Garden Street Apartments Brownfield Cleanup Program New Rochelle, Westchester County Site No. C360188 December 2020



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

# **DECLARATION STATEMENT - DECISION DOCUMENT**

Garden St Apartments Brownfield Cleanup Program New Rochelle, Westchester County Site No. C360188 December 2020

#### **Statement of Purpose and Basis**

This document presents the remedy for the Garden St Apartments 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 Garden St Apartments 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

- 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. Excavation

Excavation and off-site disposal of all on-site soils which exceed unrestricted SCOs as defined by 6 NYCRR Part 375-6.8. Approximately 15,800 cubic yards of contaminated soil will be removed from the site.

#### 3. Backfill

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

#### 4.Local Institutional Controls

If no Environmental Easement (EE) or Site Management Plan (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: Chapter 873, article VII of the Laws of Westchester County which prohibits potable use of groundwater without prior approval.

#### 5. Conditional Track 1

The intent of the remedy is to achieve a Track 1 unrestricted use; therefore, no environmental easement or site management plan is anticipated. If the soil vapor intrusion (SVI) evaluation is not completed prior to completion of the Final Engineering Report, then a Site Management Plan (SMP) and Environmental Easement (EE) will be required to secure the SVI evaluation and implement actions as needed, if any. If a mitigation or monitoring action is needed, a Track 1 cleanup can only be achieved if the mitigation system or other required action is no longer needed within 5 years of the date of the Certificate of Completion.

In the event that Track 1 unrestricted use is not achieved because the remedial objectives for soil vapor have not been achieved, the following contingent remedial elements will be required, and the remedy will achieve a Track 2 residential cleanup.

5a. Engineering and Institutional Controls

Imposition of an institutional control in the form of an environmental easement and a Site Management Plan, as described below, will be required. The remedy will achieve a Track 2 residential cleanup at a minimum and will include an environmental easement, and site management plan as described below.

#### 5b. Institutional Control

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 residential, restrictedresidential, commercial, or industrial use as defined by Part 375-1.8(g), although land use is subject to local zoning laws;
- restrict the use of groundwater as a source of potable or process water, without necessary water quality treatment as determined by the NYSDOH or County DOH (Chapter 873, Article VII of the Laws of Westchester County); and
- require compliance with the Department approved Site Management Plan.

5c. Site Management Plan

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

i. 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 5b above.

Engineering Controls: Any engineering control that may be required following the five-year conditional Track 1 evaluation period (e.g. sub-slab depressurization system).

This plan includes, but may not be limited to:

- descriptions of the provisions of the environmental easement including any land use, and groundwater use restrictions;
- a provision for evaluation of the potential for soil vapor intrusion for any buildings on the site, including provision for implementing actions recommended to address exposures related to soil vapor intrusion;
- provisions for the management and inspection of the identified engineering controls;
- maintaining site access controls and Department notification; and
- the steps necessary for the periodic reviews and certification of the institutional and/or engineering controls.
- ii. a Monitoring Plan to assess the performance and effectiveness of the remedy. The plan includes, but may not be limited to:
  - a schedule of monitoring and frequency of submittals to the Department; and
  - monitoring for vapor intrusion for any buildings on the site, as may be required by the Institutional and Engineering Control Plan discussed above.
- iii. an Operation and Maintenance (O&M) Plan to ensure continued operation, maintenance, inspection, and reporting of any mechanical or physical components of the vapor mitigation system(s), if any. The plan includes, but is not limited to:
  - procedures for operating and maintaining the system(s); and
  - compliance inspection of the system(s) to ensure proper O&M as well as providing the data for any necessary reporting.

- 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.

12/21/20

Date

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Janet Blown, Director Remedial Bureau C

# **DECISION DOCUMENT**

Garden St Apartments New Rochelle, Westchester County Site No. C360188 December 2020

## 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: <u>CITIZEN PARTICIPATION</u>

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

DECInfo Locator - Web Application https://gisservices.dec.ny.gov/gis/dil/index.html?rs=C360188

New Rochelle Public Library 1 Library Plaza New Rochelle, NY 10801 Phone: (914) 632-7878

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

# SECTION 3: SITE DESCRIPTION AND HISTORY

Site Location: The site is located at 11 Garden Street in a commercial and residential area of the City of New Rochelle. The site is a triangular shaped parcel approximately 0.9-acres in size. The site is bounded to the north by Garden Street, to the west by mixed commercial/residential structures and to the south and east by the Hartford Railroad.

Site Features: The site's more recent use was as a parking lot. The site is currently vacant, containing only an asphalt paved surface. The site is elevated above the adjacent railway to south of the site.

Current Zoning and Land Use: The site is currently located in a Downtown Mixed-Use Urban Renewal District. The surrounding properties include various vendors and retailers (mixed commercial/residential use) and the Amtrak and Metro-North train routes.

Past Use of the Site: The first known business on the site was a marble works in 1887. By 1896, a dwelling and barn were constructed on the central portions of the site. Between 1896 and 1903, the marble works was replaced with a three-story commercial building that included a saloon. Between 1903 and 1911, a brick oven baking company was constructed on the south-central portion of the site. Between 1911 and 1931, the site was substantially reconfigured with the addition of a cabinet shop, automotive shop and garages as well as repurposing a dwelling to a blacksmith shop and the bakery to a wood working facility. In addition, a structure labelled "oils" and another circular unspecified structure were located near the woodworking facility on a 1931 Sanborn map depiction of the site. By 1951, the site was cleared of all but two structures; the former saloon and blacksmith shop had each been extended east and repurposed as a paint store and automotive facility, respectively. Between 1996 and 2003, all remaining site structures were demolished. The City of New Rochelle acquired the site in 1998 and has operated a municipal parking lot at the site since the time of acquisition.

Site Geology and Hydrogeology: On-site soils consist of medium to coarse-grained sand and gravel fill ranging from 7-18 feet below grade surface (bgs) underlain by native soils consisting of silty sand extending to depths of 26-40 feet bgs. Weathered bedrock is present beneath native soils. Groundwater is present within native soils at depths ranging from 18.5 to 24.5 feet bgs. Groundwater flow direction beneath the site is to the north towards the Cottage-Garden Auto Repair BCP (C360180) 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, an alternative which allows for unrestricted use of the site was evaluated.

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

# SECTION 5: ENFORCEMENT STATUS

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

# SECTION 6: SITE CONTAMINATION

# 6.1: <u>Summary of the Remedial Investigation</u>

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 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: <u>http://www.dec.ny.gov/regulations/61794.html</u>

# 6.1.2: <u>RI Results</u>

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)	zinc
copper	4,4'-DDT
lead	chromium (hexavalent)
mercury	benzo(b)fluoranthene
nickel	indeno(1,2,3-cd)pyrene

The contaminant(s) of concern exceed the applicable SCGs for:

- soil - soil vapor intrusion

#### 6.2: Interim Remedial Measures

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

There were no IRMs performed at this site during the RI.

# 6.3: <u>Summary of Environmental Assessment</u>

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 samples were analyzed for volatile organic compounds (VOCs), semivolatile organic compounds (SVOCs), polychlorinated biphenyls (PCBs), metals, total petroleum hydrocarbons (TPH), hexavalent chromium, and the emerging contaminants per- and polyfluoroalkyl substances (PFAS) and 1,4-dioxane. Soil vapor samples were analyzed for VOCs. Based on investigations conducted to date, the primary contaminants of concern include SVOCs, metals and pesticides in soil, and VOCs in soil vapor.

Soil: Surface soil samples to assess direct human exposure were not collected during the RI due to the lack of exposed surface soil (presence of an asphalt parking lot) within the site boundary. A total of 47 subsurface soil samples were collected from 11 locations across the site to document soil conditions. Soil samples were collected at depths ranging from 1 to 20 feet below grade.

Two SVOCs, six metals, and one pesticide (4,4'-DDT) were detected in soil samples collected during the RI at concentrations that exceeded unrestricted soil cleanup objectives (USCOs). Compounds were detected at the following maximum concentrations: benzo(b)fluoranthene (1.2 parts per million (ppm) vs a USCO of 1 ppm), indeno(1,2,3-cd)pyrene (0.56 ppm vs a USCO of 0.5 ppm), copper (61 ppm vs a USCO of 50 ppm), lead (878 ppm vs a USCO of 63 ppm), mercury (0.36 ppm vs a USCO of 0.18 ppm), nickel (60 ppm vs a USCO of 30 ppm), zinc (1,370 ppm vs a USCO of 109 ppm), hexavalent chromium (1.24 ppm vs a USCO of 1 ppm), and 4,4'-DDT (0.00409 ppm vs a USCO of 0.0033 ppm). PFAS compounds including Perfluorooctanoic acid (PFOA) and perfluorooctanesulfonic acid (PFOS) were detected below their soil guidance values of 0.66 parts per billion (ppb) and 0.88 ppb respectively. Soil contamination is not expected to migrate off-site.

Groundwater: Groundwater samples were collected from four monitoring wells installed at the site as part of the RI. The metals iron, magnesium, manganese, and sodium were detected in groundwater samples in exceedance of groundwater standards. These metals are naturally occurring a component of road salt, and are likely not associated with contamination from the site.

Perfluorooctanoic acid (PFOA) and perfluorooctanesulfonic acid (PFOS) were detected in groundwater samples collected from the site at concentrations up to 55 and 23 parts per trillion (ppt) respectively, exceeding the 10 ppt maximum contaminant level (MCL) for each. Detectable levels of PFAS below their soil guidance values in on-site soils indicate the site is not contributing PFAS to groundwater. The levels observed in the on-site groundwater are consistent with the general conditions for PFAS in groundwater in the New Rochelle area. Additionally, the area is served by municipal water.

Soil Vapor: Soil vapor samples were collected at seven locations throughout the site. Soil vapor samples were collected from a depth of 5 ft at three locations and from a depth of 15 ft at four locations. The chlorinated VOC (CVOC) tetrachloroethene (PCE) was detected in four soil vapor samples and the CVOC trichloroethene (TCE) was detected in one soil vapor sample. The maximum concentration of PCE detected was 17.6 micrograms per meter cubed (ug/m^3). TCE was detected in one soil vapor sample at a concentration of 12.7 ug/m^3. No on-site source was

identified for these soil vapor constituents in the soil or groundwater. Across Garden Street to the north of this site is the BCP site Cottage-Garden Auto Repair (C360180). The RI for the Cottage-Garden Auto Repair site documented impacts from CVOCs to groundwater and soil vapor; however, the Cottage-Garden Auto Repair site is hydraulically down gradient of this site. CVOC concentrations in the soil vapor at the Cottage-Garden Auto Repair site border with Garden Street were in the range of hundreds of ug/m3 as compared to the Garden St Apartments site border with Garden Street had concentrations in the range of 12-17 ug/m^3.Detections of CVOCs at this site may be a result of migration from the off-site BCP site to the north.

# 6.4: <u>Summary of Human Exposure Pathways</u>

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

Access to the site is unrestricted, however, the public is not expected to come in contact with contaminated soil or groundwater unless they dig below the asphalt surface. People are not drinking the contaminated groundwater because the area is served by a public water supply that is not contaminated by the site. Volatile organic compounds in soil vapor (air spaces within the soil), 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. Because there is no onsite building, inhalation of site contaminants in indoor air due to soil vapor intrusion does not represent a concern for the site in its current condition. However, the potential exists for the inhalation of site contaminants due to soil vapor intrusion for any future onsite development. Sampling indicates soil vapor intrusion is not a concern for offsite buildings.

#### 6.5: <u>Summary of the Remediation Objectives</u>

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.

#### <u>Soil</u>

#### **RAOs for Public Health Protection**

Prevent ingestion/direct contact with contaminated soil.

## **RAOs for Environmental Protection**

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

# <u>Soil Vapor</u>

# **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 elements of the selected remedy, as shown in Figure 2, are as follows:

## 1. Remedial Design

- 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. Excavation

Excavation and off-site disposal of all on-site soils which exceed unrestricted SCOs as defined by 6 NYCRR Part 375-6.8. Approximately 15,800 cubic yards of contaminated soil will be removed from the site.

# 3. Backfill

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

#### 4. Local Institutional Controls

If no Environmental Easement (EE) or Site Management Plan (SMP) is needed to achieve soil, groundwater or soil vapor remedial action objectives, then the following local use restriction will be relied upon to prevent ingestion of groundwater: Chapter 873, article VII of the Laws of Westchester County which prohibits potable use of groundwater without prior approval.

#### 5. Conditional Track 1

The intent of the remedy is to achieve a Track 1 unrestricted use; therefore, no environmental easement or site management plan is anticipated. If the soil vapor intrusion (SVI) evaluation is not completed prior to completion of the Final Engineering Report, then a Site Management Plan (SMP) and Environmental Easement (EE) will be required to secure the SVI evaluation and implement actions as needed, if any. If a mitigation or monitoring action is needed, a Track 1 cleanup can only be achieved if the mitigation system or other required action is no longer needed within 5 years of the date of the Certificate of Completion.

In the event that Track 1 unrestricted use is not achieved because the remedial objectives for soil vapor have not been achieved, the following contingent remedial elements will be required, and the remedy will achieve a Track 2 residential cleanup.

#### 5a. Engineering and Institutional Controls

Imposition of an institutional control in the form of an environmental easement and a Site Management Plan, as described below, will be required. The remedy will achieve a Track 2 residential cleanup at a minimum and will include an environmental easement, and site management plan as described below.

#### 5b. Institutional Control

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 residential, restrictedresidential, commercial, or industrial use as defined by Part 375-1.8(g), although land use is subject to local zoning laws;
- restrict the use of groundwater as a source of potable or process water, without necessary water quality treatment as determined by the NYSDOH or County DOH (Chapter 873, Article VII of the Laws of Westchester County); and

• require compliance with the Department approved Site Management Plan.

5c. Site Management Plan

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

i. 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 5b above.

Engineering Controls: Any engineering control that may be required following the five-year conditional Track 1 evaluation period (e.g. sub-slab depressurization system).

This plan includes, but may not be limited to:

- descriptions of the provisions of the environmental easement including any land use, and groundwater use restrictions;
- a provision for evaluation of the potential for soil vapor intrusion for any buildings on the site, including provision for implementing actions recommended to address exposures related to soil vapor intrusion;
- provisions for the management and inspection of the identified engineering controls;
- maintaining site access controls and Department notification; and
- the steps necessary for the periodic reviews and certification of the institutional and/or engineering controls.
- ii. a Monitoring Plan to assess the performance and effectiveness of the remedy. The plan includes, but may not be limited to:
  - a schedule of monitoring and frequency of submittals to the Department; and
  - monitoring for vapor intrusion for any buildings on the site, as may be required by the Institutional and Engineering Control Plan discussed above.
- iii. an Operation and Maintenance (O&M) Plan to ensure continued operation, maintenance, inspection, and reporting of any mechanical or physical components of the vapor mitigation system(s), if any. The plan includes, but is not limited to:
  - procedures for operating and maintaining the system(s); and
  - compliance inspection of the system(s) to ensure proper O&M as well as providing the data for any necessary reporting.
  - maintaining site access controls and Department notification; and
  - providing the Department access to the site and O&M records.



