DECISION DOCUMENT

37-24 & 37-28 30th Street Redevelopment Site Brownfield Cleanup Program Long Island City, Queens County Site No. C241214 January 2021



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

DECLARATION STATEMENT - DECISION DOCUMENT

37-24 & 37-28 30th Street Redevelopment Site Brownfield Cleanup Program Long Island City, Queens County Site No. C241214 January 2021

Statement of Purpose and Basis

This document presents the remedy for the 37-24 & 37-28 30th Street Redevelopment Site, a 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 37-24 & 37-28 30th Street Redevelopment 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 will include, at
 a minimum, a 20-mil vapor barrier/waterproofing membrane on the foundation to improve

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energy efficiency as an element of construction.

2. In-Situ Chemical Oxidation

In-situ chemical oxidation (ISCO) was implemented to treat the groundwater contaminated with volatile organic compounds (VOCs). A chemical oxidant was injected into the subsurface to destroy the contaminants across the site. The Department will determine if additional injections are necessary.

Monitoring will be conducted for contaminants of concern upgradient and downgradient of the site to determine if the contaminants of concern (COCs) are reduced to below groundwater standards or asymptotic levels. This level of groundwater treatment must be achieved within 5 years of the date of the Certificate of Completion or the remedy would result in a Track 2 Restricted Residential cleanup.

3. Vapor Mitigation

Any on-site buildings will be required to have a sub-slab depressurization system, or other acceptable measures, to mitigate the migration of vapors into the building from soil and/or groundwater. The system and any vapor intrusion monitoring must no longer be needed within 5 years of the date of the Certificate of Completion, or the remedy would result in a Track 2 Restricted Residential cleanup

4. Local Institutional Controls

If no EE or SMP is needed to achieve soil, or soil vapor remedial action objectives, then the following local use restriction will be relied upon to prevent ingestion of groundwater: Article 141 of the NYCDOHMH code, which prohibits potable use of groundwater without prior approval.

Contingent Remedy Elements (Paragraphs 5 and 6)

In the event that Track 1 unrestricted use is not achieved, including achievement of groundwater and soil vapor remedial objectives, the following contingent remedial elements will be required, and the remedy will achieve a Track 2 Restricted Residential cleanup. The Track 2 cleanup would require an Environmental Easement and Site Management Plan.

5. 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 NYCDOHMH; and
- require compliance with the Department approved Site Management Plan.

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

1. 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 is discussed in Paragraph 5 above.

Engineering Controls: The in-situ chemical oxidation and the sub-slab depressurization system are discussed in Paragraphs 2 and 3, respectively.

This plan includes, but may not be limited to:

- descriptions of the provisions of the environmental easement including any land use, and groundwater:
- 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.
- a Monitoring Plan to assess the performance and effectiveness of the remedy. The plan includes, but may not be limited to:
- monitoring of groundwater and soil vapor to assess the performance and effectiveness of the remedy;
- a schedule of monitoring and frequency of submittals to the Department;
- 3. an Operation and Maintenance (O&M) Plan to ensure continued operation, maintenance, optimization, monitoring, inspection, and reporting of any mechanical or physical components of the remedy. The plan includes, but is not limited to:
- procedures for operating and maintaining the remedy;
- compliance monitoring of treatment systems to ensure proper O&M as well as providing the data for any necessary permit or permit equivalent reporting;
- maintaining site access controls and Department notification; and
- providing the Department access to the site and O&M records.

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.

Date	Gerard Burke, Director
	Remedial Bureau B

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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, the redevelopment or reuse of which may be complicated by the presence or potential presence of a contaminant.

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 repositories:

DECInfo Locator - Web Application https://gisservices.dec.ny.gov/gis/dil/index.html?rs=C241214

Queens Library - Long Island City 37-44 21st Street Long Island City, NY 11101 Phone: (718) 752-3700

Queens Community Board 1 45-02 Ditmars Boulevard, LL Suite 1025

Astoria, NY 11105 Phone: (718) 626-1021

Receive Site Citizen Participation Information By Email

Please note that the Department's Division of Environmental Remediation (DER) is "going paperless" relative to citizen participation information. The ultimate goal is to distribute citizen participation information about contaminated sites electronically by way of county email listservs. Information will be distributed for all sites that are being investigated and cleaned up in a particular county under the State Superfund Program, Environmental Restoration Program, Brownfield Cleanup Program and Resource Conservation and Recovery Act Program. We encourage the public to sign up for one or more county listservs at http://www.dec.ny.gov/chemical/61092.html

SECTION 3: SITE DESCRIPTION AND HISTORY

Location: The site is located at 37-24, 37-26 and 37-28 30th Street in the Long Island City section of Queens, NY and is identified as Block 371 and Tax Lots 33 and 34 on the New York City Tax Map. The 0.368-acre site is bounded by a 2-story office building to the north, auto repair shop and two residential houses to the south, 30th Road to the east, and Old Ridge Road to the west.

Site Features: The site formerly contained a 1-story structure with partial 2-story section and partial basement. The building was demolished to facilitate soil excavation as part of an interim remedial measure (IRM.)

Current Zoning and Land Use: The site is located within a M1-2/R6A zoning district. M1-2 districts are often buffers between industrial zoned districts and adjacent residential or commercial districts. M1-2 districts typically include light to medium industrial uses, such as woodworking shops, repair shops, and wholesale service and storage facilities. R6A-zoned buildings are designed to be compatible with older buildings found in medium-density neighborhoods.

The site is currently vacant. It is located within a primarily mixed use, industrial/warehouse, commercial, and residential area of Queens.

The future redevelopment of the site consists of two seven-story residential buildings with 33 dwelling units and 17 parking spaces. The proposed building slabs and parking areas will cover the entire areal extent of the site.

Past Use of the Site: Historic Sanborn Maps show that the site was occupied by a residential building from at least 1898 until it was replaced with a 1- and 2-story commercial structure with partial basement on Tax Lot 34 constructed circa 1936. The 1-story commercial structure located on Tax Lot 33 was constructed circa 1947. Historic use of the site includes manufacturing metal products and plastics (approx. 1947-1970), carpet cleaning (approx. 1967-1970), printing (approx. 1983-1991), dry cleaning (approx. 1996 to 2018) and auto repair (approx. 2000 to 2018).

Site Geology and Hydrogeology: The hydrogeology beneath the site is generally characterized as the Upper Glacial Aquifer, which consists of typical morainal materials, including a mixture of

sand and gravel. Historic fill material, consisting of coal ash, wood ash, municipal solid waste incinerator ash, construction and demolition debris, dredged sediments, railroad ballast, refuse and land clearing debris, was observed on-site at a depth of 2 feet to 14 feet below grade at the site.

Based on previous investigative reports and regional information, groundwater generally flows in an east to west direction beneath the site. Depth to groundwater ranges from 26 feet to 28 feet below grade at the site.

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 that restrict the use of the site to restricted-residential use (which allows for commercial use and industrial use) as described in Part 375-1.8(g) were 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 Applicants under the Brownfield Cleanup Agreement are Volunteers. The Applicants do not have an obligation to address off-site contamination. However, the Department has determined that this site poses a significant threat to human health and the environment and there are off-site impacts that require remedial activities; accordingly, enforcement actions are necessary.

The Department will seek to identify any parties (other than the Volunteers) known or suspected to be responsible for contamination at or emanating from the site, referred to as Potentially Responsible Parties (PRPs). The Department will bring an enforcement action against the PRPs. If an enforcement action cannot be brought or does not result in the initiation of a remedial program by any PRPs, the Department will evaluate the off-site contamination for action under the State Superfund. The PRPs are subject to legal actions by the State for recovery of all response costs the State incurs or has incurred.

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 contaminant(s) of concern identified at this site is/are:

tetrachloroethene (PCE) mercury trichloroethene (TCE)

The contaminants of concern exceed the applicable SCGs for:

- soil
- groundwater
- soil vapor intrusion

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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.

The following IRM will be completed at this site based on conditions observed during the RI.

IRM Soil Removal

In September 2019, the Department approved an IRM to demolish the on-site building and excavate soil to depths ranging from 10-15 feet across the site to address mercury and historic fill, for off-site disposal. Post-excavation samples will be taken to determine whether the remaining soil meets Unrestricted Soil Cleanup Objectives (USCOs). Implementation of the IRM began in September 2020, and a Construction Completion Report (CCR) is expected in February 2021.

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), and pesticides. Groundwater was also analyzed for emerging contaminants. Soil vapor samples were analyzed for VOCs. Based upon investigations conducted to date, the primary contaminants of concern for the site include tetrachloroethene (PCE), trichloroethene (TCE), and mercury. Both PCE and TCE were identified in the groundwater and soil vapor.

Soil - Exceedances of the unrestricted use soil cleanup objectives (UUSCOs) include mercury with exceedances ranging from 0.23 to 0.43 parts per million (ppm) compared to the UUSCO of 0.18 ppm. No VOCs, SVOCs, or PCBs were detected above UUSCOs. Data does not indicate any offsite impacts in soil related to this site.

Groundwater - VOCs were detected above groundwater standards at all groundwater locations. PCE was detected at all six monitoring well locations and at a maximum of 460 parts per billion (ppb) compared to the standard of 5 parts per billion (ppb) and TCE was detected at one monitoring well location at a concentration of 5.2 ppb compared to the standard of 5 ppb. Emerging contaminants were sampled at two locations. The maximum perfluorooctanoic acid (PFOA)concentration was detected at 46.5 parts per trillion (ppt), the maximum perfluorooctane sulfonate (PFOS) concentration was detected at 10.7 ppt, compared to their maximum contamination level (MCL) of 10 parts per trillion (ppt). Data does not indicate any off-site impacts in groundwater related to this site.

Soil Vapor - PCE was detected in all seven soil vapor samples with PCE at a maximum concentration of 28,000 micrograms per cubic meters (ug/m3). TCE was detected in six of the samples at a maximum concentration of 390 ug/m3. Several petroleum-related compounds were also detected in soil vapor across the site. Data indicates there is potential for 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*.

Direct contact with contaminants in the soil is unlikely because the majority of the site is covered with buildings and pavement. Contaminated groundwater at the site is not used for drinking or other purposes and the site is served by a public water supply that obtains water from a different source not affected by this contamination. Volatile organic compounds in the soil vapor (air spaces within the soil) may move into 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. The potential exists for people to inhale site contaminants in indoor air due to soil vapor intrusion in any future onsite building development and occupancy. Furthermore, environmental sampling indicates soil vapor intrusion may be a concern for offsite 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 ground water aquifer to pre-disposal/pre-release conditions, to the extent practicable.
- Remove the source of ground or surface water 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 Soil Excavation, In-Situ Chemical Oxidation and Subslab Depressurization System remedy.

The elements of the selected remedy, as shown in Figures 2 and 3, 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 will include, at a minimum, a 20-mil vapor barrier/waterproofing membrane on the foundation to improve energy efficiency as an element of construction.

2. In-Situ Chemical Oxidation

In-situ chemical oxidation (ISCO) was implemented to treat the groundwater contaminated with volatile organic compounds (VOCs). A chemical oxidant was injected into the subsurface to destroy the contaminants across the site. The Department will determine if additional injections are necessary.

Monitoring will be conducted for contaminants of concern upgradient and downgradient of the site to determine if the contaminants of concern (COCs) are reduced to below groundwater standards or asymptotic levels. This level of groundwater treatment must be achieved within 5 years of the date of the Certificate of Completion or the remedy would result in a Track 2 Restricted Residential cleanup.

3. Vapor Mitigation

Any on-site buildings will be required to have a sub-slab depressurization system, or other acceptable measures, to mitigate the migration of vapors into the building from soil and/or groundwater. The system and any vapor intrusion monitoring must no longer be needed within 5 years of the date of the Certificate of Completion, or the remedy would result in a Track 2 Restricted Residential cleanup

4. Local Institutional Controls

If no EE or SMP is needed to achieve soil, or soil vapor remedial action objectives, then the following local use restriction will be relied upon to prevent ingestion of groundwater: Article 141 of the NYCDOHMH code, which prohibits potable use of groundwater without prior approval.

Contingent Remedy Elements (Paragraphs 5 and 6)

In the event that Track 1 unrestricted use is not achieved, including achievement of groundwater and soil vapor remedial objectives, the following contingent remedial elements will be required, and the remedy will achieve a Track 2 Restricted Residential cleanup. The Track 2 cleanup would require an Environmental Easement and Site Management Plan.

5. 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 NYCDOHMH; and
- require compliance with the Department approved Site Management Plan.

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

an Institutional and Engineering Control Plan that identifies all use restrictions and 1.

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Institutional Controls: The Environmental Easement is discussed in Paragraph 5 above.

Engineering Controls: The in-situ chemical oxidation and the sub-slab depressurization system are discussed in Paragraphs 2 and 3, respectively.

This plan includes, but may not be limited to:

- descriptions of the provisions of the environmental easement including any land use, and groundwater;
- 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.
- 2. a Monitoring Plan to assess the performance and effectiveness of the remedy. The plan includes, but may not be limited to:
- monitoring of groundwater and soil vapor to assess the performance and effectiveness of the remedy;
- a schedule of monitoring and frequency of submittals to the Department;
- 3. an Operation and Maintenance (O&M) Plan to ensure continued operation, maintenance, optimization, monitoring, inspection, and reporting of any mechanical or physical components of the remedy. The plan includes, but is not limited to:
- procedures for operating and maintaining the remedy;
- compliance monitoring of treatment systems to ensure proper O&M as well as providing the data for any necessary permit or permit equivalent reporting;
- maintaining site access controls and Department notification; and
- providing the Department access to the site and O&M records.

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