EXECUTIVE SUMMARY

PROJECT AUTHORIZATION

This remedial investigation (RI), with the exception of the Voorheesville Depot – Area of Concern (AOC) 5, comes under the authority of the Defense Environmental Restoration Program for Formerly Utilized Defense Sites (DERP-FUDS). Under the DERP-FUDS program, only those conditions attributable to former Department of Defense (DoD) activities can be investigated. Conditions that have been caused by post-DoD use of the site cannot be investigated or remediated under the DERP-FUDS program. Operations at the Schenectady Army Depot - Voorheesville Area (SADVA) began in 1941 and continued for a period of 28 years. SADVA was closed in 1969 and the property was subsequently sold. Since that time, the property has been used as an industrial park, and is now known as the Northeastern Industrial Park (NEIP). The focus of this RI has been on identifying land use over time to differentiate site conditions caused by DoD-related activities (during the period 1941 to 1969) from conditions caused by post-DoD activities (during the period 1969 to the present). Only those site conditions that are attributable to DoD activities can be investigated during this RI.

The investigation of AOC 5-Voorheesville Depot is under the authority of the Defense Logistics Agency (DLA) Defense National Stockpile Center (DNSC), the operator of the Voorheesville Depot. Until late 2006, AOC 5 was an active supply depot used to store strategic natural resources critical to national defense. AOC 5 is not part of the DERP-FUDS program because it is the only portion of the former SADVA that is presently owned and operated by the Federal government.

The DERP-FUDS program reflects the DoD's commitment to reduce, in a timely and cost effective manner, the risk to human health, safety, and the environment from contamination resulting from past DoD activities. This commitment is ongoing such that the USACE would address, at eligible sites with approved projects, any DoD contamination found after planned response actions were completed. This RI presents findings of human health and environmental concerns in accordance with the Comprehensive Environmental Restoration, Compensation, and Liability Act of 1980 (CERCLA) and FUDS programs.

PURPOSE AND OBJECTIVES

The purpose of this RI is to assess the presence or absence of contamination, and if present, to characterize the nature and extent of contamination at the AOCs that have been identified at the former SADVA in the Town of Guilderland, New York (Figure 1.1). The AOCs for this RI include AOC 1-U.S. Army Southern Landfill, AOC 2-Bivouac Area/Post Commander's Landfill, AOC 3-Burn Pit Area, AOC 4- the Construction and Demolition (C&D) Landfill, AOC 6-Waste Water Treatment Plant Area, AOC 7-Triangular Disposal Area, AOC 8-Black Creek, and AOC 9-Building 60 Area (Figure 1.2). In addition, the DNSC Voorheesville Depot, designated AOC 5, is included in this RI; however, it is covered under a separate funding program and contract task order as described above.

The USACE, the New York State Department of Health (NYSDOH), and the New York State Department of Environmental Conservation (NYSDEC) will work together to identify the primary human health and environmental concerns using the characterization data from this RI. USACE may conduct a Feasibility Study (FS) for certain AOCs, if necessary, to evaluate the need for remedial action and to identify and evaluate various site clean-up options. USACE, in consultation with NYSDEC and NYSDOH, and in conformance with the public participation requirements of CERCLA, will then decide on an appropriate site remedy, as necessary. Once the clean-up remedy is established, USACE will prepare a remedial design for the clean-up action, and complete the clean-up. A Restoration Advisory Board (RAB) has been established and has been active since 1999 in this RI, and will continue to participate in this process through to the final clean-up action.

SITE OWNERSHIP

The DoD held ownership of the SADVA property from 1941 until 1969. The site was originally constructed as a regulating station and a holding and reconsignment point in 1941, and later it became a general Army depot. The principal mission of the installation was the receipt, storage, maintenance, and distribution of supply items for the Department of the Army (DOA). Prior to construction of the facility in 1941, the land use was agricultural. In 1963, approximately 40 acres on the west side of Route 201 were sold to a private party, and that parcel has been used as a residence since that time. That parcel was formerly the Bivouac Area/Post Commander's Landfill and has been designated AOC 2. In 1969 SADVA was closed, and 35.5 acres were transferred to the U.S. General Services Administration (GSA). This parcel is the DNSC Voorheesville Depot (AOC 5). The rest of the SADVA property was sold to the Town of Guilderland Urban Renewal Agency (GURA). GURA leased the property to the Galesi Group, Inc., which established the NEIP. Galesi took ownership of the NEIP property in 1993. The NEIP has been operated as an industrial park since 1969. Various open spaces and buildings are leased to tenants. The majority of the tenants have used the leased space for storage of goods. Some of the tenants have performed manufacturing operations in their leased space. The Galesi Group has constructed several structures at the NEIP since 1969.

OPERATIONAL HISTORY

A comprehensive site history has been developed from available site records and other DoD documentation for the period 1941 to 1969; that information can be found in the Final Archival Search Report (EAEST, 2003). The Final Archival Search Report includes an analysis of historical aerial photos for SADVA. The site history and aerial photo analysis were among the tools and information used to identify the AOCs being investigated during this RI. The Archival Search Report information has been supplemented and/or confirmed by recent interviews with former SADVA employees, which were conducted during this RI.

The following subsections present conclusions and recommendations based on key results as they relate to the objectives for each AOC.

AOC 1 – U.S. ARMY SOUTHERN LANDFILL

AOC 1 is the former U.S. Army Southern Landfill. The Southern Landfill reportedly contains C&D debris, industrial and domestic wastes, and wastes from a former burning pit area. The landfill boundaries have previously been determined, and the presence of volatile organic compounds (VOCs), polynuclear aromatic hydrocarbons (PAHs) and metals in surface soil, subsurface soil and groundwater have been documented, particularly in the southern section. Previous investigations have provided considerable characterization data for this AOC. However, additional groundwater, surface water and sediment characterization data were needed to fill data gaps. The objective of the present RI was to further characterize the groundwater, and surface water and sediment in the pond and wetlands adjacent to the U.S. Army Southern Landfill; this objective was met.

The water quality in the main pond adjacent to AOC 1 contains elevated concentrations of bis(2-ethylhexyl)phthalate (BEHP). The sediments in the main pond and the seasonally wet areas have concentrations of semivolatile organic compounds (SVOCs), pesticides, polychlorinated biphenyls (PCBs) and metals above NYSDEC quality criteria. A qualitative assessment of the wildlife in and around the pond, and a macroinvertebrate community analysis of the pond found no significant impacts on the quality or diversity of wildlife. The pond macroinvertebrate community was found to be slightly impaired, due to the monotonous nature of the man-made pond.

A groundwater plume containing VOCs continues to be present in the southern portion of the landfill; however, VOC concentrations are decreasing with time. The groundwater plume is not migrating offsite. A human health risk assessment was completed for AOCs 1 and 7 combined, and found that unacceptable human health cancer risks are associated with the groundwater and surface water in the pond at AOC 1, if these were to be used as sources of drinking water. A feasibility study is recommended for AOC 1 to evaluate the range of remedial alternatives required to mitigate the human health risk, and to determine whether remedial action is necessary.

AOC 2 – FORMER BIVOUAC AREA/POST COMMANDER'S LANDFILL

AOC 2 is the former Bivouac Area/Post Commander's Landfill located west of County Route 201. This 40.6-acre parcel was part of the SADVA from its inception until its sale to a private owner in 1963, who has lived at the property since that time. The overall RI objective was to assess the presence, nature and extent of contamination at AOC 2. The activities included locating and characterizing the extent of fill, and sampling the fill, soil, groundwater, surface water and sediment to assess potential exposure pathways to humans and the environment. The scope of work also included sampling former domestic wells at the site and abandoning a former groundwater monitoring well. The RI objectives were met as planned.

The extent of fill was determined using soil borings and test pits. In two large areas, the fill consisted primarily of small glass pill bottles containing salt tablets and iodine tablets. In several other areas, fill and waste materials consisting of pint-sized solvent-filled bottles, 55-gallon drums of solvent-like materials, 5-gallon pails of a tar-like material, and paint residue were identified and delineated. The fill materials contained hazardous substances and were classified

as flammable and toxic, and would be classified as hazardous waste if removed from the site. Pesticides were detected above NYSDEC surface water and sediment quality criteria. SVOCs were detected above surface water criteria in two samples. Metals were detected above the applicable criteria in all of the media sampled. Benzene, BEHP and phenol were detected above the Class GA groundwater standards. Up to six metals were present at concentrations above the groundwater standards and upgradient concentrations. No VOCs, SVOC, pesticides, or PCBs were detected above Class GA groundwater standards in either of the two nearby former domestic wells that were sampled. No metals were detected above Class GA criteria in the former domestic well located at the site. Three metals were detected above Class GA criteria in the former domestic supply well located on a neighboring property.

The fill material (pill bottles, solvent drums and bottles, paint residue, tar buckets, and metallic debris) at the Post Commander's Landfill area was most likely attributable to the DoD. Since this property is no longer owned by the DoD, and concentrations in soil, surface water, sediment and groundwater exceed applicable NYSDEC criteria, USACE contracted with Parsons to complete a quantitative human health risk assessment (HHRA) and an engineering evaluation and cost analysis (EECA). Those documents supported USACE's decision to complete a Non-Time Critical Removal Action, which began in 2005 and was completed in 2006. All known hazardous waste and soils exceeding NYSDEC soil criteria have been removed from AOC 2. A post-remediation quantitative HHRA has been completed for AOC 2 and indicates that the remedial action was effective in mitigating the human health risks. The soil, surface water and sediment at the site do not pose unacceptable cancer risks or non-cancer hazards to human health. Even before the remedial action, 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. 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. No other actions are recommended at this time.

AOC 3 – FORMER BURN PIT AREA

AOC 3 is the former Burn Pit Area located at the north end of the SADVA. This area is less than 10 acres in size. Historical aerial photographs suggest this area had been the site of dump areas, pits, or scarred areas. The RI objectives were to assess the nature and extent of contamination at AOC 3, including defining the presence and extent of surface and subsurface soil contamination in geophysical anomalies, and the characterization of shallow groundwater quality. The soil characterization objectives were met through the drilling and sampling of soil borings. The groundwater characterization objectives were met through the installation and sampling of eight permanent groundwater monitoring wells and five temporary groundwater monitoring wells. The one existing well at AOC 3 (MW-4-2) was also sampled several times during the RI. Additional rounds of groundwater sampling were conducted to further characterize groundwater quality.

The Galesi Group was conducting earth-work activities for the construction of a new warehouse in the AOC 3 area during the initial stages of the RI field work in 2000. The soil was being reworked and leveled in preparation for the construction of the new warehouse. 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. Based on preliminary RI findings, the Galesi Group reduced the size of the planned new warehouse and moved the warehouse footprint to the north. By January 11, 2001, the new warehouse foundation was completed, and the steel framing was under construction. The new warehouse footprint originally fell over a burn pit that had stained soils and organic compounds above the NYSDEC soil criteria and groundwater standards.

Surface soils containing carcinogenic polynuclear aromatic hydrocarbons (CPAHs), pesticides, and PCBs were identified; however, all but one of those areas were within the footprint of the new warehouse or paved parking and roadway areas, so any future exposure risk would be mitigated. Subsurface soil contamination by VOCs, CPAHs, noncarcinogenic polynuclear aromatic hydrocarbons (NPAHs), pesticides, and metals was detected and delineated. The former burn pit area near SB06 was heavily contaminated. The vertical extent of contamination at SB06 and SB14 was identified by an additional soil boring completed in this area. RI results indicated the onsite contamination extended as much as eight feet into the water table to depths of 25 feet below ground surface (bgs).

VOC and SVOC concentrations above Class GA groundwater standards were present at the site in SB06R, at the western property line in HP02, and during each sampling of MW-2. Results from wells installed later during the RI at AOC 3 and on the adjacent school property also indicated the presence of VOCs and SVOCs above Class GA groundwater standards and guidance values. Although the concentrations at the fence line were low, the groundwater plume appeared to extend onto the school grounds for a short distance, and appeared to be moving offsite in a north-northwesterly direction.

Based on the analytical results discussed above, a Focused Feasibility Study (FFS) was completed in March 2002. Three remedial action alternatives were developed. Based on the engineering and cost evaluation criteria, a remedial alternative was selected that included:

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

An interim action plan (IAP) was developed to implement the recommendations of the FFS (July 2002). 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. Three areas at AOC 3 (ED-1, ED-2, and ED-3) were identified for the interim remedial actions (IRMs). The IRMs included the excavation and removal of stained soils and debris, and backfilling and compacting soils after confirmation sampling. Confirmation sampling results were compared to the preliminary remediation goals (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 work also included an emergency removal of buried Army medical materials at the Guilderland high school grounds adjacent to AOC 3, in the new bus garage area (Shaw, 2003). Debris was also removed on the SADVA side of the property line.

Following the remedial activities, ten rounds of quarterly groundwater sampling were completed by Shaw between September 2003 and November 2006 to assess whether the remedial activities have improved groundwater quality.

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 was completed and demonstrated that the remedial action was effective and that no unacceptable cancer risks and non-cancer hazards are present in soil at AOC 3. The cancer risks and non-cancer hazards for groundwater were calculated for individual wells, which have been monitored for contamination since the remediation was completed. The risk assessment was conservatively (most health-protective) based on the use of groundwater as a drinking water source, even though groundwater is not used as a drinking water source in the immediate vicinity of the site. Non-cancer hazards for all wells were within the USEPA's acceptable range. Cancer risks above the USEPA's acceptable range were calculated in 2 of the 7 monitoring wells (MW-2 and MW-9). In MW-2, the risk was driven almost entirely by the presence of 1,3,5-trimethylbenzene, which was detected at an estimated concentration during one sampling event in September 2004, at a concentration far below the NYSDEC Class GA groundwater quality criterion. This chemical has not been detected in any of the subsequent 5 sampling events, and so it is uncertain whether an unacceptable risk remains at MW-2. The cancer risk in MW-9 was based on the presence of trichloroethene (TCE) during two sampling events in 2006. USACE will continue to sample well MW-9 annually for a period of five years, and will continue to monitor the results for this well as new data are collected.

The HHRA also an assessment to evaluate potential risks from vapor intrusion of VOCs from shallow groundwater into buildings, based on USEPA (2002) target groundwater concentrations. The USEPA target groundwater concentrations are calculated to correspond to target indoor air concentrations that are protective of (residential) human health if vapor intrusion occurs. The calculated risks of vapor intrusion were evaluated for each individual well at AOC 3. All wells except MW-9 pose no unacceptable risk. In MW-9, the maximum concentration of TCE (6.6 micrograms per liter or ug/L) exceeds the USEPA screening value (5

ug/L). The calculated risks at MW-9 are based on only two samples collected in 2006. MW-9 is in an open area located about 600 feet downgradient of the NEIP warehouse at AOC 3, and about 300 feet from the old Guilderland School District bus garage where the Supply Well is located. Based on the location of MW-9, and the fact that the Supply Well met the vapor intrusion screening criteria, there appears to be no unacceptable risk for vapor intrusion of VOCs into the existing buildings at AOC 3. USACE will continue to sample well MW-9 annually for a period of five years, and will continue to monitor the results for this well as new data are collected. Note that the target screening concentrations are derived to ensure protection of a residential receptor, and thus provide an overly conservative evaluation for the current and/or future worker exposure scenarios expected for the site.

In February 2007, USACE requested approval from NYSDEC to pursue a record of decision for the site. No other action is recommended for AOC 3 at this time.

AOC 4 – C&D LANDFILL

AOC 4 is the C&D Landfill located at the southern end of the NEIP, west of AOC 1 (the US Army Southern Landfill) and AOC 7 (the Triangular Disposal Area). The C&D Landfill was not active during the period of time the SADVA was operated by the DoD, so this AOC was not originally included in the RI. A 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 hazardous waste, nor high levels of contamination, nor a direct connection with former SADVA activities. No further action is recommended for AOC 4.

AOC 5 – VOORHEESVILLE DEPOT

AOC 5, known as the DNSC Voorheesville Depot, is currently owned by the GSA and has been operated by the DNSC under the National Stockpile Program. Metallurgical ores and materials necessary for manufacturing defense materials, or materials used in national defense, have been stored at the site. AOC 5 was originally included in the SADVA RI because DNSC was planning to complete an environmental assessment of the site at the same time that USACE was planning the SADVA RI. The two agencies decided to conduct their projects concurrently and cooperatively to facilitate the public participation process. DNSC is planning to close the Voorheesville Depot and transfer the property back to GSA. For that reason, the DNSC has separately prepared an RI Report for the DNSC Voorheesville Depot and is negotiating site closure with NYSDEC. Because that process is ongoing and is outside the DERP-FUDS program, the closure of AOC 5 will not be addressed in this RI Report. Rather, this RI report will address AOC 5 as a potential source of contamination to Black Creek (AOC 8). To that end, this RI Report will present the AOC 5 characterization data to the extent it is relevant to the assessment and characterization of AOC 8.

The RI project objective was to assess whether the stored materials are leaching or have leached metals into the soil, groundwater, and surface water/sediments. Soil samples were

collected at 12 locations. Groundwater samples were collected from four temporary well borings and one supply well located at the site. Fourteen surface water and seventeen sediment samples were collected from the perimeter ditches, site retention ponds, storm sewer infalls, and ditches adjacent to the former open storage area.

The primary transport mechanism is sediment suspended in storm water runoff. The DNSC has completed a reconstruction and expansion of the onsite storm water retention ponds to reduce the potential for offsite migration of contaminated soil, surface water and sediment. Implementation of this expansion is expected to reduce surface water discharges from the Depot to Black Creek. 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. No further actions are recommended.

AOC 6 – FORMER SADVA WASTE WATER TREATMENT PLANT (WWTP)

AOC 6 is the area near the former SADVA WWTP. AOC 6 is an area up to two acres in size, located in the northeast corner of the WWTP, and was a possible dumping ground for unidentified materials based on historical aerial photo interpretation. Waste materials were encountered during construction of the new Town of Guilderland WWTP in 1993 through 1995. The waste materials included 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 left only one or possibly two potential small dumpsites along Black Creek to be investigated. The objective of the AOC 6 investigation was to investigate the presence or absence of contamination in the suspected fill areas outside the footprint of the current WWTP. The objectives were met through the excavation of six test pits and collection of six soil samples. Other than a thin, charred soil layer, no visual evidence of a fill/waste source was observed in the test pits. Up to seven metals were detected above the NYSDEC soil criteria and background ranges in various samples. These metals concentrations were only slightly above the background ranges. The characterization data for AOC 6 indicate that no further action is necessary.

AOC 7 – TRIANGULAR DISPOSAL AREA

AOC 7 is a triangular-shaped area located near the southeastern end of the former SADVA and west of AOC 1. This area was formerly bounded by railroad tracks on three sides. Aerial photographs from the early 1940s indicate the presence of a possible dump in this triangular area, as do geophysical anomalies from previous investigations. The objective of this RI was to assess the presence or absence of fill materials and to characterize surface soils, subsurface soils, and groundwater. The objectives were met through the sampling of soils in four test pit excavations and the sampling of groundwater in three temporary well borings and five monitoring wells.

A small amount of fill was encountered in the test pits. The fill consisted of railroad ties, charred wood, angular gravel, and glass bottles. Metals concentrations slightly above background were widespread in surface soil and subsurface soil. BEHP was detected above the NYSDEC Class GA groundwater standard in all five groundwater samples in July/August 2000

and in four of five samples collected in 2004. The source(s) of BEHP detected in AOC 7 and elsewhere at the site are unknown, but the groundwater flow pattern suggests the source(s) are upgradient (east-northeast) of AOC 7. BEHP was detected upstream in Black Creek and during a previous RI in AOC 1; both of these areas are upgradient of AOC 7. Metals concentrations in the AOC 7 groundwater samples collected from temporary wells in 2000 may have been affected by high turbidity. Permanent wells were installed in 2004 to improve the integrity of groundwater samples. With the exception of iron in GW02, the 2004 metals concentrations were below the upgradient and Class GA concentrations.

The AOC 7 area has been adequately characterized. The soil and groundwater characterization data, and the visual evidence of the extent of fill provided by the test pit excavations, provides sufficient information to satisfy the project objectives for AOC 7. A quantitative HHRA has been performed for AOC 7 and AOC 1 combined. The two AOCs were combined because they are nearly contiguous. The unacceptable cancer risks posed by groundwater and surface water are primarily related to constituent concentrations found at AOC 1, assuming that these water sources would be used for drinking water purposes. The identified human health risks do not appear to be specifically related to AOC 7. A feasibility study is recommended for AOCs 1/7 to assess the need for remedial action.

AOC 8 – BLACK CREEK

Black Creek flows near many of the AOCs and receives surface water runoff from most of the AOCs through the perimeter ditches or by direct inflow. The objectives of the RI were to determine background concentrations for surface water and sediment in Black Creek, to assess the nature and extent of contamination in Black Creek within the boundaries of the SADVA, and to assess impacts attributable to the various AOCs. The investigation objectives were met through the collection of upstream surface water and sediment samples, and the collection of surface water and sediment samples on site and downstream of the site.

In general, the surface water sample results showed that the western ditch has degraded water 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 the SW17 sample, collected in 2004, had a concentration of silver 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.

At the south end of SADVA, near AOCs 4 and 5, shallow sediment concentrations for most metals were above the sediment criteria, and tended to be higher than in the deeper sediment samples. 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 sediment samples than in the shallow sediment samples. Downstream, offsite metals concentrations in both the shallow and deep sediment samples tended to be higher than the metals concentrations onsite at SD17 and SD07.

No further surface water or sediment sampling is recommended at this time. The criteria used to assess surface water quality are for protection of human health, and the criteria to assess sediment are for protection of aquatic life. A quantitative HHRA was completed for AOC 8, and there are no unacceptable risks to human health posed by the surface water and sediment. The primary issue with respect to Black Creek is protection of ecological resources. The sediment data do not suggest there are significant threats to the health of aquatic life. The sediment data do not show uniformly increasing concentrations downstream of the SADVA which would suggest the need to continue characterizing sediment quality farther downstream. Sediment concentrations in Black Creek downstream of SADVA tend to suggest quality impacts attributable to the School Road crossing, as many metal and other constituent concentrations increase in the immediate vicinity of that location. The sediment data do not indicate that SADVA alone was a source of degraded sediment quality downstream of the site. The data do suggest that sediment quality in the western ditch has been degraded in the immediate vicinity of AOC 5, and to a lesser extent, in Black Creek in the immediate vicinity of AOC 4. A feasibility study is recommended to assess the need for remedial action in AOC 8.

AOC 9 – BUILDING 60 AREA

AOC 9 is located at the northeast corner of the SADVA in the area around Building 60. The potential source area for AOC 9 was an oil/water separator and a storm sewer pipeline leading from the oil/water separator to Black Creek. Both were removed by USACE during a rapid response action in 1999. The remaining potential source area would be residual contamination in the soil that may have originated from pipeline leaks. The objective of the RI was to assess the presence or absence of contamination at AOC 9. Soil along the former 12-inch clay sewer pipeline was assessed to determine whether residual contamination exists. Groundwater in the vicinity of AOC 9 was also assessed to determine whether contaminants are present and whether they are migrating toward Black Creek.

Metals concentrations slightly above background ranges were widespread in soils. None of the metals concentrations were anomalously higher than the NYSDEC soil criteria and background ranges. 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 showed no quality impacts. Five metals were present in one sediment sample at concentrations above criteria.

The elevated metals concentrations in MW09 are not believed to be associated with the contamination problem that occurred in this area in 1998. Soil, surface water and sediment quality impacts are not severe in this area. The AOC 9 area has been adequately characterized, and no further characterization is necessary. This area does not warrant further action for the soil, groundwater or surface water pathways. The sediment issues are considered to be addressed in concert with AOC 8 (Black Creek).