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Fwd SEAD 12 RD

Probability Assessment for Unexploded Ordnance
At the Radiological Waste Burial Site (SEAD-12)
Seneca Army Depot Activity
29 September 2009

1. Introduction

Seneca previously occupied approximately 10,600 acres of land located in the Towns of Romulus and Varick, New York. The property was acquired by the United States Government in 1941, and was operated by the Department of the Army from that time until approximately September 2000 when the installation closed. Seneca's historic military mission included receipt, storage, distribution, maintenance, and demilitarization of conventional ammunition, explosives, and special weapons. In 1995, Seneca was designated for closure under the Department of Defense's BRAC process. SEAD-12 is located in the north central portion of SEDA within the Weapons Storage Area.

2. SEAD-12 Investigations

A SWMU Classification Report (Parsons, 1994) describes and evaluated 72 of the SWMUs originally listed at SEDA and provided recommendations for future actions at these SWMUs. The report recommended that a CERCLA Site Inspection be performed at SEAD-12. At the time of preparation of the SWMU Classification Report, SEAD-12 was classified as a Moderately Low Priority Area of Concern.

An Expanded Site Inspection was performed in 1994. This investigation included sampling of surface and subsurface soils, groundwater, surface water, and sediment to identify hazardous substances or wastes that may have been released to the environment. Samples were analyzed for Target Compound List, volatile organic compounds, semi volatile organic compounds, pesticides/polychlorinated biphenyls; Target Analyte List metals and cyanide; and radiochemical analysis. As a result of this investigation the size of SEAD-12 was expanded.

A remedial investigation was initiated at the expanded SEAD-12 in 1997 and the results were documented in the Final RI Report (Parsons, 2002). The RI investigation consisted of : geophysical, radiological, and soil gas surveys; sampling and analysis of subsurface and surface soils, groundwater, surface water, and sediment; and performance of a baseline human health (BRA) and screening level ecological risk assessment. Samples were analyzed for TCLs, VOCs, SVOCs, pesticides/PCBs; TAL metals, and radiological analytes. Nine potential release areas (PRA) were identified in the RI and only the four PRAs shown below required the development of remedial action alternatives during the initial Feasibility Study (FS) conducted for Sead-12:

- Disposal Pit A/B – removal of remaining "military" debris associated with electromagnetic (EM) anomalies;
- Disposal Pit C - removal of remaining "military" debris associated with electromagnetic (EM) anomalies;

- EM-5 – investigation and debris removal address Lead-210 (Pb210) contamination issues;
- Class III area – additional groundwater monitoring to define source and extent of trichloroethylene (TCE) in groundwater north of Building 813/814.

Further investigations were performed to address the Pb-210 contaminant issues at EM-5, and further investigations and a focused soil removal action were conducted in the area north of Buildings 813/814 to address the identified TCE plume. Results of both of these investigations/actions are presented in the Supplement Remedial Investigation (SRI) Report, Radioactive Waste Burial Sites (SEAD-12) (Parsons, 2006).

The Army's determination is that no further action is warranted based on the human health and ecological risk assessment for Disposal Pit A/B and C. However, it is in the Army's interest to prevent public access to the classified military-related items and debris potentially contained in both disposal pits.

3. Removal Action at SEAD-12

The remedial action at SEAD-12 is the removing of all classified military-related debris encountered at Disposal Pits A/B and C, and the removal of soil found to contain hazardous substances. Contaminated soil will be excavated, characterized, treated (as necessary) and disposed off-site at licensed off-site landfills.

4. Probability Assessment for Ordnance

The history of the Seneca program and the efforts at the SEAD-12 site indicate Military Munitions or Explosive Constituents (MMEC) is not an issue or a concern. Following the recent removal action, the installation has requested all surface metal and near surface metal be removed. This metal is not associated with any UXO or MEC. The Contractor has requested the use of two UXO technicians in performing metal sweeps only because their cost data was included in the original contract-approved rates and as such require no additional approvals. Using geophysicists for this effort would be unnecessary, costly and would require KO approval to include the new rates in the contract. Based on previous activities and investigations at this site there is no UXO at this site. However, if UXO is identified work would stop and appropriate action would be taken.

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Installation Manager
Seneca Army Depot

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