

DECISION DOCUMENT

Saranac Lofts
Brownfield Cleanup Program
Saranac Lake, Franklin County
Site No. C517015
June 2023



**Department of
Environmental
Conservation**

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

DECLARATION STATEMENT - DECISION DOCUMENT

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Statement of Purpose and Basis

This document presents the remedy for the Saranac Lofts brownfield cleanup site. The remedial program was chosen in accordance with the 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 decision is based on the Administrative Record of the New York State Department of Environmental Conservation (the Department) for the Saranac Lofts site and the public's input to the proposed remedy presented by the Department.

Description of Selected 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 re-development; 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 remedial design program, to evaluate the remedy with respect to 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 Department 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 incorporated into the remedial design program, as appropriate. The project design specifications will include detailed requirements to achieve the green and sustainable remediation goals. Further, progress with respect to green and sustainable remediation metrics will be tracked during implementation of the remedial action and reported in the Final Engineering Report (FER), including a comparison to the goals established during the remedial design program.

Additionally, the remedial design program will include a climate change vulnerability assessment, to evaluate the impact of climate change on the project site and the proposed remedy. 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 remedial design program will incorporate measures to minimize the impact of climate change on potential identified vulnerabilities.

2. Excavation

The existing on-site building will be demolished and materials which cannot be beneficially reused on site will be taken off-site for proper disposal in order to implement the remedy.

Excavation and off-site disposal of all on-site soils which exceed unrestricted SCOs, as defined by 6 NYCRR Part 375-6.8. If a Track 1 cleanup is achieved, a Cover System will not be a required element of the remedy. Collection and analysis of confirmation and documentation samples at the remedial excavation depths will be used to verify that SCOs for the site have been achieved. If confirmation/documentation sampling indicates that SCOs were not achieved at the stated remedial depth, the Applicant must notify DEC, submit the sample results and, in consultation with DEC, determine if further remedial excavation is necessary. Further excavation for development will proceed after confirmation samples demonstrate that SCOs for the site have been achieved.

Approximately 9,300 cubic yards of contaminated soil will be removed from the site. An estimated 2,100 cubic yards will be removed from Lot 12. The excavation on Lot 12 will be to bedrock or clean soil endpoints that meet Track 1 unrestricted SCOs. Contaminated soils on Lot 11 will be

excavated to an anticipated depth of five feet below ground surface (bgs), resulting in a removal of an additional 7,200 cubic yards to achieve unrestricted SCOs.

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.

Excavation and removal of any underground storage tanks (USTs), fuel dispensers, underground piping or other structures associated with a source of contamination. Potential underground storage tanks will be removed in accordance with Petroleum Bulk Storage (PBS) regulations (6 NYCRR Part 613).

3. Backfill

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

4. Groundwater Remedies

In-situ chemical oxidation (ISCO) reagent will be applied at the base of the excavation on Lot 12 to actively treat petroleum-related compounds and other volatile organic compounds (VOCs) in groundwater. The selected ISCO technology, application method, and rate will be determined during the remedial design.

Monitoring will be conducted for contaminants of concern upgradient and downgradient of the treatment zone to inform the effectiveness of the remedy and the potential need for additional ISCO applications/groundwater treatment.

5. Vapor Intrusion Evaluation

As part of the Track 1 remedy, a soil vapor intrusion (SVI) evaluation will be completed. The evaluation will include a provision for implementing actions recommended to address exposures related to soil vapor intrusion.

Conditional Track 1:

The intent of the remedy is to achieve a Track 1 unrestricted use; therefore, no Environmental Easement (EE) or Site Management Plan (SMP) is anticipated. If the SVI evaluation is not completed prior to completion of the Final Engineering Report, then a SMP and EE will be required to address the SVI evaluation and implement actions as needed. If a mitigation or monitoring action is needed, a Track 1 cleanup can only be achieved if the mitigation system or other required action is no longer needed within five years of the date of the Certificate of Completion.

In the event that Track 1 unrestricted use is not achieved, including achievement of groundwater and soil vapor remedial objectives, the following conditional remedial elements will be required, and the remedy will achieve a Track 2 restricted residential cleanup.

6. Engineering and Institutional Controls

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 Track 2 restricted residential cleanup, at a minimum.

Institutional Controls - 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 County DOH; and
- require compliance with the Department approved Site Management Plan.

7. 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 Paragraph 6 above.

Engineering Controls: If necessary, as determined by the SVI evaluation, the sub-slab depressurization system discussed in paragraph 5 above.

This plan includes, but may not be limited to:

- descriptions of the provisions of the environmental easement including any land use and groundwater use restrictions;
- a provision for evaluation of the potential for soil vapor intrusion for any occupied buildings on the site, including provision for implementing actions recommended to address exposures related to soil vapor intrusion;
- provisions for the management and inspection of the identified engineering controls;
- 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 and inform the need for potential additional groundwater treatment;
- a schedule of monitoring and frequency of submittals to the Department; and
- monitoring for vapor intrusion for any buildings occupied or developed on the site, as may be required by the Institutional and Engineering Control Plan discussed above.

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 system(s). The plan includes, but is not limited to:

- procedures for operating and maintaining the system(s); and
- compliance inspection of the system(s) to ensure proper O&M as well as providing the data for any necessary reporting.

Declaration

The remedy conforms with promulgated standards and criteria that are directly applicable, or that are relevant and appropriate and takes into consideration Department guidance, as appropriate. The remedy is protective of public health and the environment.

June 23, 2023



Date

Richard A. Mustico, Director
Remedial Bureau A

DECISION DOCUMENT

Saranac Lofts
Saranac Lake, Franklin County
Site No. C517015
June 2023

SECTION 1: SUMMARY AND PURPOSE

The New York State Department of Environmental Conservation (the Department), in consultation with the New York State Department of Health (NYSDOH), has selected a remedy for the above referenced site. The disposal of contaminants at the site has resulted in threats to public health and the environment that would be addressed by the remedy. The disposal or release of contaminants at this site, as more fully described in this document, has contaminated various environmental media. Contaminants include hazardous waste and/or petroleum.

The New York State Brownfield Cleanup Program (BCP) is a voluntary program. The goal of the BCP is to enhance private-sector cleanups of brownfields and to reduce development pressure on "greenfields." A brownfield site is real property, where a contaminant is present at levels exceeding the soil cleanup objectives or other health-based or environmental standards, criteria or guidance, based on the reasonably anticipated use of the property.

The Department has issued this document in accordance with the requirements of New York State Environmental Conservation Law and 6 NYCRR Part 375. This document is a summary of the information that can be found in the site-related reports and documents.

SECTION 2: CITIZEN PARTICIPATION

The Department seeks input from the community on all remedies. A public comment period was held, during which the public was encouraged to submit comment on the proposed remedy. All comments on the remedy received during the comment period were considered by the Department in selecting a remedy for the site. Site-related reports and documents were made available for review by the public at the following document repository:

DECInfo Locator - Web Application
<https://gisservices.dec.ny.gov/gis/dil/index.html?rs=C517015>

Saranac Lake Free Library
Attn: Peter Benson
109 Main Street
Saranac Lake, NY 12983
Phone: (518) 891-4190

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 1.11-acre parcel is located at 120 Broadway in a well-developed village area of Saranac Lake, Franklin County.

Site Features: The site is made up of two property tax map lots. A former tire shop is currently located at the southern portion of Lot 12 on Broadway. The site is significantly sloped with an approximately 15-foot drop in elevation from the front of the former tire shop to the rear of the building with a walkout basement. The remainder of the property is relatively flat and is comprised of a gravel parking lot at the rear of the building and a maintained yard (entirety of Lot 11). Portions of the eastern and western borders at Lot 12 are defined by the extent of the on-site building. Portions of the northern border at Lot 11 are defined by a concrete retaining wall.

Current Zoning and Land Use: The site is unoccupied and is located in a E-1 commercial and residential zoning district. Uses at adjoining properties include the Adirondack Rail Trail (a 119-mile walking/biking corridor to the north), the Saranac Lake Volunteer Rescue Squad to the east, multi-family residential developments to the west of Lot 12 (south of Lot 11), a bookstore and a children's museum and family resource center to the south, and a propane storage facility to the west of Lot 11.

Past Uses of the Site: The southern portion of the subject property (Lot 12) was in use for commercial purposes as a filling station and automotive maintenance facility sometime between 1916 and 1924. This portion of the property contains a small structure that has been used as a tire shop since circa 1969. The northern portion of the property (Lot 11) contained a woodworking factory from at least 1916 through 1965 (remaining portions of these buildings were present on the property as late as 1977).

Site Geology and Hydrogeology: Soils in the vicinity of the subject property are likely derived from glaciolacustrine deposits, which overlie hard crystalline bedrock. Soils recovered during site investigations generally consisted of loamy, fine to medium sands. Likely fill material containing sandy loams or variable-texture sand with coal fragments and/or ash was observed in several borings during the remedial investigation ranging in depth from several inches to up to ten feet below grade surface (bgs). Boring refusal (likely on bedrock) was encountered at depths ranging from seven feet bgs at the southern end of Lot 12, ten to 13.5 feet bgs at the northern half of Lot 12 and nine to 13.5 feet bgs at Lot 11. Bedrock outcrops were observed on the opposite side of Broadway, but not on the property.

Saturated soils were encountered at the surface to ten feet bgs at Lot 11 and approximately 15 feet bgs at the southern end of Lot 12 to five feet bgs at the northern half of Lot 12.

Overall groundwater flow at the site is southerly at Lot 11 and north-northeasterly at Lot 12, toward a low-lying area at the northern half of Lot 12, from which it flows southeasterly toward the Saranac River (located approximately 0.2-mile from the property).

A site location map is attached as Figure 1.

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 for soil remediation. For this site, alternatives (or an alternative) that restrict(s) the use of the site to as described in Part 375-1.8(g) were/was evaluated in addition to an alternative which would allow for unrestricted use of the site.

A comparison of the results of the Remedial Investigation (RI) to the appropriate standards, criteria and guidance values (SCGs) for the identified land use and the unrestricted use SCGs for the site contaminants is available in the RI Report.

SECTION 5: ENFORCEMENT STATUS

The Applicant(s) under the Brownfield Cleanup Agreement is a/are Volunteer(s). The Applicant(s) does/do not have an obligation to address off-site contamination. However, the Department has determined that this site does not pose a significant threat to public health or the environment; accordingly, no enforcement actions are necessary.

SECTION 6: SITE CONTAMINATION

6.1: Summary of the Remedial Investigation

A remedial investigation (RI) serves as the mechanism for collecting data to:

- characterize site conditions;
- determine the nature of the contamination; and
- assess risk to human health and the environment.

The RI is intended to identify the nature (or type) of contamination which may be present at a site and the extent of that contamination in the environment on the site, or leaving the site. The RI reports on data gathered to determine if the soil, groundwater, soil vapor, indoor air, surface water or sediments may have been contaminated. Monitoring wells are installed to assess groundwater and soil borings or test pits are installed to sample soil and/or waste(s) identified. If other natural resources are present, such as surface water bodies or wetlands, the water and sediment may be sampled as well. Based on the presence of contaminants in soil and groundwater, soil vapor will also be sampled for the presence of contamination. Data collected in the RI influence the

development of remedial alternatives. The RI report is available for review in the site document repository and the results are summarized in section 6.3.

The analytical data collected on this site includes data for:

- groundwater
- soil
- soil vapor

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. 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 contaminant 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. The nature and extent of contamination and environmental media requiring action are summarized below. Additionally, the RI Report contains a full discussion of the data. The contaminants of concern identified at this site are:

1,2,4-trimethylbenzene	lead
1,3,5-trimethylbenzene	methylene chloride
benzo(a)anthracene	naphthalene
benzo(a)pyrene	toluene
benzo(b)fluoranthene	xylene (mixed)
cyclohexane	
dibenzo(a,h)anthracene	
ethylbenzene	
indeno (1,2,3-cd)pyrene	

The contaminants of concern exceed the applicable SCGs for:

- groundwater
- soil
- soil vapor intrusion

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 the Decision Document.

There were no IRMs performed at this site.

6.3: Summary of Environmental Assessment

This section summarizes the assessment of existing and potential future environmental impacts presented by the site. Environmental impacts may include existing and potential future exposure pathways to fish and wildlife receptors, wetlands, groundwater resources, and surface water. The RI report presents a detailed discussion of any existing and potential impacts from the site to fish and wildlife receptors.

Soil and groundwater were analyzed for volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), metals, polychlorinated biphenyls (PCBs), per- and polyfluoroalkyl substances (PFAS), pesticides and herbicides. Based upon investigations conducted to date, the primary contaminants of concern for the site include petroleum-related VOCs such as trimethylbenzenes, ethylbenzene and toluene; SVOCs, such as polycyclic aromatic hydrocarbons (PAHs; *e.g.*, benzo(a)anthracene, benzo(a)pyrene and benzo(b)fluoranthene); and metals.

Nature and Extent of Contamination:

Soils: VOCs, PAHs, and metals were detected in soils above unrestricted use soils cleanup objectives (UUSCOs). PFAS impacts were limited to one exceedance above NYSDEC unrestricted use guidance values. No pesticides, PCBs or herbicides were detected in soil samples (with the exception of endosulfan sulfate detection in a duplicate sample).

VOCs were detected above UUSCOs in soil throughout Lot 11 and Lot 12, with the highest concentrations detected on Lot 12 located north-northeast of the site building, and suspect tank location. 1,2,4-Trimethylbenzene was detected up to 320 parts per million (ppm) (UUSCO - 3.6 ppm); methylene chloride was detected up to 0.35 ppm (UUSCO - 0.05 ppm); 1,3,5-trimethylbenzene was detected up to 100 ppm (UUSCO - 8.4 ppm); ethylbenzene was detected up to 40 ppm (UUSCO - 1 ppm); and total xylenes were detected up to 210 ppm (UUSCO - 0.26 ppm).

PAH contaminants of concern at their maximum reported values, as compared to their respective UUSCOs, include benzo(a)anthracene (4.38 ppm; UUSCO 1 ppm); benzo(a)pyrene (3 ppm; UUSCO 1 ppm); benzo(b)fluoranthene (6.11 ppm; UUSCO 1 ppm); dibenzo(a,h)anthracene (0.888 ppm, UUSCO 0.33 ppm); and indeno(1,2,3-cd)pyrene (2.85 ppm; UUSCO 0.5 ppm). All SVOCs detected above SCOs were located in the upper 0 to 5 feet interval of soil.

Lead was the only contaminant of concern for the suite of metals analyzed during the investigation. The maximum reported value for lead was 1,010 ppm as compared to the UUSCO of 63 ppm.

Contaminated soils are likely due to historic repair activities and releases from former gasoline USTs at the site. Data do not indicate any off-site impacts in soil related to this site.

Groundwater: VOC and SVOC contaminants were detected in groundwater above groundwater standards. Site groundwater is also characterized by low grade metal and PFAS contamination. Pesticides, PCBs and herbicides were not detected in any groundwater samples.

Petroleum-related VOCs above groundwater standards were detected onsite. Contaminants of concern, along with the maximum concentration, detected above their respective Ambient Water Quality Standards (AWQS) of 5 parts per billion (ppb) were 1,2,4-trimethylbenzene (1,440 ppb), 1,3,5-trimethylbenzene (352 ppb), ethylbenzene (1,280 ppb), toluene (707 ppb), and total xylenes (1,196 ppb). Naphthalene was detected above its AWQS of 10 ppb at a maximum concentration of 179 ppb.

Multiple metals (*i.e.*, cobalt, iron, manganese and sodium) were reported in groundwater across the site. Dissolved metal concentrations did not exceed AWQS or were significantly lower than total metals concentrations in groundwater for cobalt and iron. This indicates that these metals are not migrating through the water column. The data is indicative of ubiquitous and/or naturally occurring metals in groundwater upgradient and across the site and are not site-related contaminants of concern.

PFOS was detected at a maximum concentration of 4.06 parts per trillion (ppt), above the Ambient Water Quality Guidance Value (AWQGV) of 2.7 ppt. PFOA was not detected above the AWQGV of 6.7 ppt. Detections of PFOS and PFOA are not indicative of an on-site source area. The groundwater at the site and surrounding area is not used as a source of potable water, as the area is municipally supplied.

Data do not indicate any off-site impacts in groundwater-related to this site.

Soil Vapor: Gasoline constituents are present in soil vapor. This is likely due to the field evidence of petroleum contamination documented in both soil and groundwater, which were likely caused by releases from former gasoline USTs at the site.

Petroleum-related VOC constituents cyclohexane [1,700,000 micrograms per cubic meter (ug/m³); n-heptane (4,300,000 ug/m³); n-hexane (7,700,000 ug/m³); and BTEX and related VOCs (up to 95,000 ug/m³) were detected in on-site soil vapor.

Data do not indicate any off-site impacts in soil vapor related to this site.

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*.

Access is not restricted and people who enter the site could contact contaminants in the soil by walking, 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. Volatile organic compounds in the groundwater may move into the soil vapor (air spaces within the soil), which in turn may move into overlying buildings and affect the indoor air quality. This process, which is similar to the movement of radon gas from the subsurface into the indoor air of buildings, is referred to as soil vapor intrusion. Soil vapor intrusion is not a current concern as the site is currently unoccupied, however, the potential exists for the inhalation of site contaminants due to soil vapor intrusion for any future on-site redevelopment and occupancy. Environmental sampling indicates soil vapor intrusion from site contamination is not a concern for off-site buildings.

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 Part 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 for this site are:

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

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

Soil

RAOs for Public Health Protection

- Prevent ingestion/direct contact with contaminated soil.
- Prevent inhalation of or exposure from contaminants volatilizing from contaminants in soil.

RAOs for Environmental Protection

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

Soil Vapor

RAOs for Public Health Protection

- Mitigate impacts to public health resulting from existing, or the potential for, soil vapor intrusion into buildings at a site.

SECTION 7: ELEMENTS OF THE SELECTED REMEDY

The alternatives developed for the site and the evaluation of the remedial criteria are presented in the Alternative Analysis. The remedy is selected pursuant to the remedy selection criteria set forth in DER-10, Technical Guidance for Site Investigation and Remediation and 6 NYCRR Part 375.

The selected remedy is a Conditional Track 1 remedy.

The selected remedy is referred to as the Excavation, ISCO and Soil Vapor Evaluation remedy.

The elements of the selected remedy, as shown in Figure 2, 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 re-development; 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 remedial design program, to evaluate the remedy with respect to 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 Department 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 incorporated into the remedial design program, as appropriate. The project design specifications will include detailed requirements to achieve the green and sustainable remediation goals. Further, progress with respect to green and sustainable remediation metrics will be tracked during implementation of the remedial action and reported in the Final Engineering Report (FER), including a comparison to the goals established during the remedial design program.

Additionally, the remedial design program will include a climate change vulnerability assessment, to evaluate the impact of climate change on the project site and the proposed remedy. 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 remedial design program will incorporate measures to minimize the impact of climate change on potential identified vulnerabilities.

2. Excavation

The existing on-site building will be demolished and materials which cannot be beneficially reused on site will be taken off-site for proper disposal in order to implement the remedy.

Excavation and off-site disposal of all on-site soils which exceed unrestricted SCOs, as defined by 6 NYCRR Part 375-6.8. If a Track 1 cleanup is achieved, a Cover System will not be a required element of the remedy. Collection and analysis of confirmation and documentation samples at the remedial excavation depths will be used to verify that SCOs for the site have been achieved. If confirmation/documentation sampling indicates that SCOs were not achieved at the stated remedial depth, the Applicant must notify DEC, submit the sample results and, in consultation with DEC, determine if further remedial excavation is necessary. Further excavation for development will proceed after confirmation samples demonstrate that SCOs for the site have been achieved.

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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.

Excavation and removal of any underground storage tanks (USTs), fuel dispensers, underground piping or other structures associated with a source of contamination. Potential underground storage tanks will be removed in accordance with Petroleum Bulk Storage (PBS) regulations (6 NYCRR

Part 613).

3. Backfill

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

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Conditional Track 1:

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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 Track 2 restricted residential cleanup, at a minimum.

Institutional Controls - 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 County DOH; and
- require compliance with the Department approved Site Management Plan.

7. 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 Paragraph 6 above.

Engineering Controls: If necessary, as determined by the SVI evaluation, the sub-slab depressurization system discussed in paragraph 5 above.

This plan includes, but may not be limited to:

- descriptions of the provisions of the environmental easement including any land use and groundwater use restrictions;
- a provision for evaluation of the potential for soil vapor intrusion for any occupied buildings on the site, including provision for implementing actions recommended to address exposures related to soil vapor intrusion;
- provisions for the management and inspection of the identified engineering controls;
- 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 and inform the need for potential additional groundwater treatment;
- a schedule of monitoring and frequency of submittals to the Department; and
- monitoring for vapor intrusion for any buildings occupied or developed on the site, as may be required by the Institutional and Engineering Control Plan discussed above.

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 system(s). The plan includes, but is not limited to:

- procedures for operating and maintaining the system(s); and

- compliance inspection of the system(s) to ensure proper O&M as well as providing the data for any necessary reporting.

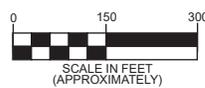


All feature locations are approximate. This map is intended as a schematic to be used in conjunction with the associated report, and it should not be relied upon as a survey for planning or other activities.

Figure 1: Site Plan

Saranac Lofts BCP Site C517015
120 Broadway
Village of Saranac Lake
Franklin County, New York

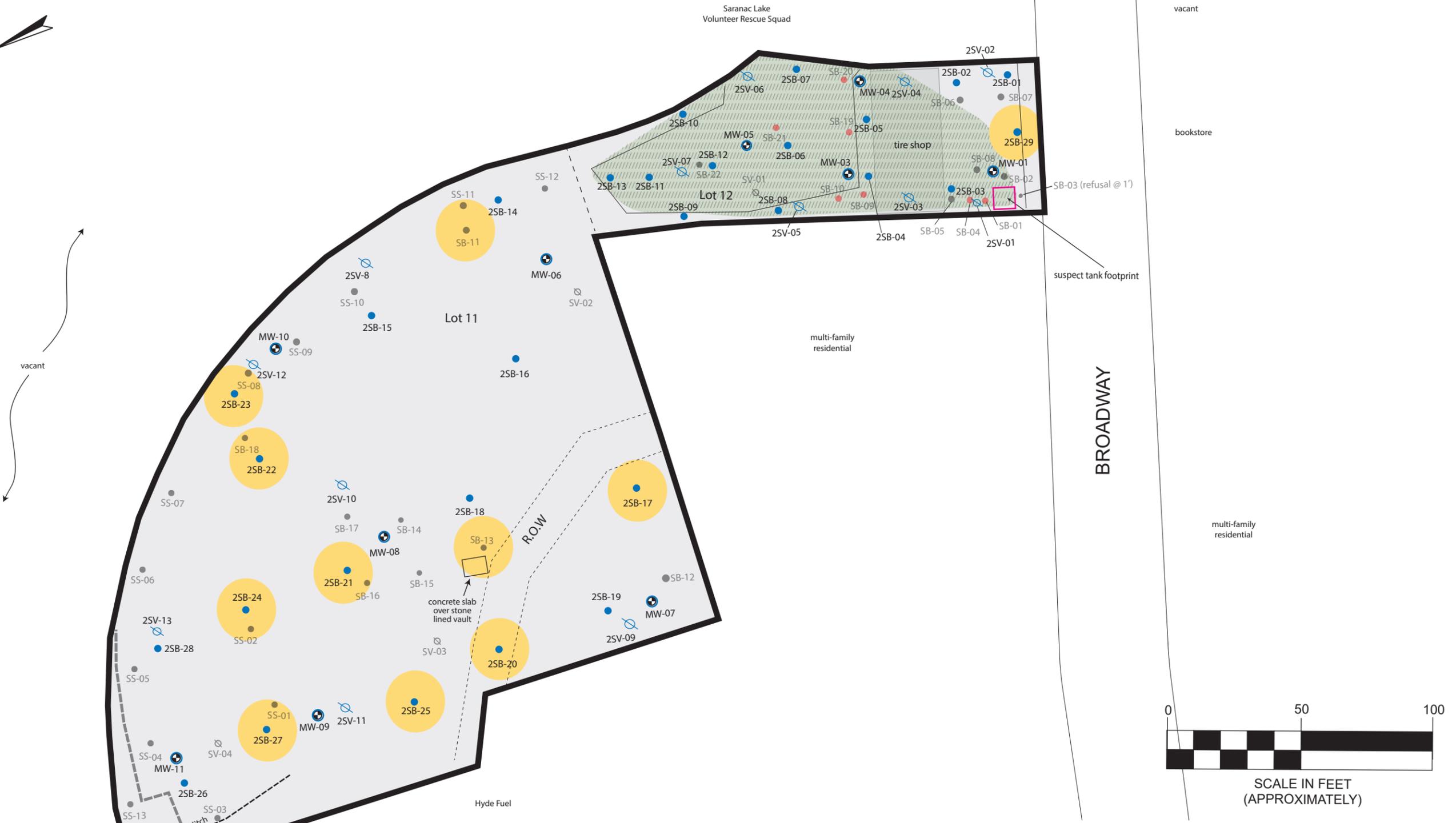
Legend: — BCP site boundary



File: 21003-0066

June 2023

Figures



vacant

16 inch cast iron culvert

Legend:

- BCP site boundary
- lot line
- retaining wall
- previous soil sample location
- previous soil boring with evidence of petroleum contamination
- ⊙ previous soil vapor location
- ⊕ monitoring well location
- ⊙ soil vapor location
- boring location
- ISCO application area
- Petroleum Spill Area: All grossly impacted soil to be removed (excavation to bedrock as needed)
- Targeted soil to be removed below 5 feet as required to meet UU SCOs
- Excavation to be performed across the Site as needed to achieve Track 1 SCOs (generally expected to not exceed 5 feet below grade)

Figure 2: Selected Remedy (Excavation)

Saranac Lofts BCP Site C517015 120 Broadway Village of Saranac Lake Franklin County, New York	File: 21003-0066 Scale as shown June 2023 Figures
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