PROPOSED STATEMENT OF BASIS

Texaco Research Center
Operable Unit 03: Residential Property Parcel

East Fishkill, Dutchess County
USEPA ID No. NYD091894899
NYSDEC Site No. 314004
December 2025

Prepared by
Division of Environmental Remediation
New York State Department of Environmental Conservation

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SECTION 1: INTRODUCTION

The New York State Department of Environmental Conservation (the Department), in consultation with the New York State Department of Health (NYSDOH), is proposing a remedy for one operable unit (OU) comprising a portion of the above referenced site; OU-3: Residential Property Parcel. The disposal of hazardous wastes at nearby portions of the site, as more fully described in this document, has contaminated various environmental media (defined as soil, surface water, groundwater, sediment, and soil vapor). While no site-related operations or hazardous waste disposal was conducted on OU-3 (the Residential Property Parcel, and subject of this document), impacts to soil have been identified. The remedy is intended to attain the remedial action objectives identified for this site for the protection of public health and the environment. This Proposed Statement of Basis (PSOB) identifies the proposed remedy and presents the basis for its selection.

The New York State Inactive Hazardous Waste Disposal Site Remedial Program (also known as the State Superfund Program) is an enforcement program, the mission of which is to identify and characterize suspected inactive hazardous waste disposal sites and to investigate and remediate those sites found to pose a significant threat to public health and environment. The New York State Hazardous Waste Management Program (also known as the Resource Conservation and Recovery Act [RCRA] Program) requires corrective action for releases of hazardous waste and hazardous constituents to the environment. This facility is subject to both programs, and this remedy is consistent with the remedial requirements of both programs. The proposed Statement of Basis will serve as the Proposed Remedial Action Plan as required by the State Superfund Program.

The Department has issued this document in accordance with the requirements of New York State Environmental Conservation Law and Title 6 of the Official Compilation of Codes, Rules and Regulations of the State of New York; (6 NYCRR) Part 375. This document is a summary of the information that can be found in the site-related reports and documents in the document repository identified below.

SECTION 2: CITIZEN PARTICIPATION

The Department seeks input from the community on all proposed remedies. This is an opportunity for public participation in the remedy selection process. The public is encouraged to

review the reports and documents, which are available at the following repository:

Blodgett Memorial Library
37 Broad Street
Fishkill, NY 12524
Phone: (845) 896-9215

Access the Proposed Statement of Basis and other project documents online through the DECinfo Locator: https://gisservices-dev.dec.ny.gov/gis/dil/. (Enter the site address, check the Environmental Cleanup button, click the excavator icon, then click Document Folder link).

A public comment period has been set from:

12/31/2025 to 01/31/2026

A public meeting is scheduled for the following date:

01/13/2026 at 6 p.m.

Public meeting location:

Fishkill Town Hall, 807 NY Hwy 52

At the meeting, the findings of the remedial investigation (RI) and the feasibility study (FS) will be presented along with a summary of the proposed remedy. After the presentation, a question-and-answer period will be held, during which verbal or written comments may be submitted on the PSOB.

Written comments may also be sent through **01/31/2026** to:

Greta Kowalski, P.G.
NYS Department of Environmental Conservation
Division of Environmental Remediation
625 Broadway
Albany, NY 12233
greta.kowalski@dec.ny.gov

The Department may modify the proposed remedy based on new information or public comments. Therefore, the public is encouraged to review and comment on the proposed remedy identified herein. Comments will be summarized and addressed in the responsiveness summary that will accompany the Department's final selection of the remedy for this OU.

Receive Site Citizen Participation Information By Email

Please note that the Department's Division of Environmental Remediation (DER) is "going paperless" relative to citizen participation information. The ultimate goal is to distribute citizen participation information about contaminated sites electronically by way of county email listservs. Information will be distributed for all sites that are being investigated and cleaned up in a particular county under the State Superfund Program, Environmental Restoration Program, Brownfield Cleanup Program, and Resource Conservation and Recovery Act Program. We

encourage the public to sign up for one or more county listservs at http://www.dec.ny.gov/chemical/61092.html

SECTION 3: SITE DESCRIPTION AND HISTORY

Location:

The site is located in the Hamlet of Glenham, Town of Fishkill, Dutchess County, New York. Glenham is a small residential community with churches, businesses, and a fire hall in the vicinity of the site. The site is located on Old Glenham Road at the intersection of School Street and is about one mile south of I-84. The site consists of approximately 150 acres of land straddling the Fishkill Creek (the Creek).

The site has two main areas: the Main Facility and areas south of the Fishkill Creek. The Main Facility is bounded to the south by Fishkill Creek, to the north by Old Glenham Road, to the west by the Metro-North Railroad line and the Former Church Property, and to the east by private property including parking, residential housing and businesses. South of the Fishkill Creek areas include four operable units of the site: the approximately 90-acre Former Recreation Area (OU-1E), the Residential Property Parcel (OU-3), the Residential Property and Rail Siding Parcel (OU-1D). and the Former Tank Farm (OU-1C). A site location map is attached as Figure 1. A Site Plan identifying the site parcels (red outlines) as well as labels for each of the operable units is attached as Figure 2.

Site Features:

Fishkill Creek runs east to west through the site. Most of the buildings in the formerly heavily developed area to the north of the creek were demolished in the early 2010's. The area to the south of the creek is partially remediated empty land (over half of it forested) with no remaining structures.

Current Zoning and Land Use:

The site is currently inactive and is zoned for industrial use. A landscaping company utilizes a small portion of the main facility for equipment storage. The surrounding parcels are currently used for a combination of residential, commercial, light industrial and utility rights-of-way. The nearest residential units are less than 100 feet from the site.

Past Use of the Site:

The portion of the site north of the creek is called the Main Facility, and was used as an onshore, non-production, non-transportation laboratory complex engaged in research, development, and technical services related to petroleum products and energy by Texaco (a subsidiary of Chevron U.S.A. Inc. [Chevron]) from 1931 to 2003, when it was closed. Petroleum, coal products, and solvents were used at the property in connection with the research functions.

Operable Units (OUs):

On October 31, 2013, the Department issued a Consent Order which supplanted the 6 NYCRR Part 373 Permit and provided new definitions for the OUs. An operable unit represents a portion of a remedial program for a site that for technical or administrative reasons can be addressed

separately to investigate, eliminate, or mitigate a release, threat of release or exposure pathway resulting from the site contamination. As described below, the site has been divided into four OUs.

(1) Operable Unit 1 (OU-1): Remainder of the Chevron Properties. Operable Unit No. 1 is the balance of the Chevron parcel which includes Lot 1 (Tax Parcel 839339), Lot 2 (Tax Parcel 908283), the Church Street parcels (Tax Parcels 730327 and 686282), the former rail siding property (Tax Parcel 879250) and the approximately 90-acre parcel (which includes the Class 4 Inactive Hazardous Waste site) (Tax Parcel 835088). This OU is defined as the following six sub-units:

- OU-1A: Main Facility Parcel
- OU-1B: Former Church Property
- OU-1C: Washington Avenue Tank Farm
- OU-1D: Residential Property & Rail Siding Property
- OU-1E: Back 93 Acre Parcel
- OU-1F: Fishkill Creek

(2) Operable Unit 2 (OU-2): Road Parcel.

(3) Operable Unit 3 (OU-3): Residential Property Parcel (the subject of this PSOB). OU-3 is a 0.67-acre vacant parcel identified on the Dutchess County Tax Map as Parcel ID No. 795253. No site-related activities were reportedly conducted on this OU. Currently, no structures or activities exist or are performed on this OU. The proposed future use of this property is residential.

(4) Operable Unit 4 (OU-4): Hydroelectric Dam & Facilities – Lot 3.

Site Geology and Hydrogeology:

The site is underlain by a bedrock formation with a fault line that runs northwest to southeast though the center of the Main Facility. Bedrock out-crops (where bedrock is present at the ground surface) are found in the northern part of the site due to thinner soil cover.

The Fishkill Creek flows through the site from east to west. In general, groundwater flows from the north and south toward the creek.

Operable Unit Number OU-3 is the subject of this document. The remaining OUs will be the subject of subsequent Statements of Basis.

A site location map is attached as Figure 1. A Site Plan identifying the Operable Units is attached as Figure 2.

SECTION 4: LAND USE AND PHYSICAL SETTING

The Department may consider the current, intended, and reasonably anticipated future land use of the site and its surroundings when evaluating a remedy. While the overall site is zoned for industrial use, alternatives that restrict the use of the site to residential and restricted residential as described in Part 375-1.8(g) are being evaluated in addition to an alternative which would allow for unrestricted use of the site.

A comparison of the results of the investigation to the appropriate standards, criteria, and guidance values (SCGs) for the identified land use and the unrestricted use SCGs for the site contaminants is included in the Tables for the media being evaluated in Exhibit A.

SECTION 5: ENFORCEMENT STATUS

Potentially Responsible Parties (PRPs) are those who may be legally liable for contamination at a site. This may include past or present owners and operators, waste generators, and haulers.

The PRPs for the site, documented to date, include:

Chevron U.S.A. Inc. (Chevron)

Chevron (f/k/a Texaco and Chevron Texaco) operated a laboratory research center at the site from 1931 through its closure in 2003. The Department issued Part 373 Hazardous Waste Management Permit #3-1330-00048/16-0 identifying Chevron as Permittee, which governed RCRA corrective action, closure, and post-closure activities at portions of the site. The Department and Chevron executed a Consent Order on October 31, 2013 (Index No. 03-1112-08-12), which terminated the RCRA permit at the site and obligated Chevron to implement a full remedial program for the site, including all identified OUs.

SECTION 6: SITE CONTAMINATION

6.1: Summary of the Remedial Investigation

A Remedial Investigation (RI) has been conducted. The purpose of the RI was to define the nature and extent of any contamination resulting from previous activities at the site. The field activities and findings of the investigation are described in the RI Report.

The following general activities are conducted during an RI:

- Research of historical information;
- Geophysical survey to determine the lateral extent of wastes;
- Test pits, soil borings, and monitoring well installations;
- Sampling of waste, surface and subsurface soils, groundwater, and soil vapor for laboratory analysis;
- Sampling of surface water and sediment for laboratory analysis; and
- Ecological and Human Health Exposure Assessments.

The analytical data collected on this site for the OUs covered under this proposed Statement of Basis includes data for:

- soil
- groundwater

6.1.1: Standards, Criteria, and Guidance (SCGs)

The remedy must conform to promulgated standards and criteria that are directly applicable or that are relevant and appropriate. The selection of a remedy must also take into consideration

guidance, as appropriate. Standards, Criteria and Guidance are hereafter called SCGs.

To determine whether the contaminants identified in various media are present at levels of concern, the data from the RI were compared to media-specific SCGs. The Department has developed SCGs for groundwater, surface water, sediments, and soil. The NYSDOH has developed SCGs for drinking water and soil vapor intrusion. The tables found in Exhibit A list the applicable SCGs in the footnotes. For a full listing of all SCGs see: http://www.dec.ny.gov/regulations/61794.html

6.1.2: RI Results

The data have identified contaminants of concern. A "contaminant of concern" is a hazardous waste that is sufficiently present in frequency and concentration in the environment to require evaluation for remedial action. Not all contaminants identified on the property are contaminants of concern. For this reason, a background soil evaluation was performed as part of the remedial investigation. The evaluation accounted for local soil background concentrations of metals, semi-volatile organic compounds (SVOCs), and pesticides for comparison to site soil concentrations. The nature and extent of contamination and environmental media requiring action are summarized in Exhibit A. Additionally, the RI Report contains a full discussion of the data. The contaminant(s) of concern identified at the site for this OU are:

- soil: SVOCs, including: benz(a)anthracene (BAA), benzo(a)pyrene (BAP), benzo(b)fluoranthene (BBF), benzo(k)fluoranthene (BKF), chrysene, and indeno(1,2,3-cd)pyrene; and
- groundwater: SVOCs, including: BAA, BBF, BKF, chrysene, and indeno(1,2,3-cd)pyrene.

As summarized in Exhibit A (Nature and Extent of Contamination), the contaminant(s) of concern exceed the applicable SCGs for:

- soil
- groundwater

6.2: Interim Remedial Measures

An interim remedial measure (IRM) is conducted at a site when a source of contamination or exposure pathway can be effectively addressed before issuance of a final remedy.

No IRMs were conducted at OU-3.

6.3: Summary of Environmental Assessment

This section summarizes the assessment of existing and potential future environmental impacts presented by the OU. Environmental impacts may include existing and potential future exposure pathways to fish and wildlife receptors, wetlands, groundwater resources, and surface water.

Nature and extent of contamination: Soil and groundwater were analyzed during the remedial investigation at OU-3 for volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), pesticides (soil only), polychlorinated biphenyls (PCBs) (soil only), and metals. Based upon investigations conducted to date, including the background soil evaluation and acetone

evaluation, the primary contaminants of concern (CoCs) at OU-3 include SVOCs in soil and groundwater, as outlined below.

Soil: While zoned for industrial use, soil contamination at OU-3 was compared to Unrestricted Use Soil Cleanup Objectives (USCOs) and Residential Use Soil Cleanup Objectives (RSCOs), as well as Protection of Groundwater Soil Cleanup Objectives (PoGW SCOs) for those compounds found in both soil and groundwater. Adjacent properties are currently residential, and this OU is anticipated to have future residential use. Soil contamination detected above RSCOs is limited to SVOCs. In the summary below, the maximum detected concentration is listed for each compound followed by the USCO/RSCO, if different (where the PoGW SCO is lower than the RSCO, the PoGW SCO is given: BAA (2.7 parts per million [ppm] compared to 1 ppm), BAP (1.9 ppm compared to 1 ppm), BBF (2.6 ppm compared to 1 ppm), BKF (1.1 ppm compared to 0.8/1 ppm), chrysene (2.4 ppm compared to 1 ppm), and indeno(1,2,3-cd)pyrene (0.87 ppm compared to 0.5 ppm).

VOCs, pesticides, and metals were detected at concentrations above USCOs, but below the RSCOs as follows: acetone (0.079 ppm compared to 0.05 ppm), 4,4-DDE (0.011 ppm compared to 0.0033/1.8 ppm), 4,4-DDT (0.004 ppm compared to 0.0033/1.7 ppm), mercury (0.217 ppm compared to 0.18/0.73 ppm), and nickel (32.8 ppm compared to 30/130 ppm). See Figure 3 for a summary of the soil data relative to the OU-3 boundaries.

PCBs were not detected in soil samples collected.

No off-site soil impacts associated with OU-3 have been identified.

Groundwater: Groundwater samples were collected from temporary well points at OU-3 and analyzed for VOCs, SVOCs, and metals. Concentrations of several VOCs, SVOCs, and metals were detected exceeding groundwater standards; the maximum detected concentration is followed by the Division of Water Technical and Operational Guidance Series (1.1.1) (TOGS 1.1.1) Ambient Water Quality Standard and/or Guidance Value (AWQS) (the metals results provided are unfiltered/filtered concentrations): acetone (56 parts per billion [ppb] compared to 50 ppb), BAA (0.3 ppb compared to 0.002 ppb), BAP (0.4 ppb compared to non-detect), BBF (0.5 ppb compared to 0.002 ppb), BKF (0.2 ppb compared to 0.002 ppb), chrysene (0.4 ppb compared to 0.002 ppb), indeno(1,2,3-c,d)pyrene (0.3 ppb compared to 0.002 ppb), arsenic 61.1/1.8 ppb compared to 25 ppb), barium (1,330/812 ppb compared to 1,000 ppb), beryllium (12.7/0.89 ppb compared to 3 ppb), cadmium (2.3/5.2 ppb compared to 5 ppb), chromium (511/8.6 ppb compared to 50 ppb), copper (433/15.1 ppb compared to 200 ppb), iron (2,040,000/25,660 ppb compared to 300 ppb), lead (272/3.4 ppb compared to 25 ppb), magnesium (594,000/113,000 ppb compared to 35,000 ppb), manganese (65,700/55,100 ppb compared to 300 ppb), mercury (4.2/non-detect ppb compared to 0.7 ppb), nickel (2,490/233 ppb compared to 100 ppb), sodium (192,000/295,000 ppb compared to 20,000 ppb), and thallium (1.5/non-detect ppb compared to 0.5 ppb). See Figure 4 for a summary of the groundwater data relative to the OU-3 boundaries.

Acetone is a common laboratory contaminant and is not associated with historical site use; therefore, it is not retained as a contaminant of concern at OU-3.

Barium, beryllium, copper, iron, magnesium, manganese, nickel, sodium, and thallium are naturally occurring metals and not considered contaminants of concern for the site. While arsenic, cadmium, chromium, lead, and mercury concentrations were above standards in unfiltered samples, concentrations were below or very slightly above standards in filtered samples indicating that entrained sediments in the samples were likely biasing the concentrations high; therefore, metals are not considered contaminants of concern at OU-3.

No off-site groundwater impacts associated with OU-3 have been identified.

Soil vapor: No soil vapor sampling was performed at OU-3. No buildings exist on-site at present, therefore indoor air sampling was not performed. An evaluation of the potential for soil vapor intrusion will, however, be performed for any buildings developed on-site.

No off-site soil vapor impacts associated with OU-3 have been identified.

Special Resources Impacted/Threatened: A Step 1 Fish and Wildlife Impact Assessment (FWIA) was performed and based upon the resources and pathways identified and the toxicity of the contaminants of ecological concern at OU-3, potential ecological exposures are minimal and do not require further evaluation. Further information can be found in the Remedial Investigation Report.

6.4: Summary of Human Exposure Pathways

This human exposure assessment identifies ways in which people may be exposed to site-related contaminants. Chemicals can enter the body through three major pathways (breathing, touching, or swallowing). This is referred to as *exposure.*

Persons who enter OU-3 (hereafter referred to as “site”) could contact contaminants in the soil by walking on the site, digging, or otherwise disturbing the soil. People are not drinking the contaminated groundwater because the area is served by a public water supply that is not affected by this contamination.

6.5: Summary of the Remediation Objectives

The objectives for the remedial program have been established through the remedy selection process stated in 6 NYCRR Parts 373 and 375. The goal for the remedial program is to restore the site to pre-disposal conditions to the extent feasible. At a minimum, the remedy shall eliminate or mitigate all significant threats to public health and the environment presented by the contamination identified at the site through the proper application of scientific and engineering principles.

The remedial action objectives (RAOs) chosen for this OU are:

Soil

RAOs for Public Health Protection

- Prevent ingestion/direct contact with contaminated soil.
-

RAOs for Environmental Protection

- Prevent migration of contaminants that would result in groundwater or surface water contamination.

Groundwater

RAOs for Public Health Protection

- Prevent ingestion of groundwater with contaminant levels exceeding drinking water standards.
- Prevent contact with, or inhalation of volatiles, from contaminated groundwater.

RAOs for Environmental Protection

- Remove the source of ground or surface water contamination.
- Restore groundwater aquifer to pre-disposal/pre-release conditions, to the extent practicable.

SECTION 7: SUMMARY OF THE PROPOSED OU-3 REMEDY

To be selected, the remedy must be protective of human health and the environment, be cost-effective, comply with other statutory requirements, and utilize permanent solutions, alternative technologies or resource recovery technologies to the maximum extent practicable. The remedy must also attain the remedial action objectives identified for the site, which are presented in Section 6.5. Potential remedial alternatives for the site were identified, screened and evaluated in the FS report.

A summary of the remedial alternatives that were considered for this site is presented in Exhibit B (Description of Remedial Alternatives). Cost information is presented in the form of present worth, which represents the amount of money invested in the current year that would be sufficient to cover all present and future costs associated with the alternative. This enables the costs of remedial alternatives to be compared on a common basis. As a convention, a time frame of 30 years is used to evaluate present worth costs for alternatives with an indefinite duration. This does not imply that operation, maintenance, or monitoring would cease after 30 years if remediation goals are not achieved. A summary of the Remedial Alternatives Costs is included as Exhibit C (Remedial Alternative Costs).

The basis for the Department's proposed remedies is set forth as Exhibit D (Summary of the Proposed Remedies).

The OU-3, Residential Property Parcel, proposed remedy is Alternative 2, referred to as the Excavation to Meet Residential SCOs remedy. Refer to Figure 5 for a depiction of the proposed remedy.

The estimated present worth cost to implement/construct the remedy is $108,000, with $7,000 annual costs following implementation.

The elements of the proposed remedy are as follows:

1. Green Remediation

Green remediation principals and techniques will be implemented to the extent feasible in the site management of the remedy as per DER-31. The major green remediation components are as follows:

- Considering the environmental impacts of treatment technologies and remedy stewardship over the long term;
- Reducing direct and indirect greenhouse gas and other emissions;
- Increasing energy efficiency and minimizing use of non-renewable energy;
- Conserving and efficiently managing resources and materials;
- Reducing waste, increasing recycling and increasing reuse of materials which would otherwise be considered a waste; and
- Additionally, to incorporate green remediation principles and techniques to the extent feasible in the future development at this site, any future on-site buildings shall be constructed, at a minimum, to meet the 2020 Energy Conservation Construction Code of New York (or most recent edition) to improve energy efficiency as an element of construction.

As part of the site management program, to promote implementation of green and sustainable remediation principles, an environmental footprint analysis will be completed. The environmental footprint analysis will be completed using an accepted environmental footprint analysis calculator such as SEFA (Spreadsheets for Environmental Footprint Analysis, USEPA), SiteWise(TM) (available in the Sustainable Remediation Forum [SURF] library) or similar NYSDEC accepted tool. Water consumption, greenhouse gas emissions, renewable and non-renewable energy use, waste reduction and material use will be estimated, and goals for the project related to these green and sustainable remediation metrics, as well as for minimizing community impacts, protecting habitats and natural and cultural resources, and promoting environmental justice, will be established for the site management activities, as appropriate. Further, progress with respect to green and sustainable remediation metrics will be tracked, and reported in periodic reports, as part of the site management program, and opportunities to further reduce the environmental footprint of the project will be identified as appropriate.

Additionally, the site management program will include an evaluation of the impact of climate change on the project site and the engineering controls. Potential vulnerabilities associated with extreme weather events (e.g., hurricanes, lightning, heat stress and drought), flooding, and sea level rise will be identified, and the site management program will include measures to minimize the impact of potential identified vulnerabilities.

2. Excavation:

Excavation and off-site disposal of contaminant source areas, including**:**

- Soil exceeding Residential Use SCOs, as defined by 6 NYCRR Part 375-6.8.

Approximately two (2) cubic yards of contaminated soil will be removed from the site.

Collection and analysis of confirmation and documentation samples at the remedial excavation depths (anticipated to be approximately 0.5 feet below ground surface) will be used to verify that SCOs have been achieved. If confirmation/documentation sampling indicates that SCOs were not achieved at the stated remedial depth, the responsible party must notify the Department,

submit the sample results and, in consultation with the Department, determine if further remedial excavation is necessary.

To ensure proper handling and disposal of excavated material, waste characterization sampling will be completed for all identified contaminated site material. Waste characterization sampling will be performed exclusively for the purposes of off-site disposal in a manner suitable to receiving facilities and in conformance with applicable federal, state and local laws, rules, and regulations and facility-specific permits.

3. Backfill:

Backfill meeting the requirements of 6 NYCRR Part 375-6.7(d) will be brought in to replace the excavated soil or complete the backfilling of the excavation and establish the designed grades at the site.

4. Institutional Control:

Imposition of an institutional control in the form of an environmental easement and a Site Management Plan, as described below, will be required. The remedy will achieve a residential use cleanup, at a minimum.

Imposition of an institutional control in the form of an environmental easement for the controlled property which will:

- require the remedial party or site owner to complete and submit to the Department a periodic certification of institutional controls in accordance with Part 375-1.8 (h)(3);
- allow the use and development of the controlled property for residential use as defined by Part 375-1.8(g), although land use is subject to local zoning laws;
- restrict the use of groundwater as a source of potable or process water, without necessary water quality treatment as determined by the NYSDOH or County DOH; and
- require compliance with the Department approved Site Management Plan.

5. Site Management Plan:

A Site Management Plan is required, which includes the following:

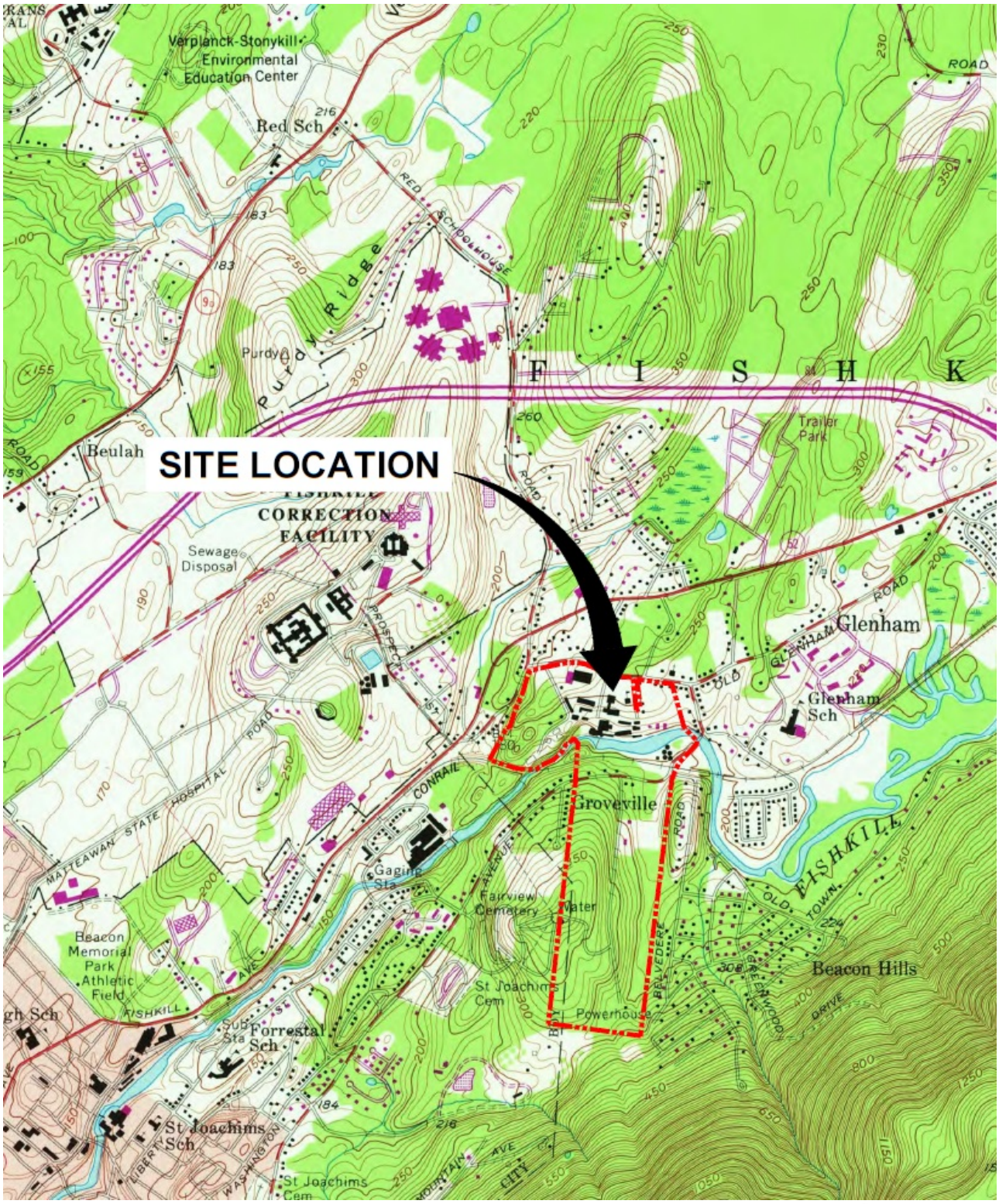
a. an Institutional and Engineering Control Plan that identifies all use restrictions for the site and details the steps and media-specific requirements necessary to ensure the following institutional controls remain in place and effective:

   Institutional Controls: The environmental easement discussed in Paragraph 4 above.

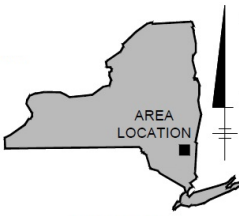
   This plan includes, but may not be limited to:

   - an Excavation Plan which details the provisions for management of future excavations in areas of remaining contamination;

- provision should redevelopment occur to ensure no soil exceeding protection of groundwater concentrations will remain below storm water retention basin or infiltration structures. Collection and analysis of one-foot confirmation samples immediately below the basin or structure depth will be used to verify that the protection of groundwater SCOs have been achieved;
- provision for the evaluation of the potential for soil vapor intrusion for any future buildings constructed on-site, including provision for implementing actions recommended to address exposures related to soil vapor intrusion;
- descriptions of the provisions of the environmental easement including any land use, and/or groundwater use restrictions;
- maintaining site access controls and Department notification; and
- the steps necessary for the periodic reviews and certification of the institutional controls.



REFERENCE: BASE MAP USGS 7.5. MIN. TOPO. QUAD.,WAPPINGERS FALLS, NY, DATED 1956, PHOTOREVISED 1981.



NEW YORK STATE Department of Environmental Conservation

TEXACO RESEARCH CENTER

FISHKILL, NEW YORK

SITE LOCATION

DATE
DECEMBER 2025

SITE NO.
314004

FIGURE
1

SITE #314004 BOUNDARY

NEW YORK STATE Department of Environmental Conservation

TEXACO RESEARCH CENTER
FISHKILL, NEW YORK

SITE PLAN & OPERABLE UNITS

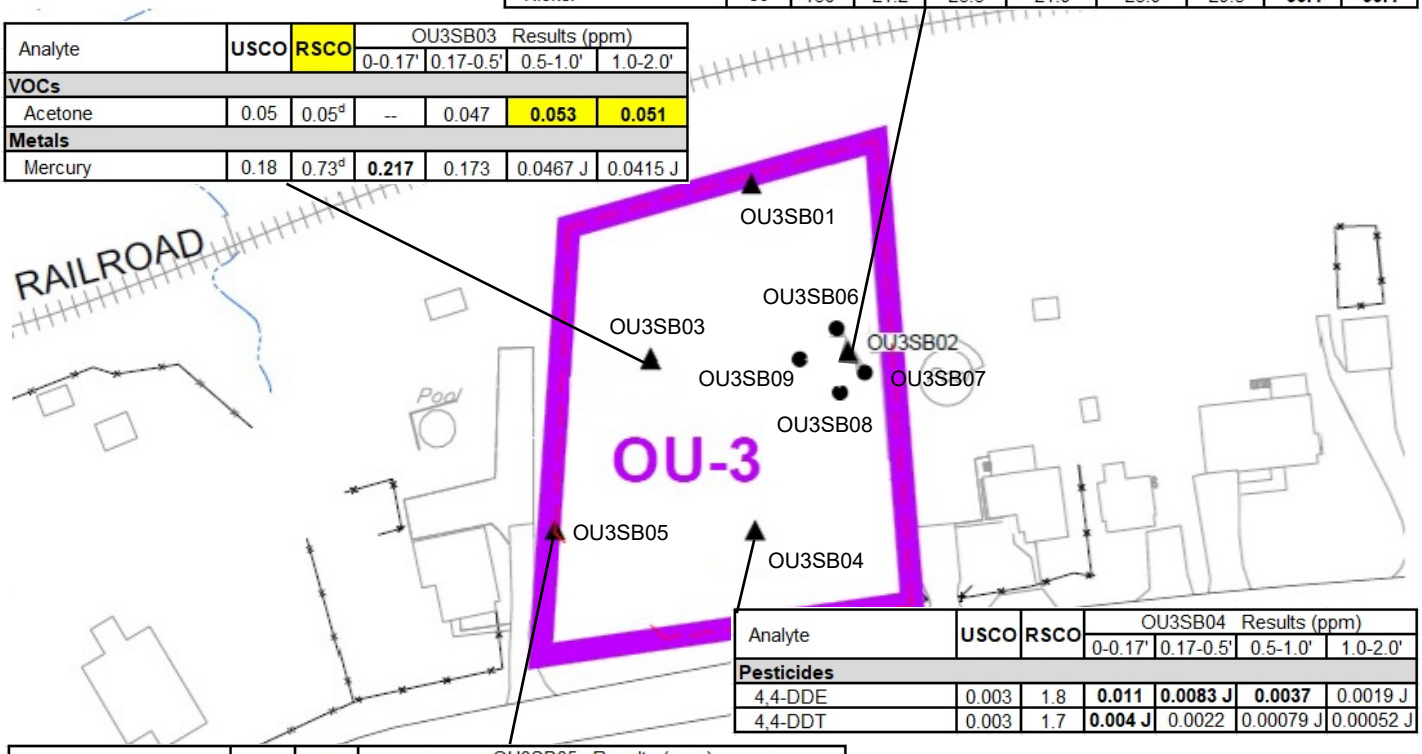
DATE
DECEMBER 2025

SITE NO.
314004

FIGURE
2

Analyte	USCO	RSCO	OU3SB02 Results (ppm) 0-0.17'	0.17-0.5'	0.5-1.0'	1-2'	2-4'	10-12'	14-16'
VOCs									
Acetone	0.05	0.05[d]	--	--	--	--	**0.079**	0.013 J	0.015 J
SVOCs									
Benz(a)anthracene	1	1	**2.7**	0.081	0.039	0.007 J	<0.004	<0.004	<0.004
Benzo(a)pyrene	1	1	**1.9**	0.08	0.042	0.007 J	<0.008	<0.007	<0.007
Benzo(b)fluoranthene	1	1	**2.6**	0.13	0.059	0.01 J	<0.004	<0.004	<0.004
Benzo(k)fluoranthene	0.8	1	**1.1**	0.041	0.026	<0.004	<0.004	<0.004	<0.004
Chrysene	1	1	**2.4**	0.093	0.048	0.008 J	<0.004	<0.004	<0.004
Indeno(1,2,3-cd)pyrene	0.5	0.5	**0.87**	0.051	0.027	0.006 J	<0.008	<0.007	<0.007
Metals									
Nickel	30	130[d]	21.2	23.3	21.9	25.9	29.5	**30.4**	**30.4**

Analyte	USCO	RSCO	OU3SB03 Results (ppm) 0-0.17'	0.17-0.5'	0.5-1.0'	1.0-2.0'
VOCs						
Acetone	0.05	0.05[d]	--	0.047	**0.053**	**0.051**
Metals						
Mercury	0.18	0.73[d]	**0.217**	0.173	0.0467 J	0.0415 J



Analyte	USCO	RSCO	OU3SB04 Results (ppm) 0-0.17'	0.17-0.5'	0.5-1.0'	1.0-2.0'
Pesticides						
4,4-DDE	0.003	1.8	**0.011**	**0.0083 J**	**0.0037**	0.0019 J
4,4-DDT	0.003	1.7	**0.004 J**	0.0022	0.00079 J	0.00052 J

Analyte	USCO	RSCO	OU3SB05 Results (ppm) 0-0.17'	0.17-0.5'	0.5-1.0'	1.0-2.0'	6-8'	12-14'
Metals								
Nickel	30	130[d]	19.7	26	**32.8**	**31.2**	**31.1**	**32.4**

Notes:
Soil samples OU3SB01-05 collected 5/22/2017. Soil samples OU3SB06-09 collected 10/7/2024.
Sample depth ranges given in feet below ground surface.
Results given in parts per million (ppm) and compared to 6 New York Codes, Rules and Regulations Part 375 Unrestricted Use Soil Cleanup Objectives (USCOs) and Residential Use Soil Cleanup Objectives (RSCOs).
"d" superscript indicates compounds with Protection of Groundwater Soil Cleanup Objectives (PoGW SCO) lower than RSCOs; the PoGW SCO is given.
Bold concentrations indicate those above USCOs.
Highlighted concentrations indicate those above RSCOs/PoGW SCOs.
J = estimated concentration
All volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), and metals were below USCOs at OU3SB01.
All SVOCs were below USCOs at OU3SB06, OU3SB07, OU3SB08, and OU3SB09.

LEGEND:
FENCE
RAILROAD
WETLAND
STREAM
SOIL BORING LOCATIONS

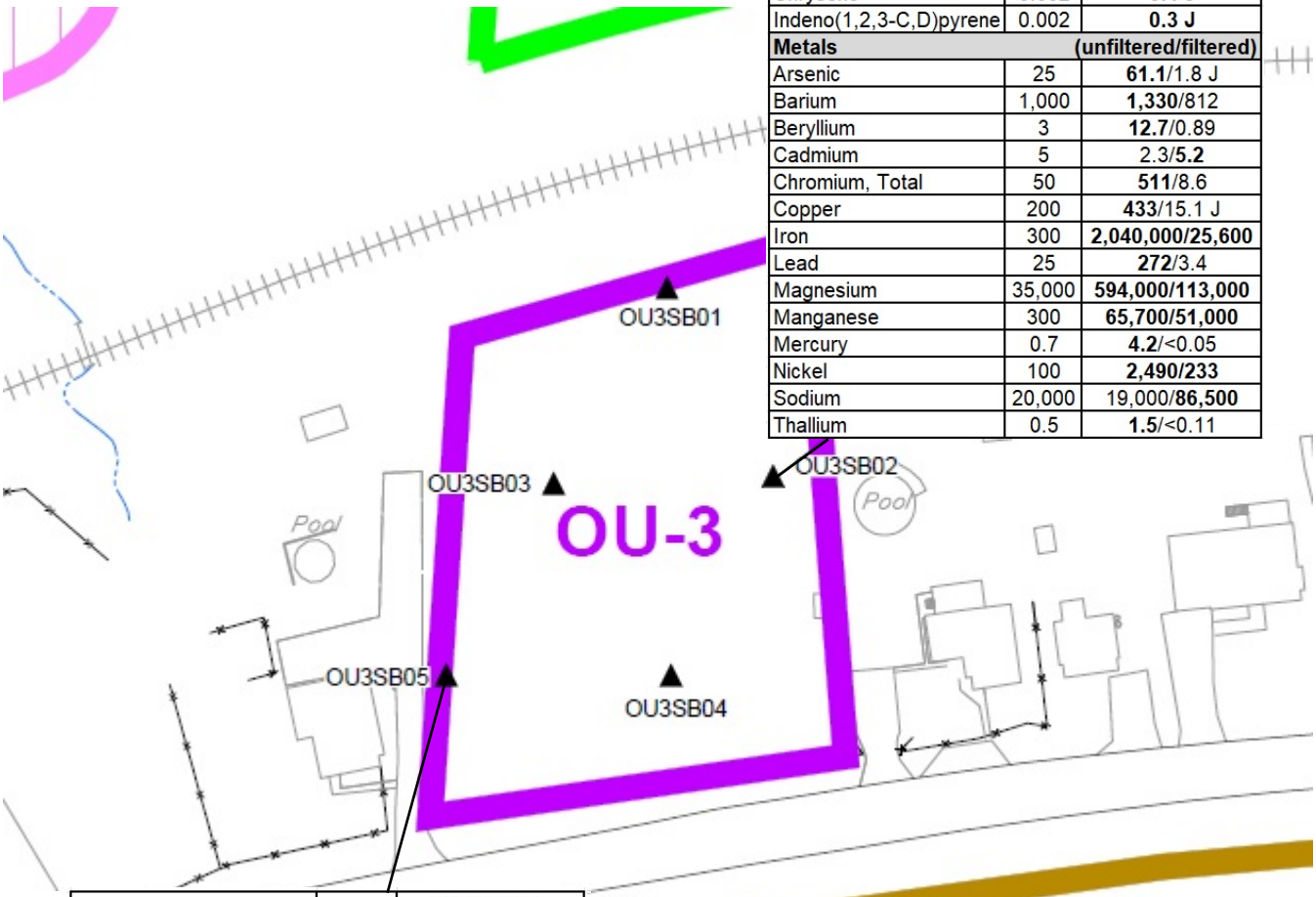
NEW YORK STATE Department of Environmental Conservation

TEXACO RESEARCH CENTER
FISHKILL, NEW YORK

OU-3 RESIDENTIAL PROPERTY PARCEL SOIL CONCENTRATIONS

DATE
DECEMBER 2025
SITE NO.
314004
FIGURE
3

Analyte	AWQS	OU3SB02 Results (ppb)
VOCs		
Acetone	50	**56**
SVOCs		
Benz(a)anthracene	0.002	**0.3 J**
Benzo(a)pyrene	0.002	**0.4 J**
Benzo(b)fluoranthene	0.002	**0.5 J**
Benzo(k)fluoranthene	0.002	**0.2 J**
Chrysene	0.002	**0.4 J**
Indeno(1,2,3-C,D)pyrene	0.002	**0.3 J**
Metals		**(unfiltered/filtered)**
Arsenic	25	**61.1**/1.8 J
Barium	1,000	**1,330**/812
Beryllium	3	**12.7**/0.89
Cadmium	5	2.3/**5.2**
Chromium, Total	50	**511**/8.6
Copper	200	**433**/15.1 J
Iron	300	**2,040,000/25,600**
Lead	25	**272**/3.4
Magnesium	35,000	**594,000/113,000**
Manganese	300	**65,700/51,000**
Mercury	0.7	**4.2**/<0.05
Nickel	100	**2,490/233**
Sodium	20,000	19,000/**86,500**
Thallium	0.5	**1.5**/<0.11



Analyte	AWQS	OU3SB05 Results (ppb)
VOCs		
Acetone	50	**12 J**
Metals		**(unfiltered/filtered)**
Arsenic	25	**43.1**/<0.68
Beryllium	3	**6.8**/<0.091
Chromium, Total	50	**289**/1.3 J
Copper	200	**259**/<9.9
Iron	300	**220,000**/24.5 J
Lead	25	**137**/<1.1
Magnesium	35,000	**71,500**/32,300
Manganese	300	**14,300/4,630**
Nickel	100	**268**/5.7
Sodium	20,000	**192,000/295,000**
Thallium	0.5	**1**/<0.11

Notes:
Groundwater samples collected 11/19/2018.
Results given in parts per billion (ppb) and compared to NYS Division of Water Technical and Operational Guidance Series (1.1.1) Ambient Water Quality Standards and Guidance Values (AWQS).
Bold concentrations indicate those above AWQS.
J = Estimated concentration.

LEGEND:
- FENCE
- RAILROAD
- WETLAND
- STREAM
- SAMPLE LOCATIONS

NEW YORK STATE | Department of Environmental Conservation

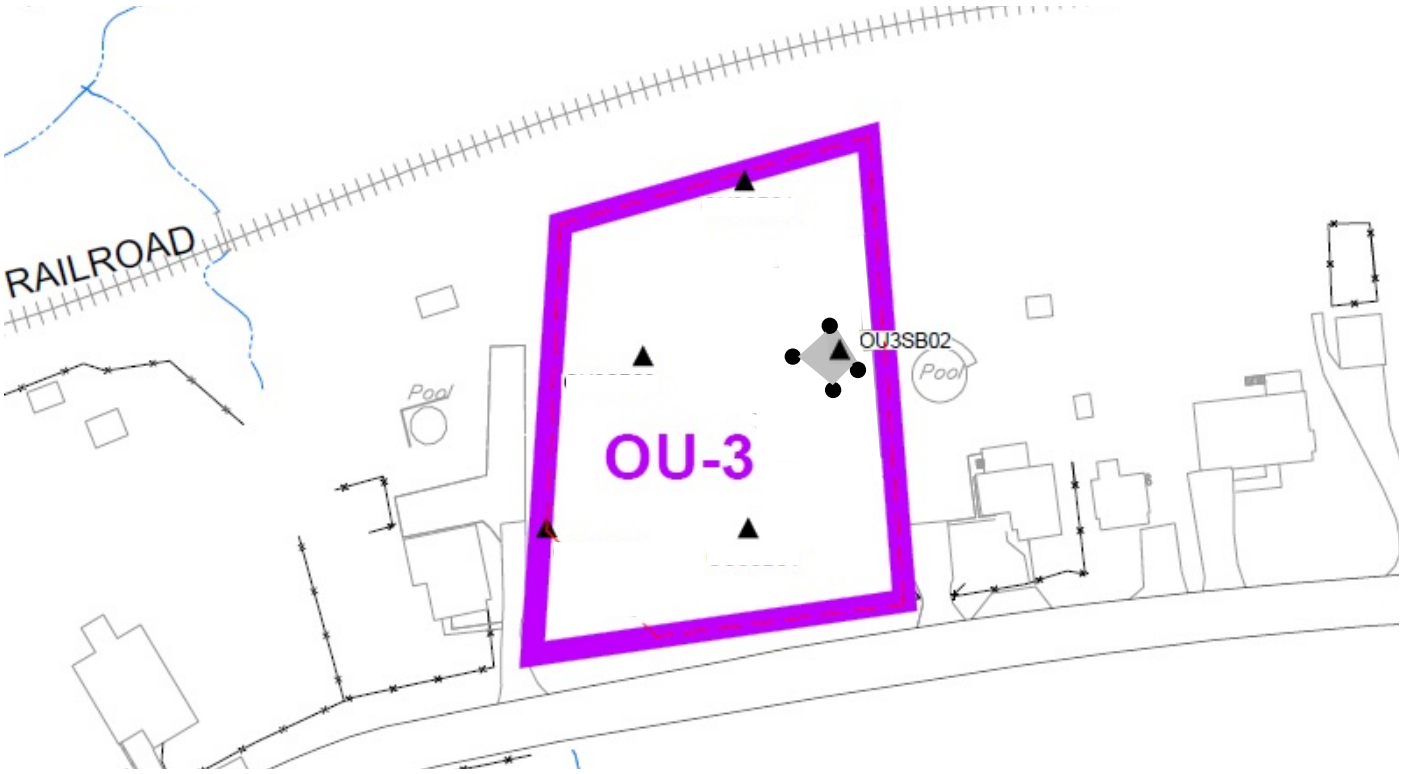
TEXACO RESEARCH CENTER
FISHKILL, NEW YORK

OU-3 RESIDENTIAL PROPERTY PARCEL GROUNDWATER CONCENTRATIONS

DATE
DECEMBER 2025

SITE NO.
314004

FIGURE
4



LEGEND

- FENCE
- RAILROAD
- WETLAND
- STREAM
- SOIL BORING LOCATION
- OU-3 0.67 ACRE VACANT/RESIDENTIAL PROPERTY PARCEL
- EXCAVATION 0-0.5 FT BGS

NEW YORK STATE | Department of Environmental Conservation

TEXACO RESEARCH CENTER
FISHKILL, NEW YORK

OU-3 RESIDENTIAL PROPERTY PARCEL
PROPOSED REMEDIAL ACTION

DATE
DECEMBER 2025

SITE NO.
314004

FIGURE
5

Exhibit A

Nature and Extent of Contamination

This section describes the findings of the remedial investigation (RI) for all environmental media that were evaluated at OU-3 – Residential Property Parcel. As described in Section 6.1, samples were collected from various environmental media to characterize the nature and extent of contamination.

For each medium for which contamination was identified, a table summarizes the findings of the investigation. The tables present the range of contamination found at the site in the media and compares the data with the applicable SCGs for the site. The contaminants are arranged into four categories: volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), pesticides, and metals. For comparison purposes, the Standards, Criteria and Guidance values (SCGs) are provided for each medium that allows for unrestricted use. For soil, the Restricted Use SCGs identified in Section 4 and Section 6.1.1 are also presented.

Waste/Source Areas

As described in the RI report, waste/source materials were identified at the site and are impacting soil and/or groundwater in various operable units.

Wastes are defined in 6 NYCRR Part 375-1.2 (ay) and include solid, industrial and/or hazardous wastes. Source Areas are defined in 6 NYCRR Part 375 (aw). Source areas are areas of concern at a site where substantial quantities of contaminants are found which can migrate and release significant levels of contaminants to another environmental medium. Wastes and source areas were not identified at OU-3.

Soil

Soil samples were collected across the OU. No polychlorinated biphenyls (PCBs) were detected in soil. While VOCs, SVOCs, pesticides, and metals were detected above SCGs, as presented in Table 1 below and on Figure 3, only SVOCs were identified as contaminants of concern (CoC) in soil.

SVOC exceedances above USCOs in the soil at OU-3 are attributable to an ash pile and are limited to one soil sample. The maximum depth of SVOC exceedances at OU-3 is two (2) inches.

Additional compounds were detected in the soil; however, those compounds are not associated with historic site operations or sources, exceedances are marginally above standards, they are sporadically dispersed, there are no exposure pathways, and/or they are considered background concentrations. Therefore, they have not been retained as contaminants of concern.

Table #1 - Soil

Detected Constituents	Concentration Range Detected (ppm)[a]	Unrestricted SCG[b] (ppm)	Frequency Exceeding Unrestricted SCG	Restricted Use SCG[c] (ppm)	Frequency Exceeding Restricted SCG
VOCs					
Acetone	0.013-0.079	0.05	3/8	0.05[d]	3/8
SVOCs					
Benzo(a)anthracene	<0.004-2.7	1	1/30	1	1/30

Detected Constituents	Concentration Range Detected (ppm)[a]	Unrestricted SCG[b] (ppm)	Frequency Exceeding Unrestricted SCG	Restricted Use SCG[c] (ppm)	Frequency Exceeding Restricted SCG
SVOCs					
Benzo(a)pyrene	<0.004-1.9	1	1/30	1	1/30
Benzo(b)fluoranthene	<0.004-2.6	1	1/30	1	1/30
Benzo(k)fluoranthene	<0.004-1.1	0.8	1/30	1	1/30
Chrysene	<0.004-2.4	1	1/30	1	1/30
Indeno(1,2,3-cd)pyrene	<0.004-0.87	0.5	1/30	0.5	1/30
Pesticides					
4,4-DDE	0.0019-0.011	0.0033	4/5	1.8	0/5
4,4-DDT	0.0005-0.004	0.0033	1/5	1.7	0/5
Metals					
Mercury	<0.033-0.217	0.18	1/26	0.73[d]	0/26
Nickel	14.9-32.8	30	6/26	130[d]	0/26

a - ppm: parts per million, which is equivalent to milligrams per kilogram, mg/kg, in soil;
b - SCG: Part 375-6.8(a), Unrestricted Soil Cleanup Objectives.
c - SCG: Part 375-6.8(b), Residential Use Soil Cleanup Objectives.
d - SCG: Part 375-6.8(b), Protection of Groundwater Soil Cleanup Objectives. This objective is used when the compound is also detected in groundwater and the objective is more restrictive than the Residential Use Soil Cleanup Objective.

VOCs, SVOCs, pesticides, and metals are detected sporadically at the OU at concentrations greater than Unrestricted Use SCOs. Acetone is a common lab contaminant, is not associated with historical site operations, and is sporadically detected across all operable units of the site. Pesticide concentrations are below proposed site use objectives and/or consistent with the background soil concentrations. Metals are commonly detected and potentially site-related, however, they were detected below the SCO for the proposed site use and are also consistent with background soil concentrations.

Based on the findings of the Remedial Investigation, the ash pile explains the presence of SVOCs in OU-3 soil. The site contaminants identified in soil which are considered the primary contaminants of concern, to be addressed by the remedy selection process are:

- benzo(a)anthracene;
- benzo(a)pyrene;
- benzo(b)fluoranthene;
- benzo(k)fluoranthene;
- chrysene; and
- indeno(1,2,3-c,d)pyrene.

Groundwater

Groundwater samples were collected from temporary well points at OU-3. VOCs, SVOCs, and metals were detected in groundwater above SCGs, as presented in Table 2 below and on Figure 4. While additional compounds were detected, only SVOCs are considered contaminants of concern in groundwater at OU-3.

Table #2 – Groundwater in OU-3

Detected Constituents	Concentration Range Detected (ppb)[a]	SCG[b] (ppb)	Frequency Exceeding SCG
VOCs			
Acetone	12-56	50	1/2
SVOCs			
Benzo(a)anthracene	<0.1-0.3	0.002	1/2
Benzo(a)pyrene	<0.1-0.4	0	1/2
Benzo(b)fluoranthene	<0.1-0.5	0.002	1/2
Benzo(k)fluoranthene	<0.1-0.2	0.002	1/2
Chrysene	<0.1-0.4	0.002	1/2
Indeno(1,2,3-C,D)pyrene	<0.1-0.3	0.002	1/2
Metals			
Arsenic	43.1-61.1	25	2/2
Arsenic (DISSOLVED)	<0.68-1.8	25	0/2
Barium	720-1,330	1,000	1/2
Barium (DISSOLVED)	94.7-812	1,000	0/2
Beryllium	6.8-12.7	3	2/2
Beryllium (DISSOLVED)	<0.091-0.89	3	0/2
Cadmium	1.1-2.3	5	0/2
Cadmium (DISSOLVED)	<0.15-5.2	5	1/2
Chromium, Total	289-511	50	2/2
Chromium, Total (DISSOLVED)	1.3-8.6	50	0/2
Copper	259-433	200	2/2
Copper (DISSOLVED)	<9.9-15.1	200	0/2
Iron	220,000-2,040,000	300	2/2
Iron (DISSOLVED)	24.5-25,600	300	1/2

Detected Constituents	Concentration Range Detected (ppb)[a]	SCG[b] (ppb)	Frequency Exceeding SCG
Lead	137-272	25	2/2
Lead (DISSOLVED)	<1.1-3.4	25	0/2
Magnesium	71,500-594,000	35,000	2/2
Magnesium (DISSOLVED)	32,300-113,000	35,000	1/2
Manganese	14,300-65,700	300	2/2
Manganese (DISSOLVED)	4,630-55,100	300	2/2
Mercury	0.32-4.2	0.7	1/2
Mercury (DISSOLVED)	<0.05	0.7	0/2
Nickel	268-2,490	100	2/2
Nickel (DISSOLVED)	5.7-233	100	1/2
Sodium	19,000-192,000	20,000	1/2
Sodium (DISSOLVED)	86,500-295,000	20,000	2/2
Thallium	1-1.5	0.5	2/2
Thallium (DISSOLVED)	<0.11	0.5	0/2

a - ppb: parts per billion, which is equivalent to micrograms per liter, ug/L, in water. Note, the maximum detected concentration provided in the range is based on elevated reporting limits for sample OU3SB05. Actual maximum concentrations are below 0.600 ppb.
b- SCG: Standard Criteria or Guidance - Ambient Water Quality Standards and Guidance Values (TOGs 1.1.1)

Acetone is a common lab contaminant, is not associated with historical site operations, is inconsistently detected across all operable units of the site, and there is a lack of correlation between acetone exceedances in soil and exceedances in groundwater. Therefore, there is not a complete pathway for leaching from soil to groundwater and acetone is not considered a site-specific contaminant of concern for groundwater.

While inorganic compounds (metals) were identified in groundwater above SCGs, most filtered groundwater sample results were below SCGs, indicating sediment entrained in the samples was likely biasing the metals results high. Therefore, the metal compounds identified in groundwater are not considered site-specific contaminants of concern for groundwater.

SVOCs were detected in one of the groundwater samples collected at OU-3, in the location of the ash pile. With the removal of the ash pile and surrounding impacted soil, along with imposition of an environmental easement (due to soil not meeting unrestricted use soil cleanup objectives), groundwater at this OU requires no further remedial evaluation.

Soil Vapor

No buildings are present on OU-3. Therefore, the evaluation of the potential for soil vapor intrusion resulting from the presence of site related soil or groundwater contamination was not evaluated for OU-3.

Furthermore, based on the concentrations detected, no site-related soil vapor contamination of concern was identified during the RI. An evaluation of the potential for soil vapor intrusion will, however, be performed for any buildings developed on-site.

Exhibit B

Description of Remedial Alternatives

The following alternatives were considered based on the remedial action objectives (see Section 6.5) to address the contaminated media identified at the site as described in Exhibit A.

Alternative 1: No Action

The No Action Alternative is evaluated as a procedural requirement and as a basis for comparison. This alternative leaves the site in its present condition and does not provide any additional protection to public health and the environment.

Alternative 2: Excavation to Meet Residential SCOs

Soil source areas in exceedance of Residential Use SCOs would be excavated to an anticipated maximum depth of one-half (0.5) foot below grade for a total of approximately two (2) cubic yards (cy). The excavation would then be backfilled with material meeting the requirements set forth in 6NYCRR Part 375-6.7(d), and an institutional control in the form of an environmental easement and a site management plan for the controlled property would be imposed.

Present Worth: *$108,000*
Capital Cost: *$108,000*
Annual Costs: *$7,000*

OU-3 Alternative 3: Excavation to Meet Unrestricted SCOs

Soil impacted in exceedance of Unrestricted Use SCOs would be excavated to an anticipated maximum depth of one (1) ft bg for a total of approximately 770 cubic yards (cy). The excavation would then be backfilled with material meeting the requirements set forth in 6NYCRR Part 375-6.7(d), and an institutional control in the form of an environmental easement.

Present Worth: *$458,000*
Capital Cost: *$458,000*
Annual Costs: *$0*

Exhibit C

Remedial Alternative Costs

Remedial Alternative	Capital Cost ($)	Annual Costs ($)	Total Present Worth ($)
Alternative 1: No Action	$0	$0	$0
Alternative 2: Excavation to Meet Residential SCOs	$108,000	$7,000	$108,000
Alternative 3: Excavation to Meet Unrestricted SCOs	$458,000	$0	$458,000

Bold font indicates the proposed alternative to be implemented.

Exhibit D

SUMMARY OF THE PROPOSED REMEDY

The Department is proposing Alternative 2, Excavation to Meet Residential SCOs as the remedy for OU-3, Residential Property Parcel. Alternative 2 would achieve the remediation goals for the site by removing all on-site soil exceeding residential SCOs. The elements of this remedy are described in Section 7. The proposed remedy is depicted in Figure 5.

Basis for Selection

The proposed remedy is based on the results of the RI and the evaluation of alternatives. The criteria to which potential remedial alternatives are compared are defined in 6 NYCRR Part 375. A detailed discussion of the evaluation criteria and comparative analysis is included in the FS report.

The first two evaluation criteria are termed "threshold criteria" and must be satisfied for an alternative to be considered for selection.

1. Protection of Human Health and the Environment. This criterion is an overall evaluation of each alternative's ability to protect public health and the environment.

Alternative 1 (No Action) provides no additional protection of human health and the environment compared to current levels of protection and will not be evaluated further. Alternative 2 removes all soil above Residential Use SCOs and Alternative 3 removes all soil in exceedance of Unrestricted Use SCOs.

2. Compliance with New York State Standards, Criteria, and Guidance (SCGs). Compliance with SCGs addresses whether a remedy will meet environmental laws, regulations, and other standards and criteria. In addition, this criterion includes the consideration of guidance which the Department has determined to be applicable on a case-specific basis.

While Alternative 2 leaves some portion of soil exceeding Unrestricted Use SCOs, it provides for measures to restrict exposure pathways to remaining impacts. Alternative 3 removes all soil exceeding Department SCOs for Unrestricted Use.

The next six "primary balancing criteria" are used to compare the positive and negative aspects of each of the remedial strategies.

3. Long-term Effectiveness and Permanence. This criterion evaluates the long-term effectiveness of the remedial alternatives after implementation. If wastes or treated residuals remain on-site after the selected remedy has been implemented, the following items are evaluated: 1) the magnitude of the remaining risks, 2) the adequacy of the engineering and/or institutional controls intended to limit the risk, and 3) the reliability of these controls.

While Alternative 2 removes soil impacts in exceedance of Residential SCOs, Alternative 3 removes all soil exceeding Unrestricted SCOs, which is a reliable and permanent alternative allowing for all potential future site uses.

4. Reduction of Toxicity, Mobility or Volume. Preference is given to alternatives that permanently and significantly reduce the toxicity, mobility, or volume of the wastes at the site.

Alternatives 2 and 3 reduce the toxicity, mobility and volume of contaminants present on-site by transferring the

material to an approved off-site disposal location.

5. Short-term Impacts and Effectiveness. The potential short-term adverse impacts of the remedial action upon the community, the workers, and the environment during the construction and/or implementation are evaluated. The length of time needed to achieve the remedial objectives is also estimated and compared against the other alternatives.

Alternatives 2 and 3 provide varying levels of short-term impacts and effectiveness. Alternative 2 requires less excavation, handling and transportation of soil than Alternative 3, therefore less potential for exposure to impacts by workers, surrounding communities, and the environment.

6. Implementability. The technical and administrative feasibility of implementing each alternative is evaluated. Technical feasibility includes the difficulties associated with the construction of the remedy and the ability to monitor its effectiveness. For administrative feasibility, the availability of the necessary personnel and materials is evaluated along with potential difficulties in obtaining specific operating approvals, access for construction, institutional controls, and so forth.

Alternatives 2 and 3 are both readily implementable using traditional construction equipment.

7. Cost-Effectiveness. Capital costs and annual operation, maintenance, and monitoring costs are estimated for each alternative and compared on a present worth basis. Although cost-effectiveness is the last balancing criterion evaluated, where two or more alternatives have met the requirements of the other criteria, it can be used as the basis for the final decision.

The capital cost for Alternative 3 is approximately four times as expensive as Alternative 2 due to the amount of soil excavation required. Alternative 2 requires an annual cost of approximately $7,000 for site management responsibilities.

8. Land Use. When cleanup to pre-disposal conditions is determined to be infeasible, the Department may consider the current, intended, and reasonable anticipated future land use of the site and its surroundings in the selection of the soil remedy.

Alternative 2 provides additional protection to the community, while permitting residential development under a future use. Alternative 3 would allow for unrestricted use.

The final criterion, Community Acceptance, is considered a "modifying criterion" and is taken into account after evaluating those above. It is evaluated after public comments on the Proposed Remedial Action Plan have been received.

9. Community Acceptance. Concerns of the community regarding the investigation, the evaluation of alternatives, and the Proposed Statement of Basis are evaluated. A responsiveness summary will be prepared that describes public comments received and the manner in which the Department will address the concerns raised. If the selected remedy differs significantly from the proposed remedy, notices to the public will be issued describing the differences and reasons for the changes.

Green and sustainable remediation (GSR) practices and techniques are considered and incorporated throughout the remedial process. A GSR evaluation considers the potential indirect environmental impact of the remedy. GSR consideration gives preference to alternatives that have the potential to remediate the site with the lowest potential negative environmental impact, such as carbon dioxide (CO_2) emissions. GSR practices also consider the resilience of alternatives to potential climate change effects such as sustained changes in average temperatures, increased heavy precipitation events, and increased coastal flooding.

Alternative 3 will produce greater CO_2 emissions and require more off-site transport of impacted material as hazardous waste utilizing limited landfill space compared to Alternative 2.

Remedy Selection

Alternative 2 is being proposed for OU-3 because, as described above, it satisfies the threshold criteria and provides the best balance of the balancing criterion.