

EXPLANATION OF SIGNIFICANT DIFFERENCES

WOODBROOK ROAD DUMP SUPERFUND SITE

Site Name and Location

The Woodbrook Road Dump Superfund Site
Borough of South Plainfield
Middlesex County, New Jersey

Introduction

The purpose of this Explanation of Significant Differences (ESD) is to explain the cost increase to the remedy selected for the Record of Decision (ROD) for the Woodbrook Road Dump Superfund Site (Site), which was selected on September 30, 2013. The major components of the ROD include excavation and off-site disposal of soil and debris with polychlorinated biphenyl (PCB) concentrations greater than 100 parts per million (ppm) to an approved off-site disposal facility, excavation and off-site disposal of soil and debris that contain PCBs at concentrations greater than 1.0 ppm to an approved off-site disposal facility, and establishment of institutional controls, such as a deed notice or covenant, to prevent a change in land use to a use such as residential.

This ESD addresses the change in the selected remedy's overall cost. The ROD estimated a remedy cost of \$24.4 million to remove the contaminated soil from the Site. However, based upon further soil sampling conducted during the remedial design, a higher volume of contaminated material would need to be removed than originally estimated. In addition, the remedial design also took into account on-site waste management costs that were not included in the ROD. As a result, the estimated cost for remediation increased to \$45.3 million.

EPA issues this ESD in accordance with Section 117(c) of the Comprehensive Environmental Response, Compensation and Liability Act of 1980, as amended (CERCLA), 42 U.S.C. § 9617(c), and Sections 300.435(c)(2)(i) and 300.825(a)(2) of the National Oil and Hazardous Substances Pollution Contingency Plan (NCP), 40 C.F.R. 300.435(c)(2)(i) and 300.825(a)(2). EPA is required to publish an ESD if the remedy is modified in a way that differs significantly, but not fundamentally, in either scope, performance, or cost from the remedy selected in the ROD for the site. This ESD serves to document and explain the increase in the estimated cost of the remedy.

The ESD, and documents that provide the basis of the ESD decision, will be incorporated into the Administrative Record for the site in accordance with Section 300.825(a)(2) of

the NCP. The Administrative Record is available for public review at the locations listed below:

U.S. EPA, Region 2

290 Broadway 18th Floor

New York, New York 10007

Site Web Page: <https://www.epa.gov/superfund/woodbrook-road>

South Plainfield Public Library

2484 Plainfield Avenue

South Plainfield, New Jersey 07080

(908) 754-7885

<http://www.southplainfield.lib.nj.us/>

Site History, Contamination, and Selected Remedy

The Woodbrook Road Dump Superfund Site is located primarily on two properties in South Plainfield north of Woodbrook Road currently identified as Block 388, Lots 1 and 26, in Middlesex County, New Jersey. The properties cover approximately 70 acres of heavily wooded and undeveloped land within the Dismal Swamp. Dumps were operated on the two properties by previous owners during the 1940s and 1950s, accepting household and industrial wastes until shut down by the State of New Jersey in 1958. Texas Eastern Terminal Company (TETC) acquired the properties in 1971 and 1972. The surrounding area consists of a mixture of undeveloped/open space, residential and industrial properties. The Site is transected by the northwest-flowing Bound Brook, which forms the boundary between Lot 1 on the east and Lot 26 on the west. Bound Brook flows into central South Plainfield and ultimately discharges to Green Brook and the Raritan River. Three tributaries (referred to as Main Tributary, Secondary Tributary and Railroad Tributary) and a body of standing water (referred to as Western Pond) also bound portions of the Site and discharge to Bound Brook.

In September 1999, members of the non-profit organization, Edison Wetlands Association, discovered weathered electrical capacitors on the western portion of the Site. Some of the capacitors were lying on the ground surface and some were partially buried. In September 1999, the New Jersey Department of Environmental Protection (NJDEP) sampled material inside one capacitor and recorded greater than 50 ppm of PCBs with a field screening kit. NJDEP also observed the name “Cornell Dubilier” on small phenolic ballast containers. Cornell-Dubilier Electronics, Inc. (CDE) used PCBs in the process of manufacturing capacitors from 1936 to 1962 at a South Plainfield facility, which is now a Superfund Site located approximately 0.75 miles northwest of the Site. NJDEP requested EPA to take the lead for the Woodbrook Road Dump Superfund Site in October 1999.

In March 2000, the property owner, TETC, removed and disposed of 26 capacitors from an area which became known as Disposal Area 1, with oversight by EPA. TETC installed a fence and warning signs were posted surrounding Disposal Area 1. Additional surficial soil sampling near Disposal Area 1 was performed during this time by EPA. These sample results also indicated the presence of PCBs in the soil.

In April 2000, a second disposal area (Disposal Area 2) containing capacitor parts was discovered on Lot 26. Surficial soil samples collected in this area by EPA indicated elevated PCB concentrations. Additional preventative security measures were implemented by TETC, including installation of additional fencing, warning signs along the paths leading to Disposal Areas 1 and 2, and road-side barriers to limit access by all-terrain vehicles, which periodically trespassed on the Site.

In July and August 2000, EPA performed test pit excavations and sampling of surface water, sediment, domestic well water, groundwater and soil throughout both lots and at some off-site locations. Based on the results of these investigations, the Site was placed on the National Priorities List on April 30, 2003.

In August 2003, TETC entered into an administrative order on consent with EPA to further investigate and study the Site through a remedial investigation/feasibility study (RI/FS) and to implement additional Site security measures. A contractor for TETC, TRC Environmental Corporation, initiated the RI in 2007, which included sampling of groundwater, potable water, surface water, sediment as well as surface and subsurface soil on and off site. A baseline human health risk assessment for the Site was completed in July 2011 and a screening level ecological risk assessment was completed in February 2012. The Draft Final RI Report, which summarizes the data and risk assessments, was approved by EPA in July 2012 and the Final Draft FS was approved by EPA in July 2013.

In 2009, a Superfund Community Advisory Group (CAG) was formed to keep the public apprised of activities at the Site. The CAG meets every three to four months or as needed for updates, presentations and discussions about progress at the Site. A Technical Assistance Grant was awarded to the CAG by EPA in 2012 to aid the CAG in the review of technical reports, site conditions, and EPA's proposed cleanup proposals and decisions.

In September 2013, EPA issued a ROD that describes the selected remedy for the Site, based upon consideration of the results of the Site investigations, the requirements of CERCLA, the detailed analysis of the response measures in the FS, and public comments. The selected remedy satisfies the requirements of CERCLA Section 121 and the NCP's

nine evaluation criteria for remedial alternatives, 40 CFR §300.430(e)(9). The Selected Remedy includes the following major components:

- Excavation and off-site disposal of an estimated 4,000 cubic yards of soil and debris that contains capacitors, capacitor parts and PCB-contaminated soil and debris with PCB concentrations greater than 100 ppm to an approved off-site disposal facility;
- Excavation and off-site disposal of an estimated 120,000 cubic yards of soil and debris that contains PCBs at concentrations greater than 1.0 ppm to an approved off-site disposal facility; and
- The establishment of institutional controls, such as a deed notice or covenant, to prevent a change in land use to an unrestricted land use such as residential.

This is expected to be the final action for this Site.

Description of Significant Differences

This ESD modifies the cost to the selected remedy, specifically the component that addresses excavation and off-site disposal of soil and debris contaminated with PCBs. The ROD estimated that the remedy would cost \$24.4 million. However, based on the remedial design investigations, EPA now estimates the remedy will cost \$45.3 million, as described below.

The ROD cost was based on the assumption, for cost estimating purposes, that 168,960 tons of contaminated soil and debris would be sent to a Resource Conservation and Recovery Act (RCRA) Subtitle D facility for disposal and 13,975 tons would be sent to a Toxic Substance Control Act (TSCA) facility. Waste contaminated with PCB concentrations under 50 ppm are disposed of at a Subtitle D facility, and waste from the Site that is contaminated with PCB concentrations greater than 50 ppm are disposed of at a TSCA facility. During a pre-remedial design investigation, an extensive soil sampling event was performed in order to minimize the necessity for post-excavation sampling. As a result of this sampling, EPA has revised the earlier calculations, and now estimates that 169,550 tons (or 130,421 cy) of contaminated soil and debris will be sent for disposal at a Subtitle D facility, and 16,470 tons (or 12,666 cy) will be sent for the disposal at a TSCA facility. The increase in TSCA waste quantity as well as an increase in the per unit cost for disposal at both Subtitle D and TSCA disposal facilities resulted in a total excavation, handling and disposal cost increase of \$4.2 million. The remedial design also included cost estimates for non-contaminated debris stabilization, site restoration, on-site water treatment, flood management and other waste management and staging costs which were not included in the ROD estimate and ultimately increased the final remedial design cost

estimate by approximately \$11 million. In addition, the remedial design estimated the timeframe for the remedial action to be 15 months longer than estimated in the ROD which caused an additional increase in the remedial design estimated cost. Due to these cost increases the remedial design cost estimate is \$45.3 million. See Table 1.

Support Agency Comments

EPA is the Lead Agency for the Woodbrook Road Dump Superfund Site, and NJDEP is the Support Agency. The State of New Jersey supports this ESD, which revises the cost estimate of the remedy and the decision to issue this ESD.

Affirmation of Statutory Determinations

EPA is issuing this ESD after consultation with NJDEP, and NJDEP concurs with the presented approach. This ESD modifies the cost of the selected remedy; the performance of the selected remedy is not being modified by this ESD. When implemented, the remedy, as modified by this ESD, will continue to be protective of human health and the environment, and will comply with federal and state requirements that are legally applicable or relevant and appropriate to the remedial action.

The remedy is technically feasible, cost-effective, and satisfies the statutory requirements of CERCLA by providing for a remedial action that has a preference for treatment as a principal element and, therefore, permanently and significantly reduces the toxicity, mobility and volume of hazardous substances.

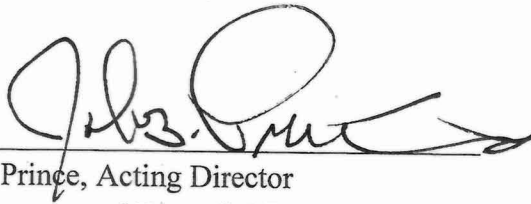
The remedy does not alter the need for a statutory review to be conducted at five-year intervals starting after initiation of the remedial action to ensure that the remedy is, or will be, protective of human health and the environment.

Public Participation Activities

In accordance with Section 300.435(c)(2)(i) of the NCP, a formal public comment period is not required when issuing an ESD. EPA will announce the availability of the ESD in a local newspaper of general circulation. Pursuant to Section 300.825(a)(2) of the NCP, the ESD has been placed in the Administrative Record for the Site and the information repository at South Plainfield Public Library, 2484 Plainfield Avenue, South Plainfield, New Jersey 07080.

**Table 1 - Cost Estimate Summary for the Selected Remedy
Woodbrook Road Dump Site, South Plainfield, New Jersey
November 2017**

Description	Quantity	Units	Unit Cost	Cost
General Requirements				\$5,989,300
General Conditions	1	LS	\$4,548,300	\$4,548,300
Safety, Health & Emergency Response	1	LS	\$110,200	\$110,200
Temporary On Site Facilities	1	LS	\$447,500	\$447,500
Site Security	1	LS	\$588,800	\$588,800
Surveying	1	LS	\$294,500	\$294,500
Site Preparation				\$4,542,200
Pre-Excavation Sampling	1	LS	\$75,100	\$75,100
Clearing and Grubbing	1	LS	\$105,500	\$105,500
Soil Erosion Sediment Control	1	LS	\$204,400	\$204,400
Flood Control Installation	1	LS	\$177,800	\$177,800
Access Roads / Bridges	1	LS	\$1,011,500	\$1,011,500
Soil Containment Area	1	LS	\$236,200	\$236,200
Rail Spur / Loadout Area	1	LS	\$2,163,200	\$2,163,200
Sheet Pile Installation	1,330	LF	\$412	\$550,300
Monitoring Well Abandonment	1	LS	\$18,200	\$18,200
Dewatering / Water Treatment				\$1,598,900
Water Treatment System	1	LS	\$419,500	\$419,500
Operation of Water Treatment System	1	LS	\$1,179,400	\$1,179,400
Excavation, Waste Handling, and Disposal				\$20,525,400
Excavation	143,090	BCY	\$35	\$4,978,400
Excavation / Grading Uncontaminated Material	29,250	BCY	\$32	\$935,000
T&D TSCA Waste	16,470	Tons	\$158	\$2,602,000
T&D Non-TSCA Waste	169,550	Tons	\$71	\$12,010,000
Restoration				\$4,348,900
Backfill / Grading Excavation Areas	62,300	ECY	\$25	\$1,562,500
Removal Site Infrastructure	1.0	LS	\$2,056,900	\$2,056,900
Wetland Restoration	13.5	Acres	\$39,156	\$528,600
Upland Area Seeding	20.4	Acres	\$2,240	\$45,700
Wetland Restoration Monitoring & Maintenance	5.0	YR	\$31,040	\$155,200
Subtotal				\$37,004,700
Contingency (10%)				\$3,843,200
Project Management and Support				\$4,492,900
Total Capital Cost				\$45,340,800



John Prince, Acting Director
Emergency and Remedial Response Division

February 5, 2018
Date