AMENDED RECORD OF DECISION

Lapp Insulator Site Village of LeRoy Genesee County, New York Site Number 819017

March 2014



Prepared by the:

Division of Environmental Remediation New York State Department of Environmental Conservation

DECLARATION STATEMENT – AMENDED RECORD OF DECISION

Lapp Insulator Site
State Superfund Project
Village of LeRoy, Genesee County
Site No. 819017
March 2014

Statement of Purpose and Basis

The Amended Record of Decision (AROD) presents the selected remedy for Remedial Program Onsite Soil Contamination of the Lapp Insulator site, a Class 2 inactive hazardous waste disposal site. The selected 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, and is not inconsistent with the National Oil and Hazardous Substances Pollution Contingency Plan of March 8, 1990 (40CFR300), as amended.

This decision is based on the Administrative Record of the New York State Department of Environmental Conservation (the Department) for Lapp Insulator site and the public's input to the Proposed Amendment to the ROD presented by the Department. A listing of the documents included as a part of the Administrative Record is included in Appendix B of the AROD.

Description of Selected Remedy

The Department is amending the ROD document for the Lapp Insulator Site. The changes to the selected remedy are summarized in Section 7.3 above.

The elements of the amended remedy listed below are identified as *unchanged*, *modified or new* when compared to the March 2009 remedy:

- 1) 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: (modified to include the major green remediation components).
 - 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;

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- 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; and
- Integrating the remedy with the end use where possible and encouraging green and sustainable re-development.
- 2) On-site soils which exceed the protection of groundwater SCOs for the site contaminants will be excavated from Area A and Areas C and D (Figure 3). The excavated soils will be mechanically screened to separate stones and debris (nominally greater than 3/8-inches in diameter) from the contaminated soils. The screened material that is separated out and that is not soil will be recycled as fill into the excavations. During the processing of soil through a series of vibrating steel screens/grids, a portion of the contaminants will evaporate from the soil, but will not exceed the Division of Air Resources Guidelines. Real time air monitoring will be conducted in the nearby vicinity of the excavations and screening operations to insure that concentrations do not exceed protective action levels. A community air monitoring program will also be implemented during remedial activities. If necessary and based on the results of the ambient air monitoring program, the emissions will be collected and subjected to further treatment prior to discharge to the atmosphere.

Approximately 1,500 cubic yards of soil will be excavated from an approximate 11,000 square foot area near Building 13 (near a former machine shop and former solvent storage tank area) to an approximate depth of 12 feet and approximately 10,500 cubic yards of soil will be excavated from an approximate 28,000 square foot area near the southern portion of the site (near former hazardous materials storage pad and southeast fill area) to an approximate depth of 14 feet and treated on-site using a mechanical screening technology. The soil from these two areas exceeds the protection of groundwater SCOs for the site contaminants, as defined by 6 NYCRR Part 375-6.8.

Following excavation from these two areas, the soil will be transported to an on-site staging area located near the southern portion of the facility where the soil will be mechanically separated on-site and subsequently placed in temporary stockpiles for characterization by chemical analysis (see Figure 4). Characterization results will be compared to SCOs to determine if the soil can be reused on-site as excavation backfill (meets the protection of groundwater SCOs); must be disposed of off-site; or must undergo further mechanical screening to remove additional contamination before use as backfill. Soil which meets the requirements of 6 NYCRR 375-6.7(d) for the intended use of the site may be reused on-site. Following treatment, soil that meets the protection of groundwater SCOs will receive a beneficial use determination and will be reused on-site as backfill material. As necessary, additional clean fill meeting the requirements of DER-10, Appendix 5 will be brought in to complete the backfilling of the excavation and establish the designed grades at the site (modified).

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3) In-situ chemical oxidation (ISCO) will be implemented to treat contaminants in both overburden and shallow bedrock groundwater. A chemical oxidant will be injected into the subsurface to destroy the contaminants in shallow bedrock near Area A (former solvent storage tank and machine shop area) and in overburden groundwater near Areas C and D (former hazardous materials storage pad and southeast fill area). The method and depth of injection will be determined during the remedial design.

Prior to the full implementation of this technology, laboratory and on-site pilot scale studies will be conducted to more clearly define design parameters. Between the pilot and the full scale implementations, it is estimated that six overburden and six shallow bedrock injection points will be installed. It is estimated that the chemical oxidant will be injected during two separate events over several months (*modified*).

- 4) Imposition of an institutional control in the form of an environmental easement for the controlled property that: (*modified*).
 - requires 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);
 - allows the use and development of the controlled property for residential, restricted residential, commercial, and industrial use as defined by Part 375-1.8(g), although land use is subject to local zoning laws;
 - restricts 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
 - requires compliance with the Department approved Site Management Plan.
- 5) A Site Management Plan is required, which includes the following: (modified)
 - 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:

<u>Institutional Controls</u>: The Environmental Easement discussed in Paragraph 4 above.

<u>Engineering Controls</u>: Potential future subslab depressurization systems resulting from the soil vapor intrusion evaluation included in the Site Management Plan below.

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, if any;
- descriptions of the provisions of the environmental easement including any land use and/or groundwater use restrictions;
- a provision for evaluation of the potential for soil vapor intrusion for any future buildings developed on the site along with existing site buildings, including provisions for implementing actions recommended to address exposures related to

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soil vapor intrusion;

- a provision for evaluation of the potential for soil contamination to exist beneath the site building located adjacent to Excavation Area A, including a provision for the building to serve as a site cover;
- 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;
 - a schedule of monitoring and frequency of submittals to the Department;
 - monitoring for vapor intrusion for any buildings developed on the site, as may be required by the Institutional and Engineering Control Plan discussed above; and
 - Continued evaluation of the potential for soil vapor intrusion of existing site buildings, including provisions for implementing actions recommended to address exposures related to soil vapor intrusion.

New York State Department of Health Acceptance

The NYSDOH concurs that the amendment to the ROD remedy for this site is protective of human health.

Declaration

The selected remedy is protective of human 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.

March 24, 2014 Duschs

Robert W. Schick, P.E., Director Division of Environmental Remediation

Date

Record of Decision Amendment Lapp Insulator Site



Village of LeRoy / Genesee County / Site No. 819017

March 2014

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

SECTION 1: PURPOSE AND SUMMARY OF THE RECORD OF DECISION AMENDMENT

The New York State Department of Environmental Conservation (the Department), in consultation with the New York State Department of Health (NYSDOH), is issuing an amendment to the Record of Decision (ROD) for the above referenced site. The disposal of hazardous wastes at this site, as more fully described in the original ROD document and Section 6 of this document, has caused the contamination of various environmental media. The amendment is intended to attain the remedial action objectives identified for this site for the protection of public health and the environment. This amendment identifies the new information which has lead to this amendment and discusses the reasons for the preferred remedy.

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 Environmental Remediation Programs. 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.

On March 31, 2009, the Department signed a ROD for the Lapp Insulator Site to address volatile organic compound (VOC) contamination present in site soil and groundwater. Specifically, the March 2009 ROD selected: targeted excavation and off-site disposal of contaminated soil along with the installation of a soil or asphalt cover in selected areas for subsurface contaminated soil and insitu chemical oxidation injections to address groundwater contamination.

In October 2012, prior to implementation of the remedy outlined in the March 2009 ROD, the Department completed a pre-design investigation which identified a significant increase in the volume of contaminated soil to be addressed. Subsequently, the Department conducted a pilot study to evaluate the effectiveness of mechanical screening technology to separate stones and debris greater than 3/8-inches in diameter from the contaminated soils. The results of the pilot study showed that mechanical screening reduced the amount of physical material to be addressed by the remedy and likewise reduced contaminant concentrations to below soil cleanup objectives (SCOs) for groundwater protection without exceeding air quality guidelines for VOCs during air monitoring. The success of the pilot study showed that off-site transportation and disposal of contaminated soil could be greatly reduced. Consistent with the Department's "Green Remediation" policy, this amendment will reduce emissions from the transportation originally anticipated and recycle material

ROD Amendment March 2014 Lapp Insulator, Site Code 819017 Page 5 for beneficial use at this facility, while doing so in a cost effective manner.

The Department is issuing an amendment to the site's ROD document. The changes and the reason for the changes are summarized in section 7.3 below.

SECTION 2: CITIZEN PARTICIPATION

The Department sought input from the community on this ROD Amendment and offered an opportunity for public participation in the remedy selection process. The information here is a summary of what can be found in greater detail in reports that have been placed in the Administrative Record for the site. The public is encouraged to review the reports and documents, which are available at the following repositories:

Woodward Memorial Library 7 Wolcott Street LeRoy, NY 14482 Mon - Thurs: 10:00 - 8:30

Fri: 10:00 – 5:00 Phone (585) 768-8300 NYSDEC Region 8 Office 6274 East Avon-Lima Road Avon, NY 14414-9516 Contact: Mrs. Linda Vera Phone: (585) 226-5324

Phone: (585) 226-5324 (Appointment Requested)

A public comment period was held from February 10, 2014 through March 12, 2014 to provide an opportunity for public comment on these changes. A public meeting was held on March 4, 2014 at the Village of LeRoy Village Hall, 3 West Main Street, LeRoy, New York 14482 at 6:00 PM.

At the meeting, a description of the original ROD documents and the circumstances that have led to changes in this ROD were presented. After the presentation, a question and answer period was held.

Comments were summarized and responses provided in a Responsiveness Summary attached to the end of this document. The Department did not modify the ROD Amendment based on public comments.

SECTION 3: SITE DESCRIPTION AND HISTORY

Location: The Lapp Insulator Site is located in a mixed industrial, residential, and rural area. The site is located on Gilbert Street and approximately 0.5 miles southwest of the intersection of New York State Route 5 (Main Street) and Gilbert Street in the Village of LeRoy, Genesee County (Figure 1).

Site Features: The main site features include several large active industrial buildings surrounded by paved roadways, parking areas, and material storage areas. About one quarter of the site area is undeveloped and includes Oatka Creek which traverses the southeast side of the site (Figure 1).

Current Zoning/Use(s): The site is currently active, and is zoned for industrial use. The surrounding parcels are currently used for a combination of residential, commercial, and agricultural. A Rochester

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and Southern rail line borders the west-side of the Lapp Insulator Site. The nearest residential area is immediately adjacent to the northeast side of the site.

Past Use(s) of the Site: The Lapp Insulator Company has been manufacturing electrical insulators and transformer bushings at this location since 1917. Lapp discontinued the manufacture of the bushings in 2004 and leased this portion of the business to PCore Electronics (PCore). PCore continues to operate in buildings located on the east side of Gilbert Street. Historic records indicate that oils, petroleum based products, and chlorinated solvents were stored and utilized for production at the site.

A series of investigations at the site between 1991 and 1995 confirmed disposal of chlorinated solvents and identified the following four areas of concern (Figure 2).

<u>Area A</u> is located near the southeast corner of Building 23. Historical information indicates that a machine shop and two vapor degreasers were located in this corner of the building and the handling of solvents occurred at a nearby loading dock. Underground storage tanks containing 1,1,1-TCA and TCE were also formerly located in this area. 1,1,1-TCA and TCE contamination is present in soil, groundwater and soil vapor in Area A.

<u>Area B</u> is located near the east-side of Building 31. Building 31 is currently used as a warehouse. The building has historically been used as a shipping and receiving dock and a warehouse. A gasoline underground storage tank was formerly located near the southeast corner of the building. TCE contamination is present in soil and groundwater in Area B.

<u>Area C</u> is located near the southern portion of the site. This area was historically used for the storage of hazardous materials on a concrete pad. A drywell was located adjacent to the southeast corner of the hazardous materials storage pad. 1,1,1-TCA, TCE, and PCE contamination is present in soil and groundwater in Area C.

<u>Area D</u> is located near the southern portion of the site and immediately south of Area C. This area was historically used for the placement of fill. In particular, a large quantity of unused and broken ceramic insulators and construction debris were used as fill in this area. TCE and PCE contamination is present in soil and groundwater in Area D.

To address the chlorinated solvent contamination in Areas A, B, and C, Lapp implemented an interim remedial measure (IRM) consisting of a soil vapor extraction system in 1995. The operation of the soil vapor extraction system was discontinued in 1999 due to uncertainty associated with the system's overall effectiveness.

Operable Units: The site is currently managed as a single operable unit.

Site Geology and Hydrogeology: Overburden at the site consists predominantly of fill material overlying glacial till. The fill, consisting of brick, coal, cinders, and porcelain fragments mixed with

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native soil, was used to level topographically low areas and to support the steep banks of Oatka Creek. The glacial till is poorly sorted and consists of clay, silt, sand, and gravel directly overlying the bedrock. The overburden is approximately 10 to 30 feet thick and is underlain by the shales and limestones of the Skaneatles Formation. Groundwater occurs at a depth of approximately 10 feet beneath the ground surface. In general, groundwater flow in both the overburden and shallow bedrock is to the east, toward Oatka Creek.

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. The Lapp Insulator site is currently zoned for industrial use and it is anticipated that this industrial use will continue into the foreseeable future.

The RI has identified CVOCs as the primary site contaminants with the highest soil and groundwater CVOC concentrations occurring in Areas A, C, and D (Figure 2). Although the site is zoned for industrial use, CVOCs beneath the entire site will meet the more stringent residential soil cleanup objectives (SCOs) following the excavation of soil under this ROD amendment. Based on this, the limits of the two soil excavations outlined in this ROD Amendment are based on SCOs for the protection of groundwater. For the site contaminants, the protection of groundwater SCOs are lower than residential SCOs making the residential soil cleanup objectives for the entire site readily attainable. Because the primary site contaminants are CVOCs and these contaminants are present in groundwater at concentrations exceeding SCGs, the two soil excavations outlined in this ROD Amendment are based on SCOs for the protection of groundwater. For the site contaminants, the protection of groundwater SCOs are lower than residential SCOs making the residential soil cleanup objectives for the entire site readily attainable.

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 current owner of the site is Lapp Insulator, LLC, 130 Gilbert Street, LeRoy, NY 14482. An Order on Consent and Administrative Settlement between the Department and Lapp Insulator, LLC and PCore Electric Company, Inc. was signed on December 31, 2010. The settlement was for the development and implementation of a remedial program at the Lapp Insulator Site.

SECTION 6: SITE CONTAMINATION

6.1: Summary of Environmental Assessment

This section summarizes the assessment of existing and potential future environmental impacts presented by the site (2009 ROD, and a pre-design investigation conducted in 2012).

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Nature and Extent of Contamination: Environmental investigations conducted to date, have identified a southeast fill area, a hazardous materials storage pad, former underground storage tanks (USTs), and a former machine shop as source areas for contamination at the Lapp Insulator Site. Chlorinated volatile organic compounds (CVOCs), including TCE, PCE, and 1,1,1-TCA along with their associated breakdown products are the primary contaminants of concern at the site. Specifically, shallow subsurface soil collected near the former solvent tanks and machine shop area contained 1,1,1-TCA at concentrations up to 110 ppm and near the former hazardous materials storage pad TCE was detected at a maximum concentration of 45 ppm. The chlorinated VOC concentrations in shallow subsurface soil significantly exceed their respective soil cleanup objectives for the protection of groundwater.

The primary site contaminants are also detected at concentrations significantly exceeding the groundwater SCGs (typically 5 ppb). In particular, 1,1,1-TCA, 1,1-DCA, and TCE were detected in shallow bedrock groundwater near the former solvent tanks and machine shop area at concentrations of 190,000 ppb, 45,000 ppb, and 33,000 ppb respectively. Similarly, TCE and 1,1,1-TCA were detected in overburden groundwater near the former hazardous materials storage pad at concentrations of 76,000 ppb and 49,000 ppb respectively. In both areas, the CVOC concentrations decrease with depth in bedrock groundwater but persist at concentrations that also exceed the groundwater standards.

Similar to the distribution of CVOC contamination in soil and groundwater, high concentrations of TCE, PCE, and 1,1,1-TCA were detected in soil vapor along the eastern margin of the site near the hazardous materials storage pad, former USTs, and the former machine shop. TCE, detected at a passive soil gas concentration of 980 micrograms, was the CVOC detected at the highest concentration in this area.

Special Resources Impacted/Threatened: Based on groundwater flow patterns, both overburden and shallow bedrock groundwater discharges to the Oatka Creek. Surface water and sediment samples collected from Oatka Creek indicate that site contaminants are not affecting surface water and sediment quality in the creek. A Fish and Wildlife Impact Analysis was performed during the RI and concluded that sediment and surface water in Oatka Creek are not considered as concerns related to site contaminants.

Three of five private water supply wells sampled in 1995 near the Lapp Insulator Site contained low concentrations of site contaminants. During repeat sampling however in 1998 and 2003, no site contaminants were detected in groundwater from these five private wells.

6.2: Interim Remedial Measures

An IRM is conducted at a site when a source of contamination or exposure pathway can be effectively addressed before issuance of the Record of Decision.

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Lapp Insulator installed and operated a soil vapor extraction system in Areas A, B and C (Figure 2) during the late 1990s. This SVE system was not reviewed and approved by the Department and was deemed ineffective at addressing the site contamination. Operation of the SVE system was stopped in September 1999. No other IRMs were completed at the site during the RI.

6.3: **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*.

The site is fenced, which restricts access to the site. People are not expected to come into contact with site-related soil and groundwater contamination unless they dig below the surface. People are not drinking 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. There is a potential for soil vapor intrusion to occur in on-site buildings and an investigation of this potential pathway is necessary.

SECTION 7: SUMMARY OF ORIGINAL REMEDY AND AMENDMENT

7.1 **Original Remedy**

The components of the March 2009 remedy were as follows:

- Targeted excavation and off-site disposal was selected to address approximately 815 cubic yards of CVOC contaminated subsurface soil in Area A (former machine shop and former solvent tank area on Figure 2). This targeted excavation was designed to remove approximately 80% of contaminant mass from Area A and not necessarily to achieve specific soil cleanup objectives;
- Targeted excavation and off-site disposal was selected to address approximately 2,000 cubic yards of CVOC contaminated subsurface soil in Areas C and D (former hazardous materials storage pad and southeast fill area on Figure 2). This targeted excavation was designed to remove approximately 90% of contaminant mass from Areas C and D and not necessarily to achieve specific soil cleanup objectives;
- Backfill of the excavations with clean fill transported to the site;
- Installation of a soil or asphalt cover in Area A and Areas C and D;
- In-situ chemical oxidation was selected to address overburden groundwater contamination in Areas C and D:
- Execution of an environmental easement that would require limiting use and development of the property to industrial use, compliance with the approved site management plan,

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- restricting use of groundwater as a source of potable or process water, and the property owner to complete and submit to the Department a periodic certification of institutional and engineering controls; and
- Installation of additional groundwater monitoring wells and long term groundwater monitoring was selected to evaluate the effectiveness of the in-situ chemical oxidation injection.

7.2 **New Information**

Since the issuance of the Feasibility Study (FS) and ROD, new information about the site and the chosen remedy has been obtained and is outlined below.

1. Based on the pre-design investigation and pilot test, it is estimated that approximately 12,000 cubic yards of soil is contaminated with CVOCs at concentrations exceeding the protection of groundwater SCOs. This is an increase of approximately 4.25 times the volume originally estimated in the 2009 ROD (targeted mass removal of CVOC contaminated soil).

As described above, the primary remedial component in the 2009 ROD to address site contaminants in subsurface soil included the excavation and off-site disposal of approximately 2,815 cubic yards of CVOC contaminated soil. In particular, a total of approximately 815 cubic yards of soil would be excavated from an approximate 11,000 square foot area from the zero to two foot depth interval from Area A and approximately 2,000 cubic yards of soil would be excavated from an approximate 27,300 square foot area from the four to six foot depth interval from Areas C and D on Figure 2. Data collected during the pre-design investigation and the pilot study suggests that the overall thickness of soil requiring removal from both Area A and Areas C and D significantly exceeds the 2009 ROD estimates. As shown on Figure 3, the bulk of the contaminated soil requiring removal is from the one to six foot depth interval in three areas and from the two to twelve foot depth interval in one area of Area A. In Areas C and D, soil is contaminated from the four to fourteen foot depth interval and not exclusively from a two foot thick interval extending from four to six feet bgs. The March 2009 ROD estimated that approximately 2,815 cubic yards of soil required removal.

- 2. The updated cost to excavate and dispose of this increased volume of soil off-site at a permitted facility is estimated at approximately \$8,000,000. This is an increase of \$4,600,000 over the original estimated cost of \$3,400,000.
- 3. In-situ chemical oxidation needs to be applied to Area A (former machine shop and solvent storage tank area) to address high concentrations of CVOCs in shallow bedrock groundwater:

Based on the installation of two additional shallow bedrock groundwater monitoring wells, it was also identified that groundwater treatment is needed in Area A to address high concentrations of CVOCs in the shallow bedrock groundwater. The 2009 ROD included the injection of chemical oxidants to address overburden groundwater contamination in Areas C and D but no treatment of groundwater contamination in Area A. New information indicates that 1,1,1-TCA and 1,1-DCA is

ROD Amendment March 2014 PAGE 11 present in shallow bedrock groundwater immediately downgradient of Area A at concentrations of 190,000 ppb and 45,000 ppb respectively, well above the groundwater SCGs.

4. As a result of the significant increase in the volume of soil to be transported off-site, on-site treatment options were considered. A pilot test was then undertaken which evaluated mechanical screening which can be used to separate stones and debris greater than 3/8-inches in diameter from the contaminated soils thereby reducing the amount of soils to be addressed by the remedy and determined that during this process a portion of the soil contamination is reduced through evaporation. Using this process the soil contamination in the excavation areas is reduced to meet protection of groundwater cleanup criteria allowing it to remain at the site, offering advantages over excavation and off-site transportation of all soils in the contaminated study area.

Based on the success of the pilot study, it was decided to modify the remedy for the site to include mechanical screening because this approach offers the following advantages:

- 1) Eliminates or reduces the transportation and off-site disposal of hazardous waste, thereby eliminating or reducing potential disruptions to the surrounding community during off-site transportation and disposal;
- 2) Permanently reduces the toxicity, mobility or volume of waste rather than containing the waste in an off-site landfill cell:
- 3) Reduces the overall cost of site remediation; and
- 4) Reduces the amount of truck traffic for transportation of soil off-site for disposal and soil on-site for backfill and is consistent with the Department's green remediation initiatives.

As a result of this new information and the positive results of the pilot study, the Department is amending the 2009 ROD document for the Lapp Insulator Site.

7.3 **Changes to the Original Remedy**

The primary change to the remedy, compared to the remedy selected in the March 2009 ROD, is the approach to address the CVOC contamination in site soil in Area A and Areas C and D (Figure 3) at concentrations exceeding the Protection of Groundwater SCOs. This is a fundamental change to the remedy selected in the previous ROD but is a more streamlined and effective approach to removing contaminant mass at the site. The following section describes the elements of the ROD Amendment relative to the original ROD.

Transportation and disposal of contaminated soil in an off-site landfill will be greatly reduced or even eliminated by the amended remedy. All excavated soil will be processed one or more times through a mechanical screen which will remove CVOCs. The processed soil will be sampled and soil that is found to be at or below the SCOs for the protection of groundwater, will remain on the site and be used to backfill the excavated areas. Processed soil that does not meet the SCOs will be evaluated to determine if the soil should be processed to further remove contaminants, or transported off-site for disposal at a permitted facility. Soil, if any, that is contaminated above the SCOs after treatment, will be transported off-site for disposal

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in a permitted facility.

- The original remedy included the targeted excavation and off-site disposal of approximately 2,815 cubic yards of CVOC contaminated soil. It was determined during the Feasibility Study that the targeted excavations would be designed to remove approximately 80% of the contaminant mass in Area A and approximately 90% of the contaminant mass in Areas C and D and not to achieve specific SCOs. Based on data collected during the pre-design investigation and the pilot study, the amended remedy will remove approximately 12,000 cubic yards of soil that is contaminated with CVOCs at concentrations exceeding the protection of groundwater SCOs.
- A soil cover will not be placed over Area A or Areas C and D. Only excavated soil that meets SCOs after processing and treatment or clean imported fill will be used to backfill excavated areas. This material will meet the protection of groundwater SCOs, will not pose a potential threat to human health or the environment, and will not require that a soil cover be placed over it.
- The original remedy included the injection of in-situ chemical oxidants in overburden groundwater in Areas C and D. The amended ROD will inject oxidants to treat contaminants in both overburden groundwater in Areas C and D and also shallow bedrock groundwater in Area A. Oxidants are injected into the subsurface to destroy the groundwater contamination. Similar to the original remedy, the method and depth of injection for the amended remedy will be determined during a remedial design.
- The amended remedy includes sampling for vapor intrusion of on-site structures, including provisions for actions to address exposure, if needed. The original remedy only included a provision for evaluation and mitigation, if necessary of the potential for soil vapor intrusion for any future buildings developed on the site and evaluation and mitigation, if necessary of the potential for soil vapor intrusion of existing site buildings should a change of site use occur.

SECTION 8: EVALUATION OF CHANGES

8.1 **Remedial Goals**

Goals for the cleanup of the site were established in the March 2009 ROD. The overall remedial goals were to meet SCGs and be protective of human health and the environment. The remedial action objectives (RAO) and selected remedial actions for the site are shown in Table 1.

8.2 **Evaluation Criteria**

The criteria used to compare the remedial alternatives are defined in the regulation that directs the remediation of inactive hazardous waste sites in New York State (6 NYCRR Part 375). For each

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criterion, a brief description is provided. A detailed discussion of the evaluation criteria and comparative analysis is contained in the original Feasibility Study.

The first two evaluation criteria are called threshold criteria and must be satisfied in order 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.

The ROD amendment remedy was evaluated and is protective of public health and the environment. This remedy is consistent with the anticipated future use and the current zoning for the site. The original remedy would remove contaminated soil from the site and dispose of the soil in an off-site regulated facility. The modified remedy will include the excavation of site soil containing CVOCs at concentrations exceeding the protection of groundwater SCOs followed by mechanical screening, which after processing, the soil contaminant concentrations are expected to be at or below SCOs for the protection of groundwater. The soil would then be available for reuse as backfill in each of the excavations. Because the soil would meet the Protection of Groundwater SCOs there would be no potential adverse impact on groundwater. Groundwater will be monitored on a periodic basis following implementation of the remedy. The original and modified remedies also both include an in-situ chemical oxidation component to address remaining groundwater contamination, with the amended remedy addressing an expanded area. The amended remedy additionally includes a component to evaluate the potential for soil vapor intrusion (SVI) with a contingency to implement actions recommended to address exposures within buildings located on-site. Overall, both remedies are protective of human health and the environment, but the amended remedy, through the removal of additional soil contamination; injection of ISCO in Area C and D and also in Area A (compared to only Area C and D in the original remedy) to address groundwater contamination; and a SVI evaluation program, provides increased protection to human health and the environment.

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.

Soil SCGs for both the original and modified remedies are based on the Department's Soil Cleanup Objectives (SCOs) in 6 NYCRR Subpart 375-6. The original ROD is based on a targeted mass removal of contaminated soil in the excavation areas where the limits of the two excavation areas in this ROD Amendment are based on SCOs for the protection of groundwater. An easement to limit the site to residential use addresses soil contamination outside the excavation areas. The original remedy would comply with the industrial use soil SCOs where the amended remedy attains the protection of groundwater SCOs in the two excavation areas.

Groundwater SCGs for both the original and modified remedies are based on the Department's "Ambient Water Quality Standards and Guidance Values" and Part 5 of the New York State Sanitary

Code. Both remedies include groundwater treatment in the excavation areas and institutional controls restricting groundwater use and requiring groundwater monitoring. Both remedies comply with the groundwater SCGs.

Air SCGs for the amended remedy are based on 6 NYCRR, Chapter III, Part 212 (General Process Emission Sources) and the New York State Department of Environmental Conservation Division of Air Resources DAR-1 (Guidelines for the Control of Toxic Ambient Air Contaminants). Based on the results of a comprehensive air monitoring program implemented during the pilot test and calculations based on known soil contaminant concentrations, it is expected that the amended remedy will not exceed air SCGs. Based on the results of the ambient air monitoring program, if necessary, a contingency to collect air emissions and to provide further treatment prior to discharge to the atmosphere to achieve the air SCGs will be determined.

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

3. Short-term 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.

The original and modified remedies would present a potential for construction worker and on-site worker exposure due to fugitive emissions including CVOCs and particulates during excavation. However, an air monitoring program was implemented during the October 2012 pilot study and showed that CVOC and particulate emissions did not exceed the Division of Air Resources Guidelines during the mechanical screening process or the community air monitoring requirements of DER-10 Appendix 1A and 1B. Any potential for exposure would be significantly reduced through the use of dust and vapor suppression measures, decontaminating trucks before they leave the work area, proper covering of trucks, the implementation of an air monitoring program, and the use of personal protection equipment by site workers. These dust suppression measures, as well as site access restrictions and air monitoring, would eliminate or greatly reduce any increased potential exposure to the public or impacts to the environment during construction. If necessary and based on the results of the ambient air monitoring program, the vapors will be collected and subjected to further treatment prior to discharge to the atmosphere.

Another potential concern is the potential impact that construction traffic and off-site disposal would have on the occupants of adjacent properties due to the fourfold increase in the volume of material to be sent off-site. This potential for short term impacts will be eliminated or greatly reduced by the modified remedy since there will be little or no off-site transportation of contaminated soil. In addition, the use of traffic control measures and planned traffic flow patterns will minimize any impacts caused by truck traffic during the implementation of the remedy, if off-site transport is required. It is estimated that the modified remedy will take approximately 3 months to implement thereby minimizing potential exposure time; the groundwater remediation will continue for some

years after construction of the remedy. It is estimated that the modified remedy will eliminate approximately 800 dump trucks leaving the site with contaminated soil and an approximate equal number of dump trucks entering the site with backfill material for the excavations.

Both the original and amended remedy will take three to four months to implement, can be implemented quite safely as standard construction practices would be applied, and require nearly the same heavy equipment.

4. 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 contamination; 2) the adequacy of the engineering and/or institutional controls intended to limit the risk; and 3) the reliability of these controls.

The amended remedy is expected to provide better long-term effectiveness and permanence compared to the original remedy with regards to addressing the primary source of contamination. The original remedy included a targeted mass removal of approximately 2,815 yd³ of contaminated soil in the two excavation areas and left soil in-place that contained site contaminants at concentrations exceeding the protection of groundwater SCOs. For the modified remedy, a total of approximately 9,200 yd³ of additional CVOC contaminated soil will be removed from the two excavation areas for a total of approximately 12,000 yd³. Instead of transporting the contaminated soil and placing it in a landfill, it is expected based on the results of the pilot test that most if not all the soil excavated from the target areas will remain on-site after mechanical screening. Posttreatment sampling will determine if the soil can be re-used on-site as backfill material. The soil reused as backfill will meet the SCOs for groundwater protection after screening and will not pose a significant risk. Under both remedies, adequate and reliable engineering controls would be put in place to limit exposure to residual contamination. These controls include: groundwater monitoring, an environmental easement, a site management plan, and periodic certification of the controls. The modified remedy does not include controls for management of a cover system because soil outside of the excavation areas based on RI and pre-design soil sampling and the soil re-used as backfill will achieve the residential SCOs.

5. 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.

With the removal and treatment of approximately 9,200 yd³ of additional CVOC contaminated soil, the amended remedy is superior to the original remedy in terms of the overall reduction of toxicity, mobility, or volume (TMV). The original remedy would leave a significant volume of soil in-place containing CVOCs at concentrations exceeding the protection of groundwater SCOs. Without removal, this contamination remains mobile and would continue to represent a long-term source for groundwater contamination. For the amended remedy, contamination is removed during the mechanical screening process and there is a permanent reduction of TMV. Should the ambient air monitoring program indicate that vapors need to be collected and subjected to further treatment, then

a small volume of activated carbon would likely be needed and would require additional treatment and/or disposal.

6. Implementability. The technical feasibility and administrative feasibility of implementing each alternative are 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.

For the original remedy, soil excavation and off-site disposal is a proven technology and can be readily implemented using standard construction practices. The amended remedy includes mechanical screening which slightly increases the overall difficulty of implementing the remedy. However, the results of the pilot test show that the site soil can be excavated and effectively handled and processed through the mechanical screen to attain the protection of groundwater SCOs. Overall, the pilot study showed that the amended remedy is technically feasible and should not present significant difficulties during implementation.

Both remedies are administratively feasible to implement. Both remedies would require implementation of Engineering and Institutional Controls and restrict use of the property in the future. Without the need for a soil or asphalt cover, the amended remedy would be easier to implement from an administrative perspective. The original remedy includes a soil cap, so long-term inspection and maintenance of the cap would be required.

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 estimated present worth cost to carry out the remedy is \$1,630,000. These costs are primarily capital costs to implement the remedy and also include installation of additional monitoring wells and long-term monitoring for 30 years. Other than the maintenance of possible future subslab depressurization systems, there are no long-term operational or maintenance costs associated with this remedy. The estimated cost to complete the original remedy in the March 2009 ROD is \$3,400,000. This cost includes \$2,900,000 for construction of the remedy and a \$500,000 present worth cost for implementation of operation, maintenance, and monitoring activities for the remedy over a 30 year period. However, based on the updated volume of soil that exceeds the protection of groundwater SCOs, the cost to excavate and dispose of this updated volume of soil is estimated at approximately \$8,000,000. In addition, the cost of the original remedy would further increase if updated to reflect inflation since the original estimate.

Therefore the on-site soil screening remedy is more cost effective than the previous remedy.

This final criterion is considered a modifying criterion and is considered after evaluating those

above. It is focused upon after public comments on the ROD amendment have been received.

8. Community Acceptance. Concerns of the community regarding the changes are evaluated. A responsiveness summary has been prepared that describes public comments received and the manner in which the Department will address the concerns raised.

SECTION 9: AMENDED REMEDY

The Department is amending the ROD document for the Lapp Insulator Site. The changes to the selected remedy are summarized in Section 7.3 above.

The elements of the amended remedy listed below are identified as *unchanged*, *modified or new* when compared to the March 2009 remedy:

- 6) 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: (modified to include the major green remediation components).
 - 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; and
 - Integrating the remedy with the end use where possible and encouraging green and sustainable re-development.
- 7) On-site soils which exceed the protection of groundwater SCOs for the site contaminants will be excavated from Area A and Areas C and D (Figure 3). The excavated soils will be mechanically screened to separate stones and debris (nominally greater than 3/8-inches in diameter) from the contaminated soils. The screened material that is separated out and that is not soil will be recycled as fill into the excavations. During the processing of soil through a series of vibrating steel screens/grids, a portion of the contaminants will evaporate from the soil, but will not exceed the Division of Air Resources Guidelines. Real time air monitoring will be conducted in the nearby vicinity of the excavations and screening operations to insure

that concentrations do not exceed protective action levels. A community air monitoring program will also be implemented during remedial activities. If necessary and based on the results of the ambient air monitoring program, the emissions will be collected and subjected to further treatment prior to discharge to the atmosphere.

Approximately 1,500 cubic yards of soil will be excavated from an approximate 11,000 square foot area near Building 13 (near a former machine shop and former solvent storage tank area) to an approximate depth of 12 feet and approximately 10,500 cubic yards of soil will be excavated from an approximate 28,000 square foot area near the southern portion of the site (near former hazardous materials storage pad and southeast fill area) to an approximate depth of 14 feet and treated on-site using a mechanical screening technology. The soil from these two areas exceeds the protection of groundwater SCOs for the site contaminants, as defined by 6 NYCRR Part 375-6.8.

Following excavation from these two areas, the soil will be transported to an on-site staging area located near the southern portion of the facility where the soil will be mechanically separated on-site and subsequently placed in temporary stockpiles for characterization by chemical analysis (see Figure 4). Characterization results will be compared to SCOs to determine if the soil can be reused on-site as excavation backfill (meets the protection of groundwater SCOs); must be disposed of off-site; or must undergo further mechanical screening to remove additional contamination before use as backfill. Soil which meets the requirements of 6 NYCRR 375-6.7(d) for the intended use of the site may be reused on-site. Following treatment, soil that meets the protection of groundwater SCOs will receive a beneficial use determination and will be reused on-site as backfill material. As necessary, additional clean fill meeting the requirements of DER-10, Appendix 5 will be brought in to complete the backfilling of the excavation and establish the designed grades at the site (modified).

8) In-situ chemical oxidation (ISCO) will be implemented to treat contaminants in both overburden and shallow bedrock groundwater. A chemical oxidant will be injected into the subsurface to destroy the contaminants in shallow bedrock near Area A (former solvent storage tank and machine shop area) and in overburden groundwater near Areas C and D (former hazardous materials storage pad and southeast fill area). The method and depth of injection will be determined during the remedial design.

Prior to the full implementation of this technology, laboratory and on-site pilot scale studies will be conducted to more clearly define design parameters. Between the pilot and the full scale implementations, it is estimated that six overburden and six shallow bedrock injection points will be installed. It is estimated that the chemical oxidant will be injected during two separate events over several months (*modified*).

9) Imposition of an institutional control in the form of an environmental easement for the controlled property that: (*modified*).

- requires 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);
- allows the use and development of the controlled property for residential, restricted residential, commercial, and industrial use as defined by Part 375-1.8(g), although land use is subject to local zoning laws;
- restricts 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
- requires compliance with the Department approved Site Management Plan.
- 10) A Site Management Plan is required, which includes the following: (modified)
 - c. 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 4 above.

Engineering Controls: Potential future subslab depressurization systems resulting from the soil vapor intrusion evaluation included in the Site Management Plan below.

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, if any;
- descriptions of the provisions of the environmental easement including any land use and/or groundwater use restrictions;
- a provision for evaluation of the potential for soil vapor intrusion for any future buildings developed on the site along with existing site buildings, including provisions for implementing actions recommended to address exposures related to soil vapor intrusion;
- a provision for evaluation of the potential for soil contamination to exist beneath the site building located adjacent to Excavation Area A, including a provision for the building to serve as a site cover;
- 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.
- d. 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;

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- a schedule of monitoring and frequency of submittals to the Department;
- monitoring for vapor intrusion for any buildings developed on the site, as may be required by the Institutional and Engineering Control Plan discussed above; and
- Continued evaluation of the potential for soil vapor intrusion of existing site buildings, including provisions for implementing actions recommended to address exposures related to soil vapor intrusion.

ROD Amendment March 2014 PAGE 21 FIGURE 1 Site Location

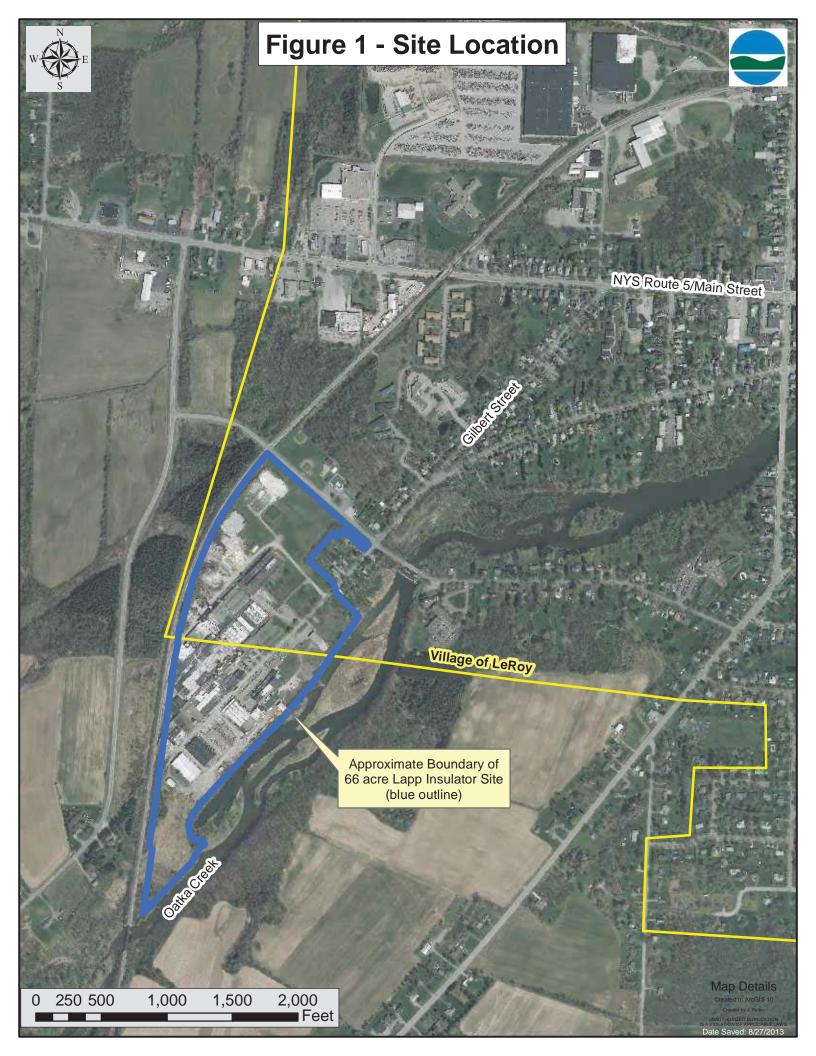


FIGURE 2 Remedial Investigation Areas of Concern and March 2009 ROD Excavation Areas

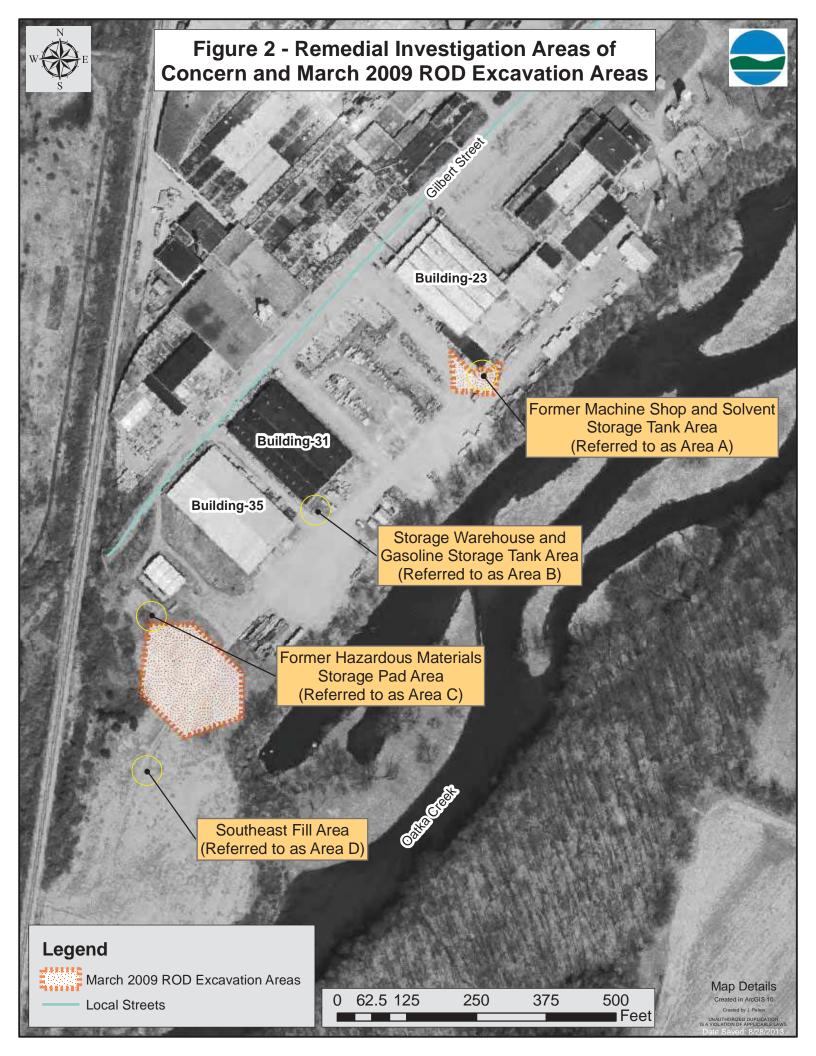


FIGURE 3 Amended Remedy Details

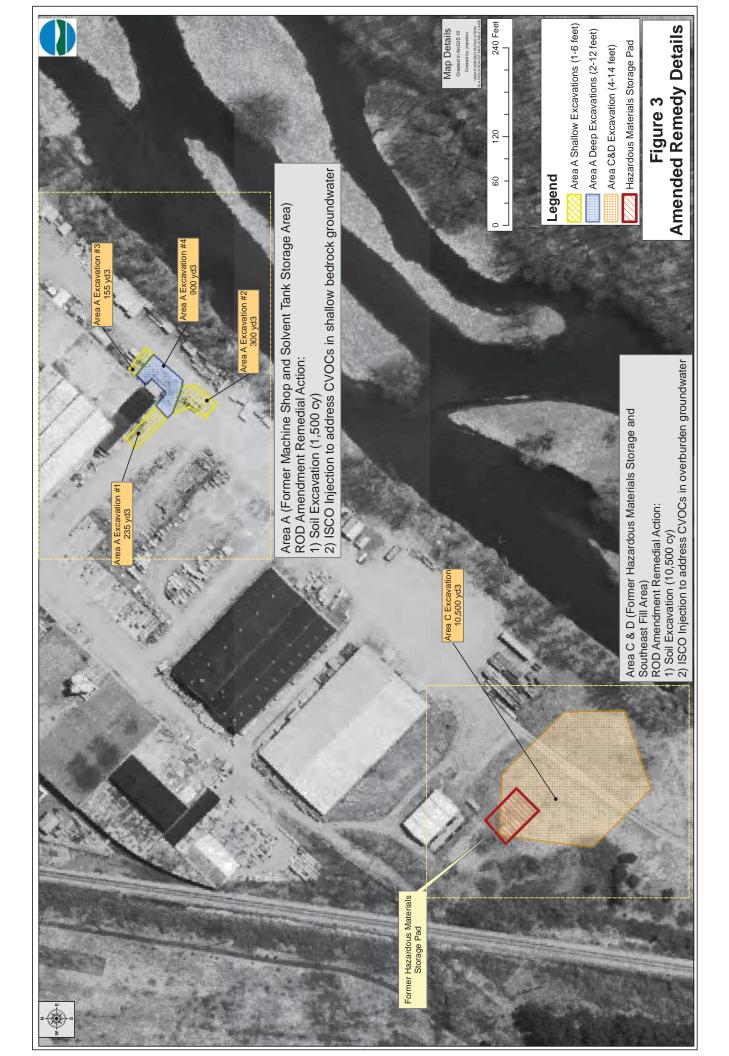


FIGURE 4 Conceptual Illustration of Mechanical Screening Area

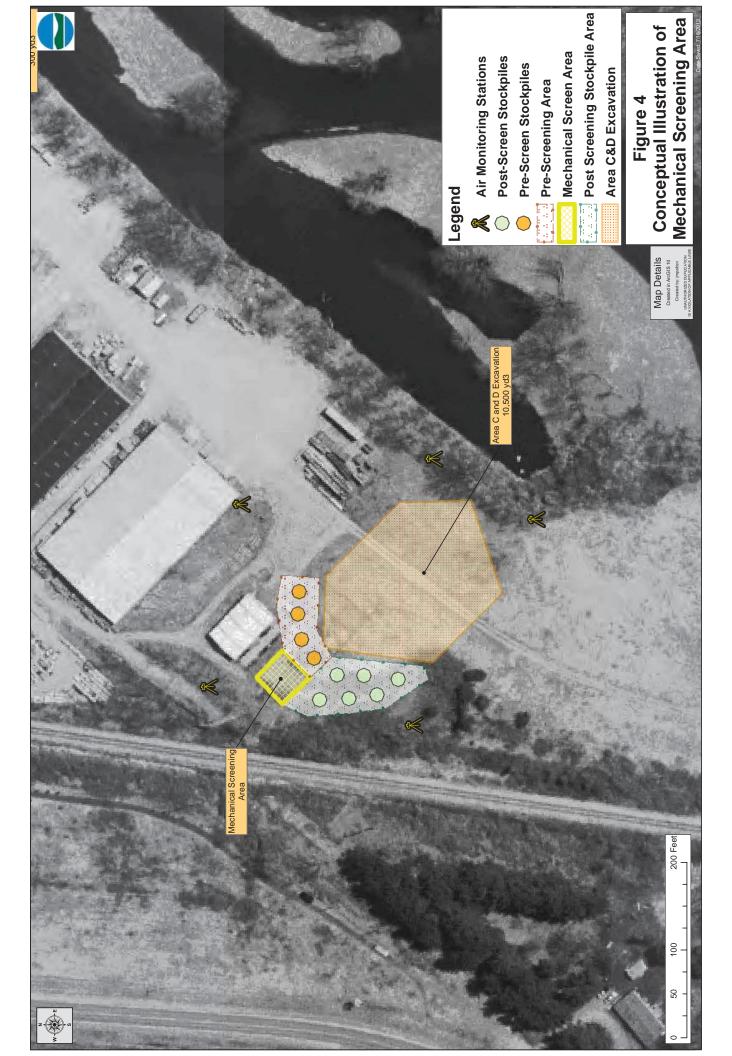


Table 1 Summary of Selected Remedial Actions to Meet Remedial Objectives

Remedial Action Objectives (RAOs)	Selected Remedial Actions
Groun	Groundwater RAOs for Protection of Public Health
	• Achieved by the availability and connection to public water that is provided to this area. Groundwater is not the source of public water on-site.
Prevent ingestion of groundwater with contaminant	 Achieved with an environmental easement and associated site management plan that prohibits groundwater use at the Site.
levels exceeding drinking water standards	 Achieved by developing a Site Management Plan that will include protocols to safely handle groundwater encountered during potential future excavation activities.
	 Achieved by developing a Site Management Plan that includes periodic groundwater monitoring and a contingency for additional treatment to address residual groundwater contamination.
	 Achieved with a Site Management Plan that includes a provision for evaluation of the potential for soil vapor intrusion for any future buildings developed on the site along with existing site buildings, including provisions for implementing actions recommended to address exposures related to soil vapor intrusion.
Prevent contact with, or inhalation of volatiles, from contaminated groundwater	 Achieved with a Site Management Plan that will include protocols for any subsurface work where groundwater could be encountered to protect construction and utility workers.
	 Achieved by continuing to monitor groundwater including installation of additional groundwater monitoring wells to determine extent of plume and to assess contaminant concentrations over time.
Groundw	dwater RAOs for Environmental Protection
	 Achieved by removing soil from Area A (former solvent storage tank and machine shop area) and Areas C and D (former hazardous materials storage and former drywell area) with CVOC contamination at concentrations above the protection of groundwater SCOs.
Restore groundwater aquifer to pre-disposal/pre-release conditions, to the extent practicable	 The remedy will include the injection of in-situ chemical oxidants in shallow bedrock groundwater in Area A and overburden groundwater in Areas C and D to destroy site contaminants.
	 Achieved by developing a Site Management Plan that includes periodic groundwater sampling to monitor the effectiveness of the treatment alternative and monitor downgradient natural attenuation.

Remedial Action Objectives (RAOs)	Selected Remedial Actions
	Achieved by removing soil from Area A (former solvent storage tank and machine shop area) and Areas C and D (former hazardous materials storage and former drywell area) with CVOC contamination at concentrations above the protection of groundwater SCOs.
Remove the source of ground or surface water contamination	The remedy will include the injection of in-situ chemical oxidants in shallow bedrock groundwater in Area A and overburden groundwater in Areas C and D to destroy site contaminants.
	Achieved by developing a Site Management Plan that includes periodic groundwater sampling to monitor the effectiveness of the treatment alternative and monitor downgradient natural attenuation.
	Achieved by removing soil from Area A (former solvent storage tank and machine shop area) and Areas C and D (former hazardous materials storage and former drywell area) with CVOC contamination at concentrations above the protection of groundwater SCOs.
Prevent the discharge of contaminants to surface water	The remedy will include the injection of in-situ chemical oxidants in shallow bedrock groundwater in Area A and overburden groundwater in Areas C and D to destroy site contaminants prior to migration off-site.
	Achieved by developing a Site Management Plan that includes periodic groundwater sampling to monitor the effectiveness of the treatment alternative and monitor downgradient natural attenuation.
Š	Soil RAOs for Protection of Public Health
	Achieved by removing soil from Area A (former solvent storage tank and machine shop area) and Areas C and D (former hazardous materials storage and former drywell area) with CVOC contamination at concentrations above the protection of groundwater SCOs.
Prevent ingestion/direct contact with contaminated soil	Achieved with an environmental easement limiting the use of the site to residential.
	Achieved by developing a Site Management Plan, that will include a soil excavation plan for construction or utility work to protect workers from residual subsurface soil contaminants during potential future excavation activities.
Prevent inhalation of or exposure from contaminants volatilizing from contaminants in soil.	Achieved with a Site Management Plan that includes a provision for evaluation of the potential for soil vapor intrusion for any future buildings developed on the site along with existing site buildings, including provisions for implementing actions recommended to address exposures related to soil vapor intrusion.

Remedial Action Objectives (RAOs)	Selected Remedial Actions
S	Soil RAOs for Environmental Protection
Prevent migration of contaminants that would result in groundwater or surface water contamination	• Achieved by removing soil from Area A (former solvent storage tank and machine shop area) and Areas C and D (former hazardous materials storage and former drywell area) with CVOC contamination at concentrations above the protection of groundwater SCOs.
	 The impacted soil is not located near a surface water source.
Prevent impacts to biota from ingestion/direct contact with soil causing toxicity or impacts from bioaccumulation through the terrestrial food chain	Achieved by removing soil from Area A (former solvent storage tank and machine shop area) and Areas C and D (former hazardous materials storage and former drywell area) with CVOC contamination at concentrations above the protection of groundwater SCOs.
Sedin	Sediment RAOs for Protection of Public Health
Prevent direct contact with contaminated sediments	NA
Prevent surface water contamination which may result in fish advisories	NA
Se	Sediment RAOs for Environmental Protection
Prevent releases of contaminant(s) from sediments that would result in surface water levels in excess of (ambient water quality criteria)	NA
Prevent impacts to biota from ingestion/direct contact with sediments causing toxicity or impacts from bioaccumulation through the marine or aquatic food chain	NA
Restore sediments to pre-release/background conditions to the extent feasible	NA
Surface	ce Water RAOs for Protection of Public Health
Prevent ingestion of water impacted by contaminants	NA

Remedial Action Objectives (RAOs)	Selected Remedial Actions
Prevent contact or inhalation of contaminants from impacted water bodies	NA
Prevent surface water contamination which may result in fish advisories	NA
Surfa	Surface Water RAOs for Environmental Protection
Restore surface water to ambient water quality criteria for the contaminant of concern	NA
Prevent impacts to biota from ingestion/direct contact with surface water causing toxicity and impacts from bioaccumulation through the marine or aquatic food chain	NA
Soil V	Vapor RAOs for Protection of Public Health
Mitigate impacts to public health resulting from existing, or the potential for, soil vapor intrusion into buildings at a site	 Achieved with a Site Management Plan that includes a provision for evaluation of the potential for soil vapor intrusion for any future buildings developed on the site along with existing site buildings, including provisions for implementing actions recommended to address exposures related to soil vapor intrusion.

APPENDIX A

Responsiveness Summary

Lapp Insulator State Superfund Project LeRoy (V), Genesee County Site No. 819017

The Proposed Amendment to the Record of Decision (PAROD) for the Lapp Insulator Site Operable Unit No. 2 was prepared by the New York State Department of Environmental Conservation (the Department) in consultation with the New York State Department of Health (NYSDOH) and was issued to the document repositories on October 21, 2013. The PAROD outlined the amended remedial measure proposed for the contaminated off-site groundwater at the Lapp Insulator Site Operable Unit No. 2.

The release of the PAROD was announced by sending a notice to the public contact list, informing the public of the opportunity to comment on the proposed amendment to the ROD remedy.

A public meeting was held on Wednesday, November 13, 2013, which included a presentation of the original ROD remedy, the circumstances that have led to proposed changes in the February 2002 ROD remedy, as well as a discussion of the proposed amendment to the ROD remedy. The meeting provided an opportunity for citizens to discuss their concerns, ask questions and comment on the proposed amendment to the ROD remedy. The public comment period for the PAROD ended on Friday, December 6, 2013.

This responsiveness summary responds to all questions and comments raised during the public comment period. The following comments were received at that meeting or during the public comment period with the appropriate Department Response.

COMMENT 1: What will happen to screened soil?

RESPONSE 1: After screening, the soil will be placed into stockpiles approximately 250-500 cubic yards in size. Soil samples will be collected from the stockpiles and sent to an off-site laboratory to determine/confirm the remediation goals have been met. The clean, treated soil will eventually be used as backfill material. If the soil does not meet the cleanup criteria it will be sent off-site for disposal.

COMMENT 2: Could TCE or other contaminants potentially travel through the groundwater and leach into the Oatka Creek? It was reported that there are future plans for a canoe and kayak rental business and there will be future swimming in the creek adjacent to the site.

RESPONSE 2: The contaminated soil is considered a source. Once the soil is excavated, the source will have been removed and will no longer contribute to additional groundwater contamination. The injection of chemical oxidants into the groundwater will treat any residual contamination found in the groundwater.

COMMENT 3: Are there contaminants in the groundwater reaching the creek?

RESPONSE 3: During the Remedial Investigation (RI) ten samples were collected upstream, adjacent and downstream of the site. No organic compounds (VOCs, SVOCs, pesticides and PCBs) were detected in surface water at concentrations above water quality standards.

COMMENT 4: How will the remediation be paid for and what is the funding source?

RESPONSE 4: A financial settlement with Lapp Insulator will be used to fund the remediation. If needed, any remaining funding will come from New York State Superfund.

COMMENT 5: Will the USEPA be involved with this project?

RESPONSE 5: No. This is a NYS Superfund project.

COMMENT 6: What is the project schedule?

RESPONSE 6: The Department is anticipating remediation to start this summer. The soonest the remediation would start would be June 2014.

COMMENT 7: At what depths would the ISCO injections occur?

RESPONSE 7: The injection wells will be screened where the contamination has been detected. It may be necessary to conduct additional pre-design investigation/bench scale study. The new information will be used to develop the remedial design. During the design phase is when the specifics of the approach are determined.

COMMENT 8: Who will be the contacts for this project?

RESPONSE 8: Michael Mason is the Department's Project Manager. His contact information is on the Fact Sheet. A contact list will be prepared that will include various municipal officials, the Police and Fire Departments, etc. Prior to remediation a new Fact Sheet will be prepared and distributed which will detail the project schedule and provide contact information for the Department and NYSDOH.

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APPENDIX B

Administrative Record

Lapp Insulator State Superfund Project LeRoy (V), Genesee County Site No. 819017

- 1. Proposed Record of Decision Amendment for the Lapp Insulator site, dated February 2014, prepared by the Department.
- 2. Record of Decision for the Lapp Insulator site, dated March 2009, prepared by the Department.
- 3. Proposed Remedial Action Plan for the Lapp Insulator site, dated February 2009, prepared by the Department.
- 4. Fact Sheet sent February 2009 regarding Proposed Remedial Action Plan.
- 5. Order on Consent, Index No. B8-0548-99-02, between the Department and Lapp Insulator, executed on August 21, 2001.
- 6. Phase I Environmental Due Diligence Examination (ENSR, 1991).
- 7. Phase II Environmental Due Diligence Examination (ENSR, 1992).
- 8. Phase I Site Characterization Report (ENSR, 1995).
- 9. Supplemental Site Soil Characterization (Haley & Aldrich, 1995).
- 10. Remedial Investigation / Feasibility Study Work Plan (Malcolm Pirnie, November 2000).
- 11. Final Remedial Investigation Report (Malcolm Pirnie, September 2005).
- 12. Final FS Report (Malcolm Pirnie, March 2007).
- 13.Fact Sheet Sent September 2001 announcing Consent Order and start of the Remedial Investigation.