SECTION 1

INTRODUCTION

1.1 PROJECT AUTHORIZATION

1.1.1 This RI at the former SADVA, with the exception of the Voorheesville Depot – AOC 5, comes under the authority of the DERP-FUDS. Authority for the DERP-FUDS program is derived from the following laws: the Comprehensive Environmental Restoration, Compensation, and Liability Act of 1980 (CERCLA); PL 96-510 as amended by the Superfund Amendments and Reauthorization Act (SARA) of 1986; PL 99-499 (codified as 42 U.S.C. 9601-9675); and Environmental Restoration Program, 10 U.S.C.2701-2707. The NEIP is the current name of the former SADVA site; the DERP-FUDS site number is C02NY0002.

1.1.2 Under the DERP-FUDS program, only those conditions attributable to the former DoD activities can be investigated. Conditions which have been caused by post-DoD use of the site cannot be investigated or remediated under the DERP-FUDS program. Operations at 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 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 which are attributable to DoD activities can be investigated during this RI.

1.1.3 The investigation of AOC 5-Voorheesville Depot is under the authority of the DLA/DNSC, who operates the Depot (Figure 1.1). AOC 5 has been a 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. DNSC is planning to cease 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 owner, the GSA. AOC 5 has been 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. 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.

1.2 PURPOSE AND OBJECTIVES

1.2.1 The purpose of this RI is to characterize the presence or absence of contamination, and if present, to characterize the nature and extent of contamination at the AOCs which have been identified at the former SADVA (Figure 1.2). The AOCs proposed 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-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 Voorheesville Depot, designated AOC 5, is included in this RI; however, it is covered under a separate funding program and closure process as described above.

1.2.2 The USACE, the NYSDOH, and the NYSDEC will work together to identify the primary human health and environmental concerns using the characterization data from this RI. Depending on the findings and recommendations of this RI, the USACE may continue the process on a step-by-step basis as far as necessary. The following steps may be completed if warranted by the RI data:

- Conduct a quantitative HHRA to assess the cancer and non-cancer risks that contaminants pose to the health of current and future site users and the nearby public. This step may be taken if the site characterization sample data show concentrations above the New York State soil and water quality screening criteria.
- Complete a Feasibility Study/Proposed Plan (FS/PP) to evaluate various remedial alternatives, as necessary. The USEPA developed "Nine Criteria for Remedial Alternatives Evaluation" (USEPA, 1999) as presented on Table 1.1. These criteria are used to evaluate the remedial alternatives proposed in an FS/PP. The Draft Final FS/PP will be made available for comment by regulatory agencies, the RAB, and the public. USACE will recommend an appropriate site clean-up remedy, if necessary. The FS/PP will incorporate comments from the various reviewing entities and will present a proposed recommended remedial alternative.
- The Record of Decision (ROD) documents the planned remedial action. The ROD certifies that the remedy selection process was carried out in accordance with CERCLA and, to the extent practicable, with the NCP. It describes the technical parameters of the remedy, methods that were selected to protect human health and the environment including treatment, engineering, institutional control components, and clean-up levels. The ROD provides the public with a consolidated summary of information about the site and the chosen remedy.
- A remedial design (RD), if needed, will be prepared to support the implementation of the selected remedial alternative. Additional data will be incorporated into technical drawings and specifications to meet selected remedy and clean-up criteria as specified in the ROD.
- A remedial action (RA) may be implemented, if required by the ROD. The goal of the remedial action is to meet the requirements of the ROD, ultimately leading to the delisting and closure of the site.

1.2.3 A RAB was established and has been active in this RI and will continue to participate in this process through to the final resolution.

1.3 RI REPORT ORGANIZATION

1.3.1 This RI report presents the objectives, scope of work, and results for each AOC. At the start of this RI, the AOC investigations were at different stages; some had been investigated previously and had characterization data available, while other AOCs were being investigated for the first time. Where characterization data existed before the start of this RI, those data were reviewed and used to design the investigation plan for the applicable AOCs. The pre-existing characterization data are referred to in the site history section, but those data have not been fully presented in this RI Report. However, those pre-existing data have been used to develop the conclusions and recommendations in this RI Report.

1.3.2 This introductory section includes the project authorization, purpose and objectives, and report organization. Section 2 provides the site location, site ownership, regional setting, operational history, and a brief description of each AOC. Section 3 is organized by AOC, and presents the history, regulatory status, previous investigations, a conceptual site model, project objectives, sampling strategy, scope, and results for each AOC. A discussion of the quality assurance and quality control sample results is also included in Section 3. Section 4 presents summaries of the human health and ecological risk assessments. Section 5 presents a summary of the RI findings, conclusions, and recommendations for each AOC. Appendix A presents two quantitative human health risk assessments (HHRAs) for AOC 2. Appendix B includes data validation reports and analytical data tables. Appendix C contains a 1964 auto tour brochure for a stop at the SADVA, and a copy of the letter from the Albany County Health Department (ACHD) concerning the contamination at the Post Commanders Landfill (AOC 2). Appendix D presents the results of the air monitoring conducted during the supplemental RI at AOC 3 and the post-remediation quantitative HHRA for AOC 3. Appendix E contains the groundwater results for the irrigation well sampled by the NYSDOH near the Guilderland Center Transportation Building. Appendix F contains historical regional weather data for the area. Appendix G contains radiological survey results from the bunker near AOC 1. Appendix H contains a habitat assessment report for the AOC 1 pond, the 1999 wetlands delineation report, and a qualitative ecological risk assessment for the entire SADVA site. Appendix I presents geological information obtained during the RI, including boring logs and well construction logs and results of the grain size analysis conducted on soil samples from three wells located on the Guilderland High School property adjacent to AOC 3. Appendix J presents the quantitative HHRA report for AOCs 1 and 7 combined. Appendix K presents the quantitative HHRA report for AOC 8.

1.3.3 The tables and figures presented in this report are located at the end of each section for ease of use.

Figure 1.1 Site Vicinity Map

Figure 1.2 Former SADVA Site Plan

TABLE 1.1

NINE CRITERIA FOR REMEDIAL ALTERNATIVES EVALUATON

THRESHOLD CRITERIA

1 Overall Protection of Human Health and the Environment

- How the Alternative Provides Human Health and Environmental Protection

2 Overall Protection of Human Health and the Environment

- Compliance with Chemical-Specific ARARs
- Compliance with Location-Specific ARARs
- Compliance with Action-Specific ARARs
- Compliance with Other Criteria, Advisories, and guidance

PRIMARY BALANCING CRITERIA

3 Long-Term Effectiveness and Permanence

- Magnitude of Residual Risk
- Adequacy and Reliability of Controls

4 Reduction of Toxicity, Mobility, or Volume Through Treatment

- Treatment Process Used and Materials Treated
- Amount of Hazardous Materials Destroyed or Treated
- Degree of Expected Reductions n Toxicity, Mobility, or Volume
- Degree to Which Treatment is Irreversible
- Type and Quantity of Residuals Remaining After Treatment

5 Short-Term Effectiveness

- Protection of Community During Remedial Actions
- Protection of Workers During Remedial Actions
- Environmental Impacts
- Time Until Remedial Action Objectives are Achieved

6 Implementability

- Ability to Construct and Operate the Technology
- Reliability of the Technology
- East of Undertaking Additional Remedial Actions, if Necessary
- Ability to Monitor Effectiveness of Remedy
- Ability to Obtain Approvals from Other Agencies
- Coordination with Other Agencies
- Ability to Off-Site Treatment, Storage, and Disposal Services and Capacity
- Availability of Necessary Equipment and specialists
- Availability of Prospective Technologies

7 Cost

- Estimated Capital Costs
- Estimated Annual Operation and Maintenance Costs
- Estimated Present Worth Costs

MODIFYING CRITERIA[1]

8 State Acceptance

- Features of the Alternatives the State supports
- Features of the Alternative About Which the State has Reservations
- Elements of the Alternative the state Strongly Opposes

9 Community Acceptance

- Features of the Alternative the community Supports
- Features of the Alternative About Which the community has Reservations
- Elements of the Alternative the community Strongly Opposes

[1] These criteria are fully assessed following comment on the FI/FS Report and the Proposed Plan, and are fully address in the ROD.