

Explanation of Significant Differences Rockaway Township Wells Superfund Site

Site Name: Rockaway Township Wells Superfund Site
Operable Units 1 and 2

CERCLA ID #: NJD980654214

Site Location: Green Pond Road
Rockaway Township, NJ 07866

Support Agency: EPA, Region 2

Lead Agency: New Jersey Department of Environmental
Protection



*Rockaway and Denville
Townships, NJ*

I. Introduction

This decision document presents an Explanation of Significant Differences (ESD) for the Rockaway Township Wells Superfund Site (Site), located in Rockaway and Denville Townships, New Jersey. The Records of Decision (RODs) selecting the remedies that are modified by this ESD are:

ROD for Operable Unit (OU) 1, October 5, 1993;
and ROD for OU 2, October 8, 2002.

The ESD is issued in accordance with Section 117(c) of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended (CERCLA), 42 U.S.C. § 9601 *et seq.*, and the National Oil and Hazardous Substances Pollution Contingency Plan (NCP), § 300.435(c)(2)(i).

This ESD will become part of the Administrative Record for the Rockaway Township Wells Superfund Site (NCP § 300.825(a)(2)), which has been developed in accordance with Section 113(k) of CERCLA, 42 U.S.C. § 9613(k).

This ESD and the Administrative Record are available for review online at <https://www.epa.gov/superfund/rockaway-township-wellfield> and at the information repository maintained at the Rockaway Township Public Library, 61 Mt. Hope Road, Rockaway Township, New Jersey 07866, Monday - Thursday, 9:00 a.m. to 8:00 p.m.; Friday and Saturday, 9:00 a.m. to 5:00 p.m.; Sunday, 1:00 p.m. to 4:00 p.m., closed on Sundays between Memorial Day and Labor Day; and at the U.S. Environmental Protection Agency (EPA) Region 2 Administrative Record File Room, 290 Broadway, 18th Floor, New York, New York 10007, Monday - Friday, 9:00 a.m. to 5:00 p.m.

II. Statement of Purpose

Since the RODs were issued in 1993 and 2002, EPA has identified the need to implement institutional controls (ICs) at the Site.

The purpose of this ESD is to document EPA's decision to implement ICs in the form of a deed notice as part of the soil remedy for the Site, and a

Classification Exception Area/Well Restriction Area (CEA/WRA) for Site groundwater until groundwater at the Site has been restored to applicable federal and state standards as specified by the ROD. The CEA/WRA is an IC that maintains the protectiveness of the selected remedy by providing notice that the constituent standards for the aquifer are not or will not be met in a localized area due to natural water quality or anthropogenic influences, and that designated aquifer uses are suspended in the affected area for the term of the CEA/WRA, until groundwater is restored. The CEA/WRA has already been implemented as part of the groundwater remedy.

EPA prepares an ESD when the Agency determines that changes are needed to the original selected remedy that are significant, but do not fundamentally alter, the remedy selected in the ROD with respect to scope, performance, or cost.

III. Site History and Contamination

Site History

The Site is located in both Rockaway and Denville Townships in Morris County, New Jersey. The Site, as defined by the areal extent of the contaminated groundwater plume, lies in the center of a Y-shaped valley in an otherwise hilly area of the New Jersey Highlands on approximately 0.29 square miles located immediately north of Interstate 80. The general area is predominantly non-residential, industrial-zoned land which includes the Denville Technical Park (DTP), an industrial building complex. Area development includes commercial businesses, light industries including service stations, restaurants, hotels, plastic manufacturers, truck/transit companies and commercial office complexes.

The source area of Site-related contamination is predominantly located in Denville Township, while the impacted downgradient water supply wells are located in Rockaway Township. The Site

sits atop the Buried Valley Aquifer Complex in the Rockaway River Basin. Both a shallow (not uniformly present over the entire Site) and deep aquifer are present at the Site. The municipal wells that are impacted by Site contamination are high-yielding (approximately 500 gallons per minute) municipal supply/production wells which are located approximately 1,000 feet north-northwest of the initial release/spill source zone (near Buildings 1 and 2 in the DTP). The municipal wells are screened in sand and gravel deposits approximately 130 to 160 feet below the ground surface. The capture zone (area of influence) of the municipal wells extends horizontally and vertically to the source area in the DTP.

Groundwater is used as a drinking water source for approximately 14,000 residents in Rockaway Township. The groundwater will continue to be the source of drinking water for the foreseeable future. The surface waters of the White Meadow Brook and the Beaver Brook (nearby surface water bodies) flow into the Rockaway River and are not used for drinking water. Wetlands associated with these brooks exist in the vicinity of the Site.

Water samples collected by Rockaway Township and the New Jersey Department of Environmental Protection (NJDEP) from the Rockaway Township wells in late 1979 and early 1980 indicated the presence of trichloroethene (TCE) and other volatile organic compounds (VOCs). The Township installed an activated carbon adsorption treatment system in response to this contamination. In October 1980, the treated water developed an unpleasant taste and odor. Analysis showed it to be contaminated with the gasoline additives, di-isopropyl ether and methyl tertiary-butyl ether.

Following the discovery of contamination in the wellfield, NJDEP performed an area-wide industrial survey to identify potential sources of the groundwater contamination. The survey, along with additional information, revealed that petroleum hydrocarbon products were present in groundwater at a Shell Gas Station and the Town and Country Gas Station, which are both located on Green Pond

Road to the west of the wellfield. Chlorinated VOCs were present in groundwater at the DTP.

On August 16, 1982, NJDEP requested that EPA consider the Site for inclusion on the National Priorities List (NPL) of Superfund sites. The Rockaway Township Wells Site was subsequently placed on the NPL on September 1, 1983.

In June 1986, pursuant to the New Jersey Spill Compensation and Control Act (Spill Act), N.J.S.A. 58:10-23.11 et. seq., NJDEP issued Directives to Morton Thiokol Incorporated (Thiokol) (then owner of the DTP property), Shell Oil Company (Shell), and the Town and Country Gas Station requiring payment to NJDEP to conduct a Remedial Investigation/Feasibility Study (RI/FS), and payment to Rockaway Township for the operation and maintenance of an air stripping unit. In May 1987, pursuant to the Spill Act, NJDEP entered into an Administrative Consent Order (ACO) with Thiokol and Shell in which the two companies agreed to make the above payments. NJDEP performed an RI, which was completed in November 1988.

Based on the information from the 1988 RI Report, NJDEP determined that additional studies were necessary and began a Phase II RI. The Phase II RI Report and an FS Report were finalized in September 1992 and December 1992, respectively.

Northrop Grumman Systems Corporation ((NGSC) a successor to Thiokol) continues to pay the operation and maintenance costs of the Township's air stripping unit. In addition, NGSC, in accordance with ACO requirements, continues to implement the groundwater and soil remedial actions at the Site.

As described above, NJDEP is the lead Agency for the Site. EPA has served as the support Agency.

Site Contamination

The contaminants of concern (COCs) presented in the baseline human health risk assessment for groundwater (OU 1) were VOCs including TCE,

1,1,1-trichloroethane (TCA), vinyl chloride, methylene chloride and arsenic. The OU 2 COCs identified for soil include TCE, tetrachloroethene, TCA and cis-1,2-dichloroethene. All of the contaminants identified are hazardous substances as defined in Section 104(14) of CERCLA, 42 U.S.C. § 9601(14), and 40 C.F.R. § 302.4.

Town and Country Gas Station operated on Green Pond Road in Rockaway Township. In June 1984, the property was leased to Exxon Company, U.S.A. (Exxon). In June 1985, Exxon removed 2,500 cubic yards of contaminated soil from the property in accordance with New Jersey regulations in effect at that time.

IV. Selected Remedy

RODs for the Site were signed on October 5, 1993, and October 8, 2002.

These documents are available in the Superfund Document Management System under Record Numbers 100024 (1993 ROD for OU 1) and 83478 (2002 ROD for OU 2).

The selected remedy in the OU 1 groundwater ROD included:

- Extraction of contaminated groundwater and restoration of the aquifer to the more stringent of the federal and New Jersey Maximum Contaminant Limits (MCLs) and New Jersey Ground Water Quality Standards (NJGWQS);
- Treatment of the extracted groundwater to levels attaining the more stringent of the federal and New Jersey MCLs and NJGWQS;
- Reinjection of the treated groundwater to the extent needed to promote groundwater restoration, with discharge of any surplus to the public water supply (changed in the OU 2 ROD to surface water discharge);

- Replacement of the deteriorated air stripping treatment system at the Rockaway Township Wellfield; and
- Appropriate environmental monitoring to ensure the effectiveness of the remedy.

The selected remedy in the OU 2 soil ROD included:

- Soil vapor extraction (SVE) of VOCs in both a former degreaser pit area and a former underground storage tank area;
- Treatment, if required, for the extracted vapors prior to release to the atmosphere; and,
- Operation of the SVE system for approximately 3 to 5 years to attain the New Jersey Impact to Groundwater Soil Cleanup Criteria.

In addition, the 2002 ROD modified the 1993 ROD to allow the treated groundwater to be discharged to the surface water (Beaver Brook) instead of being reinjected or discharged to the public water supply.

V. Description of Significant Differences and Basis for the ESD

An IC in the form of a deed notice must be implemented at the Site. The remedy selected for Site soil in the OU 2 ROD resulted in hazardous substances, pollutants, or contaminants remaining at the Site above levels that allow for unlimited use and unrestricted exposure to soil, but the ROD did not include a requirement for an IC to address potential exposure to the residual soil contamination. As a result, EPA has concluded that an ESD is needed to document the decision to add an IC in the form of a deed notice as part of the soil remedy for the Site to ensure that use of the property remains industrial.

Further, the remedial action selected in the 1993 ROD for groundwater also did not include ICs. EPA has concluded that an ESD is also needed to

document the decision to include a groundwater IC in the form of a CEA/WRA previously implemented as part of the groundwater remedy for the Site (Site CEA ID #NJD980654214/Case ID #G000004876 established by NJDEP on November 17, 2000). The CEA/WRA will remain in place until groundwater at the Site has been restored to applicable federal and state standards as specified by the ROD.

VI. Support Agency Comments

EPA consulted with the NJDEP and provided it the opportunity to comment on this ESD in accordance with NCP § 300.435(c)(2) and § 300.435(c)(2)(i) and CERCLA Section 121(f), 42 U.S.C. § 9621(f). The NJDEP concurred with this ESD in a letter dated September 28, 2022.

VII. Statutory Determinations

EPA has determined that the remedies, as modified by these significant changes, comply with the statutory requirements of CERCLA Section 121, 42 U.S.C. § 9621, are protective of human health and the environment, comply with federal and state requirements that are applicable or relevant and appropriate to the remedial action, remain cost-effective, and utilize permanent solutions and alternative treatment technologies to the maximum extent practicable.

Because the soil remedy selected in the 2002 ROD, as modified by this ESD, will result in hazardous substances, pollutants, or contaminants remaining on-site above levels that allow for unlimited use and unrestricted exposure, a statutory five-year review will now be required to ensure that the remedy remains protective of human health and the environment. The last policy five-year review for the Site was completed on September 23, 2020. The next five-year review will be conducted no more than five years from that date.

VIII. Public Participation

In accordance with 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 with a notice briefly summarizing this ESD. The ESD and the documents that provide the basis for the ESD will be placed in the Administrative Record for the Site in accordance with Section 300.825(a)(2) of the NCP and the information repository maintained at the address above. The ESD will also be placed on EPA's Site page located at <https://www.epa.gov/superfund/rockaway-township-wellfield>.

IX. Authorizing Signature

I have determined the remedies for the Site, as modified by this ESD, are protective of human health and the environment, and will remain so, provided the actions presented are implemented as described above.

This ESD documents the significant changes related to the remedies at the Site. U.S. EPA selected these changes with the concurrence of the NJDEP.

U.S. Environmental Protection Agency

Pat Evangelista

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Pat Evangelista
Director
Superfund and Emergency Management Division
EPA, Region 2

Date: September 29, 2022