# EXPLANATION OF SIGNIFICANT DIFFERENCE





Lancaster / Erie County / Site No. C915344 / September 2025

Prepared by the New York State Department of Environmental Conservation

Division of Environmental Remediation

#### 1.0 Introduction

The purpose of this notice is to describe the progress of the cleanup at the Lakeside Village Apartments Site and to inform you about a change in the site remedy. Lakeside Village Apartments Site is located at 65-67 Lake Avenue, Village of Lancaster, NY (see Figure 1). On May 17, 2022, the New York State Department of Environmental Conservation (NYSDEC) issued a Decision Document (DD) which selected a remedy to clean up the site.

There is no fundamental change from the original remedy selected in the 2022 DD, however, under this Explanation of Significant Difference a Multi-Track Remedy will now be completed. This change is necessary to address administrative and technical issues that have arisen during implementation of the remedial program. Most of the site will remain a Track 2 cleanup but a 0.05-acre Track 1 area and a 0.04-acre Track 4 area will be attained in portions of the site. The Track 1 area is in the southwest portion of the site where a NYS Flood Control easement is already in place. In the Track 4 area a soil vapor extraction system (SVE) has been installed to address soil contamination that is not easily removed by excavation due to an active utility corridor. These changes maintain the same level of protection of public health and the environment as the original remedy.

This Explanation of Significant Difference (ESD) will become part of the Administrative Record for this Site. The information here is a summary of what can be found in greater detail in documents that are available through DEC Info Locator (<a href="https://extapps.dec.ny.gov/data/DecDocs/C915344/">https://extapps.dec.ny.gov/data/DecDocs/C915344/</a>) and have been placed in the following repositories:

#### **Lancaster Library**

5466 Broadway Lancaster, NY 14086

Call for hours: (716) 683-1120

Although this is not a request for comments, interested persons are invited to contact NYSDEC's Project Manager for this site to obtain more information or have questions answered.

# 2.0 SITE DESCRIPTION AND ORIGINAL REMEDY

## 2.1 Site History, Contamination, and Selected Remedy

#### Site Description and History:

The 1.18-acre Lakeside Village Apartments site is located in a suburban residential area and is addressed as 65 and 67 Lake Avenue in the Town of Lancaster, Erie County. The site is bound to the north, west, and south by single family homes and apartment buildings and to the east by Lake Avenue and additional residential properties. A four-unit apartment building constructed in 1903 and three two-story town home apartment buildings ranging in size from 5,600 square feet to 8,560 square feet are present at the site. The central portion of the site is a paved parking area with landscaped and grassy areas. Areas behind the apartments consist of grassy areas and small vegetation.

Historical reports and Sanborn maps indicate that a portion of the site was utilized as a dry cleaner from at least 1949 through approximately 1980. The former dry-cleaning building was demolished by 1995. The three townhome buildings were constructed in 2006. The apartment building at 67 Lake Avenue has been utilized for residential purposes since construction in 1903. Reports also identified one tank installed on-site in 1958. The location and

status of the tank has not been determined but would most likely have been located on the eastern portion of the site, based upon the nature of historical site development.

#### **Extent of Contamination:**

The Remedial Investigation (RI) sampled surface and subsurface soils, groundwater, and soil vapor (see Figure 2). Sub-slab soil vapor and indoor air were analyzed separately prior to the RI. The primary contaminants of concern are volatile organic compounds (VOCs) related to past dry-cleaning operations at the site. VOC impacts in soil, groundwater, sub-slab soil vapor, and indoor air have all been detected exceeding standards, criteria, or guidance values.

Surface Soil: Nine samples were collected from 0 to 2 inches below the vegetative cover across the entire site and analyzed for semi-volatile organic compounds (SVOCs), metals, pesticides, herbicides, polychlorinated biphenyls (PCBs), cyanide, and per- and polyfluorinated substances (PFAS). Nine samples were collected from 0 to 6 inches below the vegetative cover across the entire site and analyzed for VOCs. None of the analytes were detected at levels exceeding restricted residential use soil cleanup objectives (RRSCOs). No PFAS were detected at levels exceeding current guidance values.

Investigation results do not indicate that site contaminants have migrated off-site in surface soil.

Subsurface Soil: Twenty-four (24) soil borings were completed to depths ranging from 14.5 to 25 feet below ground surface (fbgs) and analyzed for VOCs. Fourteen (14) of these locations were also analyzed for SVOCs, metals, pesticides, herbicides, PCBs, cyanide, and PFAS. No subsurface soil samples have been collected from below the existing buildings. No VOCs, SVOCs, pesticides, herbicides, PCBs, or cyanide were detected at levels exceeding RRSCOs. No PFAS were detected at levels exceeding current guidance values.

While no VOCs were detected exceeding RRSCOs, tetrachloroethene (PCE) (up to 19 parts per million (ppm), PGWSCO 1.3 ppm), trichloroethene (TCE) (up to 8.8 ppm. PGWSCO 0.47 ppm), cis-1,2-dichloroethene (cis-1,2-DCE) (up to 1.3 ppm, PGWSCO 0.25 ppm), trans-1,2-dichloroethene (trans-1,2-DCE) (up to 1.3 ppm, PGWSCO 0.19 ppm), and vinyl chloride (up to 0.033 ppm, PGWSCO 0.02 ppm) were detected exceeding the protection of groundwater soil cleanup objectives (PGWSCOs) in areas collocated with VOC contamination in groundwater.

Metals exceeded RRSCOs at two soil boring locations. Barium (446 ppm, RRUSCO 400 ppm) and manganese (3,440 ppm, RRUSCO 2,000 ppm) were detected exceeding RRSCOs at SB116. Arsenic (18.2 ppm, RRUSCO 16 ppm) was detected exceeding RRSCO at SB117. Given the low frequency of detection and relatively low magnitude of the exceedances these metals are not considered contaminants of concern at the site.

Investigation results do not indicate that site contaminants have migrated off-site in subsurface soil, though some subsurface soil is a source of on-site groundwater contamination.

Groundwater: Samples were collected from nine on-site monitoring wells and one off-site temporary well screened at depths between 3 and 19 fbgs. All wells were analyzed for VOCs. Three of the wells were also analyzed for SVOCs, total/dissolved metals, pesticides, herbicides, PCBs, cyanide, and PFAS. There were no SVOCs, metals, pesticides, herbicides, PCBs, or cyanide detected above groundwater quality standards (GWQS) in any of the wells analyzed for those compounds. No PFAS were detected at levels exceeding current guidance values or drinking water standards in any of the wells analyzed for those compounds. No VOCs were detected above GWQSs in the off-site temporary well.

The VOCs PCE (up to 3,200 parts per billion (ppb), GWQS 5 ppb), TCE (up to 160 ppb, GWQS 5 ppb), cis-1,2-DCE (up to 830 ppb, GWQS 5 ppb), trans-1,2-dichloroethene (up to 11 ppb, GWQS 5 ppb), and vinyl chloride (up to 20 ppb, GWQS 2 ppb) were all detected exceeding GWQS in at least one monitoring well.

Investigation results indicate that groundwater contaminated with chlorinated VOCs is not migrating off-site but is a source of soil vapor intrusion in two on-site buildings.

Soil Vapor/Sub-Slab Soil Vapor/Indoor Air: Soil vapor intrusion (SVI) assessments were completed in all four onsite apartment buildings prior to the RI. Based on these assessments, Building 1 and Building A require mitigation due to PCE (up to 36 micrograms per cubic meter (ug/m3) at SS-1) and TCE (up to 66 ug/m3 at SS-1) present in sub-slab soil vapor and PCE (up to 35 ug/m3 at IA-1) and TCE (up to 4.6 ug/m3 at IA-1) present in indoor air. Subslab depressurization systems have been installed and are currently operating in these buildings. During the RI, attempts were made to complete an SVI assessment in off-site buildings south of Building 1, but access could not be obtained from the property owner. Two soil vapor probes were installed east and south of Building 1 to assess the potential for off-site migration in soil vapor. Soil vapor probes were installed to approximately 4 fbgs due to the potential for shallow groundwater around the site. PCE (up to 0.68 ug/m3 at VP-1) was detected in one soil vapor probe and TCE was not detected in either soil vapor probe.

Investigation results indicate that site contaminants are not migrating off-site in soil vapor.

## **Investigation and Remedial History:**

The following narrative provides a remedial history timeline and a brief summary of the available project records to document key investigative and remedial milestones for the site:

- Remedial Investigation and Alternatives Analysis Report (RIAAR), submitted by Matrix Environmental Technologies, Inc. (METI), February 23, 2022.
- Decision Document (DD), prepared by NYSDEC, May 17, 2022.
- Remedial Action Work Plan (RAWP), submitted by METI, August 25, 2023.
- Soil Boring Work Plan, submitted by METI, August 14, 2024
- Revised Memo on Proposed Change in BCP Cleanup Track and Response to Comments, submitted by METI, May 30, 2025.

## **Elements of the Selected Remedy:**

The selected remedy is a Track 2: Restricted use with generic soil cleanup objectives remedy.

The selected remedy is referred to as the Excavation with Groundwater Treatment and Site Management remedy.

The elements of the selected remedy are as follows:

## 1. Remedial Design

A remedial design program will be implemented to provide the details necessary for the construction, operation, optimization, maintenance, and monitoring of the remedial program. Green remediation principles and techniques will be implemented to the extent feasible in the design, implementation, and 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 gases 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;
- Maximizing habitat value and creating habitat when possible;
- Fostering green and healthy communities and working landscapes which balance ecological, economic and social goals;
- Integrating the remedy with the end use where possible and encouraging green and sustainable redevelopment; 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 will include, at a minimum, a 20-mil vapor barrier/waterproofing membrane on the foundation to improve energy efficiency as an element of construction.

## 2. Excavation

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

grossly contaminated soil, as defined in 6 NYCRR Part 375-1.2(u);

- non-aqueous phase liquids;
- soil with visual waste material or non-aqueous phase liquid;
- any potential underground storage tanks (USTs), underground piping, or other structures associated with a source of contamination; and
- soils which exceed the PGWSCOs, as defined by 6 NYCRR Part 375-6.8 for those contaminants found in site groundwater above standards.

Approximately 400 cubic yards of contaminated soil meeting the above definition will be removed from the site. The exact volume of soil will be determined using a pre-design investigation and confirmation sampling results.

On-site soil which does not exceed the above excavation criteria or the PGWSCOs for any constituent may be used anywhere on-site, including below the water table, to backfill the excavation. Clean fill 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.

#### 3. Cover System

If a Track 2 - restricted residential cleanup is not achieved a site cover will be required to allow for restricted residential use of the site in areas where the upper two feet of exposed surface soil will exceed the applicable SCOs. Where a soil cover is to be used it will be a minimum of two feet of soil placed over a demarcation layer, with the upper six inches of soil of sufficient quality to maintain a vegetative layer. Soil cover material, including any fill material brought to the site, will meet the SCOs for cover material for the use of the site as set forth in 6 NYCRR Part 375-6.7(d). Substitution of other materials and components may be allowed where such components already exist or are a component of the tangible property to be placed as part of site redevelopment. Such components may include, but are not necessarily limited to pavement, concrete, paved surface parking areas, sidewalks, building foundations and building slabs.

#### 4. In-Situ Chemical Oxidation

In-situ chemical oxidation (ISCO) will be implemented to treat tetrachloroethene and its degradation products in groundwater and any residual that may remain in soil following the excavation in Remedial Element 2. A chemical oxidant will be injected via injection points in the saturated zone of the subsurface to destroy the contaminants. The exact oxidant and extent of the injection area will be determined during the remedial design.

Monitoring will be required within and downgradient of the treatment zone to confirm that treatment was effective. Monitoring will be conducted for tetrachloroethene and its degradation products, geochemical parameters, and any other parameters useful in assessing the effectiveness of the injections. If ISCO fails to achieve the remedial action objectives additional remedial actions may be required.

#### 5. Vapor Mitigation

On-site Buildings 1 and Building A are required to maintain the active sub-slab depressurization systems, or other acceptable measures, to mitigate the migration of vapors into the buildings from groundwater. Mitigation will continue until the Department and NYSDOH determine it is no longer required.

#### 6. Environmental Easement

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 and engineering controls in accordance with Part 375-1.8 (h)(3);
- allow the use and development of the controlled property for restricted 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 Erie County DOH; and
- require compliance with the Department approved Site Management Plan.

#### 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 and engineering controls for the site and details the steps and media-specific requirements necessary to ensure the following institutional and/or engineering controls remain in place and effective:

Institutional Controls: The Environmental Easement discussed in Remedial Element 6, above.

Engineering Controls: The cover system discussed in Remedial Element 3 (if required) and the sub-slab depressurization system discussed in Remedial Element 5 above.

This plan includes, but may not be limited to:

- an Excavation Work Plan which details the provisions for management of future excavations in areas of remaining contamination;
- descriptions of the provisions of the environmental easement including any land use and groundwater use restrictions;
- If a cover system is required, a provision that should a building foundation or building slab be removed in the future, a cover system consistent with that described in Remedial Element 3 will be placed in any areas where the upper two feet of exposed surface soil exceed the applicable SCOs;
- provisions for the management and inspection of the identified engineering controls;
- a provision for evaluation of the potential for soil vapor intrusion for any new buildings developed on the site or if significant changes are made to the existing on-site buildings, including provision for implementing actions recommended to address exposures related to soil vapor intrusion;
- maintaining site access controls and Department notification; and
- the steps necessary for the periodic reviews and certification of the institutional and/or engineering controls.
- b. A Monitoring Plan to assess the performance and effectiveness of the remedy. The plan includes, but may not be limited to:
  - monitoring of groundwater to assess the performance and effectiveness of the remedy;
  - a schedule of monitoring and frequency of submittals to the Department; and
  - monitoring for vapor intrusion for any new on-site buildings or if significant changes are made to the existing on-site buildings.
- c. An Operation and Maintenance (O&M) Plan to ensure continued operation, maintenance, inspection, and reporting of any mechanical or physical components of the active vapor mitigation systems. The plan includes, but is not limited to:
  - procedures for operating and maintaining the systems; and
  - compliance inspection of the systems to ensure proper O&M as well as providing the data for any necessary reporting.

# 3.0 CURRENT STATUS

Construction of remedial elements outlined above and in the 2023 RAWP have been implemented. A combined remedy of shallow soil excavation to 5-7 feet below grade in the source area, installation of belowground piping for a SVE system near the underground utilities in the source area, and injection of potassium permanganate for in situ chemical oxidation (ISCO) was completed in September and October 2023. As discussed in more detail below, confirmation soil samples indicate that soil exceeding the PGWSCO for PCE remain along a utility corridor north of the excavation footprint.

65 Lake Avenue LLC (Applicant) is currently finalizing the Site Management Plan, Final Engineering Report, and Environmental Easement for the site.

### 4.0 DESCRIPTION OF SIGNIFICANT DIFFERENCE

## 4.1 New Information

Confirmation soil sampling was completed at the furthest extents of the excavation along the sidewalls in September 2023. PCE, TCE, and/or cis-1,2-DCE were detected at sample locations EX-6 (6.2), EX-8 (6.5), and EX-10 (6.5) along the utility corridor exceeding their PGWSCOs. The reported concentrations at these locations are at concentrations higher than what is anticipated to be adequately removed within five years by the SVE system

in order to satisfy the Conditional Track 2 Remedy.

Additional borings were installed to collect post-remediation soil data near locations where PCE concentrations in confirmation soil samples were most elevated, as specified in the 2024 Soil Boring Work Plan. Five soil borings were completed at the location of confirmation samples EX-6 (6.2), EX-8 (6.5), and EX-10 (6.5); and north of the utility corridor to further delineate the horizontal extent of contamination. Two of the five sample locations (i.e., SB301 (6-7) and SB302 (6-6.5)) exhibited concentrations of PCE greater than its PGWSCO. Only SB301 (6-7) had a concentration of TCE greater than its PGWSCO. Similar to the confirmation soil samples mentioned above, the concentration of PCE in SB301 (6-7) and SB302 (6-6.5) are higher than what is anticipated to be adequately removed within five years by the SVE system.

The locations of the underground gas and water utilities in front of Building A and through the center of the parking lot present a significant logistical challenge to soil excavation. The sanitary sewer is also assumed to be located within this utility corridor. The more permeable backfill surrounding the utilities may serve as a preferential pathway for vapors into Buildings 1 and A. To that end, contamination in the backfill and soils in the vicinity of the utility corridor was addressed with the SVE system as discussed in the 2023 RAWP (see Figure 3).

Additionally, during preparation of the BCP Environmental Easement a NYS Flood Control Easement along Cayuga Creek was identified within the site boundary. To avoid incompatibility between the pending BCP Environmental Easement and the existing NYS Flood Control Easement, the 0.05-acre portion of the site was evaluated to determine if it met the Track 1 cleanup requirements, thus eliminating the need for a BCP Environmental Easement in that portion of the site.

## 4.2 Comparison of Changes with Original Remedy

The following is a summary of the cleanup plan described in the DD, including the ESD modifications to the original remedy:

- A remedial design program will be implemented to provide the details necessary for the construction, operation, optimization, maintenance, and monitoring of the remedial program. Green remediation principles and techniques will be implemented to the extent feasible in the design, implementation, and site management of the remedy as per DER-31;
- [new] Designation of a 0.05-acre portion of the site as meeting Track 1 criteria where a NYS Flood Control Easement is already in place;
- Excavation and off-site disposal of contaminated soil from ground surface to the top of the water table to remove the source of groundwater contamination;
- [new] Operation of a soil vapor extraction system to remove volatile organic compounds from subsurface soils near a utility corridor;
- Treating contaminated groundwater through injection of chemical oxidants into the groundwater;
- [modified] In the Track 4 area, placement of a cover system, including a demarcation layer over areas without hardscape (buildings, asphalt or concrete) to address remaining contamination;
- Importing clean material that meets the established soil cleanup objectives (SCOs) for use as backfill;
- Continued operation of sub-slab depressurization systems in two on-site buildings to prevent soil vapor intrusion of contaminated vapors; and
- [modified] Recording of an Environmental Easement in the Track 2 and Track 4 areas to ensure proper use of the site and that the remedy remains in place and effective.

Following the excavation completed in 2023 chlorinated VOCs were detected exceeding PGWSCOs in several confirmation samples. The extent of these exceedances and the supporting analytical results of post-excavation confirmatory soil sample results and supplementary soil sampling results are summarized in the May 30, 2025, *Revised Memo on Proposed Change in BCP Cleanup Track and Response to Comments*. Along the utility corridor in the vicinity of EX-6, EX-8, EX-10, SB202, SB203, SB301, SB302, and SB303 concentrations of PCE, TCE, and/or cis-1,2-DCE in these samples exceeded the applicable PGWSCOs.

As the remaining PGWSCO exceedance do not satisfy the Track 2 remedy requirements for soil and the applicant has proposed to change to a Track 4 remedy for the area where soils exceeding PGWSCOs remain proximate to the utility lines. The horizontal SVE wells (SVE2 and SVE3) that were previously installed as part of the Remedial Action Work Plan can be used to treat the soil and a site cover will be constructed over the entire Track 4 area, which will consist of existing hardscape, portions of an expanded asphalt parking lot, and soil cover.

The Track 4 Remedy area includes the horizontal soil vapor extraction wells SVE2 and SVE3 that were installed to treat remaining soil contamination in the utility corridor. Based on results of the individual leg sampling completed in January 2025, contaminant concentrations in SVE1, located furthest from the impacted utility corridor, are approximately 35% of those in SVE2 and 16% of those in SVE3. It is anticipated that decommissioning SVE1 will result in an increase in the overall rate of contaminant removal from the impacted soil by the remaining SVE wells. SVE1 will be decommissioned by closing the valve at the manifold near the blower and the handle subsequently removed. Consequently, the Track 4 Remedy area does not include SVE1.

Most of the Track 4 area is newly paved and meets the Track 4 cover requirements for restricted-residential use as described in 6 NYCRR Part 375-3.8(e)(4)(iii) including two small areas of soil cover along the east and west boundaries measuring approximately 24 and 23 square feet each. Existing soil in these areas were sampled for VOCs by advancing a manual auger to a completion depth of 16 inches below grade. Results of the soils sampled concluded that VOC concentrations were lower than the restricted-residential SCOs and/or PGWSCOs for those contaminants found in site groundwater. Details of the cover installation will be included in the Final Engineering Report (FER).

The new Track 1 area in the southwestern portion of the site is approximately 0.05 acres and completely covers the on-site portion of the existing NYS Flood Control Easement. Four soil samples were taken from three locations within this area during the RI and subsequent Track 2 delineation investigation (included in the RAWP) which include SS5 (0.25-0.42), SB109 (19.5-20.0), and SB116 (0.5-2.5 and 6.0-7.5). SB116 (0.5-2.5) did have exceedances for barium, manganese, and zinc but are likely not associated with former use of the site, relatively minor exceedances of the restricted-residential SCOs, and can also be naturally occurring in soils. These were the only on-site exceedances of these metals and there were no further exceedances in the deeper SB116 (6.0-7.5) sample. Considering the relatively small area in question and that remedial actions were not previously going to be completed in this area, this area was determined as meeting Track 1 requirements to address the administrative issues between the pending BCP Environmental Easement and the existing NYS Flood Control Easement.

#### 5.0 SCHEDULE AND MORE INFORMATION

Essential remedial work associated with this project has concluded. The Site Management Plan and Final Engineering Report are anticipated to be completed by end of 2025.

If you have questions or need additional information you may contact any of the following:

Jason Kryszak, Project Manager NYSDEC Division of Environmental Remediation 700 Delaware Avenue Buffalo, NY 14209 (716) 851-7220 jason.kryszak@dec.ny.gov Ryan Minzloff, Project Manager NYSDOH Bureau of Environmental Exposure Investigation Empire State Plaza, Corning Tower Room 1787 Albany, NY 12237 (518) 408-1266 ryan.minzloff@health.ny.gov

Date	Jason Kryszak, Project Manager Division of Environmental Remediation Region 9
Date	Benjamin McPherson, RHWRE Division of Environmental Remediation Region 9
Date	Michael Cruden, Director Remedial Bureau E
Date	Andrew Guglielmi, Director Division of Environmental Remediation

## **DECLARATION**

The selected remedy is protective of public health and the environment, complies with State and Federal requirements that are legally applicable or relevant and appropriate to the remedial action to the extent practicable, and is cost effective. This remedy utilizes permanent solutions and alternative treatment or resource recovery technologies, to the maximum extent practicable, and satisfies the preference for remedies that reduce toxicity, mobility, or volume as a principal element.





