

# Seneca Army Depot

## New York

EPA ID#: NY0213820830

### EPA REGION 2

#### Congressional District(s): 24

Seneca  
Near the Town of Romulus

NPL LISTING HISTORY  
Proposed Date: 7/14/1989  
Final Date: 8/30/1990

## Site Description

The Seneca Army Depot Activity (SEDA) site encompasses 10,587 acres. It lies between Cayuga and Seneca Lakes in the Finger Lakes region and abuts the Town of Romulus. Approximately 1,000 people obtain drinking water from private wells within a 3-mile radius of the depot. The Army has stored and disposed of military explosives at the facility since 1941. As a result of Base Closure, SEDA has downsized significantly from 1200 to 7 employees. Following recommendation by DoD, approval by the Base Closure Commission, the President and Congress, SEDA was approved for the 1995 Base Realignment and Closure (BRAC) list in October 1995. SEDA formally closed and moved to a caretaker status on September 30, 2000. Current reuse plans project that most of the property will be transferred for conservation/recreational purposes; some parts of the base had been transferred to various prison and correctional authorities, as well as the Local Reuse Authority (LRA).

Site Responsibility: This site is being addressed through a Federal Facility Agreement between the Army, EPA and the State of New York.

## Threat and Contaminants

The groundwater is contaminated with volatile organic compounds (VOCs) including trichloroethylene (TCE), 1,2-Dichloroethene, vinyl chloride, and metals. Soils are contaminated with heavy metals, VOCs and SVOCs.

## Cleanup Approach

The site is being addressed through removal actions, investigations and remedial actions.

### Response Action Status

Ash Landfill: SEDA's Local Redevelopment Authority has determined that future use of this property will be wildlife conservation/ recreation. The Final Remedial Investigation (RI) Report was completed in June 1994. The removal and in-situ thermal treatment of 35,000 tons of VOC contaminated soil was complete in June 1995. The groundwater is contaminated with VOCs including trichloroethylene (TCE), 1,2-dichloroethene and vinyl chloride. In response to EPA and NYSDEC comments on the Draft Feasibility Study (FS), the Army performed ground water modeling and revised the FS. In response to EPA and NYSDEC comments, the Army revised the Proposed Plan. December 20, 1998, an interceptor trench was installed and groundwater monitoring wells were placed upgradient, downgradient, and on the wall as part of a treatability study. As result, the Army has proposed additional continuous reactive walls to remediate the VOCs in groundwater. A Record of Decision (ROD) was signed in January 21, 2005. The reactive material of the treatment walls is mulch. The Operating Properly and Successfully determination was submitted by the Army on June 6, 2008. No Determination has been made as of the end of December. GW monitoring was conducted on December 2008. The Draft Final Land Use Control RD was submitted on December 12, 2008.

Open Burning Grounds: SEDA's Local Redevelopment Authority has determined that future use of the thirty acre OB Grounds will be wildlife conservation/ recreation. Previous demilitarization of munitions had been conducted for forty years by open burning of fuses, projectiles, explosives and propellants directly upon the ground surface. These activities adversely impacted soil at the OB Grounds and sediments in Reeder Creek, with concentrations of lead in soil as high as 56,700 mg/kg. The selected remedy includes clearance of unexploded ordnance in the area of the remedial action, excavation of soils with concentrations of lead above 500 mg/kg (based on human health risks) and sediments from Reeder Creek with concentrations of lead above 31 mg/kg and copper above 16 mg/kg (NYSDEC standards to protect benthic aquatic life); solidification/stabilization of 3,800 cubic yards of soils that are expected to exceed TCLP limits;

off-site disposal of soil, solidified soil and sediment with total quantity of 17,900 cubic yards; providing 9 inches of clean fill with revegetation over remaining soils where concentrations of lead exceed 60 mg/kg (from guidelines published by the U.S. Fish and Wildlife Service); and conducting appropriate post-remediation groundwater monitoring to ensure groundwater is not impacted in the future by the remaining lead in the soil. A public meeting was held on December 17, 1997 to present to the community, the Army, EPA and NYSDEC's preferred remedial action. The ROD was signed on June 14, 1999. Screening excavation of unexploded ordnance continues together with stock piling and soil classification for disposal or backfill. Currently, 50,000 tons of soil have been excavated with 45,000 tons treated by stabilization. Oversize materials are being segregated and removed. A Remedial Action completion reports were submitted in 2005, and approved in 2006. Long Term Monitoring started in December 2007. The quarterly GW monitoring report was submitted on November 13, 2008 and the Annual Report was submitted on December 15, 2008.

Fire Training Pad and Pit: SEDA's Local Redevelopment Authority has determined that future use of these areas are planned industrial development and warehousing. The Army has submitted an RI/FS workplan to characterize the extent of contamination. Field work was completed in December 1995. Results of remedial investigations indicate that fire training practices may have adversely impacted soil and groundwater at these areas. Various Draft Proposed Plans have been submitted, however, the Army is planning to do a dig and haul source soil including pump and treat of groundwater during dewatering activities. A groundwater use restriction is also part of the remedy. The Final ROD was received on September 8, 2004, and was signed on September 29, 2004. The Remedial Design and Work Plan were submitted in June 2005. The remedial action was completed in 2005, and the completion report was submitted and approved in 2006. The Second year monitoring report was submitted June 18, 2008. Semi-annual sampling was attempted in August 2008 but there was insufficient water.

Deactivation Furnaces: SEDA's Local Redevelopment Authority has determined that future use of these areas are planned industrial development. The Army has prepared an RI/FS workplan to characterize the extent of contamination. Field work was completed in December 1996. The Army submitted the RI report in May 1997. Results of remedial investigations indicate that incineration of obsolete and unserviceable small arms munitions, fuses, boosters and fire devices may have adversely impacted the soil and groundwater at these areas. In response to EPA and NYSDEC comments, SEDA is revising the Draft Final FS Report. SEDA performed a treatability study using the old deactivation furnace at SEAD-17 as a low temperature thermal desorption unit and found it to be not cost effective to use as a remedial alternative. A ROD for the removal of contaminated soils was signed in 2006. A Remedial Design and Workplan were submitted in June 2007, and the action started in July 2007. The final Construction Completion Report was accepted by NYSDEC on August 13, 2008 and by EPA on September 23, 2008. Ground water sampling occurred on December 18, 2008.

The Old Construction Debris Landfill and the Garbage Disposal Areas: SEDA's Local Redevelopment Authority has determined that future use of this property will be wildlife conservation/ recreation. Results of site investigations indicate that previous activities may have adversely impacted soil and groundwater. EPA and NYSDEC have reviewed and commented on the Army's Draft RI/FS workplan to characterize the extent of any contamination. SEDA decided to do an IRM. EPA submitted comments on an Action Memorandum for the removal of buried materials. Removal Action for the CD landfill occurred in 2006. The Draft Completion Report and Technical Memorandum were submitted in 2007. EPA comments were satisfactorily addressed. The Draft Final PRAP was issued on October 9, 2008 and received EPA comments on December 2, 2008. A no further action (NFA) ROD was signed on September 25, 2009.

Munitions Washout Facility and Leach Field: SEDA's Local Redevelopment Authority has determined that future use of this property will be wildlife conservation/ recreation. Operations at this facility included dismantling and removing explosives from munitions by steam cleaning. Details of the operation and the wastewater discharge locations are not well known by the Army, but some wastewater may have been discharged into a pond area. Results of site investigations indicate that previous activities may have adversely impacted soil and groundwater. EPA and NYSDEC have reviewed and commented on the Army's Draft RI/FS workplan to characterize the extent of any contamination. EPA issued comments on Draft RI Report. Draft Final FS was submitted in January 29, 2002 and EPA comments forwarded on March 14, 2002. A Final FS is was accepted in 2006. Public comment period was opened in December 2007. The ROD was signed on September 2008. The Remedial Action started October 6, 2008 and was completed on November 12, 2008. The Construction Completion Report approved on September 3, 2009.

Inhibited Red Fuming Nitric Acid (IRFNA) Disposal Site: SEDA's Local Redevelopment Authority has determined that future use of this property will be wildlife conservation/ recreation. Unserviceable IRFNA was mixed with water and deposited into limestone lined trenches in order to facilitate the neutralization of the acid. Results of site investigations indicate that these previous activities may have adversely impacted soil and groundwater. The Army has submitted a Draft RI/FS workplan for EPA and NYSDEC review to characterize the extent of any contamination. EPA and NYSDEC have reviewed and commented on the Army's Draft RI/FS workplan to characterize the extent of any contamination. RI Field work is complete. SEDA submitted decision document proposing no action. All parties agreed that new sampling was needed before making a final determination of no action. Sampling field work was performed in Spring 2002; analytical results indicate no significant impact to soils, and limited impact to groundwater. A ROD proposing institutional controls was signed in July 2007.

The Radioactive Waste Burial Sites, the Pitchblende Storage Igloos, and the Miscellaneous Components Burial Site: SEDA's Local Redevelopment Authority has determined that future use of this property will be wildlife conservation/recreation. Burial of laboratory wastes occurred between 1940 and 1980. These pits were excavated in 1987, with the waste shipped to an authorized off-site radioactive waste landfill. During the 1950s and 1960s wastewater generated from washing radioactive contaminated clothing was stored in a 5000-gallon tank. In 1987 SEDA attempted to remove the tank, but then back filled it in place. During the 1950s and 1960s, "classified" metallic parts were buried at the Miscellaneous Components Burial Site. Since the documentation related to the disposal is considered classified by the Army, the exact nature of the buried material has not been disclosed. Results of site investigations indicate that previous activities may have adversely impacted soil and groundwater. Field work to characterize the extent of any contamination began during the Autumn of 1998. SEDA decided to remove buried components. EPA submitted comments on an Action Memorandum for the removal of buried materials. Public Comments on Final EE/CA Document opened on February 19, 2002. Removal action was taken at the miscellaneous components burial site, and a completion report was received on February 14, 2005. A no further action ROD for the Miscellaneous Components Burial Site was signed in September 2006. Supplemental investigations have been performed due to sporadic hits of TCE in the groundwater around building 813. A Final Status Survey was performed and a report was submitted in August 2005. The Final Status Survey was accepted in FY-2006. Final FS Report was submitted on December 10, 2007. A Draft Final proposed plan was submitted in November 2008. A removal action of military components took place during the summer of 2009. We are reviewing the draft final completion report before moving forward with the PRAP and ROD scheduled to be signed by September 2011.

The Ammunition Breakdown Area and the Oil Discharge Area Adjacent to Building 609: SEDA's Local Redevelopment Authority has determined that future use of this property will be wildlife conservation/recreation. The results of site investigations at the Oil Discharge Area indicate previous activities may have adversely impacted soil and groundwater. The Army has submitted a Draft RI/FS workplan for EPA and NYSDEC review to characterize the extent of any contamination. SEDA is proposing no action. All concerns have been addressed and a no action ROD was signed in November 2003.

Open Detonation Area and Small Arms Range: SEDA submitted limited RI in December 2001. However, UXO material needs to be removed before a full assessment could be performed at these sites. Recent discussions with SEDA seem to indicate that they are seriously entertaining the idea of a 4-ft cap remedy for these sites. Project geophysics is complete and re-acquiring of the anomalies will start in May 2005. The Small Arms Ranges were cleaned up and a Completion Report was submitted and commented on it in 2007. The Army is currently preparing their response. We expect to sign a ROD this fiscal year 2010 for these areas of concern.

The Sewage Sludge Piles, the Fill Area West of Building 135 and the Alleged Paint Disposal Area: SEDA's Local Redevelopment Authority has determined that future use of these areas are planned industrial development. Results of site investigations indicate that previous activities at these areas may have adversely impacted soil and groundwater. EPA and NYSDEC have reviewed and commented on the Army's Draft RI/FS workplan to characterize the extent of any contamination. Based upon recommendations provided by the Army's Technical Peer Review Team, funding was only approved to perform limited soil sampling at these areas, which did not follow the RI/FS workplan that the regulatory agencies had approved. Limited soil sampling was conducted in the Autumn of 1997. Although no groundwater samples were collected, the Peer Technical Review Team thinks the soil data will be sufficient to determine if ground water has been adversely impacted and to perform a soil removal action. Removal action is complete. A Draft RI was submitted in June 2005. The Final Removal Action Completion Report was submitted in 2006. A ROD was signed on May 6, 2009, and a cap was placed over the area this past summer. We are awaiting the construction completion report.

It is expected that an additional 3 separate contaminated areas will be addressed under future CERCLA removal or remedial actions. These areas are considered munitions response sites.

#### Enforcement Status

A Federal Facility Agreement was signed by the Army, NYSDEC and EPA as of January 21, 1993.

## Cleanup Progress

Ash Landfill (Operable Unit 1): The removal and in-situ thermal treatment of 35,000 tons of VOC contaminated soil was complete in June 1995. The groundwater is still contaminated with VOCs including trichloroethylene, 1,2-dichloroethene and vinyl chloride at levels exceeding MCLs. A Record of Decision addressing groundwater was signed in 2005.

Open Burning Ground ( Operable Unit 2): The proposed remedy includes clearance of unexploded ordnance in the area of the remedial action, excavation of soils with concentrations of lead above 500 mg/kg and sediments from Reeder Creek with concentrations of lead above 31 mg/kg and copper above 16 mg/kg; solidification/stabilization of 3,800 cubic yards of soils that are expected to exceed TCLP limits; off-site disposal of soil, solidified soil and sediment with total quantity of 17,900 cubic yards; providing 9 inches of clean fill with revegetation over remaining soils where concentrations of lead exceed 60 mg/kg; and conducting appropriate post-remediation groundwater monitoring to ensure

groundwater is not impacted in the future by the remaining lead in the soil. A public meeting was held on December 17, 1997 to present to the community, the Army, EPA and NYSDEC's preferred remedial action. A ROD was signed June 14, 1999.

Currently, 33,000CY or 50,000 tons (45,000 tons stabilized 5,000 untreated tons) Case 1 and 2 soils have been excavated and disposed of off-site as daily cover material at two landfills. Also, 24,000 CY Case III soils (< 500 ppm total Lead) stockpile remains at the Soil Staging for Army use, along with 3,700 CY of new Case 1 awaiting Treatment and Disposal off site. 11,000 CY of screened soils from the one foot cut and 20,000CY of oversized/UXO suspect material remain stockpiled at the OB Grounds. The oversized material stockpile contains approx. 4 million pounds of ferrous ordnance related scrap, OE, and UXO. The other material is suitable for backfill/ site restoration if needed. The operation generated between 250,00 -300,000 gal of water, primarily from the equipment decontamination wash rack. Because the local well water source contained 300 ppm Iron, and could not be economically treated or filtered, SEDA chose to pay the local POTW's to dispose of it.

Fire Training Areas (OU 3): A soils removal action were done at SEAD-25 & 26 to remove SVOCs, pesticides, and metals. Groundwater BTEX-impacted at SEAD-25 will be monitored until safe levels are reached now that the source has been removed. A total of 1,722 cy of soil was excavated from SEAD-26, and 828 cy from SEAD-26 at a cost of \$450,000. The Final ROD was signed on September 29, 2004.

Deactivation Furnaces (Operable Unit 04): A soil removal action took place at SEAD-16, 17 to remove heavy metals from surface soils. The Final ROD was signed on September 29, 2006.

Miscellaneous Components Burial Site (Part of OU 05): A Removal Action took place in 2004 for SEAD-63. More than 3,778 CY of contaminated soils were removed and disposed off-site. A No Further Action ROD was signed on September 29, 2006.

Old Construction Debris (Part of OU 08): A Removal Action at SEAD-11 took place in October 2006. A total of 31,250 CY of soil and waste material was excavated and disposed off-site. The Final ROD was signed on September 25, 2009.

## Site Repositories

Seneca Army Depot Activity 5786 State Route 96 Building 123 Romulus, NY 14541 (607) 869-1309