil samples were analyzed for a selected list of metals, corresponding to the metals listed on the Depot's SPDES permit.

3.2.6.5.9 The results of these supplemental samples are summarized on Table 3.26c, and are compared to the NYSDEC Soil Criteria. Most of the supplementary soil samples have concentrations that exceed the soil criteria for chromium, copper, iron and nickel. Selected samples exceed the soil criteria for aluminum, lead, magnesium and zinc.

Soil Characterization Summary

3.2.6.5.10 The soil sample coverage is sufficient to characterize the impacts of historical and more recent operations on soil quality at Voorheesville Depot. DNSC has prepared a separate RI Report for the Voorheesville Depot. The Voorheesville Depot RI report has been submitted to NYSDEC, NYSDOH and Albany County Department of Health (ACHD) for review and concurrence.

Groundwater Sampling Strategy and Results

3.2.6.5.11 Most nearby residents are connected to the Town of Guilderland public water supply (Town of Guilderland, 2000). The Town of Guilderland public water supply lines run along Route 201 as far as the railroad tracks west of the intersection of Ostrander Road and Route 201, and extend approximately 1,500 feet west along Meadowdale Road (Route 202). Homes northwest, west, and southwest of AOC 5 along the rest of Meadowdale Road, and along Frederick and Hawes Roads, use private wells (Town of Guilderland, 2000).

3.2.6.5.12 Sampling of residential wells south and west of the Voorheesville Depot was conducted in 1990 by the ACHD. Sampling results showed that groundwater quality was within the NYSDOH drinking water standards. The residential wells south and west of the Voorheesville Depot are believed to be cross-gradient to, or upgradient of, the Depot, as described later in the section.

3.2.6.5.13 In 1991, OHM conducted groundwater sampling at residences along Depot Road (County Route 201) adjacent to Voorheesville Depot. The residences that were sampled were located between Hennessey Road and Ostrander Road and also included three residences along Ostrander Road. Twenty-one groundwater samples were collected and analyzed for VOCs, base/neutral SVOCs, and metals. Zinc exceeded the groundwater criteria in one sample collected near the intersection of Depot Road and County Route 206. Other compounds and metals were detected below groundwater criteria or were not detected (see Figures 3.7B, 3.7C and 3.7D).

3.2.6.5.14 During the RI at AOC 5 in 2000, groundwater samples were collected from an onsite well and three temporary wells to characterize groundwater quality at the Voorheesville Depot. A groundwater sample (GW01) was collected from the onsite water well that provided non-potable water to the bathrooms in the trailers. This well is approximately 32 feet deep and is located between the stockpiles and the residences south of County Route 201 (Figure 3.27). Groundwater samples were also planned to be collected from a series of four temporary well borings located upgradient (HP01) and downgradient (HP02, HP03, and HP04) of the metals storage areas at the Depot. Groundwater samples were collected from three of the four borings (HP01, HP03, and HP04). The shallow water table was not encountered at HP02; therefore, a groundwater sample was not collected. In each boring, a groundwater sample was collected from the top of the water table using a temporary PVC sampling point installed in the augered borehole. The groundwater samples were analyzed for TAL metals. Because the samples were not collected from conventional monitoring wells, the turbidity of the samples was difficult to control and was higher than desired.

3.2.6.5.15 Groundwater elevations were measured in the temporary sampling points (HP series borings) using an electronic water level indicator before each groundwater sample was collected in early August 2000. Groundwater elevations are presented on Table 3.27 and Figure 3.27. The groundwater elevation map shows a general trend of local groundwater flow to the northeast, toward Black Creek. HP01 and GW01 are the upgradient sample locations at the site.

3.2.6.5.16 Groundwater sample results are compared to NYSDEC Class GA groundwater criteria (NYSDEC, 1998). Downgradient sample concentrations in HP03 and HP04 are also compared to upgradient concentrations in GW01 and HP01. Those downgradient concentrations that exceed the upgradient concentrations and the Class GA criteria are highlighted on Table 2.28. The concentrations of the primary metals stored at the site (aluminum, copper, chromium, lead, and zinc) are below the Class GA groundwater criteria in all samples. Iron was detected above the groundwater standard and upgradient concentrations in HP03. The highest concentrations of sodium were detected in the two upgradient samples collected near Route 201, and could be attributable to road salting. Thallium was detected only in upgradient sample GW01; it was not detected in the downgradient samples. Antimony and magnesium were detected above Class GA criteria and upgradient concentrations in both downgradient samples.

Groundwater Characterization Summary

3.2.6.5.17 The metals stored at Voorheesville Depot (aluminum, copper, chromium, lead, and zinc) have not adversely impacted groundwater quality beneath the site. The nearest residential groundwater wells are located upgradient of the Voorheesville Depot. Residences in the immediate vicinity of the Depot are served by the municipal drinking water system. On the basis of these conditions, no further action is required at the site.

Surface Water Sampling Strategy and Results

3.2.6.5.18 AOC 5 is located adjacent to the southern end of the former SADVA, within the Black Creek drainage basin. The main Black Creek channel is located approximately 1,600 feet east of AOC 5. Near AOC 5, the Black Creek channel is surrounded by New York State wetland V-19. Wetland V-19 extends west of Black Creek and is as close as 800 feet to the eastern side of AOC 5. Surface water drainage from Route 201 and from a small, unclassified wetland area south of Route 201 enters the Voorheesville Depot.

3.2.5.5.19 The Voorheesville Depot has a perimeter drainage ditch connected to storm water retention ponds that are designed to hold surface water runoff and allow sediment and particulate matter to be deposited in the ponds. Figure 3.28 shows site drainage patterns as they existed at the time of the start of the RI in 2000. Before the installation of the first set of retention ponds in the spring of 1999, surface water run-off from the ditches flowed to Black Creek. After the excavation of detention ponds in 1999, surface water occasionally would overflow the ponds into the ditches leading to Black Creek. In 2004, the ponds were enlarged and deepened to provide greater detention capacity. The intent of the detention ponds is to allow suspended sediment to settle out of the water column and be deposited in the ponds, minimizing the amount of sediment and soil runoff that can leave the site and reach Black Creek.

3.2.6.5.20 Black Creek is a Class C water body. Class C waters are suitable for fishing and fish propagation and primary and secondary recreation, even though other factors may limit the use for that purpose. Black Creek flows north and joins the Bozenkill, which enters the Watervliet Reservoir approximately four miles north of AOC 5. The Watervliet Reservoir is a

Class A water body suitable for drinking, culinary or food processing, and any other uses. There may be surface water intakes between AOC 5 and the Watervliet Reservoir (NYSDOH, 1992). Individuals were known to withdraw water from Black Creek just south of the Bozenkill (Guilderland Water Department, 2000). That stretch of the Black Creek is classified as a Class B waterway by the NYSDEC. Class B waters are suitable for primary contact recreation and any other uses except as a source of water supply for drinking, culinary or food processing purposes. The Watervliet Reservoir water supply serves a population of over 40,000 people.

3.2.6.5.21 Eight surface water samples (SW01 through SW08) were proposed in the RI Field Sampling Plan to be collected from the perimeter ditches and from the two retention ponds that were completed in 1999. The objective was to characterize potential impacts from the materials stored at the Voorheesville Depot. Seven of the eight surface water samples from the ditches and retention ponds were collected as planned. SW08 was not collected due to a lack of surface water during the course of the field work. SW08 was intended to be collected in the northeast corner of the site at SD08 (see Figure 3.28). Some surface water locations only contained water during storm events and for a limited time thereafter. The initial sampling was conducted on June 2, 2000 during a rain event. Based upon observations of overflow drainage from the northern ditches and retention pond, six surface water samples (SW09, SW10, SW11, SW12, SW13, and SW26) were added. SW9, SW10, and SW11 were located in the drainage way adjacent to the former open storage area, downstream of the retention pond. SW26 is located downstream of the northern part of the former open storage area, and SW12 is located between these drainage areas and Black Creek.

3.2.6.5.22 Surface water samples SW05 and SW06 were collected at storm water infalls from Route 201 near the perimeter fence. SW13 was collected at another infall where Route 201 storm water flowed into the site beneath the perimeter fence. Sample locations SW5, SW6, and SW13 monitored the quality of storm water that entered the Voorheesville Depot from the municipal storm sewer system along Route 201. The primary source of that storm water is an open field southeast of the Depot. These infalls nearly double the storm water that flows into the retention basins (Gannett Fleming, 2001). Due to the volume of the surface water being discharged to the Voorheesville Depot from the municipal storm water system, the data from locations SW5, SW6, and SW13 have been grouped as upstream data against which the onsite data are compared. This comparison allows the surface water quality of the municipal storm water inflow to be compared to the quality of storm water leaving the Voorheesville Depot. In this way, impacts attributable to the Depot activities can be distinguished from impacts attributable to the municipal storm water inflow.

3.2.6.5.23 Table 3.29 provides two background/upstream surface water data sets, one from Black Creek, and one from the municipal storm water infalls. Data for the onsite and downstream surface water locations are compared to these upstream data sets, as well as NYSDEC Class A and Class C surface water standards. Those onsite/downstream concentrations that exceed both background data sets and Class C surface water standards are shaded on Table 3.29. Class C Standards apply from a regulatory standpoint because that is the classification of Black Creek near AOC 5. Class A Standards are provided for comparison purposes, since Class A waters are located downstream of AOC 5.

3.2.6.5.24 Most surface water samples were analyzed for total and dissolved TAL metals and hardness. Sample results are presented in Table 3.29. Sample locations and results are summarized on Figure 3.28. Samples for dissolved metals were filtered by the analytical laboratory before analysis. This eliminated metals attached to suspended sediment in the samples, leaving only dissolved metals.

3.2.6.5.25 All metals concentrations in onsite and downstream samples were below the NYSDEC Class C surface water standards and background ranges. The highest concentrations of most metals were detected in the infall samples. There are no site-related impacts to surface water at the site or immediately downstream of AOC 5. These results suggest the retention ponds are effective at improving surface water quality before it leaves the site.

3.2.6.5.26 When DNSC was planning to enlarge the retention ponds, NYSDEC required DNSC to apply for a SPDES permit for Stormwater discharges from the site. SPDES Permit NY 0268305 was issued to DNSC by NYSDEC on October 15, 2003. DNSC maintained the site in accordance with the permit requirements, including sampling the stormwater discharges. DNSC continued to monitor and sample stormwater discharges in 2005 and 2006, after the retention ponds were expanded and added. In July 2006, DNSC informed NYSDEC that all commodities being stored at the depot had been removed, that there was no longer any active use of the site, and that the site would be returned to the property owner, the GSA. NYSDEC subsequently granted DNSC's request to delete SPDES Permit NY 0268305 on August 2, 2006.

Sediment Sample Strategy and Results

3.2.6.5.27 At the start of the RI in 2000, eight sediment samples (SD01 through SD08) were proposed in the RI Field Sampling Plan to be collected from the two retention ponds and from the perimeter ditches. The eight sediment samples were collected as planned from the ditches and retention ponds. Surface water samples SW5 and SW6 were collected at the discharge points of culvert pipes as the storm water entered the site. This area is covered in large riprap, so the corresponding sediment samples could not be collected at the same locations. Sediment samples SD5 and SD6 were collected from the perimeter ditch near the points where the offsite storm water entered the perimeter ditches. The initial sampling was conducted during a rain event. Based upon observations of overflow drainage from the southern ditches and retention pond, five sediment samples (SD09, SD10, SD11, SD12, and SD26) corresponding to surface water sample locations were added. The sediment sampling objective was to characterize potential impacts from the materials stored at the Voorheesville Depot. Sediment samples were analyzed for TAL metals (Table 3.30). Sample locations and key results are shown on Figure 3.29.

3.2.6.5.28 Sediment results are presented in Table 3.30. The results for the primary metals presently or historically stored at the site are summarized on Figure 3.29. The 2000 sediment sample results from the onsite ditches and offsite drainage pathways were compared to the sediment background concentration ranges for Black Creek and the NYSDEC sediment criteria. Sample concentrations that exceeded both the Black Creek background and the NYSDEC sediment criteria were considered to be potentially impacted by Voorheesville Depot operations. Sample concentrations that exceed both sets of criteria are shaded on Table 3.30 and Figure 3.29.

3.2.6.5.29 The concentrations of metals in the sediment samples from the retention ponds collected in 2000 did not exceed the combined Black Creek background and NYSDEC sediment criteria in either sample (SD1 and SD3). In the onsite ditches, the concentrations of chromium, copper, lead and zinc were above both sets of criteria in one or more samples (SD2, SD3, SD4, SD5, SD6 and SD8). Concentrations tended to be higher in the offsite ditch samples SD7 and SD9, and then decreased somewhat in offsite samples SD10, SD11, SD12 and SD26 located farther downstream in the swale. These results suggest that soils and sediments with metals concentrations above sediment criteria have accumulated in the onsite ditches, and have migrated into offsite ditches, probably during periods of surface water overflow from the site.

3.2.6.5.30 In 2004, DNSC expanded and added retention ponds at the Voorheesville Depot. Included in that process was the over-excavation of the offsite drainage swale (where samples SD07 and SD09 were located). The drainage swale was over-excavated to a depth of four inches to remove accumulated soil. The excavated soil was placed onsite along with the southern pond excavation spoils (Figure 3.26).

3.2.6.5.31 In October 2005, four soil samples were collected from the drainage swale that had been cleaned out in 2004. The drainage swale sample locations are shown on Figure 3.29; three locations (PSED002, PSED003 and PSED004) were in the excavated portion of the swale, and one location (PSED001) was located beyond the area that had been excavated.

3.2.6.5.32 The 2005 sample results are summarized on the last page of Table 3.30. The concentrations in post-excavation samples PSED003 and PSED004 tend to be lower than the concentrations in the pre-excavation samples SD07 and SD09. However, the sample concentrations from the excavated area are not consistently lower than the sample from the unexcavated area (PSED001). Chromium, copper, lead and zinc concentrations exceed both sets of sediment criteria in one or more samples from the excavated area. These results suggest the over-excavation to four inches improved sediment quality, but may not have removed all of the impacted soil and sediment present in the offsite drainage swale.

3.2.6.6 AOC 5 Summary

3.2.6.6.1 The project objective was to assess whether the present and historical metals/ore stockpile sources within AOC 5 are leaching, or have leached, metals into the soil, groundwater, and surface water/sediments.

3.2.6.6.2 There were no apparent impacts from the materials stored at the site on groundwater or surface water quality, as all concentrations of the metals stored onsite were below applicable criteria and upgradient/upstream ranges.

3.2.6.6.3 The soil sample coverage is sufficient to characterize the impacts of historical and more recent operations on soil quality at Voorheesville Depot. DNSC has prepared a separate RI Report for the Voorheesville Depot. The Voorheesville Depot RI report has been submitted to NYSDEC, NYSDOH and Albany County Department of Health (ACHD) for review and concurrence.

3.2.6.6.4 Based on the sample results identified during the RI, the DNSC voluntarily enlarged the retention ponds to increase the water retention and sediment settling time capacity. Despite the fact that the County Road 201 storm drains significantly increase the amount of water at the site, the retention ponds are operating effectively and continue to improve surface water quality and reduce the sediment and soil runoff discharges offsite toward to Black Creek. The excavation of the offsite swale did not remove all of the sediments that had concentrations in excess of NYSDEC sediment criteria. The site-wide ecological risk assessment and the human health risk assessment for Black Creek (AOC 8) provide additional information about the risks posed by the offsite sediments at AOC 5 (see Section 4)..

3.2.7 AOC 6 Waste Water Treatment Plant Area

3.2.7.1 Introduction

AOC 6 is the area near the former SADVA waste water treatment plant (WWTP). Figure 3.30 is a site plan of AOC 6 and the former WWTP area. The Town of Guilderland used the former SADVA WWTP prior to the construction of a new WWTP between 1993 and 1995. The Final Archival Search Report shows the footprint of the former WWTP as it was configured in 1943 to 1945. The former SADVA WWTP consisted of two sand beds, two sludge beds, one sedimentation tank, one chlorination building and one 500,000-gallon water storage tank. The footprint of the new Town of Guilderland WWTP is situated over the former SADVA WWTP. The new WWTP includes a 10,000-square foot building and a 1 million gallon pre-stressed concrete water storage tank. Upgrades and improvements included complete renovations to the offices, control room, electrical room, chemical feed areas, generator room, laboratory and rest rooms (uwmarx.com, 2005).

3.2.7.2 Site History

The Final Archival Search Report (EAEST, 2003) and the Albany County Environmental Management Council (ACEMC, 1980) reviewed the history of this area. The area was used as the SADVA WWTP beginning in the early 1940's. The Archival Search Report states that an area up to two acres in size in the northeast corner of the WWTP was a possible dumping ground, based on aerial photographs taken between 1952 and 1968. Coal was apparently stored in this area between 1952 and 1960. Excavations, scarring, and a ponded area were observed in aerial photos with dates between 1952 and 1968. By 1969, the scarring was no longer visible. During construction of the new Town of Guilderland WWTP in 1993 through 1995, fill areas were encountered, according to the current Guilderland Water Treatment Plant operator. These fill areas contained stained soil, ash, and bottles containing iodine tablets. These materials were removed and properly disposed as part of constructing the new WWTP. Construction of the new WWTP has left only one or possibly two potential small dumpsites along Black Creek to be investigated. Based on the Archival Search Report, USACE recommended that a site reconnaissance and test pit excavations be performed in this area in an attempt to locate the dumpsites, if they exist.

3.2.7.3 Site Conceptual Model

The site conceptual model is based on limited data from the interpretation of aerial photographs (EAEST, 2003 and ACEMC, 1980). One to two fill areas were identified outside the footprint of the current WWTP. These former fill areas are located between the current WWTP and Black Creek. As reported by the Albany County Department of Health (ACDH), fill material was encountered in the area where the current WWTP was constructed, including thousands of small pill bottles. The contents of the pill bottles were identified as tetraglycine hydroperiodid tablets (ACDH, 1988). Tetraglycine hydroperiodid is used for emergency purification of drinking water and contains approximately six percent iodine (Waltonfeed.com, 2001). The conceptual model for AOC 6 is based on the assumption that, if present, wastes are buried beneath the ground surface. Any hazardous substances present in the waste could migrate downward to groundwater, where migration offsite could occur. Discharge of groundwater to Black Creek is also a possible migration pathway.

3.2.7.4 RI Project Objectives

The investigation at AOC 6 is a preliminary site investigation to assess the presence or absence of additional areas of contamination. Laboratory analysis of soil samples is intended to supplement the visual findings and document the presence or absence of potential contamination.

3.2.7.5 RI Soil Sampling Strategy, Scope, and Results

3.2.7.5.1 The following subsections present the sampling strategy, scope, and results for the site investigation at AOC 6. Table 3.31 presents the soil sample analytical results and Figure 3.31 shows sample locations and a summary of the sample results. Organic compounds/ metals not detected in a specific sample are listed as ND in the summary tables. A full list of compounds/metals and their detection limits are included in Appendix B. Soil results are compared to background concentration ranges and NYSDEC soil criteria.

3.2.7.5.2 A series of test pits were excavated to provide visual documentation of the presence or absence of fill. Historical aerial photos were used to identify the locations for the test pits. If fill materials were present, or the area appeared to have been disturbed, at least one soil sample was collected from each test pit. Soil samples were analyzed for TCL VOCs, SVOCs, pesticides/PCBs and TAL metals.

3.2.7.5.3 Six test pits were excavated as shown on Figure 3.31. A thin, charred soil layer with dark staining was observed below the topsoil layer in TP1. A dark soil layer was observed below the topsoil layer in TP2 and TP3, corresponding to the charred soil layer observed in TP1. All three test pits were located in the same general area. A hardpan layer that graded into glacial till was observed below the charred soil layer at TP1, TP2 and TP3. The hardpan layer was immediately beneath the topsoil at TP4, TP5 and TP6. No other indications of fill or potential contamination were observed.

3.2.7.5.4 VOCs, SVOC, pesticides, and PCBs were not detected above applicable soil criteria in any of the soil samples (Table 3.31). Three to seven metals were detected above NYSDEC soil criteria and background ranges in each of the soil samples collected at AOC 6, except for the sample from TP6. In that sample, metals concentrations did not exceed the soil criteria. TP2 contained the most metals above criteria (seven). However, the concentrations in TP2 were not anomalously higher than the concentrations identified in the other samples. There was no apparent pattern to the distribution of metals.

3.2.7.6 AOC 6 Summary

The overall objective of the investigation at AOC 6 was to determine if fill material was present and to determine if potential contaminants of concern were present. Six soil samples were analyzed from six test pits. No visual evidence of fill material was observed. Charred soil was observed in one test pit and stained soil was observed in two other test pits from the same shallow soil horizon. Three to seven metals were detected above NYSDEC soil criteria and background ranges. There were no obvious signs of waste sources that warrant further investigation in this area.

3.2.8 AOC 7 - Triangular Disposal Area

3.2.8.1 Introduction

AOC 7 is a triangular-shaped area located near the southeastern end of the former SADVA and west of AOC 1 (Figure 3.32). This area was formerly bounded by railroad tracks on each of the three sides; currently only one track on the west side of AOC 7 remains. Aerial photographs from the early 1940s indicate the presence of a possible dump in this triangular area. No other written documentation has been found to confirm the presence of a dump area, or to indicate what materials were dumped there. During the 1990's, the USACE conducted geophysical surveys to investigate the presence of subsurface disposal areas. The geophysical survey results suggested that subsurface disposal areas or fill material may be present in this AOC.

3.2.8.2 Site History

3.2.8.2.1 The Final Archival Search Report (EAEST 2003) and the ACEMC report (ACEMC, 1980) described AOC 7 based upon the interpretation of aerial photographs. The aerial photograph analysis completed by Albany County included a small area described by the Albany County as a 2-acre dump just west of the U.S. Army Southern Landfill, in the southern portion of SADVA. Based on a review of a 1940s aerial photograph, Albany County noted that a two-acre dump was located in a triangular junction of railroad tracks in this area. No storage containers or debris were noted in this area. A 1952 aerial photograph showed the area was inactive and partially vegetated. A review of aerial photographs from 1963, 1968, and 1974 showed that some of the tracks had been removed and the site was partially vegetated open space. The site was inactive in the 1977 aerial photograph, but the tracks along the southern and eastern sides of the triangular area had been removed and the area was surrounded by woods on all sides. No storage containers or debris were noted. It was speculated that the debris had been buried. An August 1941 drawing, last revised December 1952, noted two borrow pits in the vicinity of this area, which may have provided soil cover for the dumping areas at AOC 7 or AOC 1.

3.2.8.2.2 In 1991, the USACE retained OHM Remediation Services to conduct a field investigation of SADVA, which included an electromagnetic (EM) survey and monitoring well installation at AOC 7. The EM survey found one major anomaly that extended out of the investigation grid area toward the U.S. Army Southern Landfill (AOC 1). The anomaly indicated the presence of significant amounts of metal similar to a pipeline; however, the facility drawings showed no underground utilities in this area. As a result of this finding, OHM installed a shallow well (2AMW-7) between AOC 1 and AOC 7 and collected soil and groundwater samples. Split-spoon samples revealed silty soil containing some cinders from zero to two feet below ground, silty-clay with rubber tire fragments from two to four feet, followed by clay and silty clay layers containing gravel down to 15 feet, and then sand and gravel down to 21.5 feet, where auger refusal occurred. The soil samples from 2AMW-7 contained elevated levels of SVOCs and various metals; the groundwater sample had a small amount of methylene chloride and xylenes (EAEST 2003).

3.2.8.2.3 In April 1999, Quantum Geophysics, Inc. completed a geophysical investigation under contract to USACE. The purpose of the investigation was to: 1) locate large metallic or other objects in the subsurface, 2) identify the horizontal and vertical boundaries of the former disposal areas, particularly the depth to and/or thickness of fill layers, 3) locate the shallow aquifer and evaluate the continuity of any confining layers, and 4) determine if a contaminant plume is present. The investigation incorporated an EM61 metal detector survey, an EM31 ground conductivity survey, and an electrical resistivity imaging survey. Only about 0.5 acres of the two-acre Triangular Disposal Area could be surveyed because of extensive brush cover. Three probable disposal areas were identified by Quantum in the western corner of AOC 7. Those areas appeared to contain buried metallic debris and a probable disposal area. The water table was estimated to be at a depth of 6.5 to 8 feet below ground. The geophysical investigation found no confining layers or contaminant plumes in the resistivity profile for the western corner. Four probable disposal areas were identified along the northeastern side. Two areas were attributed to buried metallic debris and two areas were attributed to nonmetallic conductive material. Geophysical data showed no evidence of the water table or a contaminant plume along the northeastern side. The resistivity survey found no apparent confining layers and predicted the top of rock may be at depths between 40 to 50 feet below ground surface.

3.2.8.3 Conceptual Site Model

3.2.8.3.1 The site conceptual model is based upon aerial photo analysis and geophysical surveys. The only previous sampling was conducted between AOC 7 and AOC 1 at 2AMW-5, 2AMW-6, and 2AMW-7. Buried wastes, if present in AOC 7, could represent potential sources of hazardous substances. The substances present in these possible source areas are unknown, therefore, a broad list of analytes was proposed. The surface soil, subsurface soil, and groundwater are potential migration pathways. The potential exposure pathways are direct contact and/or ingestion of soil or groundwater by site workers or persons accessing the vicinity of this AOC. Samples of surface soil, subsurface soil, and groundwater were collected in 1991 by OHM and analyzed for a broad list of analytes to assess the presence or absence of impacts.

3.2.8.3.2 The only contaminant found in the groundwater sample from 2AMW-7, other than a probable laboratory solvent (methylene chloride), was xylene. Soil samples from well boring AMW-5 showed elevated VOCs and metals, and soil from 2AMW-7 showed elevated levels of SVOCs and metals. The contaminants in the soils could eventually migrate into the groundwater.

3.2.8.4 RI Project Objectives

Sampling of soil and groundwater has not been conducted within the boundary of the triangular area. Geophysical anomalies have been observed within the triangular area that may indicate the presence of buried fill. The objective of this preliminary RI is to assess the presence or absence of contamination by means of the following tasks:

1. Investigate the geophysical anomalies with test pits to assess the presence or absence of fill materials.
2. Characterize the surface soil at the Triangular Disposal Area; analyze samples for VOCs, SVOCs, PCBs/pesticides and metals.
3. Characterize the subsurface soil at the Triangular Disposal Area; analyze for VOCs, SVOCs, PCBs/pesticides and metals.
4. Characterize groundwater at the Triangular Disposal Area; analyze samples for VOCs, SVOCs, PCBs/pesticides and metals.

3.2.8.5 RI Sampling Strategy, Scope and Results

3.2.8.5.1 The following subsections present the sampling strategy, scope of work, and results for each migration pathway sampled at AOC 7 during this RI. Tables 3.32a and 3.32b present the soil sample analytical results. Compounds not detected in a specific sample are listed as ND in the summary tables. A full list of compounds and their detection limits are included in Appendix B. Soil results are compared to applicable NYSDEC criteria and background ranges. Shaded sample results on the analytical data tables indicate that the NYSDEC criteria and background ranges have been exceeded.

3.2.8.5.2 Groundwater elevation data are summarized on Table 3.33. The groundwater analytical results are presented on Tables 3.34a and 3.34b and are compared to NYSDEC Class GA groundwater standards and guidance values. To accomplish the project objectives, the results of the previous geophysical survey were used to guide the number and locations of test pits and soil and groundwater samples. The proposed sampling strategy was designed to determine whether materials have been disposed at the former Triangular Disposal Area and whether soil and/or groundwater quality have been impacted.

Soil Sampling Strategy and Scope

3.2.8.5.3 The soil sample locations are shown in Figure 3.33. Surface and subsurface soil samples SB01A through SB04C were collected from test pits that were excavated where ground conductivity anomalies were identified during the previous geophysical survey. Samples for laboratory analysis were collected at the surface, within the fill zone, and immediately beneath the fill zone, and analyzed for VOCs, SVOCs, pesticides/PCBs, and metals. The objectives of this sampling scheme were to characterize surface soils for direct contact risks, to characterize the fill material for contaminants present, and to identify the lower extent of contamination by sampling beneath the fill zone. Surface soils and subsurface soils (from within the screened interval) were also sampled in three monitoring well borings installed in 2004 as part of the Data Gap RI. These samples were analyzed for SVOCs (including BEHP). The placement of GW02 was to provide a downgradient location for AOC 7, and to provide coverage for a former septic system that was associated with Building S-69 (as part of the investigation of AOC 4). The sample parameters and depths are listed on Tables 3.1a, 3.1b, and 3.1c. Soil sample results are summarized on Table 3.32a and Table 3.32b and Figure 3.33.

Soil Results

3.2.8.5.4 The test pits were excavated through the fill material and into “clean” material below, or into the water table at each of the four locations. The test pits were dug to depths ranging from 4.5 to 5 feet. Two of the test pits (SB01 and SB04) encountered soils that appeared to be native with no associated fill material. Approximately 3.5 feet of glacial till, consisting of sand and gravel with cobbles, was encountered over gray and orange clay and silt. SB01 was located near the northern end of AOC 7 and SB04 was located near the southern end of AOC 7. Two other test pits (SB02 and SB03) encountered 2.0 to 2.5 feet of reworked glacial till over 0.8 to 1.5 feet of fill. SB02 was located at the western corner of AOC 7, and SB03 was located along the middle of the eastern side of AOC 7. The 0.8 feet of fill in SB02 consisted of dark-colored, angular gravel. The fill in SB03 consisted of the dark-colored, angular gravel and railroad ties, charred wood, and glass bottles. The gray and orange clay and silt were present below the fill in both SB02 and SB03. Each of the test pits encountered perched water on top of the orange clay and silt. Monitoring well borings GW01 and GW03 did not encounter fill materials. GW02 is located near Building S-69 and encountered up to 4 feet of fill material that had traces of black stain and asphalt. This material appeared to have been used to level the area around Building S-69. It did not look like the construction and demolition fill observed elsewhere at AOC 4.

3.2.8.5.5 VOCs, SVOCs, pesticides, and PCBs were not detected above NYSDEC soil criteria and background ranges in any of the surface or subsurface soil samples collected at AOC 7. The low concentrations of PAHs detected in the surface soils may be associated with the creosote-treated railroad ties present under the current and former railroad tracks. The samples collected from the two test pits that contained fill had PAH concentrations similar to those collected from the two test pits with no fill. The soil sample GW02-0-0.5 contained four CPAHs above NYSDEC soil criteria. This sample location is more closely associated with AOC 4 and those sample results were discussed with AOC 4. Eight different metals were slightly above NYSDEC soil criteria and background ranges in various soil samples at AOC 7. The most metals exceeding criteria and background ranges (five) were in the deepest sample (SB02C) collected from the native orange clay in SB02. Iron was the most commonly detected metal above soil criteria (nine samples) followed by copper (seven samples). None of the metals concentrations are anomalously high and there is no consistent pattern to the distribution of metals.

Groundwater Sampling Strategy and Scope

3.2.8.5.6 The groundwater sampling scheme was designed to assess groundwater quality upgradient, within, and downgradient of AOC 7. Given the close proximity of other AOCs, such as the C&D Landfill (AOC 4) and the U.S. Army Southern Landfill (AOC 1), it may be difficult to distinguish groundwater impacts associated with AOC 7 from impacts associated with other sources.

3.2.8.5.7 In 2000, three groundwater samples were collected from temporary wells installed in borings at AOC 7 to characterize shallow groundwater at AOC 7. Hydropunch methods were originally planned but were not used because of the dense soils and high gravel content. Instead, PVC pipe and well screen were placed in each boring temporarily, to allow a groundwater sample to be collected. Nearby monitoring wells 2AMW-5 and 2AMW-7 were also sampled to characterize shallow groundwater in the vicinity of AOC 7. The three groundwater samples from temporary wells (HP01, HP02, and HP03) were collected on July 31, 2000 and August 2, 2000 and the two monitoring well groundwater samples (2AMW-5 and 2AMW-7) were collected on August 16, 2000. Groundwater samples collected in July/August 2000 were analyzed for TCL VOCs, SVOCs, pesticides, PCBs, and TAL metals.

3.2.8.5.8 Based on the Hydropunch groundwater results collected in 2000, three permanent monitoring wells were installed in 2004. GW01 was installed at an upgradient location east of AOC 7, within AOC 1. GW02 was installed near building S-69 to assess groundwater quality downgradient of AOC 7 impacts and to assess potential impacts from a former septic system at building S-69. GW03 was installed downgradient and south of AOC 7. Groundwater samples were collected from new wells GW01, GW02, GW03 and existing wells 2AMW-5 and 2AMW-7 on July 21 and July 22, 2004. Samples collected in July 2004 were only analyzed for SVOCs and TAL metals because those were the only analyte groups detected above criteria in the 2000 round of groundwater samples.

Groundwater Elevations

3.2.8.5.9 Groundwater elevations were measured in the three temporary wells and 2AMW-5 and 2AMW-7 during the period July 31 to August 16, 2000. Groundwater elevations were measured in the three new monitoring wells and 2AMW-5 and 2AMW-7 on July 21 and 22, 2004 and December 7, 2004. Groundwater depths were measured using an electronic water level indicator. Groundwater measurements are presented in Table 3.33 and groundwater elevation contours are presented on Figures 3.34a, 3.34b, and Figure 3.34c. Groundwater flow is generally to the west-southwest toward Black Creek and the adjoining wetlands. A similar trend was observed during all three measurement events.

Groundwater Sample Results

3.2.8.5.10 Groundwater results are presented in Tables 3.34a (2000 sampling event) and Table 3.34b (2004 sampling event) and are summarized on Figure 3.35. VOCs were not detected above NYSDEC Class GA groundwater standards during the 2000 sampling event. VOCs were not on the analysis list for the 2004 event. BEHP was the only SVOC detected above Class GA groundwater standards and upgradient concentrations during both sampling events. BEHP exceeded the Class GA criterion in all groundwater samples collected in July/August 2000. In the 2004 sampling event, four of the well samples had concentrations of BEHP above the criterion; however, two of those (2AMW5 and GW01) are located on the upgradient side of the triangular disposal area. BEHP concentrations in downgradient wells GW02 and GW03 exceeded the Class GA criterion, but these concentrations were less than the upgradient concentrations in 2AMW5 and GW01 (and so are not shaded on Figure 3.35). No pesticides or PCBs were detected above Class GA groundwater standards when analyzed during the 2000 sampling event.

3.2.8.5.11 Fifteen metals were detected above Class GA groundwater standards in HP02. Iron, manganese and magnesium were detected above groundwater standards in nearly every sample collected in July/August 2000. HP02 had the greatest number of metals above groundwater standards (fifteen) and generally had the highest concentrations. Many of the metals concentrations in HP02 were more than one order of magnitude higher than other samples. The high metals concentrations in HP02 were thought to be due to the high turbidity of the sample. That location was slow to yield water, and only a limited amount of water was present in the temporary well. The sample from HP02 was visibly turbid. To improve the integrity of groundwater samples, three permanent monitoring wells were installed at AOC 7 in 2004. GW03 was installed in the same general area as HP-02. The 2004 sample from GW03 did not contain any metals above NYSDEC groundwater standards. With the exception of iron in GW02, the metals concentrations at AOC 7 were lower than the upgradient concentrations at 2AMW5, 2AMW7 and GW01.

3.2.8.6 AOC 7 Summary

This RI was intended to assess the nature and extent of contamination at AOC 7 by means of the following tasks:

Objective 1) *Investigate the previously-identified geophysical anomalies with test pits to assess the presence or absence of fill materials.*

Four test pits were dug and sampled to assess the presence of fill materials associated with the geophysical anomalies at AOC 7. Fill was within the upper 3 feet of soil in two test pits at AOC 7. Fill thicknesses ranged from 0.8 feet to 1.5 feet, and contained railroad ties, charred wood, dark angular gravel, and glass bottles.

Objective 2) *Characterize surface soil at the Triangular Disposal Area; analyze samples for VOCs, SVOCs, PCBs/pesticides and metals.*

No VOCs, SVOCs, pesticides or PCBs were detected above NYSDEC soil criteria and background ranges in the surface soils at AOC 7. Up to four metals (chromium, copper, iron, and nickel) were detected in surface soil samples at concentrations slightly above NYSDEC soil criteria and background ranges.

Objective 3) *Characterize subsurface soil and fill at the Triangular Disposal Area; analyze for VOCs, SVOCs, PCBs/pesticides and metals.*

No VOCs, SVOCs, pesticides, or PCBs were detected above NYSDEC soil criteria and background ranges in any of the subsurface soil samples collected at AOC 7. Eight different metals were detected slightly above NYSDEC soil criteria and background ranges in various soil samples.

Objective 4) *Characterize groundwater at the Triangular Disposal Area; analyze samples for VOCs, SVOCs, PCBs/pesticides and metals.*

Samples from three newly installed monitoring wells, three temporary wells, and two previously existing monitoring wells were collected. No VOCs, pesticides or PCBs were detected above NYSDEC Class GA groundwater standards. One SVOC (BEHP) was detected above Class GA groundwater standards in nine of ten groundwater samples. However, the 2004 sample results from the permanent wells suggest the BEHP may be originating from a source area that is upgradient (east-northeast) of AOC 7. Up to 15 metals were detected above Class GA groundwater standards, however, 11 of these only occurred in the 2000 sample collected from temporary well HP02. The high metals concentrations are likely due to the high turbidity of that sample. In the 2004 samples from monitoring wells, the only metal that exceeded Class GA criteria and upgradient concentrations was iron in GW02.

3.2.9 AOC 8 - Black Creek

3.2.9.1 Introduction

Black Creek is an AOC because previous investigations have shown the presence of VOCs and metals in surface water and/or sediment at concentrations above applicable regulatory criteria. Black Creek flows through New York State Wetland V-19 and enters the southern end of the SADVA between AOC 1 and AOC 5, and flows north along the west side of AOC 7 and the C&D landfill. Black Creek continues north along the eastern side of the NEIP and AOCs 9 and 6 before exiting the former SADVA. Figures 1.2 and 3.1 show the locations of Black Creek and other features. Figure 3.36 is a site plan for AOC 8 at SADVA and Figure 3.37 is a regional map that shows offsite surface water and sediment sample locations in Black Creek.

3.2.9.2 Site History

3.2.9.2.1 In 1998, the USACE investigated Black Creek as part of a focused groundwater and surface water investigation at Building 60 at SADVA (now known as AOC 9). Building 60 was investigated because petroleum contamination was encountered during excavation for a new building by the present site owner (NEIP). The investigation objectives were to determine whether petroleum-related contamination in the Building 60 area had impacted groundwater or Black Creek, and whether Black Creek had been impacted by any other contaminants of concern at the SADVA site. Building 60 is in the northeast portion of the SADVA (Figure 1.2).

3.2.9.2.2 USACE found that the surface water of Black Creek had not been adversely impacted in the vicinity of the Building 60 area. However, lead was detected in the sediment at concentrations that exceeded the Lowest Effect Level identified in the NYSDEC's Technical Guidance for Screening Contaminated Sediments (NYSDEC, 1999). Although the sediment in the Building 60 Area apparently contained elevated lead, there was not enough data to determine whether the observed concentrations exceeded background concentrations.

3.2.9.2.3 USACE also assessed the overall quality of Black Creek. The analytical results of the surface water samples were compared to the ambient water quality standards listed in the NYSDEC Technical & Operational Guidance Series (NYSDEC, 1998). The analytical results were also compared to an upstream sample (SW-2). Based on these comparisons, there appeared to be an impact on the quality of the surface water in Black Creek. Lead or 1,1,2,2-tetrachloroethane were detected above the upstream concentration and the regulatory criteria in four sample locations adjacent to the former SADVA in Black Creek SW-03, and in the western ditch that drains to Black Creek (SW-10, SW-11 and SW-12). Sample results from the 1998 USACE sampling are plotted on Figure 3.38.

3.2.9.2.4 It is also noteworthy that two business/operations at the NEIP currently have, or had for several years, SPDES discharge permits. The Guilderland WWTP (SPDES # 0022217) has a current permit, and the Loretex Corporation (SPDES Permit # 0202776) formerly had a permit for controlled discharges to the lower Normanskill and Black Creek, respectively. SPDES permits are issued and monitored by the NYSDEC.

3.2.9.3 Conceptual Site Model

3.2.9.3.1 The potential source areas for AOC 8 that are part of this RI are the U.S. Army Southern Landfill (AOC 1), the Bivouac Area (AOC 2), the former Burn Pits Area (AOC 3), the C&D Landfill (AOC 4), the DNSC Voorheesville Depot (AOC 5), the former SADVA Waste Water Treatment Plant Area (AOC 6), and the Building 60 Area (AOC 9). Runoff from AOC 7 is unlikely to reach Black Creek. The areas in AOC 8 that potentially could be impacted are surface water and sediment in the Black Creek, and the ditches/outfalls leading to the creek from the noted AOCs.

3.2.9.3.2 The migration pathways are surface water and sediment flowing offsite, and the exposure pathways are direct contact with, or incidental ingestion of, surface water and/or sediment. To assess the presence or absence of impacts to Black Creek that are attributable to DoD activities, samples of surface water and sediment were collected within the SADVA, and upstream and downstream of the site. It should be noted that the NEIP has been active since approximately 1969, and surface water runoff from the industrial park vehicle traffic and other sources may have also impacted surface water and sediment in Black Creek. Under the FUDS process, only impacts attributable to DoD activities can be addressed. Any impacts to Black Creek will need to be shown to be attributable to the DoD's use of the site, if they are to be further addressed.

3.2.9.4 RI Project Objectives

The investigation at AOC 8 had the objective of assessing the presence, nature and extent of contamination in Black Creek within the boundaries of the SADVA, and in a limited number of additional downstream locations. This was accomplished by means of the following tasks:

1. Assessed the impacts that the identified AOCs have had on Black Creek.
2. Resampled the surface water and sediment in previous locations SW/SD1, 2, 3, 4, 5, and 12 as well as upstream and downstream of AOC 3, and analyzed for VOCs, SVOCs, pesticides/PCBs, and metals (the respective new sample designations are SW/SD20, 19, 18, 17, 16, 15, 24 and 14).
3. Determined background levels for Black Creek by collecting five sediment and surface water samples upstream of the former SADVA property boundary south of County Road 201. Sample locations were determined in the field, and analyzed for VOCs, SVOCs, PCBs/pesticides, TOC, and metals.
4. Sampled surface water and sediment on the upstream side of the first dam located downstream of SADVA. Sediment was also sampled on the upstream side of the first spillway nearest the SADVA site and between the spillway and the dam.

3.2.9.5 RI Sampling Strategy, Scope and Results

3.2.9.5.1 The sampling strategy was designed to determine whether past DoD activities at SADVA have contaminated surface water and/or sediment onsite and downstream of various AOCs. The sample results are used to assess surface water and sediment quality impacts. The following subsections present the sampling strategy, scope, and results for the surface water and sediment samples at AOC 8 during the RI. Tables 3.35a, 3.35b, 3.36a and 3.36b present analytical results of surface water and sediment sampling conducted in 2000 and 2004. Compounds not detected in a specific sample are listed as ND in the summary tables. A full list of compounds and their detection limits are included in Appendix B. The New York Bureau of Watershed Management and the NYSDEC considers the section of Black Creek adjacent to SADVA a Class C water body, suitable for fishing, fish propagation, and primary and secondary contact recreation. Surface water results are compared to NYSDEC Class C standards and upstream concentrations. Class A criteria are also included for comparison purposes only, because Black Creek is a tributary to Watervliet Reservoir. Sediment results are compared to NYSDEC ecologically-based sediment criteria and background ranges. The NYSDEC sediment criteria are not based on protection of human health.

Surface Water Sampling Strategy and Scope

3.2.9.5.2 The surface water investigation for AOC 8 included sampling surface water at 19 locations to characterize upstream and downstream surface water quality and to identify surface water impacts from the AOCs associated with the former SADVA (Figures 3.37 and 3.39). Samples SW19 and SW20 are located at the points where the two branches of Black Creek enter the SADVA at the south end (Figure 3.39). Samples SW16/SW17 and SW18 were collected downstream and upstream, respectively, of the branch that drains AOC 5 and the southern portion of SADVA to assess impacts on water quality in the main branch of Black Creek. Samples SW07, SW26, and SW12 were collected in the ditches that drain AOC 5 and the southern part of the SADVA. Samples SW15, SW29, and SW24 were collected in the western ditch. SW7 and SW9 were collected upstream and downstream, respectively, of the intersection of the western ditch and Black Creek to assess the ditch's impact on the main branch of Black Creek at the north end of SADVA.

3.2.9.5.3 Eighteen of the 19 surface water samples were collected as planned. One proposed surface water location in the western ditch (SW14) was dry so it could not be sampled. Fourteen of the surface water samples were collected in 2000 and were analyzed for TCL VOCs, SVOCs, pesticides, PCBs, and TAL metals (Table 3.35a). Six of the samples were collected in July 2004 and were analyzed for SVOCs and metals (Table 3.35b). Upstream samples SW28 (2000) and SW28 (2004) were collected adjacent to, and upstream of, Meadowdale Road to further characterize upstream conditions in Black Creek (Figure 3.37). Upstream sample results were discussed in Section 3.2.1.

Surface Water Sample Results

3.2.9.5.4 Surface water results are presented in Table 3.35a and Table 3.35b and are summarized on Figure 3.39. Those samples that exceed the NYSDEC criteria and upstream concentration ranges are shaded on the tables and figure. Figure 3.39 also presents results for samples collected in 1998 as part of the USACE investigation of Black Creek. In general, the surface water sample results showed that water in the western ditch has degraded quality, primarily for metals. However, the samples immediately downstream from the two points where the western ditch discharges to Black Creek (SW17 and SW09) show virtually no degraded water quality. Only SW17 had a concentration (of silver in the 2004 sample) above regulatory criteria and the upstream concentrations. The two samples collected downstream from all the AOCs (SW09 and SW25) had no concentrations above regulatory criteria and upstream concentrations.

3.2.9.5.5 VOCs were not detected above NYSDEC Class A or C surface water criteria and upstream ranges in any samples. One SVOC (BEHP) was frequently detected; however, the BEHP concentrations were within the ranges detected in the upstream samples (ND to 26 ug/L). Pesticides and PCBs were not detected in any of the surface water samples. Eight metals were detected above Class C surface water criteria and upstream ranges in various surface water samples. Five metals, aluminum (in SW29), copper (in SW19), iron (in SW29), silver (in SW16), and zinc (in SW15 and SW29) were detected at concentrations anomalously higher than the background ranges at one or two locations. The three samples (SW15, SW29 (2000), and SW29 (2004) collected near the open storage area adjacent to AOC 5 had the greatest number of metals above surface water standards and background ranges, with five metals in each. These samples are upstream and downstream of a storm sewer discharge pipe located in the drainage ditch on the west side of the former SADVA. This section of the west ditch is slow-flowing and is often stagnant or even dry. Applying Class A (drinking water) and Class C (fish consumption and propagation) criteria may be inappropriate, given these uses do not apply to this ditch. However, since this ditch can connect to Black Creek, the same criteria that have been applied to Black Creek have been applied for comparison purposes. The storm water sewer drains an area that was formerly used as an open storage area for equipment and commodities during the timeframe that SADVA was active.

3.2.9.5.6 It is noteworthy that four of five upstream sample locations had concentrations of BEHP and/or metals that exceeded Class C criteria. It was suspected that upstream locations SW21, 22, and 23 could potentially be considered downstream of AOC 2, therefore, SW28 (2000) and SW28 (2004) were added as additional upstream locations. BEHP was detected in a surface water sample from AOC 2, and was detected in SW21, 22, 23. BEHP was detected in SW28 (2004), collected upstream of all of the AOCs. BEHP was not detected in SW28 (2000) collected a short distance downstream of SW28 (2004) near Meadowdale Road.

3.2.9.5.7 Samples SW07, SW09 and SW28 were collected on July 14, 2004. Samples SW17, SW18 and SW29 were collected on July 15, 2004. Prior to July 14, the last precipitation event recorded in Albany (the nearest official weather reporting station) was on July 8, when 0.63 inches of rain fell. A trace or no rain was recorded until July 13, when 0.01 inches of rain fell. Heavy rain fell late in the day on July 14, measuring 0.77 inches. Heavy rain fell during the overnight period and during the day on July 15, measuring 1.25 inches. The surface samples in Black Creek can be considered to have been collected during a two-day period of relatively heavy precipitation.

Sediment Sample Strategy and Results

3.2.9.5.8 In 2000, sediments were collected from 0 to 2 inches beneath the sediment surface at each of the surface water locations, plus location SD14 where a surface water sample could not be collected due to dry conditions. The sediment samples collected in 2000 were analyzed for TCL VOCs, SVOCs, pesticides, PCBs, and TAL metals. In 2004, deeper samples from 1 to 1.5 feet beneath the sediment surface were collected at nine existing sample locations to characterize deeper sediments. A deeper sample (SD30) was collected at SD25, located upstream of the small dam on Black Creek. Two new locations (SD31 and SD32) were added between the small dam and SADVA. One upstream location (SD28) was added upstream of SD28 (2000) and Meadowdale Road. Sediment samples collected in 2004 were analyzed for SVOCs, pesticides, PCBs, and metals, based on the analytes detected in 2000.

Sediment Results

3.2.9.5.9 Sediment results are compared to NYSDEC sediment criteria (for protection of aquatic life) and Black Creek upstream concentration ranges. Sediment results that exceed NYSDEC sediment criteria and Black Creek upstream ranges have been shaded on Table 3.36a, Table 3.36b, and Figure 3.40.

3.2.9.5.10 VOCs were not detected above sediment criteria and upstream ranges in any sediment sample. SVOCs were not detected at concentrations above the NYSDEC sediment criteria in any of the sample locations adjacent to SADVA, including sample location SD09, which was collected at the downstream end of SADVA. However, four other shallow sediment samples (SD19, SD25, SD31-0-0.5’, and SD32-0-0.5’) contained one or more SVOCs above sediment criteria and background ranges. One of these locations is at the upstream end of SADVA, and the other three are downstream and offsite of SADVA. SD19 was collected at the southern end of the SADVA in Wetland V-19 where Black Creek enters the site. Sample SD25 was collected on the upstream side of the small dam (Figure 3.37). Sample SD32-0-0.5’ was collected downstream of the SADVA on the upstream side of the first spillway located along Route 146. Sample SD31-0-0.5’ was collected between the first spillway and the small dam farther downstream. On basis of the sample locations, the elevated concentrations of SVOCs in SD25, SD31-0-0.5, and SD32-0-0.5’ may not necessarily be attributable to the former SADVA. Each of these samples was located near Route 146. SD32-0-0.5’ is also located near an active driveway used by the Guilderland School District buses. SD31-0-0.5’ is located downstream of the bridge on School Road and the bus driveway. The detected SVOCs could be attributed to vehicle traffic and exhaust. SVOCs were below criteria or were not detected in all of the deep sediment samples collected onsite and offsite.

3.2.9.5.11 Pesticides were detected above sediment criteria and background ranges in ten sediment samples. Total pesticide concentrations were highest (288.7 ug/kg) in SD14. SD14 was a shallow sample collected from the western ditch, downstream of AOC 3. SD14 and deeper sample SD14-0.5-1’ each contained 4,4’-DDE and 4,4’DDT. Both pesticides were also detected above sediment criteria in SD24, collected from the same drainage ditch upstream of SD14. Pesticide concentrations in samples collected from the southern end of the SADVA were generally lower than in SD 24 and SD14. Pesticide concentrations at the downstream dam were low; alpha chlordane was the only pesticide detected above sediment criteria at SD25.

3.2.9.5.12 PCBs were only detected in one sample (SD29 in the western ditch) at a concentration of 110 ug/kg. That concentration is below the NYSDEC sediment criterion. The deeper sample collected at this location did not contain PCBs. The vertical extent of PCBs has been defined.

3.2.9.5.13 Metals were detected above sediment criteria and background ranges in all site samples except SD07-1-1.5', SD17-1-1.5', and SD19 (all in Black Creek on east side of SADVA). The most metals above sediment criteria were detected in SD18 (nine metals), collected in Black Creek near the C&D landfill area. This sample location suggests the C&D Landfill area may be contributing metals to Black Creek. Large numbers of metals exceeding criteria were also detected in the western and southern drainage ditches near the former open storage area adjacent to AOC 5, at SD12, (five metals), SD15 (8 metals), SD26 (six metals) and SD29 (seven metals). These results suggest the elevated metals in the western and southern ditch have been impacted by runoff from AOC 5. As previously described in Section 3.2.6, sediment samples were collected from the ditch leading from AOC 5. Samples PSED002, PSED003 and PSED004 were collected in 2005 from the portion of the ditch that had been over-excavated during construction of the new retention ponds (Table 3.36a and Figure 3.40). Sample PSED001 was collected from the northern portion of the ditch that had not been over-excavated. The results for the "PSED" samples in the ditch leading from AOC 5, and the results for the southern and western ditches that also receive runoff from AOC 5, have elevated concentrations of the same metals that have been stored at AOC 5 during its operational history.

3.2.9.5.14 It is noteworthy that at SD16 and SD17 these metals concentrations were much lower and did not exceed both the sediment criteria and upstream ranges. SD16 and SD17 are located in Black Creek, downstream of where the drainage ditch leading from AOC 5 enters the creek.

3.2.9.5.15 A series of figures has been created to better visualize and understand the distribution of metals concentrations with depth at each location, and with distance downstream. Figures 3.41a through 3.41g present graphical depictions of the shallow and deep concentrations of individual metals (arsenic, copper, iron, lead, manganese, nickel and zinc). At each sample location, the figures show small bar graphs representing the relative concentrations of the shallow and deep samples as compared to the sediment criterion for that metal. The criterion shown is the higher of the upstream concentration and the NYSDEC sediment criteria (NYSDEC, 1999). The figures only show those sample locations that have both shallow and deep samples at the same locations. The metals listed are those most frequently detected at elevated concentrations. Brief summaries of the results for each metal follows:

- Arsenic (Figure 3.41a) – at the south end of SADVA near AOC 4 and 5, shallow concentrations of arsenic are generally higher than the deeper concentrations and are above the criterion. Within the site (at SD17 and SD7) concentrations in Black Creek are below the criterion. Downstream of SADVA, the deeper concentrations in Black Creek are generally higher than the shallow concentrations, and are above the sediment criterion.

- Copper (Figure 3.41b) - at the south end of SADVA near AOC 4 and 5, shallow concentrations of copper are generally higher than the deeper concentrations and are well above the criterion. Within the site (at SD17 and SD7) concentrations in Black Creek are below the criterion. Downstream and beyond SADVA, the deeper concentrations in Black Creek are generally higher than the shallow concentrations, and are above the sediment criterion. As a general trend, deep concentrations in Black Creek tend to increase downstream.

- Iron (Figure 3.41c) – at the south end of SADVA, shallow concentrations are generally higher than deep concentrations. Downstream of SADVA, deep concentrations are generally higher than shallow concentrations.

- Lead (Figure 3.41d) – Very high shallow concentrations are located near AOC 5, and to a lesser extent, near AOC 4. Farther downstream in Black Creek, near School Road at SD31 and SD32, shallow concentrations increase and are above the criterion.

- Manganese (Figure 3.41e) – the deep concentration at SD09 is anomalously high. Downstream concentrations in SD25/30, Sd31 and SD32 are below the manganese criterion.

- Nickel (Figure 3.41f) - at the south end of SADVA near AOC 4 and 5, shallow concentrations of nickel are generally higher than the deeper concentrations, and both sets of concentrations are above the criterion. Within the site (at SD17 and SD7) concentrations in Black Creek are below the criterion. Downstream and beyond SADVA, the deeper concentrations in Black Creek are generally higher than the shallow concentrations, and are above the sediment criterion.

- Zinc (Figure 3.41g) - at the south end of SADVA near AOC 4 and 5, shallow concentrations of zinc are generally higher than the deeper concentrations and are well above the criterion. AOC 4 and AOC 5 both appear to be contributing copper to the sediments. Farther downstream in Black Creek at SD07 and SD09, concentrations decrease and are below the criterion at the most downstream location (SD25/30).

3.2.9.6 AOC 8 Summary

Listed below are the specific objectives for the investigation at AOC 8, followed by the results for each.

Objective 1) *Assess the impacts that the identified AOCs have had on Black Creek.*

Fourteen surface water samples and 27 sediment samples were collected from the drainage ditches and Black Creek onsite and downstream of the former SADVA. In general, the surface water sample results showed that the western ditch contained water of degraded quality, primarily for metals. However, the samples immediately downstream from the two points where the western ditch discharges to Black Creek (SW17 and SW09) show virtually no degraded water quality.

Only SW17 had a concentration (of silver in the 2004 sample) above regulatory criteria and the upstream concentrations. The two samples collected downstream from all the AOCs (SW09 and SW25) had no concentrations above regulatory criteria and upstream concentrations. Metals concentrations were elevated in sediment samples collected near AOCs 4 and 5 (SD15, 18 and 29).

Objective 2) *Resample the surface water and sediment in locations SW/SD1, 2, 3, 4, 5, and 12 as well as upstream and downstream of AOC 3, and analyze for VOCs, SVOCs, pesticides/PCBs, and metals (the respective new sample designations are SW/SD20, 19, 18, 17, 16, 15, 24 and 14).*

Samples were collected at each of the referenced locations, with the exception of surface water at SW/SD14 which was dry. In most cases, the RI surface water samples collected in 2000 had lower metals concentrations than those samples collected in 1998. For all locations, the 2000 sample lead concentrations were lower, or not detected, as compared to the 1998 sample results. Similarly, the VOCs detected in the 1998 surface water samples were not detected in the corresponding 2000 surface water samples. Note that the differences in concentrations over two sampling events two years apart can be influenced by different laboratories being used, and normal variations in stream concentrations relative to flow volume and precipitation events, seasonal variations, etc.

There was less consistency in the comparisons of sediment sample results between the 1998 and 2000 sampling events. Sediment quality was generally better in the 2000 samples at locations SD2/SD19, SD4/SD17, SD5/SD16, and SD12/SD24. Sediment quality was worse at locations SD1/SD20 and SD3/SD18. Note that sediment concentrations over time may be affected by streambed conditions, such as scouring and deposition, depending on the stream flow and flood events over time.

Objective 3) *Determine background levels for Black Creek by collecting three sediment and surface water samples upstream of the former SADVA property boundaries, south of County Road 201. Analyze for VOCs, SVOCs, PCBs/pesticides, TOC, and metals. Two sample locations were added upstream of Route 202 (Meadowdale Road) to further characterize upstream conditions. These samples were analyzed for SVOCs and metals.*

Upstream surface water and sediment samples were collected at the three locations south of Route 201 and the two additional locations off of Meadowdale Road. These sample results suggest there are elevated BEHP, PAH and metals concentrations in the creek water and sediments that are not attributable to the former SADVA.

Objective 4) *Sample surface water and sediment on the upstream side of the first dam located downstream of SADVA.*

Samples SW/SD25 were collected on the upstream side of the first dam located downstream of the SADVA. The only organic compound detected above background and NYSDEC Class C surface water criteria was BEHP. However, the concentration at SW25 is higher than that detected at the site, suggesting another source of BEHP may exist downstream of SADVA. In sediment, the total SVOC concentration was less than that detected in the most upstream sediment sample (SD28). One pesticide and lead were also present at concentrations slightly above background and sediment criteria. However, the lead concentration ad SD25 is higher than all onsite samples, except SD15 and 29 (from the western ditch). Those locations are not in the main channel of Black Creek, and the lead concentrations in SD24 and 14 (located downstream of SD15/SD29 in the western ditch) are lower than detected at SD25. These data suggest a source for lead may exist downstream of SADVA.

Objective 5) *Collect deeper sediment samples at nine previous sample locations at a depth of 12 to 18 inches below the ditch and creek bottom. The intent was to characterize deeper sediment quality in areas previously characterized by shallow sampling.*

At the south end of SADVA, near AOCs 4 and 5, shallow concentrations of most metals tended to be higher than deeper concentrations and were above the sediment criteria. In the main channel of Black Creek adjacent to the SADVA (at SD17 and SD07) concentrations of most metals were generally below the sediment criteria. Downstream of SADVA, in the vicinity of School Road (at SD31 and SD32), metals concentrations tended to be higher in the deeper samples than in the shallow samples. Downstream and offsite metals concentrations tended to increase in both the shallow and deep zones, as compared to the concentrations onsite at SD17 and SD07.

3.2.10 AOC 9 Building 60 Area

3.2.10.1 Introduction

AOC 9 is the area near Building 60, located in the northeast corner of the former SADVA (Figure 1.2). Figure 3.42 is a site plan for the AOC 9 area. This area was formerly used by the DoD for vehicle maintenance and had seven underground storage tanks (USTs). Petroleum contamination was encountered in February 1998 during excavation at the NEIP by a tenant of the site. The excavation activities were initiated for the construction of three buildings located just north of Buildings 60 and 77. A site visit was conducted on February 23, 1998 by members of the USACE and the NYSDEC. Although it was believed that the USTs had been removed in recent years, no documentation or soil sample results were available for confirmation.

3.2.10.2 Site History

3.2.10.2.1 Based on the site visit by the USACE and NYSDEC, the USACE's Rapid Response Team was mobilized to the site on March 2, 1998 to characterize the nature and extent of soil contamination. The Rapid Response Team excavated areas of suspected contamination and stockpiled the soil for testing and disposal. In addition, test pits were dug around the footprint of the buildings being constructed to ensure that additional contamination was not present. A total of ten test pits were dug, including an area around an oil/water separator. The oil/water separator and some pipelines were removed. Surface water that collected in the excavation pits was pumped into a 6,500-gallon storage tank for testing/disposal. Soil, surface water, and sludge from the pipelines were tested for VOCs, SVOCs, PCBs, total petroleum hydrocarbons (TPH) gasoline and diesel range organics, and metals in compliance with the

NYSDEC Spill Technology And Remediation Series (STARS) Memo #1: Petroleum-Contaminated Soil Guidance Policy, dated August 1992. Based on the results of the chemical analyses, VOCs and SVOCs were identified as the contaminants of concern in this area.

3.2.10.2.2 The Rapid Response Team also dug four test pits in an area where USTs were suspected to exist. During the excavation activities, no evidence was found to indicate that USTs still existed in this area. However, documentation of tank closure and removal has not been found.

3.2.10.2.3 During test pit excavations, a 12-inch clay pipe that originated at the oil/water separator and ended near Black Creek was removed. The clay pipe appeared to be an abandoned storm sewer, which acted as a discharge from the oil/water separator to Black Creek.

3.2.10.2.4 In addition to the characterization of soils near Building 60, the overall quality of Black Creek was examined. Sediment and surface water samples SD6/SW6, SD7/SW7, and SD8/SW8 were collected to evaluate the potential impact from petroleum-related contamination in the Building 60 Area (Figure 3.38). Sediment and surface water sample analyses were limited to VOCs, SVOCs, and metals. Sample SD7/SW7 was located at the storm water outfall in the Building 60 Area. This storm water pipe outfall was connected to the former oil/water separator. Sample SD6/SW6 was located 300 feet upstream of SD7/SW7, and sample SD8/SW8 was located 300 feet downstream of SD7/SW7. The locations of these samples allowed the quality of the surface water and sediment in the creek upstream and downstream of the Building 60 Area to be assessed.

3.2.10.2.5 The analytical results indicated that Black Creek surface water quality in the Building 60 Area was not adversely impacted at the time the samples were collected in 1998. However, the Black Creek sediments in the Building 60 Area contained lead. There was insufficient background or upstream data to definitively distinguish source area concentrations from background concentrations. It is possible that the former discharge pipe from the oil/water separator contributed to the lead concentration within Black Creek; however, the results were inconclusive. Additional information was required to determine if a feasibility study is necessary and what risks to the environment may be present.

3.2.10.3 Conceptual Site Model

3.2.10.3.1 Further characterization of the impacts on Black Creek has been addressed by the investigation at AOC 8. The investigation at AOC 9 was focused on the groundwater and soil migration pathways.

3.2.10.3.2 The potential source area for AOC 9 was the oil/water separator, which has been removed. The storm sewer pipeline leading from the oil/water separator to Black Creek has also been removed. The remaining potential source area would be residual contamination in the soil that may have originated from pipeline leaks. The potential contaminant migration pathways are lateral migration to the creek via the soil and pipeline backfill, and downward migration to the groundwater table.

3.2.10.3.3 The soil and groundwater data collected during this RI provide an assessment of the presence of residual contamination. If concentrations are below Class GA groundwater and TAGM 4046 soil criteria, then AOC 9 will be considered closed. If regulatory criteria are exceeded, the need for a feasibility study will be assessed.

3.2.10.4 RI Objectives

The objective of this RI is to assess the presence or absence of contamination at AOC 9. Soil along the former 12-inch clay sewer route was characterized to assess whether residual contamination exists. Groundwater in the vicinity of AOC 9 was characterized to assess whether contaminants are present and are migrating toward Black Creek.

3.2.10.5 RI Sampling Strategy, Scope, and Results

3.2.10.5.1 The following subsections present the sampling strategy, scope, and results for each matrix sampled at AOC 9 during the RI. The investigation focused on the area where the former 12-inch clay sewer pipe was encountered. The site contains three recently constructed buildings; two metal shed structures formerly used for recycled glass and storage, and a metal building that formerly housed glass recycling equipment. The metal building appears to be constructed on a concrete slab. A septic system for the glass recycling facility is located near the former clay sewer line. Table 3.37 presents the analytical results of soil sampling, Table 3.38 presents groundwater elevation data, and Tables 3.39a and 3.39b present the groundwater analytical data. Compounds not detected in a specific sample are listed as “ND” in the summary tables. A full list of compounds and their detection limits are included in Appendix B. Soil sample results are compared to NYSDEC soil criteria and background concentrations. Groundwater sample results are compared to NYSDEC Class GA groundwater criteria. Sample concentrations exceeding these criteria are shaded on the tables and figures.

Soil Sampling Strategy and Scope

3.2.10.5.2 Soil borings SB01 through SB04 were drilled along the path of the former 12-inch sewer line. The borings were continuously sampled to 10 feet below the ground surface. Two soil samples from each boring were collected and analyzed for TCL VOCs, SVOCs and TAL metals. Samples were to be chosen for laboratory analysis based on visual or other field evidence of contamination (*i.e.,* oily appearance, sheens, etc.), and from deeper zones to determine the vertical extent of contamination. However, there was no field evidence of contamination observed in the soil samples. The samples collected and their depths are listed on Table 3.37. Key results are summarized on Figure 3.43.

Soil Results

3.2.10.5.3 VOCs were not detected above the NYSDEC soil criteria and background ranges in any of the eight samples from the four borings. Only one SVOC was detected at a concentration above soil criteria; benzo(a)pyrene (a carcinogenic PAH) was detected at 120 ug/kg in SB01C (from 4 feet deep). All other SVOC concentrations were at or below the soil criteria.

3.2.10.5.4 Metals were detected above NYSDEC soil criteria and background ranges in each of the eight samples. However, most concentrations that exceeded were only slightly above the criteria. Lead was only above the background ranges and soil criteria in one (SB01C) of eight samples (98.8 mg/kg). The soils in the vicinity of the sewer pipe do not appear to be a potential source of lead contamination. The other metals results are not indicative of a source area requiring further delineation.

Groundwater Sampling Strategy and Scope

3.2.10.5.5 Groundwater is used by the residences east of the former SADVA, along Ostrander Road to the east of Black Creek. Most of the area east of the former SADVA is not on the public water supply (Town of Guilderland, 2000).

3.2.10.5.6 The groundwater investigation scope included sampling of four wells in the vicinity of AOC 9 (MW-9, COEMW-10, COEMW-11, and COEMW-12) to characterize shallow groundwater quality. Groundwater samples were analyzed for TCL VOCs, SVOCs and TAL metals. MW-9 was sampled for total and dissolved metals in 2004 to verify August 2000 results. MW-9 was redeveloped before the 2004 sampling.

Groundwater Elevations

3.2.10.5.7 Groundwater depths were measured in the four permanent monitoring wells at AOC 9 on August 16 and August 17, 2000 (Table 3.38). Reliable measuring point elevations could not be located for all these wells. The relative groundwater elevations measured in August 2000 show localized groundwater flow is eastward toward Black Creek. This is consistent with the groundwater flow direction based on groundwater elevations measured by the USACE in January 1999 (Figure 3.44).

Groundwater Results

3.2.10.5.8 Four groundwater samples were collected from the wells in the vicinity of AOC 9 in August 2000. VOCs were not detected above Class GA groundwater standards in the four groundwater samples (Table 3.39a and Figure 3.45). Two SVOCs were detected slightly above groundwater standards in COEMW-11 and MW-9. BEHP was detected at 7.6 ug/L in MW-9 and phenol was detected at 4.4 ug/L in COEMW-11.

3.2.10.5.9 Five metals were detected above Class GA groundwater standards in various groundwater samples collected in August 2000. MW9, located downgradient of Building 60 (Garage) and Building 77 (Firehouse), had the greatest number of metals above groundwater standards (four). The concentrations of arsenic, iron, and manganese in MW9 were above groundwater standards and higher than other groundwater concentrations in the area. Iron was detected above groundwater standards in all four samples and sodium was detected above groundwater standards in three samples. At the time of sampling, the water from MW-9 was visibly discolored and turbid. This suggests the integrity of the well was suspect or required redevelopment and/or rehabilitation. High turbidity can lead to increased suspended solids in the sample, which artificially elevates metals concentrations.

3.2.10.5.10 MW-9 was redeveloped and sampled in July 2004. Samples for total metals (unfiltered) and dissolved metals (filtered) were collected using low-flow sampling techniques to minimize turbidity in the samples. Arsenic was not detected in either sample from MW-9 (Table 3.39b). The concentrations of iron, manganese, and sodium were above groundwater standards in both the total metals and dissolved metals samples. However, the concentrations in 2004 were lower than the 2000 results. The 2004 results were similar to the concentration ranges detected in COEMW-12 in 2000 (Figure 3.45).

3.2.10.5.11 The groundwater results for AOC 9 are not indicative of impacts associated with the former USTs or oil/water separator. Lead, VOCs and SVOCs are the typical indicators associated with petroleum products and these analytes are not present at elevated concentrations in the AOC 9 wells.

Surface Water Results

3.2.10.5.12 The USACE investigation in 1998 concluded there was only a limited impact on surface water quality attributable to AOC 9. Therefore, additional characterization of surface water at AOC 9 was not included in this RI. However, results for the most downstream samples from AOC 8, SW09 and SW25 (at the first dam downstream from the former SADVA) were reviewed in the context of AOC 9. The SW09 and SW25 results indicate that there are no impacts on surface water quality from AOC 9, because all results are below NYSDEC criteria and/or upstream concentrations.

Sediment Results

3.2.10.5.13 The USACE investigation in 1998 concluded there were elevated metals concentrations in sediments. Additional upstream sampling was recommended. Although no additional shallow sediment samples were collected adjacent to AOC 9 during this RI, the results from the USACE investigation in 1998 have been compared to the new upstream sediment concentrations on Table 3.40. That comparison suggests the sediments at SD7, adjacent to the former storm sewer outfall, contained cadmium, chromium, copper, lead, and zinc above criteria. A deeper sediment sample was collected in 2004 from 1.0 to 1.5 feet beneath the sediment surface at this location. All concentrations were below the sediment criteria.

3.2.10.6 AOC 9 Summary

The RI was intended to assess the nature and extent of contamination at AOC 9 by means of the following tasks:

Objective 1) *Sample soil along the former 12-inch clay sewer route to assess whether residual contamination exists.*

Four soil borings were drilled and soils were continuously sampled to assess whether residual contamination was present. Metals were detected above NYSDEC soil criteria and background ranges in each of the soil samples. However, the concentrations were not significantly above the soil criteria and background ranges, and the concentrations of organic compounds did not exceed background and soil criteria, with the exception of one sample for benzo(a)pyrene. Further characterization is not necessary.

Objective 2) *Sample groundwater in the vicinity of AOC 9 sampled to assess whether contaminants are present and are migrating toward Black Creek.*

Four groundwater samples were collected from existing monitoring wells in the area. MW9 contained BEHP, arsenic, iron, and manganese above the groundwater standards. The metals concentrations in MW9 were significantly higher than in other groundwater samples. These concentrations may not be related to the former oil/water separator and clay sewer pipe, as they are not the typical contaminants of concern associated with petroleum products.

Objective 3) *Review existing surface water and sediment results from the 1998 USACE investigation and compare the data to the new upstream concentrations identified during the RI.*

The surface water results suggest there are no impacts on water quality attributable to AOC 9. The sediment results suggest five metals, including lead, were above sediment criteria and upstream concentrations in the sample SD07, located adjacent to AOC 9.

3.3 ANALYTICAL QUALITY ASSURANCE, QUALITY CONTROL, AND VALIDATION

3.3.1 During the RI, QA/QC samples were collected and analyzed to ensure that the sample results are representative, accurate, and precise. The QA/QC samples were analyzed for the same analytes as the corresponding field samples. The field duplicate samples are intended to assess the representativeness of the sampling procedures. Field duplicate samples were collected at a rate of one duplicate sample for each 20 field samples. The laboratory matrix spike and matrix spike duplicate samples (MS/MSD) are intended to assess the presence of analytical interferences caused by the sample matrix. MS/MSD samples sets were also collected at a rate of one MS/MSD set per 20 field samples. One water source blank (SB-1) was collected and analyzed to document the purity of the water used for the final equipment decontamination rinse. A trip blank sample was analyzed for VOCs and accompanied each day's shipment of water samples scheduled for VOC analysis to assess sample handling and shipping. The QA/QC results were used during the data validation process to assess whether the sample results met the project objectives for representativeness, accuracy, and precision. QA/QC sample results are included with the Data Validation Report in Appendix B.

3.3.2 Data validation was conducted in accordance with USEPA guidance for data validation, and consisted of Level IV validation on 10 percent, and Level III validation on 100 percent of the field samples.

3.4 SAMPLE HANDLING AND ANALYSIS

Sample custody and documentation procedures as described in Section 5 of the Remedial Investigation Field Sampling Plan were followed. The analytical procedures utilized and were conducted in accordance with USEPA SW846 methods and were reported in accordance with the NYSDEC Analytical Services Protocol (ASP) Category B deliverables.

3.5 SAMPLING EQUIPMENT AND PROCEDURES

The sampling procedures as specified in the field sampling plan were followed. Any modifications to the sampling procedures are discussed with the RI investigation results for each AOC. In general samples were collected with decontaminated stainless steel spoons, bowls, split spoons. Surface water samples were collected directly into the sample bottles when site conditions allowed. Groundwater samples were collected using dedicated high-density polyethylene (HDPE) bailers or by pumping through dedicated tubing.

TABLE 3.1a
INITIAL RI SAMPLING AND ANALYTICAL PROGRAM (2000)

Sample ID	Matrix	Analyses and Method									
		Sample Depth (ft)	TCL VOCs	TCL SVOCs	TCL Pesticides	TCL PCBs	TOC	Hardness Method 130.2	TAL Metals	TAL Metals (Filtered Sample)	Dioxin
			SW8260 with 25-ml purge*	SW8270	SW8081	SW8082	Walkley-Black		SW6010B SW7470 SW7471	SW6010B SW7470 SW7471	SW8290
AOC 1											
SW04+SW08 (Dup)	Surface Water	-	2	2	2	2		2	2		
SW05	Surface Water	NA									
SW06	Surface Water	-	1	1	1	1		1	1		
SW07	Surface Water	-	1	1	1	1		1	1		
SD04+SD08 (Dup)	Sediment	0.2	2	2	2	2	2		2		
SD05	Sediment	0.2	1	1	1	1	1		1		
SD06	Sediment	0.2	1	1	1	1	1		1		
SD07	Sediment	0.2	1	1	1	1	1		1		
GW11R	Groundwater	NA									
AOC 2											
GW01 (B)	Groundwater	4.2	1	1	1	1			1		
GW02 (R)	Groundwater	2.83	1	1	1	1			1		
SB01	Soil	0.2, 3, 7	3	3	3	3			3		1
SB02	Soil	0.2, 3, 7	3	3	3	3			3		1
HP01	Soil	0.2, 5, 9	3	3	3	3			3		1

TABLE 3.1a (continued)
INITIAL RI SAMPLING AND ANALYTICAL PROGRAM (2000)

Sample ID	Matrix	Analyses and Method									
		Sample Depth (ft)	**TCL VOCs**	**TCL SVOCs**	**TCL Pesticides**	**TCL PCBs**	**TOC**	**Hardness Method 130.2**	**TAL Metals**	**TAL Metals (Filtered Sample)**	**Dioxin**
			SW8260 with 25-ml purge*	SW8270	SW8081	SW8082	Walkley-Black		SW6010B SW7470 SW7471	SW6010B SW7470 SW7471	SW8290
HP01	Groundwater	9.0	1	1	1	1			1		
HP02	Soil	0.2, 5, 15	3	3	3	3			3		1
HP02	Groundwater	NA									
HP03	Soil	0.2, 5, 9	3	3	3	3			3		1
HP03	Groundwater	NA									
HP04	Soil	0.2, 5, 7**, 17	4	3	3	3			3		1
HP04	Groundwater	11.5	1	1	1	1			1		
HP05	Soil	0.2, 8, 11	3	3	3	3			3		1
HP05	Groundwater	NA									
HP06	Soil	0.2, 7, 11	3	3	3	3			3		1
HP06	Groundwater	NA									
HP07	Soil	0.2, 7, 17	3	3	3	3			3		1
HP07	Groundwater	1.0	1	1	1	1			1		
HP08	Soil	0.2, 7, 11	3	3	3	3			3		1
HP08	Groundwater	NA									
HP09	Soil	0.2, 2**,5, 17	4	3	3	3			3		1

TABLE 3.1a (continued)
INITIAL RI SAMPLING AND ANALYTICAL PROGRAM (2000)

Sample ID	Matrix	Analyses and Method									
		Sample Depth (ft)	TCL VOCs	TCL SVOCs	TCL Pesticides	TCL PCBs	TOC	Hardness Method 130.2	TAL Metals	TAL Metals (Filtered Sample)	Dioxin
			SW8260 with 25-ml purge*	SW8270	SW8081	SW8082	Walkley-Black		SW6010B SW7470 SW7471	SW6010B SW7470 SW7471	SW8290
HP09	Groundwater	7.7	1	1	1	1			1		
TP03	Soil	2,4.5	2	2	2	2			2		
TP05	Soil	3,5	2	2	2	2			2		
TP07 + (TP17C dup)	Soil	2.5,4.5	2	2	2	2			2		
TP11	Soil	2.5,4.5	2	2	2	2			2		
TP14	Soil	2.5,4.5	2	2	2	2			2		
SW02	Surface Water	-	1	1	1	1		1	1		
SW03	Surface Water	-	1	1	1	1		1	1		
SW04	Surface Water	-	1	1	1	1		1	1		
SW05	Surface Water	-	1	1	1	1		1	1		
SW06	Surface Water	-	1	1	1	1		1	1		
SW07	Surface Water	-	1	1	1	1		1	1		
SW08	Surface Water	-	1	1	1	1		1	1		
SW09	Surface Water	-	1	1	1	1		1	1		

TABLE 3.1a (continued)
INITIAL RI SAMPLING AND ANALYTICAL PROGRAM (2000)

Sample ID	Matrix	Analyses and Method									
		Sample Depth (ft)	**TCL VOCs**	**TCL SVOCs**	**TCL Pesticides**	**TCL PCBs**	**TOC**	**Hardness Method 130.2**	**TAL Metals**	**TAL Metals (Filtered Sample)**	**Dioxin**
			SW8260 with 25-ml purge*	SW8270	SW8081	SW8082	Walkley-Black		SW6010B SW7470 SW7471	SW6010B SW7470 SW7471	SW8290
SD01	Sediment	0-0.5	1	1	1	1			1		
SD02	Sediment	0-0.5	1	1	1	1			1		
SD03	Sediment	0-0.5	1	1	1	1			1		
SD04	Sediment	0-0.5	1	1	1	1			1		
SD05	Sediment	0-0.5	1	1	1	1			1		
SD06	Sediment	0-0.5	1	1	1	1			1		
SD07	Sediment	0-0.5	1	1	1	1			1		
SD08	Sediment	0-0.5	1	1	1	1			1		
SD09	Sediment	0-0.5	1	1	1	1			1		
AOC 3											
SB01	Soil	0.2, 7, 9	3	3	3	3			3		1
SB02	Soil	0.2, 7, 13	3	3	3	3			3		1
SB03	Soil	0.2, 3, 9	3	3	3	3			3		1
SB04	Soil	0.2, 3, 9	3	3	3	3			3		1
SB05	Soil	0.2, 7, 13	3	3	3	3			3		1
SB06	Soil	0.2, 14, 20	3	3	3	3			3		1

TABLE 3.1a (continued)
INITIAL RI SAMPLING AND ANALYTICAL PROGRAM (2000)

Sample ID	Matrix	Analyses and Method									
		Sample Depth (ft)	TCL VOCs	TCL SVOCs	TCL Pesticides	TCL PCBs	TOC	Hardness Method 130.2	TAL Metals	TAL Metals (Filtered Sample)	Dioxin
			SW8260 with 25-ml purge*	SW8270	SW8081	SW8082	Walkley-Black		SW6010B SW7470 SW7471	SW6010B SW7470 SW7471	SW8290
SB06	Groundwater	19-24	1	1	1	1			1		
SB07	Soil	0.2, 7	2	2	2	2			2		1
SB08	Soil	0.2, 11, 17	3	3	3	3			3		1
SB09	Soil	0.2, 9,11	3	3	3	3			3		1
SB10	Soil	0.2, 7, 19	3	3	3	3			3		1
SB11	Soil	0.2, 3, 9	3	3	3	3			3		1
SB12	Soil	NA									
SB13	Soil	NA									
SB14	Soil	13, 23	2	2	2	2			2		
SB15	Soil	NA									
SB16	Soil	NA									
SB17	Soil	5, 11, 13	3	3	3	3			3		
SB18	Soil	0.2, 5, 9	3	3	3	3			3		
SB19	Soil	5, 9, 11	3	3	3	3			3		
SB20	Soil	0.2, 5, 9	3	3	3	3			3		
SB21	Soil	0.2, 5, 9	3	3	3	3			3		

TABLE 3.1a (continued)
INITIAL RI SAMPLING AND ANALYTICAL PROGRAM (2000)

		Analyses and Method									
Sample ID	**Matrix**	**Sample Depth (ft)**	**TCL VOCs**	**TCL SVOCs**	**TCL Pesticides**	**TCL PCBs**	**TOC**	**Hardness Method 130.2**	**TAL Metals**	**TAL Metals (Filtered Sample)**	**Dioxin**
			SW8260 with 25-ml purge*	SW8270	SW8081	SW8082	Walkley-Black		SW6010B SW7470 SW7471	SW6010B SW7470 SW7471	SW8290
SB22	Soil	0.2, 5, 11	3	3	3	3			3		
SB23	Soil	0.2, 5, 13	3	3	3	3			3		
SB24	Soil	0.2, 5, 11	3	3	3	3			3		
SB25	Soil	5, 11, 15	3	3	3	3			3		
SB26	Soil	5, 25, 29	3	3	3	3			3		
SB27	Soil	5, 19, 31	3	3	3	3			3		
SB28	Soil	0.2, 17, 25	3	3	3	3			3		
SB29	Soil	0.2, 23, 29	3	3	3	3			3		
SB30	Soil	27	1	1	1	1			1		
SB31	Soil	5, 27	2	2	2	2			2		
SB32	Soil	24, 28, 32	3	3	3	3			3		
MW-1	Groundwater	Varies	1	1	1	1			1		
MW-2	Groundwater	Varies	1	1	1	1			1		
MW-3	Groundwater	Varies	1	1	1	1			1		
MW-4-2	Groundwater	Varies	1	1	1	1			1		
MW-5	Soil	1, 17	2	2	2	2			2		

TABLE 3.1a (continued)
INITIAL RI SAMPLING AND ANALYTICAL PROGRAM (2000)

Sample ID	Matrix	Analyses and Method									
		Sample Depth (ft)	TCL VOCs	TCL SVOCs	TCL Pesticides	TCL PCBs	TOC	Hardness Method 130.2	TAL Metals	TAL Metals (Filtered Sample)	Dioxin
			SW8260 with 25-ml purge*	SW8270	SW8081	SW8082	Walkley-Black		SW6010B SW7470 SW7471	SW6010B SW7470 SW7471	SW8290
MW-5	Groundwater	Varies	1	1	1	1			1		
MW-6	Soil	1, 17	2	2	2	2			2		
MW-6	Groundwater	Varies	1	1	1	1			1		
MW-7	Soil	1, 23, 25	2	2	2	2			2		
MW-7	Groundwater	Varies	1	1	1	1			1		
MW-8	Soil	1, 28	2	2	2	2			2		
MW-8	Groundwater	Varies	1	1	1	1			1		
MW-9	Soil	1, 26	2	2	2	2			2		
MW-9	Groundwater	Varies	1	1	1	1			1		
HP01	Groundwater	17.4	1	1	1	1			1		
HP02	Groundwater	16.5	1	1	1	1			1		
HP03	Groundwater	16.8	1	1	1	1			1		
HP04	Groundwater	18.5	1	1	1	1			1		

TABLE 3.1a (continued)
INITIAL RI SAMPLING AND ANALYTICAL PROGRAM (2000)

Sample ID	Matrix	Analyses and Method									
		Sample Depth (ft)	TCL VOCs	TCL SVOCs	TCL Pesticides	TCL PCBs	TOC	Hardness Method 130.2	TAL Metals	TAL Metals (Filtered Sample)	Dioxin
			SW8260 with 25-ml purge*	SW8270	SW8081	SW8082	Walkley-Black		SW6010B SW7470 SW7471	SW6010B SW7470 SW7471	SW8290
AOC 5											
SS01	Soil	0.2, 2							2		
SS02	Soil	0.2, 2							2		
SS03	Soil	0.2, 2							2		
SS04	Soil	0.2, 2							2		
SS05	Soil	0.2, 2							2		
SS06	Soil	0.2, 2							2		
SS07	Soil	0.2, 2							2		
SS08	Soil	0.2							1		
SS09	Soil	0.2							1		
GW1	Groundwater	4.5 (TOC)							1		
HP01	Soil	3							1		
HP01	Groundwater	3.0							1		
HP02	Soil	27							1		
HP02	Groundwater	NA									
HP03	Soil	6							1		

TABLE 3.1a (continued)
INITIAL RI SAMPLING AND ANALYTICAL PROGRAM (2000)

Sample ID	Matrix	Analyses and Method									
		Sample Depth (ft)	TCL VOCs	TCL SVOCs	TCL Pesticides	TCL PCBs	TOC	Hardness Method 130.2	TAL Metals	TAL Metals (Filtered Sample)	Dioxin
			SW8260 with 25-ml purge*	SW8270	SW8081	SW8082	Walkley-Black		SW6010B SW7470 SW7471	SW6010B SW7470 SW7471	SW8290
HP03	Groundwater	11.8							1		
HP04	Soil	6							1		
HP04	Groundwater	2.5							1		
SW01	Surface Water	-						1	1	1	
SW02	Surface Water	-						1	1		
SW03	Surface Water	-						1	1	1	
SW04	Surface Water	-						1	1		
SW05	Surface Water	-						1	1	1	
SW06	Surface Water	-						1	1	1	
SW07	Surface Water	-						1	1	1	
SW08	Surface Water	NA									
SW09	Surface Water	-						1	1		
SW10	Surface Water	-						1	1		
SW11	Surface Water	-						1	1		
SW12	Surface Water	-						1	1		
SW13	Surface Water	-						1	1	1	

TABLE 3.1a (continued)
INITIAL RI SAMPLING AND ANALYTICAL PROGRAM (2000)

		Analyses and Method									
Sample ID	Matrix	Sample Depth (ft)	TCL VOCs	TCL SVOCs	TCL Pesticides	TCL PCBs	TOC	Hardness Method 130.2	TAL Metals	TAL Metals (Filtered Sample)	Dioxin
			SW8260 with 25-ml purge*	SW8270	SW8081	SW8082	Walkley-Black		SW6010B SW7470 SW7471	SW6010B SW7470 SW7471	SW8290
SW26	Surface Water	-	1	1	1	1			1	1	
SD01	Sediment	0.2							1		
SD02	Sediment	0.2							1		
SD03	Sediment	0.2							1		
SD04	Sediment	0.2							1		
SD05	Sediment	0.2							1		
SD06	Sediment	0.2							1		
SD07	Sediment	0.2							1		
SD08	Sediment	0.2							1		
SD09	Sediment	0.2							1		
SD10	Sediment	0.2							1		
SD11	Sediment	0.2							1		
SD12	Sediment	0.2							1		
SD26	Sediment	0.2	1	1	1	1			1		

TABLE 3.1a (continued)
INITIAL RI SAMPLING AND ANALYTICAL PROGRAM (2000)

Sample ID	Matrix	Analyses and Method									
		Sample Depth (ft)	TCL VOCs	TCL SVOCs	TCL Pesticides	TCL PCBs	TOC	Hardness Method 130.2	TAL Metals	TAL Metals (Filtered Sample)	Dioxin
			SW8260 with 25-ml purge*	SW8270	SW8081	SW8082	Walkley-Black		SW6010B SW7470 SW7471	SW6010B SW7470 SW7471	SW8290
AOC 6											
TP01	Soil	1	1	1	1	1			1		
TP02	Soil	1	1	1	1	1			1		
TP03	Soil	1	1	1	1	1			1		
TP04	Soil	1	1	1	1	1			1		
TP05	Soil	2	1	1	1	1			1		
TP06	Soil	1	1	1	1	1			1		
AOC 7											
SB01	Soil	0.2, 3, 5	3	3	3	3			3		
SB02	Soil	0.2, 3, 5	3	3	3	3			3		
SB03	Soil	0.2, 3, 5	3	3	3	3			3		
SB04	Soil	0.2, 3, 5	3	3	3	3			3		
HP01	Groundwater	20.2	1	1	1	1			1		
HP02	Groundwater	17	1	1	1	1			1		
HP03	Groundwater	11.8	1	1	1	1			1		
2AMW-5	Groundwater	3.24	1	1	1	1			1		

TABLE 3.1a (continued)
INITIAL RI SAMPLING AND ANALYTICAL PROGRAM (2000)

Sample ID	Matrix	Analyses and Method									
		Sample Depth (ft)	TCL VOCs	TCL SVOCs	TCL Pesticides	TCL PCBs	TOC	Hardness Method 130.2	TAL Metals	TAL Metals (Filtered Sample)	Dioxin
			SW8260 with 25-ml purge*	SW8270	SW8081	SW8082	Walkley-Black		SW6010B SW7470 SW7471	SW6010B SW7470 SW7471	SW8290
2AMW-7	Groundwater	4.11	1	1	1	1			1		
AOC 8											
SW14	Surface Water	NA									
SW15	Surface Water	-	1	1	1	1			1		
SW16	Surface Water	-	1	1	1	1			1		
SW17	Surface Water	-	1	1	1	1			1		
SW18	Surface Water	-	1	1	1	1			1		
SW19	Surface Water	-	1	1	1	1			1		
SW20	Surface Water	-	1	1	1	1			1		
SW21	Surface Water	-	1	1	1	1			1		
SW22	Surface Water	-	1	1	1	1			1		
SW23	Surface Water	-	1	1	1	1			1		
SW24	Surface Water	-	1	1	1	1			1		
SW25	Surface Water	-	1	1	1	1			1		
SW27 (Dup)	Surface Water		1	1	1	1					
SW28	Surface Water	-	1	1	1	1			1		

TABLE 3.1a (continued)
INITIAL RI SAMPLING AND ANALYTICAL PROGRAM (2000)

Sample ID	Matrix	Analyses and Method									
		Sample Depth (ft)	TCL VOCs	TCL SVOCs	TCL Pesticides	TCL PCBs	TOC	Hardness Method 130.2	TAL Metals	TAL Metals (Filtered Sample)	Dioxin
			SW8260 with 25-ml purge*	SW8270	SW8081	SW8082	Walkley-Black		SW6010B SW7470 SW7471	SW6010B SW7470 SW7471	SW8290
SW29	Surface Water	-	1	1	1	1			1		
SD14	Sediment	0.2	1	1	1	1			1		
SD15	Sediment	0.2	1	1	1	1			1		
SD16	Sediment	0.2	1	1	1	1			1		
SD17	Sediment	0.2	1	1	1	1			1		
SD18	Sediment	0.2	1	1	1	1			1		
SD19	Sediment	0.2	1	1	1	1			1		
SD20	Sediment	0.2	1	1	1	1			1		
SD21	Sediment	0.2	1	1	1	1	1		1		
SD22	Sediment	0.2	1	1	1	1	1		1		
SD23	Sediment	0.2	1	1	1	1	1		1		
SD24	Sediment	0.2	1	1	1	1			1		
SD25	Sediment	0.2	1	1	1	1			1		
SD27 (Dup)	Sediment	0.2	1	1	1	1					
SD28	Sediment	0.2	1	1	1	1			1		

TABLE 3.1a (continued)
INITIAL RI SAMPLING AND ANALYTICAL PROGRAM (2000)

Sample ID	Matrix	Analyses and Method									
		Sample Depth (ft)	TCL VOCs	TCL SVOCs	TCL Pesticides	TCL PCBs	TOC	Hardness Method 130.2	TAL Metals	TAL Metals (Filtered Sample)	Dioxin
			SW8260 with 25-ml purge*	SW8270	SW8081	SW8082	Walkley-Black		SW6010B SW7470 SW7471	SW6010B SW7470 SW7471	SW8290
SD29	Sediment	0.2	1	1	1	1			1		
AOC 9											
SB01	Soil	4, 9	2	2					2		
SB02	Soil	4, 9	2	2					2		
SB03	Soil	3, 9	2	2					2		
SB04	Soil	4, 9	2	2					2		
MW-9	Groundwater	10.6 TOC	1	1					1		
COEMW-10	Groundwater	9.77 TOC	1	1					1		
COEMW-11	Groundwater	5.5 TOC	1	1					1		
COEMW-12	Groundwater	7.8 TOC	1	1					1		
BACKGROUND											
HP10	Soil	0.2,	3	3	3	3	1		3		1
HP11	Soil	0.2	1	1	1	1	1		1		
HP12	Soil	0.2	1	1	1	1	1		1		
HP13	Soil	0.2	1	1	1	1	1		1		
HP14	Soil	0.2	1	1	1	1	1		1		

TABLE 3.1a (continued)
INITIAL RI SAMPLING AND ANALYTICAL PROGRAM (2000)

Sample ID	Matrix	Analyses and Method									
		Sample Depth (ft)	TCL VOCs	TCL SVOCs	TCL Pesticides	TCL PCBs	TOC	Hardness Method 130.2	TAL Metals	TAL Metals (Filtered Sample)	Dioxin
			SW8260 with 25-ml purge*	SW8270	SW8081	SW8082	Walkley-Black		SW6010B SW7470 SW7471	SW6010B SW7470 SW7471	SW8290
HP15	Soil	0.2	1	1	1	1	1		1		
HP16	Soil	0.2	1	1	1	1	1		1		
HP17	Soil	0.2	1	1	1	1	1		1		
HP18	Soil	0.2	1	1	1	1	1		1		

** - Sample analyzed for VOC's only.

* - 25-ml purge applied to water samples only.

(R) - Rivers Well

(B) - Burns Well

TOC, Walkley Black - Total Organic Carbon

TOC - Top of Casing

The natural attenuation parameters chloride, nitrate, and sulfate were also analyzed during the fourth round of groundwater sampling at AOC 3 (MW-1, 2, 3, 4-2, 8, and 9) on 1/18/01.

TABLE 3.1b
DATA GAP RI SAMPLING AND ANALYTICAL PROGRAM (2004)

Sample ID	Matrix	Sample Depth (ft)	TCL VOCs	TCL SVOCs	TCL Pesticides	TCL PCBs	TAL Metals	TCLP (VOCs, SVOCs, Pest, metals)
			SW8260 with 25-ml purge*	SW8270	SW8081	SW8082	SW6010B SW7470 SW7471	SW1311 SW8260 SW8270 SW8081 Sw6010B
AOC 1								
SD08	Sediment	0.2		1	1	1	1	
SD09	Sediment	0.2		1	1	1	1	
SD10	Sediment	0.2		1	1	1	1	
SD11	Sediment	0.2		1	1	1	1	
SD12	Sediment	0.2		1	1	1	1	
AOC 2								
GW03	Groundwater	Water table	1	1			1	
GW04	Groundwater	Water table	1	1			1	
GW05	Groundwater	Water table	1	1			1	

TABLE 3.1b (continued)
DATA GAP RI SAMPLING AND ANALYTICAL PROGRAM (2004)

Sample ID	Matrix	Sample Depth (ft)	TCL VOCs	TCL SVOCs	TCL Pesticides	TCL PCBs	TAL Metals	TCLP (VOCs, SVOCs, Pest, metals)
			SW8260 with 25-ml purge*	SW8270	SW8081	SW8082	SW6010B SW7470 SW7471	SW1311 SW8260 SW8270 SW8081 Sw6010B
COMP-1	Soil	TBD						1
SW10	Surface Water	-		1	1		1	
SW11	Surface Water	-		1	1		1	
SW12	Surface Water	-		1	1		1	
SW13	Surface Water	-		1	1		1	
SW14	Surface Water	-		1	1		1	
SD10	Sediment	0-0.5					1	
SD11	Sediment	0-0.5					1	
SD12	Sediment	0-0.5					1	
SD13	Sediment	0-0.5					1	
SD14	Sediment	0-0.5					1	

TABLE 3.1b (continued)
DATA GAP RI SAMPLING AND ANALYTICAL PROGRAM (2004)

Sample ID	Matrix	Sample Depth (ft)	TCL VOCs	TCL SVOCs	TCL Pesticides	TCL PCBs	TAL Metals	TCLP (VOCs, SVOCs, Pest, metals)
			SW8260 with 25-ml purge*	SW8270	SW8081	SW8082	SW6010B SW7470 SW7471	SW1311 SW8260 SW8270 SW8081 Sw6010B
AOC 7								
GW-1	Groundwater	Water table		1			1	
GW-2	Groundwater	Water table		1			1	
GW-3	Groundwater	Water table		1			1	
AOC 8								
SD15 D	Sediment	1.0		1	1		1	
SD29 D	Sediment	1.02		1	1		1	
SD30	Sediment	TBD		1	1		1	
SD31	Sediment	TBD		1	1		1	
SD32	Sediment	TBD		1	1		1	
SD33	Sediment	TBD		1	1		1	
SD34	Sediment	TBD		1	1		1	

TABLE 3.1b (continued)
DATA GAP RI SAMPLING AND ANALYTICAL PROGRAM (2004)

Sample ID	Matrix	Sample Depth (ft)	VOCs	SVOCs	Pesticides	PCBs	TAL Metals	Corrosivity
			SW8260B	SW8270C	SW8081A	SW8082	SW601B SW7470A	SW9045C
SD35	Sediment	TBD		1	1		1	
SD36	Sediment	TBD		1	1		1	
SD37	Sediment	TBD		1	1		1	
SD-SW-28	Surface Water	-		1			1	
AOC 9								
MW-9	Groundwater	-					2 **	

** - Sample analyzed for VOC's only.

* - 25-ml purge applied to water samples only.

TABLE 3.1c
CONTINUING DATA GAP RI
SAMPLING AND ANALYTICAL PROGRAM (2004)

Sample ID	Matrix	Sample Depth (ft)	VOCs	SVOCs	Pesticides	PCBs	TAL Metals	Corrosivity
			SW8260B	SW8270C	SW8081A	SW8082	SW601B SW7470A	SW9045C
AOC 1								
GW12	Groundwater	Water Table	1	1	1	1	1	
GW13	Groundwater	Water Table	1	1	1	1	1	
GW14	Groundwater	Water Table	1	1	1	1	1	
AOC 2								
GW06	Groundwater	Water Table	1	1	1	1	1	
GW07	Groundwater	Water Table	1	1	1	1	1	
PILLS-1	Pills	TBD						1
PILLS-2	Pills	TBD						1
PILLS-3	Pills	TBD						1
PILLS-4	Pills	TBD						1
PILLS-5	Pills	TBD						1

TABLE 3.1d
CONTINUING DATA GAP RI
SAMPLING AND ANALYTICAL PROGRAM (2006)

Sample ID	Matrix	Sample Depth (ft)	VOCs	SVOCs	Pesticides	PCBs	TAL Metals	Natural Attenuation
			SW8260B	SW8270C	SW8081A	SW8082	SW601B SW7470A	**Parameters**
AOC 1								
ACE-2	Groundwater	Water Table	1					1
AMW-1	Groundwater	Water Table	1					1
AMW-2	Groundwater	Water Table	1					
AMW-3	Groundwater	Water Table	1					
AMW-4	Groundwater	Water Table	1					
GW-12	Groundwater	Water Table	1					
GW-13	Groundwater	Water Table	1					1
GW-14	Groundwater	Water Table	1					
MW-2B	Groundwater	Water Table	1					1
AOC 7								
GW-01	Groundwater	Water Table	1					
GW-03	Groundwater	Water Table	1					

Natural Attenuation Parameters are total alkalinity, chloride, ethane, ethane, methane, nitrate (as nitrogen), sulfate, total sulfide and total organic carbon.

TABLE 3.2
SITE-SPECIFIC BACKGROUND SURFACE WATER DATA
SADVA RI

Former Schenectady Army Depot
Remedial Investigation
Upstream/Background Surface Water Data
Detected Compound Summary

CAS NO.	COMPOUND	NYSDEC Class C Surface Water Standards/Guidance Values: Background Range	H(FC)		Background: AOC8-SW21	AOC8-SW22	AOC8-SW23	AOC8-SW28	SD-SW28
				LAB ID:	C0H080193002	C0H080193005	C0H080193003	C0J050207001	C4G160332006
				SOURCE:	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh
				SDG:	SADVA9	SADVA9	SADVA9	SADVA20	C4G150227
				MATRIX:	WATER	WATER	WATER	WATER	WATER
				SAMPLED:	8/7/2000	8/7/2000	8/7/2000	10/4/2000	7/14/2004
				VALIDATED:	10/30/2000	10/30/2000	10/30/2000	12/3/2000	9/17/2004
				UNITS:					
	VOLATILES								
67-64-1	Acetone	ND - 2.3	NC	ug/L	ND	ND	ND	2.3 J	NA
78-93-3	2-Butanone	ND	NC	ug/L	R	R	R	ND	NA
	SEMIVOLATILES								
117-81-7	bis(2-Ethylhexyl) phthalate	ND - 26	0.6 A(C)	ug/L	14	26	7.5 J	ND	6.2
84-74-2	Di-n-butyl phthalate	ND-0.64	NC	ug/L	ND	ND	ND	ND	0.64
	PESTICIDES								
	None Detected			ug/L	ND	ND	ND	ND	NA
	PCBs								
	None Detected			ug/L	ND	ND	ND	ND	NA
	METALS								
7429-90-5	Aluminum	23.4-346	100 (1)	ug/L	24.3 J	23.4 J	37.5 J	158 J	346
7440-39-3	Barium	22.6-43.5	NC	ug/L	22.6 J	26.3 J	23.5 J	25.8 J	43.5 J
7440-41-7	Beryllium	0.14-0.96	11 *	ug/L	0.16 J	0.15 J	0.15 J	0.14 J	0.96 J
7440-70-2	Calcium	60500-64400	NC	ug/L	61300	61800	60500	64400	56700
7440-47-3	Chromium	ND - 1.4	52.7 (2) *A(C)	ug/L	ND	ND	ND	1.4 J	ND
7440-50-8	Copper	ND - 2.5	6.3 (2) *A(C)	ug/L	ND	2.5 J	ND	ND	ND
7439-89-6	Iron	497-998	300	ug/L	660	998	691	497	767
7439-95-4	Magnesium	8810 - 11500	NC	ug/L	9770	9600	9510	11500	8810
7439-96-5	Manganese	105 - 691	NC	ug/L	164	691	387	105	480
7439-97-6	Mercury	0.065 - 0.093	0.0007	ug/L	0.065 J	0.086 J	0.075 J	0.093 J	ND
7440-02-0	Nickel	ND - 6.2	36.5 (2) *A(C)	ug/L	ND	ND	6.2 J	ND	ND
7440-09-7	Potassium	796 - 2640	NC	ug/L	1020 J	1120 J	1450 J	2640 J	796 J
7440-22-4	Silver	ND-0.31	0.68 (2) *A(C)	ug/L	ND	ND	ND	ND	0.31 J
7440-23-5	Sodium	9710 - 15000	NC	ug/L	15000	14600	14300	13800	9710
7440-62-2	Vanadium	ND - 3.4	14	ug/L	ND	3.4 J	ND	2 J	1.1 J
7440-66-6	Zinc	3.9 - 22.1	58 (2) *A(C)	ug/L	22.1	7 J	4.2 J	3.9 J	7.7 J

(1) - Ionic form
(2) - Dissolved form - sample data are total metals.
* - based on average hardness value
Average Hardness: 65.9 mg/L
A(C) - Protection of Fish Propagation
[shaded] - concentration exceeds NYSDEC surface water standards/guidance values.

ND - Not Detected
H(FC) - Protection for Human Consumption of Fish
J - Estimated Value
R - data rejected during data validation
NC - No Criteria

TABLE 3.3
SITE-SPECIFIC BACKGROUND SEDIMENT DATA
SADVA RI

				Background				
Former Schenectady Army Depot Remedial Investigation Background Sediment Samples Detected Compound Summary			SAMPLE ID:	AOC8-SD21	AOC8-SD22	AOC8-SD23	AOC8-SD28	SD-SD28-0-0.5
			LAB ID:	C0H080195001	C0H080195004	C0H080195002	C0J050202003	C4G150227006
			DEPTH:	0.2'	0.2'	0.2'	0.2'	0.5'
			SOURCE:	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh
			SDG:	SADVA10	SADVA10	SADVA10	SADVA19	C4G150227006
			MATRIX:	SOIL	SOIL	SOIL	SOIL	SOIL
			SAMPLED:	8/7/2000	8/7/2000	8/7/2000	10/4/2000	7/14/2004
		NYSDEC	VALIDATED:	10/25/2000	10/25/2000	10/25/2000	12/3/2000	9/17/2004
CAS NO.	COMPOUND	Sediment Criteria	UNITS:					
	VOLATILES							
108-88-3	Toluene	720 (C)	ug/kg	2.4 J	ND	ND	ND	NA
	Total VOCs		ug/kg	**2.4 J**	**ND**	**ND**	**ND**	**NA**
	SEMIVOLATILES							
106-44-5	4-Methylphenol	7 (C)	ug/kg	ND	150 J	210 J	190 J	ND
132-64-9	Dibenzofuran		ug/kg	ND	ND	ND	50 J	ND
	CPAHs							
56-55-3	Benzo(a)anthracene	19 (C)	ug/kg	1	ND	ND	310 J	ND
50-32-8	Benzo(a)pyrene	19 (H)	ug/kg	ND	ND	ND	330 J	ND
205-99-2	Benzo(b)fluoranthene	19 (H)	ug/kg	ND	ND	ND	440 J	ND
207-08-9	Benzo(k)fluoranthene	19 (H)	ug/kg	ND	ND	ND	360 J	ND
218-01-9	Chrysene	19 (H)	ug/kg	ND	ND	ND	730 J	44 J
193-39-5	Indeno(1,2,3-cd)pyrene	19 (H)	ug/kg	ND	ND	ND	78 J	ND
	Total CPAHs		ug/kg	**1**	**ND**	**ND**	**2248**	**44**
	NPAHs							
83-32-9	Acenaphthene	2058 (C)	ug/kg	ND	ND	ND	92 J	ND
120-12-7	Anthracene	1573 (C)	ug/kg	ND	ND	ND	170 J	ND
191-24-2	Benzo(ghi)perylene	1573 (C)	ug/kg	ND	ND	ND	66 J	ND
206-44-0	Fluoranthene	14994 (C)	ug/kg	ND	ND	ND	1200 J	ND
91-20-3	Naphthalene	441 (C)	ug/kg	ND	ND	ND	210 J	ND
85-01-8	Phenanthrene	1764 (C)	ug/kg	ND	ND	ND	400 J	ND
129-00-0	Pyrene	14127 (C)	ug/kg	ND	ND	ND	920 J	ND
	Total NPAHs		ug/kg	**ND**	**ND**	**ND**	**3058**	**ND**
	Total PAHs	**35000 (LM)**	ug/kg	**1**	**ND**	**ND**	**5306**	**44**
	Total SVOCs		ug/kg	**1**	**150**	**210**	**5546**	**44**
	PESTICIDES							
72-55-9	4,4'-DDE	14.7 (W)	ug/kg	0.13 JN	0.23 JN	0.15 JN	ND	ND
50-29-3	4,4'-DDT	14.7 (C)	ug/kg	ND	ND	ND	ND	0.35 J
	PCBs							
	None Detected			ND	ND	ND	ND	ND

CPAH = Carcinogenic Polynuclear Aromatic Hydrocarbon.
NPAH = Noncarcinogenic Polynuclear Aromatic Hydrocarbon.
C = Benthic Aquatic Chronic Criteria (TOC Adjusted),(NYSDEC, 1999).
H = Human Health Bioaccumulation (TOC Adjusted), (NYSDEC, 1999).
LM = Medium Effects Level (TOC Adjusted), (Long and Morgan, 1990).
W = Wildlife Bioaccumulation Criteria (TOC Adjusted), (NYSDEC, 1999).
L = Lowest Effect Level (metals), (NYSDEC, 1999).
J = Estimated Value
ND = Not Detected
NC = No Criteria
- concentration above NYSDEC sediment criteria.

TABLE 3.3
SITE-SPECIFIC BACKGROUND SEDIMENT DATA
SADVA RI

Former Schenectady Army Depot Remedial Investigation Background Sediment Samples Detected Compound Summary				Background				
			SAMPLE ID:	AOC8-SD21	AOC8-SD22	AOC8-SD23	AOC8-SD28	SD-SD28-0-0.5
			LAB ID:	C0H080195001	C0H080195004	C0H080195002	C0J050202003	C4G150227006
			DEPTH:	0.2'	0.2'	0.2'	0.2'	0.5'
			SOURCE:	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh
			SDG:	SADVA10	SADVA10	SADVA10	SADVA19	C4G150227006
			MATRIX:	SOIL	SOIL	SOIL	SOIL	SOIL
			SAMPLED:	8/7/2000	8/7/2000	8/7/2000	10/4/2000	7/14/2004
		NYSDEC	VALIDATED:	10/25/2000	10/25/2000	10/25/2000	12/3/2000	9/17/2004
CAS NO.	COMPOUND	Sediment Criteria	UNITS:					
	METALS							
7429-90-5	Aluminum	NC	mg/kg	12000	17900	14000	9830 J	8040
7440-36-0	Antimony	2 (L)	mg/kg	0.24 J	0.41 J	0.44 J	0.42 J	ND
7440-38-2	Arsenic	6 (L)	mg/kg	3.6	3.6	3.1	4.5	5.1
7440-39-3	Barium	NC	mg/kg	101	141	119	71.9	53.9
7440-41-7	Beryllium	NC	mg/kg	0.67	0.92	0.79 J	0.62 J	0.7
7440-43-9	Cadmium	0.6 (L)	mg/kg	0.39 J	0.75 J	0.48 J	0.4 J	ND
7440-70-2	Calcium	NC	mg/kg	4370	5630	4810	6700 J	2660
7440-47-3	Chromium	26 (L)	mg/kg	15.4 J	22 J	15.3 J	16.4 J	11.2
7440-48-4	Cobalt	NC	mg/kg	10	14	7.4 J	11 J	7.1
7440-50-8	Copper	16 (L)	mg/kg	22.2	27.7	17.2	20.6 J	13
7439-89-6	Iron	20000 (L)	mg/kg	20200	25400	18300	24900 J	20800
7439-92-1	Lead	31 (L)	mg/kg	15.8 J	18.7 J	20.9 J	20 J	7.8
7439-95-4	Magnesium	NC	mg/kg	3930	5190	3240	4150 J	3190
7439-96-5	Manganese	460 (L)	mg/kg	328	647	386	624 J	363
7439-97-6	Mercury	0.15 (L)	mg/kg	0.067	0.091 J	0.079	0.06 J	0.027 J
7440-02-0	Nickel	16 (L)	mg/kg	21 J	24.5 J	17.2 J	20.5 J	15.6
7440-09-7	Potassium	NC	mg/kg	900 J	1530 J	891 J	734 J	901
7782-49-2	Selenium	NC	mg/kg	0.53 J	0.72 J	0.81 J	0.67 J	ND
7440-22-4	Silver	1 (L)	mg/kg	0.16 J	0.5 J	ND	ND	0.075 J
7440-23-5	Sodium	NC	mg/kg	268 J	186 J	255 J	790 J	71.6 J
7440-28-0	Thallium	NC	mg/kg	ND	1.5 J	1.3 J	ND	ND
7440-62-2	Vanadium	NC	mg/kg	19.2 J	28.4 J	24.4 J	18.2 J	14.6
7440-66-6	Zinc	120 (L)	mg/kg	77.3	118	72.3	98.7 J	47.7
	OTHER							
7440-44-0	Total Organic Carbon	NC	mg/kg	3110	16200	24900	NA	NA

C = Benthic Aquatic Chronic Criteria (TOC Adjusted),(NYSDEC, 1999).
H = Human Health Bioaccumulation (TOC Adjusted), (NYSDEC, 1999).
LM = Medium Effects Level (TOC Adjusted), (Long and Morgan, 1990).
W = Wildlife Bioaccumulation Criteria (TOC Adjusted), (NYSDEC, 1999).
L = Lowest Effect Level (metals), (NYSDEC, 1999).
J = Estimated Value
NA = Not Analyzed
ND = Not Detected
NC = No Criteria
- concentration above NYSDEC sediment criteria.

TABLE 3.4
SADVA RI BACKGROUND SOIL DATA

CAS NO.	COMPOUND	Background Ranges	NYSDEC Soil Criteria	SAMPLE ID:	HP10	HP11	HP12	HP112 (Dup of HP12)	HP13	HP14	HP15	HP16	HP17	HP18
Former Schenectady Army Depot				LAB ID:	C0J060292004	C0J050202006	C0J050202004	C0J050202005	C0J050202002	C0J050202001	C0J060292002	C0J060292001	C0J060292003	C0J110265001
Remedial Investigation				DEPTH:	0.2'	0.2'	0.2'	0.2'	0.2'	0.2'	0.2'	0.2'	0.2'	0.2'
Background Soil Samples				SOURCE:	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh
Detected Compound Summary				SDG:	SADVA19	SADVA19	SADVA19	SADVA19	SADVA19	SADVA19	SADVA19	SADVA19	SADVA19	SADVA19
				MATRIX:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
				SAMPLED:	10/5/2000	10/4/2000	10/4/2000	10/4/2000	10/4/2000	10/4/2000	10/5/2000	10/5/2000	10/5/2000	10/10/2000
				VALIDATED:	12/1/2000	12/1/2000	12/1/2000	12/1/2000	12/1/2000	12/1/2000	12/1/2000	12/1/2000	12/1/2000	12/1/2000
				UNITS:										
	VOLATILES													
67-64-1	Acetone	ND - 3.1	407	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.1 J
	Total VOCs	**ND - 3.1**	**10000**	**ug/kg**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**3.1**
	SEMIVOLATILES													
86-74-8	Carbazole	ND - 54	NC	ug/kg	54 J	ND	ND	ND	ND	ND	ND	ND	ND	ND
	CPAHs													
56-55-3	Benzo(a)anthracene	ND - 410	224	ug/kg	410 J	ND	ND	ND	ND	210 J	23 J	ND	31 J	ND
50-32-8	Benzo(a)pyrene	ND - 550	61	ug/kg	550	ND	ND	ND	ND	150 J	26 J	ND	52 J	ND
205-99-2	Benzo(b)fluoranthene	ND - 620	4070	ug/kg	620	ND	ND	ND	ND	130 J	25 J	ND	33 J	ND
207-08-9	Benzo(k)fluoranthene	ND - 550	4070	ug/kg	550	ND	ND	ND	ND	150 J	24 J	ND	29 J	ND
218-01-9	Chrysene	ND - 680	1480	ug/kg	680	ND	ND	ND	ND	200 J	36 J	ND	50 J	ND
53-70-3	Dibenz(a,h)anthracene	ND - 55	14	ug/kg	55 J	ND	ND	ND	ND	ND	ND	ND	ND	ND
193-39-5	Indeno(1,2,3-cd)pyrene	ND - 230	11840	ug/kg	230 J	ND	ND	ND	ND	ND	13 J	ND	13 J	ND
	Total CPAHs	**ND - 3095**	**10,000**	**ug/kg**	**3095**	**ND**	**ND**	**ND**	**ND**	**840**	**147**	**ND**	**208**	**ND**
	NPAHs													
120-12-7	Anthracene	ND - 61	50000	ug/kg	61 J	ND	ND	ND	ND	ND	ND	ND	ND	ND
191-24-2	Benzo(ghi)perylene	ND - 210	50000	ug/kg	210 J	ND	ND	ND	ND	ND	ND	ND	14 J	ND
206-44-0	Fluoranthene	ND - 940	50000	ug/kg	940	ND	ND	ND	ND	340 J	38 J	ND	61 J	ND
86-73-7	Fluorene	ND - 23	50000	ug/kg	23 J	ND	ND	ND	ND	ND	ND	ND	ND	ND
85-01-8	Phenanthrene	ND - 480	50000	ug/kg	480	ND	ND	ND	ND	300 J	27 J	ND	30 J	ND
129-00-0	Pyrene	ND - 750	50000	ug/kg	750	ND	33 J	ND	ND	290 J	43 J	ND	55 J	ND
	Total NPAHs	**ND - 2464**	**500,000**	**ug/kg**	**2464**	**ND**	**33**	**ND**	**ND**	**930**	**108**	**ND**	**160**	**ND**
	Total PAHs	**ND - 5,559**	**510,000**	ug/kg	**5559**	**ND**	**33**	**ND**	**ND**	**1770**	**255**	**ND**	**368**	**ND**
	Total SVOCs	**ND - 5,613**	**510,000**	ug/kg	**5613**	**ND**	**33**	**ND**	**ND**	**1770**	**255**	**ND**	**368**	**ND**
	PESTICIDES													
319-84-6	alpha-BHC	ND - 0.15	111	ug/kg	0.086 J	ND	ND	ND	0.15 J	ND	ND	ND	ND	ND
76-44-8	Heptachlor	ND - 0.35	444	ug/kg	ND	ND	ND	ND	ND	0.35 JN	ND	ND	ND	ND
1024-57-3	Heptachlor epoxide	ND - 0.11	20	ug/kg	ND	ND	ND	ND	ND	0.11 JN	ND	ND	ND	ND
60-57-1	Dieldrin	ND - 0.89	44	ug/kg	ND	ND	ND	ND	ND	0.38 JN	ND	ND	0.89 JN	ND
72-55-9	4,4'-DDE	ND - 9.4	2100	ug/kg	1.6 JN	9.4	1.6 J	2.1 J	2.2 J	4.9	5.5	1.6 J	8.3	2 J
72-54-8	4,4'-DDD	ND - 1.2	2900	ug/kg	ND	ND	1.2 JN	ND	ND	ND	ND	0.4 J	0.68 JN	ND
50-29-3	4,4'-DDT	0.61 - 15	2100	ug/kg	1.3 JN	4.3	0.61 JN	0.68 JN	1.2 JN	5.4	12	2.6	15	2 J
72-43-5	Methoxychlor	ND - 0.92	10000	ug/kg	ND	ND	ND	ND	ND	ND	0.92 JN	ND	ND	ND
5103-71-9	alpha-Chlordane	ND - 0.93	540	ug/kg	ND	ND	ND	ND	ND	0.93 JN	ND	ND	ND	ND
	Total Pesticides	**0.61 - 28.95**	**10000**	**ug/kg**	**2.986**	**13.7**	**3.41**	**2.78**	**3.55**	**12.07**	**18.42**	**4.6**	**24.87**	**4**
	PCBs													
	None Detected	ND - ND	NA	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	METALS													
7429-90-5	Aluminum	7080 - 12800	SB	mg/kg	12700	12200	12800	12800	9270	7310	8060	8110	7950	7080
7440-36-0	Antimony	0.2 - 0.59	SB	mg/kg	0.5 J	0.59 J	0.37 J	0.35 J	0.59 J	0.38 J	0.43 J	0.2 J	0.45 J	0.43 J
7440-38-2	Arsenic	4.3 - 16.4	7.5 or SB	mg/kg	5.4	7.9	6.1	5.9	5.9	5.1	4.6	16.4	4.3	5.3
7440-39-3	Barium	33 - 104	300 or SB	mg/kg	58.8	71.9	84.8	86.9	104	39.4	41.7	60.3	33	38.2
7440-41-7	Beryllium	0.38 - 0.67	0.16(HEAST) or SB	mg/kg	0.61 J	0.63	0.65 J	0.67 J	0.52 J	0.44 J	0.4 J	0.38 J	0.38 J	0.41 J
7440-43-9	Cadmium	0.21 - 0.52	1 or SB	mg/kg	0.24 J	0.52 J	0.49 J	0.52 J	0.35 J	0.37 J	0.34 J	0.21 J	0.29 J	0.24 J
7440-70-2	Calcium	1280 - 46600	SB	mg/kg	3380 J	22600 J	6050 J	5990 J	18700 J	21700 J	2590 J	1520 J	1280 J	46600 J
7440-47-3	Chromium	9.3 - 17.5	10 or SB	mg/kg	15	16.1	17.1	17.5	15	12	9.9	9.3	10.1	11.3
7440-48-4	Cobalt	5.3 - 12.2	30 or SB	mg/kg	12.2	11.9	9.7	10	12.2	9.6	5.8	5.3 J	5.8	8.3
7440-50-8	Copper	13.4 - 26.9	25 or SB	mg/kg	14.3	23.3	21.8	22.2	21.5	14.2	13.5	26.9	13.4	18.2
7439-89-6	Iron	14100 - 25700	2000 or SB	mg/kg	22600	25300	24800	25700	22800	16800	14500	14100	16900	16900
7439-92-1	Lead	16.5 - 60.8	60.8 (29.3 Average SB)	mg/kg	19.9	20.9	60.8	58.1	16.5	30.5	30.2	17.6	21.2	17.2
7439-95-4	Magnesium	2150 - 13100	SB	mg/kg	3760 J	13100 J	3740 J	3860 J	5440 J	5040 J	2240 J	2150 J	2320 J	5880 J
7439-96-5	Manganese	197 - 875	SB	mg/kg	664	875	369	404	767	506	243	373	197	437
7439-97-6	Mercury	0.039 - 0.095	0.1	mg/kg	0.059	0.053	0.086	0.095	0.055 J	0.074	0.084	0.039 J	0.054	0.04 J
7440-02-0	Nickel	10.6 - 24.8	13 or SB	mg/kg	16.4	21.5	18.2	18	24.8	17.5	12.9	10.6	12.5	15.2
7440-09-7	Potassium	443 - 1660	SB	mg/kg	767	1590	1450	1360	1660	592 J	490 J	443 J	539 J	503 J
7782-49-2	Selenium	0.44 - 1.2	2 or SB	mg/kg	0.58 J	0.46 J	0.79 J	0.9	1.2	0.93	0.88	0.44 J	0.72	ND
7440-22-4	Silver	0.16 - 0.17	SB	mg/kg	0.16 J	ND	ND	ND	0.17 J	0.17 J	ND	ND	ND	ND
7440-23-5	Sodium	28.7 - 619	SB	mg/kg	215 J	108 J	580 J	619 J	179 J	482 J	71.9 J	41.7 J	28.7 J	379 J
7440-28-0	Thallium	ND - 0.67	SB	mg/kg	ND	ND	ND	ND	ND	ND	ND	0.67 J	ND	ND
7440-62-2	Vanadium	13.7 - 24	150 or SB	mg/kg	21.4	22.4	23.6	24	16.6	17.1	18.5	14.6	15.9	13.7
7440-66-6	Zinc	46 - 134	20 or SB	mg/kg	57.1 J	81.9 J	134 J	133 J	74.6 J	86.5 J	56.4 J	48.5 J	46 J	59.2 J
	OTHER													
7440-44-0	Total Organic Carbon	19900 - 53400	NA	mg/kg	33600	27600	51300	53400	48200	38800	39500	19900	30100	31600

CPAHs = Carcinogenic Polynuclear Aromatic Hydrocarbons
NPAHs = Noncarcinogenic Polynuclear Aromatic Hydrocarbons
J = Estimated Value
N = Presumptivbe Evidence
SB = Site Background
NA = Not Available
NC = No Criteria
NYSDEC Soil Criteria for organic compounds calculated based on average TOC=3.7%.

TABLE 3.5
SADVA AOC 1 SURFACE WATER RESULTS

Former Schenectady Army Depot Remedial Investigation AOC 1 - U.S. Army Southern Landfill Detected Compound Summary						MAIN POND		SMALL POND	DUP OF SW04
		Upstream/ Background Ranges	NYSDEC Class A Surface Water Standards/Guidance Values	NYSDEC Class C Surface Water Standards/Guidance Values	SAMPLE ID:	AOC1-SW04	AOC1-SW06	AOC1-SW07	AOC1-SW08
					LAB ID:	C0G140162001	C0G140162002	C0G140162003	C0G140162004
					SOURCE:	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh
					SDG:	SADVA2	SADVA2	SADVA2	SADVA2
					MATRIX:	WATER	WATER	WATER	WATER
					SAMPLED:	7/13/2000	7/13/2000	7/13/2000	7/13/2000
					VALIDATED:	10/10/2000	10/10/2000	10/10/2000	10/10/2000
CAS NO.	COMPOUND	(ug/L)	H(FC)	H(FC)	UNITS:				
	VOLATILES								
67-64-1	Acetone	ND-2.3	50	NC	ug/L	ND	2.5 J	2.2 J	ND
75-15-0	Carbon disulfide	ND	NC	NC	ug/L	ND	0.99 J	0.36 J	ND
108-88-3	Toluene	ND	5	6000	ug/L	ND	ND	0.24 J	ND
	Total VOCs	**ND - 2.3**	**55**	**6000**	**ug/L**	**ND**	**3.49**	**2.8**	**ND**
	SEMIVOLATILES								
117-81-7	bis(2-Ethylhexyl) phthalate	ND-26	5 H(WS)	0.6 A(C)	ug/L	16	19	ND	73
	Total SVOCs				**ug/L**	**16**	**19**	**ND**	**73**
	PESTICIDES								
	None Detected				ug/L	ND	ND	ND	ND
	PCBs								
	None Detected				ug/L	ND	ND	ND	ND
	METALS								
7429-90-5	Aluminum	23.4-346	100 (1)	100 (1)	ug/L	27.7 J	313	61.2 J	24.9 J
7440-39-3	Barium	22.6-43.5	1000	NC	ug/L	21.1 J	27.9 J	2.8 J	21.3 J
7440-41-7	Beryllium	0.14-0.96	1,100 *	1100 *	ug/L	ND	ND	ND	0.09 J
7440-70-2	Calcium	60,500-64,400	NC	NC	ug/L	26000	30600	16800	27000
7440-47-3	Chromium	ND-1.4	86.1 (2) *A(C)	86.1 (2) *A(C)	ug/L	ND	1.3 J	ND	ND
7440-50-8	Copper	ND-2.5	10.5 (2) *A(C)	10.5 (2) *A(C)	ug/L	ND	3.7 J	ND	ND
7439-89-6	Iron	497-998	300	300	ug/L	109	734	919	101
7439-92-1	Lead	ND	4.6 (2) *A(C)	4.6 (2) *A(C)	ug/L	ND	3.7	ND	ND
7439-95-4	Magnesium	8,810-11,500	35,000	NC	ug/L	17100	17300	4650 J	17700
7439-96-5	Manganese	105-691	300	NC	ug/L	98.5	320	116	96.9
7439-97-6	Mercury	0.065-0.093	0.0007	0.0007	ug/L	0.047 J	0.058 J	ND	0.05 J
7440-09-7	Potassium	796-2,640	NC	NC	ug/L	2380 J	2530 J	558 J	2720 J
7782-49-2	Selenium	ND	4.6 (2)A(C)	4.6 (2)A(C)	ug/L	2.6 J	ND	ND	ND
7440-23-5	Sodium	9,710-15,000	NC	NC	ug/L	83200	82800	1160 J	85400
7440-66-6	Zinc	3.9-22.1	89.5 (2) *A(C)	89.5 (2) *A(C)	ug/L	20.1	24.3	15.2 J	11.6 J
	OTHER								
Q356	Hardness, as CaCO3	NA			mg/L	158	136	56	128

(1) - Ionic form
(2) - Dissolved form - sample data are total metals.
* - based on average hardness value
Average Hardness: 120 mg/L
A(C) - Protection fo Fish Propagation
H(FC) - Protection for Human Consumption of Fish
H(WS) - Protection for source of drinking water
U - Not Detected.
J - Estimated Value
NA - Not Analyzed/Not Applicable
NC - No Criteria
Concentration exceeds NYSDEC Standard/Guidance Value and Background Range

TABLE 3.6a
SADVA AOC 1 SEDIMENT RESULTS (2000)

CAS NO.	COMPOUND	Upstream/ Background Ranges	NYSDEC Sediment Criteria		Main Pond	North Wetland	Main Pond	Small Pond	Dup of SD04
Former Schenectady Army Depot Remedial Investigation U.S. Army Southern Landfill AOC 1 Sediment Data Detected Compound Summary				SAMPLE ID:	AOC1-SD04	AOC1-SD05	AOC1-SD06	AOC1-SD07	AOC1-SD08
				LAB ID:	C0G140158001	C0G140158005	C0G140158003	C0G140158004	C0G140158002
				DEPTH:	0.2'	0.2'	0.2'	0.2'	0.2'
				SOURCE:	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh
				SDG:	SADVA1	SADVA1	SADVA1	SADVA1	SADVA1
				MATRIX:	SOIL	SOIL	SOIL	SOIL	SOIL
				SAMPLED:	7/13/2000	7/13/2000	7/13/2000	7/13/2000	7/13/2000
				VALIDATED:	10/4/2000	10/4/2000	10/4/2000	10/4/2000	10/4/2000
				UNITS:					
	VOLATILES								
67-64-1	Acetone	ND-14	NC	ug/kg	7.5 J	ND	ND	5.1 J	6.6 J
	Total VOCs			**ug/kg**	**7.5**	**ND**	**ND**	**5.1**	**6.6**
	SEMIVOLATILES								
117-81-7	bis(2-Ethylhexyl) phthalate	ND	2,925 (C)	ug/kg	390 J	15 J	100 J	25 J	290 J
86-74-8	Carbazole	ND-50	NC	ug/kg	740	ND	ND	ND	690
132-64-9	Dibenzofuran	ND-50	NC	ug/kg	300 J	ND	ND	ND	310 J
	CPAHs								
56-55-3	Benzo(a)anthracene	ND-310	19 (C)	ug/kg	2400	17 J	94 J	ND	2400
50-32-8	Benzo(a)pyrene	ND-330	19 (H)	ug/kg	2200	18 J	110 J	ND	2100
205-99-2	Benzo(b)fluoranthene	ND-440	19 (H)	ug/kg	1900	19 J	160 J	ND	1900
207-08-9	Benzo(k)fluoranthene	ND-360	19 (H)	ug/kg	2300	22 J	130 J	ND	2300
218-01-9	Chrysene	ND-730	19 (H)	ug/kg	2400	23 J	140 J	ND	2300
53-70-3	Dibenz(a,h)anthracene	ND	88 (LM)	ug/kg	280 J	ND	ND	ND	260 J
193-39-5	Indeno(1,2,3-cd)pyrene	ND-78	19 (H)	ug/kg	650	ND	ND	ND	580 J
	NPAHs								
91-57-6	2-Methylnaphthalene	ND	500 (C)	ug/kg	130 J	ND	230 J	ND	90 J
83-32-9	Acenaphthene	ND-92	2058 (C)	ug/kg	700	ND	ND	ND	660
120-12-7	Anthracene	ND-170	1573 (C)	ug/kg	1200	ND	ND	ND	1500
191-24-2	Benzo(ghi)perylene	ND-66	NC	ug/kg	570 J	ND	ND	ND	500 J
206-44-0	Fluoranthene	ND-1200	14994 (C)	ug/kg	4700	ND	300 J	ND	5400
86-73-7	Fluorene	ND-100	118 (C)	ug/kg	590	ND	ND	ND	650
91-20-3	Naphthalene	ND-210	441 (C)	ug/kg	300 J	ND	190 J	ND	150 J
85-01-8	Phenanthrene	ND-400	1764 (C)	ug/kg	5200	ND	160 J	ND	5800
129-00-0	Pyrene	ND-920	14127 (C)	ug/kg	3500	24 J	180 J	ND	3600
	Total PAHs		**35000 (LM)**	**ug/kg**	**29020**	**123**	**1694**	**ND**	**30190**
	Total SVOCs			**ug/kg**	**30450**	**138**	**1794**	**25**	**31480**
	PESTICIDES								
72-55-9	4,4'-DDE	ND-0.23	14.7 (W)	ug/kg	21 J	0.22 JN	540 J	18	32 J
72-54-8	4,4'-DDD	ND	14.7 (W)	ug/kg	42 J	ND	2400 J	2 J	54 J
50-29-3	4,4'-DDT	ND	14.7 (C)	ug/kg	130	ND	630 J	1.3 J	110 J
	Total Pesticides			**ug/kg**	**193**	**0.22**	**3570**	**21.3**	**196**
	PCBs								
11097-69-1	Aroclor 1254	ND	284 (C)	ug/kg	69	ND	ND	ND	290
	Total PCBs			**ug/kg**	**69**	**ND**	**ND**	**ND**	**290**

TABLE 3.6a
SADVA AOC 1 SEDIMENT RESULTS (2000)

					Main Pond	North Wetland	Main Pond	Small Pond	Dup of SD04
Former Schenectady Army Depot				SAMPLE ID:	AOC1-SD04	AOC1-SD05	AOC1-SD06	AOC1-SD07	AOC1-SD08
Remedial Investigation				LAB ID:	C0G140158001	C0G140158005	C0G140158003	C0G140158004	C0G140158002
U.S. Army Southern Landfill				DEPTH:	0.2'	0.2'	0.2'	0.2'	0.2'
AOC 1 Sediment Data				SOURCE:	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh
Detected Compound Summary				SDG:	SADVA1	SADVA1	SADVA1	SADVA1	SADVA1
				MATRIX:	SOIL	SOIL	SOIL	SOIL	SOIL
				SAMPLED:	7/13/2000	7/13/2000	7/13/2000	7/13/2000	7/13/2000
		Upstream/	NYSDEC	VALIDATED:	10/4/2000	10/4/2000	10/4/2000	10/4/2000	10/4/2000
CAS NO.	COMPOUND	Background Ranges	Sediment Criteria	UNITS:					
	METALS								
7429-90-5	Aluminum	8040-17900	NC	mg/kg	15300	16400	9440 J	12600	12600
7440-36-0	Antimony	ND-0.44	2 (L)	mg/kg	7.9 J	ND	2.1 J	ND	6.8 J
7440-38-2	Arsenic	3.1-5.1	6 (L)	mg/kg	9.5	2.5	9.1 J	7.6	7
7440-39-3	Barium	53.9-141	NC	mg/kg	205	128	71.6 J	258	216
7440-41-7	Beryllium	0.62-0.92	NC	mg/kg	7.6	0.89	3.2 J	0.81 J	7
7440-43-9	Cadmium	ND-0.75	0.6 (L)	mg/kg	1.2	0.55 J	1.1 J	1.1	0.96
7440-70-2	Calcium	2660-6700	NC	mg/kg	29900	5070	4850 J	2230	20200
7440-47-3	Chromium	11.2-22	26 (L)	mg/kg	359	15.3	60.3 J	16.9	193
7440-48-4	Cobalt	7.1-14	NC	mg/kg	47.4	6.2 J	12.7 J	22.3	38.5
7440-50-8	Copper	13-27.7	16 (L)	mg/kg	478	17.2	298 J	24.1	491
7439-89-6	Iron	18300-25400	20000 (L)	mg/kg	86800	15200	22900 J	31200	54800
7439-92-1	Lead	7.8-20.9	31 (L)	mg/kg	2440 J	23.1 J	442 J	16.3 J	1300 J
7439-95-4	Magnesium	3190-5190	NC	mg/kg	6080	3240	4300 J	3940	3500
7439-96-5	Manganese	328-647	460 (L)	mg/kg	918	98	209 J	4800	553
7439-97-6	Mercury	0.027-0.091	0.15 (L)	mg/kg	0.038 J	0.083	0.11 J	0.029 J	0.036 J
7440-02-0	Nickel	15.6-24.5	16 (L)	mg/kg	124	17.4	47.5 J	25.1	114
7440-09-7	Potassium	734-1530	NC	mg/kg	1330	1150	1440 J	956	1230
7782-49-2	Selenium	ND-0.81	NC	mg/kg	ND	0.65 J	1.5 J	ND	ND
7440-22-4	Silver	ND-0.5	1 (L)	mg/kg	0.49 J	ND	0.66 J	0.47 J	0.42 J
7440-23-5	Sodium	71.6-790	NC	mg/kg	630 J	108 J	680 J	84.5 J	677 J
7440-28-0	Thallium	ND-1.5	NC	mg/kg	ND	0.58	ND	ND	ND
7440-62-2	Vanadium	14.6-28.4	NC	mg/kg	97	22.8	49.4 J	25.6	89.9
7440-66-6	Zinc	47.7-118	120 (L)	mg/kg	2960	76.5	979 J	87.1	2630
	OTHER								
7440-44-0	Total Organic Carbon	NA		mg/kg	20400	53600	98300 J	14400	22800

CPAH - Carcinogenic Polynuclear Aromatic Hydrocarbon
NPAH - Noncarcinogenic Polynuclear Aromatic Hydrocarbon
ND - Not detected
NA - Not Analyzed
C = Benthic Aquatic Chronic Criteria (TOC Adjusted),(NYSDEC, 1999).
H = Human Health Bioaccumulation (TOC Adjusted), (NYSDEC, 1999).
LM = Medium Effects Level (TOC Adjusted), (Long and Morgan, 1990).
W = Wildlife Bioaccumulation Criteria (TOC Adjusted), (NYSDEC, 1999).
L = Lowest Effect Level (metals), (NYSDEC, 1999).
Exceeds upstream/background range and NYSDEC sediment criteria.
NC - No criteria available.
R - Data rejected during data validation.
J - Estimated Value

TABLE 3.6b
SADVA AOC 1 SEDIMENT RESULTS (2004)

USACE-Schenectady Depot
Validated Sediment Analytical Data
AOC 1
Detected Compound Summary

CAS NO.	COMPOUND	Upstream/ Background Ranges	NYSDEC Sediment Criteria	Sample ID:	SD-SD08-0-0.2-AOC-1	SD-SD08-0.5-0.75-AOC-1	SD-SD09-0-0.2-AOC-1	SD-SD09-0.5-0.8-AOC-1	SD-SD10-0-0.2-AOC-1	Dup of SD-SD10-0-0.2-AOC-1 SD-SD110-0-0.2-AOC-1
				Lab Sample Id:	C4G210269001	C4G210269002	C4G210269003	C4G210269004	C4G210269005	C4G210269006
				Depth:	0-0.2	0.5-0.75	0-0.2	0.5-0.8	0-0.2	0-0.2
				Source:	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh
				SDG:	C4G210269	C4G210269	C4G210269	C4G210269	C4G210269	C4G210269
				Matrix:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
				Sampled:	7/19/2004	7/19/2004	7/19/2004	7/19/2004	7/19/2004	7/19/2004
				Validated:	9/19/2004	9/19/2004	9/19/2004	9/19/2004	9/19/2004	9/19/2004
				UNITS:						
	SEMIVOLATILES									
84-74-2	Di-n-butyl phthalate	ND	NC	ug/kg	ND	ND	220 J	39 J	ND	ND
	CPAHs									
	None Detected									
	NPAHs									
206-44-0	Fluoranthene	ND-1200	14994 (C)	ug/kg	1600 J	ND	ND	ND	ND	ND
85-01-8	Phenanthrene	ND-400	1764 (C)	ug/kg	900 J	ND	ND	ND	ND	ND
129-00-0	Pyrene	ND-920	14127 (C)	ug/kg	1300 J	ND	ND	ND	ND	ND
	Total NPAHs				3800	ND	ND	ND	ND	ND
	Total PAHs				3800	ND	ND	ND	ND	ND
	TOTAL SVOCs				3800	ND	220	39	ND	ND
	PESTICIDES									
319-85-7	beta-BHC	ND	NC	ug/kg	ND	ND	ND	ND	4.5 JN	ND
319-86-8	delta-BHC	ND	NC	ug/kg	ND	ND	ND	ND	ND	ND
58-89-9	gamma-BHC (Lindane)	ND	NC	ug/kg	ND	ND	ND	ND	ND	ND
959-98-8	Endosulfan I	ND	NC	ug/kg	3.6 J	ND	0.78 JN	0.2 J	0.88 JN	ND
72-55-9	4,4'-DDE	ND-0.23	14.7 (W)	ug/kg	60 J	0.68 JN	46 J	1.8 JN	30 JN	35 J
72-20-8	Endrin	ND	59 (C)	ug/kg	ND	ND	ND	0.23 JN	ND	ND
33213-65-9	Endosulfan II	ND	NC	ug/kg	ND	ND	ND	ND	ND	ND
72-54-8	4,4'-DDD	ND	14.7 (W)	ug/kg	63 J	2 J	21 J	2.3	21 J	22 J
50-29-3	4,4'-DDT	ND	14.7 (C)	ug/kg	ND	ND	28 J	1.4 J	33 J	ND
5103-71-9	alpha-Chlordane	ND	0.44 (C)	ug/kg	ND	ND	ND	ND	1.1 JN	ND
	TOTAL PESTICIDES				126.6	2.68	95.78	5.93	90.48	57
	PCBS									
	None Detected	ND			ND	ND	ND	ND	ND	ND
	METALS									
7429-90-5	Aluminum	8040-17900	NC	mg/kg	9940 J	11100	5830 J	11100	5740 J	7100 J
7440-36-0	Antimony	ND-0.44	2 (L)	mg/kg	2.2 J	ND	1.4 J	ND	2.8 J	2.5 J
7440-38-2	Arsenic	3.1-5.1	6 (L)	mg/kg	5.1 J	5.4	3.1 J	5.9	3.5 J	4.3 J
7440-39-3	Barium	53.9-141	NC	mg/kg	125 J	56.7	84.8 J	57.9	87 J	112 J
7440-41-7	Beryllium	0.62-0.92	NC	mg/kg	1.4 J	0.78	0.67 J	0.83	0.78 J	0.93 J
7440-43-9	Cadmium	ND-0.75	0.6 (L)	mg/kg	0.91 J	0.23 J	0.44 J	0.26 J	0.57 J	0.74 J
7440-70-2	Calcium	2660-6700	NC	mg/kg	139000 J	14600	112000 J	16100	119000 J	156000 J
7440-47-3	Chromium	11.2-22	26 (L)	mg/kg	23.6 J	15.4	11.8 J	16	13.8 J	17 J
7440-48-4	Cobalt	7.1-14	NC	mg/kg	12.7 J	9.4	6.7 J	10.8	7.1 J	8.7 J
7440-50-8	Copper	13-27.7	16 (L)	mg/kg	123 J	26.3	46 J	32	64 J	75.3 J
7439-89-6	Iron	18300-25400	20000 (L)	mg/kg	26900 J	23400	14700 J	26200	15600 J	18800 J
7439-92-1	Lead	7.8-20.9	31 (L)	mg/kg	109 J	9	36.1 J	12.1	53.9 J	65.5 J
7439-95-4	Magnesium	3190-5190	NC	mg/kg	7230 J	6830	5220 J	6750	5120 J	6460 J
7439-96-5	Manganese	328-647	460 (L)	mg/kg	978 J	438	981 J	542	896 J	1120 J
7439-97-6	Mercury	0.027-0.091	0.15 (L)	mg/kg	ND	0.023 J	ND	0.018 J	ND	ND
7440-02-0	Nickel	15.6-24.5	16 (L)	mg/kg	42.1 J	21.6	23.8 J	25.8	24.8 J	30.3 J
7440-09-7	Potassium	734-1530	NC	mg/kg	1880 J	1440	989 J	1350	1070 J	1340 J
7440-22-4	Silver	ND-0.5	1 (L)	mg/kg	0.44 J	0.098 J	0.3 J	0.091 J	0.22 J	0.39 J
7440-23-5	Sodium	71.6-790	NC	mg/kg	1470 J	144 J	628 J	149 J	690 J	890 J
7440-62-2	Vanadium	14.6-28.4	NC	mg/kg	81.4 J	21.8	45.6 J	21.6	49.1 J	61.2 J
7440-66-6	Zinc	47.7-118	120 (L)	mg/kg	378 J	54.2	152 J	69.4	201 J	256 J

U = Analyte not detected; the number is the analytical reporting limit.
CPAH = Carcinogenic Polynuclear Aromatic Hydrocarbon.
NPAH = Noncarcinogenic Polynuclear Aromatic Hydrocarbon.
J = Estimated Value
ND = Not Detected
C = Benthic Aquatic Chronic Criteria (TOC Adjusted),(NYSDEC, 1999).
L = Lowest Effect Level (metals), (NYSDEC, 1999)
W = Wildlife Bioaccumulation Criteria (TOC Adjusted), (NYSDEC, 1999).
NS = No Standard
N = Presumptive Evidence
NC = No Criteria
- concentration above NYSDEC Sediment criteria and background.

TABLE 3.6b
SADVA AOC 1 SEDIMENT RESULTS (2004)

USACE-Schenectady Depot Validated Sediment Analytical Data AOC 1 Detected Compound Summary				Sample ID: Lab Sample Id: Depth: Source: SDG: Matrix: Sampled: Validated:	SD-SD10-0.5-0.75-AOC-1 C4G210269007 0.5-0.75 STL Pittsburgh C4G210269 SOIL 7/19/2004 9/19/2004	SD-SD11-0-0.2-AOC-1 C4G210269008 0-0.2 STL Pittsburgh C4G210269 SOIL 7/19/2004 9/19/2004	SD-SD11-0.5-0.75-AOC-1 C4G210269009 0.5-0.75 STL Pittsburgh C4G210269 SOIL 7/19/2004 9/19/2004	SD-SD12-0-0.2-AOC-1 C4G210269014 0-0.2 STL Pittsburgh C4G210269 SOIL 7/20/2004 9/19/2004	SD-SD12-0.5-0.75-AOC-1 C4G210269010 0.5-0.75 STL Pittsburgh C4G210269 SOIL 7/19/2004 9/19/2004
CAS NO.	COMPOUND	Upstream/ Background Ranges	NYSDEC Sediment Criteria	UNITS:					
	SEMIVOLATILES								
84-74-2	Di-n-butyl phthalate	ND	NC	ug/kg	37 J	350 J	49 J	ND	59 J
	CPAHs								
	None Detected								
	NPAHs								
206-44-0	Fluoranthene	ND-1200	14994 (C)	ug/kg	ND	ND	ND	ND	46 J
85-01-8	Phenanthrene	ND-400	1764 (C)	ug/kg	ND	ND	ND	ND	ND
129-00-0	Pyrene	ND-920	14127 (C)	ug/kg	ND	ND	ND	ND	ND
	Total NPAHs				ND	ND	ND	ND	46
	Total PAHs				ND	ND	ND	ND	46
	TOTAL SVOCs				37	350	49	ND	59
	PESTICIDES								
319-85-7	beta-BHC	ND	NC	ug/kg	ND	ND UJ	ND	ND	ND
319-86-8	delta-BHC	ND	NC	ug/kg	ND	ND UJ	ND	3.2 JN	ND
58-89-9	gamma-BHC (Lindane)	ND	NC	ug/kg	ND	ND UJ	ND	1.5 JN	ND
959-98-8	Endosulfan I	ND	NC	ug/kg	ND	ND UJ	ND	ND	ND
72-55-9	4,4'-DDE	ND-0.23	14.7 (W)	ug/kg	1.5 J	9.9 JN	3.2	34 JN	12
72-20-8	Endrin	ND	59 (C)	ug/kg	ND	ND	ND	ND	ND
33213-65-9	Endosulfan II	ND	NC	ug/kg	0.31 JN	ND	ND	ND	ND
72-54-8	4,4'-DDD	ND	14.7 (W)	ug/kg	1.7 J	8.4 J	3.1	29 J	22
50-29-3	4,4'-DDT	ND	14.7 (C)	ug/kg	ND	7.6 J	0.96 JN	ND	ND
5103-71-9	alpha-Chlordane	ND	0.44 (C)	ug/kg	ND	ND	ND	ND	ND
	TOTAL PESTICIDES				3.51	25.9	7.26	67.7	34
	PCBS								
	None Detected	ND			ND	ND	ND	ND	ND
	METALS								
7429-90-5	Aluminum	8040-17900	NC	mg/kg	10000	8070 J	6940	9650 J	11400
7440-36-0	Antimony	ND-0.44	2 (L)	mg/kg	ND	1.7 J	ND	ND	ND
7440-38-2	Arsenic	3.1-5.1	6 (L)	mg/kg	4.9	3.4 J	6	4.6 J	6.6
7440-39-3	Barium	53.9-141	NC	mg/kg	47	106 J	90.7	87.5 J	63
7440-41-7	Beryllium	0.62-0.92	NC	mg/kg	0.71	0.93 J	0.7	1.4 J	0.88
7440-43-9	Cadmium	ND-0.75	0.6 (L)	mg/kg	0.26 J	0.52 J	0.34 J	0.87 J	0.34 J
7440-70-2	Calcium	2660-6700	NC	mg/kg	16100	134000 J	53300	54900 J	22600
7440-47-3	Chromium	11.2-22	26 (L)	mg/kg	14.4	15.2 J	11.1	17.3 J	17
7440-48-4	Cobalt	7.1-14	NC	mg/kg	9.2	9.2 J	7.8	10.7 J	12.5
7440-50-8	Copper	13-27.7	16 (L)	mg/kg	28.3	47.7 J	29.3	53.7 J	33.2
7439-89-6	Iron	18300-25400	20000 (L)	mg/kg	22800	20300 J	19800	25300 J	26700
7439-92-1	Lead	7.8-20.9	31 (L)	mg/kg	11.9	40.8 J	10.8	43.2 J	14.2
7439-95-4	Magnesium	3190-5190	NC	mg/kg	6470	6900 J	6160	5880 J	7650
7439-96-5	Manganese	328-647	460 (L)	mg/kg	541	1530 J	654	573 J	802
7439-97-6	Mercury	0.027-0.091	0.15 (L)	mg/kg	0.029 J	ND	0.018 J	ND	0.019 J
7440-02-0	Nickel	15.6-24.5	16 (L)	mg/kg	21.4	27.5 J	18	31.6 J	27.8
7440-09-7	Potassium	734-1530	NC	mg/kg	1180	1370 J	968	1600 J	1500
7440-22-4	Silver	ND-0.5	1 (L)	mg/kg	0.12 J	0.43 J	0.15 J	0.48 J	0.14 J
7440-23-5	Sodium	71.6-790	NC	mg/kg	139 J	813 J	149 J	1410 J	171 J
7440-62-2	Vanadium	14.6-28.4	NC	mg/kg	19.8	53.3 J	15.7	57.5 J	23.1
7440-66-6	Zinc	47.7-118	120 (L)	mg/kg	68.7	178 J	61.6	170 J	78.1

U = Analyte not detected; the number is the analytical reporting limit.
CPAH = Carcinogenic Polynuclear Aromatic Hydrocarbon.
NPAH = Noncarcinogenic Polynuclear Aromatic Hydrocarbon.
J = Estimated Value
ND = Not Detected
C = Benthic Aquatic Chronic Criteria (TOC Adjusted),(NYSDEC, 1999).
L = Lowest Effect Level (metals), (NYSDEC, 1999)
W = Wildlife Bioaccumulation Criteria (TOC Adjusted), (NYSDEC, 1999).
NS = No Standard
N = Presumptive Evidence
NC = No Criteria
- concentration above NYSDEC Sediment criteria and background.

TABLE 3.7
SADVA AOC 1 GROUNDWATER ELEVATION DATA

				ROUND 1			ROUND 2			ROUND 3			ROUND 4			ROUND 5		
Wells	Elevation TOC*	Elevation Ground*	Sample Depth**	Date	Depth to Water***	Groundwater Elevation*	Date	Depth to Water***	Groundwater Elevation*	Date	Depth to Water***	Groundwater Elevation*	Date	Depth to Water***	Groundwater Elevation*	Date	Depth to Water***	Groundwater Elevation*
AMW-1	323.82	320.84	3-13	06/29/00	4.18	319.64	11/30/00	3.92	319.90	01/09/01	4.11	319.71	11/07/01	5.88	317.94	12/07/04	3.80	320.02
AMW-2	326.43	321.09	49-54	06/29/00	4.00	322.43	11/30/00	2.71	323.72	01/09/01	4.05	322.38	11/07/01	4.46	321.97	12/07/04	2.10	324.33
AMW-3	327.46	324.9	6-21	06/29/00	5.34	322.12	11/30/00	3.49	323.97	01/09/01	5.11	322.35	11/07/01	12.04	315.42	12/07/04	3.81	323.65
AMW-4	326.38	323.72	3.5-9.5	06/29/00	4.48	321.90	11/30/00	4.59	321.79	01/09/01	4.99	321.39	11/07/01	7.35	319.03	12/07/04	3.52	322.86
AMW-11	327.64	325.45	68-75	06/29/00	27.63	300.01	11/30/00	Abandoned	NA	01/09/01	NA	NA	11/07/01	NA	NA	12/07/04	NA	NM
GW-11R	329.47	326.77	72-145	06/29/00	DRY	DRY	11/30/00	100.60	228.87	01/09/01	80.23	249.24	11/07/01	35.01	294.46	12/07/04	65.35	264.12
ACE-2	323.26	320.2	2-12	06/29/00	3.86	319.40	11/30/00	3.61	319.65	01/09/01	3.62	319.64	11/07/01	5.41	317.85	12/07/04	3.54	319.72
ACE-3	322.57	319.29	4-14	06/29/00	NM	NM	11/30/00	6.16	316.41	01/09/01	6.46	316.11	11/07/01	15.54	307.03	12/07/04	6.10	316.47
ACE-6	328.43	325	7-17	06/29/00	6.96	321.47	11/30/00	5.84	322.59	01/09/01	6.43	322.00	11/07/01	13.48	314.95	12/07/04	5.68	322.75
MW-2B	324.65 est	318.5	5-20	06/29/00	5.54	319.11	11/30/00	NM	NM	01/09/01	5.50	319.15	11/07/01	NM	NM	12/07/04	NM	NM
2AMW-5	325.09 MP	322.93 MP	5-20	06/29/00	3.92	321.17	11/30/00	3.77	321.32	01/09/01	4.13	320.96	11/07/01	9.49	315.60	12/07/04	3.43	321.66
2AMW-6	327.97	323.50	4-19	06/29/00	4.42	323.55	11/30/00	4.75	323.22	01/09/01	4.48	323.49	11/07/01	13.02	314.95	12/07/04	3.83	324.14
2AMW-7	325.15 MP	322.68 MP	5.5-15	06/29/00	4.61	320.54	11/30/00	4.54	320.61	01/09/01	4.91	320.24	11/07/01	10.27	314.88	12/07/04	3.96	321.19
2AMW-8	326.73	324.18	5-20	06/29/00	5.06	321.67	11/30/00	5.41	321.32	01/09/01	5.44	321.29	11/07/01	10.46	316.27	12/07/04	4.67	322.06
2BMW-9	326.07	323.39	7-21	06/29/00	NM	NM	11/30/00	8.11	317.96	01/09/01	8.22	317.85	11/07/01	11.16	314.91	12/07/04	7.90	318.17
GW-01 AOC7	326.48	323.75	9 - 14	06/29/00	NM	NM	11/30/00	NM	NM	01/09/01	NM	NM	11/07/01	NM	NM	12/07/04	3.56	322.92
GW-12	325.62	322.86	3 - 8	06/29/00	NM	NM	11/30/00	NM	NM	01/09/01	NM	NM	11/07/01	NM	NM	12/07/04	Dry	NA
GW-13	323.00	320.27	3 - 8	06/29/00	NM	NM	11/30/00	NM	NM	01/09/01	NM	NM	11/07/01	NM	NM	12/07/04	3.51	319.49
GW-14	323.24	319.90	3 - 8	06/29/00	NM	NM	11/30/00	NM	NM	01/09/01	NM	NM	11/07/01	NM	NM	12/07/04	Dry	NA

est. - estimated
MP - elevation data from Malcolm Pirnie, Inc.
* - elevations above mean sea level.
** - depth measured from the ground surface.
*** - depth measured from the top of the inner well casing.
NM - No measurement.
NA - Not applicable - well abandoned.
Surface water elevation = 320.49 July 2000
GW-12, GW-13, and GW-14 installed 11/2004

TABLE 3.8a
SADVA AOC 1 GROUNDWATER SAMPLE RESULTS (2000)

Former Schenectady Army Depot Remedial Investigation U.S. Army Southern Landfill AOC1 Groundwater Data Detected Compound Summary		NYSDEC Class GA Groundwater Standards/ Guidance Values	SAMPLE ID: LAB ID: DEPTH: (ft) SOURCE: SDG: MATRIX: SAMPLED: VALIDATED:	AMW-11 000629AW01 27-37 Adirondack Groundwater 6/29/2000	AMW-2 000629AW03 49-54 Adirondack Groundwater 6/29/2000	ACE-6 000629AW02 7-17 Adirondack Groundwater 6/29/2000	ACE-2 000629AW04 2-12 Adirondack Groundwater 6/29/2000	AMW-1 000629AW05 3-13 Adirondack Groundwater 6/29/2000
CAS NO.	COMPOUND		UNITS:					
	VOLATILES							
540-59-0	1,2-Dichloroethene (total)	5	ug/L	ND	ND	ND	990	120
79-01-6	Trichloroethene	5	ug/L	ND	ND	ND	300	11
75-01-4	Vinyl chloride	2	ug/L	ND	ND	ND	270	42
	Total VOCs	**10,000**	**ug/L**	**ND**	**ND**	**ND**	**1560**	**173**

300 - Concentration exceeds NYSDEC Class GA Standards/Guidance Values
ND - Not Detected
ug/L - micrograms per liter

TABLE 3.8b
SADVA AOC 1 GROUNDWATER RESULTS (2001)

Schenectady Army Depot Remedial Investigation AOC 1 Groundwater Data Detected Compound Sumary			Sample ID: Lab Sample Id: Source: SDG: Matrix: Sampled: Validated:	AOC-1 GW-11R C1A120121001 STL Pittsburgh SADVA22 WATER 1/11/2001 2/11/2001
CAS NO.	COMPOUND	NYSDEC Class GA Ground Water Standards/Guidance Values	UNITS:	
	VOLATILES			
67-64-1	Acetone	50 (G)	ug/L	4.3 J
108-88-3	Toluene	5	ug/L	0.3 J
	SEMIVOLATILES			
	None Detected	NA	ug/L	ND
	PESTICIDES			
	None Detected	NA	ug/L	ND
	PCBs			
	None Detected	NA	ug/L	ND
	METALS			
7429-90-5	Aluminum	NS	ug/L	12800
7440-36-0	Antimony	3	ug/L	11.5 J
7440-38-2	Arsenic	25	ug/L	131
7440-39-3	Barium	1000	ug/L	357
7440-41-7	Beryllium	3 (G)	ug/L	0.8 J
7440-70-2	Calcium	NS	ug/L	2810 J
7440-47-3	Chromium	50	ug/L	21
7440-48-4	Cobalt	NS	ug/L	5.6 J
7440-50-8	Copper	200	ug/L	25.4
7439-89-6	Iron	300	ug/L	12800
7439-92-1	Lead	25	ug/L	15.8
7439-95-4	Magnesium	35000 (G)	ug/L	3210 J
7439-96-5	Manganese	300	ug/L	120
7439-97-6	Mercury	0.7	ug/L	0.049 J
7440-02-0	Nickel	100	ug/L	17.3 J
7440-09-7	Potassium	NS	ug/L	9060
7782-49-2	Selenium	10	ug/L	84.5
7440-23-5	Sodium	20000	ug/L	437000
7440-62-2	Vanadium	NS	ug/L	61.7
7440-66-6	Zinc	2000 (G)	ug/L	21.2

(G) - Guidance Value.
ND - Not Detected.
J - Estimated Value
ug/L - micrograms per liter
NS - No Standard
NA - Not Analyzed/Not Applicable
[shaded box] Concentration above NYSDEC Class GA Groundwater Standards/Guidance values.

TABLE 3.8c
SADVA AOC 1 GROUNDWATER RESULTS (2004)

USACE-Schenectady Depot Validated Groundwater Analytical Data AOC 1 Detected Compound Summary		NYSDEC Class GA Ground Water	Sample ID: Lab Sample Id: Source: SDG: Matrix: Sampled: Validated:	SD-GW11R-AOC-1 C4G290219002 STL Pittsburgh C4G290219 WATER 7/28/2004 9/19/2004	SD-GW13-AOC1 C4L080148001 STL Pittsburgh SADVA29 WATER 12/7/2004 1/6/2005
CAS NO.	COMPOUND	Standards/Guidance Values	UNITS:		
	VOLATILES				
108-88-3	Toluene	5	ug/L	0.62 J	ND
	TOTAL VOCs			0.62	ND
	SEMIVOLATILES				
117-81-7	bis(2-Ethylhexyl) phthalate	5	ug/L	6.8	ND
84-74-2	Di-n-butyl phthalate	50	ug/L	5.4	1.1 J
206-44-0	Fluoranthene	50000 (G)	ug/L	ND	2.5 J
129-00-0	Pyrene	50000 (G)	ug/L	ND	0.95 J
	TOTAL SVOCs			12.2	4.55
	PESTICIDES				
319-84-6	alpha-BHC	0.01	ug/L	ND	0.0023 J
58-89-9	gamma-BHC (Lindane)	0.05	ug/L	ND	0.0017 JN
72-54-8	4,4'-DDD	0.3	ug/L	ND	0.027 J
50-29-3	4,4'-DDT	0.2	ug/L	0.0039 JN	0.014 JN
72-20-8	Endrin	ND	ug/L	ND	0.0077 JN
53494-70-5	Endrin Ketone	5	ug/L	ND	0.0027 J
7421-93-4	Endrin aldehyde	5	ug/L	0.0065 JN	0.0019 JN
	TOTAL PESTICIDES			0.0104	0.0573
	PCBS				
	None Detected			ND	ND
	METALS				
7429-90-5	Aluminum	NS	ug/L	1860 J	ND
7440-36-0	Antimony	3	ug/L	6.5 J	ND
7440-38-2	Arsenic	25	ug/L	15.6	ND
7440-39-3	Barium	1000	ug/L	116 J	36.5 J
7440-41-7	Beryllium	3 (G)	ug/L	1.2 J	0.71 J
7440-70-2	Calcium	NS	ug/L	1690 J	441000
7440-47-3	Chromium	50	ug/L	3.3 J	7
7440-48-4	Cobalt	NS	ug/L	1.1 J	ND
7440-50-8	Copper	200	ug/L	14.1 J	1.2 J
7439-89-6	Iron	300	ug/L	2220 J	ND
7439-92-1	Lead	25	ug/L	2.2 J	ND
7439-95-4	Magnesium	35000 (G)	ug/L	653 J	168000
7439-96-5	Manganese	300	ug/L	30	90.2
7440-02-0	Nickel	100	ug/L	7 J	2.4 J
7440-09-7	Potassium	NS	ug/L	4240 J	47800
7782-49-2	Selenium	10	ug/L	11.2	8.4 J
7440-23-5	Sodium	20000	ug/L	352000	74600
7440-62-2	Vanadium	NS	ug/L	8 J	4.9 J
7440-66-6	Zinc	2000 (G)	ug/L	339	30.6

(G) - Guidance Value.
U - Not Detected.
J - Estimated Value
NA - Not Analyzed
R - Rejected Value
ND - Not Detected
NS - No Standard
Concentration above NYSDEC Class GA Groundwater Standards/Guidance values.

TABLE 3.8d
SADVA AOC 1 GROUNDWATER RESULTS (2006)

USACE-Schenectady Depot Validated Groundwater Analytical Data SDG: SADVA30 Detected Compound Summary		NYSDEC Class GA GW Stds/	Sample ID:	ACE-2	AMW-1	AMW-2	AMW-3	AMW-4	Dup of AMW-4 AMW-104
			Lab Sample ID:	C6F160136007	C6F160136008	C6F160136006	C6F160136003	C6F160136001	C6F160136002
			Source:	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh
			SDG:	SADVA30	SADVA30	SADVA30	SADVA30	SADVA30	SADVA30
			Matrix:	WATER	WATER	WATER	WATER	WATER	WATER
			Sampled:	6/15/2006	6/15/2006	6/15/2006	6/14/2006	6/14/2006	6/14/2006
			Validated:	7/20/2006	7/20/2006	7/20/2006	7/20/2006	7/20/2006	7/20/2006
CAS NO.	COMPOUND	Guidance Values	UNITS:						
	VOLATILES								
107-06-2	1,2-Dichloroethane	0.6	ug/L	ND	1.4 J	ND	ND	ND	ND
540-59-0	1,2-Dichloroethene (total)	5	ug/L	530	78	ND	ND	ND	ND
71-43-2	Benzene	1	ug/L	ND	ND	ND	ND	0.28 J	0.81 J
108-88-3	Toluene	5	ug/L	ND	ND	0.28 J	ND	0.23 J	ND
79-01-6	Trichloroethene	5	ug/L	44	2.5 J	ND	0.26 J	ND	0.32 J
75-01-4	Vinyl chloride	2	ug/L	160	21	ND	ND	1 J	3.4 J
78-93-3	2-Butanone	50 (G)	ug/L	ND	ND	2.3 J	ND	2 J	ND
	TOTAL VOCs		ug/L	734	102.9	2.58	0.26	3.51	4.53
	OTHER					NA	NA	NA	NA
Q18	Total Alkalinity	NS	mg/L	405	429				
(CHLOR)	Chloride	250	mg/L	292	45.1				
74-84-0	Ethane	NS	ug/L	6	1.5				
74-85-1	Ethene	NS	ug/L	12	1.9				
74-82-8	Methane	NS	ug/L	800	240				
(N3)	Nitrate as N	10	mg/L	ND	ND				
(SULFA)	Sulfate	250	mg/L	50.1	141				
Q608	Total Sulfide	0.05 (G)	mg/L	ND	ND				
7440-44-0	TOC	NS	mg/L	3.4	1.9				

(G) - Guidance Value.
J - Estimated Value
NA - Not Analyzed
ND - Not Detected
NS - No Standard
Concentration above NYSDEC Class GA Groundwater Standards/Guidance values.

TABLE 3.8d
SADVA AOC 1 GROUNDWATER RESULTS (2006)

				AOC 7 wells					
USACE-Schenectady Depot Validated Groundwater Analytical Data SDG: SADVA30 Detected Compound Summary			Sample ID: Lab Sample ID: Source: SDG: Matrix: Sampled: Validated:	GW-01 C6F170124001 STL Pittsburgh SADVA30 WATER 6/16/2006 7/20/2006	GW-03 C6F170124002 STL Pittsburgh SADVA30 WATER 6/16/2006 7/20/2006	GW-12 C6F160136004 STL Pittsburgh SADVA30 WATER 6/14/2006 7/20/2006	GW-13 C6F170124004 STL Pittsburgh SADVA30 WATER 6/16/2006 7/20/2006	GW-14 C6F170124003 STL Pittsburgh SADVA30 WATER 6/16/2006 7/20/2006	MW-2B C6F160136009 STL Pittsburgh SADVA30 WATER 6/15/2006 7/20/2006
CAS NO.	COMPOUND	NYSDEC Class GA GW Stds/ Guidance Values	UNITS:						
	VOLATILES								
107-06-2	1,2-Dichloroethane	0.6	ug/L	ND	ND	ND	ND	ND	ND
540-59-0	1,2-Dichloroethene (total)	5	ug/L	ND	ND	ND	ND	ND	ND
71-43-2	Benzene	1	ug/L	ND	ND	ND	ND	ND	ND
108-88-3	Toluene	5	ug/L	ND	ND	ND	ND	ND	ND
79-01-6	Trichloroethene	5	ug/L	ND	ND	ND	ND	ND	ND
75-01-4	Vinyl chloride	2	ug/L	ND	ND	ND	ND	ND	ND
78-93-3	2-Butanone	50 (G)	ug/L	ND	ND	ND	ND	ND	ND
	TOTAL VOCs		ug/L	ND	ND	ND	ND	ND	ND
	OTHER			NA	NA	NA		NA	
Q18	Total Alkalinity	NS	mg/L				382		317
(CHLOR)	Chloride	250	mg/L				43.2		773
74-84-0	Ethane	NS	ug/L				ND		ND
74-85-1	Ethene	NS	ug/L				ND		ND
74-82-8	Methane	NS	ug/L				0.53		9.6
(N3)	Nitrate as N	10	mg/L				0.017 J		ND
(SULFA)	Sulfate	250	mg/L				2100		542
Q608	Total Sulfide	0.05 (G)	mg/L				ND		4
7440-44-0	TOC	NS	mg/L				7.4		1.8

(G) - Guidance Value.
J - Estimated Value
NA - Not Analyzed
ND - Not Detected
NS - No Standard
Concentration above NYSDEC Class GA Groundwater Standards/Guidance values.

TABLE 3.9
SADVA AOC 1 SOIL RESULTS

USACE-Schenectady Depot Validated Soil Analytical Data SDG: SADVA28 Detected Compound Summary		NYSDEC Soil Criteria	Sample ID: Lab Sample ID Depth: Source: SDG: Matrix: Sampled: Validated:	SD-GW12C AOC1 C4K240314001 6-8' STL Pittsburgh SADVA28 SOIL 11/23/2004 1/5/2005	SD-GW14DE AOC1 C4K200145001 6-10' STL Pittsburgh SADVA28 SOIL 11/19/2004 1/5/2005
CAS NO.	COMPOUND		UNITS:		
	VOLATILES				
	None Detected			ND	ND
	SEMIVOLATILES				
117-81-7	bis(2-Ethylhexyl) phthalate	50000	ug/kg	ND	74 J
	PESTICIDES				
	None Detected			ND	ND
	PCBS				
	None Detected			ND	ND
	METALS				
7429-90-5(T)	Aluminum	12800	mg/kg	10700	10300
7440-38-2(T)	Arsenic	16.4	mg/kg	7.7	5.8
7440-39-3(T)	Barium	300	mg/kg	140 J	60 J
7440-41-7(T)	Beryllium	0.67	mg/kg	0.81	0.82
7440-43-9(T)	Cadmium	1	mg/kg	0.33 J	0.31 J
7440-70-2(T)	Calcium	46600	mg/kg	18500 J	21500 J
7440-47-3(T)	Chromium	17.5	mg/kg	15.8	15.2
7440-48-4(T)	Cobalt	30	mg/kg	11	10.1
7440-50-8(T)	Copper	26.9	mg/kg	27.7	27.3
7439-89-6(T)	Iron	25700	mg/kg	24600	24800
7439-92-1(T)	Lead	60.8 (29.3 average)	mg/kg	12.8 J	9.8 J
7439-95-4(T)	Magnesium	13100	mg/kg	8470	8570
7439-96-5(T)	Manganese	875	mg/kg	477	483
7439-97-6(T)	Mercury	0.1	mg/kg	0.023 J	0.014 J
7440-02-0(T)	Nickel	24.8	mg/kg	24.6 J	23.8 J
7440-09-7(T)	Potassium	1660	mg/kg	1910	1850
7782-49-2(T)	Selenium	2	mg/kg	1 J	0.94 J
7440-22-4(T)	Silver	0.17	mg/kg	0.13 J	0.12 J
7440-23-5(T)	Sodium	619	mg/kg	153 J	133 J
7440-62-2(T)	Vanadium	150	mg/kg	20.5	20.3
7440-66-6(T)	Zinc	134	mg/kg	53.3 J	53.5 J

- concentration exceeds NYSDEC soil criterion

ND - Not detected

TABLE 3.10a
SADVA AOC 2 SURFACE WATER RESULTS (2000)

Former Schenectady Army Depot
Remedial Investigation
AOC 2 Surface Water Data
Detected Compound Summary

CAS NO.	COMPOUND	Upstream/ Background Ranges	NYSDEC Class A Surface Water Standards/Guidance Values H(FC)	NYSDEC Class C Surface Water Standards/Guidance Values H(FC)	SAMPLE ID:	AOC2-SW2	AOC2-SW3	AOC2-SW4	AOC2-SW5	AOC2-SW6	AOC2-SW7	AOC2-SW8	AOC2-SW9
					LAB ID:	C0H180282003	C0H180282004	C0H180282008	C0H180282012	C0H180282011	C0H080193001	C0G260181001	C0H180282010
					SOURCE:	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh
					SDG:	SADVA14	SADVA14	SADVA14	SADVA14	SADVA14	SADVA9	SADVA2	SADVA14
					MATRIX:	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER
					SAMPLED:	8/17/2000	8/17/2000	8/17/2000	8/17/2000	8/17/2000	8/7/2000	7/26/2000	8/17/2000
					VALIDATED:	11/2/2000	11/2/2000	11/2/2000	11/2/2000	11/2/2000	10/30/2000	10/10/2000	11/2/2000
					UNITS:								
	VOLATILES												
67-64-1	Acetone	ND-2.3	50	NS	ug/L	3.3 J	3.6 J	4.2 J	2.7 J	2.9 J	ND	5.2 J	3 J
78-93-3	2-Butanone	ND	NS	NS	ug/L	R	R	R	R	R	R	ND	R
108-88-3	Toluene	ND	5	6000	ug/L	ND	ND	ND	0.29 J	0.26 J	ND	2.2	ND
	TOTAL VOCs	**2.3**	**55**	**6000**	**ug/L**	**3.3**	**3.6**	**4.2**	**2.99**	**3.16**	**ND**	**7.4**	**3**
	SEMIVOLATILES												
117-81-7	bis(2-Ethylhexyl) phthalate	ND-26	0.6 A(C)	0.6 A(C)	ug/L	ND	ND	ND	ND	ND	140	17	ND
	TOTAL SVOCs	**ND-26**	**0.6 A(C)**	**0.6 A(C)**	**ug/L**	**ND**	**ND**	**ND**	**ND**	**ND**	**140**	**17**	**ND**
	PESTICIDES												
319-86-8	delta-BHC	ND	0.008	0.008	ug/L	ND	0.0052 JN	ND	ND	ND	ND	ND	ND
76-44-8	Heptachlor	ND	0.0002	0.0002	ug/L	ND	ND	ND	ND	ND	ND	0.006 J	ND
309-00-2	Aldrin	ND	0.001	0.001	ug/L	ND	ND	ND	ND	ND	ND	0.0043 JN	ND
1024-57-3	Heptachlor epoxide	ND	0.0003	0.0003	ug/L	ND	ND	ND	ND	ND	ND	0.012 JN	ND
72-54-8	4,4'-DDD	ND	0.000011	0.00008	ug/L	ND	0.019 J	ND	ND	ND	ND	ND	ND
	TOTAL PESTICIDES	**ND**	**0.009511**	**0.00958**	**ug/L**	**ND**	**0.0242**	**ND**	**ND**	**ND**	**ND**	**0.0223**	**ND**
	PCBs												
	None Detected	ND			ug/L	ND	ND	ND	ND	ND	ND	ND	ND
	METALS												
7429-90-5	Aluminum	23.4-346	100 (1)	100 (1)	ug/L	4680	6840	2780	1110	15300	286	463	85 J
7440-38-2	Arsenic	ND	150 (2) A(C)	150 (2) A(C)	ug/L	ND	10.7	ND	ND	8.3 J	2.9 J	19.6	ND
7440-39-3	Barium	22.6-43.5	1000	NS	ug/L	27.3 J	48.6 J	51.7 J	18.7 J	165 J	18.1 J	5.4 J	15.8 J
7440-41-7	Beryllium	0.14-0.96	3	1100 *	ug/L	ND	0.14 J	ND	ND	0.44 J	0.18 J	ND	ND
7440-70-2	Calcium	60500-64400	NS	NS	ug/L	9750	37700	17700	7360	17200	15600	22400	20400
7440-47-3	Chromium	ND-1.4	62.9 (2) *A(C)	62.9 (2) *A(C)	ug/L	4.1 J	6.6 J	2.5 J	1 J	19.1	1.1 J	4.9 J	ND
7440-48-4	Cobalt	ND	5 A(C)	5 A(C)	ug/L	ND	ND	ND	ND	5.7 J	ND	5.1 J	ND
7440-50-8	Copper	ND-2.5	200 H(WS)	7.5 (2) *A(C)	ug/L	3.8 J	ND	4.6 J	9.8 J	24.4 J	6.3 J	35.4	3.7 J
7439-89-6	Iron	497-998	300	300	ug/L	3430	5700	2900	1680	15500	6040	878	274
7439-92-1	Lead	ND	50 H(WS)	3.1 (2) *A(C)	ug/L	2.7 J	5.1	2.7 J	3	27.2	2.7 J	3.1	ND
7439-95-4	Magnesium	8810-11500	35000	NS	ug/L	5330	16300	6740	3100 J	7980	5490	8670	8240
7439-96-5	Manganese	105-691	300	NS	ug/L	28.5	94.8	122	165	206	85.6	76.7	34.1
7439-97-6	Mercury	0.065-0.093	0.0007	0.0007	ug/L	ND	ND	ND	ND	ND	0.063 J	ND	ND
7440-02-0	Nickel	ND-6.2	100 H(WS)	44.9 (2) *A(C)	ug/L	ND	ND	ND	ND	13.4 J	ND	9.8 J	ND
7440-09-7	Potassium	796-2640	NS	NS	ug/L	1770 J	3450 J	1580 J	1010 J	6470	2970 J	2850 J	5920
7782-49-2	Selenium	ND	4.6 (2)	4.6 (2)	ug/L	2.7 J	2.2 J	ND	ND	2.9 J	2.2 J	2.8 J	ND
7440-23-5	Sodium	9710-15000	NS	NS	ug/L	2050 J	23500	3770 J	2560 J	11200	7820	212000	2500 J
7440-62-2	Vanadium	ND-3.4	14	14	ug/L	9 J	13.6 J	5.6 J	4.4 J	27.7 J	3.4 J	ND	ND
7440-66-6	Zinc	3.9-22.1	2000 H(WS)	71.2	ug/L	16.6 J	20.2	22.7	18.1 J	214	13.4 J	24.6	ND
	OTHER												
Q356	Hardness, as CaCO3	NA			mg/L	61.8	185	61.8	41.2	65.9	65.9	86.2	86.5

(1) - Ionic form
(2) - Dissolved form - sample data are total metals.
* - based on average hardness value
Average Hardness: 81.7 mg/L
A(C) - Protection of Fish Propagation
H(FC) - Protection for Human Consumption of Fish
H(WS) - Protection for drinking water source
J - Estimated Value
NA - Not Analyzed
ND - Not Detected
R - Rejected Value
N - Presumptive Evidence
NS - No Standard/Guidance Value
[shaded box] - Concentration above NYSDEC Class C Surface Water Standard/Guidance Value and Background.

TABLE 3.10b
SURFACE WATER DATA SUMMARY
AOC 2 DATA GAP RI AT FORMER SADVA (2004)

USACE-Schenectady Depot Validated Analytical Data AOC 2		Upstream/ Background Ranges	NYSDEC Class A Surface Water Standards/Guidance Values H(FC)	NYSDEC Class C Surface Water Standards/Guidance Values H(FC)			Dup of SD-SW10					
					Sample ID:	SD-SW10	SD-SW110	SD-SW11	SD-SW12	SD-SW13	SD-SW14-AOC-2	SD-W-TP27
					Lab Sample Id:	C4G160332001	C4G160332002	C4G160332003	C4G160332004	C4G160332005	C4G290219001	C4F250308001
					Source:	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh
					SDG:	C4G160332	C4G160332	C4G160332	C4G160332	C4G160332	C4G290219	C4F250308
					Matrix:	WATER	WATER	WATER	WATER	WATER	WATER	Water
					Sampled:	7/15/2004	7/15/2004	7/15/2004	7/15/2004	7/15/2004	7/28/2004	6/24/2004
					Validated:	9/18/2004	9/18/2004	9/18/2004	9/18/2004	9/18/2004	9/19/2004	9/3/2004
CAS NO.	COMPOUND				UNITS:							
	VOLATILES											
	Acetone					NA	NA	NA	NA	NA	NA	7.8 J
	SEMIVOLATILES											
117-81-7	bis(2-Ethylhexyl) phthalate	ND-26	0.6 A(C)	0.6 A(C)	ug/L	16 J	5.9 J	11	8.5	4.1 J	68 J	2.3 J
85-68-7	Butyl benzyl phthalate	ND	50 (G)	NS	ug/L	ND	ND	ND	0.76 J	ND	ND	ND
84-66-2	Diethyl phthalate	ND	50 (G)	NS	ug/L	ND	ND	ND	0.26 J	0.34 J	0.31 J	ND
84-74-2	Di-n-butyl phthalate	ND	50 (G)	NS	ug/L	ND	ND	ND	0.37 J	0.34 J	0.67 J	ND
117-84-0	Di-n-octyl phthalate	ND	50 (G)	NS	ug/L	ND	ND	ND	ND	0.67 J	ND	ND
206-44-0	Fluoranthene	ND	50 (G)	NS	ug/L	ND	ND	ND	ND	0.12 J	ND	ND
78-59-1	Isophorone	ND	50 (G)	NS	ug/L	0.49 J	0.49 J	ND	ND	0.31 J	0.27 J	ND
	NPAHs											
129-00-0	Pyrene	ND	4.6 A(C)	4.6 A(C)	ug/L	ND	ND	ND	ND	0.11 J	ND	ND
	Total SVOCs					16.49	6.39	11	9.89	5.99	69.25	2.3
	PESTICIDES											
319-86-8	delta-BHC	ND	0.008	0.008	ug/L	0.0028 JN	0.0041 JN	0.0023 JN	ND	ND	ND	ND
5103-71-9	alpha-Chlordane	ND	0.00002	0.00002	ug/L	ND	ND	0.0063 JN	ND	0.0053 J	0.0033 J	ND
5103-74-2	gamma-Chlordane	ND	0.00002	0.00002	ug/L	0.0078 J	ND	ND	ND	0.0026 JN	ND	ND
60-57-1	Dieldrin	ND	0.004	0.0000006	ug/L	ND	0.027 JN	0.0079 J	0.006 JN	0.0075 J	0.0022 JN	ND
72-54-8	4,4'-DDD	ND	0.000011	0.00008	ug/L	ND	ND	ND	ND	0.0029 JN	ND	ND
72-55-9	4,4'-DDE	ND	0.000007	0.000007	ug/L	ND	ND	0.0081 JN	ND	0.0028 JN	0.0035 JN	ND
50-29-3	4,4'-DDT	ND	0.00001	0.00001	ug/L	ND	0.012 JN	ND	ND	ND	ND	0.0046 JN
33213-65-9	Endosulfan II	ND	NS	NS	ug/L	ND	ND	0.0052 JN	ND	0.0062 JN	ND	ND
1031-07-8	Endosulfan sulfate	ND	NS	NS	ug/L	ND	ND	ND	ND	0.0039 JN	ND	ND
72-20-8	Endrin	ND	0.002	0.002	ug/L	ND	ND	ND	0.0053	0.0098 JN	0.0018 JN	ND
7421-93-4	Endrin aldehyde	ND	5	NS	ug/L	ND	ND	0.0039 JN	ND	ND	ND	0.0069 JN
1024-57-3	Heptachlor epoxide	ND	0.0003	0.0003	ug/L	0.0033 JN	ND	0.0049 JN	0.0037 JN	0.0028 JN	0.0027 JN	ND
72-43-5	Methoxychlor	ND	0.03 A(C)	0.03 A(C)	ug/L	0.012 JN	0.009 JN	ND	ND	ND	ND	ND
	Total Pesticide					0.0259	0.0521	0.0386	0.015	0.0438	0.0135	0.0115
	METALS											
7429-90-5	Aluminum	23.4-346	100 (1)	100 (1)	ug/L	5070 J	4680 J	2970 J	7240 J	8190 J	3920 J	1150 J
7440-36-0	Antimony	ND	3	NS	ug/L	ND	ND	3.6 J	3.4 J	3.2 J	ND	ND
7440-38-2	Arsenic	ND	150 (2) A(C)	150 (2) A(C)	ug/L	7.7 J	6.9 J	4.7 J	5.2 J	ND	ND	ND
7440-39-3	Barium	22.6-43.5	1000	NS	ug/L	34.2 J	34.7 J	31.3 J	57.8 J	154 J	29.7 J	643
7440-41-7	Beryllium	0.14-0.96	3	1100 *	ug/L	0.83 J	0.7 J	0.74 J	1.1 J	1 J	0.59 J	ND
7440-70-2	Calcium	60500-64400	NS	NS	ug/L	55000	55300	48700	53600	115000	17100	99600
7440-47-3	Chromium	ND-1.4	171 (2) *A(C)	171 (2) *A(C)	ug/L	6	5.5	3.6 J	7.1	8.3	5.5	3 J
7440-48-4	Cobalt	ND	5 A(C)	5 A(C)	ug/L	2.2 J	2.1 J	1.5 J	1.9 J	5.1 J	1.9 J	2.1 J
7440-50-8	Copper	ND-2.5	200 H(WS)	21.5 (2) *A(C)	ug/L	28.3	28.5	11.8 J	14.5 J	29.3	18 J	6.9 J
7439-89-6	Iron	497-998	300	300	ug/L	5610	4880	2620	4160	4870	3820 J	3610 J
7439-92-1	Lead	ND	11.3 (2) *A(C)	11.3 (2) *A(C)	ug/L	5.5 J	5.2 J	3.7 J	5.7 J	10.5	5.3 J	ND
7439-95-4	Magnesium	8810-11500	35000	NS	ug/L	15000	14800	15400	15900	37900	6830	99200
7439-96-5	Manganese	105-691	300	NS	ug/L	86.1	93.4	38.3	80.8	364	48.7	310
7440-02-0	Nickel	0.065-0.093	124 (2) *A(C)	124 (2) *A(C)	ug/L	10.8 J	10.7 J	5.8 J	8 J	12 J	7.4 J	5.5 J
7440-09-7	Potassium	ND-6.2	NS	NS	ug/L	5230	4930 J	2250 J	2490 J	2700 J	3000 J	2300 J
7782-49-2	Selenium	796-2640	4.6 (2)	4.6 (2)	ug/L	ND	ND	ND	ND	ND	2.7 J	2.8 J
7440-22-4	Silver	ND-0.31	0.1 (1)	0.1 (1)	ug/L	0.43 J	ND	0.46 J	ND	0.31 J	0.32 J	0.63 J
7440-23-5	Sodium	9710-15000	NS	NS	ug/L	34000	34200	19700	22600	7710	16700	92600
7440-62-2	Vanadium	ND-3.4	14	14	ug/L	16.4 J	14.8 J	10 J	15.5 J	14.6 J	10.2 J	2.9 J
7440-66-6	Zinc	3.9-22.1	198 (2) *A(C)	198 (2) *A(C)	ug/L	26.3	27.4	26.3	38.5	141	68.5	75.4
	OTHER											
Q1925	Hardness	NA			mg/L	199	199	185	199	443	70.8	657

(1) - Ionic form
(2) - Dissolved form - all sample data are total metals.
* - based on average hardness value
Average Hardness: 279 mg/L
A(C) - Protection of Fish Propagation
H(FC) - Protection for Human Consumption of Fish
H(WS) - Protection for drinking water source
U = Analyte not detected; the number is the analytical reporting limit.
J - Estimated Value
NA - Not Analyzed
ND - Not Detected
R - Rejected Value
N - Presumptive Evidence
NS - No Standard/Guidance Value
(shaded) - Concentration above NYSDEC Class C Surface Water Standard/Guidance Value and Background.

TABLE 3.11a
SADVA AOC 2 SEDIMENT RESULTS (2000)

Former Schenectady Army Depot Remedial Investigation AOC 2 Sediment Data Detected Compound Summary				SAMPLE ID:	AOC2-SD1	AOC2-SD2	AOC2-SD3	AOC2-SD4	AOC2-SD5
				LAB ID:	C0G240117001	C0G240117002	C0G240117003	C0G240117004	C0G240117005
				DEPTH:	0-0.5'	0-0.5'	0-0.5'	0-0.5'	0-0.5'
				SOURCE:	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh
				SDG:	SADVA7	SADVA7	SADVA7	SADVA7	SADVA7
				MATRIX:	SOIL	SOIL	SOIL	SOIL	SOIL
				SAMPLED:	7/21/2000	7/21/2000	7/21/2000	7/21/2000	7/21/2000
		Upstream/	NYSDEC	VALIDATED:	10/17/2000	10/17/2000	10/17/2000	10/17/2000	10/17/2000
CAS NO.	COMPOUND	Background Ranges	Sediment Criteria	UNITS:					
	VOLATILES								
	None Detected	ND		ug/kg	ND	ND	ND	ND	ND
	SEMIVOLATILES								
117-81-7	bis(2-Ethylhexyl) phthalate	ND	2925 (C)	ug/kg	ND	ND	ND	ND	ND
	CPAHs								
	None Detected	ND		ug/kg	ND	ND	ND	ND	ND
	NPAHs								
	None Detected	ND		ug/kg	ND	ND	ND	ND	ND
	TOTAL SVOCs	**ND**		**ug/kg**	**ND**	**ND**	**ND**	**ND**	**ND**
	PESTICIDES								
319-86-8	delta-BHC	ND	NC	ug/kg	ND	ND	ND	ND	ND
76-44-8	Heptachlor	ND	1.47 (C)	ug/kg	0.33 J	ND	ND	ND	ND
72-55-9	4,4'-DDE	ND-0.23	14.7 (W)	ug/kg	2.5 J	1.9 JN	1.1 J	4.3 J	ND
72-20-8	Endrin	ND	59 (C)	ug/kg	ND	0.73 J	0.48 J	0.53 JN	ND
72-54-8	4,4'-DDD	ND	14.7 (W)	ug/kg	ND	ND	ND	1.2 JN	ND
50-29-3	4,4'-DDT	ND-0.35	14.7 (C)	ug/kg	7.3	ND	ND	ND	ND
5103-71-9	alpha-Chlordane	ND	0.44 (C)	ug/kg	ND	ND	ND	1.1 JN	ND
	TOTAL PESTICIDES	**0.23**	**105.01**	**ug/kg**	**10.13**	**2.63**	**1.58**	**7.13**	**ND**
	PCBs								
	None Detected	ND		ug/kg	ND	ND	ND	ND	ND

CPAH = Carcinogenic Polynuclear Aromatic Hydrocarbon.
NPAH = Noncarcinogenic Polynuclear Aromatic Hydrocarbon.
J = Estimated Value
ND = Not Detected
C = Benthic Aquatic Chronic Criteria (TOC Adjusted),(NYSDEC, 1999).
W = Wildlife Bioaccumulation Criteria (TOC Adjusted), (NYSDEC, 1999).
NC = No Criteria
N = Presumptive Evidence
- concentration above NYSDEC Sediment criteria and background.

TABLE 3.11a
SADVA AOC 2 SEDIMENT RESULTS (2000)

Former Schenectady Army Depot Remedial Investigation AOC 2 Sediment Data Detected Compound Summary				SAMPLE ID:	AOC2-SD1	AOC2-SD2	AOC2-SD3	AOC2-SD4	AOC2-SD5
				LAB ID:	C0G240117001	C0G240117002	C0G240117003	C0G240117004	C0G240117005
				DEPTH:	0-0.5'	0-0.5'	0-0.5'	0-0.5'	0-0.5'
				SOURCE:	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh
				SDG:	SADVA7	SADVA7	SADVA7	SADVA7	SADVA7
				MATRIX:	SOIL	SOIL	SOIL	SOIL	SOIL
				SAMPLED:	7/21/2000	7/21/2000	7/21/2000	7/21/2000	7/21/2000
		Upstream/	NYSDEC	VALIDATED:	10/17/2000	10/17/2000	10/17/2000	10/17/2000	10/17/2000
CAS NO.	COMPOUND	Background Ranges	Sediment Criteria	UNITS:					
	METALS								
7429-90-5	Aluminum	8040-17900	NC	mg/kg	17400	11000	14600	17100 J	3310 J
7440-36-0	Antimony	ND-0.44	2 (L)	mg/kg	ND	0.51 J	0.38 J	ND	ND
7440-38-2	Arsenic	3.1-5.1	6 (L)	mg/kg	4.6	2.1 J	2.3	2.3 J	2.4 J
7440-39-3	Barium	53.9-141	NC	mg/kg	63.6	65.5 J	71.8	126 J	53.5 J
7440-41-7	Beryllium	0.62-0.92	NC	mg/kg	0.57 J	0.48 J	0.51 J	0.65 J	0.16 J
7440-43-9	Cadmium	ND-0.75	0.6 (L)	mg/kg	0.21 J	0.46 J	0.38 J	0.5 J	0.59 J
7440-70-2	Calcium	2660-6700	NC	mg/kg	4210 J	2690 J	6280 J	6670 J	6690 J
7440-47-3	Chromium	11.2-22	26 (L)	mg/kg	10.5	8.5 J	8.8	11.2 J	5.7 J
7440-48-4	Cobalt	7.1-14	NC	mg/kg	5.7 J	2.6 J	2.4 J	3.3 J	ND
7440-50-8	Copper	13-27.7	16 (L)	mg/kg	11.3	14 J	12.4	17.3 J	13.9 J
7439-89-6	Iron	18300-25400	20000 (L)	mg/kg	20500 J	7080 J	8080 J	8640 J	3390 J
7439-92-1	Lead	7.8-20.9	31 (L)	mg/kg	16.6	45.4 J	26	44.8 J	69.9 J
7439-95-4	Magnesium	3190-5190	NC	mg/kg	3150	1540 J	2320	2480 J	1170 J
7439-96-5	Manganese	328-647	460 (L)	mg/kg	210	24.6 J	36.3	76.6 J	62.2 J
7439-97-6	Mercury	0.027-0.091	0.15 (L)	mg/kg	0.052 J	0.1 J	0.089	0.15 J	0.18 J
7440-02-0	Nickel	15.6-24.5	16 (L)	mg/kg	9.3	8.8 J	8	10.7 J	4.5 J
7440-09-7	Potassium	734-1530	NC	mg/kg	1240	806 J	929	968 J	446 J
7782-49-2	Selenium	ND-0.81	NC	mg/kg	ND	0.5 J	ND	ND	2.1 J
7440-22-4	Silver	ND-0.5	1 (L)	mg/kg	ND	ND	0.2 J	ND	0.77 J
7440-23-5	Sodium	71.6-790	NC	mg/kg	76 J	87.1 J	120 J	139 J	172 J
7440-28-0	Thallium	ND-1.5	NC	mg/kg	1.5 J	ND	1 J	1.3 J	ND
7440-62-2	Vanadium	14.6-28.4	NC	mg/kg	30.1	15.1 J	17.5	20.4 J	8.2 J
7440-66-6	Zinc	47.7-118	120 (L)	mg/kg	62 J	36.7 J	35.8 J	215 J	51.3 J

L = Lowest Effect Level (metals), (NYSDEC, 1999)
C = Benthic Aquatic Chronic Criteria (TOC Adjusted),(NYSDEC, 1999).
J = Estimated Value
ND = Not Detected
NC = No Criteria
- concentration above NYSDEC Sediment criteria and background.

TABLE 3.11a
SADVA AOC 2 SEDIMENT RESULTS (2000)

Former Schenectady Army Depot Remedial Investigation AOC 2 Sediment Data Detected Compound Summary				SAMPLE ID:	AOC2-SD6	AOC2-SD7	AOC2-SD8	AOC2-SD9
				LAB ID:	C0G240117006	C0G240112006	C0G280267004	COH180281002
				DEPTH:	0-0.5'	0-0.5'	0-0.5'	
				SOURCE:	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh
				SDG:	SADVA7	SADVA6	SADVA8	SADVA13
				MATRIX:	SOIL	SOIL	SOIL	SOIL
				SAMPLED:	7/21/2000	7/21/2000	7/26/2000	8/17/2000
		Upstream/	NYSDEC	VALIDATED:	10/17/2000	10/13/2000	10/20/2000	11/7/2000
CAS NO.	COMPOUND	Background Ranges	Sediment Criteria	UNITS:				
	VOLATILES							
	None Detected	ND		ug/kg	ND	ND	ND	ND
	SEMIVOLATILES							
117-81-7	bis(2-Ethylhexyl) phthalate	ND	2925 (C)	ug/kg	ND	ND	100 J	ND
	CPAHs							
	None Detected	ND		ug/kg	ND	ND	ND	ND
	NPAHs							
	None Detected	ND		ug/kg	ND	ND	ND	ND
	TOTAL SVOCs	**ND**		**ug/kg**	**ND**	**ND**	**100**	**ND**
	PESTICIDES							
319-86-8	delta-BHC	ND	NC	ug/kg	ND	ND	0.12 JN	ND
76-44-8	Heptachlor	ND	1.47 (C)	ug/kg	ND	ND	ND	ND
72-55-9	4,4'-DDE	ND-0.23	14.7 (W)	ug/kg	1.5 J	2.7 J	0.56 J	ND
72-20-8	Endrin	ND	59 (C)	ug/kg	0.57 J	ND	ND	ND
72-54-8	4,4'-DDD	ND	14.7 (W)	ug/kg	2.2 J	ND	ND	ND
50-29-3	4,4'-DDT	ND-0.35	14.7 (C)	ug/kg	1.1 J	3.1	ND	ND
5103-71-9	alpha-Chlordane	ND	0.44 (C)	ug/kg	ND	ND	ND	ND
	TOTAL PESTICIDES	**0.23**	**105.01**	**ug/kg**	**5.37**	**5.8**	**0.68**	**ND**
	PCBs							
	None Detected	ND		ug/kg	ND	ND	ND	ND

CPAH = Carcinogenic Polynuclear Aromatic Hydrocarbon.
NPAH = Noncarcinogenic Polynuclear Aromatic Hydrocarbon.
J = Estimated Value
ND = Not Detected
C = Benthic Aquatic Chronic Criteria (TOC Adjusted),(NYSDEC, 1999).
W = Wildlife Bioaccumulation Criteria (TOC Adjusted), (NYSDEC, 1999).
NC = No Criteria
N = Presumptive Evidence
- concentration above NYSDEC Sediment criteria and background.

TABLE 3.11a
SADVA AOC 2 SEDIMENT RESULTS (2000)

Former Schenectady Army Depot Remedial Investigation AOC 2 Sediment Data Detected Compound Summary				SAMPLE ID: LAB ID: DEPTH: SOURCE: SDG: MATRIX: SAMPLED: VALIDATED:	AOC2-SD6 C0G240117006 0-0.5' STL Pittsburgh SADVA7 SOIL 7/21/2000 10/17/2000	AOC2-SD7 C0G240112006 0-0.5' STL Pittsburgh SADVA6 SOIL 7/21/2000 10/13/2000	AOC2-SD8 C0G280267004 0-0.5' STL Pittsburgh SADVA8 SOIL 7/26/2000 10/20/2000	AOC2-SD9 COH180281002 STL Pittsburgh SADVA13 SOIL 8/17/2000 11/7/2000
CAS NO.	COMPOUND	Upstream/ Background Ranges	NYSDEC Sediment Criteria	UNITS:				
	METALS							
7429-90-5	Aluminum	8040-17900	NC	mg/kg	9280	13200	12200	5320
7440-36-0	Antimony	ND-0.44	2 (L)	mg/kg	0.24 J	0.61 J	0.42 J	ND
7440-38-2	Arsenic	3.1-5.1	6 (L)	mg/kg	2.1	5.2	7.3	2
7440-39-3	Barium	53.9-141	NC	mg/kg	1760	64.7	52.6	24.3 J
7440-41-7	Beryllium	0.62-0.92	NC	mg/kg	0.53 J	0.57 J	0.7	0.34 J
7440-43-9	Cadmium	ND-0.75	0.6 (L)	mg/kg	0.28 J	0.56 J	0.17 J	ND
7440-70-2	Calcium	2660-6700	NC	mg/kg	2920 J	2590	10500 J	1690
7440-47-3	Chromium	11.2-22	26 (L)	mg/kg	16.7	20.5 J	18.2	6.3
7440-48-4	Cobalt	7.1-14	NC	mg/kg	2.8 J	6.7 J	13.8	4 J
7440-50-8	Copper	13-27.7	16 (L)	mg/kg	12.1	24.1	27.9 J	10.4
7439-89-6	Iron	18300-25400	20000 (L)	mg/kg	9110 J	33800 J	28000 J	12300
7439-92-1	Lead	7.8-20.9	31 (L)	mg/kg	30.1	35.5	15.3	4.5
7439-95-4	Magnesium	3190-5190	NC	mg/kg	2030	2610	6100	1590
7439-96-5	Manganese	328-647	460 (L)	mg/kg	49.2	146	545 J	96.6
7439-97-6	Mercury	0.027-0.091	0.15 (L)	mg/kg	0.057	0.11	R	ND
7440-02-0	Nickel	15.6-24.5	16 (L)	mg/kg	10.3	15 J	26.1	8.1
7440-09-7	Potassium	734-1530	NC	mg/kg	587 J	1030	1130	495 J
7782-49-2	Selenium	ND-0.81	NC	mg/kg	0.39 J	0.62 J	ND	ND
7440-22-4	Silver	ND-0.5	1 (L)	mg/kg	ND	ND	0.17 J	ND
7440-23-5	Sodium	71.6-790	NC	mg/kg	104 J	88.4 J	227 J	76.1 J
7440-28-0	Thallium	ND-1.5	NC	mg/kg	ND	ND	ND	ND
7440-62-2	Vanadium	14.6-28.4	NC	mg/kg	12.9	21.7	21.8 J	13.6
7440-66-6	Zinc	47.7-118	120 (L)	mg/kg	407 J	65.2	71.3	ND

L = Lowest Effect Level (metals), (NYSDEC, 1999)
C = Benthic Aquatic Chronic Criteria (TOC Adjusted),(NYSDEC, 1999).
J = Estimated Value
ND = Not Detected
NC = No Criteria
- concentration above NYSDEC Sediment criteria and background.

TABLE 3.11b
SEDIMENT DATA SUMMARY
AOC 2 DATA GAP RI AT FORMER SADVA (2004)

USACE-Schenectady Depot Validated Analytical Data AOC 2							Duplicate of SD-11-0-0.5			
				Sample ID:	SD-SD-10-0-0.5	SD-SD-11-0-0.5	SD-SD-111-0-0.5	SD-SD-12-0-0.5	SD-SD-13-0-0.5	SD-SD-14-0-0.5
				Lab Sample Id:	C4F260165001	C4F260165002	C4F260165003	C4F260165004	C4F260165005	C4F260165006
				Depth:	0-0.5'	0-0.5'	0-0.5'	0-0.5'	0-0.5'	0-0.5'
				Source:	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh
				SDG:	C4F260165	C4F260165	C4F260165	C4F260165	C4F260165	C4F260165
				Matrix:	Soil	Soil	Soil	Soil	Soil	Soil
				Sampled:	6/25/2004	6/25/2004	6/25/2004	6/25/2004	6/25/2004	6/25/2004
				Validated:	8/21/2004	8/21/2004	8/21/2004	8/21/2004	8/21/2004	8/21/2004
CAS NO.	COMPOUND	Upstream/ Background Ranges	NYSDEC Sediment Criteria	UNITS:						
	METALS									
7429-90-5(T)	Aluminum	8040-17900	NC	mg/kg	19000	19200	19600	21200	25900 J	15800
7440-38-2(T)	Arsenic	3.1-5.1	6 (L)	mg/kg	2.7	1.9	2.5	1.7	3.2 J	2.9
7440-39-3(T)	Barium	53.9-141	NC	mg/kg	82.9	82.9	83.3	116	138 J	67.2
7440-41-7(T)	Beryllium	0.62-0.92	NC	mg/kg	0.72	0.82	0.83	0.96	1.1 J	0.77
7440-43-9(T)	Cadmium	ND-0.75	0.6 (L)	mg/kg	0.3 J	0.29 J	0.28 J	0.41 J	0.52 J	1.5
7440-70-2(T)	Calcium	2660-6700	NC	mg/kg	6150	3710	4040	3360	6540 J	2500
7440-47-3(T)	Chromium	11.2-22	26 (L)	mg/kg	17.1 J	15.6 J	16 J	16.3 J	28.3 J	24 J
7440-48-4(T)	Cobalt	7.1-14	NC	mg/kg	3.4 J	2.4 J	2.4 J	2.3 J	6.5 J	5.2 J
7440-50-8(T)	Copper	13-27.7	16 (L)	mg/kg	16.9	18.1	20	18.5	38.7 J	17.6
7439-89-6(T)	Iron	18300-25400	20000 (L)	mg/kg	13900	9110	9110	7020	17400 J	19000
7439-92-1(T)	Lead	7.8-20.9	31 (L)	mg/kg	25.9	23.5	23.9	26.3	54.5 J	45
7439-95-4(T)	Magnesium	3190-5190	NC	mg/kg	2930	2310	2390	2410	4820 J	3050
7439-96-5(T)	Manganese	328-647	460 (L)	mg/kg	78.1	43.5	43.8	42.2	106 J	110
7439-97-6(T)	Mercury	0.027-0.091	0.15 (L)	mg/kg	0.024 J	0.07	0.085	0.051 J	0.15 J	0.046
7440-02-0(T)	Nickel	15.6-24.5	16 (L)	mg/kg	11.2	10.5	10.8	11	20.9 J	14.4
7440-09-7(T)	Potassium	734-1530	NC	mg/kg	1180	764	826	741 J	1920 J	1280
7782-49-2(T)	Selenium	ND-0.81	NC	mg/kg	0.64 J	0.53 J	ND	0.58 J	1.4 J	0.46 J
7440-22-4(T)	Silver	ND-0.5	1 (L)	mg/kg	0.073 J	0.092 J	ND	0.067 J	0.18 J	0.075 J
7440-23-5(T)	Sodium	71.6-790	NC	mg/kg	274 J	144 J	149 J	147 J	211 J	140 J
7440-28-0(T)	Thallium	ND-1.5	NC	mg/kg	ND	ND	ND	ND	ND	ND
7440-62-2(T)	Vanadium	14.6-28.4	NC	mg/kg	29.7	25.1	26.9	26.4	39.3 J	29.5
7440-66-6(T)	Zinc	47.7-118	120 (L)	mg/kg	56.6	36.8	37.5	40.3	187 J	88.1

U = Analyte not detected; the number is the analytical reporting limit.
CPAH = Carcinogenic Polynuclear Aromatic Hydrocarbon.
NPAH = Noncarcinogenic Polynuclear Aromatic Hydrocarbon.
J = Estimated Value
ND = Not Detected
C = Benthic Aquatic Chronic Criteria (TOC Adjusted),(NYSDEC, 1999).
L = Lowest Effect Level (metals), (NYSDEC, 1999)
W = Wildlife Bioaccumulation Criteria (TOC Adjusted), (NYSDEC, 1999).
NC = No Criteria
N = Presumptive Evidence
- concentration above NYSDEC Sediment criteria and background.

TABLE 3.12
SADVA AOC 2 GROUNDWATER ELEVATION DATA

				ROUND 1			ROUND 2		
Wells	Elevation TOC*	Elevation Ground*	Sample Depth**	Date	Depth to Water***	Groundwater Elevation*	Date	Depth to Water***	Groundwater Elevation*
AOC 2									
GW-03	347.93	348.09	20 - 25	07/23/2004	4.85	343.08	12/06/2004	1.98	345.95
GW-04	331.97	329.45	6 - 10.5	07/22/2004	3.28	328.69	12/06/2004	3.41	328.56
GW-05	345.51	345.73	15 - 20	07/22/2004	5.41	340.10	12/06/2004	3.75	341.76
GW-06	331.07	328.93	5 - 10	07/22/2004	NM	NM	12/06/2004	2.67	328.40
GW-07	342.75	340.49	14 - 19	07/22/2004	NM	NM	12/06/2004	2.10	340.65

Notes:
(TOC): Top of Casing
* - Elevations in feet above mean sea level
** - Depth in feet below ground surface
*** - Depth in feet below TOC
NM - No Measurement
GW-06 and GW-07 were installed in November 2004

TABLE 3.13a
SADVA AOC 2 GROUNDWATER RESULTS (2000)

CAS NO.	COMPOUND	NYSDEC Class GA Ground Water Standards/Guidance Values		Residential Wells *		Post Commanders's Landfill			
Former Schenectady Army Depot Remedial Investigation AOC 2 Groundwater Data Detected Compound Summary			SAMPLE ID:	AOC2-GW01	AOC2-GW02	AOC2-HP01	AOC2-HP04	AOC2-HP07	AOC2-HP09
			LAB ID:	C0H180282009	C0H180282007	C0G310115002	C0G280278001	C0G310115001	C0G280286001
			SOURCE:	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh
			SDG:	SADVA14	SADVA14	SADVA9	SADVA2	SADVA9	SADVA9
			MATRIX:	WATER	WATER	WATER	WATER	WATER	WATER
			SAMPLED:	8/17/2000	8/17/2000	7/28/2000	7/26/2000	7/28/2000	7/26/2000
			VALIDATED:	11/2/2000	11/2/2000	10/30/2000	10/10/2000	10/30/2000	10/30/2000
			UNITS:						
	VOLATILES								
67-64-1	Acetone	50 (G)	ug/L	ND	ND	21 J	ND	2.6 J	ND
71-43-2	Benzene	1	ug/L	ND	ND	3.6	ND	ND	ND
78-93-3	2-Butanone	50 (G)	ug/L	R	R	3.9 J	ND	ND	ND
75-15-0	Carbon disulfide	NC	ug/L	ND	0.59 J	ND	ND	ND	ND
107-06-2	1,2-Dichloroethane	0.6	ug/L	ND	ND	0.57 J	ND	ND	ND
108-88-3	Toluene	5	ug/L	ND	ND	1.7	ND	ND	ND
	TOTAL VOCs			**ND**	**0.59**	**30.77**	**ND**	**2.6**	**ND**
	SEMIVOLATILES								
117-81-7	bis(2-Ethylhexyl) phthalate	5	ug/L	ND	ND	5.9 J	31	19	ND
108-95-2	Phenol	1	ug/L	ND	ND	3.1 J	ND	ND	ND
	TOTAL SVOCs	**6**	**ug/L**	**ND**	**ND**	**9**	**31**	**19**	**ND**
	PESTICIDES								
	None Detected	ND	ug/L	ND	ND	ND	ND	ND	ND
	PCBs								
	None Detected	ND	ug/L	ND	ND	ND	ND	ND	ND
	METALS								
7429-90-5	Aluminum	NC	ug/L	32.5 J	210	1230	1280	611	2610
7440-39-3	Barium	1000	ug/L	23.7 J	22.3 J	54.3 J	81.2 J	46.6 J	85.1 J
7440-41-7	Beryllium	3 (G)	ug/L	ND	ND	0.17 J	0.23 J	ND	0.22 J
7440-43-9	Cadmium	5	ug/L	ND	ND	6.1	ND	ND	ND
7440-70-2	Calcium	NC	ug/L	76000	114000	311000	364000	529000	573000
7440-47-3	Chromium	50	ug/L	ND	ND	2 J	3.6 J	1.4 J	4.3 J
7440-48-4	Cobalt	NC	ug/L	ND	ND	46.6 J	3.4 J	4.7 J	5 J
7440-50-8	Copper	200	ug/L	3.9 J	ND	4.4 J	5.8 J	6.8 J	5.4 J
7439-89-6	Iron	300	ug/L	17.1 J	1020	2480	1850	1130	4470
7439-95-4	Magnesium	35000 (G)	ug/L	11100	55300	169000	241000	147000	242000
7439-96-5	Manganese	300	ug/L	9.2 J	298	1190	1310	1040	2160
7439-97-6	Mercury	0.7	ug/L	ND	ND	0.051 J	0.1 J	0.063 J	0.057 J
7440-02-0	Nickel	100	ug/L	ND	ND	129	ND	ND	ND
7440-09-7	Potassium	NC	ug/L	10100	3630 J	7100	46000	14600	21900
7440-22-4	Silver	50	ug/L	ND	ND	ND	ND	0.99 J	ND
7440-23-5	Sodium	20000	ug/L	6110	32600	23300	278000	48500	51600
7440-62-2	Vanadium	NC	ug/L	4.1 J	4.4 J	7.2 J	3.7 J	ND	11.3 J
7440-66-6	Zinc	2000 (G)	ug/L	ND	ND	7.9 J	11.5 J	6.7 J	13.8 J

(G) - Guidance Value.
U - Not Detected.
J - Estimated Value
NA - Not Analyzed
R - Rejected Value
ND - Not Detected
NC - No Criteria
Concentration above NYSDEC Class GA Groundwater Standards/Guidance values and upgradient concentrations (see Table 3.13b).
* - Concentrations in residential wells (GW01 and GW02) were only compared to NYSDEC Class GA groundwater standards/guidance values.

TABLE 3.13b
GROUNDWATER DATA SUMMARY
AOC 2 DATA GAP RI AT FORMER SADVA (2004)

USACE-Schenectady Depot Validated Analytical Data AOC 2		NYSDEC Class GA Ground Water	Sample ID:	UPGRADIENT SD-GW03-AOC-2	SD-GW04-AOC-2	SD-GW05-AOC-2	SD-GW06-AOC2	SD-GW07-AOC2
			Lab Sample Id:	C4G240150003	C4G240150004	C4G240150006	C4L070288001	C4L070288002
			Depth:					
			Source:	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh
			SDG:	C4G240150	C4G240150	C4G240150	SADVA29	SADVA29
			Matrix:	WATER	WATER	WATER	WATER	WATER
			Sampled:	7/23/2004	7/23/2004	7/22/2004	12/6/2004	12/6/2004
			Validated:	9/19/2004	9/19/2004	9/19/2004	1/6/2005	1/6/2005
CAS NO.	COMPOUND	Standards/Guidance Values	UNITS:					
	VOLATILES							
71-43-2	Benzene	1	ug/L	ND	ND	ND	1.5	ND
78-93-3	2-Butanone	50 (G)	ug/L	ND	ND	ND	10	ND
67-66-3	Chloroform	7	ug/L	0.22 J	ND	ND	ND	ND
108-88-3	Toluene	5	ug/L	ND	ND	ND	1.1	ND
1330-20-7	Xylenes (total)	5	ug/L	ND	ND	ND	0.79 J	ND
	TOTAL VOCs		ug/L	0.22	ND	ND	13.39	ND
	SEMIVOLATILES							
117-81-7	bis(2-Ethylhexyl) phthalate	5	ug/L	ND	12	ND	ND	ND
84-66-2	Diethyl phthalate	50 (G)	ug/L	ND	0.35 J	ND	ND	ND
84-74-2	Di-n-butyl phthalate	50	ug/L	ND	0.78 J	ND	ND	ND
86-73-7	Fluorene	50 (G)	ug/L	ND	ND	ND	0.13 J	ND
91-57-6	2-Methylnaphthalene	NC	ug/L	ND	ND	ND	0.87 J	ND
91-20-3	Naphthalene	10 (G)	ug/L	ND	ND	ND	0.65 J	ND
	TOTAL SVOCs		ug/L	ND	13.13	ND	1.65	ND
	PESTICIDES							
1031-07-8	Endosulfan sulfate	NC	ug/L	NA	NA	NA	0.0067 JN	ND
50-29-3	4,4'-DDT	0.2	ug/L	NA	NA	NA	ND	0.002 J
72-43-5	Methoxychlor	35	ug/L	NA	NA	NA	0.0098 JN	ND
5103-71-9	alpha-Chlordane	0.05	ug/L	NA	NA	NA	0.0032 JN	ND
	TOTAL PESTICIDES			NA	NA	NA	0.0197	0.002
	PCBS							
			ug/L	NA	NA	NA	ND	ND
	METALS							
7429-90-5	Aluminum	NC	ug/L	60.6 J	210	42.3 J	38.7 J	230
7440-39-3	Barium	1000	ug/L	20.1 J	15.8 J	10.7 J	102 J	12.9 J
7440-41-7	Beryllium	3 (G)	ug/L	0.53 J	0.85 J	0.74 J	ND	ND
7440-70-2	Calcium	NC	ug/L	494000	342000	520000	108000	459000
7440-48-4	Cobalt	NC	ug/L	1.3 J	ND	ND	0.72 J	ND
7440-50-8	Copper	200	ug/L	ND	ND	ND	ND	ND
7439-89-6	Iron	300	ug/L	1260	766	43.1 J	50100	1870
7439-95-4	Magnesium	35000 (G)	ug/L	228000	407000	96000	66500	272000
7439-96-5	Manganese	300	ug/L	1220	706	374	839	1440
7440-02-0	Nickel	100	ug/L	3.9 J	2.1 J	2.1 J	2.6 J	1.2 J
7440-09-7	Potassium	NC	ug/L	15600	18700	6470	1990 J	13000
7440-22-4	Silver	50	ug/L	0.4 J	0.34 J	0.59 J	ND	0.33 J
7440-23-5	Sodium	20000	ug/L	62200	258000	25400	65500	41100
7440-62-2(T)	Vanadium	NC	ug/L	ND	ND	ND	1.7 J	ND
7440-66-6	Zinc	2000 (G)	ug/L	17.7 J	3.3 J	11 J	2.1 J	ND

(G) - Guidance Value.
U = Analyte not detected; the number is the analytical reporting limit.
J - Estimated Value
NA - Not Analyzed
R - Rejected Value
ND - Not Detected
NC - No Criteria
Concentration above NYSDEC Class GA Groundwater Standards/Guidance values and upgradient concentration.

Table 3.14a
SADVA AOC 2 Soil Results (2000)

	Former Schenectady Army Depot Remedial Investigation AOC 2 Soil Boring Data Detected Compound Summary		SAMPLE ID:	AOC2-DRM1	AOC2-HP01A	AOC2-HP01C	AOC2-HP01E	AOC2-HP02A	AOC2-HP02C	AOC2-HP02H	AOC2-HP03A	AOC2-HP03C
			LAB ID:	COH180281001	C0G210257002	C0G250266001	C0G250266002	C0G210257003	C0G260183001	C0G260183002	C0G210257004	C0G270303001
			DEPTH:		0-1'	2-4'	6-8'	0-1'	4-6'	14-16'	0-1'	4-6'
			SOURCE:	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh
			SDG:	SADVA13	SADVA6	SADVA7	SADVA7	SADVA6	SADVA7	SADVA7	SADVA6	SADVA8
			MATRIX:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
		NYSDEC	SAMPLED:	8/17/2000	7/20/2000	7/24/2000	7/24/2000	7/20/2000	7/24/2000	7/24/2000	7/20/2000	7/25/2000
		Soil	VALIDATED:	11/7/2000	10/13/2000	10/17/2000	10/17/2000	10/13/2000	10/17/2000	10/17/2000	10/13/2000	10/20/2000
CAS NO.	COMPOUND	Criteria	UNITS:									
	VOLATILES											
67-64-1	Acetone	407	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	11 J
71-43-2	Benzene	215	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND
74-83-9	Bromomethane	NC	ug/kg	ND	R	R	R	R	R	R	R	R
78-93-3	2-Butanone	833	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND
75-15-0	Carbon disulfide	9990	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND
75-00-3	Chloroethane	6845	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND
100-41-4	Ethylbenzene	10000	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND
108-88-3	Toluene	5550	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND
1330-20-7	Xylenes (total)	4440	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Total VOCs	10000	ug/kg	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**11**
	SEMIVOLATILES											
59-50-7	4-Chloro-3-methylphenol	870	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND
117-81-7	bis(2-Ethylhexyl) phthalate	50000	ug/kg	ND	46 J	62 J	ND	60 J	ND	51 J	56 J	ND
86-74-8	Carbazole	NC	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND
84-74-2	Di-n-butyl phthalate	29970	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND
	CPAHs											
56-55-3	Benzo(a)anthracene	224	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND
50-32-8	Benzo(a)pyrene	61	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND
205-99-2	Benzo(b)fluoranthene	4070	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND
207-08-9	Benzo(k)fluoranthene	4070	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND
218-01-9	Chrysene	1480	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND
53-70-3	Dibenz(a,h)anthracene	14	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND
193-39-5	Indeno(1,2,3-cd)pyrene	11840	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Total CPAHs		ug/kg	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**
	NPAHs											
91-57-6	2-Methylnaphthalene	50000	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND
120-12-7	Anthracene	50000	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND
191-24-2	Benzo(ghi)perylene	50000	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND
206-44-0	Fluoranthene	50000	ug/kg	ND	ND	ND	ND	ND	17 J	ND	ND	ND
86-73-7	Fluorene	50000	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND
91-20-3	Naphthalene	48100	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND
85-01-8	Phenanthrene	50000	ug/kg	ND	ND	ND	ND	ND	14 J	ND	ND	ND
129-00-0	Pyrene	50000	ug/kg	ND	ND	ND	ND	ND	15 J	ND	ND	ND
	Total NPAHs		**ug/kg**	**ND**	**ND**	**ND**	**ND**	**ND**	**46**	**ND**	**ND**	**ND**
	Total PAHs		**ug/kg**	**ND**	**ND**	**ND**	**ND**	**ND**	**46**	**ND**	**ND**	**ND**
	Total SVOCs	**50000**	**ug/kg**	**ND**	**46**	**62**	**ND**	**60**	**46**	**51**	**56**	**ND**

Table 3.14a
SADVA AOC 2 Soil Results (2000)

Former Schenectady Army Depot Remedial Investigation AOC 2 Soil Boring Data Detected Compound Summary		NYSDEC Soil Criteria	SAMPLE ID:	AOC2-DRM1	AOC2-HP01A	AOC2-HP01C	AOC2-HP01E	AOC2-HP02A	AOC2-HP02C	AOC2-HP02H	AOC2-HP03A	AOC2-HP03C
			LAB ID:	COH180281001	C0G210257002	C0G250266001	C0G250266002	C0G210257003	C0G260183001	C0G260183002	C0G210257004	C0G270303001
			DEPTH:		0-1'	2-4'	6-8'	0-1'	4-6'	14-16'	0-1'	4-6'
			SOURCE:	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh
			SDG:	SADVA13	SADVA6	SADVA7	SADVA7	SADVA6	SADVA7	SADVA7	SADVA6	SADVA8
			MATRIX:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
			SAMPLED:	8/17/2000	7/20/2000	7/24/2000	7/24/2000	7/20/2000	7/24/2000	7/24/2000	7/20/2000	7/25/2000
			VALIDATED:	11/7/2000	10/13/2000	10/17/2000	10/17/2000	10/13/2000	10/17/2000	10/17/2000	10/13/2000	10/20/2000
CAS NO.	COMPOUND		UNITS:									
	PESTICIDES											
319-84-6	alpha-BHC	111	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND
319-86-8	delta-BHC	1221	ug/kg	0.16 JN	ND	ND	ND	ND	ND	ND	ND	ND
58-89-9	gamma-BHC (Lindane)	NC	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND
76-44-8	Heptachlor	444	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND
309-00-2	Aldrin	41	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND
1024-57-3	Heptachlor epoxide	20	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND
60-57-1	Dieldrin	44	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND
72-55-9	4,4'-DDE	2100	ug/kg	ND	1.1 J	0.24 JN	ND	0.97 J	ND	ND	4.1	ND
72-20-8	Endrin	339	ug/kg	ND	ND	ND	ND	ND	ND	0.16 JN	ND	ND
72-54-8	4,4'-DDD	2900	ug/kg	ND	ND	ND	ND	ND	ND	ND	0.89 JN	ND
50-29-3	4,4'-DDT	2100	ug/kg	ND	3	0.57 J	ND	3.3 J	ND	ND	9.1	ND
72-43-5	Methoxychlor	10000	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND
5103-71-9	alpha-Chlordane	540	ug/kg	ND	0.52 JN	ND	ND	ND	ND	ND	ND	ND
5103-74-2	gamma-Chlordane	540	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Total Pesticides	**10000**	**ug/kg**	**0.16**	**4.62**	**0.81**	**ND**	**4.27**	**ND**	**0.16**	**14.09**	**ND**
	PCBs											
11141-16-5	None Detected	1000/10000	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND
	METALS											
7429-90-5	Aluminum	12800	mg/kg	15400	11400	14000	12500	11900	13900	8120	12400	13600
7440-36-0	Antimony	0.59	mg/kg	ND	0.73 J	0.23 J	ND	0.5 J	ND	ND	0.48 J	0.26 J
7440-38-2	Arsenic	16.4	mg/kg	9.5	6.4	7.5	8.6	7	7.6	6.1	5.3	8.4
7440-39-3	Barium	300	mg/kg	69.8	51.3	56.1	48.7	54.6	63.5	38.5	58.7	52.2
7440-41-7	Beryllium	0.67	mg/kg	0.82	0.6 J	0.69	0.64	0.64 J	0.67	0.43 J	0.62 J	0.69
7440-43-9	Cadmium	1	mg/kg	0.35 J	0.36 J	0.29 J	0.36 J	0.38 J	0.35 J	0.2 J	0.34 J	0.3 J
7440-70-2	Calcium	46600	mg/kg	18300	1320	19000 J	17900 J	1910	30800 J	14000 J	2600	27100 J
7440-47-3	Chromium	17.5	mg/kg	25.2	14.9 J	18.7	24.2	15.8 J	13.8	18.2	18.5 J	20.3
7440-48-4	Cobalt	30	mg/kg	19.7	10.6 J	15.9	16.4	10 J	16.6	11.3	10.8 J	17.4
7440-50-8	Copper	26.9	mg/kg	39	14.7	32.5	39	14.4	37.4	24.1	17.6	37.2 J
7439-89-6	Iron	25700	mg/kg	38100	22900 J	30600 J	31400 J	25000 J	33800 J	21800 J	22500 J	32700 J
7439-92-1	Lead	60.8 (average 29.3)	mg/kg	18.4	76.3	15.8	19.6	69.3	11.8	12.2	58.2	16.1
7439-95-4	Magnesium	13100	mg/kg	11100	3110	6870	8330	3390	8750	5410	3640	8370
7439-96-5	Manganese	875	mg/kg	647	575	666	588	386	793	500	437	726 J
7439-97-6	Mercury	0.1	mg/kg	0.038 J	0.053	0.034 J	0.026 J	0.042 J	0.03 J	0.028 J	0.066	0.031 J
7440-02-0	Nickel	24.8	mg/kg	43.6	15 J	27.7	32.2	15.2 J	32.2	21.5	17 J	35.1
7440-09-7	Potassium	1660	mg/kg	2220 J	565 J	1520	1380	533 J	1680	1250	796	1530
7782-49-2	Selenium	2	mg/kg	ND	ND	ND	ND	0.52 J	ND	ND	0.32 J	ND
7440-22-4	Silver	0.17	mg/kg	0.22 J	0.18 J	0.2 J	0.24 J	0.15 J	0.21 J	0.15 J	ND	0.14 J
7440-23-5	Sodium	619	mg/kg	122 J	59.2 J	70.4 J	74.4 J	66.6 J	85.9 J	66.4 J	54.8 J	78.6 J
7440-28-0	Thallium	0.67	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND
7440-62-2	Vanadium	150	mg/kg	24.9	22.3	23.5	20.7	24.4	22.7	14.3	23.2	23.1 J
7440-66-6	Zinc	134	mg/kg	85.5 J	48.9	82.3 J	84.2 J	48.6	90.3 J	55.6 J	56.8	88.7

CPAH = Carcinogenic Polynuclear Aromatic Hydrocarbons
NPAH = Noncarcinogenic Polynuclear Aromatic Hydrocarbons
NC = No Criteria
ND = Not Detected
NA = Not Analyzed
J = Estimated Value
N = Estimated
SB = Site Background
R = Rejected Value
Concentration above NYSDEC Soil Criteria.
AOC2-DRM-1 is a sample of the soil cuttings from the formerly installed well in AOC 2
that was decomissioned during the RI.
AOC2-HP-09A2 was an additional sample collected for VOC analysis based on field observations.

Table 3.14a
SADVA AOC 2 Soil Results (2000)

Former Schenectady Army Depot Remedial Investigation AOC 2 Soil Boring Data Detected Compound Summary		NYSDEC Soil	SAMPLE ID:	AOC2-HP03E	AOC2-HP04A	AOC2-HP04C	AOC2-HP04D	AOC2-HP04I	AOC2-HP05A	AOC2-HP05D	AOC2-HP05F
			LAB ID:	C0G270303002	C0G210257005	C0G270303003	C0G270303004	C0G270303005	C0G210257006	C0G270304002	C0G270304004
			DEPTH:	8-10'	0-1'	4-6'	6-8'	16-18'	0-1'	6-8'	10-12'
			SOURCE:	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh
			SDG:	SADVA8	SADVA6	SADVA8	SADVA8	SADVA8	SADVA6	SADVA7	SADVA7
			MATRIX:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
			SAMPLED:	7/25/2000	7/20/2000	7/26/2000	7/26/2000	7/26/2000	7/20/2000	7/26/2000	7/26/2000
			VALIDATED:	10/20/2000	10/13/2000	10/20/2000	10/20/2000	10/20/2000	10/13/2000	10/17/2000	10/17/2000
CAS NO.	COMPOUND	Criteria	UNITS:								
	VOLATILES										
67-64-1	Acetone	407	ug/kg	64 J	ND	22 J	5.9 J	28 J	ND	54 J	51 J
71-43-2	Benzene	215	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
74-83-9	Bromomethane	NC	ug/kg	R	R	R	R	R	R	R	R
78-93-3	2-Butanone	833	ug/kg	ND	ND	2.6 J	ND	ND	ND	ND	ND
75-15-0	Carbon disulfide	9990	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
75-00-3	Chloroethane	6845	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
100-41-4	Ethylbenzene	10000	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
108-88-3	Toluene	5550	ug/kg	ND	ND	ND	ND	ND	ND	ND	1.8 J
1330-20-7	Xylenes (total)	4440	ug/kg	ND	ND	4.6 J	ND	ND	ND	ND	ND
	Total VOCs	10000	ug/kg	**64**	**ND**	**29.2**	**5.9**	**28**	**ND**	**54**	**52.8**
	SEMIVOLATILES										
59-50-7	4-Chloro-3-methylphenol	870	ug/kg	ND	ND	ND	NA	ND	ND	ND	ND
117-81-7	bis(2-Ethylhexyl) phthalate	50000	ug/kg	ND	ND	79 J	NA	ND	ND	170 J	ND
86-74-8	Carbazole	NC	ug/kg	ND	ND	ND	NA	ND	ND	ND	ND
84-74-2	Di-n-butyl phthalate	29970	ug/kg	ND	ND	ND	NA	ND	ND	ND	ND
	CPAHs										
56-55-3	Benzo(a)anthracene	224	ug/kg	ND	ND	ND	NA	ND	ND	ND	ND
50-32-8	Benzo(a)pyrene	61	ug/kg	ND	ND	ND	NA	ND	ND	ND	ND
205-99-2	Benzo(b)fluoranthene	4070	ug/kg	ND	ND	ND	NA	ND	ND	ND	ND
207-08-9	Benzo(k)fluoranthene	4070	ug/kg	ND	ND	ND	NA	ND	ND	ND	ND
218-01-9	Chrysene	1480	ug/kg	ND	ND	ND	NA	ND	ND	ND	ND
53-70-3	Dibenz(a,h)anthracene	14	ug/kg	ND	ND	ND	NA	ND	ND	ND	ND
193-39-5	Indeno(1,2,3-cd)pyrene	11840	ug/kg	ND	ND	ND	NA	ND	ND	ND	ND
	Total CPAHs		ug/kg	**ND**	**ND**	**ND**		**ND**	**ND**	**ND**	**ND**
	NPAHs										
91-57-6	2-Methylnaphthalene	50000	ug/kg	ND	ND	36 J	NA	ND	ND	ND	ND
120-12-7	Anthracene	50000	ug/kg	ND	ND	ND	NA	ND	ND	ND	ND
191-24-2	Benzo(ghi)perylene	50000	ug/kg	ND	ND	ND	NA	ND	ND	ND	ND
206-44-0	Fluoranthene	50000	ug/kg	ND	ND	ND	NA	ND	ND	ND	ND
86-73-7	Fluorene	50000	ug/kg	ND	ND	ND	NA	ND	ND	ND	ND
91-20-3	Naphthalene	48100	ug/kg	ND	ND	47 J	NA	ND	ND	ND	ND
85-01-8	Phenanthrene	50000	ug/kg	ND	ND	ND	NA	ND	ND	ND	ND
129-00-0	Pyrene	50000	ug/kg	ND	ND	ND	NA	ND	ND	ND	ND
	Total NPAHs		**ug/kg**	**ND**	**ND**	**83**	**NA**	**ND**	**ND**	**ND**	**ND**
	Total PAHs		**ug/kg**	**ND**	**ND**	**83**	**NA**	**ND**	**ND**	**ND**	**ND**
	Total SVOCs	**50000**	**ug/kg**	**ND**	**ND**	**162**	**NA**	**ND**	**ND**	**170**	**ND**

Table 3.14a
SADVA AOC 2 Soil Results (2000)

Former Schenectady Army Depot Remedial Investigation AOC 2 Soil Boring Data Detected Compound Summary			SAMPLE ID:	AOC2-HP03E	AOC2-HP04A	AOC2-HP04C	AOC2-HP04D	AOC2-HP04I	AOC2-HP05A	AOC2-HP05D	AOC2-HP05F
			LAB ID:	C0G270303002	C0G210257005	C0G270303003	C0G270303004	C0G270303005	C0G210257006	C0G270304002	C0G270304004
			DEPTH:	8-10'	0-1'	4-6'	6-8'	16-18'	0-1'	6-8'	10-12'
			SOURCE:	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh
			SDG:	SADVA8	SADVA6	SADVA8	SADVA8	SADVA8	SADVA6	SADVA7	SADVA7
			MATRIX:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
		NYSDEC	SAMPLED:	7/25/2000	7/20/2000	7/26/2000	7/26/2000	7/26/2000	7/20/2000	7/26/2000	7/26/2000
		Soil	VALIDATED:	10/20/2000	10/13/2000	10/20/2000	10/20/2000	10/20/2000	10/13/2000	10/17/2000	10/17/2000
CAS NO.	COMPOUND	Criteria	UNITS:								
	PESTICIDES										
319-84-6	alpha-BHC	111	ug/kg	ND	ND	0.23 JN	NA	ND	ND	ND	ND
319-86-8	delta-BHC	1221	ug/kg	ND	ND	ND	NA	ND	ND	ND	ND
58-89-9	gamma-BHC (Lindane)	NC	ug/kg	ND	ND	ND	NA	ND	ND	ND	ND
76-44-8	Heptachlor	444	ug/kg	ND	ND	ND	NA	ND	ND	ND	ND
309-00-2	Aldrin	41	ug/kg	ND	ND	ND	NA	ND	ND	ND	ND
1024-57-3	Heptachlor epoxide	20	ug/kg	ND	ND	ND	NA	ND	ND	ND	ND
60-57-1	Dieldrin	44	ug/kg	ND	ND	ND	NA	ND	ND	ND	ND
72-55-9	4,4'-DDE	2100	ug/kg	ND	22	ND	NA	ND	37	ND	ND
72-20-8	Endrin	339	ug/kg	ND	ND	ND	NA	ND	ND	ND	ND
72-54-8	4,4'-DDD	2900	ug/kg	ND	2.8 JN	ND	NA	ND	0.82 JN	ND	ND
50-29-3	4,4'-DDT	2100	ug/kg	ND	33	ND	NA	ND	24	ND	ND
72-43-5	Methoxychlor	10000	ug/kg	ND	ND	ND	NA	ND	ND	ND	ND
5103-71-9	alpha-Chlordane	540	ug/kg	ND	ND	ND	NA	ND	ND	ND	ND
5103-74-2	gamma-Chlordane	540	ug/kg	ND	ND	ND	NA	ND	ND	ND	ND
	Total Pesticides	**10000**	**ug/kg**	**ND**	**57.8**	**0.23**	**NA**	**ND**	**61.82**	**ND**	**ND**
	PCBs										
11141-16-5	None Detected	1000/10000	ug/kg	ND	ND	ND	NA	ND	ND	ND	ND
	METALS										
7429-90-5	Aluminum	12800	mg/kg	12200	13900	12700	NA	11500	10900	13600	13900
7440-36-0	Antimony	0.59	mg/kg	0.38 J	0.38 J	0.21 J	NA	ND	0.37 J	0.19 J	ND
7440-38-2	Arsenic	16.4	mg/kg	8.7	7.3	7.7	NA	7.3	6.6	9.9	8.8
7440-39-3	Barium	300	mg/kg	53.3	68	51.8	NA	49.5	56.7	59	65.6
7440-41-7	Beryllium	0.67	mg/kg	0.67	0.76	0.66	NA	0.63	0.59 J	0.69	0.69
7440-43-9	Cadmium	1	mg/kg	0.29 J	0.46 J	0.26 J	NA	0.24 J	0.33 J	0.21 J	0.24 J
7440-70-2	Calcium	46600	mg/kg	19800 J	3890	29000 J	NA	13600 J	2060	20300 J	18500 J
7440-47-3	Chromium	17.5	mg/kg	19.6	20.5 J	19.9	NA	18.2	15.1 J	19.3	18.8
7440-48-4	Cobalt	30	mg/kg	16	17 J	15.9	NA	16.4	9.7 J	17.3	20.3
7440-50-8	Copper	26.9	mg/kg	39.6 J	31	34.5 J	NA	34.2 J	15.4	38.8	37.8
7439-89-6	Iron	25700	mg/kg	30700 J	29200 J	30400 J	NA	29200 J	22000 J	32600 J	32400 J
7439-92-1	Lead	60.8 (average 29.3)	mg/kg	15.5	35.1	16.5	NA	14.8	22.8	14.3	14.5
7439-95-4	Magnesium	13100	mg/kg	8120	5240	7540	NA	7450	3220	8870	8910
7439-96-5	Manganese	875	mg/kg	588 J	640	770 J	NA	784 J	465	642	784
7439-97-6	Mercury	0.1	mg/kg	0.034 J	0.062	0.029 J	NA	0.022 J	0.056	0.034 J	0.025 J
7440-02-0	Nickel	24.8	mg/kg	31.1	30.4 J	33	NA	31.3	15.5 J	32.2	37.7
7440-09-7	Potassium	1660	mg/kg	1540	1230	1600	NA	1540	581 J	1650	1850
7782-49-2	Selenium	2	mg/kg	ND	ND	ND	NA	ND	ND	ND	ND
7440-22-4	Silver	0.17	mg/kg	0.2 J	0.16 J	0.16 J	NA	0.24 J	0.14 J	0.26 J	0.2 J
7440-23-5	Sodium	619	mg/kg	82.7 J	57.6 J	79.9 J	NA	85.3 J	52.9 J	88.5 J	93.9 J
7440-28-0	Thallium	0.67	mg/kg	ND	ND	ND	NA	ND	ND	ND	ND
7440-62-2	Vanadium	150	mg/kg	21.4 J	24.6	22 J	NA	20.2 J	20.9	22.1	23
7440-66-6	Zinc	134	mg/kg	87.8	79.8	80.8	NA	78.9	49.9	89.2 J	81.4 J

CPAH = Carcinogenic Polynuclear Aromatic Hydrocarbons
NPAH = Noncarcinogenic Polynuclear Aromatic Hydrocarbons
NC = No Criteria
ND = Not Detected
NA = Not Analyzed
J = Estimated Value
N = Estimated
SB = Site Background
R = Rejected Value
Concentration above NYSDEC Soil Criteria.
AOC2-DRM-1 is a sample of the soil cuttings from the formerly installed well in AOC 2
that was decomissioned during the RI.
AOC2-HP-09A2 was an additional sample collected for VOC analysis based on field obser

Table 3.14a
SADVA AOC 2 Soil Results (2000)

Former Schenectady Army Depot
Remedial Investigation
AOC 2 Soil Boring Data
Detected Compound Summary

CAS NO.	COMPOUND	NYSDEC Soil Criteria	SAMPLE ID:	AOC2-HP06A	AOC2-HP06D	AOC2-HP06F	AOC2-HP07A	AOC2-HP07D	AOC2-HP07I	AOC2-HP08A	AOC2-HP08D
			LAB ID:	C0G210257007	C0G260183008	C0G260183009	C0G210257008	C0G260183006	C0G260183007	C0G210257009	C0G270303006
			DEPTH:	0-1'	6-8'	10-12'	0-1'	6-8'	16-18'	0-1'	6-8'
			SOURCE:	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh
			SDG:	SADVA6	SADVA7	SADVA7	SADVA6	SADVA7	SADVA7	SADVA6	SADVA8
			MATRIX:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
			SAMPLED:	7/20/2000	7/25/2000	7/25/2000	7/20/2000	7/25/2000	7/25/2000	7/20/2000	7/26/2000
			VALIDATED:	10/13/2000	10/17/2000	10/17/2000	10/13/2000	10/17/2000	10/17/2000	10/13/2000	10/20/2000
			UNITS:								
	VOLATILES										
67-64-1	Acetone	407	ug/kg	ND	ND	ND	ND	ND	ND	ND	2.6 J
71-43-2	Benzene	215	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
74-83-9	Bromomethane	NC	ug/kg	R	R	R	R	R	R	R	R
78-93-3	2-Butanone	833	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
75-15-0	Carbon disulfide	9990	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
75-00-3	Chloroethane	6845	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
100-41-4	Ethylbenzene	10000	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
108-88-3	Toluene	5550	ug/kg	ND	ND	ND	ND	2.2 J	ND	ND	ND
1330-20-7	Xylenes (total)	4440	ug/kg	ND	ND	ND	ND	8.6	ND	ND	ND
	Total VOCs	10000	ug/kg	**ND**	**ND**	**ND**	**ND**	**10.8**	**ND**	**ND**	**2.6**
	SEMIVOLATILES										
59-50-7	4-Chloro-3-methylphenol	870	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
117-81-7	bis(2-Ethylhexyl) phthalate	50000	ug/kg	ND	ND	ND	ND	940	ND	ND	ND
86-74-8	Carbazole	NC	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
84-74-2	Di-n-butyl phthalate	29970	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
	CPAHs										
56-55-3	Benzo(a)anthracene	224	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
50-32-8	Benzo(a)pyrene	61	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
205-99-2	Benzo(b)fluoranthene	4070	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
207-08-9	Benzo(k)fluoranthene	4070	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
218-01-9	Chrysene	1480	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
53-70-3	Dibenz(a,h)anthracene	14	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
193-39-5	Indeno(1,2,3-cd)pyrene	11840	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
	Total CPAHs		ug/kg	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**
	NPAHs										
91-57-6	2-Methylnaphthalene	50000	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
120-12-7	Anthracene	50000	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
191-24-2	Benzo(ghi)perylene	50000	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
206-44-0	Fluoranthene	50000	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
86-73-7	Fluorene	50000	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
91-20-3	Naphthalene	48100	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
85-01-8	Phenanthrene	50000	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
129-00-0	Pyrene	50000	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
	Total NPAHs		**ug/kg**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**
	Total PAHs		**ug/kg**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**
	Total SVOCs	**50000**	**ug/kg**	**ND**	**ND**	**ND**	**ND**	**940**	**ND**	**ND**	**ND**

Table 3.14a
SADVA AOC 2 Soil Results (2000)

Former Schenectady Army Depot Remedial Investigation AOC 2 Soil Boring Data Detected Compound Summary			SAMPLE ID:	AOC2-HP06A	AOC2-HP06D	AOC2-HP06F	AOC2-HP07A	AOC2-HP07D	AOC2-HP07I	AOC2-HP08A	AOC2-HP08D
			LAB ID:	C0G210257007	C0G260183008	C0G260183009	C0G210257008	C0G260183006	C0G260183007	C0G210257009	C0G270303006
			DEPTH:	0-1'	6-8'	10-12'	0-1'	6-8'	16-18'	0-1'	6-8'
			SOURCE:	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh
			SDG:	SADVA6	SADVA7	SADVA7	SADVA6	SADVA7	SADVA7	SADVA6	SADVA8
			MATRIX:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
		NYSDEC	SAMPLED:	7/20/2000	7/25/2000	7/25/2000	7/20/2000	7/25/2000	7/25/2000	7/20/2000	7/26/2000
		Soil	VALIDATED:	10/13/2000	10/17/2000	10/17/2000	10/13/2000	10/17/2000	10/17/2000	10/13/2000	10/20/2000
CAS NO.	COMPOUND	Criteria	UNITS:								
	PESTICIDES										
319-84-6	alpha-BHC	111	ug/kg	ND	ND	ND	0.15 JN	ND	ND	ND	ND
319-86-8	delta-BHC	1221	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
58-89-9	gamma-BHC (Lindane)	NC	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
76-44-8	Heptachlor	444	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
309-00-2	Aldrin	41	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
1024-57-3	Heptachlor epoxide	20	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
60-57-1	Dieldrin	44	ug/kg	ND	ND	ND	0.37 J	ND	ND	ND	ND
72-55-9	4,4'-DDE	2100	ug/kg	9	ND	ND	3.8 J	0.82 JN	ND	36	0.45 J
72-20-8	Endrin	339	ug/kg	ND	0.27 J	ND	ND	ND	ND	ND	ND
72-54-8	4,4'-DDD	2900	ug/kg	0.57 JN	ND	ND	ND	0.59 J	ND	2.2 JN	ND
50-29-3	4,4'-DDT	2100	ug/kg	13	ND	ND	7.8	0.3 J	ND	41	ND
72-43-5	Methoxychlor	10000	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
5103-71-9	alpha-Chlordane	540	ug/kg	ND	ND	ND	0.61 JN	ND	ND	ND	ND
5103-74-2	gamma-Chlordane	540	ug/kg	ND	ND	ND	ND	ND	ND	0.37 JN	ND
	Total Pesticides	**10000**	**ug/kg**	**22.57**	**0.27**	**ND**	**12.73**	**1.71**	**ND**	**79.57**	**0.45**
	PCBs										
11141-16-5	None Detected	1000/10000	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
	METALS										
7429-90-5	Aluminum	12800	mg/kg	15300	13800	13400	12000	15600	14900	16000	11400
7440-36-0	Antimony	0.59	mg/kg	0.31 J	0.18 J	0.21 J	0.34 J	ND	ND	0.37 J	0.4 J
7440-38-2	Arsenic	16.4	mg/kg	7.2	9	9.5	7.2	7.9	7.9	7.4	9.1
7440-39-3	Barium	300	mg/kg	66.8	70.4	66.5	52.4	70.9	63.7	62.4	48.1
7440-41-7	Beryllium	0.67	mg/kg	0.77	0.71	0.69	0.65 J	0.79	0.73	0.72	0.64
7440-43-9	Cadmium	1	mg/kg	0.39 J	0.28 J	0.24 J	0.42 J	0.25 J	0.19 J	0.44 J	0.22 J
7440-70-2	Calcium	46600	mg/kg	2740	26500 J	19300 J	2960	22200 J	17000 J	3310	18700 J
7440-47-3	Chromium	17.5	mg/kg	19.4 J	16.1	20.9	18.2 J	19.2	19.7	20.9 J	18.2
7440-48-4	Cobalt	30	mg/kg	13.8 J	18	17.6	12.9 J	15.6	20.3	13.3 J	14.9
7440-50-8	Copper	26.9	mg/kg	26.3	41.7	39.2	26.2	36	34.5	28	37.6 J
7439-89-6	Iron	25700	mg/kg	30000 J	32600 J	33400 J	27600 J	32000 J	34200 J	29500 J	29200 J
7439-92-1	Lead	60.8 (average 29.3)	mg/kg	21.5	12.5	16.5	23.6	14.1	13.2	20.7	17.3
7439-95-4	Magnesium	13100	mg/kg	5240	9920	9070	4710	7550	9620	5160	7490
7439-96-5	Manganese	875	mg/kg	524	829	612	489	592	835	475	558 J
7439-97-6	Mercury	0.1	mg/kg	0.046	0.028 J	0.035 J	0.04 J	0.023 J	0.04	0.043 J	0.041 J
7440-02-0	Nickel	24.8	mg/kg	23.5 J	37.5	34.4	24 J	32.6	37.6	24.3 J	29.8
7440-09-7	Potassium	1660	mg/kg	1180	1870	1790	1080	1890	2170	1410	1290
7782-49-2	Selenium	2	mg/kg	ND	ND	ND	0.52 J	ND	ND	0.3 J	ND
7440-22-4	Silver	0.17	mg/kg	ND	0.24 J	0.27 J	0.14 J	0.16 J	0.25 J	0.2 J	0.22 J
7440-23-5	Sodium	619	mg/kg	71.8 J	101 J	98.3 J	45.3 J	84.9 J	115 J	63.3 J	69.7 J
7440-28-0	Thallium	0.67	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
7440-62-2	Vanadium	150	mg/kg	27.9	22.7	22.7	22.7	25.3	24.4	27.5	20 J
7440-66-6	Zinc	134	mg/kg	77	92.4 J	80.7 J	69.8	90.3 J	78.4 J	75	85.4

CPAH = Carcinogenic Polynuclear Aromatic Hydrocarbons
NPAH = Noncarcinogenic Polynuclear Aromatic Hydrocarbons
NC = No Criteria
ND = Not Detected
NA = Not Analyzed
J = Estimated Value
N = Estimated
SB = Site Background
R = Rejected Value
Concentration above NYSDEC Soil Criteria.
AOC2-DRM-1 is a sample of the soil cuttings from the formerly installed well in AOC 2
that was decomissioned during the RI.
AOC2-HP-09A2 was an additional sample collected for VOC analysis based on field obser\

Table 3.14a
SADVA AOC 2 Soil Results (2000)

Former Schenectady Army Depot Remedial Investigation AOC 2 Soil Boring Data Detected Compound Summary		NYSDEC Soil Criteria								Dup of HP05D		
			SAMPLE ID:	AOC2-HP08F	AOC2-HP09A	AOC2-HP09A2	AOC2-HP09C	AOC2-HP09I	AOC2-HP19D	AOC2-SB01A	AOC2-SB01B
			LAB ID:	C0G270303007	C0G210257010	C0G280267001	C0G280267002	C0G280267003	C0G270304003	C0G260183004	C0G310113001
			DEPTH:	10-12'	0-1'	1-2'	4-6'	16-18'		0-1'	2-4'
			SOURCE:	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh
			SDG:	SADVA8	SADVA6	SADVA8	SADVA8	SADVA8	SADVA7	SADVA7	SADVA8
			MATRIX:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
			SAMPLED:	7/26/2000	7/20/2000	7/26/2000	7/26/2000	7/26/2000	7/26/2000	7/25/2000	7/28/2000
			VALIDATED:	10/20/2000	10/13/2000	10/20/2000	10/20/2000	10/20/2000	10/17/2000	10/17/2000	10/20/2000
CAS NO.	COMPOUND		UNITS:								
	VOLATILES										
67-64-1	Acetone	407	ug/kg	4.8 J	ND	ND	ND	290 J	73 J	ND	21 J
71-43-2	Benzene	215	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
74-83-9	Bromomethane	NC	ug/kg	R	R	R	R	R	R	R	R
78-93-3	2-Butanone	833	ug/kg	ND	ND	R	R	R	ND	ND	3.5 J
75-15-0	Carbon disulfide	9990	ug/kg	ND	ND	ND	ND	ND	ND	ND	1.7 J
75-00-3	Chloroethane	6845	ug/kg	ND	ND	R	R	R	ND	ND	ND
100-41-4	Ethylbenzene	10000	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
108-88-3	Toluene	5550	ug/kg	ND	ND	ND	ND	4.2 J	ND	3.2 J	ND
1330-20-7	Xylenes (total)	4440	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
	Total VOCs	10000	ug/kg	**4.8**	**ND**	**ND**	**ND**	**294.2**	**73**	**3.2**	**26.2**
	SEMIVOLATILES										
59-50-7	4-Chloro-3-methylphenol	870	ug/kg	ND	ND	NA	ND	ND	ND	ND	ND
117-81-7	bis(2-Ethylhexyl) phthalate	50000	ug/kg	ND	ND	NA	ND	ND	ND	ND	100 J
86-74-8	Carbazole	NC	ug/kg	ND	ND	NA	ND	ND	ND	ND	ND
84-74-2	Di-n-butyl phthalate	29970	ug/kg	ND	ND	NA	ND	ND	ND	ND	ND
	CPAHs										
56-55-3	Benzo(a)anthracene	224	ug/kg	ND	ND	NA	ND	ND	ND	ND	ND
50-32-8	Benzo(a)pyrene	61	ug/kg	ND	ND	NA	ND	ND	ND	ND	ND
205-99-2	Benzo(b)fluoranthene	4070	ug/kg	ND	ND	NA	ND	ND	ND	ND	ND
207-08-9	Benzo(k)fluoranthene	4070	ug/kg	ND	ND	NA	ND	ND	ND	ND	ND
218-01-9	Chrysene	1480	ug/kg	ND	ND	NA	ND	ND	ND	ND	ND
53-70-3	Dibenz(a,h)anthracene	14	ug/kg	ND	ND	NA	ND	ND	ND	ND	ND
193-39-5	Indeno(1,2,3-cd)pyrene	11840	ug/kg	ND	ND	NA	ND	ND	ND	ND	ND
	Total CPAHs		ug/kg	**ND**	**ND**	**NA**	**ND**	**ND**	**ND**	**ND**	**ND**
	NPAHs										
91-57-6	2-Methylnaphthalene	50000	ug/kg	ND	ND	NA	ND	ND	ND	ND	ND
120-12-7	Anthracene	50000	ug/kg	ND	ND	NA	ND	ND	ND	ND	ND
191-24-2	Benzo(ghi)perylene	50000	ug/kg	ND	ND	NA	ND	ND	ND	ND	ND
206-44-0	Fluoranthene	50000	ug/kg	ND	ND	NA	ND	ND	ND	ND	ND
86-73-7	Fluorene	50000	ug/kg	ND	ND	NA	ND	ND	ND	ND	ND
91-20-3	Naphthalene	48100	ug/kg	ND	ND	NA	ND	ND	ND	ND	55 J
85-01-8	Phenanthrene	50000	ug/kg	ND	ND	NA	ND	ND	ND	ND	ND
129-00-0	Pyrene	50000	ug/kg	ND	ND	NA	ND	ND	ND	ND	ND
	Total NPAHs		**ug/kg**	**ND**	**ND**	**NA**	**ND**	**ND**	**ND**	**ND**	**55**
	Total PAHs		**ug/kg**	**ND**	**ND**	**NA**	**ND**	**ND**	**ND**	**ND**	**55**
	Total SVOCs	**50000**	**ug/kg**	**ND**	**ND**	**NA**	**ND**	**ND**	**ND**	**ND**	**155**

Table 3.14a
SADVA AOC 2 Soil Results (2000)

Former Schenectady Army Depot
Remedial Investigation
AOC 2 Soil Boring Data
Detected Compound Summary

CAS NO.	COMPOUND	NYSDEC Soil Criteria	SAMPLE ID:	AOC2-HP08F	AOC2-HP09A	AOC2-HP09A2	AOC2-HP09C	AOC2-HP09I	AOC2-HP19D (Dup of HP05D)	AOC2-SB01A	AOC2-SB01B
			LAB ID:	C0G270303007	C0G210257010	C0G280267001	C0G280267002	C0G280267003	C0G270304003	C0G260183004	C0G310113001
			DEPTH:	10-12'	0-1'	1-2'	4-6'	16-18'		0-1'	2-4'
			SOURCE:	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh
			SDG:	SADVA8	SADVA6	SADVA8	SADVA8	SADVA8	SADVA7	SADVA7	SADVA8
			MATRIX:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
			SAMPLED:	7/26/2000	7/20/2000	7/26/2000	7/26/2000	7/26/2000	7/26/2000	7/25/2000	7/28/2000
			VALIDATED:	10/20/2000	10/13/2000	10/20/2000	10/20/2000	10/20/2000	10/17/2000	10/17/2000	10/20/2000
			UNITS:								
	PESTICIDES										
319-84-6	alpha-BHC	111	ug/kg	ND	ND	NA	ND	ND	ND	ND	ND
319-86-8	delta-BHC	1221	ug/kg	ND	ND	NA	ND	ND	ND	0.19 JN	ND
58-89-9	gamma-BHC (Lindane)	NC	ug/kg	ND	ND	NA	ND	ND	ND	ND	ND
76-44-8	Heptachlor	444	ug/kg	ND	ND	NA	ND	ND	ND	ND	ND
309-00-2	Aldrin	41	ug/kg	ND	ND	NA	ND	ND	ND	ND	ND
1024-57-3	Heptachlor epoxide	20	ug/kg	ND	ND	NA	ND	ND	ND	ND	ND
60-57-1	Dieldrin	44	ug/kg	ND	ND	NA	ND	ND	ND	ND	1.7 J
72-55-9	4,4'-DDE	2100	ug/kg	1.8 J	140	NA	ND	0.14 JN	ND	3.3 J	2 JN
72-20-8	Endrin	339	ug/kg	ND	ND	NA	ND	ND	ND	0.4 J	ND
72-54-8	4,4'-DDD	2900	ug/kg	1.7 J	4.9 J	NA	ND	ND	ND	ND	27
50-29-3	4,4'-DDT	2100	ug/kg	ND	51	NA	ND	ND	ND	6.3	0.59 JN
72-43-5	Methoxychlor	10000	ug/kg	ND	ND	NA	ND	ND	ND	2.4 J	ND
5103-71-9	alpha-Chlordane	540	ug/kg	ND	ND	NA	ND	ND	ND	ND	ND
5103-74-2	gamma-Chlordane	540	ug/kg	ND	ND	NA	ND	ND	ND	ND	ND
	Total Pesticides	**10000**	**ug/kg**	**3.5**	**195.9**	**NA**	**ND**	**0.14**	**ND**	**12.59**	**31.29**
	PCBs										
11141-16-5	None Detected	1000/10000	ug/kg	ND	ND	NA	ND	ND	ND	ND	ND
	METALS										
7429-90-5	Aluminum	12800	mg/kg	11400	13000	NA	12300	12200	13400	11100	9050
7440-36-0	Antimony	0.59	mg/kg	0.3 J	0.39 J	NA	0.23 J	0.31 J	ND	ND	0.85 J
7440-38-2	Arsenic	16.4	mg/kg	7.7	6.3	NA	8.3	7.3	9	6.3	6.4
7440-39-3	Barium	300	mg/kg	44.2	60.2	NA	47.4	60.1	54.7	45.5	52.5
7440-41-7	Beryllium	0.67	mg/kg	0.6	0.63 J	NA	0.63	0.66	0.67	0.56	0.51 J
7440-43-9	Cadmium	1	mg/kg	0.25 J	0.44 J	NA	0.32 J	0.24 J	0.28 J	0.21 J	0.19 J
7440-70-2	Calcium	46600	mg/kg	20100 J	3870	NA	32000 J	15000 J	22900 J	12200 J	15600 J
7440-47-3	Chromium	17.5	mg/kg	18.2	17.1 J	NA	19.4	18.3	19.6	18.2	16.4
7440-48-4	Cobalt	30	mg/kg	14.6	11.1 J	NA	14.9	16.2	16.6	14.9	12.1
7440-50-8	Copper	26.9	mg/kg	35 J	19.9	NA	36.2 J	32.3 J	40.3	27.1	25.8 J
7439-89-6	Iron	25700	mg/kg	28400 J	23500 J	NA	30600 J	29000 J	32600 J	26400 J	23800 J
7439-92-1	Lead	60.8 (average 29.3)	mg/kg	13.9	23	NA	15.1	13.7	14.8	19.3	18.1
7439-95-4	Magnesium	13100	mg/kg	7740	3920	NA	9080	7620	8790	6460	6220
7439-96-5	Manganese	875	mg/kg	552 J	539	NA	653 J	667 J	587	590	518 J
7439-97-6	Mercury	0.1	mg/kg	0.028 J	0.054	NA	0.034 J	0.025 J	0.031 J	0.016 J	R
7440-02-0	Nickel	24.8	mg/kg	28.8	18.4 J	NA	33.3	31.4	32.9	26	23.7
7440-09-7	Potassium	1660	mg/kg	1320	998	NA	1200	1900	1650	1260	625
7782-49-2	Selenium	2	mg/kg	ND	ND	NA	ND	ND	ND	ND	0.27 J
7440-22-4	Silver	0.17	mg/kg	0.19 J	0.2 J	NA	0.21 J	0.14 J	0.18 J	0.37 J	0.15 J
7440-23-5	Sodium	619	mg/kg	77.5 J	68.1 J	NA	75 J	92.8 J	75.6 J	330 J	5700
7440-28-0	Thallium	0.67	mg/kg	ND	ND	NA	ND	ND	ND	ND	ND
7440-62-2	Vanadium	150	mg/kg	19.9 J	24.2	NA	21.5 J	21.9 J	22	20.6	16.7 J
7440-66-6	Zinc	134	mg/kg	78.3	80.2	NA	82.9	81.5	92.3 J	67.4 J	76.4

CPAH = Carcinogenic Polynuclear Aromatic Hydrocarbons
NPAH = Noncarcinogenic Polynuclear Aromatic Hydrocarbons
NC = No Criteria
ND = Not Detected
NA = Not Analyzed
J = Estimated Value
N = Estimated
SB = Site Background
R = Rejected Value
[shaded box] Concentration above NYSDEC Soil Criteria.
AOC2-DRM-1 is a sample of the soil cuttings from the formerly installed well in AOC 2 that was decomissioned during the RI.
AOC2-HP-09A2 was an additional sample collected for VOC analysis based on field obser

Table 3.14a
SADVA AOC 2 Soil Results (2000)

Former Schenectady Army Depot Remedial Investigation AOC 2 Soil Boring Data Detected Compound Summary								Dup of SB01A			
			SAMPLE ID:	AOC2-SB01D	AOC2-SB02A	AOC2-SB02B	AOC2-SB02D	AOC2-SB03A	AOC2-TP03B	AOC2-TP03C	AOC2-TP05B
			LAB ID:	C0G310113002	C0G260183005	C0G310113003	C0G310118001	C0G270304001	C0H150136001	C0H150136002	C0H150136003
			DEPTH:	6-8'	0-1'	2-4'	6-8'	0-1	2'	4.5'	3'
			SOURCE:	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh
			SDG:	SADVA8	SADVA7	SADVA8	SADVA10	SADVA7	SADVA11	SADVA11	SADVA11
			MATRIX:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
		NYSDEC	SAMPLED:	7/28/2000	7/25/2000	7/28/2000	7/28/2000	7/26/2000	8/14/2000	8/14/2000	8/14/2000
		Soil	VALIDATED:	10/20/2000	10/17/2000	10/20/2000	10/25/2000	10/17/2000	11/5/2000	11/5/2000	11/5/2000
CAS NO.	COMPOUND	Criteria	UNITS:								
	VOLATILES										
67-64-1	Acetone	407	ug/kg	2.6 J	ND	16 J	ND	2.2 J	ND	ND	ND
71-43-2	Benzene	215	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
74-83-9	Bromomethane	NC	ug/kg	R	R	R	R	R	R	R	R
78-93-3	2-Butanone	833	ug/kg	ND	ND	ND	R	ND	ND	ND	ND
75-15-0	Carbon disulfide	9990	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
75-00-3	Chloroethane	6845	ug/kg	ND	ND	ND	R	ND	ND	ND	ND
100-41-4	Ethylbenzene	10000	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
108-88-3	Toluene	5550	ug/kg	ND	ND	ND	1.8 J	2.3 J	ND	ND	ND
1330-20-7	Xylenes (total)	4440	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
	Total VOCs	10000	ug/kg	**2.6**	**ND**	**16**	**1.8**	**4.5**	**ND**	**ND**	**ND**
	SEMIVOLATILES										
59-50-7	4-Chloro-3-methylphenol	870	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
117-81-7	bis(2-Ethylhexyl) phthalate	50000	ug/kg	1100	ND	180 J	67 J	ND	14 J	7.3 J	15 J
86-74-8	Carbazole	NC	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
84-74-2	Di-n-butyl phthalate	29970	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
	CPAHs										
56-55-3	Benzo(a)anthracene	224	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
50-32-8	Benzo(a)pyrene	61	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
205-99-2	Benzo(b)fluoranthene	4070	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
207-08-9	Benzo(k)fluoranthene	4070	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
218-01-9	Chrysene	1480	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
53-70-3	Dibenz(a,h)anthracene	14	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
193-39-5	Indeno(1,2,3-cd)pyrene	11840	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
	Total CPAHs		ug/kg	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**
	NPAHs										
91-57-6	2-Methylnaphthalene	50000	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
120-12-7	Anthracene	50000	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
191-24-2	Benzo(ghi)perylene	50000	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
206-44-0	Fluoranthene	50000	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
86-73-7	Fluorene	50000	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
91-20-3	Naphthalene	48100	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
85-01-8	Phenanthrene	50000	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
129-00-0	Pyrene	50000	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
	Total NPAHs		**ug/kg**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**
	Total PAHs		**ug/kg**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**
	Total SVOCs	**50000**	**ug/kg**	**1100**	**ND**	**180**	**67**	**ND**	**14**	**7.3**	**15**

Table 3.14a
SADVA AOC 2 Soil Results (2000)

CAS NO.	COMPOUND	NYSDEC Soil Criteria	UNITS:	AOC2-SB01D	AOC2-SB02A	AOC2-SB02B	AOC2-SB02D	AOC2-SB03A (Dup of SB01A)	AOC2-TP03B	AOC2-TP03C	AOC2-TP05B
Former Schenectady Army Depot			SAMPLE ID:	AOC2-SB01D	AOC2-SB02A	AOC2-SB02B	AOC2-SB02D	AOC2-SB03A	AOC2-TP03B	AOC2-TP03C	AOC2-TP05B
Remedial Investigation			LAB ID:	C0G310113002	C0G260183005	C0G310113003	C0G310118001	C0G270304001	C0H150136001	C0H150136002	C0H150136003
AOC 2 Soil Boring Data			DEPTH:	6-8'	0-1'	2-4'	6-8'	0-1	2'	4.5'	3'
Detected Compound Summary			SOURCE:	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh
			SDG:	SADVA8	SADVA7	SADVA8	SADVA10	SADVA7	SADVA11	SADVA11	SADVA11
			MATRIX:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
			SAMPLED:	7/28/2000	7/25/2000	7/28/2000	7/28/2000	7/26/2000	8/14/2000	8/14/2000	8/14/2000
			VALIDATED:	10/20/2000	10/17/2000	10/20/2000	10/25/2000	10/17/2000	11/5/2000	11/5/2000	11/5/2000
	PESTICIDES										
319-84-6	alpha-BHC	111	ug/kg	ND	ND	ND	ND	ND	ND	ND	0.19 J
319-86-8	delta-BHC	1221	ug/kg	ND	0.17 JN	ND	ND	ND	ND	ND	1.7 J
58-89-9	gamma-BHC (Lindane)	NC	ug/kg	ND	ND	ND	ND	0.19 J	ND	ND	ND
76-44-8	Heptachlor	444	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
309-00-2	Aldrin	41	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
1024-57-3	Heptachlor epoxide	20	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
60-57-1	Dieldrin	44	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
72-55-9	4,4'-DDE	2100	ug/kg	ND	0.15 JN	ND	ND	10	22	ND	3.7
72-20-8	Endrin	339	ug/kg	ND	0.66 JN	ND	ND	ND	ND	ND	ND
72-54-8	4,4'-DDD	2900	ug/kg	ND	0.34 JN	ND	ND	1.7 JN	45	ND	26
50-29-3	4,4'-DDT	2100	ug/kg	ND	ND	ND	ND	8.6	90	ND	1.1 JN
72-43-5	Methoxychlor	10000	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
5103-71-9	alpha-Chlordane	540	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
5103-74-2	gamma-Chlordane	540	ug/kg	ND	ND	ND	ND	0.19 JN	ND	ND	ND
	Total Pesticides	**10000**	**ug/kg**	**ND**	**1.32**	**ND**	**ND**	**20.68**	**157**	**ND**	**32.69**
	PCBs										
11141-16-5	None Detected	1000/10000	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
	METALS										
7429-90-5	Aluminum	12800	mg/kg	12800	14100	14300	14100	11300	13800	11800	12300
7440-36-0	Antimony	0.59	mg/kg	0.28 J	ND	0.33 J	0.4 J	0.16 J	ND	0.25 J	ND
7440-38-2	Arsenic	16.4	mg/kg	8.3	5.7	7.5	8.7	7.6	10	8.6	3.9
7440-39-3	Barium	300	mg/kg	57.8	53.8	76.7	60.3	47.9	79.6	48.9	57.3
7440-41-7	Beryllium	0.67	mg/kg	0.69	0.63	0.8	0.7	0.6	0.75	0.62	0.55 J
7440-43-9	Cadmium	1	mg/kg	0.31 J	0.21 J	0.17 J	0.32 J	0.23 J	ND	ND	ND
7440-70-2	Calcium	46600	mg/kg	25700 J	2170 J	2340 J	20000	12700 J	2910	32400	2610
7440-47-3	Chromium	17.5	mg/kg	19.9	17.2	21.7	20.1 J	17	20.1	17.9	15.5
7440-48-4	Cobalt	30	mg/kg	15.5	13.2	16.4	18.5	15.4	18.7	16.6	10.7
7440-50-8	Copper	26.9	mg/kg	36.5 J	25.5	36.9 J	41.6	29	38.5 J	36.5 J	20.2 J
7439-89-6	Iron	25700	mg/kg	30800 J	28900 J	32600 J	34600	28200 J	36300	30400	24900
7439-92-1	Lead	60.8 (average 29.3)	mg/kg	14.6	20.7	12.8	17.5 J	22.2	17.8	14.5	13.4
7439-95-4	Magnesium	13100	mg/kg	8750	5150	6560	9050	6330	5660	8120	4260
7439-96-5	Manganese	875	mg/kg	560 J	468	399 J	627	664	1150	672	239
7439-97-6	Mercury	0.1	mg/kg	R	ND	0.017 J	0.026 J	ND	ND	0.027 J	ND
7440-02-0	Nickel	24.8	mg/kg	32.1	25.3	34.4	36.6 J	24.3	28.1	33.2	18.1
7440-09-7	Potassium	1660	mg/kg	1810	852	1190	1670 J	1250	811	1120	582 J
7782-49-2	Selenium	2	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
7440-22-4	Silver	0.17	mg/kg	0.15 J	ND	0.27 J	0.12 J	0.33 J	0.16 J	0.14 J	ND
7440-23-5	Sodium	619	mg/kg	140 J	480 J	657	112 J	191 J	298 J	81.4 J	1240
7440-28-0	Thallium	0.67	mg/kg	ND	ND	ND	ND	ND	ND	ND	0.72 J
7440-62-2	Vanadium	150	mg/kg	22.8 J	23.8	24.2 J	23.1 J	20.9	24.5 J	20.1 J	19.7 J
7440-66-6	Zinc	134	mg/kg	85.6	67.5 J	83.5	91.5	75.1 J	87.4	85	69.5

CPAH = Carcinogenic Polynuclear Aromatic Hydrocarbons
NPAH = Noncarcinogenic Polynuclear Aromatic Hydrocarbons
NC = No Criteria
ND = Not Detected
NA = Not Analyzed
J = Estimated Value
N = Estimated
SB = Site Background
R = Rejected Value
[shaded] Concentration above NYSDEC Soil Criteria.
AOC2-DRM-1 is a sample of the soil cuttings from the formerly installed well in AOC 2
that was decomissioned during the RI.
AOC2-HP-09A2 was an additional sample collected for VOC analysis based on field obser\

Table 3.14a
SADVA AOC 2 Soil Results (2000)

Former Schenectady Army Depot Remedial Investigation AOC 2 Soil Boring Data Detected Compound Summary		NYSDEC Soil	SAMPLE ID:	AOC2-TP05C	AOC2-TP07B	AOC2-TP07C	AOC2-TP17C (Dup of AOC2-TP07C)	AOC2-TP11B	AOC2-TP11C	AOC2-TP14B	AOC2-TP14C
			LAB ID:	C0H150136004	C0H150136005	C0H150136006	C0H150136007	C0H150136008	C0H150136009	C0H150136010	C0H150136011
			DEPTH:	5'	2.5'	4.5'	4.5'	2.5'	4.5'	2.5'	4.5'
			SOURCE:	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh
			SDG:	SADVA11	SADVA11	SADVA11	SADVA11	SADVA11	SADVA11	SADVA11	SADVA11
			MATRIX:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
			SAMPLED:	8/14/2000	8/14/2000	8/14/2000	8/14/2000	8/14/2000	8/14/2000	8/14/2000	8/14/2000
			VALIDATED:	11/5/2000	11/5/2000	11/5/2000	11/5/2000	11/5/2000	11/5/2000	11/5/2000	11/5/2000
CAS NO.	COMPOUND	Criteria	UNITS:								
	VOLATILES										
67-64-1	Acetone	407	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
71-43-2	Benzene	215	ug/kg	ND	ND	ND	ND	ND	ND	2.6 J	ND
74-83-9	Bromomethane	NC	ug/kg	R	R	R	R	R	R	R	R
78-93-3	2-Butanone	833	ug/kg	ND	ND	ND	ND	ND	ND	ND	1.6 J
75-15-0	Carbon disulfide	9990	ug/kg	ND	ND	ND	ND	ND	ND	ND	1.2 J
75-00-3	Chloroethane	6845	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
100-41-4	Ethylbenzene	10000	ug/kg	ND	ND	ND	ND	ND	ND	24	ND
108-88-3	Toluene	5550	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
1330-20-7	Xylenes (total)	4440	ug/kg	ND	ND	ND	ND	ND	ND	73	ND
	Total VOCs	10000	ug/kg	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**99.6**	**2.8**
	SEMIVOLATILES										
59-50-7	4-Chloro-3-methylphenol	870	ug/kg	ND	ND	ND	ND	ND	ND	170 J	ND
117-81-7	bis(2-Ethylhexyl) phthalate	50000	ug/kg	ND	27 J	ND	ND	ND	ND	ND	ND
86-74-8	Carbazole	NC	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
84-74-2	Di-n-butyl phthalate	29970	ug/kg	ND	63 J	ND	ND	ND	ND	ND	ND
	CPAHs										
56-55-3	Benzo(a)anthracene	224	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
50-32-8	Benzo(a)pyrene	61	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
205-99-2	Benzo(b)fluoranthene	4070	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
207-08-9	Benzo(k)fluoranthene	4070	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
218-01-9	Chrysene	1480	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
53-70-3	Dibenz(a,h)anthracene	14	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
193-39-5	Indeno(1,2,3-cd)pyrene	11840	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
	Total CPAHs		ug/kg	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**
	NPAHs										
91-57-6	2-Methylnaphthalene	50000	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
120-12-7	Anthracene	50000	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
191-24-2	Benzo(ghi)perylene	50000	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
206-44-0	Fluoranthene	50000	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
86-73-7	Fluorene	50000	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
91-20-3	Naphthalene	48100	ug/kg	ND	35 J	ND	ND	ND	ND	ND	ND
85-01-8	Phenanthrene	50000	ug/kg	ND	18 J	ND	ND	ND	ND	ND	ND
129-00-0	Pyrene	50000	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
	Total NPAHs		**ug/kg**	**ND**	**53**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**
	Total PAHs		**ug/kg**	**ND**	**53**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**
	Total SVOCs	**50000**	**ug/kg**	**ND**	**143**	**ND**	**ND**	**ND**	**ND**	**170**	**ND**

Table 3.14a
SADVA AOC 2 Soil Results (2000)

Former Schenectady Army Depot Remedial Investigation AOC 2 Soil Boring Data Detected Compound Summary		NYSDEC Soil	SAMPLE ID:	AOC2-TP05C	AOC2-TP07B	AOC2-TP07C	AOC2-TP17C (Dup of AOC2-TP07C)	AOC2-TP11B	AOC2-TP11C	AOC2-TP14B	AOC2-TP14C
			LAB ID:	C0H150136004	C0H150136005	C0H150136006	C0H150136007	C0H150136008	C0H150136009	C0H150136010	C0H150136011
			DEPTH:	5'	2.5'	4.5'	4.5'	2.5'	4.5'	2.5'	4.5'
			SOURCE:	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh
			SDG:	SADVA11	SADVA11	SADVA11	SADVA11	SADVA11	SADVA11	SADVA11	SADVA11
			MATRIX:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
			SAMPLED:	8/14/2000	8/14/2000	8/14/2000	8/14/2000	8/14/2000	8/14/2000	8/14/2000	8/14/2000
			VALIDATED:	11/5/2000	11/5/2000	11/5/2000	11/5/2000	11/5/2000	11/5/2000	11/5/2000	11/5/2000
CAS NO.	COMPOUND	Criteria	UNITS:								
	PESTICIDES										
319-84-6	alpha-BHC	111	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
319-86-8	delta-BHC	1221	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
58-89-9	gamma-BHC (Lindane)	NC	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
76-44-8	Heptachlor	444	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
309-00-2	Aldrin	41	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
1024-57-3	Heptachlor epoxide	20	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
60-57-1	Dieldrin	44	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
72-55-9	4,4'-DDE	2100	ug/kg	ND	7.8 JN	ND	ND	2.9 J	ND	1.2 JN	ND
72-20-8	Endrin	339	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
72-54-8	4,4'-DDD	2900	ug/kg	ND	140	ND	ND	54	ND	12	ND
50-29-3	4,4'-DDT	2100	ug/kg	ND	7.7 J	ND	ND	ND	ND	ND	ND
72-43-5	Methoxychlor	10000	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
5103-71-9	alpha-Chlordane	540	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
5103-74-2	gamma-Chlordane	540	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
	Total Pesticides	**10000**	**ug/kg**	**ND**	**155.5**	**ND**	**ND**	**56.9**	**ND**	**13.2**	**ND**
	PCBs										
11141-16-5	None Detected	1000/10000	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
	METALS										
7429-90-5	Aluminum	12800	mg/kg	13500	14200	13800	12700	15700	14600	14300	14300
7440-36-0	Antimony	0.59	mg/kg	ND	ND	ND	0.28 J	ND	ND	0.23 J	0.26 J
7440-38-2	Arsenic	16.4	mg/kg	8.6	8.4	8.3	8.2	7.9	8.8	10.4	9.1
7440-39-3	Barium	300	mg/kg	57.7	78.8	53.7	56.4	83.2	64	46.7	66.2
7440-41-7	Beryllium	0.67	mg/kg	0.69	0.75	0.74	0.67	0.76	0.76	0.7	0.78
7440-43-9	Cadmium	1	mg/kg	ND	ND	ND	ND	0.084 J	0.17 J	0.14 J	0.14 J
7440-70-2	Calcium	46600	mg/kg	32100	3940	26300	25000	4940	30900	25300	34000
7440-47-3	Chromium	17.5	mg/kg	19.7	21.1	19.3	18.5	21	20.6	20.4	20.3
7440-48-4	Cobalt	30	mg/kg	14.5	17.6	15.4	17.7	16.5	16.4	18.6	19
7440-50-8	Copper	26.9	mg/kg	41.3 J	38.1 J	41.8 J	37.8 J	33.6 J	40.8 J	35 J	41.3 J
7439-89-6	Iron	25700	mg/kg	33400	36200	33800	32000	35000	34900	32600	35800
7439-92-1	Lead	60.8 (average 29.3)	mg/kg	15.5	17.4	13.7	14.1	17.7	14	14.5	14.7
7439-95-4	Magnesium	13100	mg/kg	9200	6470	10200	8750	6180	9520	8310	9100
7439-96-5	Manganese	875	mg/kg	484	392	513	646	590	603	528	743
7439-97-6	Mercury	0.1	mg/kg	0.018 J	0.014 J	ND	ND	ND	0.011 J	0.017 J	0.023 J
7440-02-0	Nickel	24.8	mg/kg	31	34.5	32.4	33.3	29.5	35	35.9	38.1
7440-09-7	Potassium	1660	mg/kg	1490	1030	1610	1380	885	1820	1350	1850
7782-49-2	Selenium	2	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
7440-22-4	Silver	0.17	mg/kg	ND	ND	ND	ND	ND	ND	0.14 J	0.12 J
7440-23-5	Sodium	619	mg/kg	136 J	797	181 J	166 J	1150	282 J	709	152 J
7440-28-0	Thallium	0.67	mg/kg	ND	0.49 J	ND	ND	0.51 J	ND	0.72 J	ND
7440-62-2	Vanadium	150	mg/kg	22.4 J	24.5 J	23.4 J	21.8 J	27.5 J	25.1 J	24.6 J	25.3 J
7440-66-6	Zinc	134	mg/kg	89.3	96.8	92.7	86.2	91.8	101	218	89.1

CPAH = Carcinogenic Polynuclear Aromatic Hydrocarbons
NPAH = Noncarcinogenic Polynuclear Aromatic Hydrocarbons
NC = No Criteria
ND = Not Detected
NA = Not Analyzed
J = Estimated Value
N = Estimated
SB = Site Background
R = Rejected Value
Concentration above NYSDEC Soil Criteria.
AOC2-DRM-1 is a sample of the soil cuttings from the formerly installed well in AOC 2
that was decomissioned during the RI.
AOC2-HP-09A2 was an additional sample collected for VOC analysis based on field obser\

TABLE 3.14b
SOIL DATA SUMMARY FOR
AOC 2 DATA GAP RI AT FORMER SADVA (2004)

USACE-Schenectady Depot Validated Soil Analytical Data SDG: SADVA28 Detected Compound Summary		NYSDEC Soil Criteria	Sample ID: Lab Sample Id: Depth: Source: SDG: Matrix: Sampled: Validated: UNITS:	SD-TP25AOC2 C4K180240001 1-2' STL Pittsburgh SADVA28 SOIL 11/17/2004 1/5/2005	SD-TP31AOC2 C4K180240002 0.5-0.75' STL Pittsburgh SADVA28 SOIL 11/17/2004 1/5/2005
CAS NO.	COMPOUND				
	VOLATILES				
71-43-2	Benzene	215	ug/kg	22	180
74-83-9	Bromomethane	NC	ug/kg	ND	200
100-41-4	Ethylbenzene	10000	ug/kg	8.7	4100
108-88-3	Toluene	5550	ug/kg	55	2000
1330-20-7	Xylenes (total)	4440	ug/kg	64	81000 J
	TOTAL VOCs	10000	ug/kg	149.7	87480
	SEMIVOLATILES				
91-57-6	2-Methylnaphthalene	50000	ug/kg	ND	780
91-20-3	Naphthalene	48100	ug/kg	ND	2300
	TOTAL SVOCs	500000	ug/kg	ND	3080
	PESTICIDES				
72-55-9	4,4'-DDE	2100	ug/kg	1.6 J	ND
72-20-8	Endrin	100	ug/kg	ND	0.24 JN
53494-70-5	Endrin Ketone	NC	ug/kg	0.99 JN	ND
72-54-8	4,4'-DDD	2900	ug/kg	1.6 J	ND
50-29-3	4,4'-DDT	2100	ug/kg	1.2 JN	0.35 JN
72-43-5	Methoxychlor	10000	ug/kg	4.6 JN	ND
	TOTAL PESTCIDES	10000	ug/kg	9.99	0.59
	PCBS				
	None Detected			ND	ND
	METALS				
7429-90-5(T)	Aluminum	12800	mg/kg	14200	16800
7440-38-2(T)	Arsenic	16.4	mg/kg	6.1	7.8
7440-39-3(T)	Barium	300	mg/kg	95.2 J	81.2 J
7440-41-7(T)	Beryllium	0.67	mg/kg	1.1	1.2
7440-43-9(T)	Cadmium	1	mg/kg	0.35 J	0.4 J
7440-70-2(T)	Calcium	46600	mg/kg	2400 J	2590 J
7440-47-3(T)	Chromium	17.5	mg/kg	20	24.3
7440-48-4(T)	Cobalt	30	mg/kg	11.9	15.9
7440-50-8(T)	Copper	26.9	mg/kg	31	41.6
7439-89-6(T)	Iron	25700	mg/kg	29600	32400
7439-92-1(T)	Lead	60.8 (29.3 average)	mg/kg	13.5 J	25 J
7439-95-4(T)	Magnesium	13100	mg/kg	5150	6280
7439-96-5(T)	Manganese	875	mg/kg	167	669
7439-97-6(T)	Mercury	0.1	mg/kg	0.02 J	0.051
7440-02-0(T)	Nickel	24.8	mg/kg	31.1 J	32.4 J
7440-09-7(T)	Potassium	1660	mg/kg	1930	1750
7782-49-2(T)	Selenium	2	mg/kg	1.6	1.3
7440-22-4(T)	Silver	0.17	mg/kg	0.13 J	0.13 J
7440-23-5(T)	Sodium	619	mg/kg	128 J	154 J
7440-62-2(T)	Vanadium	150	mg/kg	29.4	30
7440-66-6(T)	Zinc	134	mg/kg	109 J	83.9 J

SB - Site background
NC - No Criteria
** - New York State background
**** - Background levels for lead vary widely. Average levels in underdeveloped, rural areas may range from 4-61 ppm. Average background levels in metropolitan or suburban areas or near highways are much higher and typically range from 200-500 ppm.

TABLE 3.15
SADVA AOC 2 SOIL BORING DIOXIN RESULTS

Former Schenectady Army Depot Remedial Investigation AOC 2 Dioxin and Furans Data Detected Compound Summary	SAMPLE ID: LAB ID: SOURCE: SDG: MATRIX: SAMPLED: VALIDATED:			AOC2SB01A C0G260185-001 STL C0G260185 SOIL 7/25/2000 12/15/2000	AOC2SB02A C0G260185-002 STL C0G260185 SOIL 7/25/2000 12/15/2000	AOC2SB03A C0G270305-001 STL C0G270305 SOIL 7/26/2000 12/15/2000	AOC2HP01A C0G210263-003 STL C0G210263 SOIL 7/20/2000 12/15/2000
Compound	UNITS:	Human Toxic Equivalency Factor	NYSDEC Soil Criteria pg/g				
DIOXINS							
2,3,7,8-TCDD	pg/g	1	1,000	0.69 J	0.31 U	1.9	0.21 U
1,2,3,7,8-PeCDD	pg/g	1	NC	1.5 U	0.79 U	5 J	0.47 U
1,2,3,4,7,8-HxCDD	pg/g	0.1	NC	2 U	0.37 U	5.7 J	1.1 U
1,2,3,6,7,8-HxCDD	pg/g	0.1	NC	3.2 J	0.68 U	11	2.1 U
1,2,3,7,8,9-HxCDD	pg/g	0.1	NC	5.1 J	0.84 U	13	2.5 U
1,2,3,4,6,7,8-HpCDD	pg/g	0.01	NC	96	32	270	180
1,2,3,7,8-PeCDF	pg/g	0.05	NC	0.34 U	0.33 U	0.49 U	0.28 U
OCDD	pg/g	0.0001	NC	5100	5700	13000	12000
2,3,7,8-TCDF	pg/g	0.1	NC	0.45	0.17 U	0.43 U	0.37 U
2,3,4,7,8-PeCDF	pg/g	0.5	NC	0.34 U	0.33 U	0.51 U	0.34 U
1,2,3,4,7,8-HxCDF	pg/g	0.1	NC	0.39 U	0.46 U	1.2 U	0.82 U
1,2,3,6,7,8-HxCDF	pg/g	0.1	NC	0.36 U	0.43 U	0.75 U	0.4 U
2,3,4,6,7,8-HxCDF	pg/g	0.1	NC	0.41 U	0.47 U	0.88 U	0.37 U
1,2,3,7,8,9-HxCDF	pg/g	0.1	NC	0.41 U	0.47 U	0.96 U	0.32 U
1,2,3,4,6,7,8-HpCDF	pg/g	0.01	NC	3.7 J	1.3 U	8.9	3.7 J
1,2,3,4,7,8,9-HpCDF	pg/g	0.01	NC	0.21 U	0.28 U	0.65 U	0.36 U
OCDF	pg/g	0.0001	NC	7.4 U	40	15	5.6 U
Total TCDD	pg/g	NA	NC	1.4	0.54 U	7	0.24 U
Total PeCDD	pg/g	NA	NC	3.3	1.1 U	31	1.1 U
Total HxCDD	pg/g	NA	NC	40	3.7	180	23
Total TCDF	pg/g	NA	NC	1.3	0.17 U	11	1.7
Total HpCDD	pg/g	NA	NC	270	74	770	450
Total PeCDF	pg/g	NA	NC	1.1 U	0.34 U	2.6 U	1.5 U
Total HxCDF	pg/g	NA	NC	2 U	1.1 U	8.8	1.8 U
Total HpCDF	pg/g	NA	NC	8.8	3.3	22	7.8
Toxicity Equivalents (Using EDL=0)	pg/g		NC	3.07	0.89	13.96	3.04
Toxicity Equivalents (Using 0.5 xEDL)	pg/g		NC	4.10	1.74	14.31	3.87

J = Estimated Value
U = Not Detected
NC = No Criteria
EDL = Estimated Detection Limit
pg/g = picograms per gram

TABLE 3.15
SADVA AOC 2 SOIL BORING DIOXIN RESULTS

Former Schenectady Army Depot Remedial Investigation AOC 2 Dioxin and Furans Data Detected Compound Summary	SAMPLE ID: LAB ID: SOURCE: SDG: MATRIX: SAMPLED: VALIDATED:	Human Toxic Equivalency	NYSDEC Soil Criteria	AOC2HP02A C0G210263-004 STL C0G210263 SOIL 7/20/2000 12/15/2000	Dup of SB01A AOC2HP03A C0G210263-005 STL C0G210263 SOIL 7/20/2000 12/15/2000	AOC2HP04A C0G210263-006 STL C0G210263 SOIL 7/20/2000 12/15/2000	AOC2HP05A C0G210263-007 STL C0G210263 SOIL 7/20/2000 12/15/2000
Compound	UNITS:	Factor	pg/g				
DIOXINS							
2,3,7,8-TCDD	pg/g	1	1,000	0.19 U	18 UJ	20 UJ	2.2 UJ
1,2,3,7,8-PeCDD	pg/g	1	NC	0.8 U	39 UJ	38 UJ	4.4 UJ
1,2,3,4,7,8-HxCDD	pg/g	0.1	NC	0.89 U	89 UJ	120 UJ	4.8 UJ
1,2,3,6,7,8-HxCDD	pg/g	0.1	NC	1.4 U	180 UJ	150 UJ	11 UJ
1,2,3,7,8,9-HxCDD	pg/g	0.1	NC	1.7 U	240 UJ	260 UJ	17 UJ
1,2,3,4,6,7,8-HpCDD	pg/g	0.01	NC	150	14000 J	13000 J	1000 J
1,2,3,7,8-PeCDF	pg/g	0.05	NC	0.31 U	20 UJ	24 UJ	2.7 UJ
OCDD	pg/g	0.0001	NC	9000	870000 J	1200000 J	73000 J
2,3,7,8-TCDF	pg/g	0.1	NC	0.38 U	23 UJ	47 UJ	3.7 UJ
2,3,4,7,8-PeCDF	pg/g	0.5	NC	0.31 U	29 UJ	27 UJ	2.7 UJ
1,2,3,4,7,8-HxCDF	pg/g	0.1	NC	0.65 U	96 UJ	52 UJ	5.1 UJ
1,2,3,6,7,8-HxCDF	pg/g	0.1	NC	0.23 U	30 UJ	20 UJ	2.7 UJ
2,3,4,6,7,8-HxCDF	pg/g	0.1	NC	0.32 U	40 UJ	26 UJ	2.5 UJ
1,2,3,7,8,9-HxCDF	pg/g	0.1	NC	0.29 U	28 UJ	24 UJ	2.5 UJ
1,2,3,4,6,7,8-HpCDF	pg/g	0.01	NC	3.1 U	540 J	310 UJ	18 UJ
1,2,3,4,7,8,9-HpCDF	pg/g	0.01	NC	0.36 U	39 UJ	36 UJ	3.1 UJ
OCDF	pg/g	0.0001	NC	9 J	2300 J	610 UJ	24 UJ
Total TCDD	pg/g	NA	NC	0.27 U	19 UJ	38 UJ	3.7 UJ
Total PeCDD	pg/g	NA	NC	1.3 U	160 UJ	100 UJ	10 UJ
Total HxCDD	pg/g	NA	NC	17	2200 J	1800 J	130 J
Total TCDF	pg/g	NA	NC	0.9	61 J	47 UJ	14 J
Total HpCDD	pg/g	NA	NC	360	35000 J	31000 J	2600 J
Total PeCDF	pg/g	NA	NC	1.2 U	130 UJ	85 UJ	14 UJ
Total HxCDF	pg/g	NA	NC	1.4 U	250 UJ	150 UJ	12 UJ
Total HpCDF	pg/g	NA	NC	3.7	1600 J	550 J	18 UJ
Toxicity Equivalents (Using EDL=0)	pg/g		NC	2.40	232.63	250.00	17.30
Toxicity Equivalents (Using 0.5 xEDL)	pg/g		NC	3.29	305.38	323.06	23.91

J = Estimated Value
U = Not Detected
NC = No Criteria
EDL = Estimated Detection Limit
pg/g = picograms per gram

TABLE 3.15
SADVA AOC 2 SOIL BORING DIOXIN RESULTS

Former Schenectady Army Depot Remedial Investigation AOC 2 Dioxin and Furans Data Detected Compound Summary	SAMPLE ID: LAB ID: SOURCE: SDG: MATRIX: SAMPLED: VALIDATED:			AOC2HP06A C0G210263-008 STL C0G210263 SOIL 7/20/2000 12/15/2000	AOC2HP07A C0G210263-009 STL C0G210263 SOIL 7/20/2000 12/15/2000	AOC2HP08A C0G210263-010 STL C0G210263 SOIL 7/20/2000 12/15/2000	AOC2HP09A C0G210263-011 STL C0G210263 SOIL 7/20/2000 12/15/2000
Compound	UNITS:	Human Toxic Equivalency Factor	NYSDEC Soil Criteria pg/g				
DIOXINS							
2,3,7,8-TCDD	pg/g	1	1,000	2.6 UJ	5.3 UJ	6 UJ	6 UJ
1,2,3,7,8-PeCDD	pg/g	1	NC	5 UJ	14 UJ	20 UJ	10 UJ
1,2,3,4,7,8-HxCDD	pg/g	0.1	NC	17 UJ	42 UJ	35 UJ	48 UJ
1,2,3,6,7,8-HxCDD	pg/g	0.1	NC	24 UJ	66 UJ	52 UJ	79 UJ
1,2,3,7,8,9-HxCDD	pg/g	0.1	NC	36 UJ	92 UJ	75 UJ	110 UJ
1,2,3,4,6,7,8-HpCDD	pg/g	0.01	NC	2100 J	6100 J	6400 J	4900 J
1,2,3,7,8-PeCDF	pg/g	0.05	NC	4.2 UJ	8.5 UJ	4.9 UJ	8 UJ
OCDD	pg/g	0.0001	NC	240000 J	660000 J	620000 J	360000 J
2,3,7,8-TCDF	pg/g	0.1	NC	5.5 UJ	17 UJ	18 UJ	12 UJ
2,3,4,7,8-PeCDF	pg/g	0.5	NC	4.6 UJ	11 UJ	4.9 UJ	17 UJ
1,2,3,4,7,8-HxCDF	pg/g	0.1	NC	7.3 UJ	23 UJ	21 UJ	34 UJ
1,2,3,6,7,8-HxCDF	pg/g	0.1	NC	3.4 UJ	8.1 UJ	8.7 UJ	15 UJ
2,3,4,6,7,8-HxCDF	pg/g	0.1	NC	4.2 UJ	12 UJ	10 UJ	18 UJ
1,2,3,7,8,9-HxCDF	pg/g	0.1	NC	2.6 UJ	4.9 UJ	6 UJ	10 UJ
1,2,3,4,6,7,8-HpCDF	pg/g	0.01	NC	76 J	160 J	100 J	360 J
1,2,3,4,7,8,9-HpCDF	pg/g	0.01	NC	5.9 UJ	16 UJ	7.2 UJ	14 UJ
OCDF	pg/g	0.0001	NC	490 J	330 J	160 UJ	960 J
Total TCDD	pg/g	NA	NC	4 UJ	6.9 UJ	7.5 UJ	13 UJ
Total PeCDD	pg/g	NA	NC	16 UJ	31 UJ	29 UJ	58 UJ
Total HxCDD	pg/g	NA	NC	290 J	630 J	540 J	790 J
Total TCDF	pg/g	NA	NC	12 J	28 J	18 UJ	140 J
Total HpCDD	pg/g	NA	NC	5100 J	15000 J	15000 J	12000 J
Total PeCDF	pg/g	NA	NC	17 UJ	30 UJ	34 UJ	78 UJ
Total HxCDF	pg/g	NA	NC	27 UJ	75 UJ	42 UJ	120 UJ
Total HpCDF	pg/g	NA	NC	230 J	610 J	240 J	760 J
Toxicity Equivalents (Using EDL=0)	pg/g		NC	45.81	128.63	127.00	88.70
Toxicity Equivalents (Using 0.5 xEDL)	pg/g		NC	55.89	154.58	152.68	117.52

J = Estimated Value
U = Not Detected
NC = No Criteria
EDL = Estimated Detection Limit
pg/g = picograms per gram

TABLE 3.16a
SADVA AOC 2 PILL BOTTLE SAMPLE RESULTS (2000)

Former Schenectady Army Depot Remedial Investigation AOC 2 Pill Bottle Samples Detected Compound Summary							
		SAMPLE ID:	PILL-1	PILL-2	PILL-3	PILL-4	PILL-5
		LAB ID:	C0H230138-001	LSL0010485-001	LSL0010485-002	LSL0010485-003	LSL0010485-004
		SOURCE:	STL Pittsburgh	Life Science	Life Science	Life Science	Life Science
		SDG:	COH230138				
		MATRIX:	SOLID	SOLID	SOLID	SOLID	SOLID
		SAMPLED:	8/22/2000	11/6/2000	11/7/2000	11/7/2000	11/7/2000
CAS NO.	COMPOUND	UNITS:					
	METALS						
71-43-2	Sodium	mg/Kg	110,000 mg/L	120,000	51,000	27,000	29,000
	Total Cyanide	mg/Kg	NA	ND	ND	ND	ND
	Chloride	mg/Kg	NA	2800	2,000	9,900	3,500
	Iodide	mg/Kg	NA	87,000	12,000	ND	2,000

NA - No analysis
ND - Not detected
Note: Pill-1 results were reported on a liquid basis (mg/L). All other results were reported on a solid basis (mg/Kg).

TABLE 3.16b
PILL AREA DATA SUMMARY
AOC 2 DATA GAP RI AT FORMER SADVA (2004)

USACE-Schenectady Depot Validated Groundwater Analytical Data SDG: SADVA29 Detected Compound Summary		Sample ID: Lab Sample Id: Source: SDG: Matrix: Sampled: Validated:	SD-PILLS-1 C4L080148002 STL Pittsburgh SADVA29 SOIL 12/7/2004 1/6/2005	SD-PILLS-2 C4L080148003 STL Pittsburgh SADVA29 SOIL 12/7/2004 1/6/2005	SD-PILLS-3 C4L080148004 STL Pittsburgh SADVA29 SOIL 12/7/2004 1/6/2005	SD-PILLS-4 C4L080148005 STL Pittsburgh SADVA29 SOIL 12/7/2004 1/6/2005	SD-PILLS-5 C4L080148006 STL Pittsburgh SADVA29 SOIL 12/7/2004 1/6/2005
CAS NO.	COMPOUND	UNITS:					
	OTHER						
(FPHSU)	pH	No Units	3.5	2.7	6.2	3.2	2.9

TABLE 3.17a
WASTE AND SOIL CHARACTERIZATION DATA SUMMARY
AOC 2 DATA GAP RI AT FORMER SADVA

CAS NO.	COMPOUND	NYSDEC Soil Criteria		Tar Bucket Area	Paint Residue	Drum Area	Liquid Sludge	Soil -Tar Bucket Area	Bottle Area	Bottle Area
USACE-Schenectady Depot			Sample ID:	SD-TP20-2-3	SD-TP23-0-2	SD-TP31-0-2	SD-TP31-SEEP	SD-SB-GW04-2-4	SD-SS-COMP1-0-0.5	SD-SS-COMP2-0-0.5
Validated Soil Waste Analytical Data			Lab Sample Id:	C4F250308004	C4F250308005	C4F250308003	C4G160326001	C4F230209003	C4F230209001	C4F230209002
AOC 2			Depth:	2-3'	0-2'	0-2'		2-4'	0.0.5'	0.0.5'
			Source:	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	Stl Pittsburgh	Stl Pittsburgh	Stl Pittsburgh
			SDG:	C4F250308	C4F250308	C4F250308	C4G160326	C4F230209	C4F230209	C4F230209
			Matrix:	Soil	Soil	Soil	WASTE	Soil	Soil	Soil
			Sampled:	6/23/2004	6/23/2004	6/24/2004	7/15/2004	6/21/2004	6/22/2004	6/22/2004
			Validated:	9/3/2004	9/3/2004	9/3/2004	9/18/2004	8/30/2004	8/30/2004	8/30/2004
			UNITS:							
	VOLATILES									
71-43-2	Benzene	215	ug/Kg	NA	NA	160 J	300000	NA	NA	NA
100-41-4	Ethylbenzene	10000	ug/Kg	NA	NA	720	2000000	NA	NA	NA
108-88-3	Toluene	5550	ug/Kg	NA	NA	ND	1700000	NA	NA	NA
1330-20-7	Xylenes (total)	4440	ug/Kg	NA	NA	6900	15000000	NA	NA	NA
	SEMIVOLATILES									
105-67-9	2,4-Dimethylphenol	100	ug/Kg	NA	NA	2000	ND	NA	NA	NA
86-30-6	N-Nitrosodiphenylamine	NC	ug/Kg	NA	NA	12000 J	ND	NA	NA	NA
	CPAHs									
218-01-9	Chrysene	1480	ug/Kg	NA	NA	220 J	ND	NA	NA	NA
	NPAHs									
91-57-6	2-Methylnaphthalene	50000	ug/Kg	NA	NA	3300	210000 J	NA	NA	NA
91-20-3	Naphthalene	48100	ug/Kg	NA	NA	19000	980000	NA	NA	NA
	Total NPAHs		**ug/Kg**	**NA**	**NA**	**22300**	**1190000**	**NA**	**NA**	**NA**
	Total PAHs		**ug/Kg**	**NA**	**NA**	**22300**	**1190000**	**NA**	**NA**	**NA**
	Total SVOCs		**ug/Kg**	**NA**	**NA**	**36520**	**1190000**	**NA**	**NA**	**NA**
	PESTICIDES									
319-86-8	delta-BHC	1221	ug/Kg	NA	NA	ND	32 J	NA	NA	NA
72-55-9	4,4'-DDE	2100	ug/Kg	NA	NA	5.3 JN	ND	NA	NA	NA
	Endosulfan II	297	ug/Kg	NA	NA	7.2 JN	ND	NA	NA	NA
1024-57-3	Heptachlor epoxide	8	ug/Kg	NA	NA	7.5 J	ND	NA	NA	NA
	PCBS									
	None Detected	1000/10000	ug/Kg	ND	NA	NA	ND	NA	NA	NA
	METALS									
7429-90-5(T)	Aluminum	12800	mg/Kg	NA	NA	17600	20	NA	NA	NA
7440-38-2(T)	Arsenic	16.4	mg/Kg	NA	NA	8.6	ND	NA	NA	NA
7440-39-3	Barium	300	mg/Kg	NA	NA	93.2	0.19 J	NA	NA	NA
7440-41-7	Beryllium	0.67	mg/Kg	NA	NA	1	0.081 J	NA	NA	NA
7440-43-9(T)	Cadmium	1	mg/Kg	NA	NA	0.11 J	ND	NA	NA	NA
7440-70-2	Calcium	46600	mg/Kg	NA	NA	2110	65.4 J	NA	NA	NA
7440-47-3	Chromium	17.5	mg/Kg	NA	NA	24.5	6.7	NA	NA	NA
7440-48-4(T)	Cobalt	30	mg/Kg	NA	NA	15	ND	NA	NA	NA
7440-50-8	Copper	26.9	mg/Kg	NA	NA	43 J	146	NA	NA	NA
7439-89-6	Iron	25700	mg/Kg	NA	NA	35900	97.8	NA	NA	NA
7439-92-1	Lead	60.8 (29.3 average)	mg/Kg	NA	NA	16.6	109	NA	NA	NA
7439-95-4	Magnesium	13100	mg/Kg	NA	NA	6620	22.8 J	NA	NA	NA
7439-96-5	Manganese	875	mg/Kg	NA	NA	609	7.5	NA	NA	NA
7439-97-6	Mercury	0.1	mg/Kg	NA	NA	0.73	0.96	NA	NA	NA
7440-02-0	Nickel	24.8	mg/Kg	NA	NA	34	0.16 J	NA	NA	NA
7440-09-7	Potassium	1660	mg/Kg	NA	NA	1620	10 J	NA	NA	NA
7782-49-2(T)	Selenium	2	mg/Kg	NA	NA	ND	ND	NA	NA	NA
7440-22-4(T)	Silver	0.17	mg/Kg	NA	NA	0.17 J	ND	NA	NA	NA
7440-23-5	Sodium	619	mg/Kg	NA	NA	153 J	42.5 J	NA	NA	NA
7440-28-0(T)	Thallium	0.67	mg/Kg	NA	NA	0.6 J	ND	NA	NA	NA
7440-62-2	Vanadium	150	mg/Kg	NA	NA	30	0.11 J	NA	NA	NA
7440-66-6	Zinc	134	mg/Kg	NA	NA	79.3	1.1 J	NA	NA	NA
	OTHER									
Q797	TPH (as Diesel)	NC	mg/Kg	NA	NA	NA	670000 J	NA	NA	NA

U = Analyte not detected; the number is the analytical reporting limit.
J - Estimated Value
NA - Not Analyzed
ND - Not Detected
NC - No Criteria

TABLE 3.17a
WASTE AND SOIL CHARACTERIZATION DATA SUMMARY
AOC 2 DATA GAP RI AT FORMER SADVA

USACE-Schenectady Depot
Validated Soil Waste Analytical Data
AOC 2

CAS NO.	COMPOUND	Toxicity Characteristic by TCLP Criteria		Tar Bucket Area	Paint Residue	Drum Area	Liquid Sludge	Soil -Tar Bucket Area	Bottle Area	Bottle Area
			Sample ID:	SD-TP20-2-3	SD-TP23-0-2	SD-TP31-0-2	SD-TP31-SEEP	SD-SB-GW04-2-4	SD-SS-COMP1-0-0.5	SD-SS-COMP2-0-0.5
			Lab Sample Id:	C4F250308004	C4F250308005	C4F250308003	C4G160326001	C4F230209003	C4F230209001	C4F230209002
			Depth:	2-3'	0-2'	0-2'		2-4'	0.0.5'	0.0.5'
			Source:	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	Stl Pittsburgh	Stl Pittsburgh	Stl Pittsburgh
			SDG:	C4F250308	C4F250308	C4F250308	C4G160326	C4F230209	C4F230209	C4F230209
			Matrix:	Soil	Soil	Soil	WASTE	Soil	Soil	Soil
			Sampled:	6/23/2004	6/23/2004	6/24/2004	7/15/2004	6/21/2004	6/22/2004	6/22/2004
			Validated:	9/3/2004	9/3/2004	9/3/2004	9/18/2004	8/30/2004	8/30/2004	8/30/2004
			UNITS:							
	TCLP VOLATILES									
75-35-4	1,1-Dichloroethene-TCLP	0.7	mg/L	ND	NA	ND	NA	ND	ND	ND
107-06-2	1,2-Dichloroethane-TCLP	0.5	mg/L	ND	NA	ND	NA	ND	ND	ND
78-93-3	2-Butanone-TCLP	200	mg/L	ND	NA	ND	NA	ND	ND	ND
71-43-2	Benzene-TCLP	0.5	mg/L	ND	NA	ND	NA	ND	ND	ND
56-23-5	Carbon tetrachloride-TCLP	0.5	mg/L	ND	NA	ND	NA	ND	ND	ND
108-90-7	Chlorobenzene-TCLP	100	mg/L	ND	NA	ND	NA	ND	ND	ND
67-66-3	Chloroform-TCLP	6	mg/L	ND	NA	ND	NA	ND	ND	ND
127-18-4	Tetrachloroethene-TCLP	0.7	mg/L	ND	NA	ND	NA	ND	ND	0.046 J
79-01-6	Trichloroethene-TCLP	0.5	mg/L	ND	NA	ND	NA	ND	ND	ND
75-01-4	Vinyl chloride-TCLP	0.2	mg/L	ND	NA	ND	NA	ND	ND	ND
	TCLP SEMIVOLATILES									
106-46-7	1,4-Dichlorobenzene-TCLP	7.5	mg/L	ND	NA	ND	NA	ND	ND	ND
95-95-4	2,4,5-Trichlorophenol-TCLP	400	mg/L	ND	NA	ND	NA	ND	ND	ND
88-06-2	2,4,6-Trichlorophenol-TCLP	2	mg/L	ND	NA	ND	NA	ND	ND	ND
121-14-2	2,4-Dinitrotoluene-TCLP	0.13	mg/L	ND	NA	ND	NA	ND	ND	ND
1319-77-3	Cresols (total)-TCLP	200	mg/L	0.041 J	NA	ND	NA	ND	ND	ND
118-74-1	Hexachlorobenzene-TCLP	0.13	mg/L	ND	NA	ND	NA	ND	ND	ND
87-68-3	Hexachlorobutadiene-TCLP	0.5	mg/L	ND	NA	ND	NA	ND	ND	ND
67-72-1	Hexachloroethane-TCLP	3	mg/L	ND	NA	ND	NA	ND	ND	ND
98-95-3	Nitrobenzene-TCLP	2	mg/L	ND	NA	ND	NA	ND	ND	ND
87-86-5	Pentachlorophenol-TCLP	100	mg/L	ND	NA	ND	NA	ND	ND	ND
110-86-1	Pyridine-TCLP	5	mg/L	ND	NA	0.022 J	NA	ND	ND	ND
	TCLP PESTICIDES									
57-74-9	Chlordane (technical)-TCLP	0.03	mg/L	ND	NA	ND	NA	ND	ND	ND
72-20-8	Endrin-TCLP	0.02	mg/L	ND	NA	ND	NA	ND	ND	ND
1024-57-3	Heptachlor epoxide-TCLP	0.008	mg/L	ND	NA	ND	NA	ND	ND	ND
76-44-8	Heptachlor-TCLP	0.008	mg/L	ND	NA	ND	NA	ND	ND	ND
58-89-9	Lindane-TCLP	0.4	mg/L	ND	NA	ND	NA	ND	ND	ND
72-43-5	Methoxychlor-TCLP	10	mg/L	ND	NA	ND	NA	ND	ND	ND
8001-35-2	Toxaphene-TCLP	0.5	mg/L	ND	NA	ND	NA	ND	ND	ND
	TCLP HERBICIDES									
94-75-7	2,4-D-TCLP	10	mg/L	ND	NA	ND	NA	ND	ND	ND
93-72-1	2,4,5-TP (Silvex)-TCLP	1	mg/L	ND	NA	ND	NA	ND	ND	ND
	TCLP METALS									
7440-38-2	Arsenic-TCLP	5	mg/L	0.17 J	0.17 J	0.13 J	NA	0.16 J	0.15	0.16 J
7440-39-3	Barium-TCLP	100	mg/L	0.19 J	0.49 J	0.34 J	NA	0.15 J	0.04	0.23 J
7440-43-9	Cadmium-TCLP	1	mg/L	ND	0.0023 J	ND	NA	0.0018 J	ND	ND
7440-47-3	Chromium-TCLP	5	mg/L	0.0032 J	0.14 J	0.0036 J	NA	0.0056 J	ND	0.0026 J
7439-92-1	Lead-TCLP	5	mg/L	ND	3.7	0.031 J	NA	0.079 J	ND	ND
7439-97-6	Mercury-TCLP	0.2	mg/L	ND	ND	ND	NA	ND	ND	ND
7782-49-2	Selenium-TCLP	1	mg/L	ND	ND	ND	NA	ND	ND	ND
7440-22-4	Silver-TCLP	5	mg/L	ND	ND	ND	NA	ND	ND	ND
	WASTE CHARACTERISTICS									
Q376	Flashpoint	140	Deg F	NA	NA	NA	71.1	NA	NA	NA
(FPHSU)	pH	<2 or >12.5	No Units	5.3	NA	5.6	6.8	7.4	6.8	7.6
Q414	Ignitability	140	Deg F	NO	NA	NO	YES	NO	NO	NO
Q190	Reactive Cyanide		mg/kg	ND	NA	ND	ND	NA	NA	NA
Q607	Reactive Sulfide		mg/kg	ND	NA	ND	ND	NA	NA	NA

U = Analyte not detected; the number is the analytical reporting limit.
J - Estimated Value
NA - Not Analyzed
ND - Not Detected
NC - No Criteria

TABLE 3.17b
WASTE CHARACTERIZATION DATA SUMMARY
AOC 2 DATA GAP RI AT FORMER SADVA

USACE-Schenectady Depot Validated Liquid Waste Analytical Data AOC 2		Sample ID: Lab Sample Id: Source: SDG: Matrix: Sampled: Validated:	SD-OL-TP25 C4F250308006 STL Pittsburgh C4F250308 Other Liquid (waste) 6/23/2004 9/3/2004
CAS NO.	COMPOUND	UNITS:	
	VOLATILES		
67-64-1	Acetone	ug/L	8000 J
71-43-2	Benzene	ug/L	29000
67-66-3	Chloroform	ug/L	ND
100-41-4	Ethylbenzene	ug/L	13000
108-88-3	Toluene	ug/L	67000
79-01-6	Trichloroethene	ug/L	ND
1330-20-7	Xylenes (total)	ug/L	54000
	SEMIVOLATILES		
108-95-2	Phenol	ug/L	15000
91-20-3	Naphthalene	ug/L	5700 J
91-57-6	2-Methylnaphthalene	ug/L	1200 J
	METALS		
7429-90-5(T)	Aluminum	ug/L	12200 J
7440-38-2(T)	Arsenic	ug/L	387
7440-39-3(T)	Barium	ug/L	8120
7440-41-7(T)	Beryllium	ug/L	2.8 J
7440-43-9(T)	Cadmium	ug/L	24.8 J
7440-70-2(T)	Calcium	ug/L	7900000
7440-47-3(T)	Chromium	ug/L	78.1
7440-48-4(T)	Cobalt	ug/L	168
7440-50-8(T)	Copper	ug/L	142
7439-89-6(T)	Iron	ug/L	1260000 J
7439-92-1(T)	Lead	ug/L	636
7439-95-4(T)	Magnesium	ug/L	36600
7439-96-5(T)	Manganese	ug/L	5080
7440-02-0(T)	Nickel	ug/L	130
7440-09-7(T)	Potassium	ug/L	27900
7782-49-2(T)	Selenium	ug/L	ND
7440-22-4(T)	Silver	ug/L	2.8 J
7440-23-5(T)	Sodium	ug/L	446000
7440-62-2(T)	Vanadium	ug/L	122
7440-66-6(T)	Zinc	ug/L	1180

U = Analyte not detected; the number is the analytical reporting limit.
J - Estimated Value
ND - Not Detected

TABLE 3.17b
WASTE CHARACTERIZATION DATA SUMMARY
AOC 2 DATA GAP RI AT FORMER SADVA

USACE-Schenectady Depot Validated Liquid Waste Analytical Data AOC 2		Toxicity Characteristic by TCLP Criteria	Sample ID: Lab Sample Id: Source: SDG: Matrix: Sampled: Validated:	SD-OL-TP25 C4F250308006 STL Pittsburgh C4F250308 Other Liquid (waste) 6/23/2004 9/3/2004
CAS NO.	COMPOUND		UNITS:	
	TCLP VOLATILES			
75-35-4	1,1-Dichloroethene-TCLP	0.7	mg/L	ND
107-06-2	1,2-Dichloroethane-TCLP	0.5	mg/L	ND
78-93-3	2-Butanone-TCLP	200	mg/L	ND
71-43-2	Benzene-TCLP	0.5	mg/L	23
56-23-5	Carbon tetrachloride-TCLP	0.5	mg/L	ND
108-90-7	Chlorobenzene-TCLP	100	mg/L	ND
67-66-3	Chloroform-TCLP	6	mg/L	ND
127-18-4	Tetrachloroethene-TCLP	0.7	mg/L	ND
79-01-6	Trichloroethene-TCLP	0.5	mg/L	ND
75-01-4	Vinyl chloride-TCLP	0.2	mg/L	ND
	TCLP SEMIVOLATILES			
106-46-7	1,4-Dichlorobenzene-TCLP	7.5	mg/L	ND
95-95-4	2,4,5-Trichlorophenol-TCLP	400	mg/L	ND
88-06-2	2,4,6-Trichlorophenol-TCLP	2	mg/L	ND
121-14-2	2,4-Dinitrotoluene-TCLP	0.13	mg/L	ND
1319-77-3	Cresols (total)-TCLP	200	mg/L	0.44
118-74-1	Hexachlorobenzene-TCLP	0.13	mg/L	ND
87-68-3	Hexachlorobutadiene-TCLP	0.5	mg/L	ND
67-72-1	Hexachloroethane-TCLP	3	mg/L	ND
98-95-3	Nitrobenzene-TCLP	2	mg/L	ND
87-86-5	Pentachlorophenol-TCLP	100	mg/L	ND
110-86-1	Pyridine-TCLP	5	mg/L	ND
	TCLP PESTICIDES			
57-74-9	Chlordane (technical)-TCLP	0.03	mg/L	ND
72-20-8	Endrin-TCLP	0.02	mg/L	0.000045 J
1024-57-3	Heptachlor epoxide-TCLP	0.008	mg/L	ND
76-44-8	Heptachlor-TCLP	0.008	mg/L	ND
58-89-9	Lindane-TCLP	0.4	mg/L	ND
72-43-5	Methoxychlor-TCLP	10	mg/L	ND
8001-35-2	Toxaphene-TCLP	0.5	mg/L	ND
	TCLP HERBICIDES			
94-75-7	2,4-D-TCLP	10	mg/L	ND
93-72-1	2,4,5-TP (Silvex)-TCLP	1	mg/L	ND
	TCLP METALS			
7440-38-2	Arsenic-TCLP	5	mg/L	0.2
7440-39-3	Barium-TCLP	100	mg/L	0.74
7440-43-9	Cadmium-TCLP	1	mg/L	ND
7440-47-3	Chromium-TCLP	5	mg/L	ND
7439-92-1	Lead-TCLP	5	mg/L	ND
7439-97-6	Mercury-TCLP	0.2	mg/L	ND
7782-49-2	Selenium-TCLP	1	mg/L	ND
7440-22-4	Silver-TCLP	5	mg/L	ND
	WASTE CHARACTERISTICS			
	Flashpoint	140	deg F	86
(FPHSU)	pH	<2 or >12.5	No Units	8

U = Analyte not detected; the number is the analytical reporting limit.
J - Estimated Value
Sample concentration exceeds criteria for classification as hazardous waste.
ND - Not Detected

TABLE 3.18
SADVA AOC 3 SOIL BORING RESULTS

Former Schenectady Army Depot- Remedial Investigation Soil Boring Data Detected Compound Summary		NYSDEC Soil	SAMPLE ID:	AOC3-SB01A	AOC3-SB101A (Dup of AOC3-SB01A)	AOC3-SB01D	AOC3-SB01E	AOC3-SB02A	AOC3-SB02D	AOC3-SB02G	AOC3-SB03A	AOC3-SB03B	AOC3-SB03E
			LAB ID:	C0G200280013	C0G200280014	C0G200280015	C0G200280016	C0G200280010	C0G200280011	C0G200280012	C0G200280007	C0G200280008	C0G200280009
			DEPTH:	0.2'	0.2'	7'	9'	0.2'	7'	13'	0.2'	3'	9'
			SOURCE:	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh
			SDG:	SADVA5	SADVA5	SADVA5	SADVA5	SADVA5	SADVA5	SADVA5	SADVA5	SADVA5	SADVA5
			MATRIX:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
			SAMPLED:	7/19/2000	7/19/2000	7/19/2000	7/19/2000	7/19/2000	7/19/2000	7/19/2000	7/19/2000	7/19/2000	7/19/2000
			VALIDATED:	10/12/2000	10/12/2000	10/12/2000	10/12/2000	10/12/2000	10/12/2000	10/12/2000	10/12/2000	10/12/2000	10/12/2000
CAS NO.	COMPOUND	Criteria	UNITS:										
	VOLATILES												
67-64-1	Acetone	407	ug/kg	ND	ND	ND	ND	ND	ND	9.3 J	ND	5.8 J	11 J
71-43-2	Benzene	215	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
78-93-3	2-Butanone	833	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
75-15-0	Carbon disulfide	9990	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
108-90-7	Chlorobenzene	6105	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
67-66-3	Chloroform	803	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
107-06-2	1,2-Dichloroethane	259	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
540-59-0	1,2-Dichloroethene (total)	1092	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
100-41-4	Ethylbenzene	10000	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
591-78-6	2-Hexanone	NC	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
75-09-2	Methylene chloride	389	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
108-10-1	4-Methyl-2-pentanone	3515	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
127-18-4	Tetrachloroethene	5124	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
108-88-3	Toluene	5550	ug/kg	ND	ND	ND	ND	ND	2.2 J	ND	ND	ND	ND
79-01-6	Trichloroethene	2331	ug/kg	ND	ND	2.4 J	8.8	ND	2.3 J	11	ND	ND	3.5 J
75-01-4	Vinyl chloride	422	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1330-20-7	Xylenes (total)	4440	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Total VOCs	**10,000**	**ug/kg**	**ND**	**ND**	**2.4**	**8.8**	**ND**	**4.5**	**20.3**	**ND**	**5.8**	**14.5**

ND - Not Detected.
NA - Not Analyzed / Not Applicable
J - Estimated value.
R - Rejected during data validation.
N - Presumptive evidence.
NC - No Criteria
- Concentration above NYSDEC Soil criteria.

TABLE 3.18
SADVA AOC 3 SOIL BORING RESULTS

Former Schenectady Army Depot- Remedial Investigation Soil Boring Data Detected Compound Summary		NYSDEC Soil Criteria	SAMPLE ID: LAB ID: DEPTH: SOURCE: SDG: MATRIX: SAMPLED: VALIDATED:	AOC3-SB01A C0G200280013 0.2' STL Pittsburgh SADVA5 SOIL 7/19/2000 10/12/2000	Dup of AOC3-SB01A AOC3-SB101A C0G200280014 0.2' STL Pittsburgh SADVA5 SOIL 7/19/2000 10/12/2000	AOC3-SB01D C0G200280015 7' STL Pittsburgh SADVA5 SOIL 7/19/2000 10/12/2000	AOC3-SB01E C0G200280016 9' STL Pittsburgh SADVA5 SOIL 7/19/2000 10/12/2000	AOC3-SB02A C0G200280010 0.2' STL Pittsburgh SADVA5 SOIL 7/19/2000 10/12/2000	AOC3-SB02D C0G200280011 7' STL Pittsburgh SADVA5 SOIL 7/19/2000 10/12/2000	AOC3-SB02G C0G200280012 13' STL Pittsburgh SADVA5 SOIL 7/19/2000 10/12/2000	AOC3-SB03A C0G200280007 0.2' STL Pittsburgh SADVA5 SOIL 7/19/2000 10/12/2000	AOC3-SB03B C0G200280008 3' STL Pittsburgh SADVA5 SOIL 7/19/2000 10/12/2000	AOC3-SB03E C0G200280009 9' STL Pittsburgh SADVA5 SOIL 7/19/2000 10/12/2000
CAS NO.	COMPOUND		UNITS:										
	SEMIVOLATILES												
95-48-7	2-Methylphenol	278	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
108-95-2	Phenol	100	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
117-81-7	bis(2-Ethylhexyl) phthalate	50000	ug/kg	27 J	23 J	180 J	150 J	ND	400	89 J	ND	190 J	180 J
132-64-9	Dibenzofuran	22755	ug/kg	16 J	15 J	ND	ND	ND	ND	ND	ND	ND	ND
95-50-1	1,2-Dichlorobenzene	29563	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
541-73-1	1,3-Dichlorobenzene	5735	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
106-46-7	1,4-Dichlorobenzene	31450	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
86-74-8	Carbazole	NC	ug/kg	22 J	ND	ND	ND	ND	ND	ND	ND	ND	ND
120-83-2	2,4-Dichlorophenol	1406	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
105-67-9	2,4-Dimethylphenol	NC	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
84-74-2	Di-n-butyl phthalate	29970	ug/kg	46 J	200 J	ND	ND	ND	ND	ND	ND	ND	ND
117-84-0	Di-n-octyl phthalate	50000	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
106-44-5	4-Methylphenol	3145	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
100-02-7	4-Nitrophenol	389	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
86-30-6	N-Nitrosodiphenylamine	NC	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	CPAHs												
56-55-3	Benzo(a)anthracene	224	ug/kg	240 J	130 J	25 J	ND	39 J	ND	ND	72 J	ND	ND
50-32-8	Benzo(a)pyrene	61	ug/kg	110 J	75 J	22 J	ND	39 J	ND	ND	69 J	ND	ND
205-99-2	Benzo(b)fluoranthene	4070	ug/kg	480 JN	300 JN	33 J	ND	39 J	ND	ND	66 J	ND	ND
207-08-9	Benzo(k)fluoranthene	4070	ug/kg	480 JN	300 JN	34 J	ND	46 J	ND	ND	90 J	ND	ND
218-01-9	Chrysene	1480	ug/kg	310 J	190 J	33 J	ND	50 J	ND	ND	87 J	ND	ND
53-70-3	Dibenz(a,h)anthracene	14	ug/kg	ND	13 J	ND	ND	ND	ND	ND	ND	ND	ND
193-39-5	Indeno(1,2,3-cd)pyrene	11840	ug/kg	86 J	41 J	11 J	ND	29 J	ND	ND	43 J	ND	ND
	Total CPAHs	**10000**	**ug/kg**	**1706**	**1049**	**158**	**ND**	**242**	**ND**	**ND**	**427**	**ND**	**ND**
	NPAHs												
83-32-9	Acenaphthene	(185000)340400	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
208-96-8	Acenaphthylene	152144	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
120-12-7	Anthracene	(50000)185000	ug/kg	41 J	27 J	12 J	ND	ND	ND	ND	ND	ND	ND
191-24-2	Benzo(ghi)perylene	(185000)29600000	ug/kg	68 J	35 J	9.4 J	ND	26 J	ND	ND	70 J	ND	ND
86-73-7	Fluorene	(50000)1350500	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
206-44-0	Fluoranthene	(50000)185000	ug/kg	400	270 J	42 J	ND	71 J	ND	ND	190 J	ND	ND
91-57-6	2-Methylnaphthalene	50000	ug/kg	28 J	41 J	28 J	ND	ND	ND	ND	ND	ND	ND
91-20-3	Naphthalene	48100	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
85-01-8	Phenanthrene	(50000)185000	ug/kg	210 J	160 J	33 J	ND	37 J	ND	ND	120 J	ND	ND
129-00-0	Pyrene	(50000)185000	ug/kg	310 J	170 J	32 J	ND	75 J	ND	ND	130 J	ND	ND
	Total NPAHs	**500,000**	**ug/kg**	**1057**	**703**	**156.4**	**ND**	**209**	**ND**	**ND**	**510**	**ND**	**ND**
	Total PAHs		**ug/kg**	**2763**	**1752**	**314.4**	**ND**	**451**	**ND**	**ND**	**937**	**ND**	**ND**
	Total SVOCs	**500,000**	**ug/kg**	**2874**	**1990**	**494.4**	**150**	**451**	**400**	**89**	**937**	**190**	**180**

ND - Not Detected.
NA - Not Analyzed / Not Applicable
CPAH - Carcinogenic Polynuclear Aromatic Hydrocarbon
NPAH - Noncarcinogenic Polynuclear Aromatic Hydrocarbon.
J - Estimated value.
R - Rejected during data validation.
N - Presumptive evidence.
NC - No Criteria
- Concentration above NYSDEC Soil criteria.

TABLE 3.18
SADVA AOC 3 SOIL BORING RESULTS

Former Schenectady Army Depot-
Remedial Investigation
Soil Boring Data
Detected Compound Summary

CAS NO.	COMPOUND	NYSDEC Soil Criteria	SAMPLE ID:	AOC3-SB01A	AOC3-SB101A (Dup of AOC3-SB01A)	AOC3-SB01D	AOC3-SB01E	AOC3-SB02A	AOC3-SB02D	AOC3-SB02G	AOC3-SB03A	AOC3-SB03B	AOC3-SB03E
			LAB ID:	C0G200280013	C0G200280014	C0G200280015	C0G200280016	C0G200280010	C0G200280011	C0G200280012	C0G200280007	C0G200280008	C0G200280009
			DEPTH:	0.2'	0.2'	7'	9'	0.2'	7'	13'	0.2'	3'	9'
			SOURCE:	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh
			SDG:	SADVA5	SADVA5	SADVA5	SADVA5	SADVA5	SADVA5	SADVA5	SADVA5	SADVA5	SADVA5
			MATRIX:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
			SAMPLED:	7/19/2000	7/19/2000	7/19/2000	7/19/2000	7/19/2000	7/19/2000	7/19/2000	7/19/2000	7/19/2000	7/19/2000
			VALIDATED:	10/12/2000	10/12/2000	10/12/2000	10/12/2000	10/12/2000	10/12/2000	10/12/2000	10/12/2000	10/12/2000	10/12/2000
			UNITS:										
	PESTICIDES												
319-84-6	alpha-BHC	111	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
319-86-8	delta-BHC	1221	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
309-00-2	Aldrin	41	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
60-57-1	Dieldrin	44	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
72-54-8	4,4'-DDD	2900	ug/kg	1300 JN	2200 JN	5700	1000	5.8 JN	ND	ND	ND	ND	ND
72-55-9	4,4'-DDE	2100	ug/kg	5500 J	9600 J	2900	360	27	0.77 J	0.47 J	32 J	0.54 JN	ND
50-29-3	4,4'-DDT	2100	ug/kg	21000	36000	8300	1000	300	2.4	1.4 J	230 JN	4.7 JN	ND
72-20-8	Endrin	339	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
7421-93-4	Endrin aldehyde	NC	ug/kg	ND	ND	ND	ND	ND	ND	ND	110 JN	3 JN	ND
53494-70-5	Endrin ketone	NC	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
33213-65-9	Endosulfan II	2971	ug/kg	ND	ND	ND	ND	ND	ND	ND	140 JN	3.5 JN	ND
1031-07-8	Endosulfan sulfate	3714	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
76-44-8	Heptachlor	444	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	0.21 J	ND
1024-57-3	Heptachlor epoxide	20	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
72-43-5	Methoxychlor	10000	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5103-71-9	alpha-Chlordane	540	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5103-74-2	gamma-Chlordane	540	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Total Pesticides	**10,000**	**ug/kg**	**27800**	**47800**	**16900**	**2360**	**332.8**	**3.17**	**1.87**	**512**	**11.95**	**ND**
	PCBs												
53469-21-9	Aroclor 1242	1,000/10,000	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
12672-29-6	Aroclor 1248	1,000/10,000	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
11097-69-1	Aroclor 1254	1,000/10,000	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
11096-82-5	Aroclor 1260	1,000/10,000	ug/kg	ND	ND	ND	ND	ND	ND	ND	5300	120	ND
	Total PCBs	**1,000/10,000**	**ug/kg**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**5300**	**120**	**ND**

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TABLE 3.18
SADVA AOC 3 SOIL BORING RESULTS

Former Schenectady Army Depot-
Remedial Investigation
Soil Boring Data
Detected Compound Summary

CAS NO.	COMPOUND	NYSDEC Soil Criteria		AOC3-SB01A	AOC3-SB101A (Dup of AOC3-SB01A)	AOC3-SB01D	AOC3-SB01E	AOC3-SB02A	AOC3-SB02D	AOC3-SB02G	AOC3-SB03A	AOC3-SB03B	AOC3-SB03E
			SAMPLE ID:	AOC3-SB01A	AOC3-SB101A	AOC3-SB01D	AOC3-SB01E	AOC3-SB02A	AOC3-SB02D	AOC3-SB02G	AOC3-SB03A	AOC3-SB03B	AOC3-SB03E
			LAB ID:	C0G200280013	C0G200280014	C0G200280015	C0G200280016	C0G200280010	C0G200280011	C0G200280012	C0G200280007	C0G200280008	C0G200280009
			DEPTH:	0.2'	0.2'	7'	9'	0.2'	7'	13'	0.2'	3'	9'
			SOURCE:	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh
			SDG:	SADVA5	SADVA5	SADVA5	SADVA5	SADVA5	SADVA5	SADVA5	SADVA5	SADVA5	SADVA5
			MATRIX:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
			SAMPLED:	7/19/2000	7/19/2000	7/19/2000	7/19/2000	7/19/2000	7/19/2000	7/19/2000	7/19/2000	7/19/2000	7/19/2000
			VALIDATED:	10/12/2000	10/12/2000	10/12/2000	10/12/2000	10/12/2000	10/12/2000	10/12/2000	10/12/2000	10/12/2000	10/12/2000
			UNITS:										
	METALS												
7429-90-5	Aluminum	12800	mg/kg	13800	13900	14000	14700	10600	11500	15300	12400	13100	13600
7440-36-0	Antimony	0.59	mg/kg	9.1 J	4.8 J	0.55 J	0.32 J	0.99 J	0.28 J	0.19 J	1.1 J	0.18 J	0.36 J
7440-38-2	Arsenic	16.4	mg/kg	12.4	11.5	8.7	10.2	6.8	6.6	9.7	9	5.5	8.5
7440-39-3	Barium	300	mg/kg	76.5	88.1	60.5	53.2	81.2	36	48.2	163	45.1	52.6
7440-41-7	Beryllium	0.67	mg/kg	0.8	0.78	0.77	0.81	0.64	0.6	0.82	0.68	0.79	0.76
7440-43-9	Cadmium	1	mg/kg	1.5	1.7	1.1	0.7	0.65	0.43 J	0.56	1.2	0.33 J	0.54
7440-70-2	Calcium	46600	mg/kg	4510	6230	3030	2200	3040	1720	2730	29700	1120	1510
7440-47-3	Chromium	17.5	mg/kg	28.6	32	24	23.6	16.5	17.6	23.7	24.2	15.2	20
7440-48-4	Cobalt	30	mg/kg	22.1	22.4	22	23.9	12.7	15.7	21.3	13.7	12.3	19.2
7440-50-8	Copper	26.9	mg/kg	7480	5000	183	81.7	30.4	30.3	41.8	44.7	24.6	43
7439-89-6	Iron	25700	mg/kg	51100	49900	42300	42500	23900	30200	41500	28500	30200	36900
7439-92-1	Lead	60.8 (29.3 average)	mg/kg	875	601	126	33.2	55.3	15.2	21.4	130	10.8	23.1
7439-95-4	Magnesium	13100	mg/kg	8320	8720	7000	7390	3620	5590	7970	6340	3950	6140
7439-96-5	Manganese	875	mg/kg	884	923	913	837	983	622	722	662	853	944
7439-97-6	Mercury	0.1	mg/kg	1.3	0.98	0.32	0.13	0.044	0.049	0.056	0.053	0.036 J	0.038
7440-02-0	Nickel	24.8	mg/kg	73.1	64.9	48.8	49.9	20.9	32.4	46.8	27.9	24.8	35.9
7440-09-7	Potassium	1660	mg/kg	1660 J	1660 J	1410 J	1490 J	944 J	1190 J	1660 J	1550 J	833 J	1390 J
7782-49-2	Selenium	2	mg/kg	ND	0.27 J	ND	ND	0.31 J	ND	ND	0.37 J	ND	ND
7440-22-4	Silver	0.17	mg/kg	1.9	1.3	0.19 J	0.21 J	0.31 J	0.14 J	0.14 J	0.48 J	ND	0.15 J
7440-23-5	Sodium	619	mg/kg	93.3 J	79.3 J	58.2 J	68.2 J	52.9 J	50.3 J	70.9 J	86 J	56.1 J	49.1 J
7440-28-0	Thallium	0.67	mg/kg	ND	0.85 J	0.49 J	ND	ND	ND	ND	0.46 J	ND	ND
7440-62-2	Vanadium	150	mg/kg	22.9	25	22.5	23.6	22.2	19.3	24.6	26.1	23.9	22.4
7440-66-6	Zinc	134	mg/kg	542	573	219	147	95.9	81.6	111	203	73.5	112

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TABLE 3.18
SADVA AOC 3 SOIL BORING RESULTS

Former Schenectady Army Depot- Remedial Investigation Soil Boring Data Detected Compound Summary			SAMPLE ID:	AOC3-SB04A	AOC3-SB04B	AOC3-SB04E	AOC3-SB05A	AOC3-SB05D	AOC3-SB05G	AOC3-SB06A	AOC3-SB06H	AOC3-SB06K	AOC3-SB07A
			LAB ID:	C0G200280004	C0G200280005	C0G200280006	C0G190235007	C0G200280002	C0G200280003	C0G240112001	C0G240112002	C0G240112003	C0G240112004
			DEPTH:	0.2'	3'	9'	0.2'	7'	13'	0.2'	14'	20'	0.2'
			SOURCE:	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh
			SDG:	SADVA5	SADVA5	SADVA5	SADVA1	SADVA5	SADVA5	SADVA6	SADVA6	SADVA6	SADVA6
			MATRIX:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
		NYSDEC	SAMPLED:	7/18/2000	7/19/2000	7/19/2000	7/18/2000	7/18/2000	7/18/2000	7/20/2000	7/20/2000	7/20/2000	7/20/2000
		Soil	VALIDATED:	10/12/2000	10/12/2000	10/12/2000	10/4/2000	10/12/2000	10/12/2000	10/13/2000	10/13/2000	10/13/2000	10/13/2000
CAS NO.	COMPOUND	Criteria	UNITS:										
	VOLATILES												
67-64-1	Acetone	407	ug/kg	ND	ND	5 J	ND	ND	2.5 J	ND	ND	ND	ND
71-43-2	Benzene	215	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
78-93-3	2-Butanone	833	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	540 J	ND
75-15-0	Carbon disulfide	9990	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
108-90-7	Chlorobenzene	6105	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	200 J	ND
67-66-3	Chloroform	803	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
107-06-2	1,2-Dichloroethane	259	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	330 J	ND
540-59-0	1,2-Dichloroethene (total)	1092	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	550	ND
100-41-4	Ethylbenzene	10000	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	810	ND
591-78-6	2-Hexanone	NC	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
75-09-2	Methylene chloride	389	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
108-10-1	4-Methyl-2-pentanone	3515	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
127-18-4	Tetrachloroethene	5124	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
108-88-3	Toluene	5550	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	270 J	ND
79-01-6	Trichloroethene	2331	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	250 J	ND
75-01-4	Vinyl chloride	422	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	260 J	ND
1330-20-7	Xylenes (total)	4440	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	3800	ND
	Total VOCs	**10,000**	**ug/kg**	**ND**	**ND**	**5**	**ND**	**ND**	**2.5**	**ND**	**ND**	**7010**	**ND**

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- Concentration above NYSDEC Soil criteria.

TABLE 3.18
SADVA AOC 3 SOIL BORING RESULTS

Former Schenectady Army Depot- Remedial Investigation Soil Boring Data Detected Compound Summary		NYSDEC Soil	SAMPLE ID:	AOC3-SB04A	AOC3-SB04B	AOC3-SB04E	AOC3-SB05A	AOC3-SB05D	AOC3-SB05G	AOC3-SB06A	AOC3-SB06H	AOC3-SB06K	AOC3-SB07A
			LAB ID:	C0G200280004	C0G200280005	C0G200280006	C0G190235007	C0G200280002	C0G200280003	C0G240112001	C0G240112002	C0G240112003	C0G240112004
			DEPTH:	0.2'	3'	9'	0.2'	7'	13'	0.2'	14'	20'	0.2'
			SOURCE:	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh
			SDG:	SADVA5	SADVA5	SADVA5	SADVA1	SADVA5	SADVA5	SADVA6	SADVA6	SADVA6	SADVA6
			MATRIX:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
			SAMPLED:	7/18/2000	7/19/2000	7/19/2000	7/18/2000	7/18/2000	7/18/2000	7/20/2000	7/20/2000	7/20/2000	7/20/2000
			VALIDATED:	10/12/2000	10/12/2000	10/12/2000	10/4/2000	10/12/2000	10/12/2000	10/13/2000	10/13/2000	10/13/2000	10/13/2000
CAS NO.	COMPOUND	Criteria	UNITS:										
	SEMIVOLATILES												
95-48-7	2-Methylphenol	278	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	3200 J	ND
108-95-2	Phenol	100	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	580 J	ND
117-81-7	bis(2-Ethylhexyl) phthalate	50000	ug/kg	ND	210 J	140 J	ND	240 J	240 J	ND	300 J	960 J	ND
132-64-9	Dibenzofuran	22755	ug/kg	ND	ND	ND	ND	ND	ND	ND	6700	1200 J	ND
95-50-1	1,2-Dichlorobenzene	29563	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	2500 J	ND
541-73-1	1,3-Dichlorobenzene	5735	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
106-46-7	1,4-Dichlorobenzene	31450	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
86-74-8	Carbazole	NC	ug/kg	ND	ND	ND	ND	ND	ND	ND	7700	450 J	ND
120-83-2	2,4-Dichlorophenol	1406	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
105-67-9	2,4-Dimethylphenol	NC	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
84-74-2	Di-n-butyl phthalate	29970	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	360 J	ND
117-84-0	Di-n-octyl phthalate	50000	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	350 J	ND
106-44-5	4-Methylphenol	3145	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	2800 J	ND
100-02-7	4-Nitrophenol	389	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
86-30-6	N-Nitrosodiphenylamine	NC	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	CPAHs												
56-55-3	Benzo(a)anthracene	224	ug/kg	150 J	ND	ND	23 J	180 J	ND	62 J	25000	1000 J	7.5 J
50-32-8	Benzo(a)pyrene	61	ug/kg	150 J	ND	ND	23 J	160 J	ND	63 J	19000	590 J	6.9 J
205-99-2	Benzo(b)fluoranthene	4070	ug/kg	140 J	ND	ND	19 J	230 J	ND	59 J	16000	540 J	9.5 J
207-08-9	Benzo(k)fluoranthene	4070	ug/kg	160 J	ND	ND	26 J	200 J	ND	83 J	19000	660 J	ND
218-01-9	Chrysene	1480	ug/kg	180 J	ND	ND	27 J	260 J	ND	88 J	27000	1300 J	11 J
53-70-3	Dibenz(a,h)anthracene	14	ug/kg	28 J	ND	ND	ND	42 J	ND	17 J	3400	ND	ND
193-39-5	Indeno(1,2,3-cd)pyrene	11840	ug/kg	100 J	ND	ND	17 J	120 J	ND	59 J	15000	230 J	ND
	Total CPAHs	**10000**	**ug/kg**	**908**	**ND**	**ND**	**135**	**1192**	**ND**	**431**	**124400**	**4320**	**34.9**
	NPAHs												
83-32-9	Acenaphthene	(185000)340400	ug/kg	25 J	ND	ND	ND	ND	ND	ND	11000	2000 J	ND
208-96-8	Acenaphthylene	152144	ug/kg	ND	ND	ND	ND	ND	ND	ND	310 J	ND	ND
120-12-7	Anthracene	(50000)185000	ug/kg	39 J	ND	ND	ND	ND	ND	12 J	15000	1200 J	ND
191-24-2	Benzo(ghi)perylene	(185000)29600000	ug/kg	92 J	ND	ND	17 J	120 J	ND	66 J	15000	240 J	ND
86-73-7	Fluorene	(50000)1350500	ug/kg	ND	ND	ND	ND	ND	ND	ND	11000	2600 J	ND
206-44-0	Fluoranthene	(50000)185000	ug/kg	320 J	ND	ND	44 J	230 J	ND	110 J	69000	3600 J	18 J
91-57-6	2-Methylnaphthalene	50000	ug/kg	ND	ND	ND	ND	ND	ND	ND	4400	18000	ND
91-20-3	Naphthalene	48100	ug/kg	ND	ND	ND	ND	ND	ND	ND	15000	11000	ND
85-01-8	Phenanthrene	(50000)185000	ug/kg	180 J	ND	ND	22 J	84 J	ND	71 J	73000	7400 J	ND
129-00-0	Pyrene	(50000)185000	ug/kg	250 J	ND	ND	35 J	140 J	ND	120 J	62000	2200 J	15 J
	Total NPAHs	**500,000**	**ug/kg**	**906**	**ND**	**ND**	**118**	**574**	**ND**	**379**	**275710**	**48240**	**33**
	Total PAHs		**ug/kg**	**1814**	**ND**	**ND**	**253**	**1766**	**ND**	**810**	**400110**	**52560**	**67.9**
	Total SVOCs	**500,000**	**ug/kg**	**1814**	**210**	**140**	**253**	**2006**	**240**	**810**	**414810**	**64960**	**67.9**

ND - Not Detected.
NA - Not Analyzed / Not Applicable
CPAH - Carcinogenic Polynuclear Aromatic Hydrocarbon
NPAH - Noncarcinogenic Polynuclear Aromatic Hydrocarbon.
J - Estimated value.
R - Rejected during data validation.
N - Presumptive evidence.
NC - No Criteria
- Concentration above NYSDEC Soil criteria.

TABLE 3.18
SADVA AOC 3 SOIL BORING RESULTS

Former Schenectady Army Depot-
Remedial Investigation
Soil Boring Data
Detected Compound Summary

CAS NO.	COMPOUND	NYSDEC Soil Criteria	SAMPLE ID:	AOC3-SB04A	AOC3-SB04B	AOC3-SB04E	AOC3-SB05A	AOC3-SB05D	AOC3-SB05G	AOC3-SB06A	AOC3-SB06H	AOC3-SB06K	AOC3-SB07A
			LAB ID:	C0G200280004	C0G200280005	C0G200280006	C0G190235007	C0G200280002	C0G200280003	C0G240112001	C0G240112002	C0G240112003	C0G240112004
			DEPTH:	0.2'	3'	9'	0.2'	7'	13'	0.2'	14'	20'	0.2'
			SOURCE:	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh
			SDG:	SADVA5	SADVA5	SADVA5	SADVA1	SADVA5	SADVA5	SADVA6	SADVA6	SADVA6	SADVA6
			MATRIX:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
			SAMPLED:	7/18/2000	7/19/2000	7/19/2000	7/18/2000	7/18/2000	7/18/2000	7/20/2000	7/20/2000	7/20/2000	7/20/2000
			VALIDATED:	10/12/2000	10/12/2000	10/12/2000	10/4/2000	10/12/2000	10/12/2000	10/13/2000	10/13/2000	10/13/2000	10/13/2000
			UNITS:										
	PESTICIDES												
319-84-6	alpha-BHC	111	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
319-86-8	delta-BHC	1221	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
309-00-2	Aldrin	41	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
60-57-1	Dieldrin	44	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
72-54-8	4,4'-DDD	2900	ug/kg	4.7 JN	ND	ND	ND	ND	ND	ND	16 JN	99 J	ND
72-55-9	4,4'-DDE	2100	ug/kg	73	1.8 J	ND	5.5	1.8 J	ND	12	17	26 JN	3.6
50-29-3	4,4'-DDT	2100	ug/kg	250	2.4 J	ND	20	2.2	ND	11	80	22 JN	3.1
72-20-8	Endrin	339	ug/kg	ND	ND	ND	ND	ND	ND	ND	2.2 JN	13 J	ND
7421-93-4	Endrin aldehyde	NC	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
53494-70-5	Endrin ketone	NC	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
33213-65-9	Endosulfan II	2971	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1031-07-8	Endosulfan sulfate	3714	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
76-44-8	Heptachlor	444	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1024-57-3	Heptachlor epoxide	20	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
72-43-5	Methoxychlor	10000	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5103-71-9	alpha-Chlordane	540	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5103-74-2	gamma-Chlordane	540	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	3.8 JN	ND
	Total Pesticides	**10,000**	**ug/kg**	**327.7**	**4.2**	**ND**	**25.5**	**4**	**ND**	**23**	**115.2**	**163.8**	**6.7**
	PCBs												
53469-21-9	Aroclor 1242	1,000/10,000	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
12672-29-6	Aroclor 1248	1,000/10,000	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	530	ND
11097-69-1	Aroclor 1254	1,000/10,000	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	460	ND
11096-82-5	Aroclor 1260	1,000/10,000	ug/kg	ND	ND	ND	ND	ND	ND	ND	57	430	ND
	Total PCBs	**1,000/10,000**	**ug/kg**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**57**	**1420**	**ND**

ND - Not Detected.
NA - Not Analyzed / Not Applicable
J - Estimated value.
R - Rejected during data validation.
N - Presumptive evidence.
NC - No Criteria
- Concentration above NYSDEC Soil criteria.

TABLE 3.18
SADVA AOC 3 SOIL BORING RESULTS

Former Schenectady Army Depot- Remedial Investigation Soil Boring Data Detected Compound Summary		NYSDEC Soil Criteria	SAMPLE ID: LAB ID: DEPTH: SOURCE: SDG: MATRIX: SAMPLED: VALIDATED:	AOC3-SB04A C0G200280004 0.2' STL Pittsburgh SADVA5 SOIL 7/18/2000 10/12/2000	AOC3-SB04B C0G200280005 3' STL Pittsburgh SADVA5 SOIL 7/19/2000 10/12/2000	AOC3-SB04E C0G200280006 9' STL Pittsburgh SADVA5 SOIL 7/19/2000 10/12/2000	AOC3-SB05A C0G190235007 0.2' STL Pittsburgh SADVA1 SOIL 7/18/2000 10/4/2000	AOC3-SB05D C0G200280002 7' STL Pittsburgh SADVA5 SOIL 7/18/2000 10/12/2000	AOC3-SB05G C0G200280003 13' STL Pittsburgh SADVA5 SOIL 7/18/2000 10/12/2000	AOC3-SB06A C0G240112001 0.2' STL Pittsburgh SADVA6 SOIL 7/20/2000 10/13/2000	AOC3-SB06H C0G240112002 14' STL Pittsburgh SADVA6 SOIL 7/20/2000 10/13/2000	AOC3-SB06K C0G240112003 20' STL Pittsburgh SADVA6 SOIL 7/20/2000 10/13/2000	AOC3-SB07A C0G240112004 0.2' STL Pittsburgh SADVA6 SOIL 7/20/2000 10/13/2000
CAS NO.	COMPOUND		UNITS:										
	METALS												
7429-90-5	Aluminum	12800	mg/kg	10000	17300	14500	16300	7820	14300	14900	13300	11800	12900
7440-36-0	Antimony	0.59	mg/kg	0.82 J	0.27 J	0.24 J	ND	1 J	ND	1 J	3.9 J	33.9 J	0.49 J
7440-38-2	Arsenic	16.4	mg/kg	8	8.2	8.5	6.8	23.3	8.6	6.9	12.7	19.3	5.2
7440-39-3	Barium	300	mg/kg	81.2	43.6	41.6	48.7	91.6	51.4	93.9	242	1420	83.7
7440-41-7	Beryllium	0.67	mg/kg	0.64	0.84	0.75	0.76	0.46 J	0.77	0.78	0.74	0.78	0.64
7440-43-9	Cadmium	1	mg/kg	0.59 J	0.42 J	0.42 J	0.37 J	0.44 J	0.5 J	0.68	3.2	17.1	0.49 J
7440-70-2	Calcium	46600	mg/kg	3780	842	1390	1550	5480	3680	3820	8610	17400	1300
7440-47-3	Chromium	17.5	mg/kg	16.9	22.3	20.4	20.3	20.9	21.2	22.9 J	94.1 J	279 J	18 J
7440-48-4	Cobalt	30	mg/kg	11.5	19.3	18.3	15.4	15.5	21.1	23.2 J	29.4 J	25.5 J	11.9 J
7440-50-8	Copper	26.9	mg/kg	34.4	36.5	39.8	31.9	61	40.9	47.3	11300	573	21.8
7439-89-6	Iron	25700	mg/kg	25500	39000	37000	33200	63600	37900	30900 J	91200 J	86300 J	28700 J
7439-92-1	Lead	60.8 (29.3 average)	mg/kg	63.4	17.3	16.4	18.9 J	128	18.3	79.3	1480	3310	21.4
7439-95-4	Magnesium	13100	mg/kg	3460	7060	6680	6020	3090	7250	5170	5950	4800	3530
7439-96-5	Manganese	875	mg/kg	864	713	682	602	601	896	1130	1030	1030	884
7439-97-6	Mercury	0.1	mg/kg	0.062	0.072	0.081	0.075	0.046	0.045	0.054	0.17	0.25	0.031
7440-02-0	Nickel	24.8	mg/kg	19.8	36.3	36.3	32.1	22.5	44.5	28.8 J	49.6 J	55.6 J	20.4 J
7440-09-7	Potassium	1660	mg/kg	791 J	1410 J	1560 J	1140	1020 J	1660 J	1320	1420	2340	838
7782-49-2	Selenium	2	mg/kg	0.62	ND	ND	ND	0.61 J	ND	ND	ND	1.1 J	ND
7440-22-4	Silver	0.17	mg/kg	0.24 J	ND	0.13 J	ND	0.33 J	0.16 J	0.32 J	142	4.7	0.28 J
7440-23-5	Sodium	619	mg/kg	50.2 J	47 J	52.4 J	64 J	457 J	61.1 J	58.5 J	191 J	707 J	43.2 J
7440-28-0	Thallium	0.67	mg/kg	ND	0.45 J	ND	ND	ND	0.56 J	ND	ND	ND	ND
7440-62-2	Vanadium	150	mg/kg	21.7	25.4	23.8	25.4	17.6	22.4	27.2	49.1	59.5	23.1
7440-66-6	Zinc	134	mg/kg	102	103	101	85.5	145	110	133	503	2490	85.7

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N - Presumptive evidence.
NC - No Criteria
- Concentration above NYSDEC Soil criteria.

TABLE 3.18
SADVA AOC 3 SOIL BORING RESULTS

Former Schenectady Army Depot- Remedial Investigation Soil Boring Data Detected Compound Summary		NYSDEC Soil	SAMPLE ID:	AOC3-SB07D	AOC3-SB08A	AOC3-SB08F	AOC3-SB08I	AOC3-SB09A	AOC3-SB09E	AOC3-SB09F	AOC3-SB10A	AOC3-SB10D	AOC3-SB10J
			LAB ID:	C0G240112005	C0G190235001	C0G190235002	C0G190235003	C0G210254001	C0G210254002	C0G210254003	C0G190235004	C0G190235005	C0G190235006
			DEPTH:	7'	0.2'	11'	17'	0.2'	9'	11'	0.2'	7'	19'
			SOURCE:	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh
			SDG:	SADVA6	SADVA1	SADVA1	SADVA1	SADVA5	SADVA5	SADVA5	SADVA1	SADVA1	SADVA1
			MATRIX:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
			SAMPLED:	7/20/2000	7/18/2000	7/18/2000	7/18/2000	7/19/2000	7/19/2000	7/19/2000	7/18/2000	7/18/2000	7/18/2000
			VALIDATED:	10/13/2000	10/4/2000	10/4/2000	10/4/2000	10/12/2000	10/12/2000	10/12/2000	10/4/2000	10/4/2000	10/4/2000
CAS NO.	COMPOUND	Criteria	UNITS:										
	VOLATILES												
67-64-1	Acetone	407	ug/kg	ND	ND	ND	51	ND	8.4 J	ND	ND	ND	ND
71-43-2	Benzene	215	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
78-93-3	2-Butanone	833	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
75-15-0	Carbon disulfide	9990	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
108-90-7	Chlorobenzene	6105	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
67-66-3	Chloroform	803	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
107-06-2	1,2-Dichloroethane	259	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
540-59-0	1,2-Dichloroethene (total)	1092	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
100-41-4	Ethylbenzene	10000	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
591-78-6	2-Hexanone	NC	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
75-09-2	Methylene chloride	389	ug/kg	ND	7.9	ND	ND	ND	ND	ND	ND	ND	ND
108-10-1	4-Methyl-2-pentanone	3515	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
127-18-4	Tetrachloroethene	5124	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
108-88-3	Toluene	5550	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
79-01-6	Trichloroethene	2331	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
75-01-4	Vinyl chloride	422	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1330-20-7	Xylenes (total)	4440	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Total VOCs	**10,000**	**ug/kg**	**ND**	**7.9**	**ND**	**51**	**ND**	**8.4**	**ND**	**ND**	**ND**	**ND**

ND - Not Detected.
NA - Not Analyzed / Not Applicable
J - Estimated value.
R - Rejected during data validation.
N - Presumptive evidence.
NC - No Criteria
- Concentration above NYSDEC Soil criteria.

TABLE 3.18
SADVA AOC 3 SOIL BORING RESULTS

Former Schenectady Army Depot- Remedial Investigation Soil Boring Data Detected Compound Summary		NYSDEC Soil	SAMPLE ID:	AOC3-SB07D	AOC3-SB08A	AOC3-SB08F	AOC3-SB08I	AOC3-SB09A	AOC3-SB09E	AOC3-SB09F	AOC3-SB10A	AOC3-SB10D	AOC3-SB10J
			LAB ID:	C0G240112005	C0G190235001	C0G190235002	C0G190235003	C0G210254001	C0G210254002	C0G210254003	C0G190235004	C0G190235005	C0G190235006
			DEPTH:	7'	0.2'	11'	17'	0.2'	9'	11'	0.2'	7'	19'
			SOURCE:	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh
			SDG:	SADVA6	SADVA1	SADVA1	SADVA1	SADVA5	SADVA5	SADVA5	SADVA1	SADVA1	SADVA1
			MATRIX:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
			SAMPLED:	7/20/2000	7/18/2000	7/18/2000	7/18/2000	7/19/2000	7/19/2000	7/19/2000	7/18/2000	7/18/2000	7/18/2000
			VALIDATED:	10/13/2000	10/4/2000	10/4/2000	10/4/2000	10/12/2000	10/12/2000	10/12/2000	10/4/2000	10/4/2000	10/4/2000
CAS NO.	COMPOUND	Criteria	UNITS:										
	SEMIVOLATILES												
95-48-7	2-Methylphenol	278	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
108-95-2	Phenol	100	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
117-81-7	bis(2-Ethylhexyl) phthalate	50000	ug/kg	62 J	60 J	90 J	110 J	ND	100 J	72 J	ND	71 J	180 J
132-64-9	Dibenzofuran	22755	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
95-50-1	1,2-Dichlorobenzene	29563	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
541-73-1	1,3-Dichlorobenzene	5735	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
106-46-7	1,4-Dichlorobenzene	31450	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
86-74-8	Carbazole	NC	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
120-83-2	2,4-Dichlorophenol	1406	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
105-67-9	2,4-Dimethylphenol	NC	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
84-74-2	Di-n-butyl phthalate	29970	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
117-84-0	Di-n-octyl phthalate	50000	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
106-44-5	4-Methylphenol	3145	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
100-02-7	4-Nitrophenol	389	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
86-30-6	N-Nitrosodiphenylamine	NC	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	CPAHs												
56-55-3	Benzo(a)anthracene	224	ug/kg	ND	45 J	ND	ND	85 J	ND	ND	31 J	ND	ND
50-32-8	Benzo(a)pyrene	61	ug/kg	ND	54 J	ND	ND	91 J	ND	ND	32 J	ND	ND
205-99-2	Benzo(b)fluoranthene	4070	ug/kg	ND	49 J	ND	ND	130 J	ND	ND	26 J	ND	ND
207-08-9	Benzo(k)fluoranthene	4070	ug/kg	ND	56 J	ND	ND	88 J	ND	ND	37 J	ND	ND
218-01-9	Chrysene	1480	ug/kg	ND	67 J	ND	ND	120 J	ND	ND	37 J	ND	ND
53-70-3	Dibenz(a,h)anthracene	14	ug/kg	ND	12 J	ND	ND	ND	ND	ND	ND	ND	ND
193-39-5	Indeno(1,2,3-cd)pyrene	11840	ug/kg	ND	46 J	ND	ND	29 J	ND	ND	22 J	ND	ND
	Total CPAHs	**10000**	**ug/kg**	**ND**	**329**	**ND**	**ND**	**543**	**ND**	**ND**	**185**	**ND**	**ND**
	NPAHs												
83-32-9	Acenaphthene	(185000)340400	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
208-96-8	Acenaphthylene	152144	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
120-12-7	Anthracene	(50000)185000	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
191-24-2	Benzo(ghi)perylene	(185000)29600000	ug/kg	ND	47 J	ND	ND	29 J	ND	ND	20 J	ND	ND
86-73-7	Fluorene	(50000)1350500	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
206-44-0	Fluoranthene	(50000)185000	ug/kg	ND	97 J	ND	ND	200 J	ND	ND	58 J	ND	ND
91-57-6	2-Methylnaphthalene	50000	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
91-20-3	Naphthalene	48100	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
85-01-8	Phenanthrene	(50000)185000	ug/kg	ND	52 J	ND	ND	92 J	ND	ND	26 J	ND	ND
129-00-0	Pyrene	(50000)185000	ug/kg	ND	89 J	ND	ND	120 J	ND	ND	47 J	ND	ND
	Total NPAHs	**500,000**	**ug/kg**	**ND**	**285**	**ND**	**ND**	**441**	**ND**	**ND**	**151**	**ND**	**ND**
	Total PAHs		**ug/kg**	**ND**	**614**	**ND**	**ND**	**984**	**ND**	**ND**	**336**	**ND**	**ND**
	Total SVOCs	**500,000**	**ug/kg**	**62**	**674**	**90**	**110**	**984**	**100**	**72**	**336**	**71**	**180**

ND - Not Detected.
NA - Not Analyzed / Not Applicable
CPAH - Carcinogenic Polynuclear Aromatic Hydrocarbon
NPAH - Noncarcinogenic Polynuclear Aromatic Hydrocarbon.
J - Estimated value.
R - Rejected during data validation.
N - Presumptive evidence.
NC - No Criteria
- Concentration above NYSDEC Soil criteria.

TABLE 3.18
SADVA AOC 3 SOIL BORING RESULTS

Former Schenectady Army Depot-
Remedial Investigation
Soil Boring Data
Detected Compound Summary

CAS NO.	COMPOUND	NYSDEC Soil Criteria	SAMPLE ID:	AOC3-SB07D	AOC3-SB08A	AOC3-SB08F	AOC3-SB08I	AOC3-SB09A	AOC3-SB09E	AOC3-SB09F	AOC3-SB10A	AOC3-SB10D	AOC3-SB10J
			LAB ID:	C0G240112005	C0G190235001	C0G190235002	C0G190235003	C0G210254001	C0G210254002	C0G210254003	C0G190235004	C0G190235005	C0G190235006
			DEPTH:	7'	0.2'	11'	17'	0.2'	9'	11'	0.2'	7'	19'
			SOURCE:	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh
			SDG:	SADVA6	SADVA1	SADVA1	SADVA1	SADVA5	SADVA5	SADVA5	SADVA1	SADVA1	SADVA1
			MATRIX:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
			SAMPLED:	7/20/2000	7/18/2000	7/18/2000	7/18/2000	7/19/2000	7/19/2000	7/19/2000	7/18/2000	7/18/2000	7/18/2000
			VALIDATED:	10/13/2000	10/4/2000	10/4/2000	10/4/2000	10/12/2000	10/12/2000	10/12/2000	10/4/2000	10/4/2000	10/4/2000
			UNITS:										
	PESTICIDES												
319-84-6	alpha-BHC	111	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
319-86-8	delta-BHC	1221	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
309-00-2	Aldrin	41	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
60-57-1	Dieldrin	44	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
72-54-8	4,4'-DDD	2900	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
72-55-9	4,4'-DDE	2100	ug/kg	ND	2.6	ND	ND	2.6	ND	ND	4.3	0.52 JN	ND
50-29-3	4,4'-DDT	2100	ug/kg	ND	3	ND	ND	3.6	ND	ND	4.3	0.63 J	ND
72-20-8	Endrin	339	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
7421-93-4	Endrin aldehyde	NC	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
53494-70-5	Endrin ketone	NC	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
33213-65-9	Endosulfan II	2971	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1031-07-8	Endosulfan sulfate	3714	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
76-44-8	Heptachlor	444	ug/kg	ND	ND	ND	ND	0.46 JN	ND	ND	ND	ND	ND
1024-57-3	Heptachlor epoxide	20	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
72-43-5	Methoxychlor	10000	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5103-71-9	alpha-Chlordane	540	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5103-74-2	gamma-Chlordane	540	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Total Pesticides	**10,000**	**ug/kg**	**ND**	**5.6**	**ND**	**ND**	**6.66**	**ND**	**ND**	**8.6**	**1.15**	**ND**
	PCBs												
53469-21-9	Aroclor 1242	1,000/10,000	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
12672-29-6	Aroclor 1248	1,000/10,000	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
11097-69-1	Aroclor 1254	1,000/10,000	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
11096-82-5	Aroclor 1260	1,000/10,000	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Total PCBs	**1,000/10,000**	**ug/kg**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**

ND - Not Detected.
NA - Not Analyzed / Not Applicable
J - Estimated value.
R - Rejected during data validation.
N - Presumptive evidence.
NC - No Criteria
- Concentration above NYSDEC Soil criteria.

TABLE 3.18
SADVA AOC 3 SOIL BORING RESULTS

Former Schenectady Army Depot- Remedial Investigation Soil Boring Data Detected Compound Summary		NYSDEC Soil Criteria	SAMPLE ID:	AOC3-SB07D	AOC3-SB08A	AOC3-SB08F	AOC3-SB08I	AOC3-SB09A	AOC3-SB09E	AOC3-SB09F	AOC3-SB10A	AOC3-SB10D	AOC3-SB10J
			LAB ID:	C0G240112005	C0G190235001	C0G190235002	C0G190235003	C0G210254001	C0G210254002	C0G210254003	C0G190235004	C0G190235005	C0G190235006
			DEPTH:	7'	0.2'	11'	17'	0.2'	9'	11'	0.2'	7'	19'
			SOURCE:	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh
			SDG:	SADVA6	SADVA1	SADVA1	SADVA1	SADVA5	SADVA5	SADVA5	SADVA1	SADVA1	SADVA1
			MATRIX:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
			SAMPLED:	7/20/2000	7/18/2000	7/18/2000	7/18/2000	7/19/2000	7/19/2000	7/19/2000	7/18/2000	7/18/2000	7/18/2000
			VALIDATED:	10/13/2000	10/4/2000	10/4/2000	10/4/2000	10/12/2000	10/12/2000	10/12/2000	10/4/2000	10/4/2000	10/4/2000
CAS NO.	COMPOUND		UNITS:										
	METALS												
7429-90-5	Aluminum	12800	mg/kg	14100	12400	11800	10300	11600	14200	14400	12800	16400	14500
7440-36-0	Antimony	0.59	mg/kg	0.41 J	0.55 J	ND	0.25 J	0.86 J	ND	0.18 J	0.22 J	0.26 J	ND
7440-38-2	Arsenic	16.4	mg/kg	8.6	6.7	6.6	5.5	7.5	8.7	8.6	6.9	9	7.3
7440-39-3	Barium	300	mg/kg	52.7	83.9	41.2	36.7	83.7	56.3	50.4	50.3	54.6	47.7
7440-41-7	Beryllium	0.67	mg/kg	0.76	0.67	0.65	0.54 J	0.65	0.77	0.74	0.68	0.89	0.71
7440-43-9	Cadmium	1	mg/kg	0.6	0.56 J	0.39 J	0.32 J	0.75	0.58	0.58	0.41 J	0.43 J	0.45 J
7440-70-2	Calcium	46600	mg/kg	1890	3010	4970	2010	3100	2800	2160	1320	1740	2210
7440-47-3	Chromium	17.5	mg/kg	21.9 J	18.8	18.2	14.8	45.2	21.7	22.3	18.2	23.8	21.6
7440-48-4	Cobalt	30	mg/kg	18.8 J	12.9	19	17.1	13.3	20.5	19.4	13.6	21.1	17.5
7440-50-8	Copper	26.9	mg/kg	40.1	27.7	32.7	32.9	23.5	38.8	38.7	29.9	42.5	37.1
7439-89-6	Iron	25700	mg/kg	36900 J	29900	32800	28600	33200	39300	39000	30000	42400	38400
7439-92-1	Lead	60.8 (29.3 average)	mg/kg	17.2	39.5 J	16.3 J	12.7 J	41.7	18.7	17	29.1 J	20.6 J	14.3 J
7439-95-4	Magnesium	13100	mg/kg	6540	4180	6390	5390	4130	7050	6920	5150	7780	7100
7439-96-5	Manganese	875	mg/kg	765	975	787	596	820	926	812	585	725	805
7439-97-6	Mercury	0.1	mg/kg	0.048	0.052	0.059	0.047	0.049	0.054	0.054	0.051	0.05	0.048
7440-02-0	Nickel	24.8	mg/kg	37.4 J	24.1	42.5	36	23.2	44.2	41.1	26.2	46.7	37
7440-09-7	Potassium	1660	mg/kg	1600	1170	1140	889	1260	1290	1250	938	1660	1290
7782-49-2	Selenium	2	mg/kg	ND	0.29 J	ND	ND	0.31 J	ND	ND	ND	ND	ND
7440-22-4	Silver	0.17	mg/kg	0.22 J	0.26 J	0.16 J	ND	0.23 J	0.21 J	0.17 J	0.2 J	0.15 J	0.18 J
7440-23-5	Sodium	619	mg/kg	53.6 J	131 J	73.4 J	98.9 J	49.8 J	52.2 J	61 J	118 J	71.7 J	100 J
7440-28-0	Thallium	0.67	mg/kg	0.46 J	ND	ND	ND	ND	0.61 J	0.74 J	ND	0.47 J	ND
7440-62-2	Vanadium	150	mg/kg	23.2	25.3	17.3	16.2	22.9	23.7	23.4	20.9	24	22.6
7440-66-6	Zinc	134	mg/kg	107	158	99.1	78.2	183	96	105	87.9	110	117

ND - Not Detected.
NA - Not Analyzed / Not Applicable
J - Estimated value.
R - Rejected during data validation.
N - Presumptive evidence.
NC - No Criteria
- Concentration above NYSDEC Soil criteria.

TABLE 3.18
SADVA AOC 3 SOIL BORING RESULTS

Former Schenectady Army Depot- Remedial Investigation Soil Boring Data Detected Compound Summary		NYSDEC Soil Criteria	SAMPLE ID: LAB ID: DEPTH: SOURCE: SDG: MATRIX: SAMPLED: VALIDATED:	AOC3-SB11A C0G210254004 0.2' STL Pittsburgh SADVA5 SOIL 7/20/2000 10/12/2000	AOC3-SB11B C0G210254005 3' STL Pittsburgh SADVA5 SOIL 7/20/2000 10/12/2000	AOC3-SB11E C0G210257001 9' STL Pittsburgh SADVA6 SOIL 7/20/2000 10/13/2000	AOC3-SB14G C0H040186001 13' STL Pittsburgh SADVA10 SOIL 8/3/2000 10/25/2000	AOC3-SB14L C0H040186002 23' STL Pittsburgh SADVA10 SOIL 8/3/2000 10/25/2000	AOC3-SB17C C0I270130004 5' STL Pittsburgh SADVA16 SOIL 9/26/2000 11/25/2000	AOC3-SB17F C0I270130005 11' STL Pittsburgh SADVA16 SOIL 9/26/2000 11/25/2000	AOC3-SB17G C0I270130006 13' STL Pittsburgh SADVA16 SOIL 9/26/2000 11/25/2000	AOC3-SB18A C0I260208007 0.2' STL Pittsburgh SADVA16 SOIL 9/25/2000 11/25/2000	AOC3-SB18C C0I260208008 5' STL Pittsburgh SADVA16 SOIL 9/25/2000 11/25/2000
CAS NO.	COMPOUND		UNITS:										
	VOLATILES												
67-64-1	Acetone	407	ug/kg	ND	ND	74 J	ND	ND	ND	ND	ND	ND	ND
71-43-2	Benzene	215	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
78-93-3	2-Butanone	833	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
75-15-0	Carbon disulfide	9990	ug/kg	ND	ND	ND	10 J	ND	ND	ND	ND	ND	ND
108-90-7	Chlorobenzene	6105	ug/kg	ND	ND	ND	550	5100	ND	ND	ND	ND	ND
67-66-3	Chloroform	803	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
107-06-2	1,2-Dichloroethane	259	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
540-59-0	1,2-Dichloroethene (total)	1092	ug/kg	ND	ND	ND	14 J	ND	ND	ND	ND	ND	ND
100-41-4	Ethylbenzene	10000	ug/kg	ND	ND	ND	380	4800	ND	ND	ND	ND	ND
591-78-6	2-Hexanone	NC	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
75-09-2	Methylene chloride	389	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
108-10-1	4-Methyl-2-pentanone	3515	ug/kg	ND	ND	ND	R	R	ND	ND	ND	ND	ND
127-18-4	Tetrachloroethene	5124	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
108-88-3	Toluene	5550	ug/kg	ND	ND	ND	15 J	ND	ND	ND	ND	ND	ND
79-01-6	Trichloroethene	2331	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
75-01-4	Vinyl chloride	422	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1330-20-7	Xylenes (total)	4440	ug/kg	ND	ND	ND	1400	16000	ND	ND	ND	ND	ND
	Total VOCs	**10,000**	**ug/kg**	**ND**	**ND**	**74**	**2369**	**25900**	**ND**	**ND**	**ND**	**ND**	**ND**

ND - Not Detected.
NA - Not Analyzed / Not Applicable
J - Estimated value.
R - Rejected during data validation.
N - Presumptive evidence.
NC - No Criteria
- Concentration above NYSDEC Soil criteria.

TABLE 3.18
SADVA AOC 3 SOIL BORING RESULTS

Former Schenectady Army Depot- Remedial Investigation Soil Boring Data Detected Compound Summary		NYSDEC Soil Criteria	SAMPLE ID:	AOC3-SB11A	AOC3-SB11B	AOC3-SB11E	AOC3-SB14G	AOC3-SB14L	AOC3-SB17C	AOC3-SB17F	AOC3-SB17G	AOC3-SB18A	AOC3-SB18C
			LAB ID:	C0G210254004	C0G210254005	C0G210257001	C0H040186001	C0H040186002	C0I270130004	C0I270130005	C0I270130006	C0I260208007	C0I260208008
			DEPTH:	0.2'	3'	9'	13'	23'	5'	11'	13'	0.2'	5'
			SOURCE:	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh
			SDG:	SADVA5	SADVA5	SADVA6	SADVA10	SADVA10	SADVA16	SADVA16	SADVA16	SADVA16	SADVA16
			MATRIX:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
			SAMPLED:	7/20/2000	7/20/2000	7/20/2000	8/3/2000	8/3/2000	9/26/2000	9/26/2000	9/26/2000	9/25/2000	9/25/2000
			VALIDATED:	10/12/2000	10/12/2000	10/13/2000	10/25/2000	10/25/2000	11/25/2000	11/25/2000	11/25/2000	11/25/2000	11/25/2000
CAS NO.	COMPOUND		UNITS:										
	SEMIVOLATILES												
95-48-7	2-Methylphenol	278	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
108-95-2	Phenol	100	ug/kg	ND	ND	ND	ND	ND	ND	ND	24 J	ND	ND
117-81-7	bis(2-Ethylhexyl) phthalate	50000	ug/kg	22 J	33 J	44 J	ND	ND	ND	ND	ND	ND	ND
132-64-9	Dibenzofuran	22755	ug/kg	ND	ND	ND	270 J	380 J	ND	ND	ND	ND	ND
95-50-1	1,2-Dichlorobenzene	29563	ug/kg	ND	ND	ND	960 J	300 J	ND	ND	ND	ND	ND
541-73-1	1,3-Dichlorobenzene	5735	ug/kg	ND	ND	ND	ND	170 J	ND	ND	ND	ND	ND
106-46-7	1,4-Dichlorobenzene	31450	ug/kg	ND	ND	ND	320 J	1200 J	ND	ND	ND	ND	ND
86-74-8	Carbazole	NC	ug/kg	ND	ND	ND	75 J	ND	ND	ND	ND	ND	ND
120-83-2	2,4-Dichlorophenol	1406	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
105-67-9	2,4-Dimethylphenol	NC	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
84-74-2	Di-n-butyl phthalate	29970	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
117-84-0	Di-n-octyl phthalate	50000	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
106-44-5	4-Methylphenol	3145	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
100-02-7	4-Nitrophenol	389	ug/kg	ND	ND	ND	69 J	ND	ND	ND	ND	ND	ND
86-30-6	N-Nitrosodiphenylamine	NC	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	CPAHs												
56-55-3	Benzo(a)anthracene	224	ug/kg	ND	ND	ND	80 J	ND	110 J	ND	ND	260 J	19 J
50-32-8	Benzo(a)pyrene	61	ug/kg	ND	ND	ND	62 J	ND	110 J	ND	ND	260 J	ND
205-99-2	Benzo(b)fluoranthene	4070	ug/kg	ND	ND	ND	55 J	ND	120 J	19 J	ND	280 J	24 J
207-08-9	Benzo(k)fluoranthene	4070	ug/kg	ND	ND	ND	ND	ND	150 J	21 J	ND	290 J	ND
218-01-9	Chrysene	1480	ug/kg	ND	ND	ND	140 J	ND	140 J	20 J	ND	270 J	21 J
53-70-3	Dibenz(a,h)anthracene	14	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
193-39-5	Indeno(1,2,3-cd)pyrene	11840	ug/kg	ND	ND	ND	ND	ND	37 J	ND	ND	81 J	ND
	Total CPAHs	**10000**	**ug/kg**	**ND**	**ND**	**ND**	**337**	**ND**	**667**	**60**	**ND**	**1441**	**64**
	NPAHs												
83-32-9	Acenaphthene	(185000)340400	ug/kg	ND	ND	ND	320 J	440 J	ND	ND	ND	ND	ND
208-96-8	Acenaphthylene	152144	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
120-12-7	Anthracene	(50000)185000	ug/kg	ND	ND	ND	110 J	ND	41 J	ND	ND	21 J	ND
191-24-2	Benzo(ghi)perylene	(185000)29600000	ug/kg	ND	ND	ND	37 J	ND	33 J	ND	ND	76 J	ND
86-73-7	Fluorene	(50000)1350500	ug/kg	ND	ND	ND	480 J	810 J	ND	ND	ND	ND	ND
206-44-0	Fluoranthene	(50000)185000	ug/kg	39 J	ND	ND	170 J	ND	260 J	40 J	ND	370	40 J
91-57-6	2-Methylnaphthalene	50000	ug/kg	ND	ND	ND	2600	9000	ND	ND	ND	ND	ND
91-20-3	Naphthalene	48100	ug/kg	ND	ND	ND	500 J	1000 J	ND	ND	ND	ND	ND
85-01-8	Phenanthrene	(50000)185000	ug/kg	ND	ND	ND	1200 J	2000	100 J	ND	ND	88 J	22 J
129-00-0	Pyrene	(50000)185000	ug/kg	ND	ND	ND	190 J	130 J	140 J	21 J	ND	230 J	26 J
	Total NPAHs	**500,000**	**ug/kg**	**39**	**ND**	**ND**	**5607**	**13380**	**574**	**61**	**ND**	**785**	**88**
	Total PAHs		**ug/kg**	**39**	**ND**	**ND**	**5944**	**13380**	**1241**	**121**	**ND**	**2226**	**152**
	Total SVOCs	**500,000**	**ug/kg**	**61**	**33**	**44**	**7638**	**15430**	**1241**	**121**	**24**	**2226**	**152**

ND - Not Detected.
NA - Not Analyzed / Not Applicable
CPAH - Carcinogenic Polynuclear Aromatic Hydrocarbon
NPAH - Noncarcinogenic Polynuclear Aromatic Hydrocarbon.
J - Estimated value.
R - Rejected during data validation.
N - Presumptive evidence.
NC - No Criteria
- Concentration above NYSDEC Soil criteria.

TABLE 3.18
SADVA AOC 3 SOIL BORING RESULTS

Former Schenectady Army Depot- Remedial Investigation Soil Boring Data Detected Compound Summary		NYSDEC Soil	SAMPLE ID:	AOC3-SB11A	AOC3-SB11B	AOC3-SB11E	AOC3-SB14G	AOC3-SB14L	AOC3-SB17C	AOC3-SB17F	AOC3-SB17G	AOC3-SB18A	AOC3-SB18C
			LAB ID:	C0G210254004	C0G210254005	C0G210257001	C0H040186001	C0H040186002	C0I270130004	C0I270130005	C0I270130006	C0I260208007	C0I260208008
			DEPTH:	0.2'	3'	9'	13'	23'	5'	11'	13'	0.2'	5'
			SOURCE:	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh
			SDG:	SADVA5	SADVA5	SADVA6	SADVA10	SADVA10	SADVA16	SADVA16	SADVA16	SADVA16	SADVA16
			MATRIX:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
			SAMPLED:	7/20/2000	7/20/2000	7/20/2000	8/3/2000	8/3/2000	9/26/2000	9/26/2000	9/26/2000	9/25/2000	9/25/2000
			VALIDATED:	10/12/2000	10/12/2000	10/13/2000	10/25/2000	10/25/2000	11/25/2000	11/25/2000	11/25/2000	11/25/2000	11/25/2000
CAS NO.	COMPOUND	Criteria	UNITS:										
	PESTICIDES												
319-84-6	alpha-BHC	111	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
319-86-8	delta-BHC	1221	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
309-00-2	Aldrin	41	ug/kg	ND	ND	ND	2.8 JN	ND	ND	ND	ND	ND	ND
60-57-1	Dieldrin	44	ug/kg	ND	ND	ND	180	51	ND	ND	ND	ND	ND
72-54-8	4,4'-DDD	2900	ug/kg	ND	ND	ND	35	64	2.7 JN	2.4 JN	1.1 JN	1.4 JN	ND
72-55-9	4,4'-DDE	2100	ug/kg	1.4 J	ND	ND	6.4 JN	14	18	3.3	3.5	36	2.9
50-29-3	4,4'-DDT	2100	ug/kg	2.5 J	ND	ND	5.2 JN	ND	80	30	12	27	1.8 J
72-20-8	Endrin	339	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
7421-93-4	Endrin aldehyde	NC	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
53494-70-5	Endrin ketone	NC	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
33213-65-9	Endosulfan II	2971	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1031-07-8	Endosulfan sulfate	3714	ug/kg	ND	ND	ND	11 JN	5.2 JN	ND	ND	ND	ND	ND
76-44-8	Heptachlor	444	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1024-57-3	Heptachlor epoxide	20	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
72-43-5	Methoxychlor	10000	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5103-71-9	alpha-Chlordane	540	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5103-74-2	gamma-Chlordane	540	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Total Pesticides	**10,000**	**ug/kg**	**3.9**	**ND**	**ND**	**240.4**	**134.2**	**100.7**	**35.7**	**16.6**	**64.4**	**4.7**
	PCBs												
53469-21-9	Aroclor 1242	1,000/10,000	ug/kg	ND	ND	ND	ND	470	ND	ND	ND	ND	ND
12672-29-6	Aroclor 1248	1,000/10,000	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
11097-69-1	Aroclor 1254	1,000/10,000	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
11096-82-5	Aroclor 1260	1,000/10,000	ug/kg	ND	ND	ND	250	390	ND	ND	ND	ND	ND
	Total PCBs	**1,000/10,000**	**ug/kg**	**ND**	**ND**	**ND**	**250**	**860**	**ND**	**ND**	**ND**	**ND**	**ND**

ND - Not Detected.
NA - Not Analyzed / Not Applicable
J - Estimated value.
R - Rejected during data validation.
N - Presumptive evidence.
NC - No Criteria
- Concentration above NYSDEC Soil criteria.

TABLE 3.18
SADVA AOC 3 SOIL BORING RESULTS

Former Schenectady Army Depot- Remedial Investigation Soil Boring Data Detected Compound Summary		NYSDEC Soil Criteria	SAMPLE ID:	AOC3-SB11A	AOC3-SB11B	AOC3-SB11E	AOC3-SB14G	AOC3-SB14L	AOC3-SB17C	AOC3-SB17F	AOC3-SB17G	AOC3-SB18A	AOC3-SB18C
			LAB ID:	C0G210254004	C0G210254005	C0G210257001	C0H040186001	C0H040186002	C0I270130004	C0I270130005	C0I270130006	C0I260208007	C0I260208008
			DEPTH:	0.2'	3'	9'	13'	23'	5'	11'	13'	0.2'	5'
			SOURCE:	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh
			SDG:	SADVA5	SADVA5	SADVA6	SADVA10	SADVA10	SADVA16	SADVA16	SADVA16	SADVA16	SADVA16
			MATRIX:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
			SAMPLED:	7/20/2000	7/20/2000	7/20/2000	8/3/2000	8/3/2000	9/26/2000	9/26/2000	9/26/2000	9/25/2000	9/25/2000
			VALIDATED:	10/12/2000	10/12/2000	10/13/2000	10/25/2000	10/25/2000	11/25/2000	11/25/2000	11/25/2000	11/25/2000	11/25/2000
CAS NO.	COMPOUND		UNITS:										
	METALS												
7429-90-5	Aluminum	12800	mg/kg	15900	17300	14600	NA	NA	12700	ND	15500	13700	16400
7440-36-0	Antimony	0.59	mg/kg	ND	0.17 J	0.25 J	NA	NA	1.8 J	0.7 J	0.61 J	0.86 J	0.78 J
7440-38-2	Arsenic	16.4	mg/kg	6.9	8.5	9.8	NA	NA	5.2	7.6	7.6	7.6	8
7440-39-3	Barium	300	mg/kg	53.9	36.6	46.5	NA	NA	47.5	53.1	53.3	79.8	40.7
7440-41-7	Beryllium	0.67	mg/kg	0.74	0.89	0.8	NA	NA	0.57	0.77	0.78	0.69	0.8
7440-43-9	Cadmium	1	mg/kg	0.5 J	0.44 J	0.52 J	NA	NA	ND	ND	ND	ND	ND
7440-70-2	Calcium	46600	mg/kg	1640	865	1790	NA	NA	1370 J	4770 J	3080 J	4630 J	3120 J
7440-47-3	Chromium	17.5	mg/kg	19.7	21.4	22.6 J	NA	NA	16.7	18.6	20.9	21.7	23.8
7440-48-4	Cobalt	30	mg/kg	13.5	19.5	20.4 J	NA	NA	13.3	16.9	17.9	15	19.7
7440-50-8	Copper	26.9	mg/kg	25.1	37.6	40.8	NA	NA	32.5 J	36.6 J	45 J	32.9 J	47.1 J
7439-89-6	Iron	25700	mg/kg	35800	38300	38300 J	NA	NA	27800	33500	37100	30900	36900
7439-92-1	Lead	60.8 (29.3 average)	mg/kg	16.5	16.3	22.1	NA	NA	17.9	18.7	14.5	35.5	18.8
7439-95-4	Magnesium	13100	mg/kg	5360	7060	6950	NA	NA	5060 J	6080 J	7200 J	5490 J	7620 J
7439-96-5	Manganese	875	mg/kg	551	647	738	NA	NA	585	657	800	951	672
7439-97-6	Mercury	0.1	mg/kg	0.043	0.057	0.045	NA	NA	0.072	0.054	0.063	0.034 J	0.058
7440-02-0	Nickel	24.8	mg/kg	29.3	36	43.1 J	NA	NA	27	33.4	38	27.9	37.4
7440-09-7	Potassium	1660	mg/kg	1030	1540	1700	NA	NA	1120	1360	1590	1420	1580
7782-49-2	Selenium	2	mg/kg	ND	ND	ND	NA	NA	ND	ND	ND	ND	ND
7440-22-4	Silver	0.17	mg/kg	0.13 J	ND	0.15 J	NA	NA	0.12 J	0.12 J	0.14 J	0.22 J	0.15 J
7440-23-5	Sodium	619	mg/kg	55.4 J	46.1 J	54.9 J	NA	NA	43.8 J	44.5 J	61.8 J	45.5 J	47.4 J
7440-28-0	Thallium	0.67	mg/kg	0.73 J	0.72 J	ND	NA	NA	0.69 J	ND	0.85 J	ND	0.44 J
7440-62-2	Vanadium	150	mg/kg	24.6	25.2	23.3	NA	NA	21.2	21.2	23.9	23	23.5
7440-66-6	Zinc	134	mg/kg	81	90.2	102	NA	NA	97.5 J	88.4 J	107 J	91.1 J	99.8 J

ND - Not Detected.
NA - Not Analyzed / Not Applicable
J - Estimated value.
R - Rejected during data validation.
N - Presumptive evidence.
NC - No Criteria
- Concentration above NYSDEC Soil criteria.

TABLE 3.18
SADVA AOC 3 SOIL BORING RESULTS

Former Schenectady Army Depot-
Remedial Investigation
Soil Boring Data
Detected Compound Summary

CAS NO.	COMPOUND	NYSDEC Soil Criteria		AOC3-SB18E	AOC3-SB19C	AOC3-SB19E	AOC3-SB19F	AOC3-SB20A	AOC3-SB20C	AOC3-SB20E	AOC3-SB21A	AOC3-SB21C	AOC3-SB21E
			LAB ID:	C0I260208009	C0I270130001	C0I270130002	C0I270130003	C0I260208004	C0I260208005	C0I260208006	C0I260208001	C0I260208002	C0I260208003
			DEPTH:	9'	5'	9'	11'	0.2'	5'	9'	0.2'	5'	9'
			SOURCE:	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh
			SDG:	SADVA16	SADVA16	SADVA16	SADVA16	SADVA16	SADVA16	SADVA16	SADVA16	SADVA16	SADVA16
			MATRIX:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
			SAMPLED:	9/25/2000	9/26/2000	9/26/2000	9/26/2000	9/25/2000	9/25/2000	9/25/2000	9/25/2000	9/25/2000	9/25/2000
			VALIDATED:	11/25/2000	11/25/2000	11/25/2000	11/25/2000	11/25/2000	11/25/2000	11/25/2000	11/25/2000	11/25/2000	11/25/2000
			UNITS:										
	VOLATILES												
67-64-1	Acetone	407	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
71-43-2	Benzene	215	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
78-93-3	2-Butanone	833	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
75-15-0	Carbon disulfide	9990	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
108-90-7	Chlorobenzene	6105	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
67-66-3	Chloroform	803	ug/kg	ND	ND	ND	ND	ND	4.6 J	2 J	ND	ND	ND
107-06-2	1,2-Dichloroethane	259	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
540-59-0	1,2-Dichloroethene (total)	1092	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
100-41-4	Ethylbenzene	10000	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
591-78-6	2-Hexanone	NC	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
75-09-2	Methylene chloride	389	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
108-10-1	4-Methyl-2-pentanone	3515	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
127-18-4	Tetrachloroethene	5124	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
108-88-3	Toluene	5550	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
79-01-6	Trichloroethene	2331	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
75-01-4	Vinyl chloride	422	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1330-20-7	Xylenes (total)	4440	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Total VOCs	**10,000**	**ug/kg**	**ND**	**ND**	**ND**	**ND**	**ND**	**4.6**	**2**	**ND**	**ND**	**ND**

ND - Not Detected.
NA - Not Analyzed / Not Applicable
J - Estimated value.
R - Rejected during data validation.
N - Presumptive evidence.
NC - No Criteria
- Concentration above NYSDEC Soil criteria.

TABLE 3.18
SADVA AOC 3 SOIL BORING RESULTS

Former Schenectady Army Depot-
Remedial Investigation
Soil Boring Data
Detected Compound Summary

CAS NO.	COMPOUND	NYSDEC Soil Criteria	SAMPLE ID:	AOC3-SB18E	AOC3-SB19C	AOC3-SB19E	AOC3-SB19F	AOC3-SB20A	AOC3-SB20C	AOC3-SB20E	AOC3-SB21A	AOC3-SB21C	AOC3-SB21E
			LAB ID:	C0I260208009	C0I270130001	C0I270130002	C0I270130003	C0I260208004	C0I260208005	C0I260208006	C0I260208001	C0I260208002	C0I260208003
			DEPTH:	9'	5'	9'	11'	0.2'	5'	9'	0.2'	5'	9'
			SOURCE:	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh
			SDG:	SADVA16	SADVA16	SADVA16	SADVA16	SADVA16	SADVA16	SADVA16	SADVA16	SADVA16	SADVA16
			MATRIX:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
			SAMPLED:	9/25/2000	9/26/2000	9/26/2000	9/26/2000	9/25/2000	9/25/2000	9/25/2000	9/25/2000	9/25/2000	9/25/2000
			VALIDATED:	11/25/2000	11/25/2000	11/25/2000	11/25/2000	11/25/2000	11/25/2000	11/25/2000	11/25/2000	11/25/2000	11/25/2000
			UNITS:										
	SEMIVOLATILES												
95-48-7	2-Methylphenol	278	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
108-95-2	Phenol	100	ug/kg	ND	ND	29 J	ND	ND	ND	ND	89 J	ND	ND
117-81-7	bis(2-Ethylhexyl) phthalate	50000	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	2600	620
132-64-9	Dibenzofuran	22755	ug/kg	ND	29 J	ND	ND	ND	ND	ND	26 J	86 J	ND
95-50-1	1,2-Dichlorobenzene	29563	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
541-73-1	1,3-Dichlorobenzene	5735	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
106-46-7	1,4-Dichlorobenzene	31450	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
86-74-8	Carbazole	NC	ug/kg	ND	88 J	ND	ND	ND	ND	ND	71 J	220 J	ND
120-83-2	2,4-Dichlorophenol	1406	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
105-67-9	2,4-Dimethylphenol	NC	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
84-74-2	Di-n-butyl phthalate	29970	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
117-84-0	Di-n-octyl phthalate	50000	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	27 J	ND
106-44-5	4-Methylphenol	3145	ug/kg	ND	ND	ND	ND	ND	ND	ND	410	ND	ND
100-02-7	4-Nitrophenol	389	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
86-30-6	N-Nitrosodiphenylamine	NC	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	CPAHs												
56-55-3	Benzo(a)anthracene	224	ug/kg	ND	630	36 J	39 J	44 J	ND	ND	300 J	980	25 J
50-32-8	Benzo(a)pyrene	61	ug/kg	ND	630	32 J	36 J	46 J	ND	ND	290 J	980	23 J
205-99-2	Benzo(b)fluoranthene	4070	ug/kg	ND	700	45 J	49 J	57 J	ND	ND	340 J	1100	24 J
207-08-9	Benzo(k)fluoranthene	4070	ug/kg	ND	630	30 J	35 J	49 J	ND	ND	290 J	920	25 J
218-01-9	Chrysene	1480	ug/kg	ND	730	41 J	46 J	56 J	ND	ND	350 J	1100	27 J
53-70-3	Dibenz(a,h)anthracene	14	ug/kg	ND	67 J	ND	ND	ND	ND	ND	30 J	110 J	ND
193-39-5	Indeno(1,2,3-cd)pyrene	11840	ug/kg	ND	210 J	ND	ND	ND	ND	ND	94 J	360 J	ND
	Total CPAHs	**10000**	**ug/kg**	**ND**	**3597**	**184**	**205**	**252**	**ND**	**ND**	**1694**	**5550**	**124**
	NPAHs												
83-32-9	Acenaphthene	(185000)340400	ug/kg	ND	67 J	ND	ND	ND	ND	ND	53 J	280 J	ND
208-96-8	Acenaphthylene	152144	ug/kg	ND	31 J	ND	ND	ND	ND	ND	ND	37 J	ND
120-12-7	Anthracene	(50000)185000	ug/kg	ND	150 J	ND	ND	ND	ND	ND	100 J	300 J	ND
191-24-2	Benzo(ghi)perylene	(185000)29600000	ug/kg	ND	200 J	ND	ND	ND	ND	ND	90 J	340 J	ND
86-73-7	Fluorene	(50000)1350500	ug/kg	ND	56 J	ND	ND	ND	ND	ND	45 J	150 J	ND
206-44-0	Fluoranthene	(50000)185000	ug/kg	ND	ND	95 J	110 J	99 J	27 J	ND	770	2600	64 J
91-57-6	2-Methylnaphthalene	50000	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
91-20-3	Naphthalene	48100	ug/kg	ND	ND	ND	ND	ND	ND	ND	25 J	72 J	ND
85-01-8	Phenanthrene	(50000)185000	ug/kg	ND	680	37 J	49 J	44 J	ND	ND	480	1600	31 J
129-00-0	Pyrene	(50000)185000	ug/kg	ND	840	48 J	55 J	60 J	ND	ND	430	1400	33 J
	Total NPAHs	**500,000**	**ug/kg**	**ND**	**2024**	**180**	**214**	**203**	**27**	**ND**	**1993**	**6779**	**128**
	Total PAHs		**ug/kg**	**ND**	**5621**	**364**	**419**	**455**	**27**	**ND**	**3687**	**12329**	**252**
	Total SVOCs	**500,000**	**ug/kg**	**ND**	**5738**	**393**	**419**	**455**	**27**	**ND**	**4283**	**15262**	**872**

ND - Not Detected.
NA - Not Analyzed / Not Applicable
CPAH - Carcinogenic Polynuclear Aromatic Hydrocarbon
NPAH - Noncarcinogenic Polynuclear Aromatic Hydrocarbon.
J - Estimated value.
R - Rejected during data validation.
N - Presumptive evidence.
NC - No Criteria
[shaded box] - Concentration above NYSDEC Soil criteria.

TABLE 3.18
SADVA AOC 3 SOIL BORING RESULTS

Former Schenectady Army Depot- Remedial Investigation Soil Boring Data Detected Compound Summary		NYSDEC Soil	SAMPLE ID:	AOC3-SB18E	AOC3-SB19C	AOC3-SB19E	AOC3-SB19F	AOC3-SB20A	AOC3-SB20C	AOC3-SB20E	AOC3-SB21A	AOC3-SB21C	AOC3-SB21E
			LAB ID:	C0I260208009	C0I270130001	C0I270130002	C0I270130003	C0I260208004	C0I260208005	C0I260208006	C0I260208001	C0I260208002	C0I260208003
			DEPTH:	9'	5'	9'	11'	0.2'	5'	9'	0.2'	5'	9'
			SOURCE:	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh
			SDG:	SADVA16	SADVA16	SADVA16	SADVA16	SADVA16	SADVA16	SADVA16	SADVA16	SADVA16	SADVA16
			MATRIX:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
			SAMPLED:	9/25/2000	9/26/2000	9/26/2000	9/26/2000	9/25/2000	9/25/2000	9/25/2000	9/25/2000	9/25/2000	9/25/2000
			VALIDATED:	11/25/2000	11/25/2000	11/25/2000	11/25/2000	11/25/2000	11/25/2000	11/25/2000	11/25/2000	11/25/2000	11/25/2000
CAS NO.	COMPOUND	Criteria	UNITS:										
	PESTICIDES												
319-84-6	alpha-BHC	111	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
319-86-8	delta-BHC	1221	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
309-00-2	Aldrin	41	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
60-57-1	Dieldrin	44	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
72-54-8	4,4'-DDD	2900	ug/kg	ND	10 JN	0.5 JN	0.47 JN	0.5 JN	ND	ND	3.6 JN	0.44 JN	0.35 JN
72-55-9	4,4'-DDE	2100	ug/kg	0.82 J	17	1.7 J	1.6 J	3	2.5	0.46 J	29	4.4	2.7
50-29-3	4,4'-DDT	2100	ug/kg	0.61 J	180	10	7.8	6.6	4.5	0.76 J	34	14	10
72-20-8	Endrin	339	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
7421-93-4	Endrin aldehyde	NC	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
53494-70-5	Endrin ketone	NC	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
33213-65-9	Endosulfan II	2971	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1031-07-8	Endosulfan sulfate	3714	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
76-44-8	Heptachlor	444	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1024-57-3	Heptachlor epoxide	20	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
72-43-5	Methoxychlor	10000	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5103-71-9	alpha-Chlordane	540	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5103-74-2	gamma-Chlordane	540	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Total Pesticides	**10,000**	**ug/kg**	**1.43**	**207**	**12.2**	**9.87**	**10.1**	**7**	**1.22**	**66.6**	**18.84**	**13.05**
	PCBs												
53469-21-9	Aroclor 1242	1,000/10,000	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
12672-29-6	Aroclor 1248	1,000/10,000	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
11097-69-1	Aroclor 1254	1,000/10,000	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
11096-82-5	Aroclor 1260	1,000/10,000	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Total PCBs	**1,000/10,000**	**ug/kg**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**

ND - Not Detected.
NA - Not Analyzed / Not Applicable
J - Estimated value.
R - Rejected during data validation.
N - Presumptive evidence.
NC - No Criteria
- Concentration above NYSDEC Soil criteria.

TABLE 3.18
SADVA AOC 3 SOIL BORING RESULTS

Former Schenectady Army Depot- Remedial Investigation Soil Boring Data Detected Compound Summary		NYSDEC Soil	SAMPLE ID:	AOC3-SB18E	AOC3-SB19C	AOC3-SB19E	AOC3-SB19F	AOC3-SB20A	AOC3-SB20C	AOC3-SB20E	AOC3-SB21A	AOC3-SB21C	AOC3-SB21E
			LAB ID:	C0I260208009	C0I270130001	C0I270130002	C0I270130003	C0I260208004	C0I260208005	C0I260208006	C0I260208001	C0I260208002	C0I260208003
			DEPTH:	9'	5'	9'	11'	0.2'	5'	9'	0.2'	5'	9'
			SOURCE:	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh
			SDG:	SADVA16	SADVA16	SADVA16	SADVA16	SADVA16	SADVA16	SADVA16	SADVA16	SADVA16	SADVA16
			MATRIX:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
			SAMPLED:	9/25/2000	9/26/2000	9/26/2000	9/26/2000	9/25/2000	9/25/2000	9/25/2000	9/25/2000	9/25/2000	9/25/2000
			VALIDATED:	11/25/2000	11/25/2000	11/25/2000	11/25/2000	11/25/2000	11/25/2000	11/25/2000	11/25/2000	11/25/2000	11/25/2000
CAS NO.	COMPOUND	Criteria	UNITS:										
	METALS												
7429-90-5	Aluminum	12800	mg/kg	14600	14400	14500	15600	15700	16200	14600	15600	15500	15500
7440-36-0	Antimony	0.59	mg/kg	0.73 J	1.1 J	0.75 J	0.6 J	0.83 J	0.57 J	0.85 J	1.7 J	0.61 J	0.65 J
7440-38-2	Arsenic	16.4	mg/kg	8	7.7	6.1	7.7	6.5	7.4	8	9.4	6.7	8.5
7440-39-3	Barium	300	mg/kg	49.6	99.7	38.1	48.8	50.9	49	45.3	110	54.7	54.1
7440-41-7	Beryllium	0.67	mg/kg	0.78	0.75	0.69	0.78	0.69	0.79	0.73	0.76	0.76	0.83
7440-43-9	Cadmium	1	mg/kg	ND	1.5	ND	ND	ND	ND	ND	5	0.46 J	ND
7440-70-2	Calcium	46600	mg/kg	2720 J	6210 J	1340 J	1730 J	1140 J	2820 J	2050 J	3460 J	3940 J	1740 J
7440-47-3	Chromium	17.5	mg/kg	22.5	20.2	20.5	21.7	20.9	20.2	22	25.8	34.6	22.3
7440-48-4	Cobalt	30	mg/kg	19.5	15.8	15.7	19.3	15.2	18.3	19	16.9	17.7	21.3
7440-50-8	Copper	26.9	mg/kg	44.5 J	118 J	37.5 J	45.6 J	32.8 J	38.6 J	35.8 J	293 J	58.3 J	49 J
7439-89-6	Iron	25700	mg/kg	37600	32700	33200	37700	31700	36400	36300	36300	36300	39500
7439-92-1	Lead	60.8 (29.3 average)	mg/kg	16.8	83.4	16.7	17.2	15.6	16.8	16.8	202	25.8	21.3
7439-95-4	Magnesium	13100	mg/kg	7230 J	5920 J	6510 J	7080 J	6130 J	6830 J	6810 J	6200 J	6810 J	6980 J
7439-96-5	Manganese	875	mg/kg	694	671	787	878	553	749	772	752	770	885
7439-97-6	Mercury	0.1	mg/kg	0.054	0.054	0.044	0.05	0.037	0.045	0.047	0.056	0.048	0.05
7440-02-0	Nickel	24.8	mg/kg	38.7	28.7	31.4	37.3	30.5	37.5	38.3	37.9	35.5	39.7
7440-09-7	Potassium	1660	mg/kg	1490	1180	980	1220	1050	1530	1640	1190	1300	1310
7782-49-2	Selenium	2	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
7440-22-4	Silver	0.17	mg/kg	0.15 J	0.6 J	0.15 J	0.15 J	0.12 J	0.14 J	0.2 J	0.89 J	0.14 J	0.38 J
7440-23-5	Sodium	619	mg/kg	45.5 J	76.6 J	43.4 J	49.7 J	41 J	51.9 J	53.1 J	64.2 J	71.8 J	52.6 J
7440-28-0	Thallium	0.67	mg/kg	ND	ND	ND	0.63 J	ND	ND	ND	ND	ND	ND
7440-62-2	Vanadium	150	mg/kg	23.7	24.5	21.8	23	22.6	24.3	22.7	24.7	22.9	23.4
7440-66-6	Zinc	134	mg/kg	97.2 J	484 J	88.8 J	115 J	77.7 J	91.3 J	91.2 J	568 J	138 J	124 J

ND - Not Detected.
NA - Not Analyzed / Not Applicable
J - Estimated value.
R - Rejected during data validation.
N - Presumptive evidence.
NC - No Criteria
- Concentration above NYSDEC Soil criteria.

TABLE 3.18
SADVA AOC 3 SOIL BORING RESULTS

Former Schenectady Army Depot- Remedial Investigation Soil Boring Data Detected Compound Summary		NYSDEC Soil	SAMPLE ID:	AOC3-SB22A	AOC3-SB22C	AOC3-SB22F	AOC3-SB23A	AOC3-SB23C	AOC3-SB23G	AOC3-SB24A	AOC3-SB24C	AOC3-SB24F	AOC3-SB25C
			LAB ID:	C0I270146004	C0I270146005	C0I270146006	C0I270146007	C0I270146008	C0I270146009	C0I270146010	C0I270146011	C0I270146012	C0I270146001
			DEPTH:	0.2'	5'	11'	0.2'	5'	13'	0.2'	5'	11'	5'
			SOURCE:	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh
			SDG:	SADVA17	SADVA17	SADVA17	SADVA17	SADVA17	SADVA17	SADVA17	SADVA17	SADVA17	SADVA17
			MATRIX:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
			SAMPLED:	9/26/2000	9/26/2000	9/26/2000	9/26/2000	9/26/2000	9/26/2000	9/26/2000	9/26/2000	9/26/2000	9/26/2000
			VALIDATED:	11/27/2000	11/27/2000	11/27/2000	11/27/2000	11/27/2000	11/27/2000	11/27/2000	11/27/2000	11/27/2000	11/27/2000
CAS NO.	COMPOUND	Criteria	UNITS:										
	VOLATILES												
67-64-1	Acetone	407	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
71-43-2	Benzene	215	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
78-93-3	2-Butanone	833	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
75-15-0	Carbon disulfide	9990	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
108-90-7	Chlorobenzene	6105	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
67-66-3	Chloroform	803	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
107-06-2	1,2-Dichloroethane	259	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
540-59-0	1,2-Dichloroethene (total)	1092	ug/kg	ND	ND	ND	ND	ND	8.4	ND	ND	4.7 J	ND
100-41-4	Ethylbenzene	10000	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
591-78-6	2-Hexanone	NC	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
75-09-2	Methylene chloride	389	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
108-10-1	4-Methyl-2-pentanone	3515	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
127-18-4	Tetrachloroethene	5124	ug/kg	ND	ND	2.1 J	ND	ND	2.7 J	ND	ND	2 J	ND
108-88-3	Toluene	5550	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
79-01-6	Trichloroethene	2331	ug/kg	ND	8.6	13	ND	5.3 J	28	ND	7.8	44	ND
75-01-4	Vinyl chloride	422	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1330-20-7	Xylenes (total)	4440	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Total VOCs	**10,000**	**ug/kg**	**ND**	**8.6**	**15.1**	**ND**	**5.3**	**39.1**	**ND**	**7.8**	**50.7**	**ND**

ND - Not Detected.
NA - Not Analyzed / Not Applicable
J - Estimated value.
R - Rejected during data validation.
N - Presumptive evidence.
NC - No Criteria
- Concentration above NYSDEC Soil criteria.

TABLE 3.18
SADVA AOC 3 SOIL BORING RESULTS

Former Schenectady Army Depot- Remedial Investigation Soil Boring Data Detected Compound Summary		NYSDEC Soil	SAMPLE ID:	AOC3-SB22A	AOC3-SB22C	AOC3-SB22F	AOC3-SB23A	AOC3-SB23C	AOC3-SB23G	AOC3-SB24A	AOC3-SB24C	AOC3-SB24F	AOC3-SB25C
			LAB ID:	C0I270146004	C0I270146005	C0I270146006	C0I270146007	C0I270146008	C0I270146009	C0I270146010	C0I270146011	C0I270146012	C0I270146001
			DEPTH:	0.2'	5'	11'	0.2'	5'	13'	0.2'	5'	11'	5'
			SOURCE:	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh
			SDG:	SADVA17	SADVA17	SADVA17	SADVA17	SADVA17	SADVA17	SADVA17	SADVA17	SADVA17	SADVA17
			MATRIX:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
			SAMPLED:	9/26/2000	9/26/2000	9/26/2000	9/26/2000	9/26/2000	9/26/2000	9/26/2000	9/26/2000	9/26/2000	9/26/2000
			VALIDATED:	11/27/2000	11/27/2000	11/27/2000	11/27/2000	11/27/2000	11/27/2000	11/27/2000	11/27/2000	11/27/2000	11/27/2000
CAS NO.	COMPOUND	Criteria	UNITS:										
	SEMIVOLATILES												
95-48-7	2-Methylphenol	278	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
108-95-2	Phenol	100	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
117-81-7	bis(2-Ethylhexyl) phthalate	50000	ug/kg	ND	42 J	ND	ND	160 J	54 J	ND	26 J	34 J	45 J
132-64-9	Dibenzofuran	22755	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	39 J
95-50-1	1,2-Dichlorobenzene	29563	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
541-73-1	1,3-Dichlorobenzene	5735	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
106-46-7	1,4-Dichlorobenzene	31450	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
86-74-8	Carbazole	NC	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	69 J
120-83-2	2,4-Dichlorophenol	1406	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
105-67-9	2,4-Dimethylphenol	NC	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
84-74-2	Di-n-butyl phthalate	29970	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
117-84-0	Di-n-octyl phthalate	50000	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
106-44-5	4-Methylphenol	3145	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
100-02-7	4-Nitrophenol	389	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
86-30-6	N-Nitrosodiphenylamine	NC	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	CPAHs												
56-55-3	Benzo(a)anthracene	224	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	200 J
50-32-8	Benzo(a)pyrene	61	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	160 J
205-99-2	Benzo(b)fluoranthene	4070	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	130 J
207-08-9	Benzo(k)fluoranthene	4070	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	190 J
218-01-9	Chrysene	1480	ug/kg	23 J	ND	ND	ND	ND	ND	19 J	ND	ND	220 J
53-70-3	Dibenz(a,h)anthracene	14	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	50 J
193-39-5	Indeno(1,2,3-cd)pyrene	11840	ug/kg	19 J	ND	ND	ND	ND	ND	ND	ND	ND	110 J
	Total CPAHs	**10000**	**ug/kg**	**42**	**ND**	**ND**	**ND**	**ND**	**ND**	**19**	**ND**	**ND**	**1060**
	NPAHs												
83-32-9	Acenaphthene	(185000)340400	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	90 J
208-96-8	Acenaphthylene	152144	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
120-12-7	Anthracene	(50000)185000	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	110 J
191-24-2	Benzo(ghi)perylene	(185000)29600000	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	120 J
86-73-7	Fluorene	(50000)1350500	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	67 J
206-44-0	Fluoranthene	(50000)185000	ug/kg	37 J	ND	ND	ND	ND	ND	41 J	ND	ND	490
91-57-6	2-Methylnaphthalene	50000	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
91-20-3	Naphthalene	48100	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	46 J
85-01-8	Phenanthrene	(50000)185000	ug/kg	ND	ND	ND	ND	ND	ND	36 J	ND	ND	510
129-00-0	Pyrene	(50000)185000	ug/kg	26 J	ND	ND	ND	ND	ND	27 J	ND	ND	430
	Total NPAHs	**500,000**	**ug/kg**	**63**	**ND**	**ND**	**ND**	**ND**	**ND**	**104**	**ND**	**ND**	**1863**
	Total PAHs		**ug/kg**	**105**	**ND**	**ND**	**ND**	**ND**	**ND**	**123**	**ND**	**ND**	**2923**
	Total SVOCs	**500,000**	**ug/kg**	**105**	**42**	**ND**	**ND**	**160**	**54**	**123**	**26**	**34**	**3076**

ND - Not Detected.
NA - Not Analyzed / Not Applicable
CPAH - Carcinogenic Polynuclear Aromatic Hydrocarbon
NPAH - Noncarcinogenic Polynuclear Aromatic Hydrocarbon.
J - Estimated value.
R - Rejected during data validation.
N - Presumptive evidence.
NC - No Criteria
- Concentration above NYSDEC Soil criteria.

TABLE 3.18
SADVA AOC 3 SOIL BORING RESULTS

Former Schenectady Army Depot-
Remedial Investigation
Soil Boring Data
Detected Compound Summary

CAS NO.	COMPOUND	NYSDEC Soil Criteria	SAMPLE ID:	AOC3-SB22A	AOC3-SB22C	AOC3-SB22F	AOC3-SB23A	AOC3-SB23C	AOC3-SB23G	AOC3-SB24A	AOC3-SB24C	AOC3-SB24F	AOC3-SB25C
			LAB ID:	C0I270146004	C0I270146005	C0I270146006	C0I270146007	C0I270146008	C0I270146009	C0I270146010	C0I270146011	C0I270146012	C0I270146001
			DEPTH:	0.2'	5'	11'	0.2'	5'	13'	0.2'	5'	11'	5'
			SOURCE:	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh
			SDG:	SADVA17	SADVA17	SADVA17	SADVA17	SADVA17	SADVA17	SADVA17	SADVA17	SADVA17	SADVA17
			MATRIX:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
			SAMPLED:	9/26/2000	9/26/2000	9/26/2000	9/26/2000	9/26/2000	9/26/2000	9/26/2000	9/26/2000	9/26/2000	9/26/2000
			VALIDATED:	11/27/2000	11/27/2000	11/27/2000	11/27/2000	11/27/2000	11/27/2000	11/27/2000	11/27/2000	11/27/2000	11/27/2000
			UNITS:										
	PESTICIDES												
319-84-6	alpha-BHC	111	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.11 JN
319-86-8	delta-BHC	1221	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
309-00-2	Aldrin	41	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
60-57-1	Dieldrin	44	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
72-54-8	4,4'-DDD	2900	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.76 JN
72-55-9	4,4'-DDE	2100	ug/kg	2.4	ND	ND	0.23 J	ND	ND	0.45 J	ND	ND	3.5
50-29-3	4,4'-DDT	2100	ug/kg	2.9 J	ND	ND	0.32 J	ND	ND	0.85 J	ND	ND	22
72-20-8	Endrin	339	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
7421-93-4	Endrin aldehyde	NC	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
53494-70-5	Endrin ketone	NC	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
33213-65-9	Endosulfan II	2971	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1031-07-8	Endosulfan sulfate	3714	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
76-44-8	Heptachlor	444	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1024-57-3	Heptachlor epoxide	20	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
72-43-5	Methoxychlor	10000	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5103-71-9	alpha-Chlordane	540	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5103-74-2	gamma-Chlordane	540	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Total Pesticides	**10,000**	**ug/kg**	**5.3**	**ND**	**ND**	**0.55**	**ND**	**ND**	**1.3**	**ND**	**ND**	**26.37**
	PCBs												
53469-21-9	Aroclor 1242	1,000/10,000	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
12672-29-6	Aroclor 1248	1,000/10,000	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
11097-69-1	Aroclor 1254	1,000/10,000	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
11096-82-5	Aroclor 1260	1,000/10,000	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Total PCBs	**1,000/10,000**	**ug/kg**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**

ND - Not Detected.
NA - Not Analyzed / Not Applicable
J - Estimated value.
R - Rejected during data validation.
N - Presumptive evidence.
NC - No Criteria
- Concentration above NYSDEC Soil criteria.

TABLE 3.18
SADVA AOC 3 SOIL BORING RESULTS

Former Schenectady Army Depot- Remedial Investigation Soil Boring Data Detected Compound Summary		NYSDEC Soil Criteria	SAMPLE ID:	AOC3-SB22A	AOC3-SB22C	AOC3-SB22F	AOC3-SB23A	AOC3-SB23C	AOC3-SB23G	AOC3-SB24A	AOC3-SB24C	AOC3-SB24F	AOC3-SB25C
			LAB ID:	C0I270146004	C0I270146005	C0I270146006	C0I270146007	C0I270146008	C0I270146009	C0I270146010	C0I270146011	C0I270146012	C0I270146001
			DEPTH:	0.2'	5'	11'	0.2'	5'	13'	0.2'	5'	11'	5'
			SOURCE:	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh
			SDG:	SADVA17	SADVA17	SADVA17	SADVA17	SADVA17	SADVA17	SADVA17	SADVA17	SADVA17	SADVA17
			MATRIX:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
			SAMPLED:	9/26/2000	9/26/2000	9/26/2000	9/26/2000	9/26/2000	9/26/2000	9/26/2000	9/26/2000	9/26/2000	9/26/2000
			VALIDATED:	11/27/2000	11/27/2000	11/27/2000	11/27/2000	11/27/2000	11/27/2000	11/27/2000	11/27/2000	11/27/2000	11/27/2000
CAS NO.	COMPOUND		UNITS:										
	METALS												
7429-90-5	Aluminum	12800	mg/kg	12500	14500	14200	14500	14300	12200	14300	13800	14200	15500
7440-36-0	Antimony	0.59	mg/kg	1.1 J	0.42 J	0.77 J	0.76 J	0.79 J	0.75 J	1.1 J	0.9 J	0.86 J	1.2 J
7440-38-2	Arsenic	16.4	mg/kg	7.8	8.2	10.3	9	9.5	8.8	9.5	9.5	10.4	9.7
7440-39-3	Barium	300	mg/kg	50.9	49.3	51.1	47.3	48.3	42.7	41.2	34.5	51.1	68.6
7440-41-7	Beryllium	0.67	mg/kg	0.7	0.74	0.81	0.78	0.77	0.72	0.81	0.73	0.8	0.86
7440-43-9	Cadmium	1	mg/kg	ND	ND	0.086 J	ND	ND	ND	0.087 J	0.086 J	0.17 J	2.3
7440-70-2	Calcium	46600	mg/kg	996	1440	1780	976	1340	2050	1120	1350	1760	1030
7440-47-3	Chromium	17.5	mg/kg	19.1 J	21.2 J	24.1 J	22.5 J	24.5 J	22.6 J	23.1 J	21.4 J	23.5 J	23.3 J
7440-48-4	Cobalt	30	mg/kg	13.9	17.2	20.4	16	18.9	18.2	18.7	20.9	20.4	18.1
7440-50-8	Copper	26.9	mg/kg	33.8	35.9	43.1	32.9	37.4	36.7	38.3	40.4	40.8	121
7439-89-6	Iron	25700	mg/kg	29800 J	34200 J	37900 J	33800 J	37200 J	34200 J	35500 J	35700 J	38300 J	42300 J
7439-92-1	Lead	60.8 (29.3 average)	mg/kg	22.9 J	15 J	21.3 J	18.9 J	19.7 J	18.2 J	20.9 J	20.2 J	19.8 J	49.4 J
7439-95-4	Magnesium	13100	mg/kg	4660	6020	6670	5920	6630	6130	6280	6530	6900	6380
7439-96-5	Manganese	875	mg/kg	752	681	716	613	772	622	758	686	711	856
7439-97-6	Mercury	0.1	mg/kg	0.043	0.047	0.055	0.061	0.067	0.064	0.068	0.045	0.058	0.061
7440-02-0	Nickel	24.8	mg/kg	24.4	34.3	39.6	30	39	34.9	36.1	39.1	41.4	38
7440-09-7	Potassium	1660	mg/kg	732	1520	1450	959	1310	1080	1230	1100	1730	1520
7782-49-2	Selenium	2	mg/kg	0.34 J	ND	0.41 J	0.53 J	ND	ND	0.55	0.3 J	ND	0.35 J
7440-22-4	Silver	0.17	mg/kg	ND	ND	ND	ND	0.13 J	0.11 J	ND	ND	ND	0.38 J
7440-23-5	Sodium	619	mg/kg	29.8 J	43.6 J	41.6 J	32.9 J	36.5 J	59.8 J	33.4 J	32.5 J	80.6 J	50.4 J
7440-28-0	Thallium	0.67	mg/kg	ND	ND	0.59 J	ND	ND	ND	ND	ND	ND	0.86 J
7440-62-2	Vanadium	150	mg/kg	21.6	23.4	22.5	22	23	19.9	22.3	21.4	22.5	23.5
7440-66-6	Zinc	134	mg/kg	74.8 J	92 J	102 J	78.9 J	91.6 J	85.3 J	90.6 J	98.2 J	99.9 J	392 J

ND - Not Detected.
NA - Not Analyzed / Not Applicable
J - Estimated value.
R - Rejected during data validation.
N - Presumptive evidence.
NC - No Criteria
- Concentration above NYSDEC Soil criteria.

TABLE 3.18
SADVA AOC 3 SOIL BORING RESULTS

Former Schenectady Army Depot- Remedial Investigation Soil Boring Data Detected Compound Summary		NYSDEC Soil	SAMPLE ID:	AOC3-SB25F	AOC3-SB25H	AOC3-SB26C	AOC3-SB26M	AOC3-SB26O	AOC3-SB27C	AOC3-SB27J	AOC3-SB27P	AOC3-SB28A	AOC3-SB28I
			LAB ID:	C0I270146002	C0I270146003	C0I280200001	C0I280200002	C0I280200003	C0I280200004	C0I280200005	C0I280200006	C0I280200007	C0I280200008
			DEPTH:	11'	15'	5'	25'	29'	5'	19'	31'	0.2'	17'
			SOURCE:	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh
			SDG:	SADVA17	SADVA17	SADVA17	SADVA17	SADVA17	SADVA17	SADVA17	SADVA17	SADVA17	SADVA17
			MATRIX:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
			SAMPLED:	9/26/2000	9/26/2000	9/27/2000	9/27/2000	9/27/2000	9/27/2000	9/27/2000	9/27/2000	9/27/2000	9/27/2000
			VALIDATED:	11/27/2000	11/27/2000	11/27/2000	11/27/2000	11/27/2000	11/27/2000	11/27/2000	11/27/2000	11/27/2000	11/27/2000
CAS NO.	COMPOUND	Criteria	UNITS:										
	VOLATILES												
67-64-1	Acetone	407	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
71-43-2	Benzene	215	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
78-93-3	2-Butanone	833	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
75-15-0	Carbon disulfide	9990	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
108-90-7	Chlorobenzene	6105	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
67-66-3	Chloroform	803	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
107-06-2	1,2-Dichloroethane	259	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
540-59-0	1,2-Dichloroethene (total)	1092	ug/kg	ND	ND	ND	12	ND	ND	ND	ND	ND	ND
100-41-4	Ethylbenzene	10000	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
591-78-6	2-Hexanone	NC	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
75-09-2	Methylene chloride	389	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
108-10-1	4-Methyl-2-pentanone	3515	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
127-18-4	Tetrachloroethene	5124	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
108-88-3	Toluene	5550	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
79-01-6	Trichloroethene	2331	ug/kg	5.7	ND	4 J	2.4 J	2.7 J	5 J	ND	6.9	ND	ND
75-01-4	Vinyl chloride	422	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1330-20-7	Xylenes (total)	4440	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Total VOCs	**10,000**	**ug/kg**	**5.7**	**ND**	**4**	**14.4**	**2.7**	**5**	**ND**	**6.9**	**ND**	**ND**

ND - Not Detected.
NA - Not Analyzed / Not Applicable
J - Estimated value.
R - Rejected during data validation.
N - Presumptive evidence.
NC - No Criteria
- Concentration above NYSDEC Soil criteria.

TABLE 3.18
SADVA AOC 3 SOIL BORING RESULTS

Former Schenectady Army Depot- Remedial Investigation Soil Boring Data Detected Compound Summary		NYSDEC Soil Criteria	SAMPLE ID: LAB ID: DEPTH: SOURCE: SDG: MATRIX: SAMPLED: VALIDATED: UNITS:	AOC3-SB25F C0I270146002 11' STL Pittsburgh SADVA17 SOIL 9/26/2000 11/27/2000	AOC3-SB25H C0I270146003 15' STL Pittsburgh SADVA17 SOIL 9/26/2000 11/27/2000	AOC3-SB26C C0I280200001 5' STL Pittsburgh SADVA17 SOIL 9/27/2000 11/27/2000	AOC3-SB26M C0I280200002 25' STL Pittsburgh SADVA17 SOIL 9/27/2000 11/27/2000	AOC3-SB26O C0I280200003 29' STL Pittsburgh SADVA17 SOIL 9/27/2000 11/27/2000	AOC3-SB27C C0I280200004 5' STL Pittsburgh SADVA17 SOIL 9/27/2000 11/27/2000	AOC3-SB27J C0I280200005 19' STL Pittsburgh SADVA17 SOIL 9/27/2000 11/27/2000	AOC3-SB27P C0I280200006 31' STL Pittsburgh SADVA17 SOIL 9/27/2000 11/27/2000	AOC3-SB28A C0I280200007 0.2' STL Pittsburgh SADVA17 SOIL 9/27/2000 11/27/2000	AOC3-SB28I C0I280200008 17' STL Pittsburgh SADVA17 SOIL 9/27/2000 11/27/2000
CAS NO.	COMPOUND												
	SEMIVOLATILES												
95-48-7	2-Methylphenol	278	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
108-95-2	Phenol	100	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
117-81-7	bis(2-Ethylhexyl) phthalate	50000	ug/kg	41 J	32 J	46 J	220 J	210 J	63 J	78 J	140 J	ND	110 J
132-64-9	Dibenzofuran	22755	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
95-50-1	1,2-Dichlorobenzene	29563	ug/kg	ND	ND	ND	28 J	ND	ND	ND	ND	ND	ND
541-73-1	1,3-Dichlorobenzene	5735	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
106-46-7	1,4-Dichlorobenzene	31450	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
86-74-8	Carbazole	NC	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
120-83-2	2,4-Dichlorophenol	1406	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
105-67-9	2,4-Dimethylphenol	NC	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
84-74-2	Di-n-butyl phthalate	29970	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
117-84-0	Di-n-octyl phthalate	50000	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
106-44-5	4-Methylphenol	3145	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
100-02-7	4-Nitrophenol	389	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
86-30-6	N-Nitrosodiphenylamine	NC	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	CPAHs												
56-55-3	Benzo(a)anthracene	224	ug/kg	ND	66 J	63 J	ND	ND	ND	ND	ND	ND	ND
50-32-8	Benzo(a)pyrene	61	ug/kg	ND	56 J	57 J	ND	ND	ND	ND	ND	ND	ND
205-99-2	Benzo(b)fluoranthene	4070	ug/kg	ND	55 J	68 J	ND	ND	ND	ND	ND	ND	ND
207-08-9	Benzo(k)fluoranthene	4070	ug/kg	ND	56 J	55 J	ND	ND	ND	ND	ND	ND	ND
218-01-9	Chrysene	1480	ug/kg	ND	72 J	89 J	ND	ND	ND	ND	ND	ND	ND
53-70-3	Dibenz(a,h)anthracene	14	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
193-39-5	Indeno(1,2,3-cd)pyrene	11840	ug/kg	ND	39 J	ND	ND	ND	ND	ND	ND	ND	ND
	Total CPAHs	**10000**	**ug/kg**	**ND**	**344**	**332**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**
	NPAHs												
83-32-9	Acenaphthene	(185000)340400	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
208-96-8	Acenaphthylene	152144	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
120-12-7	Anthracene	(50000)185000	ug/kg	ND	31 J	ND	ND	ND	ND	ND	ND	ND	ND
191-24-2	Benzo(ghi)perylene	(185000)29600000	ug/kg	ND	45 J	30 J	ND	ND	ND	ND	ND	ND	ND
86-73-7	Fluorene	(50000)1350500	ug/kg	ND	ND	ND	ND	77 J	ND	ND	ND	ND	ND
206-44-0	Fluoranthene	(50000)185000	ug/kg	ND	160 J	160 J	ND	49 J	ND	ND	ND	ND	ND
91-57-6	2-Methylnaphthalene	50000	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
91-20-3	Naphthalene	48100	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
85-01-8	Phenanthrene	(50000)185000	ug/kg	ND	150 J	72 J	ND	ND	ND	ND	ND	ND	ND
129-00-0	Pyrene	(50000)185000	ug/kg	ND	140 J	99 J	ND	82 J	ND	ND	ND	ND	ND
	Total NPAHs	**500,000**	**ug/kg**	**ND**	**526**	**361**	**ND**	**208**	**ND**	**ND**	**ND**	**ND**	**ND**
	Total PAHs		**ug/kg**	**ND**	**870**	**693**	**ND**	**208**	**ND**	**ND**	**ND**	**ND**	**ND**
	Total SVOCs	**500,000**	**ug/kg**	**41**	**902**	**739**	**248**	**418**	**63**	**78**	**140**	**ND**	**110**

ND - Not Detected.
NA - Not Analyzed / Not Applicable
CPAH - Carcinogenic Polynuclear Aromatic Hydrocarbon
NPAH - Noncarcinogenic Polynuclear Aromatic Hydrocarbon.
J - Estimated value.
R - Rejected during data validation.
N - Presumptive evidence.
NC - No Criteria
- Concentration above NYSDEC Soil criteria.

TABLE 3.18
SADVA AOC 3 SOIL BORING RESULTS

Former Schenectady Army Depot- Remedial Investigation Soil Boring Data Detected Compound Summary		NYSDEC Soil	SAMPLE ID:	AOC3-SB25F	AOC3-SB25H	AOC3-SB26C	AOC3-SB26M	AOC3-SB26O	AOC3-SB27C	AOC3-SB27J	AOC3-SB27P	AOC3-SB28A	AOC3-SB28I
			LAB ID:	C0I270146002	C0I270146003	C0I280200001	C0I280200002	C0I280200003	C0I280200004	C0I280200005	C0I280200006	C0I280200007	C0I280200008
			DEPTH:	11'	15'	5'	25'	29'	5'	19'	31'	0.2'	17'
			SOURCE:	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh
			SDG:	SADVA17	SADVA17	SADVA17	SADVA17	SADVA17	SADVA17	SADVA17	SADVA17	SADVA17	SADVA17
			MATRIX:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
			SAMPLED:	9/26/2000	9/26/2000	9/27/2000	9/27/2000	9/27/2000	9/27/2000	9/27/2000	9/27/2000	9/27/2000	9/27/2000
			VALIDATED:	11/27/2000	11/27/2000	11/27/2000	11/27/2000	11/27/2000	11/27/2000	11/27/2000	11/27/2000	11/27/2000	11/27/2000
CAS NO.	COMPOUND	Criteria	UNITS:										
	PESTICIDES												
319-84-6	alpha-BHC	111	ug/kg	ND	ND	ND	ND	0.42 JN	ND	ND	ND	ND	ND
319-86-8	delta-BHC	1221	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
309-00-2	Aldrin	41	ug/kg	ND	ND	ND	ND	ND	ND	ND	0.82 J	ND	ND
60-57-1	Dieldrin	44	ug/kg	ND	ND	ND	ND	ND	ND	ND	3.5	ND	ND
72-54-8	4,4'-DDD	2900	ug/kg	ND	ND	ND	10	27	ND	ND	1.1 J	ND	ND
72-55-9	4,4'-DDE	2100	ug/kg	0.11 JN	ND	0.79 J	1.7 J	6.4	ND	ND	ND	0.99 J	ND
50-29-3	4,4'-DDT	2100	ug/kg	0.8 J	ND	1.4 J	ND	ND	ND	ND	ND	0.93 J	ND
72-20-8	Endrin	339	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
7421-93-4	Endrin aldehyde	NC	ug/kg	ND	ND	ND	2.2	4.5 J	ND	ND	ND	ND	ND
53494-70-5	Endrin ketone	NC	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
33213-65-9	Endosulfan II	2971	ug/kg	ND	ND	ND	4	9.8	ND	ND	ND	ND	ND
1031-07-8	Endosulfan sulfate	3714	ug/kg	ND	ND	ND	1.2 JN	4.2	ND	ND	ND	ND	ND
76-44-8	Heptachlor	444	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1024-57-3	Heptachlor epoxide	20	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
72-43-5	Methoxychlor	10000	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5103-71-9	alpha-Chlordane	540	ug/kg	ND	ND	ND	ND	1.1 JN	ND	ND	ND	ND	ND
5103-74-2	gamma-Chlordane	540	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Total Pesticides	**10,000**	**ug/kg**	**0.91**	**ND**	**2.19**	**19.1**	**53.42**	**ND**	**ND**	**5.42**	**1.92**	**ND**
	PCBs												
53469-21-9	Aroclor 1242	1,000/10,000	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
12672-29-6	Aroclor 1248	1,000/10,000	ug/kg	ND	ND	ND	ND	66	ND	ND	ND	ND	ND
11097-69-1	Aroclor 1254	1,000/10,000	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
11096-82-5	Aroclor 1260	1,000/10,000	ug/kg	ND	ND	ND	92	210	ND	ND	ND	ND	ND
	Total PCBs	**1,000/10,000**	**ug/kg**	**ND**	**ND**	**ND**	**92**	**276**	**ND**	**ND**	**ND**	**ND**	**ND**

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NA - Not Analyzed / Not Applicable
J - Estimated value.
R - Rejected during data validation.
N - Presumptive evidence.
NC - No Criteria
- Concentration above NYSDEC Soil criteria.

TABLE 3.18
SADVA AOC 3 SOIL BORING RESULTS

Former Schenectady Army Depot-
Remedial Investigation
Soil Boring Data
Detected Compound Summary

CAS NO.	COMPOUND	NYSDEC Soil Criteria	SAMPLE ID:	AOC3-SB25F	AOC3-SB25H	AOC3-SB26C	AOC3-SB26M	AOC3-SB26O	AOC3-SB27C	AOC3-SB27J	AOC3-SB27P	AOC3-SB28A	AOC3-SB28I
			LAB ID:	C0I270146002	C0I270146003	C0I280200001	C0I280200002	C0I280200003	C0I280200004	C0I280200005	C0I280200006	C0I280200007	C0I280200008
			DEPTH:	11'	15'	5'	25'	29'	5'	19'	31'	0.2'	17'
			SOURCE:	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh
			SDG:	SADVA17	SADVA17	SADVA17	SADVA17	SADVA17	SADVA17	SADVA17	SADVA17	SADVA17	SADVA17
			MATRIX:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
			SAMPLED:	9/26/2000	9/26/2000	9/27/2000	9/27/2000	9/27/2000	9/27/2000	9/27/2000	9/27/2000	9/27/2000	9/27/2000
			VALIDATED:	11/27/2000	11/27/2000	11/27/2000	11/27/2000	11/27/2000	11/27/2000	11/27/2000	11/27/2000	11/27/2000	11/27/2000
			UNITS:										
	METALS												
7429-90-5	Aluminum	12800	mg/kg	13900	12200	14800	14800	12900	12800	12100	12100	14500	13900
7440-36-0	Antimony	0.59	mg/kg	0.75 J	0.72 J	0.67 J	0.84 J	0.59 J	0.84 J	1.1 J	0.82 J	0.74 J	0.67 J
7440-38-2	Arsenic	16.4	mg/kg	8.9	8.3	6.8	10.2	9.1	9.9	7.9	8.8	9	8.5
7440-39-3	Barium	300	mg/kg	49	44.2	71.8	75.3	54.6	55.6	46.8	43.3	52.4	55.3
7440-41-7	Beryllium	0.67	mg/kg	0.75	0.72	0.7	0.83	0.73	0.7	0.67	0.69	0.77	0.72
7440-43-9	Cadmium	1	mg/kg	ND	ND	0.69	0.22 J	0.22 J	0.17 J	0.19 J	0.21 J	0.14 J	0.26 J
7440-70-2	Calcium	46600	mg/kg	1380	1500	3570	2940	2080	1800	2130	2120	1080	4630
7440-47-3	Chromium	17.5	mg/kg	20.5 J	18.9 J	24.5 J	28.1 J	22.5 J	23.6 J	19.7 J	21.4 J	21.9 J	24 J
7440-48-4	Cobalt	30	mg/kg	17.2	18.4	15.5	21.5	20.6	18.8	19.3	20.9	17.9	18.3
7440-50-8	Copper	26.9	mg/kg	41.3	36.2	106	41.2	39	39.6	34.7	36.6	35.6	35.7
7439-89-6	Iron	25700	mg/kg	35900 J	34200 J	36100 J	39000 J	33800 J	36000 J	33800 J	33800 J	32900 J	36800 J
7439-92-1	Lead	60.8 (29.3 average)	mg/kg	16.1 J	18.1 J	26.3 J	21.7 J	20.6 J	20.9 J	16.2 J	19.2 J	20.3 J	16.5 J
7439-95-4	Magnesium	13100	mg/kg	5830	5620	6660	7460	6390	6400	6010	6130	5590	6960
7439-96-5	Manganese	875	mg/kg	662	710	773	712	371	733	869	832	631	943
7439-97-6	Mercury	0.1	mg/kg	0.02 J	0.068	0.033 J	0.053	0.055	0.065	0.044	0.044	0.04	0.051
7440-02-0	Nickel	24.8	mg/kg	33.5	34.4	33.3	47.5	45.2	41.7	38.5	38.8	34.1	37.7
7440-09-7	Potassium	1660	mg/kg	1450	992	1560	1960	1650	1110	1080	1190	1150	1870
7782-49-2	Selenium	2	mg/kg	ND	ND	ND	0.29 J	ND	ND	ND	0.3 J	ND	ND
7440-22-4	Silver	0.17	mg/kg	ND	ND	0.27 J	0.17 J	ND	0.13 J	ND	0.13 J	ND	0.15 J
7440-23-5	Sodium	619	mg/kg	63.1 J	50.4 J	50.4 J	92.7 J	84 J	48.3 J	67.6 J	81.3 J	45.6 J	93.8 J
7440-28-0	Thallium	0.67	mg/kg	ND	ND	ND	ND	ND	ND	0.68 J	ND	ND	ND
7440-62-2	Vanadium	150	mg/kg	24.2	21.3	24.1	23.8	21.3	20.9	20.3	20.1	22.6	24.3
7440-66-6	Zinc	134	mg/kg	89 J	89.5 J	130 J	94.3 J	101 J	98.6 J	90.3 J	87.9 J	87.2 J	93.9 J

ND - Not Detected.
NA - Not Analyzed / Not Applicable
J - Estimated value.
R - Rejected during data validation.
N - Presumptive evidence.
NC - No Criteria
- Concentration above NYSDEC Soil criteria.

TABLE 3.18
SADVA AOC 3 SOIL BORING RESULTS

Former Schenectady Army Depot- Remedial Investigation Soil Boring Data Detected Compound Summary		NYSDEC Soil Criteria	SAMPLE ID: LAB ID: DEPTH: SOURCE: SDG: MATRIX: SAMPLED: VALIDATED:	AOC3-SB28M C0I280215001 25' STL Pittsburgh SADVA18 SOIL 9/27/2000 11/29/2000	AOC3-SB29A C0J030135004 0.2' STL Pittsburgh SADVA18 SOIL 10/2/2000 11/29/2000	AOC3-SB29L C0J040185001 23' STL Pittsburgh SADVA18 SOIL 10/2/2000 11/29/2000	AOC3-SB29O C0J040185002 29' STL Pittsburgh SADVA18 SOIL 10/2/2000 11/29/2000	AOC3-SB30N C0J030135001 27' STL Pittsburgh SADVA18 SOIL 10/2/2000 11/29/2000	AOC3-SB31C C0J030135002 5' STL Pittsburgh SADVA18 SOIL 10/2/2000 11/29/2000	AOC3-SB31N C0J030135003 27' STL Pittsburgh SADVA18 SOIL 10/2/2000 11/29/2000	AOC3SB32L C1E110154001 23-25' STL Pittsburgh SADVA23 SOIL 5/9/2001 7/15/2001	AOC3SB32N C1E110154002 27-29' STL Pittsburgh SADVA23 SOIL 5/9/2001 7/15/2001	AOC3SB32P C1E110154003 31-33' STL Pittsburgh SADVA23 SOIL 5/9/2001 7/15/2001
CAS NO.	COMPOUND		UNITS:										
	VOLATILES												
67-64-1	Acetone	407	ug/kg	ND	ND	ND	ND	490 J	ND	ND	ND	ND	ND
71-43-2	Benzene	215	ug/kg	ND	ND	ND	ND	580	ND	ND	ND	ND	ND
78-93-3	2-Butanone	833	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
75-15-0	Carbon disulfide	9990	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
108-90-7	Chlorobenzene	6105	ug/kg	ND	ND	ND	ND	ND	ND	ND	6.2	ND	ND
67-66-3	Chloroform	803	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
107-06-2	1,2-Dichloroethane	259	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
540-59-0	1,2-Dichloroethene (total)	1092	ug/kg	ND	ND	ND	ND	1600	ND	3.1 J	ND	ND	ND
100-41-4	Ethylbenzene	10000	ug/kg	ND	ND	ND	ND	3500	ND	ND	3.9 J	ND	ND
591-78-6	2-Hexanone	NC	ug/kg	ND	ND	ND	ND	3000	ND	ND	ND	ND	ND
75-09-2	Methylene chloride	389	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
108-10-1	4-Methyl-2-pentanone	3515	ug/kg	ND	ND	ND	ND	6900	ND	ND	ND	ND	ND
127-18-4	Tetrachloroethene	5124	ug/kg	ND	ND	ND	ND	620	ND	ND	ND	ND	ND
108-88-3	Toluene	5550	ug/kg	ND	ND	ND	ND	560	ND	ND	ND	ND	ND
79-01-6	Trichloroethene	2331	ug/kg	ND	ND	ND	ND	2300	ND	ND	ND	2.8 J	ND
75-01-4	Vinyl chloride	422	ug/kg	ND	ND	ND	ND	ND	ND	2.3 J	ND	ND	ND
1330-20-7	Xylenes (total)	4440	ug/kg	ND	ND	ND	ND	5500	ND	ND	11	ND	ND
	Total VOCs	**10,000**	**ug/kg**	**ND**	**ND**	**ND**	**ND**	**25050**	**ND**	**5.4**	**21.1**	**2.8**	**ND**

ND - Not Detected.
NA - Not Analyzed / Not Applicable
J - Estimated value.
R - Rejected during data validation.
N - Presumptive evidence.
NC - No Criteria
- Concentration above NYSDEC Soil criteria.

TABLE 3.18
SADVA AOC 3 SOIL BORING RESULTS

Former Schenectady Army Depot-
Remedial Investigation
Soil Boring Data
Detected Compound Summary

CAS NO.	COMPOUND	NYSDEC Soil Criteria	SAMPLE ID:	AOC3-SB28M	AOC3-SB29A	AOC3-SB29L	AOC3-SB29O	AOC3-SB30N	AOC3-SB31C	AOC3-SB31N	AOC3SB32L	AOC3SB32N	AOC3SB32P
			LAB ID:	C0I280215001	C0J030135004	C0J040185001	C0J040185002	C0J030135001	C0J030135002	C0J030135003	C1E110154001	C1E110154002	C1E110154003
			DEPTH:	25'	0.2'	23'	29'	27'	5'	27'	23-25'	27-29'	31-33'
			SOURCE:	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh
			SDG:	SADVA18	SADVA18	SADVA18	SADVA18	SADVA18	SADVA18	SADVA18	SADVA23	SADVA23	SADVA23
			MATRIX:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
			SAMPLED:	9/27/2000	10/2/2000	10/2/2000	10/2/2000	10/2/2000	10/2/2000	10/2/2000	5/9/2001	5/9/2001	5/9/2001
			VALIDATED:	11/29/2000	11/29/2000	11/29/2000	11/29/2000	11/29/2000	11/29/2000	11/29/2000	7/15/2001	7/15/2001	7/15/2001
			UNITS:										
	SEMIVOLATILES												
95-48-7	2-Methylphenol	278	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
108-95-2	Phenol	100	ug/kg	43 J	ND	ND	ND	ND	ND	ND	ND	ND	ND
117-81-7	bis(2-Ethylhexyl) phthalate	50000	ug/kg	250 J	ND	ND	26 J	42 J	70 J	36 J	610 J	600	220 J
132-64-9	Dibenzofuran	22755	ug/kg	60 J	ND	ND	ND	40 J	23 J	ND	700 J	ND	ND
95-50-1	1,2-Dichlorobenzene	29563	ug/kg	ND	ND	ND	ND	43 J	ND	ND	740 J	ND	ND
541-73-1	1,3-Dichlorobenzene	5735	ug/kg	ND	ND	ND	ND	ND	ND	ND	440 J	ND	ND
106-46-7	1,4-Dichlorobenzene	31450	ug/kg	35 J	ND	ND	ND	ND	ND	ND	3100 J	ND	ND
86-74-8	Carbazole	NC	ug/kg	ND	ND	ND	ND	ND	51 J	ND	ND	ND	ND
120-83-2	2,4-Dichlorophenol	1406	ug/kg	ND	ND	ND	ND	29 J	ND	ND	ND	ND	ND
105-67-9	2,4-Dimethylphenol	NC	ug/kg	430	ND	ND	ND	ND	ND	ND	ND	ND	ND
84-74-2	Di-n-butyl phthalate	29970	ug/kg	24 J	ND	ND	ND	ND	ND	ND	ND	ND	ND
117-84-0	Di-n-octyl phthalate	50000	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
106-44-5	4-Methylphenol	3145	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
100-02-7	4-Nitrophenol	389	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
86-30-6	N-Nitrosodiphenylamine	NC	ug/kg	400	ND	ND	ND	ND	ND	ND	ND	ND	ND
	CPAHs												
56-55-3	Benzo(a)anthracene	224	ug/kg	35 J	72 J	ND	ND	ND	210 J	ND	ND	ND	ND
50-32-8	Benzo(a)pyrene	61	ug/kg	ND	75 J	ND	ND	ND	170 J	ND	ND	ND	ND
205-99-2	Benzo(b)fluoranthene	4070	ug/kg	ND	86 J	ND	ND	ND	160 J	ND	ND	ND	ND
207-08-9	Benzo(k)fluoranthene	4070	ug/kg	ND	78 J	ND	ND	ND	150 J	ND	ND	ND	ND
218-01-9	Chrysene	1480	ug/kg	62 J	96 J	ND	ND	ND	210 J	ND	ND	ND	ND
53-70-3	Dibenz(a,h)anthracene	14	ug/kg	ND	ND	ND	ND	ND	32 J	ND	ND	ND	ND
193-39-5	Indeno(1,2,3-cd)pyrene	11840	ug/kg	ND	38 J	ND	ND	ND	100 J	ND	ND	ND	ND
	Total CPAHs	**10000**	**ug/kg**	**97**	**445**	**ND**	**ND**	**ND**	**1032**	**ND**	**ND**	**ND**	**ND**
	NPAHs												
83-32-9	Acenaphthene	(185000)340400	ug/kg	150 J	ND	ND	ND	41 J	49 J	ND	660 J	ND	ND
208-96-8	Acenaphthylene	152144	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
120-12-7	Anthracene	(50000)185000	ug/kg	52 J	ND	ND	ND	ND	98 J	ND	ND	ND	ND
191-24-2	Benzo(ghi)perylene	(185000)29600000	ug/kg	ND	41 J	ND	ND	ND	110 J	ND	ND	ND	ND
86-73-7	Fluorene	(50000)1350500	ug/kg	400	ND	ND	ND	75 J	47 J	ND	1100 J	ND	ND
206-44-0	Fluoranthene	(50000)185000	ug/kg	58 J	150 J	ND	ND	ND	500	ND	ND	ND	ND
91-57-6	2-Methylnaphthalene	50000	ug/kg	ND	ND	ND	ND	1600	37 J	ND	22000	ND	ND
91-20-3	Naphthalene	48100	ug/kg	ND	ND	ND	ND	950	41 J	ND	7600	ND	ND
85-01-8	Phenanthrene	(50000)185000	ug/kg	63 J	85 J	ND	ND	190 J	440	34 J	2600 J	ND	ND
129-00-0	Pyrene	(50000)185000	ug/kg	140 J	100 J	ND	ND	24 J	370	ND	ND	ND	ND
	Total NPAHs	**500,000**	**ug/kg**	**863**	**376**	**ND**	**ND**	**2880**	**1692**	**34**	**33960**	**ND**	**ND**
	Total PAHs		**ug/kg**	**960**	**821**	**ND**	**ND**	**2880**	**2724**	**34**	**33960**	**ND**	**ND**
	Total SVOCs	**500,000**	**ug/kg**	**2202**	**821**	**ND**	**26**	**3034**	**2868**	**70**	**39550**	**600**	**220**

ND - Not Detected.
NA - Not Analyzed / Not Applicable
CPAH - Carcinogenic Polynuclear Aromatic Hydrocarbon
NPAH - Noncarcinogenic Polynuclear Aromatic Hydrocarbon.
J - Estimated value.
R - Rejected during data validation.
N - Presumptive evidence.
NC - No Criteria
- Concentration above NYSDEC Soil criteria.

TABLE 3.18
SADVA AOC 3 SOIL BORING RESULTS

Former Schenectady Army Depot- Remedial Investigation Soil Boring Data Detected Compound Summary		NYSDEC Soil	SAMPLE ID:	AOC3-SB28M	AOC3-SB29A	AOC3-SB29L	AOC3-SB29O	AOC3-SB30N	AOC3-SB31C	AOC3-SB31N	AOC3SB32L	AOC3SB32N	AOC3SB32P
			LAB ID:	C0I280215001	C0J030135004	C0J040185001	C0J040185002	C0J030135001	C0J030135002	C0J030135003	C1E110154001	C1E110154002	C1E110154003
			DEPTH:	25'	0.2'	23'	29'	27'	5'	27'	23-25'	27-29'	31-33'
			SOURCE:	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh
			SDG:	SADVA18	SADVA18	SADVA18	SADVA18	SADVA18	SADVA18	SADVA18	SADVA23	SADVA23	SADVA23
			MATRIX:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
			SAMPLED:	9/27/2000	10/2/2000	10/2/2000	10/2/2000	10/2/2000	10/2/2000	10/2/2000	5/9/2001	5/9/2001	5/9/2001
			VALIDATED:	11/29/2000	11/29/2000	11/29/2000	11/29/2000	11/29/2000	11/29/2000	11/29/2000	7/15/2001	7/15/2001	7/15/2001
CAS NO.	COMPOUND	Criteria	UNITS:										
	PESTICIDES												
319-84-6	alpha-BHC	111	ug/kg	ND	ND	ND	ND	0.24 JN	ND	ND	0.98 JN	ND	ND
319-86-8	delta-BHC	1221	ug/kg	0.12 J	ND	ND	ND	ND	ND	ND	ND	ND	ND
309-00-2	Aldrin	41	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
60-57-1	Dieldrin	44	ug/kg	0.48 JN	ND	ND	ND	0.25 JN	ND	ND	ND	ND	ND
72-54-8	4,4'-DDD	2900	ug/kg	9.4 J	0.93 JN	ND	ND	9.5	0.44 JN	1.9	48	0.76 JN	ND
72-55-9	4,4'-DDE	2100	ug/kg	1.7 J	39	ND	ND	2.6	1.7 J	0.76 J	12 JN	ND	ND
50-29-3	4,4'-DDT	2100	ug/kg	ND	29	ND	ND	ND	7.3	ND	17 JN	0.64 JN	0.31 J
72-20-8	Endrin	339	ug/kg	1.5 JN	ND	ND	ND	1.3 JN	ND	ND	13	ND	ND
7421-93-4	Endrin aldehyde	NC	ug/kg	3.8 JN	ND	ND	ND	1.6 JN	ND	ND	12 JN	ND	ND
53494-70-5	Endrin ketone	NC	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
33213-65-9	Endosulfan II	2971	ug/kg	4.4 JN	ND	ND	ND	3.5	ND	1.2 J	48 JN	0.73 JN	0.085 JN
1031-07-8	Endosulfan sulfate	3714	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.15 JN
76-44-8	Heptachlor	444	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1024-57-3	Heptachlor epoxide	20	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
72-43-5	Methoxychlor	10000	ug/kg	ND	ND	ND	ND	ND	ND	ND	44 JN	ND	ND
5103-71-9	alpha-Chlordane	540	ug/kg	0.56 JN	0.9 JN	ND	ND	ND	ND	ND	ND	ND	ND
5103-74-2	gamma-Chlordane	540	ug/kg	ND	0.25 JN	ND	ND	ND	ND	ND	ND	ND	ND
	Total Pesticides	**10,000**	**ug/kg**	**21.96**	**70.08**	**ND**	**ND**	**18.99**	**9.44**	**3.86**	**194.98**	**2.13**	**0.545**
	PCBs												
53469-21-9	Aroclor 1242	1,000/10,000	ug/kg	ND	ND	ND	ND	ND	ND	ND	450	ND	ND
12672-29-6	Aroclor 1248	1,000/10,000	ug/kg	52	ND	ND	ND	ND	ND	ND	ND	ND	ND
11097-69-1	Aroclor 1254	1,000/10,000	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
11096-82-5	Aroclor 1260	1,000/10,000	ug/kg	150	ND	ND	ND	72	ND	ND	610	ND	ND
	Total PCBs	**1,000/10,000**	**ug/kg**	**202**	**ND**	**ND**	**ND**	**72**	**ND**	**ND**	**1060**	**ND**	**ND**

ND - Not Detected.
NA - Not Analyzed / Not Applicable
J - Estimated value.
R - Rejected during data validation.
N - Presumptive evidence.
NC - No Criteria
- Concentration above NYSDEC Soil criteria.

TABLE 3.18
SADVA AOC 3 SOIL BORING RESULTS

Former Schenectady Army Depot- Remedial Investigation Soil Boring Data Detected Compound Summary		NYSDEC Soil Criteria	SAMPLE ID:	AOC3-SB28M	AOC3-SB29A	AOC3-SB29L	AOC3-SB29O	AOC3-SB30N	AOC3-SB31C	AOC3-SB31N	AOC3SB32L	AOC3SB32N	AOC3SB32P
			LAB ID:	C0I280215001	C0J030135004	C0J040185001	C0J040185002	C0J030135001	C0J030135002	C0J030135003	C1E110154001	C1E110154002	C1E110154003
			DEPTH:	25'	0.2'	23'	29'	27'	5'	27'	23-25'	27-29'	31-33'
			SOURCE:	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh
			SDG:	SADVA18	SADVA18	SADVA18	SADVA18	SADVA18	SADVA18	SADVA18	SADVA23	SADVA23	SADVA23
			MATRIX:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
			SAMPLED:	9/27/2000	10/2/2000	10/2/2000	10/2/2000	10/2/2000	10/2/2000	10/2/2000	5/9/2001	5/9/2001	5/9/2001
			VALIDATED:	11/29/2000	11/29/2000	11/29/2000	11/29/2000	11/29/2000	11/29/2000	11/29/2000	7/15/2001	7/15/2001	7/15/2001
CAS NO.	COMPOUND		UNITS:										
	METALS												
7429-90-5	Aluminum	12800	mg/kg	11600	9540	14300	11600	11700	17300	14200	11000	10800	10300
7440-36-0	Antimony	0.59	mg/kg	0.51 J	1.7 J	0.86 J	0.66 J	0.56 J	0.78 J	0.68 J	ND	ND	ND
7440-38-2	Arsenic	16.4	mg/kg	5.6	7.5	9	7.4	6.3	9.2	10	5.5	6.5	5.8
7440-39-3	Barium	300	mg/kg	47.7	81.6	55.8	47.8	41.6	69.5	92.8	36.7	33.7	29
7440-41-7	Beryllium	0.67	mg/kg	0.58 J	0.61 J	0.73	0.59	0.65	0.88	0.76	0.53 J	0.5 J	0.57
7440-43-9	Cadmium	1	mg/kg	ND	0.51 J	ND	ND	ND	0.68	ND	ND	0.13 J	ND
7440-70-2	Calcium	46600	mg/kg	1980	2250	2540	2500	2230	1350	13400	1850	6620	40300
7440-47-3	Chromium	17.5	mg/kg	18.7	17	22.9	19.8	18.7	26.1	23.1	17.6	16.9	16.6
7440-48-4	Cobalt	30	mg/kg	14.5	9.4	19.2	15.3	14.1	19.4	19	14.5	15.3	12.6
7440-50-8	Copper	26.9	mg/kg	32.1	31.3	42.3	36.4	30	95.3	42.4	32.3	31.7	34.8
7439-89-6	Iron	25700	mg/kg	28900	21700	37400	30700	30000	39900	37200	28900	30400	27500
7439-92-1	Lead	60.8 (29.3 average)	mg/kg	11.4 J	78.9 J	17.4 J	14.4 J	12.8 J	33.6 J	20.7 J	14.9	11.9	10.4
7439-95-4	Magnesium	13100	mg/kg	5830	3470	7010	5780	5840	7390	9330	5830	6680	16700
7439-96-5	Manganese	875	mg/kg	286	673	690	592	563	740	630	301	306	414
7439-97-6	Mercury	0.1	mg/kg	0.032 J	0.064	0.052	0.051	0.046	0.066	0.058	ND	0.031 J	0.02 J
7440-02-0	Nickel	24.8	mg/kg	29	17.1	35.4	30.9	28.4	43.3	40.4	29.2	29.9	26.9
7440-09-7	Potassium	1660	mg/kg	1400	601 J	1550	1500	1450	2250	1830	1140	1030	1410
7782-49-2	Selenium	2	mg/kg	ND	0.5 J	ND	0.39 J	ND	0.44 J	0.29 J	ND	ND	0.56 J
7440-22-4	Silver	0.17	mg/kg	ND	0.39 J	0.12 J	0.13 J	ND	0.27 J	ND	0.11 J	ND	ND
7440-23-5	Sodium	619	mg/kg	151 J	42.1 J	95.2 J	122 J	69.8 J	48.7 J	107 J	92.5 J	93.4 J	121 J
7440-28-0	Thallium	0.67	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
7440-62-2	Vanadium	150	mg/kg	19.3 J	21.6 J	22.7 J	21.3 J	19.9 J	26.1 J	22.5 J	18.9	18.8	19.1
7440-66-6	Zinc	134	mg/kg	81.9 J	108 J	112 J	90.2 J	72.3 J	174 J	83.1 J	80.8 J	81.4 J	93.6 J

ND - Not Detected.
NA - Not Analyzed / Not Applicable
J - Estimated value.
R - Rejected during data validation.
N - Presumptive evidence.
NC - No Criteria
(shaded box) - Concentration above NYSDEC Soil criteria.

TABLE 3.18
SADVA AOC 3 SOIL BORING RESULTS

Former Schenectady Army Depot- Remedial Investigation Soil Boring Data Detected Compound Summary			SAMPLE ID:	AOC3MW5A	AOC3MW5I	AOC3MW6A	AOC3MW6I	AOC3MW7A	AOC3MW7L	AOC3MW7N	MW-8A	MW-8N	MW-9A	MW-9M
			LAB ID:	C1E080129002	C1E100127004	C1E080129003	C1E100127006	C1E080129001	C1E100127001	C1E100127002	C1J230223003	C1J240196001	C1J230223001	C1J230223002
			DEPTH:	0.2'	16-18'	0.2'	16-18'	0.2'	22-24'	24-28'	0.2'	26-30'	0.2'	24-28'
			SOURCE:	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh
			SDG:	SADVA23	SADVA23	SADVA23	SADVA23	SADVA23	SADVA23	SADVA23	SADVA25	SADVA25	SADVA25	SADVA25
			MATRIX:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
		NYSDEC	SAMPLED:	5/7/2001	5/9/2001	5/7/2001	5/9/2001	5/7/2001	5/8/2001	5/8/2001	10/22/2001	10/23/2001	10/22/2001	10/22/2001
		Soil	VALIDATED:	7/15/2001	7/15/2001	7/15/2001	7/15/2001	7/15/2001	7/15/2001	7/15/2001	12/14/2001	12/14/2001	12/14/2001	12/14/2001
CAS NO.	COMPOUND	Criteria	UNITS:											
	VOLATILES													
67-64-1	Acetone	407	ug/kg	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND
71-43-2	Benzene	215	ug/kg	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND
78-93-3	2-Butanone	833	ug/kg	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND
75-15-0	Carbon disulfide	9990	ug/kg	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND
108-90-7	Chlorobenzene	6105	ug/kg	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND
67-66-3	Chloroform	803	ug/kg	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND
107-06-2	1,2-Dichloroethane	259	ug/kg	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND
540-59-0	1,2-Dichloroethene (total)	1092	ug/kg	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	14
100-41-4	Ethylbenzene	10000	ug/kg	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND
591-78-6	2-Hexanone	NC	ug/kg	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND
75-09-2	Methylene chloride	389	ug/kg	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND
108-10-1	4-Methyl-2-pentanone	3515	ug/kg	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND
127-18-4	Tetrachloroethene	5124	ug/kg	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND
108-88-3	Toluene	5550	ug/kg	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND
79-01-6	Trichloroethene	2331	ug/kg	ND	5.5 J	ND	ND	ND	ND	NA	ND	2.1 J	ND	18
75-01-4	Vinyl chloride	422	ug/kg	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND
1330-20-7	Xylenes (total)	4440	ug/kg	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND
	Total VOCs	**10,000**	**ug/kg**	**ND**	**5.5**	**ND**	**ND**	**ND**	**ND**	**NA**	**ND**	**2.1**	**ND**	**32**

ND - Not Detected.
NA - Not Analyzed / Not Applicable
J - Estimated value.
R - Rejected during data validation.
N - Presumptive evidence.
NC - No Criteria
- Concentration above NYSDEC Soil criteria.

TABLE 3.18
SADVA AOC 3 SOIL BORING RESULTS

Former Schenectady Army Depot- Remedial Investigation Soil Boring Data Detected Compound Summary			SAMPLE ID:	AOC3MW5A	AOC3MW5I	AOC3MW6A	AOC3MW6I	AOC3MW7A	AOC3MW7L	AOC3MW7N	MW-8A	MW-8N	MW-9A	MW-9M
			LAB ID:	C1E080129002	C1E100127004	C1E080129003	C1E100127006	C1E080129001	C1E100127001	C1E100127002	C1J230223003	C1J240196001	C1J230223001	C1J230223002
			DEPTH:	0.2'	16-18'	0.2'	16-18'	0.2'	22-24'	24-28'	0.2'	26-30'	0.2'	24-28'
			SOURCE:	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh
			SDG:	SADVA23	SADVA23	SADVA23	SADVA23	SADVA23	SADVA23	SADVA23	SADVA25	SADVA25	SADVA25	SADVA25
			MATRIX:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
		NYSDEC	SAMPLED:	5/7/2001	5/9/2001	5/7/2001	5/9/2001	5/7/2001	5/8/2001	5/8/2001	10/22/2001	10/23/2001	10/22/2001	10/22/2001
		Soil	VALIDATED:	7/15/2001	7/15/2001	7/15/2001	7/15/2001	7/15/2001	7/15/2001	7/15/2001	12/14/2001	12/14/2001	12/14/2001	12/14/2001
CAS NO.	COMPOUND	Criteria	UNITS:											
	SEMIVOLATILES													
95-48-7	2-Methylphenol	278	ug/kg	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND
108-95-2	Phenol	100	ug/kg	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND
117-81-7	bis(2-Ethylhexyl) phthalate	50000	ug/kg	ND	480	83 J	130 J	ND	NA	1400	ND	ND	ND	ND
132-64-9	Dibenzofuran	22755	ug/kg	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND
95-50-1	1,2-Dichlorobenzene	29563	ug/kg	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND
541-73-1	1,3-Dichlorobenzene	5735	ug/kg	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND
106-46-7	1,4-Dichlorobenzene	31450	ug/kg	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND
86-74-8	Carbazole	NC	ug/kg	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND
120-83-2	2,4-Dichlorophenol	1406	ug/kg	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND
105-67-9	2,4-Dimethylphenol	NC	ug/kg	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND
84-74-2	Di-n-butyl phthalate	29970	ug/kg	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND
117-84-0	Di-n-octyl phthalate	50000	ug/kg	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND
106-44-5	4-Methylphenol	3145	ug/kg	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND
100-02-7	4-Nitrophenol	389	ug/kg	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND
86-30-6	N-Nitrosodiphenylamine	NC	ug/kg	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND
	CPAHs													
56-55-3	Benzo(a)anthracene	224	ug/kg	ND	ND	ND	ND	45 J	NA	ND	ND	ND	72 J	ND
50-32-8	Benzo(a)pyrene	61	ug/kg	ND	ND	ND	ND	47 J	NA	ND	ND	ND	74 J	ND
205-99-2	Benzo(b)fluoranthene	4070	ug/kg	ND	ND	ND	ND	41 J	NA	ND	31 J	ND	68 J	ND
207-08-9	Benzo(k)fluoranthene	4070	ug/kg	ND	ND	ND	ND	ND	NA	ND	45 J	ND	84 J	ND
218-01-9	Chrysene	1480	ug/kg	ND	ND	ND	ND	58 J	NA	ND	48 J	ND	97 J	ND
53-70-3	Dibenz(a,h)anthracene	14	ug/kg	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND
193-39-5	Indeno(1,2,3-cd)pyrene	11840	ug/kg	ND	ND	ND	ND	ND	NA	ND	ND	ND	46 J	ND
	Total CPAHs	**10000**	**ug/kg**	**ND**	**ND**	**ND**	**ND**	**191**	**NA**	**ND**	**124**	**ND**	**441**	**ND**
	NPAHs													
83-32-9	Acenaphthene	(185000)340400	ug/kg	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND
208-96-8	Acenaphthylene	152144	ug/kg	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND
120-12-7	Anthracene	(50000)185000	ug/kg	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND
191-24-2	Benzo(ghi)perylene	(185000)29600000	ug/kg	ND	ND	ND	ND	ND	NA	ND	ND	ND	48 J	ND
86-73-7	Fluorene	(50000)1350500	ug/kg	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND
206-44-0	Fluoranthene	(50000)185000	ug/kg	260 J	ND	54 J	ND	110 J	NA	ND	90 J	ND	170 J	ND
91-57-6	2-Methylnaphthalene	50000	ug/kg	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND
91-20-3	Naphthalene	48100	ug/kg	ND	ND	ND	ND	ND	NA	ND	ND	ND	89 J	ND
85-01-8	Phenanthrene	(50000)185000	ug/kg	ND	ND	ND	ND	49 J	NA	ND	49 J	ND	110 J	ND
129-00-0	Pyrene	(50000)185000	ug/kg	ND	ND	ND	ND	77 J	NA	ND	ND	ND	ND	ND
	Total NPAHs	**500,000**	**ug/kg**	**260**	**ND**	**54**	**ND**	**236**	**NA**	**ND**	**139**	**ND**	**417**	**ND**
	Total PAHs		**ug/kg**	**260**	**ND**	**54**	**ND**	**427**	**NA**	**ND**	**263**	**ND**	**858**	**ND**
	Total SVOCs	**500,000**	**ug/kg**	**260**	**480**	**137**	**130**	**427**	**NA**	**1400**	**263**	**ND**	**858**	**ND**

ND - Not Detected.
NA - Not Analyzed / Not Applicable
CPAH - Carcinogenic Polynuclear Aromatic Hydrocarbon
NPAH - Noncarcinogenic Polynuclear Aromatic Hydrocarbon.
J - Estimated value.
R - Rejected during data validation.
N - Presumptive evidence.
NC - No Criteria
- Concentration above NYSDEC Soil criteria.

TABLE 3.18
SADVA AOC 3 SOIL BORING RESULTS

Former Schenectady Army Depot- Remedial Investigation Soil Boring Data Detected Compound Summary		NYSDEC Soil Criteria	SAMPLE ID:	AOC3MW5A	AOC3MW5I	AOC3MW6A	AOC3MW6I	AOC3MW7A	AOC3MW7L	AOC3MW7N	MW-8A	MW-8N	MW-9A	MW-9M
			LAB ID:	C1E080129002	C1E100127004	C1E080129003	C1E100127006	C1E080129001	C1E100127001	C1E100127002	C1J230223003	C1J240196001	C1J230223001	C1J230223002
			DEPTH:	0.2'	16-18'	0.2'	16-18'	0.2'	22-24'	24-28'	0.2'	26-30'	0.2'	24-28'
			SOURCE:	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh
			SDG:	SADVA23	SADVA23	SADVA23	SADVA23	SADVA23	SADVA23	SADVA23	SADVA25	SADVA25	SADVA25	SADVA25
			MATRIX:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
			SAMPLED:	5/7/2001	5/9/2001	5/7/2001	5/9/2001	5/7/2001	5/8/2001	5/8/2001	10/22/2001	10/23/2001	10/22/2001	10/22/2001
			VALIDATED:	7/15/2001	7/15/2001	7/15/2001	7/15/2001	7/15/2001	7/15/2001	7/15/2001	12/14/2001	12/14/2001	12/14/2001	12/14/2001
CAS NO.	COMPOUND		UNITS:											
	PESTICIDES													
319-84-6	alpha-BHC	111	ug/kg	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND
319-86-8	delta-BHC	1221	ug/kg	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND
309-00-2	Aldrin	41	ug/kg	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND
60-57-1	Dieldrin	44	ug/kg	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	0.1 JN
72-54-8	4,4'-DDD	2900	ug/kg	ND	ND	0.2 JN	0.28 JN	1.3 J	NA	ND	ND	ND	ND	ND
72-55-9	4,4'-DDE	2100	ug/kg	0.76 JN	0.18 JN	2	0.13 JN	1.7 J	NA	0.16 JN	6.2	ND	56	ND
50-29-3	4,4'-DDT	2100	ug/kg	0.53 JN	ND	1.8 J	0.43 J	2.9	NA	ND	8.3	ND	41	ND
72-20-8	Endrin	339	ug/kg	ND	ND	ND	ND	ND	NA	ND	ND	ND	3.5 JN	ND
7421-93-4	Endrin aldehyde	NC	ug/kg	0.35 JN	ND	0.48 JN	0.55 JN	0.74 JN	NA	ND	ND	ND	ND	ND
53494-70-5	Endrin ketone	NC	ug/kg	ND	ND	0.74 J	ND	0.99 J	NA	ND	ND	ND	ND	ND
33213-65-9	Endosulfan II	2971	ug/kg	0.12 JN	ND	ND	ND	ND	NA	ND	0.14 JN	ND	5.1 JN	ND
1031-07-8	Endosulfan sulfate	3714	ug/kg	0.18 JN	ND	0.091 JN	ND	0.3 JN	NA	ND	0.27 JN	ND		ND
76-44-8	Heptachlor	444	ug/kg	ND	ND	ND	ND	0.17 J	NA	ND	ND	ND	ND	ND
1024-57-3	Heptachlor epoxide	20	ug/kg	ND	ND	ND	ND	0.3 J	NA	ND	ND	ND	ND	ND
72-43-5	Methoxychlor	10000	ug/kg	ND	ND	0.32 JN	ND	0.4 JN	NA	ND	ND	ND	ND	ND
5103-71-9	alpha-Chlordane	540	ug/kg	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND
5103-74-2	gamma-Chlordane	540	ug/kg	ND	ND	ND	ND	0.1 JN	NA	ND	ND	ND	ND	ND
	Total Pesticides	**10,000**	**ug/kg**	**1.94**	**0.18**	**5.631**	**1.39**	**8.9**	**NA**	**0.16**	**14.91**	**ND**	**105.6**	**0.1**
	PCBs													
53469-21-9	Aroclor 1242	1,000/10,000	ug/kg	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND
12672-29-6	Aroclor 1248	1,000/10,000	ug/kg	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND
11097-69-1	Aroclor 1254	1,000/10,000	ug/kg	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND
11096-82-5	Aroclor 1260	1,000/10,000	ug/kg	ND	ND	ND	ND	ND	NA	ND	ND	ND	430	ND
	Total PCBs	**1,000/10,000**	**ug/kg**	**ND**	**ND**	**ND**	**ND**	**ND**	**NA**	**ND**	**ND**	**ND**	**430**	**ND**

ND - Not Detected.
NA - Not Analyzed / Not Applicable
J - Estimated value.
R - Rejected during data validation.
N - Presumptive evidence.
NC - No Criteria
- Concentration above NYSDEC Soil criteria.

TABLE 3.18
SADVA AOC 3 SOIL BORING RESULTS

Former Schenectady Army Depot- Remedial Investigation Soil Boring Data Detected Compound Summary			SAMPLE ID:	AOC3MW5A	AOC3MW5I	AOC3MW6A	AOC3MW6I	AOC3MW7A	AOC3MW7L	AOC3MW7N	MW-8A	MW-8N	MW-9A	MW-9M
			LAB ID:	C1E080129002	C1E100127004	C1E080129003	C1E100127006	C1E080129001	C1E100127001	C1E100127002	C1J230223003	C1J240196001	C1J230223001	C1J230223002
			DEPTH:	0.2'	16-18'	0.2'	16-18'	0.2'	22-24'	24-28'	0.2'	26-30'	0.2'	24-28'
			SOURCE:	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh
			SDG:	SADVA23	SADVA23	SADVA23	SADVA23	SADVA23	SADVA23	SADVA23	SADVA25	SADVA25	SADVA25	SADVA25
			MATRIX:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
		NYSDEC	SAMPLED:	5/7/2001	5/9/2001	5/7/2001	5/9/2001	5/7/2001	5/8/2001	5/8/2001	10/22/2001	10/23/2001	10/22/2001	10/22/2001
		Soil	VALIDATED:	7/15/2001	7/15/2001	7/15/2001	7/15/2001	7/15/2001	7/15/2001	7/15/2001	12/14/2001	12/14/2001	12/14/2001	12/14/2001
CAS NO.	COMPOUND	Criteria	UNITS:											
	METALS													
7429-90-5	Aluminum	12800	mg/kg	5300	12100	12100	11700	11600	NA	15100	10300	7110	9110	10800
7440-36-0	Antimony	0.59	mg/kg	0.53 J	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND
7440-38-2	Arsenic	16.4	mg/kg	5.1	6.2	13.4	5.7	6.4	NA	7.8	6.2	3.1	6	6.4
7440-39-3	Barium	300	mg/kg	29.7	44	76.3	39.7	78.5	NA	56.6	97.1	22 J	57.9	36.6
7440-41-7	Beryllium	0.67	mg/kg	0.31 J	0.6	0.62	0.56 J	0.6	NA	0.73	0.57	0.3 J	0.54	0.55 J
7440-43-9	Cadmium	1	mg/kg	0.15 J	ND	0.11 J	ND	0.17 J	NA	ND	0.37 J	0.18 J	0.16 J	0.18 J
7440-70-2	Calcium	46600	mg/kg	86000	2960	2030	2500	1600	NA	4740	3450 J	29200 J	10500 J	2720 J
7440-47-3	Chromium	17.5	mg/kg	9.5	19.1	16.1	16.8	18.2	NA	25.2	14.1	10.6	13.5	41.7
7440-48-4	Cobalt	30	mg/kg	5.8 J	16.1	11.6	13.7	11.2	NA	20.1	10.1	7.8	11.3	13.6
7440-50-8	Copper	26.9	mg/kg	13.1	30.9	16.7	29.7	17.7	NA	37.3	21.2	18.4	20.5	30.2
7439-89-6	Iron	25700	mg/kg	13300	32200	24500	30500	24800	NA	39000	23700	20400	23600	30900
7439-92-1	Lead	60.8 (29.3 average)	mg/kg	8.8	12.6	22.1	9.8	22.3	NA	15.2	30.9	7.2	24.9	11.7
7439-95-4	Magnesium	13100	mg/kg	40900	5850	3660	5680	3610	NA	7030	3350	9890	4880	5500
7439-96-5	Manganese	875	mg/kg	311	694	755	563	948	NA	1030	629	585	500	491
7439-97-6	Mercury	0.1	mg/kg	0.019 J	0.026 J	0.045	0.035 J	0.039	NA	0.055	0.047	0.024 J	0.029 J	0.011 U
7440-02-0	Nickel	24.8	mg/kg	11.7	32.3	19.4	27.1	21.5	NA	37.5	16.5	13.1	19.9	26.2
7440-09-7	Potassium	1660	mg/kg	983	1210	1030	1020	816	NA	1530	1270	737	931	1050
7782-49-2	Selenium	2	mg/kg	ND	ND	0.98	ND	0.85	NA	0.57 J	0.65	0.37 U	0.33 U	0.39 J
7440-22-4	Silver	0.17	mg/kg	ND	0.12 J	0.087 J	ND	0.25 J	NA	0.13 J	0.15 J	0.086 U	0.077 U	0.087 U
7440-23-5	Sodium	619	mg/kg	148 J	109 J	55.7 J	85.3 J	54.7 J	NA	126 J	44.6 J	62.5 J	54.1 J	90.6 J
7440-28-0	Thallium	0.67	mg/kg	ND	ND	ND	ND	ND	NA	ND	0.77 J	1.1 J	0.59 U	1.7
7440-62-2	Vanadium	150	mg/kg	24	20.5	21.9	19.2	23.7	NA	26.7	21.1	13.3	19.1	18.8
7440-66-6	Zinc	134	mg/kg	40.6 J	89 J	72.7 J	91.3 J	65.1 J	NA	111 J	73	54.1	69.4	82.7

ND - Not Detected.
NA - Not Analyzed / Not Applicable
J - Estimated value.
R - Rejected during data validation.
N - Presumptive evidence.
NC - No Criteria
[shaded box] - Concentration above NYSDEC Soil criteria.

TABLE 3.19
SADVA AOC 3 SOIL RESULTS
DIOXIN AND FURANS

Former Schenectady Army Depot Remedial Investigation AOC 3 Soil Boring Data Dioxins & Furans	SAMPLE ID: LAB ID: SOURCE: SDG: MATRIX: SAMPLED: VALIDATED:			AOC3SB01A C0G200283-004 STL C0G200283 SOIL 7/19/2000 12/15/2000	AOC3SB02A C0G200283-003 STL C0G200283 SOIL 7/19/2000 12/15/2000	AOC3SB03A C0G200283-002 STL C0G200283 SOIL 7/19/2000 12/15/2000	AOC3SB04A C0G200283-001 STL C0G200283 SOIL 7/18/2000 12/15/2000	AOC3SB05A C0G2100152-003 STL C0G2100152 SOIL 7/18/2000 12/15/2000	AOC3SB06A C0G240120-001 STL C0G240120 SOIL 7/20/2000 12/15/2000
Compound	UNITS:	Human Toxic Equivalency Factor	NYSDEC Soil Criteria (pg/g)						
DIOXINS									
2,3,7,8-TCDD	pg/g	1	1,000	0.23 U	0.61 J	1.1 J	0.51 U	0.13 U	0.29 U
1,2,3,7,8-PeCDD	pg/g	1	NC	0.88 U	1.6 U	6.4	2.4 U	0.2 U	0.95 U
1,2,3,4,7,8-HxCDD	pg/g	0.1	NC	0.63 U	1.7 U	5.7	3.4 J	0.27 U	1.2 U
1,2,3,6,7,8-HxCDD	pg/g	0.1	NC	6.7	6.3	34	14	0.59 U	2.7 U
1,2,3,7,8,9-HxCDD	pg/g	0.1	NC	3.4 J	5.9	20	9.5	0.58 U	3 J
1,2,3,4,6,7,8-HpCDD	pg/g	0.01	NC	270	150	650	340	44	80
1,2,3,7,8-PeCDF	pg/g	0.05	NC	1.9 U	3.2 J	8.1	2.5 U	0.16 U	1.9 U
OCDD	pg/g	0.0001	NC	5900	4900	10000	7800	8000	6500
2,3,7,8-TCDF	pg/g	0.1	NC	2.6	2.4	14	1.8	0.16 U	2.3
2,3,4,7,8-PeCDF	pg/g	0.5	NC	3.2 J	3.9	21	3.5 J	0.35 U	2.1 U
1,2,3,4,7,8-HxCDF	pg/g	0.1	NC	3.3 J	6.2	28	7.4	0.88 U	3.1 J
1,2,3,6,7,8-HxCDF	pg/g	0.1	NC	2.1 U	4.2 J	16	6.9	0.25 U	2.4 U
2,3,4,6,7,8-HxCDF	pg/g	0.1	NC	2.2 U	5.1 J	16	6.7	0.3 U	2.7 U
1,2,3,7,8,9-HxCDF	pg/g	0.1	NC	0.41 U	0.83 U	0.56 U	0.57 U	0.12 U	0.43 U
1,2,3,4,6,7,8-HpCDF	pg/g	0.01	NC	53	52	250	200	2.6 J	20
1,2,3,4,7,8,9-HpCDF	pg/g	0.01	NC	2 U	3.2 J	22	8.7	0.18 U	1.3 U
OCDF	pg/g	0.0001	NC	290	64	310	290	8.4 J	26
Total TCDD	pg/g	NA	NC	4.3	8	17	5.5	0.43 U	4.3
Total PeCDD	pg/g	NA	NC	2.9 U	4.3 U	37	4.7	0.43 U	2.9 U
Total HxCDD	pg/g	NA	NC	46	55	260	93	1.9 U	24
Total TCDF	pg/g	NA	NC	74	56	240	47	1.8	43
Total HpCDD	pg/g	NA	NC	570	330	1400	680	85	170
Total PeCDF	pg/g	NA	NC	73	58	500	66	1.2 U	26
Total HxCDF	pg/g	NA	NC	57	66	450	180	1.1 U	24
Total HpCDF	pg/g	NA	NC	110	110	610	460	6.7	35
Toxicity Equivalents (Using EDL=0)	pg/g		NC	7.05	8.28	42.03	13.02	1.27	2.49
Toxicity Equivalents (Using 0.5 xEDL)	pg/g		NC	7.93	9.20	42.05	14.56	1.68	4.16

Footnotes:
J = Estimated Value
U = Not Detected
NC = No Criteria
EDL = Estimated Detection Limit

TABLE 3.19
SADVA AOC 3 SOIL RESULTS
DIOXIN AND FURANS

Former Schenectady Army Depot Remedial Investigation AOC 3 Soil Boring Data Dioxins & Furans	SAMPLE ID: LAB ID: SOURCE: SDG: MATRIX: SAMPLED: VALIDATED:			AOC3SB07A C0G240120-002 STL C0G240120 SOIL 7/20/2000 12/15/2000	AOC3SB08A C0G200152-001 STL C0G200152 SOIL 7/18/2000 12/15/2000	AOC3SB09A C0G210263-001 STL C0G210263 SOIL 7/19/2000 12/15/2000	AOC3SB10A C0G2100152-002 STL C0G2100152 SOIL 7/18/2000 12/15/2000	AOC3SB11A C0G210263-002 STL C0G210263 SOIL 7/20/2000 12/15/2000
Compound	UNITS:	Human Toxic Equivalency Factor	NYSDEC Soil Criteria (pg/g)					
DIOXINS								
2,3,7,8-TCDD	pg/g	1	1,000	0.25 U	0.29 U	0.16 U	0.17 U	0.13 U
1,2,3,7,8-PeCDD	pg/g	1	NC	0.52 U	0.97 U	0.3 U	0.5 U	0.32 U
1,2,3,4,7,8-HxCDD	pg/g	0.1	NC	0.4 U	1.7 U	0.8 U	0.56 U	0.3 U
1,2,3,6,7,8-HxCDD	pg/g	0.1	NC	0.86 U	5.6 J	2.1 U	1.2 U	0.34 U
1,2,3,7,8,9-HxCDD	pg/g	0.1	NC	0.79 U	4.2 J	2.2 U	0.91 U	0.45 U
1,2,3,4,6,7,8-HpCDD	pg/g	0.01	NC	31	160	75	43	80
1,2,3,7,8-PeCDF	pg/g	0.05	NC	0.64 U	2.6 U	0.53 U	2.3 U	0.22 U
OCDD	pg/g	0.0001	NC	2100	8200	3200	2900	8400
2,3,7,8-TCDF	pg/g	0.1	NC	0.8 J	1.6	0.59 J	0.73 J	0.25 U
2,3,4,7,8-PeCDF	pg/g	0.5	NC	0.64 U	2.1 U	0.85 U	3.3 J	0.22 U
1,2,3,4,7,8-HxCDF	pg/g	0.1	NC	0.93 U	4.5 J	0.59 U	4.2 J	0.24 U
1,2,3,6,7,8-HxCDF	pg/g	0.1	NC	0.68 U	2.7 U	0.53 U	4.2 J	0.21 U
2,3,4,6,7,8-HxCDF	pg/g	0.1	NC	0.74 U	3.5 J	0.95 U	3.9 J	0.26 U
1,2,3,7,8,9-HxCDF	pg/g	0.1	NC	0.39 U	0.23 U	0.23 U	0.52 U	0.26 U
1,2,3,4,6,7,8-HpCDF	pg/g	0.01	NC	4.4 J	73	5.7 J	12	0.94 U
1,2,3,4,7,8,9-HpCDF	pg/g	0.01	NC	0.25 U	2.5 U	0.42 U	2.3 U	0.43 U
OCDF	pg/g	0.0001	NC	9.7 J	130	9.8 J	17	1.7 U
Total TCDD	pg/g	NA	NC	0.49 U	4.5	0.41 U	1	0.18 U
Total PeCDD	pg/g	NA	NC	0.97 U	3.1 U	1.1 U	0.97 U	0.45 U
Total HxCDD	pg/g	NA	NC	5.9	36	12	7.2	1 U
Total TCDF	pg/g	NA	NC	12	33	8.9	27	0.25 U
Total HpCDD	pg/g	NA	NC	70	350	160	110	160
Total PeCDF	pg/g	NA	NC	2.6 U	27	3.6	20	0.34 U
Total HxCDF	pg/g	NA	NC	2.2 U	58	3.1	24	0.34 U
Total HpCDF	pg/g	NA	NC	9.1	160	11	22	1.4 U
Toxicity Equivalents (Using EDL=0)	pg/g		NC	0.64	5.10	1.19	3.79	1.64
Toxicity Equivalents (Using 0.5 xEDL)	pg/g		NC	1.45	6.57	2.01	4.36	2.05

Footnotes:
J = Estimated Value
U = Not Detected
NC = No Criteria
EDL = Estimated Detection Limit

TABLE 3.20
SADVA AOC 3 GROUNDWATER ELEVATION DATA

			ROUND 1			ROUND 2			ROUND 3			ROUND 4			ROUND 5		
WELL ID	Elevation TOC**	Elevation Ground**	Date	Depth to Water***	Groundwater Elevation**	Date	Depth to Water***	Groundwater Elevation**	Date	Depth to Water***	Groundwater Elevation**	Date	Depth to Water***	Groundwater Elevation**	Date	Depth to Water***	Groundwater Elevation**
MW-1	327.07	327.17	10/31/00	23.87	303.20	11/30/00	24.80	302.27	01/10/01	23.47	303.60	05/21/01	20.25	306.82	11/07/01	26.57	300.50
MW-2	326.29	326.44	10/31/00	23.45	302.84	11/30/00	24.52	301.77	01/10/01	22.77	303.52	05/21/01	19.54	306.75	11/07/01	26.27	300.02
MW-3	326.45	326.57	10/31/00	23.19	303.26	11/30/00	24.19	302.26	01/10/01	22.83	303.62	05/21/01	19.59	306.86	11/07/01	25.74	300.71
MW-4-2	322.24	319.33	10/31/00	18.87	303.37	11/30/00	19.72	302.52	01/10/01	18.40	303.84	05/21/01	15.46	306.78	11/07/01	21.06	301.18
HP-01*	NA	326.26	7/24/00	17.40	308.86	11/30/00	NA	NA	01/10/01	NA	NA	05/21/01	NA	NA	11/07/01	NA	NA
HP-02*	NA	325.42	7/20/00	16.50	308.92	11/30/00	NA	NA	01/10/01	NA	NA	05/21/01	NA	NA	11/07/01	NA	NA
HP-03*	NA	321.93	7/20/00	16.80	305.13	11/30/00	NA	NA	01/10/01	NA	NA	05/21/01	NA	NA	11/07/01	NA	NA
HP-04*	NA	320.31	7/21/00	18.50	301.81	11/30/00	NA	NA	01/10/01	NA	NA	05/21/01	NA	NA	11/07/01	NA	NA
SB-06*	NA	323.74	NA	NA	NA	11/30/00	NA	NA	01/10/01	NA	NA	05/21/01	NA	NA	11/07/01	NA	NA
MW-5	319.31	319.71	NA	NA	NA	11/30/00	NA	NA	01/10/01	NA	NA	05/21/01	12.99****	306.32	11/07/01	Dry	NA
MW-6	316.33	316.71	NA	NA	NA	11/30/00	NA	NA	01/10/01	NA	NA	05/21/01	9.78	306.55	11/07/01	Dry	NA
MW-7	327.66	328.06	NA	NA	NA	11/30/00	NA	NA	01/10/01	NA	NA	05/21/01	20.71	306.95	11/07/01	Dry	NA
MW-8	320.72	318.22	NA	NA	NA	11/30/00	NA	NA	01/10/01	NA	NA	05/21/01	NA	NA	11/07/01	24.30	NA
MW-9	319.89	317.47	NA	NA	NA	11/30/00	NA	NA	01/10/01	NA	NA	05/21/01	NA	NA	11/07/01	21.02	298.87
GMW-3	316.74	316.83	NA	NA	NA	11/30/00	NA	NA	01/10/01	NA	NA	05/21/01	10.66	306.08	11/07/01	NA	NA
GMW-4	319.85	317.72	NA	NA	NA	11/30/00	NA	NA	01/10/01	NA	NA	05/21/01	13.86	305.99	11/07/01	NA	NA
GMW-5	316.06	316.71	NA	NA	NA	11/30/00	NA	NA	01/10/01	NA	NA	05/21/01	10.01	306.05	11/07/01	NA	NA
GMW-6	317.5	317.59	NA	NA	NA	11/30/00	NA	NA	01/10/01	NA	NA	05/21/01	11.57	305.93	11/07/01	NA	NA
SG-1	NA	~ 308.1	NA	NA	NA	11/30/00	NA	NA	01/10/01	NA	NA	05/21/01	NA	308.13	11/07/01	4.28	311.41
SG-2	NA	~310.2	NA	NA	NA	11/30/00	NA	NA	01/10/01	NA	NA	05/21/01	NA	NA	11/07/01	2.20	311.42
SG-3	NA	~310.9	NA	NA	NA	11/30/00	NA	NA	01/10/01	NA	NA	05/21/01	NA	NA	11/07/01	1.38	311.34

NA - Not available / Not applicable.
* - Measurements taken in temporary Hydropunch sampling point. Relative measurement.
** - Elevations relative to National Geodetic Vertical Datum of 1929.
*** - Depth to water measured from top of inner well casing.
**** - The water level on 5/21/01 from MW-5 was collected from the well before it was damaged.
SG-1 was washed out during a rainstorm and reinstalled in October, 2001.
- Elevations were collected from staff gauge locations along Black Creek.
Flush mount on MW-5 was destroyed and replaced with a well stand. New elevations are listed on this table.
NA - Water level not available. Temporary sample point was abandoned.
GMW-3 through GMW-6 are existing monitoring wells at the Guilderland School District bus garage area.
The GMW-3 through GMW-6 have been welded shut as requested by the NYSDEC in September, 2001.

TABLE 3.21
SADVA AOC 3 GROUNDWATER RESULTS

				HYDROPUNCH GROUNDWATER RESULTS					
								Dup of HP01	
Former Schenectady Army Depot Remedial Investigation AOC 3 Groundwater Data Detected Compound Summary		NYSDEC Class GA Ground Water	SAMPLE ID: LAB ID: SOURCE: SDG: MATRIX: SAMPLED: VALIDATED:	AOC3-HP01 C0G250264001 STL Pittsburgh SADVA2 WATER 7/24/2000 10/10/2000	AOC3-HP02 C0G210256001 STL Pittsburgh SADVA2 WATER 7/20/2000 10/10/2000	AOC3-HP03 C0G210256002 STL Pittsburgh SADVA2 WATER 7/20/2000 10/10/2000	AOC3-HP04 C0G240118002 STL Pittsburgh SADVA2 WATER 7/21/2000 10/10/2000	AOC3-HP05 C0G250264002 STL Pittsburgh SADVA2 WATER 7/24/2000 10/10/2000	AOC3-SB06R C0G240118001 STL Pittsburgh SADVA2 WATER 7/21/2000 10/10/2000
CAS NO.	COMPOUND	Standards/Guidance Values	UNITS:						
	VOLATILES								
67-64-1	Acetone	50 (G)	ug/L	ND	ND	ND	ND	ND	21 J
71-43-2	Benzene	1	ug/L	ND	ND	ND	ND	ND	9
75-15-0	Carbon disulfide	NS	ug/L	ND	ND	ND	ND	ND	
108-90-7	Chlorobenzene	5	ug/L	ND	ND	ND	ND	ND	46
107-06-2	1,2-Dichloroethane	0.6	ug/L	ND	ND	ND	ND	ND	78
540-59-0	1,2-Dichloroethene (total)	5	ug/L	ND	3.3	ND	ND	ND	65
78-87-5	1,2-Dichloropropane	5	ug/L	ND	ND	ND	ND	ND	11
100-41-4	Ethylbenzene	5	ug/L	ND	ND	ND	ND	ND	72
127-18-4	Tetrachloroethene	5	ug/L	ND	1.3	ND	ND	ND	ND
108-88-3	Toluene	5	ug/L	ND	ND	ND	ND	ND	15
79-01-6	Trichloroethene	5	ug/L	ND	21	ND	ND	ND	1.9 J
75-01-4	Vinyl chloride	2	ug/L	ND	ND	ND	ND	ND	130
1330-20-7	Xylenes (total)	5	ug/L	ND	ND	ND	ND	ND	210
	TOTAL VOCs		ug/L	**ND**	**25.6**	**ND**	**ND**	**ND**	**658.9**
	SEMIVOLATILES								
117-81-7	bis(2-Ethylhexyl) phthalate	5	ug/L	37	19	ND	10	8.5 J	ND
95-50-1	1,2-Dichlorobenzene	3	ug/L	ND	ND	ND	ND	ND	6.3 J
105-67-9	2,4-Dimethylphenol	50 (G)	ug/L	ND	ND	ND	ND	ND	6.4 J
95-48-7	2-Methylphenol	1	ug/L	ND	ND	ND	ND	ND	13
	TOTAL SVOCs		ug/L	**37**	**19**	**ND**	**10**	**8.5**	**25.7**
	PESTICIDES								
50-29-3	4,4'-DDT	0.2	ug/L	ND	ND	ND	ND	ND	ND
	Endrin Aldehyde	5	ug/L	ND	ND	ND	ND	ND	ND
76-44-8	Heptachlor	0.04	ug/L	ND	ND	ND	ND	ND	0.016 JN
	PCBs								
	None Detected		ug/L	ND	ND	ND	ND	ND	ND
	METALS								
7429-90-5	Aluminum	NS	ug/L	1680	6700	28000	6740	2460	527
7440-36-0	Antimony	3	ug/L	ND	ND	ND	1.8 J	ND	2.8 J
7440-38-2	Arsenic	25	ug/L	ND	ND	10.3	18.3	ND	ND
7440-39-3	Barium	1000	ug/L	32.1 J	60.8 J	178 J	408	36.5 J	582
7440-41-7	Beryllium	3 (G)	ug/L	0.21 J	0.38 J	1.3 J	0.44 J	0.18 J	0.12 J
7440-43-9	Cadmium	5	ug/L	ND	ND	ND	ND	ND	ND
7440-70-2	Calcium	NS	ug/L	40000	46700	46400	231000	40000	221000
7440-47-3	Chromium	50	ug/L	2.5 J	8.8 J	39.6	7.4 J	3.4 J	7 J
7440-48-4	Cobalt	NS	ug/L	ND	4 J	27.4 J	4.9 J	ND	4.1 J
7440-50-8	Copper	200	ug/L	10.5 J	6.6 J	39.1	8.6 J	9.5 J	7.3 J
7439-89-6	Iron	300	ug/L	2100	7180	38400	17100	2960	12200
7439-92-1	Lead	25	ug/L	2.1 J	3.1	14.5	3.3	2.4 J	69.2
7439-95-4	Magnesium	35000 (G)	ug/L	12700	15100	16700	31200	12900	36500
7439-96-5	Manganese	300	ug/L	61.6	168	1170	1390	82	1140
7439-97-6	Mercury	0.7	ug/L	0.049 J	ND	0.11 J	0.072 J	ND	ND
7440-02-0	Nickel	100	ug/L	ND	ND	47.7	ND	ND	ND
7440-09-7	Potassium	NS	ug/L	4170 J	3960 J	11200	4620 J	4180 J	11900
7782-49-2	Selenium	10	ug/L	ND	ND	2.7 J	ND	ND	ND
7440-22-4	Silver	50	ug/L	ND	ND	ND	ND	ND	ND
7440-23-5	Sodium	20000	ug/L	77600	30400	38100	16800	78400	47600
7440-28-0	Thallium	0.5 (G)	ug/L	ND	ND	ND	ND	ND	ND
7440-62-2	Vanadium	NS	ug/L	ND	8.3 J	44.4 J	9.6 J	ND	ND
7440-66-6	Zinc	2000 (G)	ug/L	14 J	27	116	37.8	14.2 J	40
7440-44-0	Total Organic Carbon	NS	ug/L	NA	NA	NA	NA	NA	NA
Q138	Chloride	250	ug/L	NA	NA	NA	NA	NA	NA
Q479	Nitrate	10	ug/L	NA	NA	NA	NA	NA	NA
Q605	Sulfate	250	ug/L	NA	NA	NA	NA	NA	NA

NA - Not analyzed / Not Applicable.
(G) - Guidance Value.
ND - Not Detected.
J - Estimated Value
N - Presumptive Evidence
NS - No Standard/Guidance Values
Concentration above NYSDEC Class GA Groundwater Standards/Guidance values.

TABLE 3.21
SADVA AOC 3 GROUNDWATER RESULTS

				MONITORING WELL RESULTS - ROUND 1				
						Dup of MW-2		
Former Schenectady Army Depot Remedial Investigation AOC 3 Groundwater Data Detected Compound Summary		NYSDEC Class GA Ground Water	SAMPLE ID: LAB ID: SOURCE: SDG: MATRIX: SAMPLED: VALIDATED:	AOC3MW-1 C0K010279001 STL Pittsburgh SADVA21 WATER 10/31/2000 12/7/2000	AOC3MW-2 C0K010279002 STL Pittsburgh SADVA21 WATER 10/31/2000 1207/00	AOC3MW-102 C0K010279004 STL Pittsburgh SADVA21 WATER 10/31/2000 12/7/2000	AOC3MW-3 C0K010279003 STL Pittsburgh SADVA21 WATER 10/31/2000 12/7/2000	AOC3MW-4-2 C0K020216001 STL Pittsburgh SADVA21 WATER 11/1/2000 12/7/2000
CAS NO.	COMPOUND	Standards/Guidance Values	UNITS:					
	VOLATILES							
67-64-1	Acetone	50 (G)	ug/L	ND	2.2 J	ND	ND	ND
71-43-2	Benzene	1	ug/L	ND	ND	ND	ND	ND
75-15-0	Carbon disulfide	NS	ug/L	ND	ND	ND	ND	ND
108-90-7	Chlorobenzene	5	ug/L	ND	ND	ND	ND	ND
107-06-2	1,2-Dichloroethane	0.6	ug/L	ND	ND	ND	ND	ND
540-59-0	1,2-Dichloroethene (total)	5	ug/L	ND	ND	ND	ND	ND
78-87-5	1,2-Dichloropropane	5	ug/L	ND	ND	ND	ND	ND
100-41-4	Ethylbenzene	5	ug/L	ND	ND	ND	ND	ND
127-18-4	Tetrachloroethene	5	ug/L	ND	ND	ND	ND	ND
108-88-3	Toluene	5	ug/L	ND	ND	ND	ND	ND
79-01-6	Trichloroethene	5	ug/L	ND	2	2.1	ND	ND
75-01-4	Vinyl chloride	2	ug/L	ND	ND	ND	ND	ND
1330-20-7	Xylenes (total)	5	ug/L	ND	ND	ND	ND	ND
	TOTAL VOCs		ug/L	**ND**	**4.2**	**2.1**	**ND**	**ND**
	SEMIVOLATILES							
117-81-7	bis(2-Ethylhexyl) phthalate	5	ug/L	ND	ND	ND	ND	ND
95-50-1	1,2-Dichlorobenzene	3	ug/L	ND	ND	ND	ND	ND
105-67-9	2,4-Dimethylphenol	50 (G)	ug/L	ND	ND	ND	ND	ND
95-48-7	2-Methylphenol	1	ug/L	ND	ND	ND	ND	ND
	TOTAL SVOCs		ug/L	**ND**	**ND**	**ND**	**ND**	**ND**
	PESTICIDES							
50-29-3	4,4'-DDT	0.2	ug/L	ND	ND	ND	ND	ND
	Endrin Aldehyde	5	ug/L	ND	ND	ND	ND	ND
76-44-8	Heptachlor	0.04	ug/L	ND	ND	ND	ND	ND
	PCBs							
	None Detected		ug/L	ND	ND	ND	ND	ND
	METALS							
7429-90-5	Aluminum	NS	ug/L	26800	36900	41900	11800	2010
7440-36-0	Antimony	3	ug/L	ND	ND	ND	ND	ND
7440-38-2	Arsenic	25	ug/L	11.7	16.5	18.9	5 J	ND
7440-39-3	Barium	1000	ug/L	181 J	263	291	108 J	31.6 J
7440-41-7	Beryllium	3 (G)	ug/L	1.2 J	1.9 J	2.2 J	0.6 J	0.08 J
7440-43-9	Cadmium	5	ug/L	ND	ND	ND	ND	ND
7440-70-2	Calcium	NS	ug/L	42400	74700	75900	65600	59700
7440-47-3	Chromium	50	ug/L	37.7	47.5	53.1	16.2	3.2 J
7440-48-4	Cobalt	NS	ug/L	18.3 J	31.6 J	38.2 J	6.9 J	ND
7440-50-8	Copper	200	ug/L	42.4	65.4	77.1	20.9 J	4.4 J
7439-89-6	Iron	300	ug/L	37200	60900	71400	18100	2240
7439-92-1	Lead	25	ug/L	18.5	26.1	29.9	7.5	2.2 J
7439-95-4	Magnesium	35000 (G)	ug/L	17500	28200	30000	17800	11200
7439-96-5	Manganese	300	ug/L	1020	1530	1760	2240	45.8
7439-97-6	Mercury	0.7	ug/L	ND	ND	0.1 J	0.062 J	ND
7440-02-0	Nickel	100	ug/L	29.2 J	60.9	69.8	22.1 J	ND
7440-09-7	Potassium	NS	ug/L	10700	11800	13200	7790	2650 J
7782-49-2	Selenium	10	ug/L	2.1 J	3.9 J	ND	ND	ND
7440-22-4	Silver	50	ug/L	ND	ND	ND	ND	ND
7440-23-5	Sodium	20000	ug/L	24600	37300	36200	42200	21100
7440-28-0	Thallium	0.5 (G)	ug/L	ND	ND	ND	ND	4.3 J
7440-62-2	Vanadium	NS	ug/L	47.6 J	62.6	77.2	21.1 J	3.7 J
7440-66-6	Zinc	2000 (G)	ug/L	104	174	203	54.3	7.6 J
7440-44-0	Total Organic Carbon	NS	ug/L	NA	NA	NA	NA	NA
Q138	Chloride	250	ug/L	NA	NA	NA	NA	NA
Q479	Nitrate	10	ug/L	NA	NA	NA	NA	NA
Q605	Sulfate	250	ug/L	NA	NA	NA	NA	NA

NA - Not analyzed / Not Applicable.
(G) - Guidance Value.
ND - Not Detected.
J - Estimated Value
N - Presumptive Evidence
NS - No Standard/Guidance Values
Concentration above NYSDEC Class GA Groundwater Standards/Guidance \

TABLE 3.21
SADVA AOC 3 GROUNDWATER RESULTS

Former Schenectady Army Depot Remedial Investigation AOC 3 Groundwater Data Detected Compound Summary		NYSDEC Class GA Ground Water	SAMPLE ID: LAB ID: SOURCE: SDG: MATRIX: SAMPLED: VALIDATED:	MONITORING WELL RESULTS - ROUND 2 AOC-3 MW-1 C1A110176001 STL Pittsburgh SADVA22 WATER 1/10/2001 2/11/2001	AOC-3 MW-2 C1A110176002 STL Pittsburgh SADVA22 WATER 1/10/2001 2/11/2001	Dup of MW-2 AOC-3 MW-102 C1A110176003 STL Pittsburgh SADVA22 WATER 1/10/2001 2/11/2001	AOC-3 MW-3 C1A110176004 STL Pittsburgh SADVA22 WATER 1/10/2001 2/11/2001	AOC-3 MW-4-2 C1A110176005 STL Pittsburgh SADVA22 WATER 1/10/2001 2/11/2001
CAS NO.	COMPOUND	Standards/Guidance Values	UNITS:					
	VOLATILES							
67-64-1	Acetone	50 (G)	ug/L	ND	ND	ND	ND	ND
71-43-2	Benzene	1	ug/L	ND	ND	ND	ND	ND
75-15-0	Carbon disulfide	NS	ug/L	ND	ND	ND	ND	ND
108-90-7	Chlorobenzene	5	ug/L	ND	ND	ND	ND	ND
107-06-2	1,2-Dichloroethane	0.6	ug/L	ND	ND	ND	ND	ND
540-59-0	1,2-Dichloroethene (total)	5	ug/L	ND	ND	ND	ND	ND
78-87-5	1,2-Dichloropropane	5	ug/L	ND	ND	ND	ND	ND
100-41-4	Ethylbenzene	5	ug/L	ND	ND	ND	ND	ND
127-18-4	Tetrachloroethene	5	ug/L	ND	ND	ND	ND	ND
108-88-3	Toluene	5	ug/L	ND	ND	ND	ND	ND
79-01-6	Trichloroethene	5	ug/L	ND	2	2.1	ND	ND
75-01-4	Vinyl chloride	2	ug/L	ND	ND	ND	ND	ND
1330-20-7	Xylenes (total)	5	ug/L	ND	ND	ND	ND	ND
	TOTAL VOCs		ug/L	**ND**	**2**	**2.1**	**ND**	**ND**
	SEMIVOLATILES							
117-81-7	bis(2-Ethylhexyl) phthalate	5	ug/L	7 J	4.9 J	4.9 J	5.3 J	ND
95-50-1	1,2-Dichlorobenzene	3	ug/L	ND	ND	ND	ND	ND
105-67-9	2,4-Dimethylphenol	50 (G)	ug/L	ND	ND	ND	ND	ND
95-48-7	2-Methylphenol	1	ug/L	ND	ND	ND	ND	ND
	TOTAL SVOCs		ug/L	**7**	**4.9**	**4.9**	**5.3**	**ND**
	PESTICIDES							
50-29-3	4,4'-DDT	0.2	ug/L	ND	ND	ND	ND	ND
	Endrin Aldehyde	5	ug/L	ND	ND	ND	ND	ND
76-44-8	Heptachlor	0.04	ug/L	ND	ND	ND	ND	ND
	PCBs							
	None Detected		ug/L	ND	ND	ND	ND	ND
	METALS							
7429-90-5	Aluminum	NS	ug/L	47900	64700 J	27300 J	3080	5300
7440-36-0	Antimony	3	ug/L	3.9 J	4.7 J	1.9 J	2.4 J	2.9 J
7440-38-2	Arsenic	25	ug/L	23.3	31.2 J	11.8 J	2.9 J	ND
7440-39-3	Barium	1000	ug/L	302	454 J	209 J	36.4 J	46.7 J
7440-41-7	Beryllium	3 (G)	ug/L	2.5 J	3.6 J	1.5 J	0.35 J	0.24 J
7440-43-9	Cadmium	5	ug/L	0.78 J	0.74 J	ND	ND	ND
7440-70-2	Calcium	NS	ug/L	46800	74900	67800	44900	53000
7440-47-3	Chromium	50	ug/L	67.3	84.3 J	34.4 J	4 J	7.6 J
7440-48-4	Cobalt	NS	ug/L	50.4	76 J	27 J	ND	ND
7440-50-8	Copper	200	ug/L	95.2	123 J	45.3 J	7 J	7.6 J
7439-89-6	Iron	300	ug/L	78300	110000 J	40300 J	3540	5360
7439-92-1	Lead	25	ug/L	35.6	48.9 J	17.1 J	ND	2.6 J
7439-95-4	Magnesium	35000 (G)	ug/L	25200	36700	23200	10700	11300
7439-96-5	Manganese	300	ug/L	2260	3880 J	1430 J	97	77.8
7439-97-6	Mercury	0.7	ug/L	0.089 J	0.15 J	0.083 J	ND	0.05 J
7440-02-0	Nickel	100	ug/L	91.3	131 J	56.9 J	ND	ND
7440-09-7	Potassium	NS	ug/L	14600	18800	10700	4230 J	3190 J
7782-49-2	Selenium	10	ug/L	2.4 J	ND	ND	ND	2.7 J
7440-22-4	Silver	50	ug/L	ND	ND	ND	ND	ND
7440-23-5	Sodium	20000	ug/L	25700	35900	35800	25800	17300
7440-28-0	Thallium	0.5 (G)	ug/L	ND	ND	ND	ND	ND
7440-62-2	Vanadium	NS	ug/L	88	121 J	53.3 J	8.6 J	9.8 J
7440-66-6	Zinc	2000 (G)	ug/L	227	311 J	114 J	11.1 J	16.7 J
7440-44-0	Total Organic Carbon	NS	ug/L	NA	NA	NA	NA	NA
Q138	Chloride	250	ug/L	NA	NA	NA	NA	NA
Q479	Nitrate	10	ug/L	NA	NA	NA	NA	NA
Q605	Sulfate	250	ug/L	NA	NA	NA	NA	NA

NA - Not analyzed / Not Applicable.
(G) - Guidance Value.
ND - Not Detected.
J - Estimated Value
N - Presumptive Evidence
NS - No Standard/Guidance Values
Concentration above NYSDEC Class GA Groundwater Standards/Guidance \

TABLE 3.21
SADVA AOC 3 GROUNDWATER RESULTS

Former Schenectady Army Depot Remedial Investigation AOC 3 Groundwater Data Detected Compound Summary		NYSDEC Class GA Ground Water		MONITORING WELL RESULTS - ROUND 3		Dup of MW-2					
			SAMPLE ID:	AOC3MW-1	AOC3MW-2	AOC3MW-102	AOC3MW-3	AOC3MW-4-2	AOC3MW-5	AOC3MW-6	AOC3MW-7
			LAB ID:	C1E230220001	C1E230220005	C1E230220006	C1E230220003	C1E230220004	C1E220187002	C1E230220002	C1E220187001
			SOURCE:	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh
			SDG:	SADVA24	SADVA24	SADVA24	SADVA24	SADVA24	SADVA24	SADVA24	SADVA24
			MATRIX:	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER
			SAMPLED:	5/22/2001	5/22/2001	5/22/2001	5/22/2001	5/22/2001	5/21/2001	5/22/2001	5/21/2001
			VALIDATED:	7/16/2001	7/16/2001	7/16/2001	7/16/2001	7/16/2001	7/16/2001	7/16/2001	7/16/2001
CAS NO.	COMPOUND	Standards/Guidance Values	UNITS:								
	VOLATILES										
67-64-1	Acetone	50 (G)	ug/L	ND	ND	ND	ND	ND	ND	ND	3.1 J
71-43-2	Benzene	1	ug/L	ND	ND	ND	ND	ND	ND	ND	ND
75-15-0	Carbon disulfide	NS	ug/L	ND	1.1 J	ND	ND	ND	ND	ND	ND
108-90-7	Chlorobenzene	5	ug/L	ND	ND	ND	ND	ND	ND	ND	ND
107-06-2	1,2-Dichloroethane	0.6	ug/L	ND	ND	ND	ND	ND	ND	ND	ND
540-59-0	1,2-Dichloroethene (total)	5	ug/L	ND	ND	ND	ND	ND	1.7	ND	ND
78-87-5	1,2-Dichloropropane	5	ug/L	ND	ND	ND	ND	ND	ND	ND	ND
100-41-4	Ethylbenzene	5	ug/L	ND	ND	ND	ND	ND	ND	ND	ND
127-18-4	Tetrachloroethene	5	ug/L	ND	ND	ND	ND	ND	ND	ND	ND
108-88-3	Toluene	5	ug/L	ND	ND	ND	ND	ND	ND	ND	ND
79-01-6	Trichloroethene	5	ug/L	ND	1.8 J	ND	ND	ND	4.8	ND	ND
75-01-4	Vinyl chloride	2	ug/L	ND	ND	ND	ND	ND	ND	ND	ND
1330-20-7	Xylenes (total)	5	ug/L	ND	ND	ND	ND	ND	ND	ND	ND
	TOTAL VOCs		ug/L	**ND**	**2.9**	**ND**	**ND**	**ND**	**6.5**	**ND**	**3.1**
	SEMIVOLATILES										
117-81-7	bis(2-Ethylhexyl) phthalate	5	ug/L	ND	ND	ND	ND	ND	ND	ND	ND
95-50-1	1,2-Dichlorobenzene	3	ug/L	ND	ND	ND	ND	ND	ND	ND	ND
105-67-9	2,4-Dimethylphenol	50 (G)	ug/L	ND	ND	ND	ND	ND	ND	ND	ND
95-48-7	2-Methylphenol	1	ug/L	ND	ND	ND	ND	ND	ND	ND	ND
	TOTAL SVOCs		ug/L	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**
	PESTICIDES										
50-29-3	4,4'-DDT	0.2	ug/L	ND	ND	0.012 J	0.01 JN	ND	ND	ND	ND
	Endrin Aldehyde	5	ug/L	ND	ND	ND	ND	ND	ND	ND	ND
76-44-8	Heptachlor	0.04	ug/L	ND	ND	ND	ND	ND	ND	ND	ND
	PCBs										
	None Detected		ug/L	ND	ND	ND	ND	ND	ND	ND	ND
	METALS										
7429-90-5	Aluminum	NS	ug/L	16900	2010	2590	10500	122000	5220	21100	15700
7440-36-0	Antimony	3	ug/L	ND	ND	ND	ND	ND	ND	ND	ND
7440-38-2	Arsenic	25	ug/L	6.8 J	ND	ND	3.5 J	49	2.4 J	8.4 J	6.3 J
7440-39-3	Barium	1000	ug/L	116 J	41.4 J	43 J	80.8 J	695	51.2 J	143 J	119 J
7440-41-7	Beryllium	3 (G)	ug/L	0.61 J	ND	ND	0.27 J	5.6	ND	0.72 J	0.53 J
7440-43-9	Cadmium	5	ug/L	ND	ND	ND	ND	2.1 J	ND	ND	ND
7440-70-2	Calcium	NS	ug/L	47400	61800	60900	39000	73000	49600	48900	58000
7440-47-3	Chromium	50	ug/L	22.6	3.7 J	4.3 J	13.4	189	7.9 J	24.9	18.9
7440-48-4	Cobalt	NS	ug/L	13.8 J	ND	ND	6.5 J	113	3.6 J	14.6 J	12.6 J
7440-50-8	Copper	200	ug/L	24.5 J	10.6 J	6.3 J	18.4 J	268	10.7 J	33.6	25.7
7439-89-6	Iron	300	ug/L	20500	2310	3070	13100	225000	6610	26900	20200
7439-92-1	Lead	25	ug/L	10.4	2.7 J	3.4	7.9	91.8	4.9	13.7	11.1
7439-95-4	Magnesium	35000 (G)	ug/L	17000	15900	15700	11500	54800	12800	15200	16500
7439-96-5	Manganese	300	ug/L	594	244	257	437	6390	276	685	610
7439-97-6	Mercury	0.7	ug/L	0.11 J	0.066 J	ND	ND	0.4	ND	ND	ND
7440-02-0	Nickel	100	ug/L	25.8 J	ND	8.9 J	10.3 J	222	ND	21.6 J	25.5 J
7440-09-7	Potassium	NS	ug/L	7730	2810 J	2730 J	5900	27800	4040 J	8010	6640
7782-49-2	Selenium	10	ug/L	ND	ND	ND	ND	5.8	ND	4.7 J	ND
7440-22-4	Silver	50	ug/L	ND	1.1 J	ND	ND	1.4 J	ND	ND	ND
7440-23-5	Sodium	20000	ug/L	33600	37800	36400	30700	24700	36200	17100	31900
7440-28-0	Thallium	0.5 (G)	ug/L	ND	ND	ND	ND	ND	ND	ND	ND
7440-62-2	Vanadium	NS	ug/L	31.6 J	5.7 J	5.6 J	17.8 J	203	10.4 J	37.2 J	29.5 J
7440-66-6	Zinc	2000 (G)	ug/L	62.6	16.8 J	14.6 J	48.1	667	36.7	101	79.5
7440-44-0	Total Organic Carbon	NS	ug/L	NA	NA	NA	NA	NA	NA	NA	NA
Q138	Chloride	250	ug/L	NA	NA	NA	NA	NA	NA	NA	NA
Q479	Nitrate	10	ug/L	NA	NA	NA	NA	NA	NA	NA	NA
Q605	Sulfate	250	ug/L	NA	NA	NA	NA	NA	NA	NA	NA

NA - Not analyzed / Not Applicable.
(G) - Guidance Value.
ND - Not Detected.
J - Estimated Value
N - Presumptive Evidence
NS - No Standard/Guidance Values
Concentration above NYSDEC Class GA Groundwater Standards/Guidance \

TABLE 3.21
SADVA AOC 3 GROUNDWATER RESULTS

Former Schenectady Army Depot
Remedial Investigation
AOC 3 Groundwater Data
Detected Compound Summary

CAS NO.	COMPOUND	NYSDEC Class GA Ground Water Standards/Guidance Values	SAMPLE ID: / LAB ID: / SOURCE: / SDG: / MATRIX: / SAMPLED: / VALIDATED: / UNITS:	MONITORING WELL RESULTS - ROUND 4					
			SAMPLE ID:	AOC3-MW-1	AOC3-MW-2	AOC3-MW-3	AOC3-MW-4-2	AOC3-MW-8	AOC3-MW-9
			LAB ID:	C1K090189002	C1K090189003	C1K090189001	C1K090189006	C1K090189005	C1K090189004
			SOURCE:	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh
			SDG:	SADVA26	SADVA26	SADVA26	SADVA26	SADVA26	SADVA26
			MATRIX:	WATER	WATER	WATER	WATER	WATER	WATER
			SAMPLED:	11/8/2001	11/8/2001	11/8/2001	11/8/2001	11/8/2001	11/8/2001
			VALIDATED:	12/14/2001	12/14/2001	12/14/2001	12/14/2001	12/14/2001	12/14/2001
			UNITS:						
	VOLATILES								
67-64-1	Acetone	50 (G)	ug/L	ND	ND	ND	ND	ND	ND
71-43-2	Benzene	1	ug/L	ND	ND	ND	ND	ND	ND
75-15-0	Carbon disulfide	NS	ug/L	ND	0.78 J	ND	ND	ND	ND
108-90-7	Chlorobenzene	5	ug/L	ND	ND	ND	ND	ND	ND
107-06-2	1,2-Dichloroethane	0.6	ug/L	ND	ND	ND	ND	ND	ND
540-59-0	1,2-Dichloroethene (total)	5	ug/L	ND	ND	ND	ND	6.1	1.7
78-87-5	1,2-Dichloropropane	5	ug/L	ND	ND	ND	ND	ND	ND
100-41-4	Ethylbenzene	5	ug/L	ND	ND	ND	ND	ND	ND
127-18-4	Tetrachloroethene	5	ug/L	ND	ND	ND	ND	ND	ND
108-88-3	Toluene	5	ug/L	ND	ND	ND	0.46 J	ND	ND
79-01-6	Trichloroethene	5	ug/L	ND	3.7	ND	ND	8.1	5.3
75-01-4	Vinyl chloride	2	ug/L	ND	ND	ND	ND	ND	ND
1330-20-7	Xylenes (total)	5	ug/L	ND	ND	ND	ND	ND	ND
	TOTAL VOCs		ug/L	**ND**	**4.48**	**ND**	**0.46**	**14.2**	**7**
	SEMIVOLATILES								
117-81-7	bis(2-Ethylhexyl) phthalate	5	ug/L	ND	ND	ND	ND	ND	ND
95-50-1	1,2-Dichlorobenzene	3	ug/L	ND	ND	ND	ND	ND	ND
105-67-9	2,4-Dimethylphenol	50 (G)	ug/L	ND	ND	ND	ND	ND	ND
95-48-7	2-Methylphenol	1	ug/L	ND	ND	ND	ND	ND	ND
	TOTAL SVOCs		ug/L	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**
	PESTICIDES								
50-29-3	4,4'-DDT	0.2	ug/L	ND	ND	ND	ND	ND	ND
	Endrin Aldehyde	5	ug/L	ND	ND	ND	ND	0.026 JN	ND
76-44-8	Heptachlor	0.04	ug/L	ND	ND	ND	ND	ND	ND
	PCBs								
	None Detected		ug/L	ND	ND	ND	ND	ND	ND
	METALS								
7429-90-5	Aluminum	NS	ug/L	2090 J	7840 J	5330 J	10700 J	1330 J	2870 J
7440-36-0	Antimony	3	ug/L	ND	ND	ND	ND	ND	ND
7440-38-2	Arsenic	25	ug/L	ND	ND	ND	ND	ND	ND
7440-39-3	Barium	1000	ug/L	35.5 J	77.1 J	55.9 J	89.1 J	41.3 J	39.7 J
7440-41-7	Beryllium	3 (G)	ug/L	0.077 U	0.29 J	0.13 J	0.4 J	0.15 J	0.11 J
7440-43-9	Cadmium	5	ug/L	ND	ND	ND	ND	ND	ND
7440-70-2	Calcium	NS	ug/L	61400	72900	53500	73100	65800	57400
7440-47-3	Chromium	50	ug/L	3.1 J	9.6 J	6.6 J	14.4	2.1 J	4.3 J
7440-48-4	Cobalt	NS	ug/L	2.6 U	2.6 U	2.6 U	5.3 J	4.9 J	3.8 J
7440-50-8	Copper	200	ug/L	10.3 J	8.6 J	14.2 J	15.6 J	1.7 J	5.1 J
7439-89-6	Iron	300	ug/L	2280	8390	6120	13100	1470	3500
7439-92-1	Lead	25	ug/L	1.8 U	4.7	4.4	7.6	1.8 U	2.9 J
7439-95-4	Magnesium	35000 (G)	ug/L	16600	17100	13600	15700	13300	13500
7439-96-5	Manganese	300	ug/L	71.7 J	396 J	218 J	329 J	585 J	782 J
7439-97-6	Mercury	0.7	ug/L	ND	ND	ND	ND	ND	ND
7440-02-0	Nickel	100	ug/L	7.9 U	10.2 J	8.3 J	15 J	7.9 U	9.3 J
7440-09-7	Potassium	NS	ug/L	2660 J	5200	4740 J	6490	3630 J	4920 J
7782-49-2	Selenium	10	ug/L	ND	ND	ND	ND	ND	ND
7440-22-4	Silver	50	ug/L	ND	ND	ND	ND	ND	ND
7440-23-5	Sodium	20000	ug/L	37100	41000	36700	35400	37000	38000
7440-28-0	Thallium	0.5 (G)	ug/L	ND	ND	ND	ND	ND	ND
7440-62-2	Vanadium	NS	ug/L	5.4 J	15.4 J	11.1 J	20.5 J	4.1 U	5.3 J
7440-66-6	Zinc	2000 (G)	ug/L	9.9 J	25.4	21.1	80.5	6.7 J	12.8 J
7440-44-0	Total Organic Carbon	NS	ug/L	1.7	1.9	2.6	3.6	2.2	2.5
Q138	Chloride	250	ug/L	61.4	70.8	83.7	83.9	53.9	65.4
Q479	Nitrate	10	ug/L	0.61	1.9	0.17	0.23	0.1 U	0.22
Q605	Sulfate	250	ug/L	63.1	53.2	38.7	28.2	34.1	48

NA - Not analyzed / Not Applicable.
(G) - Guidance Value.
ND - Not Detected.
J - Estimated Value
N - Presumptive Evidence
NS - No Standard/Guidance Values
Concentration above NYSDEC Class GA Groundwater Standards/Guidance \

TABLE 3.22a
SADVA AOC 4 SOIL RESULTS

					Dup of SS2-0-0.5
USACE-Schenectady Depot			Sample ID:	SS2-0-0.5	SS102-0-0.5
Validated Soil Analytical Data			Lab Sample Id:	C4G170276001	C4G170276002
AOC 4			Depth:	0-0.5'	0-0.5'
Detected Compound Summary			Source:	STL Pittsburgh	STL Pittsburgh
			SDG:	C4G170276	C4G170276
			Matrix:	SOIL	SOIL
		NYSDEC	Sampled:	7/16/2004	7/16/2004
		Soil	Validated:	9/18/2004	9/18/2004
CAS NO.	COMPOUND	Criteria	UNITS:		
	VOLATILES				
	None Detected		ug/kg	ND	ND
	CPAHs				
56-55-3	Benzo(a)anthracene	224	ug/kg	120 J	ND
50-32-8	Benzo(a)pyrene	61	ug/kg	120 J	ND
205-99-2	Benzo(b)fluoranthene	4,070	ug/kg	120 J	ND
207-08-9	Benzo(k)fluoranthene	4,070	ug/kg	52 J	ND
218-01-9	Chrysene	1,480	ug/kg	120 J	38 J
193-39-5	Indeno(1,2,3-cd)pyrene	11,840	ug/kg	87 J	ND
	Total CPAHs	**10,000***	ug/kg	**619**	**38**
	NPAHs				
191-24-2	Benzo(ghi)perylene	50,000	ug/kg	110 J	ND
206-44-0	Fluoranthene	50,000	ug/kg	140 J	45 J
85-01-8	Phenanthrene	50,000	ug/kg	48 J	ND
129-00-0	Pyrene	50,000	ug/kg	120 J	41 J
	Total NPAHs	500,000*	ug/kg	**418**	**86**
	Total PAHs	NS	ug/kg	**1,037**	**124**
	Total SVOCs	**10,000/500,000***	ug/kg	**1,037**	**124**
	PESTICIDES				
72-55-9	4,4'-DDE	2,100	ug/kg	120	150
72-54-8	4,4'-DDD	2,900	ug/kg	8.4 J	ND
50-29-3	4,4'-DDT	2,100	ug/kg	53	62 J
	Total Pesticides	**10,000**	ug/kg	**181.4**	**212**
	PCBS				
	None Detected	3,700/37,000	ug/kg	ND	ND
	METALS				
7429-90-5	Aluminum	12,800	mg/kg	6,460	7,850
7440-38-2	Arsenic	16.4	mg/kg	4.1	5.5
7440-39-3	Barium	300	mg/kg	38.8	44.4
7440-41-7	Beryllium	0.67	mg/kg	0.48	0.6
7440-43-9	Cadmium	1	mg/kg	0.26 J	0.19 J
7440-70-2	Calcium	46,600	mg/kg	16,000	16,500
7440-47-3	Chromium	17.5	mg/kg	12.4	15.4
7440-48-4	Cobalt	30	mg/kg	7.2	8.9
7440-50-8	Copper	26.9	mg/kg	20.3 J	24.7 J
7439-89-6	Iron	25,700	mg/kg	18,400	22,300
7439-92-1	Lead	60.8 (29.3 ave background)	mg/kg	44.6	42.6
7439-95-4	Magnesium	13,100	mg/kg	4,970	6,120
7439-96-5	Manganese	875	mg/kg	316	389
7439-97-6	Mercury	0.1	mg/kg	ND	0.031 J
7440-02-0	Nickel	24.8	mg/kg	19	23.5
7440-09-7	Potassium	1660	mg/kg	896	1,050
7440-22-4	Silver	0.17	mg/kg	0.076 J	0.1 J
7440-23-5	Sodium	619	mg/kg	112 J	101 J
7440-62-2	Vanadium	150	mg/kg	13.3	16
7440-66-6	Zinc	134	mg/kg	651	380

CPAH = Carcinogenic Polynuclear Aromatic Hydrocarbons
NPAH = Noncarcinogenic Polynuclear Aromatic Hydrocarbons
ND = Not Detected
J = Estimated Value
Concentration above NYSDEC Soil Criteria.
* Per TAGM 4046, total carcinogenic SVOCs cannot exceed 10,000 ug/kg; total noncarcinogenic SVOCs cannot exceed 500,000 ug/kg.

TABLE 3.22b
SADVA AOC 4 SOIL RESULTS

USACE-Schenectady Depot Validated Soil Analytical Data AOC 7 Detected Compound Summary		NYSDEC Soil Criteria	Sample ID: Lab Sample Id: Depth: Source: SDG: Matrix: Sampled: Validated:	GW02-0-0.5 C4F160339007 0-0.5' STL Pittsburgh SADVA27 SOIL 6/15/2004 8/20/2004	GW02-38-40 C4F170375001 38-40' STL Pittsburgh SADVA27 SOIL 6/15/2004 8/20/2004
CAS NO.	COMPOUND		UNITS:		
	SEMIVOLATILES				
86-74-8	Carbazole	NS	ug/kg	310 J	ND
84-74-2	Di-n-butyl phthalate	29,970	ug/kg	37 J	ND
	CPAHs				
56-55-3	Benzo(a)anthracene	224	ug/kg	2,400	ND
50-32-8	Benzo(a)pyrene	61	ug/kg	2,400	ND
205-99-2	Benzo(b)fluoranthene	4,070	ug/kg	2,700	ND
207-08-9	Benzo(k)fluoranthene	4,070	ug/kg	940	ND
218-01-9	Chrysene	1,480	ug/kg	2,800	ND
53-70-3	Dibenz(a,h)anthracene	14	ug/kg	420	ND
193-39-5	Indeno(1,2,3-cd)pyrene	11,840	ug/kg	1,700	ND
	Total CPAHs	**10,000***	**ug/kg**	**13,360**	**ND**
	NPAHs				
91-57-6	2-Methylnaphthalene	50,000	ug/kg	50 J	ND
208-96-8	Acenaphthylene	50,000	ug/kg	39 J	ND
83-32-9	Acenaphthene	50,000	ug/kg	350 J	ND
120-12-7	Anthracene	50,000	ug/kg	730	ND
191-24-2	Benzo(ghi)perylene	50,000	ug/kg	1,600	ND
132-64-9	Dibenzofuran	22,755	ug/kg	120 J	ND
206-44-0	Fluoranthene	50,000	ug/kg	6,100	ND
91-20-3	Naphthalene	48,100	ug/kg	74 J	ND
85-01-8	Phenanthrene	50,000	ug/kg	3,100	ND
129-00-0	Pyrene	50,000	ug/kg	4,200	ND
	Total NPAHs	**500,000***	**ug/kg**	**16,363**	**ND**
	Total PAHs		**ug/kg**	**29,723**	**ND**
	Total SVOCs	**10,000/500,000***	**ug/kg**	**30,070**	**ND**

CPAH = Carcinogenic Polynuclear Aromatic Hydrocarbons
NPAH = Noncarcinogenic Polynuclear Aromatic Hydrocarbons
NS = No Standard
ND = Not Detected
NA = Not Analyzed
J = Estimated Value
N = Estimated
SB = Site Background
R = Rejected Value
Concentration above NYSDEC Soil Criteria.
* Per TAGM 4046, total carcinogenic SVOCs cannot exceed 10,000 ug/kg; total noncarcinogenic SVOCs cannot exceed 500,000 ug/kg.

TABLE 3.23
SADVA AOC 4 WASTE CHARACTERIZATION RESULTS

USACE-Schenectady Depot Validated Waste Characteristic Analytical Data AOC 4			Sample ID: Lab Sample Id: Depth: Source: SDG: Matrix: Sampled: Validated:	SS1-0-0.5 C4F230209004 0.0.5' Stl Pittsburgh C4F230209 Soil 6/22/2004 8/30/2004
CAS NO.	COMPOUND	Toxicity Characteristic by TCLP Criteria	UNITS:	
	TCLP VOLATILES			
75-35-4	1,1-Dichloroethene-TCLP	0.7	mg/L	ND
107-06-2	1,2-Dichloroethane-TCLP	0.5	mg/L	ND
78-93-3	2-Butanone-TCLP	200	mg/L	ND
71-43-2	Benzene-TCLP	0.5	mg/L	ND
56-23-5	Carbon tetrachloride-TCLP	0.5	mg/L	ND
108-90-7	Chlorobenzene-TCLP	100	mg/L	ND
67-66-3	Chloroform-TCLP	6	mg/L	ND
127-18-4	Tetrachloroethene-TCLP	0.7	mg/L	ND
79-01-6	Trichloroethene-TCLP	0.5	mg/L	ND
75-01-4	Vinyl chloride-TCLP	0.2	mg/L	ND
	TCLP SEMIVOLATILES			
106-46-7	1,4-Dichlorobenzene-TCLP	7.5	mg/L	ND
95-95-4	2,4,5-Trichlorophenol-TCLP	400	mg/L	ND
88-06-2	2,4,6-Trichlorophenol-TCLP	2	mg/L	ND
121-14-2	2,4-Dinitrotoluene-TCLP	0.13	mg/L	ND
1319-77-3	Cresols (total)-TCLP	200	mg/L	ND
118-74-1	Hexachlorobenzene-TCLP	0.13	mg/L	ND
87-68-3	Hexachlorobutadiene-TCLP	0.5	mg/L	ND
67-72-1	Hexachloroethane-TCLP	3	mg/L	ND
98-95-3	Nitrobenzene-TCLP	2	mg/L	ND
87-86-5	Pentachlorophenol-TCLP	100	mg/L	ND
110-86-1	Pyridine-TCLP	5	mg/L	ND
	TCLP PESTICIDES			
57-74-9	Chlordane (technical)-TCLP	0.03	mg/L	ND
72-20-8	Endrin-TCLP	0.02	mg/L	ND
1024-57-3	Heptachlor epoxide-TCLP	0.008	mg/L	ND
76-44-8	Heptachlor-TCLP	0.008	mg/L	ND
58-89-9	Lindane-TCLP	0.4	mg/L	ND
72-43-5	Methoxychlor-TCLP	10	mg/L	ND
8001-35-2	Toxaphene-TCLP	0.5	mg/L	ND
	TCLP HERBICIDES			
94-75-7	2,4-D-TCLP	10	mg/L	ND
93-72-1	2,4,5-TP (Silvex)-TCLP	1	mg/L	ND
	TCLP METALS			
7440-38-2	Arsenic-TCLP	5	mg/L	0.18 J
7440-39-3	Barium-TCLP	100	mg/L	0.63 J
7440-43-9	Cadmium-TCLP	1	mg/L	0.0028 J
7440-47-3	Chromium-TCLP	5	mg/L	ND
7439-92-1	Lead-TCLP	5	mg/L	ND
7439-97-6	Mercury-TCLP	0.2	mg/L	ND
7782-49-2	Selenium-TCLP	1	mg/L	ND
7440-22-4	Silver-TCLP	5	mg/L	ND
	WASTE CHARACTERISTICS			
(FPHSU)	pH	< 2 or > 12.5	No Units	7.5
Q414	Ignitability	140	Deg F	NO

ND - Analyte Not Detected.
J - Estimated Value

TABLE 3.24a
SADVA AOC 4 SURFACE WATER RESULTS

USACE-Schenectady Depot Validated Surface Water Analytical Data AOC 4 Detected Compound Summary		Upstream/ Background Ranges	NYSDEC Class A Surface Water Standards/Guidance Values H(FC)	NYSDEC Class C Surface Water Standards/Guidance Values H(FC)	AOC 4 SUMP SW1 C4G160332008 STL Pittsburgh C4G160332 WATER 7/15/2004 9/18/2004
CAS NO.	COMPOUND				
	VOLATILES				
	None Detected				ND
	SEMIVOLATILES				
117-81-7	bis(2-Ethylhexyl) phthalate	ND-26	0.6 A(C)	0.6 A(C)	7.4
84-74-2	Di-n-butyl phthalate	ND	50 (G)	NS	0.38 J
	Total SVOCs				**7.78**
	PESTICIDES				
60-57-1	Dieldrin	ND	0.004	0.0000006	0.0057 J
33213-65-9	Endosulfan II	ND	NS	NS	0.0025 JN
	PCBS				
	None Detected	ND	0.000001	0.000001	ND
	METALS				
7429-90-5	Aluminum	23.4-346	100 (1)	100 (1)	150 J
7440-39-3	Barium	22.6-43.5	1000	NS	16.4 J
7440-41-7	Beryllium	0.14-0.96	3	1100 *	0.74 J
7440-70-2	Calcium	60500-64400	NS	NS	28900
7439-89-6	Iron	497-998	300	300	329
7439-95-4	Magnesium	8810-11500	35000	NS	3860 J
7439-96-5	Manganese	105-691	300	NS	43.2
7440-02-0	Nickel	ND-6.2	46.7 (2) *A(C)	46.7 (2) *A(C)	1.4 J
7440-09-7	Potassium	796-2640	NS	NS	1280 J
7440-23-5	Sodium	9710-15000	NS	NS	599 J
7440-66-6	Zinc	3.9-22.1	2000 H(WS)	74.2 (2) *A(C)	391
	OTHER				
Q1925	Hardness	NA	NS	NS	88.1

(1) - Ionic form
(2) - Dissolved form - all sample data are total metals.
* - based on average hardness value
Average Hardness: 88.1 mg/L
A(C) - Protection fo Fish Propagation
H(FC) - Protection for Human Consumption of Fish
H(WS) - Protection for drinking water sources.
ND- Not Detected.
J - Estimated Value
NS - No Standard/Guidance Value
Concentration above NYSDEC Class C Standard and background ranges.

TABLE 3.24b
SADVA AOC 4 SEDIMENT RESULTS

					AOC 4 SUMP
USACE-Schenectady Depot Validated Sediment Analytical Data AOC 4 Detected Compound Summary				Sample ID:	SD01
				Lab Sample Id:	C4G170276004
				Depth:	0-0.5'
				Source:	STL Pittsburgh
				SDG:	C4G170276
				Matrix:	SOIL
				Sampled:	7/16/2004
				Validated:	9/18/2004
CAS NO.	COMPOUND	Background Ranges	NYSDEC Sediment Criteria	UNITS:	
	SEMIVOLATILES				
108-95-2	Phenol			ug/kg	45 J
	CPAHs				
218-01-9	Chrysene	ND-730	19 (H)	ug/kg	39 J
	Total CPAHs				**39**
	NPAHs				
206-44-0	Fluoranthene	ND-1200	14994 (C)	ug/kg	57 J
129-00-0	Pyrene	ND-920	14127 (C)	ug/kg	45 J
	Total NPAHs				**102**
	Total PAHs		**35000 (LM)**		**141**
	Total SVOCs				**186**
	PESTICIDES				
72-54-8	4,4'-DDD	ND	14.7 (W)	ug/kg	0.54 J
72-55-9	4,4'-DDE	ND-0.23	14.7 (W)	ug/kg	1.6 J
50-29-3	4,4'-DDT	ND	14.7 (C)	ug/kg	2.2
	Total Pesticides				**4.34**
	PCBS				
	None Detected				ND
	METALS				
7429-90-5	Aluminum	8040-17900	NC	mg/kg	9830
7440-38-2	Arsenic	3.1-5.1	6 (L)	mg/kg	5.5
7440-39-3	Barium	53.9-141	NC	mg/kg	61.2
7440-41-7	Beryllium	0.62-0.92	NC	mg/kg	0.81
7440-43-9	Cadmium	ND-0.75	0.6 (L)	mg/kg	0.14 J
7440-70-2	Calcium	2660-6700	NC	mg/kg	26900
7440-47-3	Chromium	11.2-22	26 (L)	mg/kg	13.8
7440-48-4	Cobalt	7.1-14	NC	mg/kg	8.3
7440-50-8	Copper	13-27.7	16 (L)	mg/kg	19.6 J
7439-89-6	Iron	18300-25400	20000 (L)	mg/kg	22400
7439-92-1	Lead	7.8-20.9	31 (L)	mg/kg	9
7439-95-4	Magnesium	3190-5190	NC	mg/kg	8730
7439-96-5	Manganese	328-647	460 (L)	mg/kg	386
7439-97-6	Mercury	0.027-0.091	0.15 (L)	mg/kg	0.016 J
7440-02-0	Nickel	15.6-24.5	16 (L)	mg/kg	18.7
7440-09-7	Potassium	734-1530	NC	mg/kg	1310
7440-22-4	Silver	ND-0.5	1 (L)	mg/kg	0.064 J
7440-23-5	Sodium	71.6-790	NC	mg/kg	169 J
7440-62-2	Vanadium	14.6-28.4	NC	mg/kg	22.2
7440-66-6	Zinc	47.7-118	120 (L)	mg/kg	373

CPAH = Carcinogenic Polynuclear Aromatic Hydrocarbon.
NPAH = Noncarcinogenic Polynuclear Aromatic Hydrocarbon.
J = Estimated Value
ND = Not Detected
C = Benthic Aquatic Chronic Criteria (TOC Adjusted),(NYSDEC, 1999).
L = Lowest Effect Level (metals), (NYSDEC, 1999)
W = Wildlife Bioaccumulation Criteria (TOC Adjusted), (NYSDEC, 1999).
NC = No Criteria
- concentration above NYSDEC Sediment criteria and background.

TABLE 3.25
SADVA AOC 4 GROUNDWATER RESULTS

USACE-Schenectady Depot Validated Groundwater Analytical Data AOC 4 Detected Compound Summary		NYSDEC Class GA Ground Water Standards/Guidance Values	Sample ID: Lab Sample Id: Source: SDG: Matrix: Sampled: Validated:	GW02-AOC-7 C4G230187002 STL Pittsburgh C4G230187 WATER 7/22/2004 9/19/2004
CAS NO.	COMPOUND		UNITS:	
	SEMIVOLATILES			
117-81-7	bis(2-Ethylhexyl) phthalate	5	ug/L	16
85-68-7	Butyl benzyl phthalate	50 (G)	ug/L	ND
86-74-8	Carbazole	NS	ug/L	ND
84-66-2	Diethyl phthalate	50 (G)	ug/L	ND
84-74-2	Di-n-butyl phthalate	50	ug/L	1.7 J
	CPAHs			
	None Detected			
	NPAHs			
206-44-0	Fluoranthene	50 (G)	ug/L	ND
129-00-0	Pyrene	50 (G)	ug/L	ND
	Total NPAHs			**ND**
	TOTAL SVOCs			**17.7**
	METALS			
7429-90-5	Aluminum	NS	ug/L	59.9 J
7440-38-2	Arsenic	25	ug/L	ND
7440-39-3	Barium	1000	ug/L	197 J
7440-41-7	Beryllium	3 (G)	ug/L	ND
7440-70-2	Calcium	NS	ug/L	97600
7440-50-8	Copper	200	ug/L	ND
7439-89-6	Iron	300	ug/L	5360
7439-92-1	Lead	25	ug/L	ND
7439-95-4	Magnesium	35000 (G)	ug/L	15100
7439-96-5	Manganese	300	ug/L	456
7440-02-0	Nickel	100	ug/L	ND
7440-09-7	Potassium	NS	ug/L	1140 J
7440-22-4	Silver	50	ug/L	ND
7440-23-5	Sodium	20000	ug/L	19200
7440-62-2	Vanadium	NS	ug/L	ND
7440-66-6	Zinc	2000 (G)	ug/L	2.1 J

(G) - Guidance Value.
U = Analyte not detected; the number is the analytical reporting limit.
J - Estimated Value
NA - Not Analyzed
R - Rejected Value
ND - Not Detected
NS - No Standard
Concentration above NYSDEC Class GA Groundwater Standards/Guidance values and upgradient concentr

TABLE 3.26a
SADVA AOC 5 BACKGROUND SOIL SAMPLE RESULTS

DNSC Voorheesville Depot Remedial Investigation Background Soil Sample Summary								Dup of HP12			
				SAMPLE ID:	**HP10**	**HP11**	**HP12**	**HP112**	**HP13**	**HP14**	**HP15**
				LAB ID:	C0J060292004	C0J050202006	C0J050202004	C0J050202005	C0J050202002	C0J050202001	C0J060292002
				DEPTH (feet):	0.2'	0.2'	0.2'	0.2'	0.2'	0.2'	0.2'
				SOURCE:	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh
				SDG:	SADVA19	SADVA19	SADVA19	SADVA19	SADVA19	SADVA19	SADVA19
				MATRIX:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
			NYSDEC	SAMPLED:	10/5/2000	10/4/2000	10/4/2000	10/4/2000	10/4/2000	10/4/2000	10/5/2000
		Background	TAGM 4046	VALIDATED:	12/1/2000	12/1/2000	12/1/2000	12/1/2000	12/1/2000	12/1/2000	12/1/2000
CAS NO.	COMPOUND	Ranges	Soil Criteria	UNITS							
	METALS										
7429-90-5	Aluminum	7080 - 12800	SB	mg/kg	12700	12200	12800	12800	9270	7310	8060
7440-36-0	Antimony	ND - 0.59	SB	mg/kg	0.5 J	0.59 J	0.37 J	0.35 J	0.59 J	0.38 J	0.43 J
7440-38-2	Arsenic	4.3 - 16.4	7.5 or SB	mg/kg	5.4	7.9	6.1	5.9	5.9	5.1	4.6
7440-39-3	Barium	33 - 104	300 or SB	mg/kg	58.8	71.9	84.8	86.9	104	39.4	41.7
7440-41-7	Beryllium	0.38 - 0.8	0.16 or SB	mg/kg	0.61 J	0.63	0.65 J	0.67 J	0.52 J	0.44 J	0.4 J
7440-43-9	Cadmium	0.21 - 0.52	1 or SB	mg/kg	0.24 J	0.52 J	0.49 J	0.52 J	0.35 J	0.37 J	0.34 J
7440-70-2	Calcium	1280 - 46600	SB	mg/kg	3380 J	22600 J	6050 J	5990 J	18700 J	21700 J	2590 J
7440-47-3	Chromium	9.3 - 20.1	10 or SB	mg/kg	15	16.1	17.1	17.5	15	12	9.9
7440-48-4	Cobalt	5.3 - 12.2	30 or SB	mg/kg	12.2	11.9	9.7	10	12.2	9.6	5.8
7440-50-8	Copper	13.4 - 31.2	25 or SB	mg/kg	14.3	23.3	21.8	22.2	21.5	14.2	13.5
7439-89-6	Iron	14100 - 30200	2000 or SB	mg/kg	22600	25300	24800	25700	22800	16800	14500
7439-92-1	Lead	16.5 - 265	SB	mg/kg	19.9	20.9	60.8	58.1	16.5	30.5	30.2
7439-95-4	Magnesium	2150 - 13100	SB	mg/kg	3760 J	13100 J	3740 J	3860 J	5440 J	5040 J	2240 J
7439-96-5	Manganese	197 - 875	SB	mg/kg	664	875	369	404	767	506	243
7439-97-6	Mercury	0.039 - 0.13	0.1	mg/kg	0.059	0.053	0.086	0.095	0.055 J	0.074	0.084
7440-02-0	Nickel	10.6 - 26.6	13 or SB	mg/kg	16.4	21.5	18.2	18	24.8	17.5	12.9
7440-09-7	Potassium	443 - 1660	SB	mg/kg	767	1590	1450	1360	1660	592 J	490 J
7782-49-2	Selenium	ND - 1.2	2 or SB	mg/kg	0.58 J	0.46 J	0.79 J	0.9	1.2	0.93	0.88
7440-22-4	Silver	0.11 - 0.25	SB	mg/kg	0.16 J	ND	ND	ND	0.17 J	0.17 J	ND
7440-23-5	Sodium	28.7 - 619	SB	mg/kg	215 J	108 J	580 J	619 J	179 J	482 J	71.9 J
7440-28-0	Thallium	ND - 0.67	SB	mg/kg	ND	ND	ND	ND	ND	ND	ND
7440-62-2	Vanadium	13.7 - 24	150 or SB	mg/kg	21.4	22.4	23.6	24	16.6	17.1	18.5
7440-66-6	Zinc	46 - 134	20 or SB	mg/kg	57.1 J	81.9 J	134 J	133 J	74.6 J	86.5 J	56.4 J

J = Estimated Value
SB = Site Background
NA = Not Available
NC = No Criteria

TABLE 3.26a
SADVA AOC 5 BACKGROUND SOIL SAMPLE RESULTS

DNSC Voorheesville Depot Remedial Investigation Background Soil Sample Summary				SAMPLE ID:	HP16	HP17	HP18	SS08	SS09	HP01B
				LAB ID:	C0J060292001	C0J060292003	C0J110265001	COH090139-003	COH090139-004	COH160192-015
				DEPTH (feet):	0.2'	0.2'	0.2'	0-0.2	0-0.2	2-4
				SOURCE:	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh
				SDG:	SADVA19	SADVA19	SADVA19	SADVA4	SADVA4	SADVA12
				MATRIX:	SOIL	SOIL	SOIL	Soil	Soil	Soil
			NYSDEC	SAMPLED:	10/5/2000	10/5/2000	10/10/2000	8/8/2000	8/8/2000	8/15/2000
		Background	TAGM 4046	VALIDATED:	12/1/2000	12/1/2000	12/1/2000	9/27/2000	9/27/2000	9/28/2000
CAS NO.	COMPOUND	Ranges	Soil Criteria	UNITS						
	METALS									
7429-90-5	Aluminum	7080 - 12800	SB	mg/kg	8110	7950	7080	12000 J	12200 J	12700
7440-36-0	Antimony	ND - 0.59	SB	mg/kg	0.2 J	0.45 J	0.43 J	0.19 J	ND	0.37 J
7440-38-2	Arsenic	4.3 - 16.4	7.5 or SB	mg/kg	16.4	4.3	5.3	8.9 J	7.4 J	8.4
7440-39-3	Barium	33 - 104	300 or SB	mg/kg	60.3	33	38.2	63.7 J	71.9 J	74.1 J
7440-41-7	Beryllium	0.38 - 0.8	0.16 or SB	mg/kg	0.38 J	0.38 J	0.41 J	0.72 J	0.8 J	0.8
7440-43-9	Cadmium	0.21 - 0.52	1 or SB	mg/kg	0.21 J	0.29 J	0.24 J	0.25 J	0.29 J	0.62
7440-70-2	Calcium	1280 - 46600	SB	mg/kg	1520 J	1280 J	46600 J	5600 J	3000 J	4660
7440-47-3	Chromium	9.3 - 20.1	10 or SB	mg/kg	9.3	10.1	11.3	19.1 J	18.5 J	20.1 J
7440-48-4	Cobalt	5.3 - 12.2	30 or SB	mg/kg	5.3 J	5.8	8.3	14.9 J	14 J	15.9
7440-50-8	Copper	13.4 - 31.2	25 or SB	mg/kg	26.9	13.4	18.2	28.7 J	27.1 J	31.2
7439-89-6	Iron	14100 - 30200	2000 or SB	mg/kg	14100	16900	16900	30200 J	29100 J	29800
7439-92-1	Lead	16.5 - 265	SB	mg/kg	17.6	21.2	17.2	74.5 J	83.3 J	265 J
7439-95-4	Magnesium	2150 - 13100	SB	mg/kg	2150 J	2320 J	5880 J	5270 J	4400 J	4770 J
7439-96-5	Manganese	197 - 875	SB	mg/kg	373	197	437	672 J	610 J	813 J
7439-97-6	Mercury	0.039 - 0.13	0.1	mg/kg	0.039 J	0.054	0.04 J	0.12 J	0.062 J	0.13
7440-02-0	Nickel	10.6 - 26.6	13 or SB	mg/kg	10.6	12.5	15.2	26.6 J	22 J	23.1
7440-09-7	Potassium	443 - 1660	SB	mg/kg	443 J	539 J	503 J	1230 J	1150 J	885
7782-49-2	Selenium	ND - 1.2	2 or SB	mg/kg	0.44 J	0.72	ND	ND	0.3 J	0.71
7440-22-4	Silver	0.11 - 0.25	SB	mg/kg	ND	ND	ND	0.15 J	0.11 J	0.25 J
7440-23-5	Sodium	28.7 - 619	SB	mg/kg	41.7 J	28.7 J	379 J	56.4 J	67.5 J	141 J
7440-28-0	Thallium	ND - 0.67	SB	mg/kg	0.67 J	ND	ND	ND	ND	ND
7440-62-2	Vanadium	13.7 - 24	150 or SB	mg/kg	14.6	15.9	13.7	21.4 J	23.5 J	22
7440-66-6	Zinc	46 - 134	20 or SB	mg/kg	48.5 J	46 J	59.2 J	97.9 J	95 J	117 J

J = Estimated Value
SB = Site Background
NA = Not Available
NC = No Criteria

TABLE 3.26b
SADVA AOC 5 ONSITE SOIL RESULTS

				Metals Storage Area							
DNSC Voorheesville Depot			SAMPLE ID:	SS01A	SS01A2	SS02A	SS02A2	HP02N	SS03A	SS03A2	SS05A
Remedial Investigation			LAB ID:	COH160192-001	COH160192-002	COH160192-003	COH160192-004	COH040184-001	COH160192-005	COH160192-006	COH160192-011
Validated Soil Sample Summary			DEPTH (feet):	0-0.2	2	0-0.2	2	26-28	0-0.2	2	0-0.2
			SOURCE:	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh
			SDG:	SADVA12	SADVA12	SADVA12	SADVA12	SADVA4	SADVA12	SADVA12	SADVA12
		NYSDEC	MATRIX:	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil
		Soil Criteria	SAMPLED:	8/15/2000	8/15/2000	8/15/2000	8/15/2000	8/2/2000	8/15/2000	8/15/2000	8/15/2000
			VALIDATED:	9/28/2000	9/28/2000	9/28/2000	9/28/2000	9/27/2000	9/28/2000	9/28/2000	9/28/2000
CAS NO.	COMPOUND		UNITS								
	METALS										
7429-90-5	Aluminum	12800	mg/kg	3940	13500	626	12900	13600	1960	13200	2400
7440-36-0	Antimony	0.59	mg/kg	0.25 J	0.23 J	0.18 J	ND	ND	1.6 J	0.22 J	0.24 J
7440-38-2	Arsenic	16.4	mg/kg	6.7	11	4.3	10.6	10.5	7.6	9	1 J
7440-39-3	Barium	300	mg/kg	420 J	177 J	45.5 J	37.5 J	66.9	54.3 J	38.2 J	12.7 J
7440-41-7	Beryllium	0.8	mg/kg	0.26 J	0.72	0.18 J	0.66	0.75 J	0.28 J	0.68	0.15 J
7440-43-9	Cadmium	1	mg/kg	0.27 J	0.71	0.38 J	0.63	0.25 J	1 J	0.74	0.1 J
7440-70-2	Calcium	46600	mg/kg	102000	11400	235000	14700	17400	240000	20500	5590
7440-47-3	Chromium	20.1	mg/kg	7.8 J	20.1 J	4.8 J	20.4 J	22.7	13.6 J	22.2 J	49.9 J
7440-48-4	Cobalt	30	mg/kg	6.6	22.7	2.1 J	18.1	20.3	8.9	19.8	2.7 J
7440-50-8	Copper	31.2	mg/kg	18.8	51.9	7.1	43.2	41.5	815	46.5	5.1
7439-89-6	Iron	30200	mg/kg	9760	39000	4990	36900	38400	67500	33600	7510
7439-92-1	Lead	265	mg/kg	17.8 J	23.5 J	30.1 J	19.6 J	18.9	80.8 J	16.7 J	5.4 J
7439-95-4	Magnesium	13100	mg/kg	4570 J	9510 J	64500 J	9480 J	10400	57500 J	10600 J	2530 J
7439-96-5	Manganese	875	mg/kg	109 J	712 J	140 J	591 J	636	645 J	669 J	78.6 J
7439-97-6	Mercury	0.1	mg/kg	0.011 J	2.6	ND	0.079	0.073	ND	0.034 J	ND
7440-02-0	Nickel	26.6	mg/kg	11	51.4	3.3 J	42.3	44	9.6	40.5	4.3 J
7440-09-7	Potassium	1660	mg/kg	634	1400	298 J	1200	1570	460 J	1560	285 J
7782-49-2	Selenium	2	mg/kg	0.46 J	0.83	ND	0.71	ND	ND	0.82	0.3 J
7440-22-4	Silver	0.25	mg/kg	ND	0.23 J	ND	0.21 J	0.18 J	0.2 J	0.18 J	ND
7440-23-5	Sodium	619	mg/kg	129 J	89.7 J	158 J	87.6 J	586	181 J	108 J	60.8 J
7440-28-0	Thallium	0.67	mg/kg	ND	0.57 J	ND	0.5 J	ND	ND	ND	ND
7440-62-2	Vanadium	150	mg/kg	5.7	21	5 J	19.8	21.6	7.6	20.9	8
7440-66-6	Zinc	134	mg/kg	94.7 J	79.5 J	575 J	79.5 J	85.1	1140 J	94.1 J	28.9 J

NYSDEC Soil Criteria are TAGM 4046 values or maximum site
background value, where allowed by TAGM 4046.
J - Estimated Value
ND - Not Detected
Sample concentration exceeds NYSDEC Soil Criteria.

TABLE 3.26b
SADVA AOC 5 ONSITE SOIL RESULTS

DNSC Voorheesville Depot Remedial Investigation Validated Soil Sample Summary		NYSDEC Soil Criteria		Metals Storage Area			Former Sand Blasting Area		Former Drum Painting Area		Former Open Storage Area	
			SAMPLE ID:	SS05A2	SS06A	SS06B	SS04A	SS04A2	SS07A	SS07A2	HP03	HP04
			LAB ID:	COH160192-012	COH160192-013	COH160192-014	COH160192-009	COH160192-010	COH160192-007	COH160192-008	COH030324-001	COH030324-002
			DEPTH (feet):	2	0-0.2	2	0-0.2	2	0-0.2	2	5-7'	5-7'
			SOURCE:	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh
			SDG:	SADVA12	SADVA12	SADVA12	SADVA12	SADVA12	SADVA12	SADVA12	SADVA4	SADVA4
			MATRIX:	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil
			SAMPLED:	8/15/2000	8/15/2000	8/15/2000	8/15/2000	8/15/2000	8/15/2000	8/15/2000	8/2/2000	8/2/2000
			VALIDATED:	9/28/2000	9/28/2000	9/28/2000	9/28/2000	9/28/2000	9/28/2000	9/28/2000	9/27/2000	9/27/2000
CAS NO.	COMPOUND		UNITS									
	METALS											
7429-90-5	Aluminum	12800	mg/kg	14700	12700	12400	2340	15400	2910	14100	14100	15700
7440-36-0	Antimony	0.59	mg/kg	0.48 J	ND	1 J	4 J	0.35 J	0.48 J	0.39 J	ND	0.23 J
7440-38-2	Arsenic	16.4	mg/kg	9.6	9.6	13.5	11.8	10	6.8	9.8	11.4	13.3
7440-39-3	Barium	300	mg/kg	138 J	69.7 J	52.9 J	32.2 J	74.2 J	83.5 J	97.3 J	73.7	77.4
7440-41-7	Beryllium	0.8	mg/kg	0.78	0.7	0.68	0.21 J	0.81	0.24 J	0.77	0.8 J	0.98 J
7440-43-9	Cadmium	1	mg/kg	0.53 J	0.47 J	0.76 J	2.4 J	0.73	0.58	0.72	0.41 J	0.19 J
7440-70-2	Calcium	46600	mg/kg	9210	36500	31600	95300	14500	158000	14300	18300	16700
7440-47-3	Chromium	20.1	mg/kg	23.1 J	20.6 J	23.1 J	403 J	24.1 J	164 J	22.7 J	23.2	24.6
7440-48-4	Cobalt	30	mg/kg	22.1	16.3	23.1	25.9	21.6	5.3 J	21.5	20.7	22.1
7440-50-8	Copper	31.2	mg/kg	35.7	57.2	44.8	804	47.3	703	75.1	47.2	42.6
7439-89-6	Iron	30200	mg/kg	37700	31800	65300	176000	39500	11500	36800	39300	42900
7439-92-1	Lead	265	mg/kg	17.8 J	26.4 J	72.1 J	61.1 J	24.6 J	314 J	24.8 J	27.7	34.9
7439-95-4	Magnesium	13100	mg/kg	9520 J	17700 J	15200 J	35700 J	11700 J	50800 J	9550 J	10200	11200
7439-96-5	Manganese	875	mg/kg	602 J	583 J	767 J	1660 J	703 J	222 J	1130 J	731	700
7439-97-6	Mercury	0.1	mg/kg	0.037	0.052	0.051	0.0094 J	0.058	ND	0.069	0.073	0.051
7440-02-0	Nickel	26.6	mg/kg	45.5	36.1	41.7	158	47.4	9.9	46.2	46.1	46.8
7440-09-7	Potassium	1660	mg/kg	1610	1740	1460	475 J	1660	564	1760	1810	2320
7782-49-2	Selenium	2	mg/kg	0.9	ND	1.2	1.7 J	0.68	ND	1.1	0.47 J	ND
7440-22-4	Silver	0.25	mg/kg	0.18 J	0.21 J	0.22 J	0.69 J	0.22 J	0.22 J	0.27 J	0.16 J	0.19 J
7440-23-5	Sodium	619	mg/kg	92.8 J	111 J	107 J	83.2 J	102 J	133 J	97.1 J	108 J	144 J
7440-28-0	Thallium	0.67	mg/kg	ND	ND	ND	ND	0.62 J	ND	ND	ND	ND
7440-62-2	Vanadium	150	mg/kg	22.4	20.5	19.8	14.8	22.9	7.9	21.6	22.5	24.4
7440-66-6	Zinc	134	mg/kg	82.7 J	91.6 J	403 J	2310 J	101 J	1020 J	121 J	109	90.4

NYSDEC Soil Criteria are TAGM 4046 values or maximum site background value, where allowed by TAGM 4046.
J - Estimated Value
ND - Not Detected
Sample concentration exceeds NYSDEC Soil Criteria.

TABLE 3.26c
POND SPOILS AND SUPPLEMENTAL SOIL RESULTS

				POND SPOILS AREA						SAND BLAST AREA	DRUM PAINTING AREA	METALS STORAGE AREA
DNSC Voorheesville Depot Remedial Investigation Supplemental Soil Sample Summary		NYSDEC Soil Criteria	Sample ID:	**SS-1**	**SS-2**	**SS-3**	**SS-4**	**SS-5**	**SS-6**	**SS-7**	**SS-8**	**SS-9**
			Lab Sample ID:	C6F140197001	C6F140197002	C6F140197003	C6F140197004	C6F140197005	C6F140197006	C6F140197007	C6F140197008	C6F140197009
			Depth:	0-0.5'	0-0.5'	0-0.5'	0-0.5'	0-0.5'	0-0.5'	0-0.5'	0-0.5'	0-0.5'
			Source:	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh
			SDG:	C6F140197	C6F140197	C6F140197	C6F140197	C6F140197	C6F140197	C6F140197	C6F140197	C6F140197
			Matrix:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
			Sampled:	6/13/2006	6/13/2006	6/13/2006	6/13/2006	6/13/2006	6/13/2006	6/13/2006	6/13/2006	6/13/2006
			Validated:	7/24/2006	7/24/2006	7/24/2006	7/24/2006	7/24/2006	7/24/2006	7/24/2006	7/24/2006	7/24/2006
CAS NO.	COMPOUND		UNITS									
	METALS											
7429-90-5	Aluminum	12800	mg/kg	12300	12700	12900	13000	12300	12800	6790	2800	13600
7440-38-2	Arsenic	16.4	mg/kg	10	10.3	9.2	9.2	8.6	10.2	7.3	9.3	10.4
7440-47-3	Chromium	20.1	mg/kg	20 J	20.5 J	20.9 J	20.9 J	19.7 J	20.6 J	129 J	76.5 J	22.1 J
7440-48-4	Cobalt	30	mg/kg	15.2	16	16.4	14.9	14.9	16.3	9.2	5 J	17.6
7440-50-8	Copper	31.2	mg/kg	40.1	40.9	44	38	40.5	41.4	711	120	42.5
7439-89-6	Iron	30200	mg/kg	32800 J	35800 J	33800 J	34800 J	31500 J	34900 J	27700 J	11200 J	37100 J
7439-92-1	Lead	265	mg/kg	21.6	18	17.9	16.8	17.1	20.7	22.6	51	18.6
7439-95-4	Magnesium	13100	mg/kg	13300 J	9470 J	13000 J	10000 J	11000 J	10200 J	43800 J	53300 J	10400 J
7439-96-5	Manganese	875	mg/kg	546 J	562 J	561 J	567 J	609 J	579 J	479 J	204 J	658 J
7440-02-0	Nickel	26.6	mg/kg	38.7 J	41 J	38.8 J	39.4 J	37.7 J	42.8 J	29.8 J	14.3 J	43.8 J
7440-62-2	Vanadium	150	mg/kg	20.5	20.8	21.5	21.3	20.5	21.2	14.9	9.4	22.7
7440-66-6	Zinc	134	mg/kg	98.4 J	66.3 J	90.1 J	70.7 J	69.9 J	87.2 J	464 J	446 J	80.3 J

NYSDEC Soil Criteria are TAGM 4046 values or maximum site background value, where allowed by TAGM 4046.
J - Estimated Value
ND - Not Detected
Sample concentration exceeds NYSDEC Soil Criteria.

TABLE 3.27
SADVA AOC 5 GROUNDWATER ELEVATION DATA

Wells	Elevation TOC*	Elevation Ground*	Sample Depth**	Date	Depth to Water**	Groundwater Elevation*
AOC 5						
GW-1	331.73	329.44	32 est.	8/8/2000	NA	NA
HP-01		335.39	6 - 11	8/3/2000	3	332.39
HP-02		327.39	NA	8/2/2000	dry	NA
HP-03		323.45	9.5-14.5	8/2/2000	11.8	311.65
HP-04		320.95	5 -10	8/2/2000	2.5	318.45

NA - not available
dry - water-bearing zone not encountered
* - elevation in feet above mean sea level
** - depth in feet below ground surface
est. - estimated; Depot well depth not known for certain

TABLE 3.28
SADVA AOC 5 GROUNDWATER SAMPLE RESULTS

SADVA AOC 5 - DNSC Voorheesville Depot Remedial Investigation Validated Groundwater Data		NYSDEC Class GA Groundwater Standards	SAMPLE ID:	GW01	HP01	HP03	HP04
			Location:	Upgradient	Upgradient	Downgradient	Downgradient
			LAB ID:	COH090138-001	COH040185-001	COH030319-001	COH030319-002
			SOURCE:	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh
			SDG:	SADVA3	SADVA3	SADVA3	SADVA3
			SAMPLED:	8/8/2000	8/3/2000	8/2/2000	8/2/2000
			VALIDATED:	9/27/2000	9/27/2000	9/27/2000	9/27/2000
CAS NO.	COMPOUND		UNITS				
	METALS						
7429-90-5	Aluminum	NS	ug/L	78.5 J	1840 J	5010 J	1170 J
7440-36-0	Antimony	3	ug/L	ND	ND	19.9 J	5.4 J
7440-38-2	Arsenic	25	ug/L	ND	8.6 J	14	5.7 J
7440-39-3	Barium	1000	ug/L	75.7 J	55.9 J	133 J	56.4 J
7440-41-7	Beryllium	3 (G)	ug/L	0.09 J	0.16 J	0.35 J	0.16 J
7440-43-9	Cadmium	5	ug/L	ND	ND	ND	ND
7440-70-2	Calcium	NS	ug/L	1370 J	63900	196000	236000
7440-47-3	Chromium	50	ug/L	ND	3.8 J	7.3 J	2 J
7440-48-4	Cobalt	NS	ug/L	ND	ND	ND	ND
7440-50-8	Copper	200	ug/L	22.2 J	ND	ND	ND
7439-89-6	Iron	300	ug/L	1270 J	2590	6760	1550
7439-92-1	Lead	25	ug/L	ND	15.8	4.6	ND
7439-95-4	Magnesium	35000	ug/L	240 J	6630	50600	55200
7439-96-5	Manganese	300	ug/L	59.1 J	1290 J	207 J	512 J
7439-97-6	Mercury	0.7	ug/L	0.07 J	0.055 J	0.056 J	ND
7440-02-0	Nickel	100	ug/L	ND	ND	14.7 J	ND
7440-09-7	Potassium	NS	ug/L	3410 J	10500	45000	26400
7782-49-2	Selenium	10	ug/L	ND	ND	2.6 J	ND
7440-22-4	Silver	50	ug/L	ND	ND	ND	ND
7440-23-5	Sodium	20000	ug/L	432000 J	720000	21800	32000
7440-28-0	Thallium	0.5 (G)	ug/L	7.8 J	ND	ND	ND
7440-62-2	Vanadium	NS	ug/L	ND	6.1 J	14.3 J	5 J
7440-66-6	Zinc	2000	ug/L	87.1 J	16.2 J	20.2	35.3

J - Estimated Value
ND - Not Detected
NS - No Standard or guidance value available.
(G) - Guidance Value
Concentration above NYSDEC Class GA criteria and upgradient concentrations, or an upgradient concentration that exceeds Class GA criteria.

TABLE 3.29
SADVA AOC 5 SURFACE WATER RESULTS

Former Schenectady Army Depot AOC 5 - Voorheesville Depot Remedial Investigation Validated Surface Water Data		Black Creek Background Ranges	Municipal Storm Sewer Infall Ranges	NYSDEC Class A Surface Water Standards/Guidance Values	NYSDEC Class C Surface Water Standards/Guidance Values		Municipal Storm Sewer Infalls			
						SAMPLE ID:	SW-5		SW-6	
						LAB ID:	DE68T/F		DE68V/F	
						SOURCE:	STL		STL	
						SDG:	C0F050111		C0F050111	
						MATRIX:	WATER		WATER	
						SAMPLED:	6/2/2000		6/2/2000	
						VALIDATED:	7/20/2000		7/20/2000	
Casno	Compound	(Total)	(Total)	H(WS)	A(C)	Units	Total	Dissolved	Total	Dissolved
	METALS									
7429-90-5	Aluminum	23.4-346	13600-34300	100 (1)A(C)	100 (1)	ug/L	34300 J	7400 J	30200 J	7210 J
7440-36-0	Antimony	ND	ND	3	NS	ug/L	ND	ND	ND	ND
7440-38-2	Arsenic	ND	10.9-14.1	50	150 (2)	ug/L	14.1	5.7 J	13.5	7.2 J
7440-39-3	Barium	22.6-43.5	103-205	1000	NS	ug/L	184 J	50.4 J	205	76.7 J
7440-41-7	Beryllium	0.14-0.96	0.67-1.5	3 (G)	1100	ug/L	1.5 J	0.26 J	1.2 J	0.32 J
7440-43-9	Cadmium	ND	ND	5	6.45 *	ug/L	ND	ND	ND	ND
7440-70-2	Calcium	60500-64400	31600-64600	NS	NS	ug/L	35300	27300	64600	58000
7440-47-3	Chromium	ND-1.4	18.5-44.4	50	240 (2) *	ug/L	44.4	9.6 J	35.1	8.1 J
7440-48-4	Cobalt	ND	12.2-23.6	5 A(C)	5	ug/L	23.6 J	4.8 J	17.6 J	6.8 J
7440-50-8	Copper	ND-2.5	35.3-80.4	200	30.5 (2) *	ug/L	79.1	30	80.4	41
7439-89-6	Iron	497-998	27700-50700	300 A(C)	300	ug/L	50700	9640	41700	9280
7439-92-1	Lead	ND	30.1-57.1	50	17.3 (2) *	ug/L	57.1	10	40.9	9.8
7439-95-4	Magnesium	8810-11500	9040-17200	35000	NS	ug/L	13300	6150	17200	10600
7439-96-5	Manganese	105-691	934-1800	300 A(C)	NS	ug/L	1800	606	981	473
7439-97-6	Mercury	0.065-0.093	ND-0.096	0.7	0.0007 H(FC)	ug/L	0.096 J	ND	0.081 J	ND
7440-02-0	Nickel	ND-6.2	23.7-47.7	100	175 (2) *	ug/L	47.7	11.7 J	39.2 J	11.1 J
7440-09-7	Potassium	796-2640	12900-24600	NS	NS	ug/L	18500	14500	24600	22600
7782-49-2	Selenium	ND	3.1-6.2	10	4.6 (2) *	ug/L	4.4 J	ND	6.2	4.4 J
7440-22-4	Silver	ND-0.31	ND	50	0.1 (1)	ug/L	ND	ND	ND	ND
7440-23-5	Sodium	9710-15000	19700-88100	NS	NS	ug/L	64800	67300	88100	93300
7440-28-0	Thallium	ND	ND-4.3	0.5 (G)	8	ug/L	ND	ND	4.3 J	4.3 J
7440-62-2	Vanadium	ND-3.4	24.9-49.1	14 A(C)	14	ug/L	55.4	11.1 J	49.1 J	12.7 J
7440-66-6	Zinc	3.9-22.1	119-390	2000	279 (2) *	ug/L	390	88.7	264	89.1
	OTHER									
Q356	Hardness, as CaCO3					mg/L	358	NA	314	NA

NS - no standard/guidance value
(1) - Ionic form
(2) - Dissolved form
(3) - Acid Soluble form
* - based on average hardness value
Average Hardness: 419 mg/L
A(C) - Protection fo Fish Propagation
A(A) - Protection for Fish Survival
H(FC) - Protection for Human Consumption of Fish
ND - Not Detected.
J - Estimated Value
NA - Not Analyzed
Concentration above Class C Standards and Infalls (Background)

TABLE 3.29
SADVA AOC 5 SURFACE WATER RESULTS

Former Schenectady Army Depot AOC 5 - Voorheesville Depot Remedial Investigation Validated Surface Water Data		Black Creek Background Ranges	Municipal Storm Sewer Infall Ranges	NYSDEC Class A Surface Water Standards/Guidance Values	NYSDEC Class C Surface Water Standards/Guidance Values		Municipal Storm Sewer Infalls		On-site Ditches	
						SAMPLE ID:	SW-13		SW-2	
						LAB ID:	DE68X/F		DE68P	
						SOURCE:	STL		STL	
						SDG:	C0F050111		C0F050111	
						MATRIX:	WATER		WATER	
						SAMPLED:	6/2/2000		6/2/2000	
						VALIDATED:	7/20/2000		7/20/2000	
Casno	Compound	(Total)	(Total)	H(WS)	A(C)	Units	Total	Dissolved	Total	Dissolved
	METALS									
7429-90-5	Aluminum	23.4-346	13600-34300	100 (1)A(C)	100 (1)	ug/L	13600 J	3130 J	528 J	NA
7440-36-0	Antimony	ND	ND	3	NS	ug/L	ND	ND	ND	NA
7440-38-2	Arsenic	ND	10.9-14.1	50	150 (2)	ug/L	10.9	3.5 J	ND	NA
7440-39-3	Barium	22.6-43.5	103-205	1000	NS	ug/L	103 J	35.3 J	61.6 J	NA
7440-41-7	Beryllium	0.14-0.96	0.67-1.5	3 (G)	1100	ug/L	0.67 J	0.13 J	ND	NA
7440-43-9	Cadmium	ND	ND	5	6.45 *	ug/L	ND	ND	ND	NA
7440-70-2	Calcium	60500-64400	31600-64600	NS	NS	ug/L	31600	24900	425000	NA
7440-47-3	Chromium	ND-1.4	18.5-44.4	50	240 (2) *	ug/L	18.5	4.4 J	ND	NA
7440-48-4	Cobalt	ND	12.2-23.6	5 A(C)	5	ug/L	12.2 J	ND	ND	NA
7440-50-8	Copper	ND-2.5	35.3-80.4	200	30.5 (2) *	ug/L	35.3	14.8 J	4.6 J	NA
7439-89-6	Iron	497-998	27700-50700	300 A(C)	300	ug/L	27700	6220	1150	NA
7439-92-1	Lead	ND	30.1-57.1	50	17.3 (2) *	ug/L	30.1	6.7	ND	NA
7439-95-4	Magnesium	8810-11500	9040-17200	35000	NS	ug/L	9040	5340	179000	NA
7439-96-5	Manganese	105-691	934-1800	300 A(C)	NS	ug/L	934	287	108	NA
7439-97-6	Mercury	0.065-0.093	ND-0.096	0.7	0.0007 H(FC)	ug/L	ND	ND	ND	NA
7440-02-0	Nickel	ND-6.2	23.7-47.7	100	175 (2) *	ug/L	23.7 J	ND	ND	NA
7440-09-7	Potassium	796-2640	12900-24600	NS	NS	ug/L	12900	11000	11500	NA
7782-49-2	Selenium	ND	3.1-6.2	10	4.6 (2) *	ug/L	3.1 J	ND	ND	NA
7440-22-4	Silver	ND-0.31	ND	50	0.1 (1)	ug/L	ND	1.2 J	ND	NA
7440-23-5	Sodium	9710-15000	19700-88100	NS	NS	ug/L	19700	19100	150000	NA
7440-28-0	Thallium	ND	ND-4.3	0.5 (G)	8	ug/L	ND	ND	ND	NA
7440-62-2	Vanadium	ND-3.4	24.9-49.1	14 A(C)	14	ug/L	24.9 J	8.6 J	5.3 J	NA
7440-66-6	Zinc	3.9-22.1	119-390	2000	279 (2) *	ug/L	119	36.5	13 J	NA
	OTHER									
Q356	Hardness, as CaCO3					mg/L	133	NA	1980	NA

NS - no standard/guidance value
(1) - Ionic form
(2) - Dissolved form
(3) - Acid Soluble form
* - based on average hardness value
Average Hardness: 419 mg/L
A(C) - Protection fo Fish Propagation
A(A) - Protection for Fish Survival
H(FC) - Protection for Human Consumption of Fish
ND - Not Detected.
J - Estimated Value
NA - Not Analyzed
Concentration above Class C Standards and Infalls (Background)

TABLE 3.29
SADVA AOC 5 SURFACE WATER RESULTS

Casno	Compound	Black Creek Background Ranges (Total)	Municipal Storm Sewer Infall Ranges (Total)	NYSDEC Class A Surface Water Standards/Guidance Values H(WS)	NYSDEC Class C Surface Water Standards/Guidance Values A(C)		On-site Ditches		On-site Ponds	
Former Schenectady Army Depot AOC 5 - Voorheesville Depot Remedial Investigation Validated Surface Water Data						SAMPLE ID: LAB ID: SOURCE: SDG: MATRIX: SAMPLED: VALIDATED:	SW-4 DE68R STL C0F050111 WATER 6/2/2000 7/20/2000		SW-1 DE68H/F STL C0F050111 WATER 6/2/2000 7/20/2000	
						Units	Total	Dissolved	Total	Dissolved
	METALS									
7429-90-5	Aluminum	23.4-346	13600-34300	100 (1)A(C)	100 (1)	ug/L	21500 J	NA	316 J	204 J
7440-36-0	Antimony	ND	ND	3	NS	ug/L	ND	NA	ND	ND
7440-38-2	Arsenic	ND	10.9-14.1	50	150 (2)	ug/L	11.5	NA	ND	ND
7440-39-3	Barium	22.6-43.5	103-205	1000	NS	ug/L	131 J	NA	36.7 J	36.7 J
7440-41-7	Beryllium	0.14-0.96	0.67-1.5	3 (G)	1100	ug/L	1.1 J	NA	0.12 J	ND
7440-43-9	Cadmium	ND	ND	5	6.45 *	ug/L	ND	NA	ND	ND
7440-70-2	Calcium	60500-64400	31600-64600	NS	NS	ug/L	69700	NA	93500	93400
7440-47-3	Chromium	ND-1.4	18.5-44.4	50	240 (2) *	ug/L	38.4	NA	ND	1.1 J
7440-48-4	Cobalt	ND	12.2-23.6	5 A(C)	5	ug/L	16.4 J	NA	ND	ND
7440-50-8	Copper	ND-2.5	35.3-80.4	200	30.5 (2) *	ug/L	78.2	NA	3.2 J	3.6 J
7439-89-6	Iron	497-998	27700-50700	300 A(C)	300	ug/L	36300	NA	335	254
7439-92-1	Lead	ND	30.1-57.1	50	17.3 (2) *	ug/L	47.4	NA	ND	2.3 J
7439-95-4	Magnesium	8810-11500	9040-17200	35000	NS	ug/L	17100	NA	32600	32600
7439-96-5	Manganese	105-691	934-1800	300 A(C)	NS	ug/L	1430	NA	78.4	77.2
7439-97-6	Mercury	0.065-0.093	ND-0.096	0.7	0.0007 H(FC)	ug/L	ND	NA	ND	ND
7440-02-0	Nickel	ND-6.2	23.7-47.7	100	175 (2) *	ug/L	40.1	NA	ND	ND
7440-09-7	Potassium	796-2640	12900-24600	NS	NS	ug/L	7590	NA	3560 J	3360 J
7782-49-2	Selenium	ND	3.1-6.2	10	4.6 (2) *	ug/L	ND	NA	ND	ND
7440-22-4	Silver	ND-0.31	ND	50	0.1 (1)	ug/L	ND	NA	ND	ND
7440-23-5	Sodium	9710-15000	19700-88100	NS	NS	ug/L	2420 J	NA	126000	128000
7440-28-0	Thallium	ND	ND-4.3	0.5 (G)	8	ug/L	ND	NA	6.1 J	ND
7440-62-2	Vanadium	ND-3.4	24.9-49.1	14 A(C)	14	ug/L	38.2 J	NA	2.6 J	2.4 J
7440-66-6	Zinc	3.9-22.1	119-390	2000	279 (2) *	ug/L	339	NA	10.1 J	7.3 J
	OTHER									
Q356	Hardness, as CaCO3					mg/L	277	NA	374	NA

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(1) - Ionic form
(2) - Dissolved form
(3) - Acid Soluble form
* - based on average hardness value
Average Hardness: 419 mg/L
A(C) - Protection fo Fish Propagation
A(A) - Protection for Fish Survival
H(FC) - Protection for Human Consumption of Fish
ND - Not Detected.
J - Estimated Value
NA - Not Analyzed
Concentration above Class C Standards and Infalls (Background)

TABLE 3.29
SADVA AOC 5 SURFACE WATER RESULTS

Former Schenectady Army Depot AOC 5 - Voorheesville Depot Remedial Investigation Validated Surface Water Data		Black Creek Background Ranges	Municipal Storm Sewer Infall Ranges	NYSDEC Class A Surface Water Standards/Guidance Values	NYSDEC Class C Surface Water Standards/Guidance Values	SAMPLE ID: LAB ID: SOURCE: SDG: MATRIX: SAMPLED: VALIDATED:	On-site Ponds SW-3 DEQ/F STL C0F050111 WATER 6/2/2000 7/20/2000		Downstream of Site A0C5SW07 COG200284-002 STL Pittsburgh SADVA3 Water 7/19/2000 9/27/2000	
Casno	Compound	(Total)	(Total)	H(WS)	A(C)	Units	Total	Dissolved	Total	Dissolved
	METALS									
7429-90-5	Aluminum	23.4-346	13600-34300	100 (1) A(C)	100 (1)	ug/L	212 J	39.2 J	200 J	73 J
7440-36-0	Antimony	ND	ND	3	NS	ug/L	ND	ND	ND	ND
7440-38-2	Arsenic	ND	10.9-14.1	50	150 (2)	ug/L	ND	ND	ND	ND
7440-39-3	Barium	22.6-43.5	103-205	1000	NS	ug/L	21.1 J	18.7 J	19.5 J	20.9 J
7440-41-7	Beryllium	0.14-0.96	0.67-1.5	3 (G)	1100	ug/L	ND	ND	ND	0.09 J
7440-43-9	Cadmium	ND	ND	5	6.45 *	ug/L	ND	1 J	ND	ND
7440-70-2	Calcium	60500-64400	31600-64600	NS	NS	ug/L	60100	59500	48600	51100
7440-47-3	Chromium	ND-1.4	18.5-44.4	50	240 (2) *	ug/L	ND	ND	1.1 J	3.8 J
7440-48-4	Cobalt	ND	12.2-23.6	5 A(C)	5	ug/L	ND	ND	ND	ND
7440-50-8	Copper	ND-2.5	35.3-80.4	200	30.5 (2) *	ug/L	4.3 J	3.8 J	ND	12.6 J
7439-89-6	Iron	497-998	27700-50700	300 A(C)	300	ug/L	626	239	317	161
7439-92-1	Lead	ND	30.1-57.1	50	17.3 (2) *	ug/L	ND	ND	ND	2 J
7439-95-4	Magnesium	8810-11500	9040-17200	35000	NS	ug/L	16600	16700	10900	11500
7439-96-5	Manganese	105-691	934-1800	300 A(C)	NS	ug/L	117	42.3	101 J	21.8 J
7439-97-6	Mercury	0.065-0.093	ND-0.096	0.7	0.0007 H(FC)	ug/L	ND	ND	ND	ND
7440-02-0	Nickel	ND-6.2	23.7-47.7	100	175 (2) *	ug/L	ND	ND	ND	ND
7440-09-7	Potassium	796-2640	12900-24600	NS	NS	ug/L	3330 J	3610 J	3210 J	3350 J
7782-49-2	Selenium	ND	3.1-6.2	10	4.6 (2) *	ug/L	ND	ND	ND	ND
7440-22-4	Silver	ND-0.31	ND	50	0.1 (1)	ug/L	ND	ND	ND	ND
7440-23-5	Sodium	9710-15000	19700-88100	NS	NS	ug/L	47000	48000	27000	32800
7440-28-0	Thallium	ND	ND-4.3	0.5 (G)	8	ug/L	ND	ND	ND	ND
7440-62-2	Vanadium	ND-3.4	24.9-49.1	14 A(C)	14	ug/L	ND	ND	2.6 J	ND
7440-66-6	Zinc	3.9-22.1	119-390	2000	279 (2) *	ug/L	8.6 J	9.4 J	12.6 J	41.4
	OTHER									
Q356	Hardness, as CaCO3					mg/L	227	NA	156	NA

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(3) - Acid Soluble form
* - based on average hardness value
Average Hardness: 419 mg/L
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A(A) - Protection for Fish Survival
H(FC) - Protection for Human Consumption of Fish
ND - Not Detected.
J - Estimated Value
NA - Not Analyzed
Concentration above Class C Standards and Infalls (Background)

TABLE 3.29
SADVA AOC 5 SURFACE WATER RESULTS

Former Schenectady Army Depot AOC 5 - Voorheesville Depot Remedial Investigation Validated Surface Water Data		Black Creek Background Ranges	Municipal Storm Sewer Infall Ranges	NYSDEC Class A Surface Water Standards/Guidance Values	NYSDEC Class C Surface Water Standards/Guidance Values	SAMPLE ID: LAB ID: SOURCE: SDG: MATRIX: SAMPLED: VALIDATED:	Downstream of Site A0C5-SW9 COH180277-001 STL Pittsburgh SADVA15 Water 8/17/2000 9/28/2000	 A0C5-SW10 COH180277-002 STL Pittsburgh SADVA15 Water 8/17/2000 9/28/2000	 A0C5-SW11 COH180277-003 STL Pittsburgh SADVA15 Water 8/17/2000 9/28/2000
Casno	Compound	(Total)	(Total)	H(WS)	A(C)	Units	Total	Total	Total
	METALS								
7429-90-5	Aluminum	23.4-346	13600-34300	100 (1)A(C)	100 (1)	ug/L	46.1 J	80.4 J	248
7440-36-0	Antimony	ND	ND	3	NS	ug/L	ND	ND	ND
7440-38-2	Arsenic	ND	10.9-14.1	50	150 (2)	ug/L	ND	ND	ND
7440-39-3	Barium	22.6-43.5	103-205	1000	NS	ug/L	31.8 J	30.7 J	32.6 J
7440-41-7	Beryllium	0.14-0.96	0.67-1.5	3 (G)	1100	ug/L	0.13 J	ND	0.11 J
7440-43-9	Cadmium	ND	ND	5	6.45 *	ug/L	ND	ND	ND
7440-70-2	Calcium	60500-64400	31600-64600	NS	NS	ug/L	117000	92300	97200
7440-47-3	Chromium	ND-1.4	18.5-44.4	50	240 (2) *	ug/L	1.5 J	2.4 J	8.7 J
7440-48-4	Cobalt	ND	12.2-23.6	5 A(C)	5	ug/L	ND	ND	ND
7440-50-8	Copper	ND-2.5	35.3-80.4	200	30.5 (2) *	ug/L	6.4 J	2.4 J	8.5 J
7439-89-6	Iron	497-998	27700-50700	300 A(C)	300	ug/L	419	1450	502
7439-92-1	Lead	ND	30.1-57.1	50	17.3 (2) *	ug/L	ND	ND	2.4 J
7439-95-4	Magnesium	8810-11500	9040-17200	35000	NS	ug/L	25100	20600	21200
7439-96-5	Manganese	105-691	934-1800	300 A(C)	NS	ug/L	624	881	373
7439-97-6	Mercury	0.065-0.093	ND-0.096	0.7	0.0007 H(FC)	ug/L	ND	ND	ND
7440-02-0	Nickel	ND-6.2	23.7-47.7	100	175 (2) *	ug/L	ND	ND	ND
7440-09-7	Potassium	796-2640	12900-24600	NS	NS	ug/L	4230 J	3790 J	3810 J
7782-49-2	Selenium	ND	3.1-6.2	10	4.6 (2) *	ug/L	ND	ND	ND
7440-22-4	Silver	ND-0.31	ND	50	0.1 (1)	ug/L	ND	ND	ND
7440-23-5	Sodium	9710-15000	19700-88100	NS	NS	ug/L	41900	42200	33200
7440-28-0	Thallium	ND	ND-4.3	0.5 (G)	8	ug/L	ND	ND	ND
7440-62-2	Vanadium	ND-3.4	24.9-49.1	14 A(C)	14	ug/L	3.4 J	3.5 J	ND
7440-66-6	Zinc	3.9-22.1	119-390	2000	279 (2) *	ug/L	13.4 J	18.1 J	29
	OTHER								
Q356	Hardness, as CaCO3					mg/L	330	391	309

NS - no standard/guidance value
(1) - Ionic form
(2) - Dissolved form
(3) - Acid Soluble form
* - based on average hardness value
Average Hardness: 419 mg/L
A(C) - Protection fo Fish Propagation
A(A) - Protection for Fish Survival
H(FC) - Protection for Human Consumption of Fish
ND - Not Detected.
J - Estimated Value
NA - Not Analyzed
Concentration above Class C Standards and Infalls (Background)

TABLE 3.29
SADVA AOC 5 SURFACE WATER RESULTS

Former Schenectady Army Depot AOC 5 - Voorheesville Depot Remedial Investigation Validated Surface Water Data		Black Creek Background Ranges	Municipal Storm Sewer Infall Ranges	NYSDEC Class A Surface Water Standards/Guidance Values	NYSDEC Class C Surface Water Standards/Guidance Values	SAMPLE ID: LAB ID: SOURCE: SDG: MATRIX: SAMPLED: VALIDATED:	Downstream of Site A0C5-SW12 COH180277-004 STL Pittsburgh SADVA15 Water 8/17/2000 9/28/2000	Downstream of Site A0C5SW26 COG200284-001 STL Pittsburgh SADVA3 Water 7/19/2000 9/27/2000	
Casno	Compound	(Total)	(Total)	H(WS)	A(C)	Units	Total	Total	Dissolved
	METALS								
7429-90-5	Aluminum	23.4-346	13600-34300	100 (1)A(C)	100 (1)	ug/L	35.6 J	182 J	86.1 J
7440-36-0	Antimony	ND	ND	3	NS	ug/L	ND	ND	1.6 J
7440-38-2	Arsenic	ND	10.9-14.1	50	150 (2)	ug/L	ND	ND	ND
7440-39-3	Barium	22.6-43.5	103-205	1000	NS	ug/L	24.6 J	27.8 J	31.5 J
7440-41-7	Beryllium	0.14-0.96	0.67-1.5	3 (G)	1100	ug/L	0.08 J	ND	ND
7440-43-9	Cadmium	ND	ND	5	6.45 *	ug/L	ND	ND	0.52 J
7440-70-2	Calcium	60500-64400	31600-64600	NS	NS	ug/L	94300	89100	91000
7440-47-3	Chromium	ND-1.4	18.5-44.4	50	240 (2) *	ug/L	1.6 J	ND	8 J
7440-48-4	Cobalt	ND	12.2-23.6	5 A(C)	5	ug/L	ND	ND	ND
7440-50-8	Copper	ND-2.5	35.3-80.4	200	30.5 (2) *	ug/L	4 J	ND	8.6 J
7439-89-6	Iron	497-998	27700-50700	300 A(C)	300	ug/L	290	348	208
7439-92-1	Lead	ND	30.1-57.1	50	17.3 (2) *	ug/L	ND	ND	1.9 J
7439-95-4	Magnesium	8810-11500	9040-17200	35000	NS	ug/L	20600	18300	18700
7439-96-5	Manganese	105-691	934-1800	300 A(C)	NS	ug/L	608	125 J	68.8 J
7439-97-6	Mercury	0.065-0.093	ND-0.096	0.7	0.0007 H(FC)	ug/L	ND	ND	0.071 J
7440-02-0	Nickel	ND-6.2	23.7-47.7	100	175 (2) *	ug/L	ND	ND	ND
7440-09-7	Potassium	796-2640	12900-24600	NS	NS	ug/L	3740 J	3310 J	3410 J
7782-49-2	Selenium	ND	3.1-6.2	10	4.6 (2) *	ug/L	ND	2.4 J	ND
7440-22-4	Silver	ND-0.31	ND	50	0.1 (1)	ug/L	ND	ND	ND
7440-23-5	Sodium	9710-15000	19700-88100	NS	NS	ug/L	40300	20800	31000
7440-28-0	Thallium	ND	ND-4.3	0.5 (G)	8	ug/L	ND	ND	ND
7440-62-2	Vanadium	ND-3.4	24.9-49.1	14 A(C)	14	ug/L	ND	3.5 J	2.6 J
7440-66-6	Zinc	3.9-22.1	119-390	2000	279 (2) *	ug/L	13.3 J	11 J	21.7
	OTHER								
Q356	Hardness, as CaCO3					mg/L	309	288	NA

NS - no standard/guidance value
(1) - Ionic form
(2) - Dissolved form
(3) - Acid Soluble form
* - based on average hardness value
Average Hardness: 419 mg/L
A(C) - Protection fo Fish Propagation
A(A) - Protection for Fish Survival
H(FC) - Protection for Human Consumption of Fish
ND - Not Detected.
J - Estimated Value
NA - Not Analyzed
Concentration above Class C Standards and Infalls (Background)

TABLE 3.30
SADVA AOC 5 SEDIMENT RESULTS

DNSC Voorheesville Depot Remedial Investigation Sediment Data for Drainage Pathways					Onsite Perimeter Ditches				
				SAMPLE ID:	SD2	SD4	SD5	SD6	SD8
				LAB ID:	COH090139-002	COH090139-008	COH090139-007	COH090139-006	COG210262-001
				DEPTH:	0-0.2	0-0.2	0-0.02	0-0.2	0-0.2
				SOURCE:	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh
				SDG:	SADVA4	SADVA4	SADVA4	SADVA4	SADVA4
				MATRIX:	Soil	Soil	Soil	Soil	Soil
				SAMPLED:	8/8/2000	8/8/2000	8/8/2000	8/8/2000	7/20/2000
		Black Creek	NYSDEC	VALIDATED:	9/27/2000	9/27/2000	9/27/2000	9/27/2000	9/27/2000
CAS NO.	COMPOUND	Background Ranges	Sediment Criteria	UNITS:					
	METALS								
7429-90-5	Aluminum	8040-17900	NC	mg/kg	13500 J	16600 J	14800 J	13600 J	16000
7440-36-0	Antimony	ND-0.44	2 (L)	mg/kg	0.34 J	ND	0.3 J	0.24 J	ND
7440-38-2	Arsenic	3.1-5.1	6 (L)	mg/kg	7.8 J	9.5 J	12.9 J	21.2 J	11.5
7440-39-3	Barium	53.9-141	NC	mg/kg	246 J	80.8 J	39.8 J	98.7 J	74.5
7440-41-7	Beryllium	0.62-0.92	NC	mg/kg	0.72 J	0.98 J	0.99 J	0.78 J	0.86 J
7440-43-9	Cadmium	ND-0.75	0.6 (L)	mg/kg	0.27 J	0.34 J	0.33 J	0.68 J	0.5 J
7440-70-2	Calcium	2660-6700	NC	mg/kg	9130 J	4890 J	1390 J	4090 J	25100
7440-47-3	Chromium	11.2-22	26 (L)	mg/kg	17.2 J	23.3 J	22.2 J	21.1 J	27
7440-48-4	Cobalt	7.1-14	NC	mg/kg	14.6 J	18.4 J	23.5 J	17 J	22.3
7440-50-8	Copper	13-27.7	16 (L)	mg/kg	60.3 J	38.7 J	43.7 J	36.2 J	121
7439-89-6	Iron	18300-25400	20000 (L)	mg/kg	25600 J	39500 J	42700 J	31100 J	44500
7439-92-1	Lead	7.8-20.9	31 (L)	mg/kg	29.3 J	20 J	22.2 J	42.3 J	112
7439-95-4	Magnesium	3190-5190	NC	mg/kg	4970 J	6830 J	7020 J	5520 J	14000
7439-96-5	Manganese	328-647	460 (L)	mg/kg	590 J	1020 J	710 J	880 J	885
7439-97-6	Mercury	0.027-0.091	0.15 (L)	mg/kg	0.13 J	0.054 J	0.091 J	0.048 J	0.058
7440-02-0	Nickel	15.6-24.5	16 (L)	mg/kg	28.9 J	37.2 J	42.8 J	27.8 J	50.3
7440-09-7	Potassium	734-1530	NC	mg/kg	1290 J	1290 J	1060 J	1570 J	1840
7782-49-2	Selenium	ND-0.81	NC	mg/kg	ND	0.43 J	ND	ND	ND
7440-22-4	Silver	ND-0.5	1 (L)	mg/kg	2.3 J	0.21 J	0.17 J	0.21 J	0.14 J
7440-23-5	Sodium	71.6-790	NC	mg/kg	228 J	78.3 J	58.9 J	185 J	161 J
7440-28-0	Thallium	ND-1.5	NC	mg/kg	1 J	ND	ND	ND	ND
7440-62-2	Vanadium	14.6-28.4	NC	mg/kg	24.2 J	29.8 J	23.9 J	27.7 J	26.8
7440-66-6	Zinc	47.7-118	120 (L)	mg/kg	100 J	121 J	111 J	556 J	689

ND - Not Detected.
J - Estimated Value
NC - No Criteria
[shaded] Concentration is above both the NYSDEC Sediment Criteria and Black Creek Background Ranges

TABLE 3.30
SADVA AOC 5 SEDIMENT RESULTS

DNSC Voorheesville Depot
Remedial Investigation
Sediment Data for Drainage Pathways

					Onsite Ponds		Offsite Swale (Pre-excavation)	
				SAMPLE ID:	SD1	SD3	SD7	SD9
				LAB ID:	COH090139-001	COH090139-005	COG200286-002	COH180273-001
				DEPTH:	0-0.2	0-0.2	0-0.2	0-0.2
				SOURCE:	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh
				SDG:	SADVA4	SADVA4	SADVA4	SADVA12
				MATRIX:	Soil	Soil	Soil	Soil
				SAMPLED:	8/8/2000	8/8/2000	7/19/2000	8/17/2000
		Black Creek	NYSDEC	VALIDATED:	9/27/2000	9/27/2000	9/27/2000	9/28/2000
CAS NO.	COMPOUND	Background Ranges	Sediment Criteria	UNITS:				
	METALS							
7429-90-5	Aluminum	8040-17900	NC	mg/kg	6000 J	5670 J	13900 J	14100 J
7440-36-0	Antimony	ND-0.44	2 (L)	mg/kg	ND	ND	0.73 J	1.2 J
7440-38-2	Arsenic	3.1-5.1	6 (L)	mg/kg	3.2 J	3 J	27.2 J	11.4 J
7440-39-3	Barium	53.9-141	NC	mg/kg	31.9 J	28 J	101 J	59.8 J
7440-41-7	Beryllium	0.62-0.92	NC	mg/kg	0.32 J	0.29 J	0.98 J	0.92 J
7440-43-9	Cadmium	ND-0.75	0.6 (L)	mg/kg	0.12 J	0.1 J	0.83 J	1.2 J
7440-70-2	Calcium	2660-6700	NC	mg/kg	2340 J	1910 J	6440 J	35000 J
7440-47-3	Chromium	11.2-22	26 (L)	mg/kg	7 J	5.9 J	220 J	90.3 J
7440-48-4	Cobalt	7.1-14	NC	mg/kg	4.8 J	4.1 J	26.2 J	18.3 J
7440-50-8	Copper	13-27.7	16 (L)	mg/kg	15.4 J	11.2 J	157 J	158 J
7439-89-6	Iron	18300-25400	20000 (L)	mg/kg	12300 J	10900 J	46800 J	34400 J
7439-92-1	Lead	7.8-20.9	31 (L)	mg/kg	10.3 J	10.3 J	66.5 J	126 J
7439-95-4	Magnesium	3190-5190	NC	mg/kg	1800 J	1240 J	7640 J	19800 J
7439-96-5	Manganese	328-647	460 (L)	mg/kg	173 J	107 J	947 J	478 J
7439-97-6	Mercury	0.027-0.091	0.15 (L)	mg/kg	0.043 J	0.059 J	0.078 J	0.11 J
7440-02-0	Nickel	15.6-24.5	16 (L)	mg/kg	7.1 J	6.5 J	44.3 J	59.9 J
7440-09-7	Potassium	734-1530	NC	mg/kg	437 J	352 J	2250 J	2480 J
7782-49-2	Selenium	ND-0.81	NC	mg/kg	ND	ND	ND	2 J
7440-22-4	Silver	ND-0.5	1 (L)	mg/kg	0.5 J	0.2 J	ND	ND
7440-23-5	Sodium	71.6-790	NC	mg/kg	108 J	101 J	310 J	346 J
7440-28-0	Thallium	ND-1.5	NC	mg/kg	ND	ND	ND	ND
7440-62-2	Vanadium	14.6-28.4	NC	mg/kg	12.7 J	12.3 J	34.7 J	33.5 J
7440-66-6	Zinc	47.7-118	120 (L)	mg/kg	33.4 J	28.6 J	791 J	516 J

ND - Not Detected.
J - Estimated Value
NC - No Criteria
[shaded box] Concentration is above both the NYSDEC Sediment Criteria and Black Creek Background Ranges

TABLE 3.30
SADVA AOC 5 SEDIMENT RESULTS

DNSC Voorheesville Depot Remedial Investigation Sediment Data for Drainage Pathways					Offsite Swale (Pre-excavation)			
				SAMPLE ID:	SD10	SD11	SD12	SD26
				LAB ID:	COH180273-002	COH180273-003	COH180273-004	COG200286-001
				DEPTH:	0-0.2	0-0.2	0-0.2	0-0.2
				SOURCE:	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh
				SDG:	SADVA12	SADVA12	SADVA12	SADVA4
				MATRIX:	Soil	Soil	Soil	Soil
				SAMPLED:	8/17/2000	8/17/2000	8/17/2000	7/19/2000
		Black Creek	NYSDEC	VALIDATED:	9/28/2000	9/28/2000	9/28/2000	9/27/2000
CAS NO.	COMPOUND	Background Ranges	Sediment Criteria	UNITS:				
	METALS							
7429-90-5	Aluminum	8040-17900	NC	mg/kg	11000	11400	10000	14800
7440-36-0	Antimony	ND-0.44	2 (L)	mg/kg	0.82 J	0.57 J	ND	ND
7440-38-2	Arsenic	3.1-5.1	6 (L)	mg/kg	9.9	8.2	7.3	6.2
7440-39-3	Barium	53.9-141	NC	mg/kg	70.6 J	62.3 J	47.4 J	84
7440-41-7	Beryllium	0.62-0.92	NC	mg/kg	0.68 J	0.65	0.55 J	0.9 J
7440-43-9	Cadmium	ND-0.75	0.6 (L)	mg/kg	0.95	0.55 J	0.47 J	0.34 J
7440-70-2	Calcium	2660-6700	NC	mg/kg	14600	3530	52200	4760
7440-47-3	Chromium	11.2-22	26 (L)	mg/kg	42.7 J	34.1 J	18.9 J	22.3
7440-48-4	Cobalt	7.1-14	NC	mg/kg	15.5	15.5	12.1	15.8
7440-50-8	Copper	13-27.7	16 (L)	mg/kg	90.2	42.1	35	43.4
7439-89-6	Iron	18300-25400	20000 (L)	mg/kg	26500	30200	25700	31800
7439-92-1	Lead	7.8-20.9	31 (L)	mg/kg	141 J	90 J	34.8 J	34.4
7439-95-4	Magnesium	3190-5190	NC	mg/kg	10300 J	6750 J	7300 J	5570
7439-96-5	Manganese	328-647	460 (L)	mg/kg	1120 J	641 J	586 J	538
7439-97-6	Mercury	0.027-0.091	0.15 (L)	mg/kg	0.051 J	0.05	0.04 J	0.061
7440-02-0	Nickel	15.6-24.5	16 (L)	mg/kg	29.6	31.5	26.2	32.5
7440-09-7	Potassium	734-1530	NC	mg/kg	1650	1240	1100	1430
7782-49-2	Selenium	ND-0.81	NC	mg/kg	1.1	0.82	0.41 J	ND
7440-22-4	Silver	ND-0.5	1 (L)	mg/kg	0.43 J	0.19 J	ND	ND
7440-23-5	Sodium	71.6-790	NC	mg/kg	130 J	122 J	116 J	135 J
7440-28-0	Thallium	ND-1.5	NC	mg/kg	ND	ND	ND	ND
7440-62-2	Vanadium	14.6-28.4	NC	mg/kg	23.7	20.3	18.2	25.3
7440-66-6	Zinc	47.7-118	120 (L)	mg/kg	409 J	147 J	108 J	139

ND - Not Detected.
J - Estimated Value
NC - No Criteria
Concentration is above both the NYSDEC Sediment Criteria and Black Creek Background Ranges

TABLE 3.30
SADVA AOC 5 SEDIMENT RESULTS

DNSC Voorheesville Depot Remedial Investigation Sediment Data for Drainage Pathways					Offsite Swale (Post-excavation)			
				SAMPLE ID:	PSED001	PSED002	PSED003	PSED004
				LAB ID:	C5J200220001	C5J200220002	C5J200220003	C5J200220004
				DEPTH:	0-6"	0-6"	0-6"	0-6"
				SOURCE:	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh
				SDG:	C5J200220	C5J200220	C5J200220	C5J200220
				MATRIX:	SOIL	SOIL	SOIL	SOIL
				SAMPLED:	10/19/2005	10/19/2005	10/19/2005	10/19/2005
		Black Creek	NYSDEC	VALIDATED:	12/19/2005	12/19/2005	12/19/2005	12/19/2005
CAS NO.	COMPOUND	Background Ranges	Sediment Criteria	UNITS:				
	METALS							
7429-90-5	Aluminum	8040-17900	NC	mg/kg	11200	12700	15000	13700
7440-36-0	Antimony	ND-0.44	2 (L)	mg/kg	ND	ND	ND	ND
7440-38-2	Arsenic	3.1-5.1	6 (L)	mg/kg	10.6	10.3	8.6	13
7440-39-3	Barium	53.9-141	NC	mg/kg	65.5	55.3	57.5	72.9
7440-41-7	Beryllium	0.62-0.92	NC	mg/kg	0.81	1	1.1	1
7440-43-9	Cadmium	ND-0.75	0.6 (L)	mg/kg	0.37 J	0.15 J	0.39 J	0.18 J
7440-70-2	Calcium	2660-6700	NC	mg/kg	31800	2860	4840	3260
7440-47-3	Chromium	11.2-22	26 (L)	mg/kg	44.2	26.7	28.4	26.8
7440-48-4	Cobalt	7.1-14	NC	mg/kg	12.7	13	14	15.7
7440-50-8	Copper	13-27.7	16 (L)	mg/kg	66.9 J	54.6 J	118 J	50.9 J
7439-89-6	Iron	18300-25400	20000 (L)	mg/kg	28200	34100	32100	36800
7439-92-1	Lead	7.8-20.9	31 (L)	mg/kg	62.6 J	35.1 J	58.9 J	20.7 J
7439-95-4	Magnesium	3190-5190	NC	mg/kg	20800 J	6090 J	9520 J	8350 J
7439-96-5	Manganese	328-647	460 (L)	mg/kg	494	379	253	378
7439-97-6	Mercury	0.027-0.091	0.15 (L)	mg/kg	0.049	0.053	0.08	0.073
7440-02-0	Nickel	15.6-24.5	16 (L)	mg/kg	25.6	30	39.1	36.2
7440-09-7	Potassium	734-1530	NC	mg/kg	1730 J	1260 J	2390 J	1850 J
7782-49-2	Selenium	ND-0.81	NC	mg/kg	0.37 U	0.35 U	0.48 J	0.42 U
7440-22-4	Silver	ND-0.5	1 (L)	mg/kg	0.17 J	0.14 J	0.25 J	0.17 J
7440-23-5	Sodium	71.6-790	NC	mg/kg	119 J	101 J	147 J	150 J
7440-28-0	Thallium	ND-1.5	NC	mg/kg	0.64 U	0.6 U	0.71 U	0.73 U
7440-62-2	Vanadium	14.6-28.4	NC	mg/kg	24.3	25	29.5	24.4
7440-66-6	Zinc	47.7-118	120 (L)	mg/kg	176 J	131 J	176 J	99.7 J

ND - Not Detected.
J - Estimated Value
NC - No Criteria
[shaded] Concentration is above both the NYSDEC Sediment Criteria and Black Creek Background Ranges

TABLE 3.31
SADVA AOC 6 SOIL SAMPLE RESULTS

Former Schenectady Army Depot Remedial Investigation AOC6 Test Pit Soil Data Detected Compound Summary		NYSDEC	SAMPLE ID: LAB ID: DEPTH: SOURCE: SDG: MATRIX: SAMPLED: VALIDATED:	AOC6-TP01A C0H170209001 1' STL Pittsburgh SADVA11 SOIL 8/15/2000 11/5/2000	AOC6-TP02A COH170215001 1' STL Pittsburgh SADVA13 SOIL 8/15/2000 11/7/2000	Dup of 02A AOC6-TP12A COH170215002 1' STL Pittsburgh SADVA13 SOIL 8/15/2000 11/7/2000	AOC6-TP03A COH170215003 1' STL Pittsburgh SADVA13 SOIL 8/15/2000 11/7/2000	AOC6-TP04A COH170215004 1' STL Pittsburgh SADVA13 SOIL 8/15/2000 11/7/2000	AOC6-TP05B COH170215005 2' STL Pittsburgh SADVA13 SOIL 8/15/2000 11/7/2000	AOC6-TP06A COH170215006 1' STL Pittsburgh SADVA13 SOIL 8/15/2000 11/7/2000
CAS NO.	COMPOUND	Criteria	UNITS:							
	VOLATILES									
67-64-1	Acetone	407	ug/kg	ND	ND	ND	4 J	ND	ND	ND
	Total VOCs	10000		ND	ND	ND	4	ND	ND	ND
	SEMIVOLATILES									
	CPAHs									
56-55-3	Benzo(a)anthracene	224	ug/kg	15 J	20 J	33 J	ND	34 J	ND	15 J
50-32-8	Benzo(a)pyrene	61	ug/kg	14 J	24 J	44 J	ND	43 J	ND	21 J
205-99-2	Benzo(b)fluoranthene	4070	ug/kg	72 J	45 J	73 J	10 J	39 J	ND	33 J
207-08-9	Benzo(k)fluoranthene	4070	ug/kg	ND	36 J	65 J	ND	48 J	ND	30 J
218-01-9	Chrysene	1480	ug/kg	230 J	41 J	68 J	ND	49 J	ND	31 J
53-70-3	Dibenz(a,h)anthracene	14	ug/kg	ND	ND	13 J	ND	ND	ND	ND
193-39-5	Indeno(1,2,3-cd)pyrene	11840	ug/kg	11 J	28 J	52 J	ND	30 J	ND	18 J
	Total CPAHs	**10000**	**ug/kg**	**342**	**194**	**348**	**10**	**243**	**ND**	**148**
191-24-2	Benzo(ghi)perylene	50000	ug/kg	14 J	29 J	56 J	ND	31 J	ND	20 J
206-44-0	Fluoranthene	50000	ug/kg	48 J	37 J	52 J	ND	39 J	ND	22 J
91-20-3	Naphthalene	48100	ug/kg	23 J	ND	ND	ND	ND	ND	ND
85-01-8	Phenanthrene	50000	ug/kg	59 J	13 J	21 J	ND	ND	ND	ND
129-00-0	Pyrene	50000	ug/kg	50 J	30 J	55 J	ND	40 J	ND	22 J
	Total NPAHs	**500000**	**ug/kg**	**194**	**109**	**184**	**ND**	**110**	**ND**	**64**
	Total SVOCs		**ug/kg**	**536**	**303**	**532**	**10**	**353**	**ND**	**212**
	PESTICIDES									
72-55-9	4,4'-DDE	2100	ug/kg	0.22 JN	0.91 J	0.27 J	ND	2.7	ND	ND
72-54-8	4,4'-DDD	2900	ug/kg	ND	ND	ND	ND	1.2 J	ND	ND
50-29-3	4,4'-DDT	2100	ug/kg	ND	1 J	ND	ND	2.2	ND	ND
5103-71-9	alpha-Chlordane	540	ug/kg	ND	ND	ND	ND	0.43 J	ND	ND
	Total Pesticides	10000	ug/kg	0.22	1.91	0.27	ND	6.53	ND	ND
	PCBs									
	None Detected	1000/10000 #	ug/kg	ND	ND	ND	ND	ND	ND	ND

ND - Not Detected
J - Estimate Value
R - Rejected during data validation.
- Different criteria depending upon depth (1000 ug/kg for surface soils and 10,000 ug/kg for subsurface soils).
Concentration above Background Ranges and NYSDEC Criteria
NS - No Standard
N - Presumptive evidence; identification of compound is not definitive.

TABLE 3.31
SADVA AOC 6 SOIL SAMPLE RESULTS

Former Schenectady Army Depot Remedial Investigation AOC6 Test Pit Soil Data Detected Compound Summary		NYSDEC	SAMPLE ID:	AOC6-TP01A	AOC6-TP02A	Dup of 02A AOC6-TP12A	AOC6-TP03A	AOC6-TP04A	AOC6-TP05B	AOC6-TP06A
			LAB ID:	C0H170209001	COH170215001	COH170215002	COH170215003	COH170215004	COH170215005	COH170215006
			DEPTH:	1'	1'	1'	1'	1'	2'	1'
			SOURCE:	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh
			SDG:	SADVA11	SADVA13	SADVA13	SADVA13	SADVA13	SADVA13	SADVA13
			MATRIX:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
			SAMPLED:	8/15/2000	8/15/2000	8/15/2000	8/15/2000	8/15/2000	8/15/2000	8/15/2000
			VALIDATED:	11/5/2000	11/7/2000	11/7/2000	11/7/2000	11/7/2000	11/7/2000	11/7/2000
CAS NO.	COMPOUND	Criteria	UNITS:							
	METALS									
7429-90-5	Aluminum	12800	mg/kg	7280	7280	14200	11200	10700	11500	9940
7440-36-0	Antimony	0.59	mg/kg	0.96 J	0.96 J	0.16 J	ND	ND	ND	ND
7440-38-2	Arsenic	16.4	mg/kg	8.3	8.3	8.7	7.3	5.6	4.8	6.1
7440-39-3	Barium	300	mg/kg	50.3	50.3	59.5	49.9	52.3	63.4	42
7440-41-7	Beryllium	0.67	mg/kg	0.95	0.95	0.76	0.68	0.55 J	0.72	0.58 J
7440-43-9	Cadmium	1	mg/kg	0.18 J	0.18 J	0.22 J	0.12 J	0.37 J	0.14 J	0.19 J
7440-70-2	Calcium	46600	mg/kg	11900	11900	8910	3600	12000	1860	27000
7440-47-3	Chromium	17.5	mg/kg	15.7	15.7	19.3	16.1	16.4	15.7	14.1
7440-48-4	Cobalt	30	mg/kg	10.5	10.5	17.6	15.2	11.5	15.4	10.4
7440-50-8	Copper	26.9	mg/kg	26.6 J	26.6 J	36.1	28.2	33.6	22.6	21.3
7439-89-6	Iron	25700	mg/kg	21200	21200	35000	28400	25500	28600	24600
7439-92-1	Lead	60.8 (29.3 Average)	mg/kg	26.6	26.6	17.3	19.3	23.3	11.5	14.4
7439-95-4	Magnesium	13100	mg/kg	4140	4140	7560	5170	5560	5350	10700
7439-96-5	Manganese	875	mg/kg	332	332	525	453	494	210	383
7439-97-6	Mercury	0.1	mg/kg	0.19 J	0.19 J	0.062	0.04	0.14	0.023 J	0.025 J
7440-02-0	Nickel	24.8	mg/kg	23.6	23.6	36	25.2	23.2	29.6	19.7
7440-09-7	Potassium	1660	mg/kg	912	912	1400 J	900 J	884 J	865 J	872 J
7782-49-2	Selenium	2	mg/kg	1.5	1.5	ND	0.36 J	0.27 J	ND	ND
7440-22-4	Silver	0.17	mg/kg	0.11 U	ND	0.17 J	ND	0.39 J	ND	ND
7440-23-5	Sodium	619	mg/kg	79.1 J	79.1 J	76.2 J	83.3 J	93.8 J	78.1 J	86.1 J
7440-28-0	Thallium	0.67	mg/kg	0.62 J	0.62 J	0.87 J	ND	ND	ND	ND
7440-62-2	Vanadium	150	mg/kg	21 J	21 J	23.4	20.8	18.7	23.3	19.1
7440-66-6	Zinc	134	mg/kg	79.4	79.4	96.9 J	63 J	89.3 J	58.8 J	59.1 J

ND - Not Detected
J - Estimate Value
SB - Site Background
Concentration above Background Ranges and NYSDEC Criteria

TABLE 3.32a
SADVA AOC 7 SOIL SAMPLE RESULTS (2000)

Former Schenectady Army Depot Remedial Investigation AOC 7 - Triangular Disposal Area Detected Compound Summary			SAMPLE ID:	AOC7-SB01A	AOC7-SB01B	AOC7-SB01C	AOC7-SB02A	AOC7-SB02B	AOC7-SB02C	AOC7-SB03A
			LAB ID:	C0G240112007	C0H160189007	C0H160189008	C0G240112008	C0H160189005	C0H160189006	C0G240112009
			DEPTH:	0.2'	3'	5'	0.2'	3'	5'	0.2'
			SOURCE:	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh
			SDG:	SADVA6	SADVA11	SADVA11	SADVA6	SADVA11	SADVA11	SADVA6
			MATRIX:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
			SAMPLED:	7/21/2000	8/15/2000	8/15/2000	7/21/2000	8/15/2000	8/15/2000	7/21/2000
		NYSDEC	VALIDATED:	10/13/2000	11/5/2000	11/5/2000	10/13/2000	11/5/2000	11/5/2000	10/13/2000
CAS NO.	COMPOUND	Soil Criteria	UNITS:							
	VOLATILES									
67-64-1	Acetone	407	ug/kg	ND	ND	30 J	ND	ND	ND	ND
74-83-9	Bromomethane	NS	ug/kg	R	R	R	R	R	R	R
75-00-3	Chloroethane	6845	ug/kg	ND	R	R	ND	R	R	ND
108-88-3	Toluene	5550	ug/kg	ND	ND	ND	ND	1.6 J	3.1 J	ND
	Total VOCs	**10000**	**ug/kg**	**ND**	**ND**	**30**	**ND**	**1.6**	**3.1**	**ND**
	SEMIVOLATILES									
117-81-7	bis(2-Ethylhexyl) phthalate	50000	ug/kg	ND	ND	ND	ND	ND	ND	ND
84-74-2	Di-n-butyl phthalate	29970	ug/kg	ND	ND	ND	ND	ND	ND	100 J
	CPAHs									
56-55-3	Benzo(a)anthracene	224	ug/kg	16 J	ND	ND	13 J	ND	ND	10 J
50-32-8	Benzo(a)pyrene	61	ug/kg	15 J	ND	ND	13 J	ND	ND	9.7 J
205-99-2	Benzo(b)fluoranthene	4070	ug/kg	18 J	ND	ND	25 J	ND	ND	12 J
207-08-9	Benzo(k)fluoranthene	4070	ug/kg	24 J	ND	ND	25 J	ND	ND	15 J
218-01-9	Chrysene	1480	ug/kg	26 J	ND	ND	29 J	ND	ND	14 J
193-39-5	Indeno(1,2,3-cd)pyrene	11840	ug/kg	11 J	ND	ND	11 J	ND	ND	ND
	Total CPAHs	**10000**	**ug/kg**	**110**	**ND**	**ND**	**116**	**ND**	**ND**	**60.7**
	NPAHs									
191-24-2	Benzo(ghi)perylene	50000	ug/kg	10 J	ND	ND	12 J	ND	ND	ND
206-44-0	Fluoranthene	50000	ug/kg	38 J	ND	ND	41 J	ND	ND	23 J
85-01-8	Phenanthrene	50000	ug/kg	16 J	ND	ND	19 J	ND	ND	ND
129-00-0	Pyrene	50000	ug/kg	28 J	ND	ND	29 J	ND	ND	17 J
	Total NPAHs	**500000**	**ug/kg**	**92**	**ND**	**ND**	**101**	**ND**	**ND**	**40**
	Total PAHs		**ug/kg**	**202**	**ND**	**ND**	**217**	**ND**	**ND**	**100.7**
	Total SVOCs		**ug/kg**	**202**	**ND**	**ND**	**217**	**ND**	**ND**	**200.7**
	PESTICIDES									
72-55-9	4,4'-DDE	2100	ug/kg	0.077 JN	ND	ND	0.29 JN	ND	ND	2.1 J
72-20-8	Endrin	339	ug/kg	ND	ND	ND	0.29 JN	ND	ND	ND
7421-93-4	Endrin aldehyde	NS	ug/kg	ND	ND	ND	ND	ND	ND	2.9 J
72-54-8	4,4'-DDD	2900	ug/kg	ND	ND	ND	ND	ND	ND	2.7 JN
50-29-3	4,4'-DDT	2100	ug/kg	ND	ND	ND	0.45 J	ND	ND	6.9 JN
	Total Pesticides	**10000**	**ug/kg**	**0.077**	**ND**	**ND**	**1.03**	**ND**	**ND**	**14.6**
	PCBs									
11096-82-5	Aroclor 1260	1000/10000	ug/kg	ND	ND	ND	ND	ND	ND	160
	Total PCBs		**ug/kg**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**160**

J - Estimated Value
R - Rejected during data validation
ND - Not Detected
N - Presumptive Evidence; compound identification is not definitive
SB - Site Background
NS - No Standard
Concentration above NYSDEC Soil Criteria.

TABLE 3.32a
SADVA AOC 7 SOIL SAMPLE RESULTS (2000)

Former Schenectady Army Depot Remedial Investigation AOC 7 - Triangular Disposal Area Detected Compound Summary		NYSDEC	SAMPLE ID:	AOC7-SB01A	AOC7-SB01B	AOC7-SB01C	AOC7-SB02A	AOC7-SB02B	AOC7-SB02C	AOC7-SB03A
			LAB ID:	C0G240112007	C0H160189007	C0H160189008	C0G240112008	C0H160189005	C0H160189006	C0G240112009
			DEPTH:	0.2'	3'	5'	0.2'	3'	5'	0.2'
			SOURCE:	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh
			SDG:	SADVA6	SADVA11	SADVA11	SADVA6	SADVA11	SADVA11	SADVA6
			MATRIX:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
			SAMPLED:	7/21/2000	8/15/2000	8/15/2000	7/21/2000	8/15/2000	8/15/2000	7/21/2000
			VALIDATED:	10/13/2000	11/5/2000	11/5/2000	10/13/2000	11/5/2000	11/5/2000	10/13/2000
CAS NO.	COMPOUND	Soil Criteria	UNITS:							
	METALS									
7429-90-5	Aluminum	12800	mg/kg	10600	11000	15100	10400	10000	13900	9850
7440-36-0	Antimony	0.59	mg/kg	0.19 J	0.17 J	ND	0.29 J	0.32 J	ND	0.27 J
7440-38-2	Arsenic	16.4	mg/kg	5.9	4.9	5.4	5.7	6.9	8.1	5.4
7440-39-3	Barium	300	mg/kg	40	31	84.3	39.4	50.9	98.7	41
7440-41-7	Beryllium	0.67	mg/kg	0.52 J	0.45 J	0.95	0.54 J	0.58	1.2	0.49 J
7440-43-9	Cadmium	1	mg/kg	0.53 J	0.092 J	ND	0.44 J	0.06 J	ND	0.53 J
7440-70-2	Calcium	46600	mg/kg	7350	17500	1360	3890	23800	2650	13500
7440-47-3	Chromium	17.5	mg/kg	16.9 J	15.8	16.7	15.7 J	15.6	15.1	19.4 J
7440-48-4	Cobalt	30	mg/kg	11.8 J	11.2	13.6	11.8 J	12.7	15	11.2 J
7440-50-8	Copper	26.9	mg/kg	29.2	23.5 J	19.9 J	24.9	29.8 J	27.2 J	30.9
7439-89-6	Iron	25700	mg/kg	26700 J	26800	38400	25400 J	26300	42600	25100 J
7439-92-1	Lead	60.8 (29.3 Average)	mg/kg	19.3	10.6	11.1	15.2	11.6	8.7	35.4
7439-95-4	Magnesium	13100	mg/kg	6340	7090	3710	4820	7050	3310	8550
7439-96-5	Manganese	875	mg/kg	649	647	205	549	523	183	517
7439-97-6	Mercury	0.1	mg/kg	0.044	0.019 J	0.028 J	0.047	0.025 J	0.035 J	0.04
7440-02-0	Nickel	24.8	mg/kg	26.2 J	21.6	20.7	22.9 J	24.1	24.6	24.8 J
7440-09-7	Potassium	1660	mg/kg	1370	677	497 J	1140	1130	533 J	1270
7440-22-4	Silver	0.17	mg/kg	0.12 J	ND	ND	0.15 J	ND	ND	0.16 J
7440-23-5	Sodium	619	mg/kg	50.4 J	50.3 J	73.3 J	46.3 J	64.4 J	89.4 J	57.6 J
7440-28-0	Thallium	0.67	mg/kg	ND	ND	ND	ND	ND	0.83 J	ND
7440-62-2	Vanadium	150	mg/kg	20.9	16.2 J	27.5 J	22.9	18.8 J	35.7 J	18.6
7440-66-6	Zinc	134	mg/kg	88.9	71.3	48.2	79.8	68.4	59.1	84.5

J - Estimated Value
R - Rejected during data validation
ND - Not Detected
N - Presumptive Evidence; compound identification is not definitive
SB - Site Background
Concentration above NYSDEC Soil Criteria

TABLE 3.32a
SADVA AOC 7 SOIL SAMPLE RESULTS (2000)

Former Schenectady Army Depot Remedial Investigation AOC 7 - Triangular Disposal Area Detected Compound Summary			SAMPLE ID:	AOC7-SB03B	AOC7-SB03C	AOC7-SB04A	AOC7-SB04B	AOC7-SB04C
			LAB ID:	C0H160189003	C0H160189004	C0G240112010	C0H160189001	C0H160189002
			DEPTH:	3'	5'	0.2'	3'	5'
			SOURCE:	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh
			SDG:	SADVA11	SADVA11	SADVA6	SADVA11	SADVA11
			MATRIX:	SOIL	SOIL	SOIL	SOIL	SOIL
			SAMPLED:	8/15/2000	8/15/2000	7/21/2000	8/15/2000	8/15/2000
		NYSDEC	VALIDATED:	11/5/2000	11/5/2000	10/13/2000	11/5/2000	11/5/2000
CAS NO.	COMPOUND	Soil Criteria	UNITS:					
	VOLATILES							
67-64-1	Acetone	407	ug/kg	ND	4 J	ND	ND	ND
74-83-9	Bromomethane	NS	ug/kg	R	R	R	R	R
75-00-3	Chloroethane	6845	ug/kg	R	R	ND	R	R
108-88-3	Toluene	5550	ug/kg	ND	ND	ND	ND	ND
	Total VOCs	**10000**	**ug/kg**	**ND**	**4**	**ND**	**ND**	**ND**
	SEMIVOLATILES							
117-81-7	bis(2-Ethylhexyl) phthalate	50000	ug/kg	ND	ND	ND	58 J	ND
84-74-2	Di-n-butyl phthalate	29970	ug/kg	ND	ND	ND	ND	ND
	CPAHs							
56-55-3	Benzo(a)anthracene	224	ug/kg	ND	ND	39 J	29 J	ND
50-32-8	Benzo(a)pyrene	61	ug/kg	ND	ND	43 J	ND	ND
205-99-2	Benzo(b)fluoranthene	4070	ug/kg	ND	ND	56 J	ND	ND
207-08-9	Benzo(k)fluoranthene	4070	ug/kg	ND	ND	65 J	ND	ND
218-01-9	Chrysene	1480	ug/kg	ND	ND	67 J	53 J	ND
193-39-5	Indeno(1,2,3-cd)pyrene	11840	ug/kg	ND	ND	29 J	ND	ND
	Total CPAHs	**10000**	**ug/kg**	**ND**	**ND**	**299**	**82**	**ND**
	NPAHs							
191-24-2	Benzo(ghi)perylene	50000	ug/kg	ND	ND	27 J	ND	ND
206-44-0	Fluoranthene	50000	ug/kg	ND	ND	89 J	170 J	ND
85-01-8	Phenanthrene	50000	ug/kg	ND	ND	44 J	30 J	ND
129-00-0	Pyrene	50000	ug/kg	ND	ND	64 J	100 J	ND
	Total NPAHs	**500000**	**ug/kg**	**ND**	**ND**	**224**	**300**	**ND**
	Total PAHs		**ug/kg**	**ND**	**ND**	**523**	**382**	**ND**
	Total SVOCs		**ug/kg**	**ND**	**ND**	**523**	**440**	**ND**
	PESTICIDES							
72-55-9	4,4'-DDE	2100	ug/kg	ND	ND	0.65 JN	0.069 JN	ND
72-20-8	Endrin	339	ug/kg	ND	ND	ND	ND	ND
7421-93-4	Endrin aldehyde	NS	ug/kg	ND	ND	ND	ND	ND
72-54-8	4,4'-DDD	2900	ug/kg	ND	ND	ND	ND	ND
50-29-3	4,4'-DDT	2100	ug/kg	ND	ND	0.9 JN	ND	ND
	Total Pesticides	**10000**	**ug/kg**	**ND**	**ND**	**1.55**	**0.069**	**ND**
	PCBs							
11096-82-5	Aroclor 1260	1000/10000	ug/kg	ND	ND	ND	ND	ND
	Total PCBs		**ug/kg**	**ND**	**ND**	**ND**	**ND**	**ND**

J - Estimated Value
R - Rejected during data validation
ND - Not Detected
N - Presumptive Evidence; compound identification is not definitive
SB - Site Background
NS - No Standard
Concentration above NYSDEC Soil Criteria.

TABLE 3.32a
SADVA AOC 7 SOIL SAMPLE RESULTS (2000)

Former Schenectady Army Depot Remedial Investigation AOC 7 - Triangular Disposal Area Detected Compound Summary			SAMPLE ID:	AOC7-SB03B	AOC7-SB03C	AOC7-SB04A	AOC7-SB04B	AOC7-SB04C
			LAB ID:	C0H160189003	C0H160189004	C0G240112010	C0H160189001	C0H160189002
			DEPTH:	3'	5'	0.2'	3'	5'
			SOURCE:	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh
			SDG:	SADVA11	SADVA11	SADVA6	SADVA11	SADVA11
			MATRIX:	SOIL	SOIL	SOIL	SOIL	SOIL
			SAMPLED:	8/15/2000	8/15/2000	7/21/2000	8/15/2000	8/15/2000
		NYSDEC	VALIDATED:	11/5/2000	11/5/2000	10/13/2000	11/5/2000	11/5/2000
CAS NO.	COMPOUND	Soil Criteria	UNITS:					
	METALS							
7429-90-5	Aluminum	12800	mg/kg	10300	11300	12100	10200	14800
7440-36-0	Antimony	0.59	mg/kg	ND	0.2 J	0.36 J	ND	ND
7440-38-2	Arsenic	16.4	mg/kg	4.7	8.6	6.7	6.5	4.3
7440-39-3	Barium	300	mg/kg	28.7	64.4	47.4	33	97.2
7440-41-7	Beryllium	0.67	mg/kg	0.41 J	0.91	0.59 J	0.5 J	1
7440-43-9	Cadmium	1	mg/kg	0.095 J	ND	0.65	0.17 J	ND
7440-70-2	Calcium	46600	mg/kg	31500	3370	5580	21300	2790
7440-47-3	Chromium	17.5	mg/kg	13.9	13.6	19.3 J	15	15.4
7440-48-4	Cobalt	30	mg/kg	11.2	13.5	13.3 J	12.4	8.8
7440-50-8	Copper	26.9	mg/kg	21.6 J	27.1 J	32.7	28.8 J	17.3 J
7439-89-6	Iron	25700	mg/kg	25000	34200	30000 J	27600	28700
7439-92-1	Lead	60.8 (29.3 Average)	mg/kg	11	7.5	25.9	11.2	7.7
7439-95-4	Magnesium	13100	mg/kg	13300	3570	6760	8070	3130
7439-96-5	Manganese	875	mg/kg	614	246	615	599	174
7439-97-6	Mercury	0.1	mg/kg	0.016 J	0.039 J	0.064	0.023 J	0.034 J
7440-02-0	Nickel	24.8	mg/kg	21.4	22.9	27.3 J	24.2	16.6
7440-09-7	Potassium	1660	mg/kg	673	594 J	1600	880	453 J
7440-22-4	Silver	0.17	mg/kg	ND	ND	0.12 J	ND	ND
7440-23-5	Sodium	619	mg/kg	67.9 J	119 J	59.2 J	64.2 J	128 J
7440-28-0	Thallium	0.67	mg/kg	0.95 J	ND	0.55 J	0.93 J	ND
7440-62-2	Vanadium	150	mg/kg	14.7 J	32.2 J	25.2	18.4 J	31.7 J
7440-66-6	Zinc	134	mg/kg	73.1	52.6	114	93.8	40.8

J - Estimated Value
R - Rejected during data validation
ND - Not Detected
N - Presumptive Evidence; compound identification is not definitive
SB - Site Background
Concentration above NYSDEC Soil Criteria

TABLE 3.32b
SADVA AOC 7 SOIL RESULTS (2004)

USACE-Schenectady Depot Validated Soil Analytical Data AOC 7 Detected Compound Summary		NYSDEC Soil Criteria				AOC 4 Location				Dup of GW03-0-0.5
			Sample ID:	GW01-0-0.5	GW01-10-12	GW02-0-0.5	GW02-38-40	GW03-0-0.5	GW03-10-12	GW103-0-0.5
			Lab Sample Id:	C4F160339001	C4F160339002	C4F160339007	C4F170375001	C4F160339004	C4F160339006	C4F160339005
			Depth:	0-0.5'	10-12'	0-0.5'	38-40'	0-0.5'	10-12'	0-0.5'
			Source:	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh
			SDG:	SADVA27	SADVA27	SADVA27	SADVA27	SADVA27	SADVA27	SADVA27
			Matrix:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
			Sampled:	6/14/2004	6/14/2004	6/15/2004	6/15/2004	6/15/2004	6/15/2004	6/15/2004
			Validated:	8/20/2004	8/20/2004	8/20/2004	8/20/2004	8/20/2004	8/20/2004	8/20/2004
CAS NO.	COMPOUND		UNITS:							
	SEMIVOLATILES									
86-74-8	Carbazole	NS	ug/kg	ND	ND	310 J	ND	ND	ND	ND
84-74-2	Di-n-butyl phthalate	29970	ug/kg	46 J	ND	37 J	ND	39 J	ND	42 J
	CPAHs									
56-55-3	Benzo(a)anthracene	224	ug/kg	54 J	ND	2400	ND	ND	ND	ND
50-32-8	Benzo(a)pyrene	61	ug/kg	46 J	ND	2400	ND	ND	ND	ND
205-99-2	Benzo(b)fluoranthene	4070	ug/kg	82 J	ND	2700	ND	51 J	ND	55 J
207-08-9	Benzo(k)fluoranthene	4070	ug/kg	ND	ND	940	ND	ND	ND	ND
218-01-9	Chrysene	1480	ug/kg	94 J	ND	2800	ND	55 J	ND	71 J
53-70-3	Dibenz(a,h)anthracene	14	ug/kg	ND	ND	420	ND	ND	ND	ND
193-39-5	Indeno(1,2,3-cd)pyrene	11840	ug/kg	53 J	ND	1700	ND	37 J	ND	37 J
	Total CPAHs		**ug/kg**	**329**	**ND**	**13360**	**ND**	**143**	**ND**	**163**
	NPAHs									
91-57-6	2-Methylnaphthalene	50000	ug/kg	ND	ND	50 J	ND	ND	ND	ND
208-96-8	Acenaphthylene	50000	ug/kg	ND	ND	39 J	ND	ND	ND	ND
83-32-9	Acenaphthene	50000	ug/kg	ND	ND	350 J	ND	ND	ND	ND
120-12-7	Anthracene	50000	ug/kg	ND	ND	730	ND	ND	ND	ND
191-24-2	Benzo(ghi)perylene	50000	ug/kg	59 J	ND	1600	ND	44 J	ND	42 J
132-64-9	Dibenzofuran	22755	ug/kg	ND	ND	120 J	ND	ND	ND	ND
206-44-0	Fluoranthene	50000	ug/kg	93 J	ND	6100	ND	51 J	ND	85 J
91-20-3	Naphthalene	48100	ug/kg	ND	ND	74 J	ND	ND	ND	ND
85-01-8	Phenanthrene	50000	ug/kg	57 J	ND	3100	ND	ND	ND	37 J
129-00-0	Pyrene	50000	ug/kg	90 J	ND	4200	ND	45 J	ND	73 J
	Total NPAHs		**ug/kg**	**299**	**ND**	**16363**	**ND**	**140**	**ND**	**237**
	Total PAHs		**ug/kg**	**628**	**ND**	**29723**	**ND**	**283**	**ND**	**400**
	Total SVOCs	**50000**	**ug/kg**	**674**	**ND**	**30070**	**ND**	**322**	**ND**	**442**

CPAH = Carcinogenic Polynuclear Aromatic Hydrocarbons
NPAH = Noncarcinogenic Polynuclear Aromatic Hydrocarbons
NS = No Standard
ND = Not Detected
NA = Not Analyzed
J = Estimated Value
N = Estimated
SB = Site Background
R = Rejected Value
Concentration above NYSDEC Soil Criteria.

TABLE 3.33
SADVA AOC 7 GROUNDWATER ELEVATION DATA

					ROUND 1			ROUND 2			ROUND 3			ROUND 4		
Wells	Elevation TOC*		Elevation Ground*	Sample Depth**	Date	Depth to Water**	Groundwater Elevation*	Date	Depth to Water**	Groundwater Elevation*	Date	Depth to Water**	Groundwater Elevation*	Date	Depth to Water**	Groundwater Elevation*
AOC 7																
HP-01	NA		322.29	20 est.	8/2/2000	20.2	302.09	NM	NM	NM	7/21/2004	NM	NM	12/7/2004	NM	NM
HP-02	NA		320.35	17 est.	7/31/2000	17.00 est.	303.35	NM	NM	NM	7/21/2004	NM	NM	12/7/2004	NM	NM
HP-03	NA		321.25	12 est.	7/31/2000	11.80	309.45	NM	NM	NM	7/21/2004	NM	NM	12/7/2004	NM	NM
2AMW-5	325.09	MP	324.56	5 - 20	8/16/2000	3.24	321.85	11/30/2000	3.77	321.32	7/21/2004	5.91	319.18	12/7/2004	3.43	321.66
2AMW-7	325.15	MP	324.63	5.5 - 15	8/16/2000	4.11	321.04	11/30/2000	4.54	320.61	7/21/2004	6.78	318.37	12/7/2004	3.96	321.19
GW-01	326.48		323.75	9 - 14	8/16/2000	NM	NM	11/30/2000	NM	NM	7/21/2004	5.40	321.08	12/7/2004	3.56	322.92
GW-02	324.33		322.19	36 - 41	8/16/2000	NM	NM	11/30/2000	NM	NM	7/22/2004	10.92	313.41	12/7/2004	8.90	315.43
GW-03	323.10		320.55	7 - 12	8/16/2000	NM	NM	11/30/2000	NM	NM	7/22/2004	8.66	314.44	12/7/2004	5.09	318.01

Notes:
(TOC): Top of Casing
* - Elevations in feet above mean sea level
** - Depth in feet below ground surface
*** - Depth in feet below TOC
MP - Information source is Malcolm Pirnie (1997)
est. - Depth to water estimated based on drilling observations and moisture content in soils.
GW-01, GW-02, and GW-03 installed in June 2004

TABLE 3.34a
SADVA AOC 7 GROUNDWATER RESULTS (2000)

Former Schenectady Army Depot Remedial Investigation AOC 7 Triangular Disposal Area Detected Compound Summary		NYSDEC Class GA Ground Water	SAMPLE ID:	AOC7-2AMW-5	AOC7-2AMW-7	AOC7-2AMW-17 (Dup of 2AMW-7)	AOC7-HP01	AOC7-HP04 (Dup of HP01)	AOC7-HP02	AOC7-HP03
			LAB ID:	C0H170224001	C0H170224003	C0H170224004	C0H030315001	C0H030315002	C0H010177001	C0H010177002
			SOURCE:	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh
			SDG:	SADVA14	SADVA14	SADVA14	SADVA9	SADVA9	SADVA9	SADVA9
			MATRIX:	WATER	WATER	WATER	WATER	WATER	WATER	WATER
			SAMPLED:	8/16/2000	8/16/2000	8/16/2000	8/2/2000	8/2/2000	7/31/2000	7/31/2000
			VALIDATED:	11/2/2000	11/2/2000	11/2/2000	10/30/2000	10/30/2000	10/30/2000	10/30/2000
CAS NO.	COMPOUND	Standards/Guidance Values	UNITS:							
	VOLATILES									
67-64-1	Acetone	50 (G)	ug/L	ND	ND	ND	3.3 J	4.2 J	2.4 J	ND
78-93-3	2-Butanone	50 (G)	ug/L	R	R	R	R	ND	ND	ND
	Total VOCs		ug/L	ND	ND	ND	3.3	4.2	2.4	ND
	SEMIVOLATILES									
117-81-7	bis(2-Ethylhexyl) phthalate	5	ug/L	15	27 J	5.9 J	69	8.5 J	100	13
	Total SVOCs		ug/L	15	27	5.9	69	8.5	100	13
	PESTICIDES									
72-55-9	4,4'-DDE	0.2	ug/L	ND	ND	ND	ND	ND	ND	0.023 J
72-54-8	4,4'-DDD	0.3	ug/L	ND	ND	ND	ND	ND	ND	0.035 JN
50-29-3	4,4'-DDT	0.2	ug/L	ND	ND	ND	ND	ND	ND	0.087
	Total Pesticides		ug/L	ND	ND	ND	ND	ND	ND	0.145
	PCBs									
	None Detected		ug/L	ND	ND	ND	ND	ND	ND	ND
	METALS									
7429-90-5	Aluminum	NS	ug/L	1600	2600	3560	5940	5310	389000	19600
7440-38-2	Arsenic	25	ug/L	14.7	ND	ND	4.8 J	2.7 J	207	10.2
7440-39-3	Barium	1000	ug/L	44.6 J	27.4 J	33.8 J	85 J	72.3 J	1990	187 J
7440-41-7	Beryllium	3 (G)	ug/L	ND	ND	0.12 J	0.37 J	0.41 J	20.7	1.2 J
7440-43-9	Cadmium	5	ug/L	ND	ND	ND	ND	ND	9.1 J	ND
7440-70-2	Calcium	NS	ug/L	250000	212000	238000	251000	255000	694000	147000
7440-47-3	Chromium	50	ug/L	1.8 J	3.1 J	4 J	11.9	11.2	544	31.1
7440-48-4	Cobalt	NS	ug/L	ND	ND	ND	3.8 J	ND	423	15 J
7440-50-8	Copper	200	ug/L	ND	10.3 J	6.8 J	13.8 J	13.3 J	989	37.7
7439-89-6	Iron	300	ug/L	3880	2390	3010	9920	8910	912000	31200
7439-92-1	Lead	25	ug/L	5.2	ND	2 J	4.2	4.9	388	12.1
7439-95-4	Magnesium	35000 (G)	ug/L	49500	82900	111000	106000	96200	313000	40000
7439-96-5	Manganese	300	ug/L	124	2700	1980	461	422	16200	989
7439-97-6	Mercury	0.7	ug/L	ND	ND	ND	0.069 J	0.06 J	0.97	0.067 J
7440-02-0	Nickel	100	ug/L	ND	ND	ND	12.4 J	8.1 J	857	46.5
7440-09-7	Potassium	NS	ug/L	7460	1920 J	2270 J	46800	32000	73700	17100
7782-49-2	Selenium	10	ug/L	2.3 J	ND	ND	ND	ND	ND	ND
7440-22-4	Silver	50	ug/L	ND	ND	ND	ND	ND	4.1 J	ND
7440-23-5	Sodium	20000	ug/L	8780	12100	15900	143000	134000	74700	14300
7440-28-0	Thallium	0.5 (G)	ug/L	ND	ND	ND	ND	ND	7.8	ND
7440-62-2	Vanadium	NS	ug/L	4.4 J	9 J	10.1 J	15.8 J	15.6 J	704	41.5 J
7440-66-6	Zinc	2000 (G)	ug/L	17.5 J	13.7 J	22.3	56.9	46.8	2090	109

(G) - Guidance Value.
ND - Not Detected.
J - Estimated Value.
N - Presumptive Evidence; compound identification is not definitive.
NS - No Standard.
R - Rejected during data validation.
[shaded] Concentration above NYSDEC Groundwater Standard/Guidance Value.

TABLE 3.34b
SADVA AOC 7 GROUNDWATER RESULTS (2004)

				UPGRADIENT	Dup of SD-GW01-AOC-7	DOWNGRADIENT		UPGRADIENT	
USACE-Schenectady Depot			Sample ID:	SD-GW01-AOC-7	SD-GW101-AOC-7	SD-GW02-AOC-7	SD-GW03-AOC-7	SD-2AMW5-AOC-1	SD-2AMW7-AOC-1
Validated Groundwater Analytical Data			Lab Sample Id:	C4G220161003	C4G220161004	C4G230187002	C4G230187004	C4G230187003	C4G230187001
AOC 7			Source:	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh
Detected Compound Summary		NYSDEC	SDG:	C4G220161	C4G220161	C4G230187	C4G230187	C4G230187	C4G230187
		Class GA	Matrix:	WATER	WATER	WATER	WATER	WATER	WATER
		Ground Water	Sampled:	7/21/2004	7/21/2004	7/22/2004	7/22/2004	7/21/2004	7/21/2004
		Standards/Guidance Values	Validated:	9/19/2004	9/19/2004	9/19/2004	9/19/2004	9/19/2004	9/19/2004
CAS NO.	COMPOUND		UNITS:						
	SEMIVOLATILES								
117-81-7	bis(2-Ethylhexyl) phthalate	5	ug/L	22 J	1.6 J	16	7.6	27	4.1 J
85-68-7	Butyl benzyl phthalate	50 (G)	ug/L	ND	ND	ND	ND	0.12 J	ND
86-74-8	Carbazole	NS	ug/L	ND	ND	ND	ND	0.13 J	ND
84-66-2	Diethyl phthalate	50 (G)	ug/L	ND	ND	ND	ND	0.28 J	ND
84-74-2	Di-n-butyl phthalate	50	ug/L	ND	ND	1.7 J	ND	0.35 J	1.6 J
	CPAHs								
	None Detected								
	NPAHs								
206-44-0	Fluoranthene	50 (G)	ug/L	ND	ND	ND	ND	0.2 J	ND
129-00-0	Pyrene	50 (G)	ug/L	ND	ND	ND	ND	0.17 J	ND
	Total NPAHs			**ND**	**ND**	**ND**	**ND**	**0.37**	**ND**
	TOTAL SVOCs			**22**	**1.6**	**17.7**	**7.6**	**28.25**	**5.7**
	METALS								
7429-90-5	Aluminum	NS	ug/L	12.1 J	13.7 J	59.9 J	27.4 J	79.4 J	29.5 J
7440-38-2	Arsenic	25	ug/L	ND U	ND	ND	ND	11.6	ND
7440-39-3	Barium	1000	ug/L	38.1 J	40.7 J	197 J	10.4 J	41.6 J	16.3 J
7440-41-7	Beryllium	3 (G)	ug/L	0.53 J	0.48 J	ND	ND	ND	ND
7440-70-2	Calcium	NS	ug/L	184000	185000	97600	161000	226000	274000
7440-50-8	Copper	200	ug/L	ND	ND	ND	2 J	4.6 J	ND
7439-89-6	Iron	300	ug/L	2840	3100	5360	ND	2540	ND
7439-92-1	Lead	25	ug/L	ND	ND	ND	ND	1.6 J	ND
7439-95-4	Magnesium	35000 (G)	ug/L	128000	131000	15100	29900	47000	178000
7439-96-5	Manganese	300	ug/L	1480	1700	456	59	810	135
7440-02-0	Nickel	100	ug/L	ND	ND	ND	ND	2 J	ND
7440-09-7	Potassium	NS	ug/L	3820 J	4500 J	1140 J	296 J	5740	1090 J
7440-22-4	Silver	50	ug/L	0.59 J	0.75 J	ND	ND	ND	ND
7440-23-5	Sodium	20000	ug/L	37300	38900	19200	5510	9730	24100
7440-62-2	Vanadium	NS	ug/L	ND	ND	ND	1.1 J	5.4 J	7.6 J
7440-66-6	Zinc	2000 (G)	ug/L	3.4 J	4 J	2.1 J	12.4 J	11.6 J	6.6 J

(G) - Guidance Value.
U = Analyte not detected; the number is the analytical reporting limit.
J - Estimated Value
NA - Not Analyzed
R - Rejected Value
ND - Not Detected
NS - No Standard
Concentration above NYSDEC Class GA Groundwater Standards/Guidance values and upgradient concentrations.

TABLE 3.35a
SADVA AOC 8 SURFACE WATER RESULTS (2000)

Schenectady Army Depot Remedial Investigation AOC 8 Black Creek Area Detected Compound Summary		Upstream/ Background Ranges	NYSDEC Class A Surface Water Standards/Guidance Values	NYSDEC Class C Surface Water Standards/Guidance Values		Open Storage Area (AOC 5)		Southern SADVA		
					SAMPLE ID:	SW15	SW29	SW16	SW17	SW18
					LAB ID:	C0G190251002	C0J060306001	C0G190251001	C0G140162005	C0G200279001
					SOURCE:	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh
					SDG:	SADVA2	SADVA20	SADVA2	SADVA2	SADVA2
					MATRIX:	WATER	WATER	WATER	WATER	WATER
					SAMPLED:	7/18/2000	10/5/2000	7/18/2000	7/13/2000	7/19/2000
					VALIDATED:	10/10/2000	12/3/2000	10/10/2000	10/10/2000	10/10/2000
CAS NO.	COMPOUND		H(WS)	H(FC)	UNITS:					
	VOLATILES									
67-64-1	Acetone	ND-2.3	50	NS	ug/L	ND	ND	ND	ND	ND
78-93-3	2-Butanone	ND	50	NS	ug/L	ND	ND	ND	ND	ND
	Total VOCs				**ug/L**	**ND**	**ND**	**ND**	**ND**	**ND**
	SEMIVOLATILES									
117-81-7	bis(2-Ethylhexyl) phthalate	ND-26	0.6 A(C)	0.6 A(C)	ug/L	7.4 J	ND	ND	4.2 J	4.8 J
	Total SVOCs				**ug/L**	**7.4**	**ND**	**ND**	**4.2**	**4.8**
	PESTICIDES									
	None Detected				ug/L	ND	ND	ND	ND	ND
	PCBs									
	None Detected				ug/L	ND	ND	ND	ND	ND
	METALS									
7429-90-5	Aluminum	23.4-346	100 (1)A(C)	100 (1)	ug/L	22.7 J	346	145 J	85.3 J	206
7440-36-0	Antimony	ND	3	NS	ug/L	ND	1.8 J	ND	ND	ND
7440-39-3	Barium	22.6-43.5	1000	NS	ug/L	49.4 J	45.7 J	22.2 J	27.4 J	51.2 J
7440-41-7	Beryllium	0.14-0.96	3	11 *	ug/L	0.09 J	0.13 J	ND	ND	0.1 J
7440-70-2	Calcium	60500-64400	NS	NS	ug/L	210000	132000	40100	63000	172000
7440-47-3	Chromium	ND-1.4	50	52.7 (2) *A(C)	ug/L	1.5 J	1.4 J	1.3 J	ND	ND
7440-48-4	Cobalt	ND	5 A(C)	5 A(C)	ug/L	5.1 J	ND	ND	ND	ND
7440-50-8	Copper	ND-2.5	200 H(WS)	6.3 (2) *A(C)	ug/L	9.9 J	6.8 J	ND	ND	17.9 J
7439-89-6	Iron	497-998	300 A(C)	300	ug/L	555	2380	611	544	1360
7439-92-1	Lead	ND	50 H(WS)	2.4 (2) *A(C)	ug/L	2.6 J	4.5	ND	ND	ND
7439-95-4	Magnesium	8810-11500	35000	NS	ug/L	41200	35800	6760	11200	12000
7439-96-5	Manganese	105-691	300 A(C)	NS	ug/L	2020	107	33.8	107	1020
7439-97-6	Mercury	0.065-0.093	0.0007	0.0007	ug/L	0.051 J	0.046 J	ND	ND	0.064 J
7440-02-0	Nickel	ND-6.2	100 H(WS)	36.5 (2) *A(C)	ug/L	ND	ND	ND	ND	ND
7440-09-7	Potassium	796-2640	NS	NS	ug/L	3730 J	2560 J	1740 J	642 J	1510 J
7440-22-4	Silver	ND-0.31	50 H(WS)	0.1 (1)	ug/L	ND	ND	0.94	ND	ND
7440-23-5	Sodium	9710-15000	NS	NS	ug/L	12500	11100	10700	18600	20600
7440-62-2	Vanadium	ND-3.4	14 A(C)	14	ug/L	ND	4.6 J	ND	ND	ND
7440-66-6	Zinc	3.9-22.1	2000 H(WS)	58 (2) *A(C)	ug/L	139	75.2	21.2	15.8 J	13.1 J

(1) - Ionic form
(2) - Dissolved form - all sample data are total metals.
* - based on average hardness value
Average Hardness: 65.9 mg/L
A(C) - Protection fo Fish Propagation
H(FC) - Protection for Human Consumption of Fish
H(WS) - Protection of drinking water source.
ND- Not Detected.
NA - Not Analyzed
J - Estimated Value
R - Data Rejected During Validation
[shaded] Concentration above NYSDEC Class C Standard and upstream concentration range.

TABLE 3.35a
SADVA AOC 8 SURFACE WATER RESULTS (2000)

Schenectady Army Depot Remedial Investigation AOC 8 Black Creek Area Detected Compound Summary		Upstream/ Background Ranges	NYSDEC Class A Surface Water Standards/Guidance Values	NYSDEC Class C Surface Water Standards/Guidance Values		Southern SADVA		NW SADVA	Downstream
					SAMPLE ID:	SW19	SW20	SW24	SW25
					LAB ID:	C0G200279002	C0G200279003	C0G200279004	C0G200279005
					SOURCE:	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh
					SDG:	SADVA2	SADVA2	SADVA2	SADVA2
					MATRIX:	WATER	WATER	WATER	WATER
					SAMPLED:	7/19/2000	7/19/2000	7/19/2000	7/19/2000
					VALIDATED:	10/10/2000	10/10/2000	10/10/2000	10/10/2000
CAS NO.	COMPOUND		H(WS)	H(FC)	UNITS:				
	VOLATILES								
67-64-1	Acetone	ND-2.3	50	NS	ug/L	ND	ND	2.2 J	ND
78-93-3	2-Butanone	ND	50	NS	ug/L	ND	ND	ND	ND
	Total VOCs				**ug/L**	**ND**	**ND**	**2.2**	**ND**
	SEMIVOLATILES								
117-81-7	bis(2-Ethylhexyl) phthalate	ND-26	0.6 A(C)	0.6 A(C)	ug/L	ND	ND	5.5 J	11
	Total SVOCs				**ug/L**	**ND**	**ND**	**5.5**	**11**
	PESTICIDES								
	None Detected				ug/L	ND	ND	ND	ND
	PCBs								
	None Detected				ug/L	ND	ND	ND	ND
	METALS								
7429-90-5	Aluminum	23.4-346	100 (1) A(C)	100 (1)	ug/L	27.3 J	57.2 J	319	52.7 J
7440-36-0	Antimony	ND	3	NS	ug/L	ND	ND	ND	ND
7440-39-3	Barium	22.6-43.5	1000	NS	ug/L	20.3 J	21.3 J	24.6 J	21.1 J
7440-41-7	Beryllium	0.14-0.96	3	11 *	ug/L	ND	ND	0.09 J	ND
7440-70-2	Calcium	60500-64400	NS	NS	ug/L	39600	40600	46500	40500
7440-47-3	Chromium	ND-1.4	50	52.7 (2) *A(C)	ug/L	ND	1.1 J	1.1 J	ND
7440-48-4	Cobalt	ND	5 A(C)	5 A(C)	ug/L	ND	ND	ND	ND
7440-50-8	Copper	ND-2.5	200 H(WS)	6.3 (2) *A(C)	ug/L	41	ND	3.7 J	2.5 J
7439-89-6	Iron	497-998	300 A(C)	300	ug/L	425	474	974	432
7439-92-1	Lead	ND	50 H(WS)	2.4 (2) *A(C)	ug/L	ND	ND	2.1 J	ND
7439-95-4	Magnesium	8810-11500	35000	NS	ug/L	6680	6820	9150	6880
7439-96-5	Manganese	105-691	300 A(C)	NS	ug/L	34	40.3	299	40.3
7439-97-6	Mercury	0.065-0.093	0.0007	0.0007	ug/L	ND	ND	ND	0.058 J
7440-02-0	Nickel	ND-6.2	100 H(WS)	36.5 (2) *A(C)	ug/L	ND	ND	ND	ND
7440-09-7	Potassium	796-2640	NS	NS	ug/L	1340 J	1390 J	4220 J	1530 J
7440-22-4	Silver	ND-0.31	50 H(WS)	0.1 (1)	ug/L	ND	ND	ND	ND
7440-23-5	Sodium	9710-15000	NS	NS	ug/L	10500	13200	26300	11400
7440-62-2	Vanadium	ND-3.4	14 A(C)	14	ug/L	ND	ND	ND	ND
7440-66-6	Zinc	3.9-22.1	2000 H(WS)	58 (2) *A(C)	ug/L	28.1	3.3 J	12.7 J	8.1 J

(1) - Ionic form
(2) - Dissolved form - all sample data are total metals.
* - based on average hardness value
Average Hardness: 65.9 mg/L
A(C) - Protection fo Fish Propagation
H(FC) - Protection for Human Consumption of Fish
H(WS) - Protection of drinking water source.
ND- Not Detected.
NA - Not Analyzed
J - Estimated Value
R - Data Rejected During Validation
Concentration above NYSDEC Class C Standard and upstream concentration range.

TABLE 3.35a
SADVA AOC 8 SURFACE WATER RESULTS (2000)

Schenectady Army Depot Remedial Investigation AOC 8 Black Creek Area Detected Compound Summary		Upstream/ Background Ranges	NYSDEC Class A Surface Water Standards/Guidance Values	NYSDEC Class C Surface Water Standards/Guidance Values		UPSTREAM SAMPLES			Dup of SW23	
					SAMPLE ID:	SW21	SW22	SW23	SW27	SW28 (2000)
					LAB ID:	C0H080193002	C0H080193005	C0H080193003	C0H080193001	C0J050207001
					SOURCE:	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh
					SDG:	SADVA9	SADVA9	SADVA9	SADVA9	SADVA20
					MATRIX:	WATER	WATER	WATER	WATER	WATER
					SAMPLED:	8/7/2000	8/7/2000	8/7/2000	8/7/2000	10/4/2000
					VALIDATED:	10/30/2000	10/30/2000	10/30/2000	10/30/2000	12/3/2000
CAS NO.	COMPOUND		H(WS)	H(FC)	UNITS:					
	VOLATILES									
67-64-1	Acetone	ND-2.3	50	NS	ug/L	ND	ND	ND	ND	2.3 J
78-93-3	2-Butanone	ND	50	NS	ug/L	R	R	R	R	ND
	Total VOCs				**ug/L**	**ND**	**ND**	**ND**	**ND**	**2.3**
	SEMIVOLATILES									
117-81-7	bis(2-Ethylhexyl) phthalate	ND-26	0.6 A(C)	0.6 A(C)	ug/L	14	26	7.5 J	ND	ND
	Total SVOCs				**ug/L**	**14**	**26**	**7.5**	**ND**	**ND**
	PESTICIDES									
	None Detected				ug/L	ND	ND	ND	ND	ND
	PCBs									
	None Detected				ug/L	ND	ND	ND	ND	ND
	METALS									
7429-90-5	Aluminum	23.4-346	100 (1)A(C)	100 (1)	ug/L	24.3 J	23.4 J	37.5 J	39.7 J	158 J
7440-36-0	Antimony	ND	3	NS	ug/L	ND	ND	ND	ND	ND
7440-39-3	Barium	22.6-43.5	1000	NS	ug/L	22.6 J	26.3 J	23.5 J	22.5 J	25.8 J
7440-41-7	Beryllium	0.14-0.96	3	11 *	ug/L	0.16 J	0.15 J	0.15 J	0.18 J	0.14 J
7440-70-2	Calcium	60500-64400	NS	NS	ug/L	61300	61800	60500	58700	64400
7440-47-3	Chromium	ND-1.4	50	52.7 (2) *A(C)	ug/L	ND	ND	ND	ND	1.4 J
7440-48-4	Cobalt	ND	5 A(C)	5 A(C)	ug/L	ND	ND	ND	ND	ND
7440-50-8	Copper	ND-2.5	200 H(WS)	6.3 (2) *A(C)	ug/L	ND	2.5 J	ND	ND	ND
7439-89-6	Iron	497-998	300 A(C)	300	ug/L	660	998	691	670	497
7439-92-1	Lead	ND	50 H(WS)	2.4 (2) *A(C)	ug/L	ND	ND	ND	ND	ND
7439-95-4	Magnesium	8810-11500	35000	NS	ug/L	9770	9600	9510	9200	11500
7439-96-5	Manganese	105-691	300 A(C)	NS	ug/L	164	691	387	376	105
7439-97-6	Mercury	0.065-0.093	0.0007	0.0007	ug/L	0.065 J	0.086 J	0.075 J	0.057 J	0.093 J
7440-02-0	Nickel	ND-6.2	100 H(WS)	36.5 (2) *A(C)	ug/L	ND	ND	6.2 J	ND	ND
7440-09-7	Potassium	796-2640	NS	NS	ug/L	1020 J	1120 J	1450 J	1370 J	2640 J
7440-22-4	Silver	ND-0.31	50 H(WS)	0.1 (1)	ug/L	ND	ND	ND	ND	ND
7440-23-5	Sodium	9710-15000	NS	NS	ug/L	15000	14600	14300	13800	13800
7440-62-2	Vanadium	ND-3.4	14 A(C)	14	ug/L	ND	3.4 J	ND	3.7 J	2 J
7440-66-6	Zinc	3.9-22.1	2000 H(WS)	58 (2) *A(C)	ug/L	22.1	7 J	4.2 J	3.9 J	3.9 J

(1) - Ionic form
(2) - Dissolved form - all sample data are total metals.
* - based on average hardness value
Average Hardness: 65.9 mg/L
A(C) - Protection fo Fish Propagation
H(FC) - Protection for Human Consumption of Fish
H(WS) - Protection of drinking water source.
ND- Not Detected.
NA - Not Analyzed
J - Estimated Value
R - Data Rejected During Validation
[shaded box] Concentration above NYSDEC Class C Standard and upstream concentration range.

TABLE 3.35b
SADVA AOC 8 SURFACE WATER RESULTS (2004)

USACE-Schenectady Depot Validated Surface Water Analytical Data AOC 8 Detected Compound Summary		Site Specific Background Range	NYSDEC Class A Surface Water Standards/Guidance Values H(WS)	NYSDEC Class C Surface Water Standards/Guidance Values H(FC)	Sample ID:	SW07	SW09	SW17	SW18	UPSTREAM SW28 (2004)	SW29
					Lab Sample ID	C4G150227012	C4G150227011	C4G160332009	C4G160332007	C4G150227010	C4G160332006
					Source:	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh
					SDG:	C4G150227	C4G150227	C4G160332	C4G160332	C4G150227	C4G160332
					Matrix:	WATER	WATER	WATER	WATER	WATER	WATER
					Sampled:	7/14/2004	7/14/2004	7/15/2004	7/15/2004	7/14/2004	7/15/2004
					Validated:	9/17/2004	9/17/2004	9/18/2004	9/18/2004	9/17/2004	9/18/2004
CAS NO.	COMPOUND				UNITS:						
	SEMIVOLATILES										
117-81-7	bis(2-Ethylhexyl) phthalate	ND-26	0.6 A(C)	0.6 A(C)	ug/L	3.1 J	3.1 J	4 J	7.4	6.2	6.5
84-66-2	Diethyl phthalate	ND	50 (G)	NS	ug/L	ND	ND	ND	ND	ND	0.33 J
84-74-2	Di-n-butyl phthalate	ND-0.64	50 (G)	NS	ug/L	ND	ND	ND	0.31 J	0.64 J	0.4 J
117-84-0	Di-n-octyl phthalate	ND	50 (G)	NS	ug/L	ND	ND	ND	ND	ND	0.35 J
	Total SVOCs					3.1	3.1	4	7.71	6.84	7.58
	METALS										
7429-90-5	Aluminum	23.4-346	100 (1)A(C)	100 (1)	ug/L	401	92.2 J	109 J	158 J	346	862 J
7440-36-0	Antimony	ND	3	NS	ug/L	ND	ND	ND	ND	ND	3.2 J
7440-38-2	Arsenic	ND	50	150 A(C)	ug/L	ND	3.6 J	ND	ND	ND	ND
7440-39-3	Barium	22.6-43.5	1000	NS	ug/L	79.4 J	27.9 J	38.1 J	41.6 J	43.5 J	108 J
7440-41-7	Beryllium	0.14-0.96	3	11 *	ug/L	0.88 J	0.87 J	0.84 J	0.83 J	0.96 J	0.66 J
7440-43-9	Cadmium	ND	5	7.1 (2) *A(C)	ug/L	ND	ND	ND	ND	ND	1.2 J
7440-70-2	Calcium	60500-64400	NS	NS	ug/L	88600	66200	58700	60700	56700	431000
7440-47-3	Chromium	ND-1.4	50	267 (2) *A(C)	ug/L	ND	ND	ND	ND	ND	1.2 J
7440-48-4	Cobalt	ND	5 A(C)	5 A(C)	ug/L	ND	ND	ND	ND	ND	8.6 J
7440-50-8	Copper	ND-2.5	200 H(WS)	34.1 (2) *A(C)	ug/L	ND	ND	ND	ND	ND	23.3 J
7439-89-6	Iron	497-998	300 A(C)	300	ug/L	1800	587	731	885	767	8690
7439-92-1	Lead	ND	50 H(WS)	19.8 (2) *A(C)	ug/L	6.3	ND	1.7 J	ND	ND	14.8
7439-95-4	Magnesium	8810-11500	35000	NS	ug/L	20200	14600	11300	11800	8810	100000
7439-96-5	Manganese	105-691	300 A(C)	NS	ug/L	1410	903	705	718	480	578
7440-02-0	Nickel	ND-6.2	196 (2) *A(C)	196 (2) *A(C)	ug/L	1.4 J	ND	ND	ND	ND	35.7 J
7440-09-7	Potassium	796-2640	NS	NS	ug/L	1110 J	1040 J	823 J	795 J	796 J	6010
7440-22-4	Silver	ND-0.31	50 H(WS)	0.1 (1)	ug/L	ND	0.31 J	0.33 J	0.4 J	0.31 J	0.38 J
7440-23-5	Sodium	9710-15000	NS	NS	ug/L	35700	39100	23600	23700	9710	16700
7440-62-2	Vanadium	ND-3.4	14 A(C)	14	ug/L	1.2 J	ND	ND	ND	1.1 J	2.8 J
7440-66-6	Zinc	3.9-22.1	2000 H(WS)	197 (2) *A(C)	ug/L	10.2 J	4.5 J	5.9 J	ND	7.7 J	2780
	OTHER										
Q1925	Hardness		NS	NS	mg/L	304	225	NA	200	178	1490

(1) - Ionic form
(2) - Dissolved form - all sample results are total metals
* - based on average hardness value
Average Hardness: 479 mg/L
A(C) - Protection fo Fish Propagation
H(FC) - Protection for Human Consumption of Fish
H(WS) - Protection of drinking water soiurces.
U = Analyte not detected; the number is the analytical reporting limit.
ND- Not Detected.
NA - Not Analyzed
J - Estimated Value
R - Data Rejected During Validation
[shaded box] Concentration above NYSDEC Class C Standard and upstream concentration in SW28.

TABLE 3.36a
SADVA AOC 8 SHALLOW SEDIMENT RESULTS (2000/2005)

					Ditch Leading From AOC 5				Southern Ditch Near AOC 5	
Former Schenectady Army Depot Remedial Investigation AOC 8 Black Creek Area Detected Compound Summary				SAMPLE ID:	PSED001	PSED002	PSED003	PSED004	SD12	SD26
				LAB ID:	C5J200220001	C5J200220002	C5J200220003	C5J200220004	COH180273-004	COG200286-001
				DEPTH:	0-6"	0-6"	0-6"	0-6"	0-0.2	0-0.2
				SOURCE:	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh
				SDG:	C5J200220	C5J200220	C5J200220	C5J200220	SADVA12	SADVA4
				MATRIX:	SOIL	SOIL	SOIL	SOIL	Soil	Soil
		Black Creek	NYSDEC	SAMPLED:	10/19/2005	10/19/2005	10/19/2005	10/19/2005	8/17/2000	7/19/2000
		Upstream	Sediment	VALIDATED:	12/19/2005	12/19/2005	12/19/2005	12/19/2005	9/28/2000	9/27/2000
CAS NO.	COMPOUND	Ranges	Criteria	UNITS:						
	VOLATILES									
67-64-1	Acetone	ND-14	NS	ug/kg	NA	NA	NA	NA	NA	NA
74-83-9	Bromomethane	ND	NS	ug/kg	NA	NA	NA	NA	NA	NA
75-00-3	Chloroethane	ND	NS	ug/kg	NA	NA	NA	NA	NA	NA
108-88-3	Toluene	ND-2.4	720 (C)	ug/kg	NA	NA	NA	NA	NA	NA
	Total VOCs			**ug/kg**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**
	SEMIVOLATILES									
106-44-5	4-Methylphenol	ND	7 (C)	ug/kg	NA	NA	NA	NA	NA	NA
117-81-7	bis(2-Ethylhexyl) phthalate	ND	2925 (C)	ug/kg	NA	NA	NA	NA	NA	NA
132-64-9	Dibenzofuran	ND-50	NS	ug/kg	NA	NA	NA	NA	NA	NA
	CPAHs				NA	NA	NA	NA	NA	NA
56-55-3	Benzo(a)anthracene	ND-310	19 (C)	ug/kg	NA	NA	NA	NA	NA	NA
50-32-8	Benzo(a)pyrene	ND-330	19 (H)	ug/kg	NA	NA	NA	NA	NA	NA
205-99-2	Benzo(b)fluoranthene	ND-440	19 (H)	ug/kg	NA	NA	NA	NA	NA	NA
207-08-9	Benzo(k)fluoranthene	ND-360	19 (H)	ug/kg	NA	NA	NA	NA	NA	NA
218-01-9	Chrysene	ND-730	19 (H)	ug/kg	NA	NA	NA	NA	NA	NA
53-70-3	Dibenz(a,h)anthracene	ND	88 (LM)	ug/kg	NA	NA	NA	NA	NA	NA
193-39-5	Indeno(1,2,3-cd)pyrene	ND-78	19 (H)	ug/kg	NA	NA	NA	NA	NA	NA
	Total CPAHs			**ug/kg**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**
	NPAHs									
83-32-9	Acenaphthene	ND-92	2058 (C)	ug/kg	NA	NA	NA	NA	NA	NA
120-12-7	Anthracene	ND-170	1573 (C)	ug/kg	NA	NA	NA	NA	NA	NA
191-24-2	Benzo(ghi)perylene	ND-66	NS	ug/kg	NA	NA	NA	NA	NA	NA
206-44-0	Fluoranthene	ND-1200	14994 (C)	ug/kg	NA	NA	NA	NA	NA	NA
91-20-3	Naphthalene	ND-210	441 (C)	ug/kg	NA	NA	NA	NA	NA	NA
85-01-8	Phenanthrene	ND-400	1764 (C)	ug/kg	NA	NA	NA	NA	NA	NA
129-00-0	Pyrene	ND-920	14127 (C)	ug/kg	NA	NA	NA	NA	NA	NA
	Total NPAHs		**35000 (LM)**	**ug/kg**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**
	Total PAHs			**ug/kg**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**
	Total SVOCs			**ug/kg**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**
	PESTICIDES									
319-84-6	alpha-BHC	ND		ug/kg	NA	NA	NA	NA	NA	NA
60-57-1	Dieldrin	ND	1.47 (C)	ug/kg	NA	NA	NA	NA	NA	NA
72-55-9	4,4'-DDE	ND-0.23	14.7 (W)	ug/kg	NA	NA	NA	NA	NA	NA
72-20-8	Endrin	ND	59 (C)	ug/kg	NA	NA	NA	NA	NA	NA
72-54-8	4,4'-DDD	ND	14.7 (W)	ug/kg	NA	NA	NA	NA	NA	NA
50-29-3	4,4'-DDT	ND	14.7 (C)	ug/kg	NA	NA	NA	NA	NA	NA
5103-71-9	alpha-Chlordane	ND	0.44 (C)	ug/kg	NA	NA	NA	NA	NA	NA
5103-74-2	gamma-Chlordane	ND	0.44 (C)	ug/kg	NA	NA	NA	NA	NA	NA
	Total Pesticides			**ug/kg**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**
	PCBs									
11097-69-1	Aroclor 1254	ND	284 (C)	ug/kg	NA	NA	NA	NA	NA	NA
	Total PCBs			**ug/kg**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**

FOOTNOTES: See Next Page

TABLE 3.36a
SADVA AOC 8 SHALLOW SEDIMENT RESULTS (2000/2005)

Former Schenectady Army Depot Remedial Investigation AOC 8 Black Creek Area Detected Compound Summary					Ditch Leading From AOC 5				Southern Ditch Near AOC 5	
				SAMPLE ID:	PSED001	PSED002	PSED003	PSED004	SD12	SD26
				LAB ID:	C5J200220001	C5J200220002	C5J200220003	C5J200220004	COH180273-004	COG200286-001
				DEPTH:	0-6"	0-6"	0-6"	0-6"	0-0.2	0-0.2
				SOURCE:	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh
				SDG:	C5J200220	C5J200220	C5J200220	C5J200220	SADVA12	SADVA4
				MATRIX:	SOIL	SOIL	SOIL	SOIL	Soil	Soil
		Black Creek	NYSDEC	SAMPLED:	10/19/2005	10/19/2005	10/19/2005	10/19/2005	8/17/2000	7/19/2000
		Upstream	Sediment	VALIDATED:	12/19/2005	12/19/2005	12/19/2005	12/19/2005	9/28/2000	9/27/2000
CAS NO.	COMPOUND	Ranges	Criteria	UNITS:						
	METALS									
7429-90-5	Aluminum	8040-17900	NS	mg/kg	11200	12700	15000	13700	10000	14800
7440-36-0	Antimony	ND-0.44	2 (L)	mg/kg	ND	ND	ND	ND	ND	ND
7440-38-2	Arsenic	3.1-5.1	6 (L)	mg/kg	10.6	10.3	8.6	13	7.3	6.2
7440-39-3	Barium	53.9-141	NS	mg/kg	65.5	55.3	57.5	72.9	47.4 J	84
7440-41-7	Beryllium	0.62-0.92	NS	mg/kg	0.81	1	1.1	1	0.55 J	0.9 J
7440-43-9	Cadmium	ND-0.75	0.6 (L)	mg/kg	0.37 J	0.15 J	0.39 J	0.18 J	0.47 J	0.34 J
7440-70-2	Calcium	2660-6700	NS	mg/kg	31800	2860	4840	3260	52200	4760
7440-47-3	Chromium	11.2-22	26 (L)	mg/kg	44.2	26.7	28.4	26.8	18.9 J	22.3
7440-48-4	Cobalt	7.1-14	NS	mg/kg	12.7	13	14	15.7	12.1	15.8
7440-50-8	Copper	13-27.7	16 (L)	mg/kg	66.9 J	54.6 J	118 J	50.9 J	35	43.4
7439-89-6	Iron	18300-25400	20000 (L)	mg/kg	28200	34100	32100	36800	25700	31800
7439-92-1	Lead	7.8-20.9	31 (L)	mg/kg	62.6 J	35.1 J	58.9 J	20.7 J	34.8 J	34.4
7439-95-4	Magnesium	3190-5190	NS	mg/kg	20800 J	6090 J	9520 J	8350 J	7300 J	5570
7439-96-5	Manganese	328-647	460 (L)	mg/kg	494	379	253	378	586 J	538
7439-97-6	Mercury	0.027-0.091	0.15 (L)	mg/kg	0.049	0.053	0.08	0.073	0.04 J	0.061
7440-02-0	Nickel	15.6-24.5	16 (L)	mg/kg	25.6	30	39.1	36.2	26.2	32.5
7440-09-7	Potassium	734-1530	NS	mg/kg	1730 J	1260 J	2390 J	1850 J	1100	1430
7782-49-2	Selenium	ND-0.81	NS	mg/kg	0.37 U	0.35 U	0.48 J	0.42 U	0.41 J	ND
7440-22-4	Silver	ND-0.5	1 (L)	mg/kg	0.17 J	0.14 J	0.25 J	0.17 J	ND	ND
7440-23-5	Sodium	71.6-790	NS	mg/kg	119 J	101 J	147 J	150 J	116 J	135 J
7440-28-0	Thallium	ND-1.5	NS	mg/kg	0.64 U	0.6 U	0.71 U	0.73 U	ND	ND
7440-62-2	Vanadium	14.6-28.4	NS	mg/kg	24.3	25	29.5	24.4	18.2	25.3
7440-66-6	Zinc	47.7-118	120 (L)	mg/kg	176 J	131 J	176 J	99.7 J	108 J	139

CPAH = Carcinogenic Polynuclear Aromatic Hydrocarbon
NPAH = Noncarcinogenic Polynuclear Aromatic Hydrocarbon
C = Benthic Aquatic Chronic Criteria (TOC Adjusted),(NYSDEC, 1999).
H = Human Health Bioaccumulation (TOC Adjusted), (NYSDEC, 1999).
LM = Medium Effects Level (TOC Adjusted), (Long and Morgan, 1990).
W = Wildlife Bioaccumulation Criteria (TOC Adjusted), (NYSDEC, 1999).
L = Lowest Effect Level (metals), (NYSDEC, 1999).
NS = No sediment criteria.
NA / ND = Not analyzed or detected (USACE report does not report these metals).
J = Estimated Concentration
R = Rejected during data validation
N = Presumptive Evidence
[shaded box] Concentration is above NYSDEC Criteria and Upstream Ranges

TABLE 3.36a
SADVA AOC 8 SHALLOW SEDIMENT RESULTS (2000/2005)

CAS NO.	COMPOUND	Black Creek Upstream Ranges	NYSDEC Sediment Criteria		Western Ditch		Black Creek - Southern SADVA		
	Former Schenectady Army Depot Remedial Investigation AOC 8 Black Creek Area Detected Compound Summary			SAMPLE ID:	SD15	SD29	SD16	SD17	SD18
				LAB ID:	C0G190235009	C0J060292005	C0G190235008	C0G140158006	C0G200278002
				DEPTH:	0.2'	0.2'	0.2'	0.2'	0.2'
				SOURCE:	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh
				SDG:	SADVA1	SADVA19	SADVA1	SADVA1	SADVA1
				MATRIX:	SOIL	SOIL	SOIL	SOIL	SOIL
				SAMPLED:	7/18/2000	10/5/2000	7/18/2000	7/13/2000	7/19/2000
				VALIDATED:	10/4/2000	12/3/2000	10/4/2000	10/4/2000	10/4/2000
				UNITS:					
	VOLATILES								
67-64-1	Acetone	ND-14	NS	ug/kg	ND	ND	ND	ND	ND
74-83-9	Bromomethane	ND	NS	ug/kg	R	ND	R	R	R
75-00-3	Chloroethane	ND	NS	ug/kg	R	ND	R	ND	R
108-88-3	Toluene	ND-2.4	720 (C)	ug/kg	ND	ND	ND	ND	ND
	Total VOCs			**ug/kg**	**ND**	**ND**	**ND**	**ND**	**ND**
	SEMIVOLATILES								
106-44-5	4-Methylphenol	ND	7 (C)	ug/kg	ND	ND	ND	ND	ND
117-81-7	bis(2-Ethylhexyl) phthalate	ND	2925 (C)	ug/kg	140 J	ND	ND	21 J	44 J
132-64-9	Dibenzofuran	ND-50	NS	ug/kg	ND	ND	ND	ND	ND
	CPAHs								
56-55-3	Benzo(a)anthracene	ND-310	19 (C)	ug/kg	27 J	26 J	ND	20 J	41 J
50-32-8	Benzo(a)pyrene	ND-330	19 (H)	ug/kg	33 J	29 J	ND	21 J	ND
205-99-2	Benzo(b)fluoranthene	ND-440	19 (H)	ug/kg	36 J	35 J	ND	27 J	52 J
207-08-9	Benzo(k)fluoranthene	ND-360	19 (H)	ug/kg	40 J	31 J	ND	13 J	ND
218-01-9	Chrysene	ND-730	19 (H)	ug/kg	50 J	43 J	ND	25 J	53 J
53-70-3	Dibenz(a,h)anthracene	ND	88 (LM)	ug/kg	ND	ND	ND	ND	ND
193-39-5	Indeno(1,2,3-cd)pyrene	ND-78	19 (H)	ug/kg	25 J	ND	ND	ND	ND
	Total CPAHs			**ug/kg**	**211**	**164**	**ND**	**106**	**146**
	NPAHs								
83-32-9	Acenaphthene	ND-92	2058 (C)	ug/kg	ND	ND	ND	ND	ND
120-12-7	Anthracene	ND-170	1573 (C)	ug/kg	ND	ND	ND	ND	ND
191-24-2	Benzo(ghi)perylene	ND-66	NS	ug/kg	24 J	ND	ND	ND	ND
206-44-0	Fluoranthene	ND-1200	14994 (C)	ug/kg	79 J	57 J	ND	ND	100 J
91-20-3	Naphthalene	ND-210	441 (C)	ug/kg	ND	ND	ND	ND	ND
85-01-8	Phenanthrene	ND-400	1764 (C)	ug/kg	42 J	34 J	ND	ND	ND
129-00-0	Pyrene	ND-920	14127 (C)	ug/kg	56 J	52 J	ND	27 J	56 J
	Total NPAHs		**35000 (LM)**	**ug/kg**	**201**	**143**	**ND**	**27**	**156**
	Total PAHs			**ug/kg**	**412**	**307**	**ND**	**133**	**302**
	Total SVOCs			**ug/kg**	**552**	**307**	**ND**	**154**	**346**
	PESTICIDES								
319-84-6	alpha-BHC	ND		ug/kg	ND	ND	ND	ND	ND
60-57-1	Dieldrin	ND	1.47 (C)	ug/kg	ND	0.48 JN	ND	ND	ND
72-55-9	4,4'-DDE	ND-0.23	14.7 (W)	ug/kg	43 J	12 J	0.22 JN	1.5 J	1.2 JN
72-20-8	Endrin	ND	59 (C)	ug/kg	ND	3.4 J	ND	ND	ND
72-54-8	4,4'-DDD	ND	14.7 (W)	ug/kg	10 J	ND	ND	4.8	ND
50-29-3	4,4'-DDT	ND	14.7 (C)	ug/kg	11 J	4.1 JN	ND	ND	ND
5103-71-9	alpha-Chlordane	ND	0.44 (C)	ug/kg	ND	1.5 J	ND	ND	1.1 JN
5103-74-2	gamma-Chlordane	ND	0.44 (C)	ug/kg	0.84 JN	ND	ND	ND	ND
	Total Pesticides			**ug/kg**	**64.84**	**21.48**	**0.22**	**6.3**	**2.3**
	PCBs								
11097-69-1	Aroclor 1254	ND	284 (C)	ug/kg	ND	110 J	ND	ND	ND
	Total PCBs			**ug/kg**	**ND**	**110**	**ND**	**ND**	**ND**

FOOTNOTES: See Next Page

TABLE 3.36a
SADVA AOC 8 SHALLOW SEDIMENT RESULTS (2000/2005)

Former Schenectady Army Depot Remedial Investigation AOC 8 Black Creek Area Detected Compound Summary		Black Creek Upstream Ranges	NYSDEC Sediment Criteria		Western Ditch		Black Creek - Southern SADVA		
				SAMPLE ID:	SD15	SD29	SD16	SD17	SD18
				LAB ID:	C0G190235009	C0J060292005	C0G190235008	C0G140158006	C0G200278002
				DEPTH:	0.2'	0.2'	0.2'	0.2'	0.2'
				SOURCE:	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh
				SDG:	SADVA1	SADVA19	SADVA1	SADVA1	SADVA1
				MATRIX:	SOIL	SOIL	SOIL	SOIL	SOIL
				SAMPLED:	7/18/2000	10/5/2000	7/18/2000	7/13/2000	7/19/2000
				VALIDATED:	10/4/2000	12/3/2000	10/4/2000	10/4/2000	10/4/2000
CAS NO.	COMPOUND			UNITS:					
	METALS								
7429-90-5	Aluminum	8040-17900	NS	mg/kg	12100 J	10700 J	10600	12100	8540 J
7440-36-0	Antimony	ND-0.44	2 (L)	mg/kg	0.84 J	1.1 J	ND	0.33 J	0.72 J
7440-38-2	Arsenic	3.1-5.1	6 (L)	mg/kg	9.3 J	9.1 J	8.5	5.8	17.3 J
7440-39-3	Barium	53.9-141	NS	mg/kg	66.7 J	55.7 J	55	63.2	99.1 J
7440-41-7	Beryllium	0.62-0.92	NS	mg/kg	0.77 J	0.69 J	0.66 J	0.72	0.62 J
7440-43-9	Cadmium	ND-0.75	0.6 (L)	mg/kg	0.87 J	0.69 J	0.29 J	0.42 J	0.97 J
7440-70-2	Calcium	2660-6700	NS	mg/kg	8020 J	12200 J	29100	8760	4560 J
7440-47-3	Chromium	11.2-22	26 (L)	mg/kg	28.3 J	21.2 J	12.9	14.5	149 J
7440-48-4	Cobalt	7.1-14	NS	mg/kg	15.8 J	17.9 J	13.1	13.6	34.8 J
7440-50-8	Copper	13-27.7	16 (L)	mg/kg	205 J	142 J	23.7	23.8	116 J
7439-89-6	Iron	18300-25400	20000 (L)	mg/kg	32800 J	32300 J	26600	28900	32400 J
7439-92-1	Lead	7.8-20.9	31 (L)	mg/kg	182 J	180 J	8.9 J	11.5 J	44.4 J
7439-95-4	Magnesium	3190-5190	NS	mg/kg	8310 J	8010 J	7020	4930	4800 J
7439-96-5	Manganese	328-647	460 (L)	mg/kg	324 J	681 J	516	503	762 J
7439-97-6	Mercury	0.027-0.091	0.15 (L)	mg/kg	0.092 J	0.056 J	0.036 J	0.036 J	0.089 J
7440-02-0	Nickel	15.6-24.5	16 (L)	mg/kg	35.5 J	34.6 J	21.8	22.6	33.2 J
7440-09-7	Potassium	734-1530	NS	mg/kg	1720 J	1190 J	1140	1000	1440 J
7782-49-2	Selenium	ND-0.81	NS	mg/kg	0.65 J	1.5 J	ND	ND	0.83 J
7440-22-4	Silver	ND-0.5	1 (L)	mg/kg	ND	ND	ND	ND	0.32 J
7440-23-5	Sodium	71.6-790	NS	mg/kg	146 J	72.3 J	163 J	130 J	193 J
7440-28-0	Thallium	ND-1.5	NS	mg/kg	ND	ND	0.96 J	ND	ND
7440-62-2	Vanadium	14.6-28.4	NS	mg/kg	26.8 J	26.3 J	26	24.4	21.5 J
7440-66-6	Zinc	47.7-118	120 (L)	mg/kg	556 J	563 J	67.6	184	668 J

CPAH = Carcinogenic Polynuclear Aromatic Hydrocarbon
NPAH = Noncarcinogenic Polynuclear Aromatic Hydrocarbon
C = Benthic Aquatic Chronic Criteria (TOC Adjusted),(NYSDEC, 1999).
H = Human Health Bioaccumulation (TOC Adjusted), (NYSDEC, 1999).
LM = Medium Effects Level (TOC Adjusted), (Long and Morgan, 1990).
W = Wildlife Bioaccumulation Criteria (TOC Adjusted), (NYSDEC, 1999).
L = Lowest Effect Level (metals), (NYSDEC, 1999).
NS = No sediment criteria.
NA / ND = Not analyzed or detected (USACE report does not report these metals).
J = Estimated Concentration
R = Rejected during data validation
N = Presumptive Evidence
[shaded] Concentration is above NYSDEC Criteria and Upstream Ranges

TABLE 3.36a
SADVA AOC 8 SHALLOW SEDIMENT RESULTS (2000/2005)

					Black Creek - Southern SADVA		West Ditch - Northern SADVA		Black Creek Downstream
Former Schenectady Army Depot Remedial Investigation AOC 8 Black Creek Area Detected Compound Summary				SAMPLE ID:	SD19	SD20	SD14	SD24	SD25
				LAB ID:	C0G200278003	C0G200278004	C0G200278001	C0G200278005	C0G200280001
				DEPTH:	0.2'	0.2'	0.2'	0.2'	0.2'
				SOURCE:	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh
				SDG:	SADVA1	SADVA1	SADVA1	SADVA1	SADVA5
				MATRIX:	SOIL	SOIL	SOIL	SOIL	SOIL
		Black Creek	NYSDEC	SAMPLED:	7/19/2000	7/19/2000	7/19/2000	7/19/2000	7/19/2000
		Upstream	Sediment	VALIDATED:	10/4/2000	10/4/2000	10/4/2000	10/4/2000	10/12/2000
CAS NO.	COMPOUND	Ranges	Criteria	UNITS:					
	VOLATILES								
67-64-1	Acetone	ND-14	NS	ug/kg	ND	ND	ND	ND	3.4 J
74-83-9	Bromomethane	ND	NS	ug/kg	R	R	R	R	R
75-00-3	Chloroethane	ND	NS	ug/kg	R	R	R	R	ND
108-88-3	Toluene	ND-2.4	720 (C)	ug/kg	ND	ND	ND	ND	ND
	Total VOCs			**ug/kg**	**ND**	**ND**	**ND**	**ND**	**3.4**
	SEMIVOLATILES								
106-44-5	4-Methylphenol	ND	7 (C)	ug/kg	ND	ND	ND	ND	ND
117-81-7	bis(2-Ethylhexyl) phthalate	ND	2925 (C)	ug/kg	74 J	55 J	ND	99 J	74 J
132-64-9	Dibenzofuran	ND-50	NS	ug/kg	35 J	ND	ND	ND	ND
	CPAHs								
56-55-3	Benzo(a)anthracene	ND-310	19 (C)	ug/kg	440 J	ND	26 J	110 J	140 J
50-32-8	Benzo(a)pyrene	ND-330	19 (H)	ug/kg	380 J	ND	26 J	ND	160 J
205-99-2	Benzo(b)fluoranthene	ND-440	19 (H)	ug/kg	410 J	44 J	32 J	160 J	170 J
207-08-9	Benzo(k)fluoranthene	ND-360	19 (H)	ug/kg	350 J	ND	24 J	140 J	170 J
218-01-9	Chrysene	ND-730	19 (H)	ug/kg	470 J	46 J	35 J	150 J	180 J
53-70-3	Dibenz(a,h)anthracene	ND	88 (LM)	ug/kg	ND	ND	ND	ND	26 J
193-39-5	Indeno(1,2,3-cd)pyrene	ND-78	19 (H)	ug/kg	92 J	ND	ND	40 J	98 J
	Total CPAHs			**ug/kg**	**2142**	**90**	**143**	**600**	**944**
	NPAHs								
83-32-9	Acenaphthene	ND-92	2058 (C)	ug/kg	98 J	ND	ND	ND	ND
120-12-7	Anthracene	ND-170	1573 (C)	ug/kg	170 J	ND	ND	ND	24 J
191-24-2	Benzo(ghi)perylene	ND-66	NS	ug/kg	88 J	ND	ND	38 J	100 J
206-44-0	Fluoranthene	ND-1200	14994 (C)	ug/kg	1100	75 J	63 J	330 J	260 J
91-20-3	Naphthalene	ND-210	441 (C)	ug/kg	ND	ND	ND	ND	ND
85-01-8	Phenanthrene	ND-400	1764 (C)	ug/kg	680	ND	28 J	120 J	120 J
129-00-0	Pyrene	ND-920	14127 (C)	ug/kg	560 J	ND	32 J	170 J	260 J
	Total NPAHs		**35000 (LM)**	**ug/kg**	**2696**	**75**	**123**	**658**	**764**
	Total PAHs			**ug/kg**	**4838**	**165**	**266**	**1258**	**1708**
	Total SVOCs			**ug/kg**	**4947**	**220**	**266**	**1357**	**1782**
	PESTICIDES								
319-84-6	alpha-BHC	ND		ug/kg	0.17 J	ND	ND	ND	ND
60-57-1	Dieldrin	ND	1.47 (C)	ug/kg	ND	ND	ND	ND	ND
72-55-9	4,4'-DDE	ND-0.23	14.7 (W)	ug/kg	0.93 J	28 J	190	72	2.5
72-20-8	Endrin	ND	59 (C)	ug/kg	ND	ND	ND	ND	ND
72-54-8	4,4'-DDD	ND	14.7 (W)	ug/kg	ND	4.3 JN	5.7 JN	22	2.8
50-29-3	4,4'-DDT	ND	14.7 (C)	ug/kg	ND	9.9 J	93	21	3.6
5103-71-9	alpha-Chlordane	ND	0.44 (C)	ug/kg	ND	2 J	ND	ND	1.1 J
5103-74-2	gamma-Chlordane	ND	0.44 (C)	ug/kg	ND	ND	ND	ND	0.34 JN
	Total Pesticides			**ug/kg**	**1.1**	**44.2**	**288.7**	**115**	**10.34**
	PCBs								
11097-69-1	Aroclor 1254	ND	284 (C)	ug/kg	ND	ND	ND	ND	ND
	Total PCBs			**ug/kg**	**ND**	**ND**	**ND**	**ND**	**ND**

FOOTNOTES: See Next Page

TABLE 3.36a
SADVA AOC 8 SHALLOW SEDIMENT RESULTS (2000/2005)

					Black Creek - Southern SADVA		West Ditch - Northern SADVA		Black Creek Downstream
Former Schenectady Army Depot				SAMPLE ID:	SD19	SD20	SD14	SD24	SD25
Remedial Investigation				LAB ID:	C0G200278003	C0G200278004	C0G200278001	C0G200278005	C0G200280001
AOC 8 Black Creek Area				DEPTH:	0.2'	0.2'	0.2'	0.2'	0.2'
Detected Compound Summary				SOURCE:	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh
				SDG:	SADVA1	SADVA1	SADVA1	SADVA1	SADVA5
				MATRIX:	SOIL	SOIL	SOIL	SOIL	SOIL
		Black Creek	NYSDEC	SAMPLED:	7/19/2000	7/19/2000	7/19/2000	7/19/2000	7/19/2000
		Upstream	Sediment	VALIDATED:	10/4/2000	10/4/2000	10/4/2000	10/4/2000	10/12/2000
CAS NO.	COMPOUND	Ranges	Criteria	UNITS:					
	METALS								
7429-90-5	Aluminum	8040-17900	NS	mg/kg	5520	8190 J	14200	11200	8700
7440-36-0	Antimony	ND-0.44	2 (L)	mg/kg	ND	ND	0.22 J	0.54 J	0.26 J
7440-38-2	Arsenic	3.1-5.1	6 (L)	mg/kg	3.3	4 J	7.7	6.2	4.1
7440-39-3	Barium	53.9-141	NS	mg/kg	54.7	137 J	63.6	74.8	41.6
7440-41-7	Beryllium	0.62-0.92	NS	mg/kg	0.36 J	0.64 J	0.83	0.81 J	0.47 J
7440-43-9	Cadmium	ND-0.75	0.6 (L)	mg/kg	0.35 J	0.57 J	0.39 J	0.43 J	0.63 J
7440-70-2	Calcium	2660-6700	NS	mg/kg	23000	118000 J	3290	3350	17900
7440-47-3	Chromium	11.2-22	26 (L)	mg/kg	11.1	14.4 J	18	13.8	19.3
7440-48-4	Cobalt	7.1-14	NS	mg/kg	6.4 J	7.1 J	17	13.4	9.8
7440-50-8	Copper	13-27.7	16 (L)	mg/kg	17.1	24.6 J	28.3	25	25.3
7439-89-6	Iron	18300-25400	20000 (L)	mg/kg	17800	18200 J	34200	27600	21700
7439-92-1	Lead	7.8-20.9	31 (L)	mg/kg	22.6 J	32.5 J	20.1 J	25.3 J	95.5
7439-95-4	Magnesium	3190-5190	NS	mg/kg	4570	48500 J	5810	3470	7490
7439-96-5	Manganese	328-647	460 (L)	mg/kg	597	256 J	810	528	293
7439-97-6	Mercury	0.027-0.091	0.15 (L)	mg/kg	0.04 J	0.12 J	0.044	0.049 J	0.098
7440-02-0	Nickel	15.6-24.5	16 (L)	mg/kg	13.2	17.2 J	32.4	22.9	19.4
7440-09-7	Potassium	734-1530	NS	mg/kg	548 J	960 J	1340	1040	709 J
7782-49-2	Selenium	ND-0.81	NS	mg/kg	ND	1.1 J	ND	0.41 J	0.33 J
7440-22-4	Silver	ND-0.5	1 (L)	mg/kg	ND	ND	ND	ND	ND
7440-23-5	Sodium	71.6-790	NS	mg/kg	158 J	674 J	109 J	134 J	335 J
7440-28-0	Thallium	ND-1.5	NS	mg/kg	ND	ND	0.59 J	ND	ND
7440-62-2	Vanadium	14.6-28.4	NS	mg/kg	10.5	22.6 J	27.2	27.8	19.1
7440-66-6	Zinc	47.7-118	120 (L)	mg/kg	72.3	193 J	116	96.3	113

CPAH = Carcinogenic Polynuclear Aromatic Hydrocarbon
NPAH = Noncarcinogenic Polynuclear Aromatic Hydrocarbon
C = Benthic Aquatic Chronic Criteria (TOC Adjusted),(NYSDEC, 1999).
H = Human Health Bioaccumulation (TOC Adjusted), (NYSDEC, 1999).
LM = Medium Effects Level (TOC Adjusted), (Long and Morgan, 1990).
W = Wildlife Bioaccumulation Criteria (TOC Adjusted), (NYSDEC, 1999).
L = Lowest Effect Level (metals), (NYSDEC, 1999).
NS = No sediment criteria.
NA / ND = Not analyzed or detected (USACE report does not report these metals).
J = Estimated Concentration
R = Rejected during data validation
N = Presumptive Evidence
Concentration is above NYSDEC Criteria and Upstream Ranges

TABLE 3.36a
SADVA AOC 8 SHALLOW SEDIMENT RESULTS (2000/2005)

Former Schenectady Army Depot Remedial Investigation AOC 8 Black Creek Area Detected Compound Summary					Upstream Samples				
								Dup of SD23	
				SAMPLE ID:	SD21	SD22	SD23	SD27	SD28 (2000)
				LAB ID:	C0H080195001	C0H080195004	C0H080195002	C0H080195003	C0J050202003
				DEPTH:	0.2'	0.2'	0.2'	0.2'	0.2'
				SOURCE:	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh
				SDG:	SADVA10	SADVA10	SADVA10	SADVA10	SADVA19
				MATRIX:	SOIL	SOIL	SOIL	SOIL	SOIL
		Black Creek	NYSDEC	SAMPLED:	8/7/2000	8/7/2000	8/7/2000	8/7/2000	10/4/2000
		Upstream	Sediment	VALIDATED:	10/25/2000	10/25/2000	10/25/2000	10/25/2000	12/3/2000
CAS NO.	COMPOUND	Ranges	Criteria	UNITS:					
	VOLATILES								
67-64-1	Acetone	ND-14	NS	ug/kg	ND	ND	ND	ND	ND
74-83-9	Bromomethane	ND	NS	ug/kg	R	R	R	R	ND
75-00-3	Chloroethane	ND	NS	ug/kg	ND	ND	ND	ND	ND
108-88-3	Toluene	ND-2.4	720 (C)	ug/kg	2.4 J	ND	ND	ND	ND
	Total VOCs			**ug/kg**	**2.4**	**ND**	**ND**	**ND**	**ND**
	SEMIVOLATILES								
106-44-5	4-Methylphenol	ND	7 (C)	ug/kg	ND	150 J	210 J	ND	190 J
117-81-7	bis(2-Ethylhexyl) phthalate	ND	2925 (C)	ug/kg	ND	ND	ND	ND	ND
132-64-9	Dibenzofuran	ND-50	NS	ug/kg	ND	ND	ND	ND	50 J
	CPAHs								
56-55-3	Benzo(a)anthracene	ND-310	19 (C)	ug/kg	ND	ND	ND	ND	310 J
50-32-8	Benzo(a)pyrene	ND-330	19 (H)	ug/kg	ND	ND	ND	ND	330 J
205-99-2	Benzo(b)fluoranthene	ND-440	19 (H)	ug/kg	ND	ND	ND	ND	440 J
207-08-9	Benzo(k)fluoranthene	ND-360	19 (H)	ug/kg	ND	ND	ND	ND	360 J
218-01-9	Chrysene	ND-730	19 (H)	ug/kg	ND	ND	ND	ND	730 J
53-70-3	Dibenz(a,h)anthracene	ND	88 (LM)	ug/kg	ND	ND	ND	ND	ND
193-39-5	Indeno(1,2,3-cd)pyrene	ND-78	19 (H)	ug/kg	ND	ND	ND	ND	78 J
	Total CPAHs			**ug/kg**	**ND**	**ND**	**ND**	**ND**	**2248**
	NPAHs								
83-32-9	Acenaphthene	ND-92	2058 (C)	ug/kg	ND	ND	ND	ND	92 J
120-12-7	Anthracene	ND-170	1573 (C)	ug/kg	ND	ND	ND	ND	170 J
191-24-2	Benzo(ghi)perylene	ND-66	NS	ug/kg	ND	ND	ND	ND	66 J
206-44-0	Fluoranthene	ND-1200	14994 (C)	ug/kg	ND	ND	ND	ND	1200 J
91-20-3	Naphthalene	ND-210	441 (C)	ug/kg	ND	ND	ND	ND	210 J
85-01-8	Phenanthrene	ND-400	1764 (C)	ug/kg	ND	ND	ND	ND	400 J
129-00-0	Pyrene	ND-920	14127 (C)	ug/kg	ND	ND	ND	ND	920 J
	Total NPAHs		**35000 (LM)**	**ug/kg**	**ND**	**ND**	**ND**	**ND**	**3058**
	Total PAHs			**ug/kg**	**ND**	**ND**	**ND**	**ND**	**5306**
	Total SVOCs			**ug/kg**	**ND**	**150**	**210**	**ND**	**5546**
	PESTICIDES								
319-84-6	alpha-BHC	ND		ug/kg	ND	ND	ND	ND	ND
60-57-1	Dieldrin	ND	1.47 (C)	ug/kg	ND	ND	ND	ND	ND
72-55-9	4,4'-DDE	ND-0.23	14.7 (W)	ug/kg	0.13 JN	0.23 JN	0.15 JN	0.18 JN	ND
72-20-8	Endrin	ND	59 (C)	ug/kg	ND	ND	ND	ND	ND
72-54-8	4,4'-DDD	ND	14.7 (W)	ug/kg	ND	ND	ND	ND	ND
50-29-3	4,4'-DDT	ND	14.7 (C)	ug/kg	ND	ND	ND	ND	ND
5103-71-9	alpha-Chlordane	ND	0.44 (C)	ug/kg	ND	ND	ND	ND	ND
5103-74-2	gamma-Chlordane	ND	0.44 (C)	ug/kg	ND	ND	ND	ND	ND
	Total Pesticides			**ug/kg**	**0.13**	**0.23**	**0.15**	**0.18**	**ND**
	PCBs								
11097-69-1	Aroclor 1254	ND	284 (C)	ug/kg	ND	ND	ND	ND	ND
	Total PCBs			**ug/kg**	**ND**	**ND**	**ND**	**ND**	**ND**

FOOTNOTES: See Next Page

TABLE 3.36a
SADVA AOC 8 SHALLOW SEDIMENT RESULTS (2000/2005)

					Upstream Samples				
								Dup of SD23	
Former Schenectady Army Depot				SAMPLE ID:	SD21	SD22	SD23	SD27	SD28 (2000)
Remedial Investigation				LAB ID:	C0H080195001	C0H080195004	C0H080195002	C0H080195003	C0J050202003
AOC 8 Black Creek Area				DEPTH:	0.2'	0.2'	0.2'	0.2'	0.2'
Detected Compound Summary				SOURCE:	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh
				SDG:	SADVA10	SADVA10	SADVA10	SADVA10	SADVA19
				MATRIX:	SOIL	SOIL	SOIL	SOIL	SOIL
		Black Creek	NYSDEC	SAMPLED:	8/7/2000	8/7/2000	8/7/2000	8/7/2000	10/4/2000
		Upstream	Sediment	VALIDATED:	10/25/2000	10/25/2000	10/25/2000	10/25/2000	12/3/2000
CAS NO.	COMPOUND	Ranges	Criteria	UNITS:					
	METALS								
7429-90-5	Aluminum	8040-17900	NS	mg/kg	12000	17900	14000	16600	9830 J
7440-36-0	Antimony	ND-0.44	2 (L)	mg/kg	0.24 J	0.41 J	0.44 J	0.31 J	0.42 J
7440-38-2	Arsenic	3.1-5.1	6 (L)	mg/kg	3.6	3.6	3.1	2.7	4.5
7440-39-3	Barium	53.9-141	NS	mg/kg	101	141	119	130	71.9
7440-41-7	Beryllium	0.62-0.92	NS	mg/kg	0.67	0.92	0.79 J	0.89 J	0.62 J
7440-43-9	Cadmium	ND-0.75	0.6 (L)	mg/kg	0.39 J	0.75 J	0.48 J	0.52 J	0.4 J
7440-70-2	Calcium	2660-6700	NS	mg/kg	4370	5630	4810	4850	6700 J
7440-47-3	Chromium	11.2-22	26 (L)	mg/kg	15.4 J	22 J	15.3 J	17.2 J	16.4 J
7440-48-4	Cobalt	7.1-14	NS	mg/kg	10	14	7.4 J	8.5 J	11 J
7440-50-8	Copper	13-27.7	16 (L)	mg/kg	22.2	27.7	17.2	19.6	20.6 J
7439-89-6	Iron	18300-25400	20000 (L)	mg/kg	20200	25400	18300	18800	24900 J
7439-92-1	Lead	7.8-20.9	31 (L)	mg/kg	15.8 J	18.7 J	20.9 J	24.4 J	20 J
7439-95-4	Magnesium	3190-5190	NS	mg/kg	3930	5190	3240	3630	4150 J
7439-96-5	Manganese	328-647	460 (L)	mg/kg	328	647	386	314	624 J
7439-97-6	Mercury	0.027-0.091	0.15 (L)	mg/kg	0.067	0.091	0.079	0.083	0.06 J
7440-02-0	Nickel	15.6-24.5	16 (L)	mg/kg	21 J	24.5 J	17.2 J	18 J	20.5 J
7440-09-7	Potassium	734-1530	NS	mg/kg	900 J	1530 J	891 J	927 J	734 J
7782-49-2	Selenium	ND-0.81	NS	mg/kg	0.53 J	0.72 J	0.81 J	0.71 J	0.67 J
7440-22-4	Silver	ND-0.5	1 (L)	mg/kg	0.16 J	0.5 J	ND	ND	ND
7440-23-5	Sodium	71.6-790	NS	mg/kg	268 J	186 J	255 J	154 J	790 J
7440-28-0	Thallium	ND-1.5	NS	mg/kg	ND	1.5 J	1.3 J	1.3 J	ND
7440-62-2	Vanadium	14.6-28.4	NS	mg/kg	19.2 J	28.4 J	24.4 J	27 J	18.2 J
7440-66-6	Zinc	47.7-118	120 (L)	mg/kg	77.3	118	72.3	80	98.7 J

CPAH = Carcinogenic Polynuclear Aromatic Hydrocarbon
NPAH = Noncarcinogenic Polynuclear Aromatic Hydrocarbon
C = Benthic Aquatic Chronic Criteria (TOC Adjusted),(NYSDEC, 1999).
H = Human Health Bioaccumulation (TOC Adjusted), (NYSDEC, 1999).
LM = Medium Effects Level (TOC Adjusted), (Long and Morgan, 1990).
W = Wildlife Bioaccumulation Criteria (TOC Adjusted), (NYSDEC, 1999).
L = Lowest Effect Level (metals), (NYSDEC, 1999).
NS = No sediment criteria.
NA / ND = Not analyzed or detected (USACE report does not report these metals).
J = Estimated Concentration
R = Rejected during data validation
N = Presumptive Evidence
Concentration is above NYSDEC Criteria and Upstream Ranges

TABLE 3.36b
SADVA AOC 8 SEDIMENT RESULTS (2004)

					BLACK CREEK - EAST SIDE		WESTERN DITCH		
USACE-Schenectady Depot Validated Sediment Analytical Data AOC 8 Detected Compound Summary				Sample ID:	SD07-1-1.5	SD09-1-1.5	SD12-1-1.5	SD14-0.5-1	SD15-1-1.5
				Lab Sample ID	C4G150227009	C4G150227008	C4G210269012	C4G220161002	C4G220161001
				Depth:	1-1.5'	1-1.5'	1-1.5	0.5-1'	1-1.5'
				Source:	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh
				SDG:	C4G150227	C4G150227	C4G210269	C4G220161	C4G220161
				Matrix:	SOIL	SOIL	SOIL	SOIL	SOIL
		Black Creek	NYSDEC	Sampled:	7/14/2004	7/14/2004	7/20/2004	7/20/2004	7/20/2004
		Upstream	Sediment	Validated:	9/17/2004	9/17/2004	9/19/2004	9/19/2004	9/19/2004
CAS NO.	COMPOUND	Ranges	Criteria	UNITS:					
	SEMIVOLATILES								
117-81-7	bis(2-Ethylhexyl) phthalate	ND	2925 (C)	ug/kg	ND	ND	ND	ND	ND
86-74-8	Carbazole	ND	NS	ug/kg	ND	ND	ND	ND	ND
84-74-2	Di-n-butyl phthalate	ND	NS	ug/kg	ND	ND	41 J	ND	ND
132-64-9	Dibenzofuran	ND-50	NS	ug/kg	ND	ND	ND	ND	ND
108-95-2	Phenol			ug/kg	ND	ND	ND	ND	ND
	CPAHs								
56-55-3	Benzo(a)anthracene	ND-310	19 (C)	ug/kg	ND	ND	ND	ND	ND
50-32-8	Benzo(a)pyrene	ND-330	19 (H)	ug/kg	ND	ND	ND	ND	ND
205-99-2	Benzo(b)fluoranthene	ND-440	19 (H)	ug/kg	ND	ND	ND	ND	ND
207-08-9	Benzo(k)fluoranthene	ND-360	19 (H)	ug/kg	ND	ND	ND	ND	ND
218-01-9	Chrysene	ND-730	19 (H)	ug/kg	ND	ND	ND	ND	ND
53-70-3	Dibenz(a,h)anthracene	ND	88 (LM)	ug/kg	ND	ND	ND	ND	ND
193-39-5	Indeno(1,2,3-cd)pyrene	ND-78	19 (H)	ug/kg	ND	ND	ND	ND	ND
	Total CPAHs				**ND**	**ND**	**ND**	**ND**	**ND**
	NPAHs								
83-32-9	Acenaphthene	ND-92	2058 (C)	ug/kg	ND	ND	ND	ND	ND
120-12-7	Anthracene	ND-170	1573 (C)	ug/kg	ND	ND	ND	ND	ND
191-24-2	Benzo(ghi)perylene	ND-66	1573 (C)	ug/kg	ND	ND	ND	ND	ND
206-44-0	Fluoranthene	ND-1200	14994 (C)	ug/kg	ND	42 J	ND	ND	ND
86-73-7	Fluorene	ND	14994 (C)	ug/kg	ND	ND	ND	ND	ND
91-20-3	Naphthalene	ND-210	441 (C)	ug/kg	ND	ND	ND	ND	ND
85-01-8	Phenanthrene	ND-400	1764 (C)	ug/kg	ND	ND	ND	ND	ND
129-00-0	Pyrene	ND-920	14127 (C)	ug/kg	ND	ND	ND	ND	ND
	Total NPAHs				**ND**	**42**	**ND**	**ND**	**ND**
	Total PAHs		**35000 (LM)**		**ND**	**42**	**ND**	**ND**	**ND**
	Total SVOCs				**ND**	**42**	**41**	**ND**	**ND**

CPAH = Carcinogenic Polynuclear Aromatic Hydrocarbon.
NPAH = Noncarcinogenic Polynuclear Aromatic Hydrocarbon.
U = Analyte not detected; the number is the analytical reporting limit.
J = Estimated Value
ND = Not Detected
C = Benthic Aquatic Chronic Criteria (TOC Adjusted),(NYSDEC, 1999).
L = Lowest Effect Level (metals), (NYSDEC, 1999)
W = Wildlife Bioaccumulation Criteria (TOC Adjusted), (NYSDEC, 1999).
NS = No Standard
N = Presumptive Evidence
- concentration above NYSDEC Sediment criteria and upstream range.

TABLE 3.36b
SADVA AOC 8 SEDIMENT RESULTS (2004)

					BLACK CREEK - EAST SIDE			WESTERN DITCH	
USACE-Schenectady Depot Validated Sediment Analytical Data AOC 8 Detected Compound Summary				Sample ID:	SD07-1-1.5	SD09-1-1.5	SD12-1-1.5	SD14-0.5-1	SD15-1-1.5
				Lab Sample ID	C4G150227009	C4G150227008	C4G210269012	C4G220161002	C4G220161001
				Depth:	1-1.5'	1-1.5'	1-1.5	0.5-1'	1-1.5'
				Source:	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh
				SDG:	C4G150227	C4G150227	C4G210269	C4G220161	C4G220161
				Matrix:	SOIL	SOIL	SOIL	SOIL	SOIL
		Black Creek	NYSDEC	Sampled:	7/14/2004	7/14/2004	7/20/2004	7/20/2004	7/20/2004
		Upstream	Sediment	Validated:	9/17/2004	9/17/2004	9/19/2004	9/19/2004	9/19/2004
CAS NO.	COMPOUND	Ranges	Criteria	UNITS:					
	PESTICIDES								
319-85-7	beta-BHC	ND	NS	ug/kg	ND	ND	ND	ND	0.36 JN
5103-71-9	alpha-Chlordane	ND	0.44 (C)	ug/kg	ND	ND	ND	ND	ND
5103-74-2	gamma-Chlordane	ND	0.44 (C)	ug/kg	ND	ND	ND	ND	ND
72-54-8	4,4'-DDD	ND	14.7 (W)	ug/kg	0.66 J	1.7 JN	1.2 J	11 J	14
72-55-9	4,4'-DDE	ND-0.23	14.7 (W)	ug/kg	ND	0.9 JN	1.5 J	79	26
50-29-3	4,4'-DDT	ND	14.7 (C)	ug/kg	0.24 J	1.3 J	0.76 JN	44	8.4
60-57-1	Dieldrin	ND	1.47 (C)	ug/kg	ND	ND	ND	ND	0.26 J
33213-65-9	Endosulfan II	ND	NS	ug/kg	ND	ND	ND	ND	1.1 J
1031-07-8	Endosulfan sulfate	ND	NS	ug/kg	ND	ND	ND	ND	ND
72-20-8	Endrin	ND	59 (C)	ug/kg	ND	ND	ND	ND	ND
7421-93-4	Endrin aldehyde	ND	NS	ug/kg	ND	ND	ND	ND	ND
1024-57-3	Heptachlor epoxide	ND	1.47 (C)	ug/kg	ND	ND	ND	ND	ND
	Total Pesticides				**0.9**	**3.9**	**3.46**	**134**	**49.76**
	PCBS								
	None Detected				NA	NA	NA	NA	NA
	METALS								
7429-90-5	Aluminum	8040-17900	NS	mg/kg	7720	12600	8080	12000	11700
7440-36-0	Antimony	ND-0.44	2 (L)	mg/kg	ND	0.44 J	ND	ND	ND
7440-38-2	Arsenic	3.1-5.1	6 (L)	mg/kg	4.6	22.5	4.4	6.3	6.5
7440-39-3	Barium	53.9-141	NS	mg/kg	28.6	1030	59.5	61.2	60
7440-41-7	Beryllium	0.62-0.92	NS	mg/kg	0.75	1	0.83	0.97	0.9
7440-43-9	Cadmium	ND-0.75	0.6 (L)	mg/kg	ND	0.24 J	0.23 J	0.27 J	0.33 J
7440-70-2	Calcium	2660-6700	NS	mg/kg	2290	4740	35300	2430	8400
7440-47-3	Chromium	11.2-22	26 (L)	mg/kg	11.9	21.8	12.7	16.5	19.8
7440-48-4	Cobalt	7.1-14	NS	mg/kg	8.5	14.1	7	13.2	11.5
7440-50-8	Copper	13-27.7	16 (L)	mg/kg	24.1	22.6	20.7	28	55.7
7439-89-6	Iron	18300-25400	20000 (L)	mg/kg	19600	61100	18200	26600	27500
7439-92-1	Lead	7.8-20.9	31 (L)	mg/kg	7.3	17	11.2	16.6	30.3
7439-95-4	Magnesium	3190-5190	NS	mg/kg	2960	5210	6580	4330	6570
7439-96-5	Manganese	328-647	460 (L)	mg/kg	134	10100	329	739	357
7439-97-6	Mercury	0.027-0.091	0.15 (L)	mg/kg	0.022 J	ND	0.035 J	0.03 J	0.031 J
7440-02-0	Nickel	15.6-24.5	16 (L)	mg/kg	18	31.4	15.7	26.7	28.5
7440-09-7	Potassium	734-1530	NS	mg/kg	865	1270	759	1110	1400
7782-49-2	Selenium	ND-0.81	NS	mg/kg	0.34 J	ND	ND	ND	ND
7440-22-4	Silver	ND-0.5	1 (L)	mg/kg	ND	0.58 J	0.055 J	0.13 J	0.12 J
7440-23-5	Sodium	71.6-790	NS	mg/kg	166 J	95.1 J	166 J	125 J	102 J
7440-28-0	Thallium	ND-1.5	NS	mg/kg	ND	ND	ND	ND	ND
7440-62-2	Vanadium	14.6-28.4	NS	mg/kg	21.5	25.2	20.7	24.6	22.5
7440-66-6	Zinc	47.7-118	120 (L)	mg/kg	45.5	87	42.1	102	150

CPAH = Carcinogenic Polynuclear Aromatic Hydrocarbon.
NPAH = Noncarcinogenic Polynuclear Aromatic Hydrocarbon.
J = Estimated Value
ND = Not Detected
C = Benthic Aquatic Chronic Criteria (TOC Adjusted),(NYSDEC, 1999).
L = Lowest Effect Level (metals), (NYSDEC, 1999)
W = Wildlife Bioaccumulation Criteria (TOC Adjusted), (NYSDEC, 1999).
NS = No Standard
N = Presumptive Evidence
- concentration above NYSDEC Sediment criteria and background.

TABLE 3.36b
SADVA AOC 8 SEDIMENT RESULTS (2004)

					BLACK CREEK - EAST SIDE OF SADVA		UPSTREAM - BLACK CREEK		WESTERN DITCH
USACE-Schenectady Depot Validated Sediment Analytical Data AOC 8 Detected Compound Summary				Sample ID:	SD17-1-1.5	SD18-1-1.5	SD28-0-0.5 (2004)	SD28-1-1.5 (2004)	SD29-1-1.5
				Lab Sample ID	C4G210269013	C4G170276005	C4G150227006	C4G150227007	C4G170276006
				Depth:	1-1.5	1-1.5'	0-0.5'	1-1.5'	1-1.5'
				Source:	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh
				SDG:	C4G210269	C4G170276	C4G150227	C4G150227	C4G170276
				Matrix:	SOIL	SOIL	SOIL	SOIL	SOIL
		Black Creek	NYSDEC	Sampled:	7/20/2004	7/16/2004	7/14/2004	7/14/2004	7/16/2004
		Upstream	Sediment	Validated:	9/19/2004	9/18/2004	9/17/2004	9/17/2004	9/18/2004
CAS NO.	COMPOUND	Ranges	Criteria	UNITS:					
	SEMIVOLATILES								
117-81-7	bis(2-Ethylhexyl) phthalate	ND	2925 (C)	ug/kg	ND	ND	ND	ND	ND
86-74-8	Carbazole	ND	NS	ug/kg	ND	ND	ND	ND	ND
84-74-2	Di-n-butyl phthalate	ND	NS	ug/kg	ND	ND	ND	ND	ND
132-64-9	Dibenzofuran	ND-50	NS	ug/kg	ND	ND	ND	ND	ND
108-95-2	Phenol			ug/kg	ND	ND	ND	ND	ND
	CPAHs								
56-55-3	Benzo(a)anthracene	ND-310	19 (C)	ug/kg	ND	ND	ND	ND	ND
50-32-8	Benzo(a)pyrene	ND-330	19 (H)	ug/kg	ND	ND	ND	ND	ND
205-99-2	Benzo(b)fluoranthene	ND-440	19 (H)	ug/kg	ND	ND	ND	ND	ND
207-08-9	Benzo(k)fluoranthene	ND-360	19 (H)	ug/kg	ND	ND	ND	ND	ND
218-01-9	Chrysene	ND-730	19 (H)	ug/kg	ND	ND	44 J	ND	ND
53-70-3	Dibenz(a,h)anthracene	ND	88 (LM)	ug/kg	ND	ND	ND	ND	ND
193-39-5	Indeno(1,2,3-cd)pyrene	ND-78	19 (H)	ug/kg	ND	ND	ND	ND	ND
	Total CPAHs				**ND**	**ND**	**44**	**ND**	**ND**
	NPAHs								
83-32-9	Acenaphthene	ND-92	2058 (C)	ug/kg	ND	ND	ND	ND	ND
120-12-7	Anthracene	ND-170	1573 (C)	ug/kg	ND	ND	ND	ND	ND
191-24-2	Benzo(ghi)perylene	ND-66	1573 (C)	ug/kg	ND	ND	ND	ND	ND
206-44-0	Fluoranthene	ND-1200	14994 (C)	ug/kg	ND	ND	ND	ND	ND
86-73-7	Fluorene	ND	14994 (C)	ug/kg	ND	ND	ND	ND	ND
91-20-3	Naphthalene	ND-210	441 (C)	ug/kg	ND	ND	ND	ND	ND
85-01-8	Phenanthrene	ND-400	1764 (C)	ug/kg	ND	ND	ND	ND	ND
129-00-0	Pyrene	ND-920	14127 (C)	ug/kg	ND	ND	ND	ND	ND
	Total NPAHs				**ND**	**ND**	**ND**	**ND**	**ND**
	Total PAHs		**35000 (LM)**		**ND**	**ND**	**44**	**ND**	**ND**
	Total SVOCs				**ND**	**ND**	**44**	**ND**	**ND**

CPAH = Carcinogenic Polynuclear Aromatic Hydrocarbon.
NPAH = Noncarcinogenic Polynuclear Aromatic Hydrocarbon.
U = Analyte not detected; the number is the analytical reporting limit.
J = Estimated Value
ND = Not Detected
C = Benthic Aquatic Chronic Criteria (TOC Adjusted),(NYSDEC, 1999).
L = Lowest Effect Level (metals), (NYSDEC, 1999)
W = Wildlife Bioaccumulation Criteria (TOC Adjusted), (NYSDEC, 1999).
NS = No Standard
N = Presumptive Evidence
- concentration above NYSDEC Sediment criteria and upstream range.

TABLE 3.36b
SADVA AOC 8 SEDIMENT RESULTS (2004)

USACE-Schenectady Depot Validated Sediment Analytical Data AOC 8 Detected Compound Summary					BLACK CREEK - EAST SIDE OF SADVA		UPSTREAM - BLACK CREEK		WESTERN DITCH
				Sample ID:	SD17-1-1.5	SD18-1-1.5	SD28-0-0.5 (2004)	SD28-1-1.5 (2004)	SD29-1-1.5
				Lab Sample ID	C4G210269013	C4G170276005	C4G150227006	C4G150227007	C4G170276006
				Depth:	1-1.5	1-1.5'	0-0.5'	1-1.5'	1-1.5'
				Source:	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh
				SDG:	C4G210269	C4G170276	C4G150227	C4G150227	C4G170276
				Matrix:	SOIL	SOIL	SOIL	SOIL	SOIL
		Black Creek Upstream	NYSDEC Sediment	Sampled:	7/20/2004	7/16/2004	7/14/2004	7/14/2004	7/16/2004
				Validated:	9/19/2004	9/18/2004	9/17/2004	9/17/2004	9/18/2004
CAS NO.	COMPOUND	Ranges	Criteria	UNITS:					
	PESTICIDES								
319-85-7	beta-BHC	ND	NS	ug/kg	ND	ND	ND	ND	ND
5103-71-9	alpha-Chlordane	ND	0.44 (C)	ug/kg	ND	ND	ND	ND	ND
5103-74-2	gamma-Chlordane	ND	0.44 (C)	ug/kg	ND	ND	ND	ND	ND
72-54-8	4,4'-DDD	ND	14.7 (W)	ug/kg	0.29 J	ND	ND	0.21 JN	ND
72-55-9	4,4'-DDE	ND-0.23	14.7 (W)	ug/kg	ND	ND	ND	ND	ND
50-29-3	4,4'-DDT	ND	14.7 (C)	ug/kg	ND	ND	0.35 J	0.62 J	ND
60-57-1	Dieldrin	ND	1.47 (C)	ug/kg	ND	ND	ND	ND	ND
33213-65-9	Endosulfan II	ND	NS	ug/kg	ND	ND	ND	ND	ND
1031-07-8	Endosulfan sulfate	ND	NS	ug/kg	ND	ND	ND	ND	ND
72-20-8	Endrin	ND	59 (C)	ug/kg	ND	ND	ND	ND	ND
7421-93-4	Endrin aldehyde	ND	NS	ug/kg	ND	ND	ND	ND	ND
1024-57-3	Heptachlor epoxide	ND	1.47 (C)	ug/kg	ND	ND	ND	ND	ND
	Total Pesticides				**0.29**	**ND**	**0.35**	**0.62**	**ND**
	PCBS								
	None Detected				NA	NA	NA	NA	ND
	METALS								
7429-90-5	Aluminum	8040-17900	NS	mg/kg	9690	13300	8040	9660	12600
7440-36-0	Antimony	ND-0.44	2 (L)	mg/kg	ND	ND	ND	ND	ND
7440-38-2	Arsenic	3.1-5.1	6 (L)	mg/kg	5.3	3.2	5.1	4.2	7.6
7440-39-3	Barium	53.9-141	NS	mg/kg	47.1	79.7	53.9	48.2	68.5
7440-41-7	Beryllium	0.62-0.92	NS	mg/kg	0.86	1.3	0.7	0.69	0.87
7440-43-9	Cadmium	ND-0.75	0.6 (L)	mg/kg	0.23 J	ND	ND	0.19 J	0.23 J
7440-70-2	Calcium	2660-6700	NS	mg/kg	14000	3510	2660	35200	24300
7440-47-3	Chromium	11.2-22	26 (L)	mg/kg	13.4	18.9	11.2	16.1	21
7440-48-4	Cobalt	7.1-14	NS	mg/kg	9.1	13.6	7.1	8.7	11.8
7440-50-8	Copper	13-27.7	16 (L)	mg/kg	24.1	31.4 J	13	25	39.2 J
7439-89-6	Iron	18300-25400	20000 (L)	mg/kg	23400	29200	20800	21500	31000
7439-92-1	Lead	7.8-20.9	31 (L)	mg/kg	9.3	10.5	7.8	9.1	13.1
7439-95-4	Magnesium	3190-5190	NS	mg/kg	5590	4620	3190	17100	9570
7439-96-5	Manganese	328-647	460 (L)	mg/kg	310	207	363	528	518
7439-97-6	Mercury	0.027-0.091	0.15 (L)	mg/kg	0.019 J	0.024 J	0.027 J	0.032 J	ND
7440-02-0	Nickel	15.6-24.5	16 (L)	mg/kg	20.5	29	15.6	21.8	31.2
7440-09-7	Potassium	734-1530	NS	mg/kg	817	1270	901	1150	1740
7782-49-2	Selenium	ND-0.81	NS	mg/kg	ND	ND	ND	ND	ND
7440-22-4	Silver	ND-0.5	1 (L)	mg/kg	0.094 J	0.046 J	0.075 J	0.079 J	0.17 J
7440-23-5	Sodium	71.6-790	NS	mg/kg	111 J	148 J	71.6 J	89.1 J	138 J
7440-28-0	Thallium	ND-1.5	NS	mg/kg	ND	ND	ND	ND	ND
7440-62-2	Vanadium	14.6-28.4	NS	mg/kg	20.8	34.6	14.6	18.5	24.8
7440-66-6	Zinc	47.7-118	120 (L)	mg/kg	59.6	70.2	47.7	73.5	85.9

CPAH = Carcinogenic Polynuclear Aromatic Hydrocarbon.
NPAH = Noncarcinogenic Polynuclear Aromatic Hydrocarbon.
J = Estimated Value
ND = Not Detected
C = Benthic Aquatic Chronic Criteria (TOC Adjusted),(NYSDEC, 1999).
L = Lowest Effect Level (metals), (NYSDEC, 1999)
W = Wildlife Bioaccumulation Criteria (TOC Adjusted), (NYSDEC, 1999).
NS = No Standard
N = Presumptive Evidence
- concentration above NYSDEC Sediment criteria and background.

TABLE 3.36b
SADVA AOC 8 SEDIMENT RESULTS (2004)

					BLACK CREEK DAM	BLACK CREEK - NEAR ENTRANCE TO INDUSTRIAL PARK			
USACE-Schenectady Depot Validated Sediment Analytical Data AOC 8 Detected Compound Summary				Sample ID:	SD30-1-1.5	SD31-0-0.5	SD31-1-1.5	SD32-0-0.5	SD32-1-1.5
				Lab Sample ID	C4G150227001	C4G150227002	C4G150227003	C4G150227004	C4G150227005
				Depth:	1-1.5'	0-0.5'	1-1.5'	0-0.5'	1-1.5'
				Source:	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh
				SDG:	C4G150227	C4G150227	C4G150227	C4G150227	C4G150227
				Matrix:	SOIL	SOIL	SOIL	SOIL	SOIL
		Black Creek Upstream Ranges	NYSDEC Sediment Criteria	Sampled:	7/14/2004	7/14/2004	7/14/2004	7/14/2004	7/14/2004
				Validated:	9/17/2004	9/17/2004	9/17/2004	9/17/2004	9/17/2004
CAS NO.	COMPOUND			UNITS:					
	SEMIVOLATILES								
117-81-7	bis(2-Ethylhexyl) phthalate	ND	2925 (C)	ug/kg	ND	ND	ND	240 J	58 J
86-74-8	Carbazole	ND	NS	ug/kg	ND	ND	ND	650 J	44 J
84-74-2	Di-n-butyl phthalate	ND	NS	ug/kg	ND	ND	ND	ND	ND
132-64-9	Dibenzofuran	ND-50	NS	ug/kg	ND	ND	ND	110 J	ND
108-95-2	Phenol			ug/kg	ND	ND	ND	ND	ND
	CPAHs								
56-55-3	Benzo(a)anthracene	ND-310	19 (C)	ug/kg	ND	490 J	ND	2200	150 J
50-32-8	Benzo(a)pyrene	ND-330	19 (H)	ug/kg	ND	480 J	ND	2900	140 J
205-99-2	Benzo(b)fluoranthene	ND-440	19 (H)	ug/kg	ND	520 J	ND	3700	170 J
207-08-9	Benzo(k)fluoranthene	ND-360	19 (H)	ug/kg	ND	220 J	ND	1300	64 J
218-01-9	Chrysene	ND-730	19 (H)	ug/kg	ND	660 J	ND	3000	190 J
53-70-3	Dibenz(a,h)anthracene	ND	88 (LM)	ug/kg	ND	96 J	ND	270 J	ND
193-39-5	Indeno(1,2,3-cd)pyrene	ND-78	19 (H)	ug/kg	ND	330 J	ND	1200	62 J
	Total CPAHs				**ND**	**2796**	**ND**	**14570**	**776**
	NPAHs								
83-32-9	Acenaphthene	ND-92	2058 (C)	ug/kg	ND	ND	ND	160 J	ND
120-12-7	Anthracene	ND-170	1573 (C)	ug/kg	ND	ND	ND	670 J	54 J
191-24-2	Benzo(ghi)perylene	ND-66	1573 (C)	ug/kg	ND	420 J	ND	1300	86 J
206-44-0	Fluoranthene	ND-1200	14994 (C)	ug/kg	ND	1100 J	ND	8100	480
86-73-7	Fluorene	ND	14994 (C)	ug/kg	ND	ND	ND	230 J	ND
91-20-3	Naphthalene	ND-210	441 (C)	ug/kg	ND	ND	ND	ND	53 J
85-01-8	Phenanthrene	ND-400	1764 (C)	ug/kg	ND	500 J	ND	5500	240 J
129-00-0	Pyrene	ND-920	14127 (C)	ug/kg	ND	800 J	ND	5500	230 J
	Total NPAHs				**ND**	**2820**	**ND**	**21460**	**1143**
	Total PAHs		**35000 (LM)**		**ND**	**5616**	**ND**	**36030**	**1919**
	Total SVOCs				**ND**	**5616**	**ND**	**37030**	**2021**

CPAH = Carcinogenic Polynuclear Aromatic Hydrocarbon.
NPAH = Noncarcinogenic Polynuclear Aromatic Hydrocarbon.
U = Analyte not detected; the number is the analytical reporting limit.
J = Estimated Value
ND = Not Detected
C = Benthic Aquatic Chronic Criteria (TOC Adjusted),(NYSDEC, 1999).
L = Lowest Effect Level (metals), (NYSDEC, 1999)
W = Wildlife Bioaccumulation Criteria (TOC Adjusted), (NYSDEC, 1999).
NS = No Standard
N = Presumptive Evidence
- concentration above NYSDEC Sediment criteria and upstream range.

TABLE 3.36b
SADVA AOC 8 SEDIMENT RESULTS (2004)

					BLACK CREEK DAM	BLACK CREEK - NEAR ENTRANCE TO INDUSTRIAL PARK			
USACE-Schenectady Depot Validated Sediment Analytical Data AOC 8 Detected Compound Summary				Sample ID:	SD30-1-1.5	SD31-0-0.5	SD31-1-1.5	SD32-0-0.5	SD32-1-1.5
				Lab Sample ID	C4G150227001	C4G150227002	C4G150227003	C4G150227004	C4G150227005
				Depth:	1-1.5'	0-0.5'	1-1.5'	0-0.5'	1-1.5'
				Source:	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh
				SDG:	C4G150227	C4G150227	C4G150227	C4G150227	C4G150227
				Matrix:	SOIL	SOIL	SOIL	SOIL	SOIL
		Black Creek	NYSDEC	Sampled:	7/14/2004	7/14/2004	7/14/2004	7/14/2004	7/14/2004
		Upstream	Sediment	Validated:	9/17/2004	9/17/2004	9/17/2004	9/17/2004	9/17/2004
CAS NO.	COMPOUND	Ranges	Criteria	UNITS:					
	PESTICIDES								
319-85-7	beta-BHC	ND	NS	ug/kg	ND	ND	ND	ND	ND
5103-71-9	alpha-Chlordane	ND	0.44 (C)	ug/kg	ND	ND	ND	ND	0.57 JN
5103-74-2	gamma-Chlordane	ND	0.44 (C)	ug/kg	ND	ND	ND	ND	0.28 JN
72-54-8	4,4'-DDD	ND	14.7 (W)	ug/kg	2.4	9.5	0.6 J	6.5 JN	9.8
72-55-9	4,4'-DDE	ND-0.23	14.7 (W)	ug/kg	0.51 JN	12 J	0.33 J	ND	5.7 J
50-29-3	4,4'-DDT	ND	14.7 (C)	ug/kg	ND	8.3 J	ND	ND	ND
60-57-1	Dieldrin	ND	1.47 (C)	ug/kg	ND	ND	ND	ND	0.35 JN
33213-65-9	Endosulfan II	ND	NS	ug/kg	ND	ND	ND	1.1 JN	ND
1031-07-8	Endosulfan sulfate	ND	NS	ug/kg	ND	ND	ND	2.4 JN	ND
72-20-8	Endrin	ND	59 (C)	ug/kg	ND	0.59 J	ND	ND	0.21 JN
7421-93-4	Endrin aldehyde	ND	NS	ug/kg	ND	ND	ND	ND	1.4 J
1024-57-3	Heptachlor epoxide	ND	1.47 (C)	ug/kg	ND	ND	ND	0.5 J	ND
	Total Pesticides				**2.91**	**30.39**	**0.93**	**10.5**	**18.31**
	PCBS								
	None Detected				NA	NA	NA	NA	NA
	METALS								
7429-90-5	Aluminum	8040-17900	NS	mg/kg	14900	12000	13600	8650	10300
7440-36-0	Antimony	ND-0.44	2 (L)	mg/kg	ND	0.66 J	ND	ND	ND
7440-38-2	Arsenic	3.1-5.1	6 (L)	mg/kg	6.4	5.2	8.1	6.6	6.5
7440-39-3	Barium	53.9-141	NS	mg/kg	65.8	63.5	131	37.2	69.5
7440-41-7	Beryllium	0.62-0.92	NS	mg/kg	0.99	0.89	1	0.65	0.88
7440-43-9	Cadmium	ND-0.75	0.6 (L)	mg/kg	0.19 J	0.51 J	0.09 J	0.18 J	0.34 J
7440-70-2	Calcium	2660-6700	NS	mg/kg	11400	20000	2410	22200	6560
7440-47-3	Chromium	11.2-22	26 (L)	mg/kg	22	25.1	21.7	17.2	19
7440-48-4	Cobalt	7.1-14	NS	mg/kg	13.2	11	13.5	9.5	11.1
7440-50-8	Copper	13-27.7	16 (L)	mg/kg	35.6	39.5	36.5	24	24.9
7439-89-6	Iron	18300-25400	20000 (L)	mg/kg	30600	26800	34500	24200	27500
7439-92-1	Lead	7.8-20.9	31 (L)	mg/kg	20.8	90.8	18.4	32.9	21.7
7439-95-4	Magnesium	3190-5190	NS	mg/kg	7560	10600	6040	12400	6260
7439-96-5	Manganese	328-647	460 (L)	mg/kg	383	421	327	415	489
7439-97-6	Mercury	0.027-0.091	0.15 (L)	mg/kg	0.059	0.024 J	0.016 J	0.047	0.044
7440-02-0	Nickel	15.6-24.5	16 (L)	mg/kg	28.4	26.3	31.6	21.7	28.4
7440-09-7	Potassium	734-1530	NS	mg/kg	1280	1370	1650	957	1140
7782-49-2	Selenium	ND-0.81	NS	mg/kg	ND	0.56 J	ND	ND	ND
7440-22-4	Silver	ND-0.5	1 (L)	mg/kg	0.087 J	0.13 J	0.1 J	0.2 J	0.077 J
7440-23-5	Sodium	71.6-790	NS	mg/kg	223 J	191 J	99.6 J	111 J	93.4 J
7440-28-0	Thallium	ND-1.5	NS	mg/kg	0.58 J	ND	ND	ND	ND
7440-62-2	Vanadium	14.6-28.4	NS	mg/kg	24.7	25.1	25.6	18.8	24.4
7440-66-6	Zinc	47.7-118	120 (L)	mg/kg	86.6	165	80.1	163	86.2

CPAH = Carcinogenic Polynuclear Aromatic Hydrocarbon.
NPAH = Noncarcinogenic Polynuclear Aromatic Hydrocarbon.
J = Estimated Value
ND = Not Detected
C = Benthic Aquatic Chronic Criteria (TOC Adjusted),(NYSDEC, 1999).
L = Lowest Effect Level (metals), (NYSDEC, 1999)
W = Wildlife Bioaccumulation Criteria (TOC Adjusted), (NYSDEC, 1999).
NS = No Standard
N = Presumptive Evidence
[shaded] - concentration above NYSDEC Sediment criteria and background.

TABLE 3.37
SADVA AOC 9 SOIL RESULTS

Former Schenectady Army Depot
Remedial Investigation
AOC 9 Soil Boring Data
Detected Compound Summary

CAS NO.	COMPOUND	NYSDEC Soil Criteria	SAMPLE ID:	AOC9-SB01C	AOC9-SB01E	AOC9-SB02C	AOC9-SB02E	AOC9-SB03B	AOC9-SB03E	AOC9-SB04C	AOC9-SB04E
			LAB ID:	C0H030310001	C0H030310002	C0H020218005	C0H020218006	C0H020218003	C0H020218004	C0H020218001	C0H020218002
			DEPTH:	4'	9'	4'	9'	3'	9'	4'	9'
			SOURCE:	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh
			SDG:	SADVA10	SADVA10	SADVA8	SADVA8	SADVA8	SADVA8	SADVA8	SADVA8
			MATRIX:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
			SAMPLED:	8/1/2000	8/1/2000	8/1/2000	8/1/2000	8/1/2000	8/1/2000	8/1/2000	8/1/2000
			VALIDATED:	10/25/2000	10/25/2000	10/20/2000	10/20/2000	10/20/2000	10/20/2000	10/20/2000	10/20/2000
			UNITS:								
	VOLATILES										
67-64-1	Acetone	407	ug/kg	ND	ND	51 J	ND	ND	ND	ND	ND
74-83-9	Bromomethane	NS	ug/kg	R	R	R	R	R	R	R	R
78-93-3	2-Butanone	833	ug/kg	ND	R	R	ND	R	R	ND	R
75-00-3	Chloroethane	6845	ug/kg	ND	R	R	ND	R	R	ND	R
67-66-3	Chloroform	803	ug/kg	ND	ND	ND	ND	5.9	ND	ND	ND
108-10-1	4-Methyl-2-pentanone	3515	ug/kg	R	ND	ND	R	ND	ND	R	ND
108-88-3	Toluene	5550	ug/kg	ND	4.5 J	8.2	ND	1.8 J	2.8 J	ND	2 J
79-01-6	Trichloroethene	2331	ug/kg	ND	ND	ND	ND	10	ND	ND	ND
	Total VOCs	**10000**	**ug/kg**	**ND**	**4.5**	**59.2**	**ND**	**17.7**	**2.8**	**ND**	**2**
	SEMIVOLATILES										
117-81-7	bis(2-Ethylhexyl) phthalate	50000	ug/kg	ND	ND	160 J	120 J	190 J	65 J	410	110 J
132-64-9	Dibenzofuran	22755	ug/kg	ND	ND	ND	ND	30 J	ND	ND	ND
	CPAHs										
56-55-3	Benzo(a)anthracene	224	ug/kg	110 J	ND	77 J	ND	39 J	ND	37 J	ND
50-32-8	Benzo(a)pyrene	61	ug/kg	120 J	ND	61 J	ND	ND	ND	ND	ND
205-99-2	Benzo(b)fluoranthene	4070	ug/kg	140 J	ND	73 J	ND	40 J	ND	73 J	ND
207-08-9	Benzo(k)fluoranthene	4070	ug/kg	130 J	ND	60 J	ND	32 J	ND	ND	ND
218-01-9	Chrysene	1480	ug/kg	240 J	ND	92 J	ND	54 J	ND	56 J	ND
	Total CPAHs	**10000**	**ug/kg**	**740**	**ND**	**363**	**ND**	**165**	**ND**	**166**	**ND**
	NPAHs										
91-57-6	2-Methylnaphthalene	50000	ug/kg	ND	ND	ND	ND	ND	ND	27 J	ND
83-32-9	Acenaphthene	50000	ug/kg	ND	ND	ND	ND	48 J	ND	ND	ND
120-12-7	Anthracene	50000	ug/kg	ND	ND	38 J	ND	29 J	ND	ND	ND
206-44-0	Fluoranthene	50000	ug/kg	170 J	ND	230 J	ND	120 J	ND	83 J	ND
86-73-7	Fluorene	50000	ug/kg	ND	ND	ND	ND	51 J	ND	ND	ND
85-01-8	Phenanthrene	50000	ug/kg	ND	ND	150 J	ND	200 J	ND	79 J	ND
129-00-0	Pyrene	50000	ug/kg	140 J	ND	210 J	ND	100 J	ND	67 J	ND
	Total NPAHs	**500000**	**ug/kg**	**310**	**ND**	**628**	**ND**	**548**	**ND**	**256**	**ND**
	Total PAHs		**ug/kg**	**1050**	**ND**	**991**	**ND**	**713**	**ND**	**422**	**ND**
	Total SVOCs		**ug/kg**	**1050**	**ND**	**1151**	**120**	**933**	**65**	**832**	**110**

ND - Not Detected
R - Rejected during data validation
J - Estimated concentration
SB - Site background
(shaded) Concentration above NYSDEC Soil Criteria.

TABLE 3.37
SADVA AOC 9 SOIL RESULTS

Former Schenectady Army Depot Remedial Investigation AOC 9 Soil Boring Data Detected Compound Summary			SAMPLE ID:	AOC9-SB01C	AOC9-SB01E	AOC9-SB02C	AOC9-SB02E	AOC9-SB03B	AOC9-SB03E	AOC9-SB04C	AOC9-SB04E
			LAB ID:	C0H030310001	C0H030310002	C0H020218005	C0H020218006	C0H020218003	C0H020218004	C0H020218001	C0H020218002
			DEPTH:	4'	9'	4'	9'	3'	9'	4'	9'
			SOURCE:	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh
			SDG:	SADVA10	SADVA10	SADVA8	SADVA8	SADVA8	SADVA8	SADVA8	SADVA8
			MATRIX:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
		NYSDEC	SAMPLED:	8/1/2000	8/1/2000	8/1/2000	8/1/2000	8/1/2000	8/1/2000	8/1/2000	8/1/2000
		Soil	VALIDATED:	10/25/2000	10/25/2000	10/20/2000	10/20/2000	10/20/2000	10/20/2000	10/20/2000	10/20/2000
CAS NO.	COMPOUND	Criteria	UNITS:								
	METALS										
7429-90-5	Aluminum	12800	mg/kg	6500	13000	12800	10100	10700	14300	13300	17900
7440-36-0	Antimony	0.59	mg/kg	0.28 J	0.34 J	0.19 J	0.44 J	0.36 J	0.62 J	0.36 J	0.29 J
7440-38-2	Arsenic	16.4	mg/kg	7.9	6.4	4.3	3	9.5	8.3	6.3	2.8
7440-39-3	Barium	300	mg/kg	55.8	72.7	67.8	93.3	72	111	104	121
7440-41-7	Beryllium	0.67	mg/kg	0.36 J	0.84	0.68	0.56 J	0.63	1.1	0.95	0.91
7440-43-9	Cadmium	1	mg/kg	0.84	0.16 J	0.12 J	0.12 J	0.25 J	0.098 J	0.22 J	0.34 J
7440-70-2	Calcium	46600	mg/kg	83700	25500	12900 J	92700 J	33500 J	9170 J	21600 J	134000 J
7440-47-3	Chromium	17.5	mg/kg	10.1 J	14.1 J	14.8	14.6	18	16.5	16.8	17.9
7440-48-4	Cobalt	30	mg/kg	6.8	13.4	13.7	7.1	15.7	14.4	11	8
7440-50-8	Copper	26.9	mg/kg	23	24.1	18.6 J	13.5 J	33.5 J	28.2 J	25.4 J	18.3 J
7439-89-6	Iron	25700	mg/kg	15500	30900	22600 J	18300 J	28500 J	34000 J	27800 J	23100 J
7439-92-1	Lead	60.8 (29.3 Average)	mg/kg	98.8 J	8.4 J	9.8	7	19.5	10	16.6	9.4
7439-95-4	Magnesium	13100	mg/kg	22000	7940	4030	9510	7150	5660	4760	9240
7439-96-5	Manganese	875	mg/kg	323	464	286 J	309 J	585 J	409 J	500 J	254 J
7439-97-6	Mercury	0.1	mg/kg	0.017 J	0.028 J	0.045 J	0.019 J	0.055 J	0.019 J	0.043 J	0.022 J
7440-02-0	Nickel	24.8	mg/kg	15.9 J	23.8 J	16.2	16.9	35.3	27.8	28.3	20.3
7440-09-7	Potassium	1660	mg/kg	885 J	1180 J	920	880	1290	913	1090	2210
7440-22-4	Silver	0.17	mg/kg	0.13 J	ND	ND	0.12 J	0.16 J	ND	0.13 J	ND
7440-23-5	Sodium	619	mg/kg	167 J	284 J	128 J	206 J	365 J	2540	2630	3600
7440-28-0	Thallium	0.67	mg/kg	0.85 J	0.86 J	ND	ND	ND	ND	ND	0.9 J
7440-62-2	Vanadium	150	mg/kg	32.5 J	25.9 J	21 J	16.2 J	20.4 J	29.8 J	27.3 J	25.4 J
7440-66-6	Zinc	134	mg/kg	496	62.5	42.8	53	68.7	68	67.9	63.4

CPAH - Carcinogenic Polynuclear Aromatic Hydrocarbon.
NPAH - Noncarcinogenic Polynuclear Aromatic Hydrocarbon.
ND - Not Detected
R - Rejected during data validation
J - Estimated concentration
SB - Site background
Concentration above NYSDEC Criteria and background ranges.

TABLE 3.38
SADVA AOC 9 GROUNDWATER ELEVATION DATA

				ROUND 1			ROUND 2		
Wells	Elevation TOC*	Elevation Ground*	Screen Depth**	Date	Depth to Water**	Groundwater Elevation*	Date	Depth to Water**	Groundwater Elevation*
AOC-9									
MW-9	MNP	321.32	MNP	8/16/2000	10.60	310.72	1/99	MNP	311.75 ACE
COEMW-10	324.33	321.83	4-14	8/16/2000	9.77	312.06	1/99	MNP	312.16 ACE
COEMW-11	322.91	320.51	5.3-15.3	8/16/2000	5.50	315.01	1/99	MNP	317.57 ACE
COEMW-12	MNP	322***	10-15	8/17/2000	7.80	314.20	1/99	MNP	311.77 ACE

ACE - Information from USACE Focused Groundwater/Surface Water Investigation
* Elevation in feet above mean sea level.
** Depth in feet below ground surface
*** Elevation estimated from cross-section provided in USACE report.
MNP - Measurement not provided by USACE report.

TABLE 3.39a
SADVA AOC 9 GROUNDWATER RESULTS (2000)

Former Schenectady Army Depot Remedial Investigation AOC 9 Groundwater Data Detected Compound Summary		NYSDEC Class GA Ground Water	SAMPLE ID:	AOC9-COEMW-10	AOC9-COEMW-11	AOC9-COEMW-12	AOC9-MW9
			LAB ID:	C0H180282002	C0H180282001	C0H180282005	C0H170224005
			SOURCE:	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh	STL Pittsburgh
			SDG:	SADVA14	SADVA14	SADVA14	SADVA14
			MATRIX:	WATER	WATER	WATER	WATER
			SAMPLED:	8/16/2000	8/16/2000	8/17/2000	8/16/2000
			VALIDATED:	11/2/2000	11/2/2000	11/2/2000	11/2/2000
CAS NO.	COMPOUND	Standards/Guidance Values	UNITS:				
	VOLATILES						
67-64-1	Acetone	50 (G)	ug/L	ND	ND	2.4 J	2.2 J
78-93-3	2-Butanone	50 (G)	ug/L	R	R	R	R
	Total VOCs		**ug/L**	**ND**	**ND**	**2.4**	**2.2**
	SEMIVOLATILES						
117-81-7	bis(2-Ethylhexyl) phthalate	5	ug/L	ND	4.1 J	ND	7.6 J
108-95-2	Phenol	1	ug/L	ND	4.4 J	ND	ND
	Total SVOCs		**ug/L**	**ND**	**8.5**	**ND**	**7.6**
	METALS						
7429-90-5	Aluminum	NS	ug/L	461	738	7300	6010
7440-38-2	Arsenic	25	ug/L	ND	ND	ND	69.7
7440-39-3	Barium	1000	ug/L	48.2 J	25.2 J	62.1 J	127 J
7440-41-7	Beryllium	3 (G)	ug/L	ND	ND	0.17 J	0.58 J
7440-43-9	Cadmium	5	ug/L	ND	ND	2.3 J	ND
7440-70-2	Calcium	NS	ug/L	209000	90700	75800	131000
7440-47-3	Chromium	50	ug/L	ND	ND	10 J	6.9 J
7440-48-4	Cobalt	NS	ug/L	ND	ND	3.4 J	6.8 J
7440-50-8	Copper	200	ug/L	ND	ND	31.9	3.4 J
7439-89-6	Iron	300	ug/L	500	505	8240	53800
7439-92-1	Lead	25	ug/L	ND	ND	6.6	2.2 J
7439-95-4	Magnesium	35000 (G)	ug/L	51100	2740 J	30500	30400
7439-96-5	Manganese	300	ug/L	32.5	124	330	823
7439-97-6	Mercury	0.7	ug/L	ND	0.052 J	0.046 J	ND
7440-09-7	Potassium	NS	ug/L	606 J	3940 J	2530 J	2710 J
7782-49-2	Selenium	10	ug/L	ND	2.2 J	2.3 J	2.3 J
7440-23-5	Sodium	20000	ug/L	17000	32300	251000	29800
7440-62-2	Vanadium	NS	ug/L	4.3 J	3.5 J	15.2 J	18.2 J
7440-66-6	Zinc	2000 (G)	ug/L	ND	ND	646	15.5 J

(G) - Guidance Value.
J - Estimated Value
NA - Not Analyzed
R - Rejected during data validation.
Concentration above Class GA Groundwater Standards

TABLE 3.39b
SADVA AOC 9 GROUNDWATER RESULTS (2004)

USACE-Schenectady Depot Validated Groundwater Analytical Data AOC 9		NYSDEC Class GA Ground Water Standards/Guidance Values	Sample ID: Lab Sample ID Source: SDG: Matrix: Sampled: Validated:	MW9-TOT-AOC-9 C4G240150001 STL Pittsburgh C4G240150 WATER 7/23/2004 9/19/2004	MW9-FIL-AOC-9 C4G240150002 STL Pittsburgh C4G240150 WATER 7/23/2004 9/19/2004
CAS NO.	COMPOUND		UNITS:		
	METALS				
7429-90-5	Aluminum	NS	ug/L	69.3 J	37.9 J
7440-38-2	Arsenic	25	ug/L	ND	ND
7440-39-3	Barium	1000	ug/L	41.2 J	41.9 J
7440-41-7	Beryllium	3 (G)	ug/L	0.92 J	1.1 J
7440-70-2	Calcium	NS	ug/L	94200	94100
7440-47-3	Chromium	50	ug/L	0.93 U	1 J
7440-48-4	Cobalt	NS	ug/L	0.53 U	0.85 J
7439-89-6	Iron	300	ug/L	1870	25300
7439-95-4	Magnesium	35000 (G)	ug/L	21900	21700
7439-96-5	Manganese	300	ug/L	332	425
7440-02-0	Nickel	100	ug/L	1.2 U	2.9 J
7440-09-7	Potassium	NS	ug/L	359 J	376 J
7440-22-4	Silver	50	ug/L	0.43 J	0.55 J
7440-23-5	Sodium	20000	ug/L	23700	24000
7440-62-2	Vanadium	NS	ug/L	1 U	1.3 J
7440-66-6	Zinc	2000 (G)	ug/L	2.8 J	8.3 J

(G) - Guidance Value.
U = Analyte not detected; the number is the analytical reporting limit.
J - Estimated Value

TABLE 3.40
SADVA AOC 9 SEDIMENT RESULTS
(From USACE, 1999)

Former Schenectady Army Depot Remedial Investigation AOC 9 Building 60 Area Detected Compound Summary					At Former Outfall	Downstream of Former Outfall
					SD 7 USACE Sample	SD 8 USACE Sample
CAS NO.	COMPOUND	Background Ranges	NYSDEC Sediment Criteria	UNITS:	8/20/1998	8/20/1998
	METALS					
7429-90-5	Aluminum	8040-17900	NS	mg/kg	14000	NA/ND
7440-36-0	Antimony	ND-0.44	2 (L)	mg/kg	NA/ND	NA/ND
7440-38-2	Arsenic	3.1-5.1	6 (L)	mg/kg	3.3	NA/ND
7440-39-3	Barium	53.9-141	NS	mg/kg	59.3	NA/ND
7440-41-7	Beryllium	0.62-0.92	NS	mg/kg	0.75	NA/ND
7440-43-9	Cadmium	ND-0.75	0.6 (L)	mg/kg	1.46	NA/ND
7440-70-2	Calcium	2660-6700	NS	mg/kg	3800	NA/ND
7440-47-3	Chromium	11.2-22	26 (L)	mg/kg	38.4	NA/ND
7440-48-4	Cobalt	7.1-14	NS	mg/kg	6.29	NA/ND
7440-50-8	Copper	13-27.7	16 (L)	mg/kg	61.8	NA/ND
7439-89-6	Iron	18300-25400	20000 (L)	mg/kg	13800	NA/ND
7439-92-1	Lead	7.8-20.9	31 (L)	mg/kg	182	25.5
7439-95-4	Magnesium	3190-5190	NS	mg/kg	3480	NA/ND
7439-96-5	Manganese	328-647	460 (L)	mg/kg	105	NA/ND
7439-97-6	Mercury	0.027-0.091	0.15 (L)	mg/kg	0.0362	NA/ND
7440-02-0	Nickel	15.6-24.5	16 (L)	mg/kg	17.4	NA/ND
7440-09-7	Potassium	734-1530	NS	mg/kg	2510	NA/ND
7782-49-2	Selenium	ND-0.81	NS	mg/kg	1.07	NA/ND
7440-22-4	Silver	ND-0.5	1 (L)	mg/kg	NA/ND	NA/ND
7440-23-5	Sodium	71.6-790	NS	mg/kg	1.28	NA/ND
7440-28-0	Thallium	ND-1.5	NS	mg/kg	1.42	NA/ND
7440-62-2	Vanadium	14.6-28.4	NS	mg/kg	29.6	NA/ND
7440-66-6	Zinc	47.7-118	120 (L)	mg/kg	198	NA/ND

C = Benthic Aquatic Chronic Criteria (TOC Adjusted),(NYSDEC, 1999).
H = Human Health Bioaccumulation (TOC Adjusted), (NYSDEC, 1999).
LM = Medium Effects Level (TOC Adjusted), (Long and Morgan, 1990).
W = Wildlife Bioaccumulation Criteria (TOC Adjusted), (NYSDEC, 1999).
L = Lowest Effect Level (metals), (NYSDEC, 1999).
NS = No sediment criteria.
NA/ND = Not analyzed or not detected (USACE report does not report these metals).
J = Estimated Concentration
R = Rejected during data validation
N = Presumptive Evidence
Concentration is above NYSDEC Criteria and Background Ranges