# **DECISION DOCUMENT**

Hope Fire Engine Co. Site Brownfield Cleanup Program White Plains, Westchester County Site No. C360219 November 2022



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

## **DECLARATION STATEMENT - DECISION DOCUMENT**

Hope Fire Engine Co. Site Brownfield Cleanup Program White Plains, Westchester County Site No. C360219 November 2022

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

This document presents the remedy for the Hope Fire Engine Co. 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 Hope Fire Engine Co. Site and the public's input to the proposed remedy presented by the Department.

### **Description of Selected Remedy**

During the course of the investigation certain actions, known as interim remedial measures (IRMs), were undertaken at the above referenced site. An IRM is conducted at a site when a source of contamination or exposure pathway can be effectively addressed before completion of the remedial investigation (RI) or alternatives analysis (AA). The IRM undertaken at this site is discussed in Section 6.2.

Based on the implementation of the IRM(s), the findings of the investigation of this site indicate that the site no longer poses a threat to human health or the environment; therefore, No Further Action is the selected remedy. The remedy may include implementation of any prescribed institutional controls/engineering controls (ICs/ECs) that have been identified as being part of the proposed remedy for the site.

#### **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.

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Janet Brown, Director
Remedial Bureau C

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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 resulted in threats to public health and the environment that were addressed by actions known as interim remedial measures (IRMs), which were undertaken at the site. An IRM is conducted at a site when a source of contamination or exposure pathway can be effectively addressed before completion of the remedial investigation (RI) or alternative analysis (AA). The IRM undertaken at this site is discussed in Section 6.2.

Based on the implementation of the IRM, the findings of the investigation of this site indicate that the site no longer poses a threat to human health or the environment. The IRM conducted at the site attained the remediation objectives identified for this site, which are presented in Section 6.5, for the protection of public health and the environment. No Further Action is the selected remedy. A No Further Action remedy may include implementation of any prescribed controls that have been identified as being part of the remedy for the site. This DD identifies the IRM conducted and discusses the basis for No Further Action.

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

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

## **SECTION 2: CITIZEN PARTICIPATION**

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

White Plains Public Library 100 Martine Avenue White Plains, NY 10601 Phone: 914-422-1400

DECInfo Locator – Web application/on-line repository: https://www.dec.ny.gov/data/DecDocs/C360219

### **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, Voluntary Cleanup Program, and Resource Conservation and Recovery Act Program. We encourage the public to sign up for one or more county listservs at <a href="http://www.dec.ny.gov/chemical/61092.html">http://www.dec.ny.gov/chemical/61092.html</a>

## **SECTION 3: SITE DESCRIPTION AND HISTORY**

Site Location: The site is located at 25 North Lexington Avenue (formerly 50 Hamilton Avenue and a portion of (p/o) 85 North Lexington Avenue), in the City of White Plains, Westchester County, New York, in an area of urban development. The site comprises 1.4632 acres located on the west side of North Lexington Avenue, north of Hamilton Avenue and east of Ferris Avenue, and is identified on the Westchester County tax maps as a p/o new Tax Parcel Identification No. 125.66-5-2.1 (formerly 125.66-5-2 [lot 2], and p/o 125.66-5-1 [lot 1]).

Site Features: The site is currently undergoing construction of a multi-use residential/commercial building. The closest water body is the Bronx River, located 0.118 miles west of the site. The site is not located in a flood zone, and no designated wetlands were identified.

Current Zoning and Land Use: The site is currently located in the CB 4 District, which allows commercial and some residential uses. The CB 4 designation also permits hotels. The New Street right-of-way and Terrace Parking Garage are located north of the site. North Lexington Avenue and St. John the Evangelist Roman Catholic Church are located east of the site, across North Lexington Avenue. Hamilton Avenue and multiple commercial buildings border the southern portion of the Site. Ferris Avenue, a Greyhound Bus Station, and the White Plains Metro North Railroad Station are located west of the site. The rail line is located 0.082 miles west of the site. The closest residential area is an apartment building located approximately 0.10 miles from the site, to the south-southwest.

Past Use of the Site: Prior to 1885, the site was utilized as farmland and a freight yard. Between 1885 and 1888, the site was improved with dwellings, a rail line, and several retail establishments. Between 1889 and 1911 the site was further developed as lumber and coal storage yard, a railroad round house, and a fire station, known as the Hope Fire Engine Co. of

DECISION DOCUMENT Hope Fire Engine Co. Site, Site No. C360219 White Plains. In 1930, former lot 1 contained a UST associated with the fire station. The former lot 2 portion of the site was occupied by two service stations from 1937 through 1961. Railroad operations continued on lot 1 until the mid-1960's when the site was taken over by urban renewal agencies and the structures on the railroad portion of the lot were razed and a parking lot was constructed. The fire station remained on site until 1987. All on-site buildings were demolished by 1994 and the site was fully developed into a parking lot in 2006. The parking lot was demolished in 2022, in preparation for construction of a multi-use residential/commercial building.

The long history of fire station use, and the presence of service stations may have contributed to contamination on the site. The presence of the railroad storage yard and lumber yard may have also contributed to contamination at the site. Contaminants associated with railroad operations include residual ash and cinders, chemically treated railroad ties, and petroleum related compounds. Polyaromatic hydrocarbon (PAH) contaminated soils detected on the site may be attributed to the previous railroad storage and lumber yard.

Site Geology and Hydrogeology: According to the United States Geological Survey's White Plains, New York 7.5-minute topographic quadrangle (1967), the site is located at an elevation of 200-210 feet above mean sea level (ft amsl). The site is located in a river valley and slopes in the south-southwest direction towards the Bronx River. A steep decline is present along the eastern and northern site boundaries. During investigations of the site, groundwater was encountered at depths ranging from approximately five to 30 feet below grade (ft bg). Groundwater flow direction is to the southwest.

Based on environmental investigations conducted to date, the subsurface geology generally consists of fill material to 12 ft bg, underlain by native sand deposits consisting of loose to dense sand with varying amounts of silt to depths of 55 to 88 ft bg, followed by gneissic bedrock.

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

#### **SECTION 5: ENFORCEMENT STATUS**

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

#### **SECTION 6: SITE CONTAMINATION**

### **6.1:** Summary of the Remedial Investigation

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

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

The RI is intended to identify the nature (or type) of contamination which may be present at a site and the extent of that contamination in the environment on the site or leaving the site. The RI reports on data gathered to determine if the soil, groundwater, soil vapor, indoor air, surface water or sediments, as appropriate, 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 6.1.2.

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: <a href="http://www.dec.ny.gov/regulations/61794.html">http://www.dec.ny.gov/regulations/61794.html</a>

#### 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 are:

benzo(a)anthracene barium benzo(a)pyrene cadmium benzo(b)fluoranthene copper benzo(k)fluoranthene lead chrysene mercury dibenz[a,h]anthracene nickel indeno(1,2,3-cd)pyrene zinc PCB aroclor 1242 DDE PCB aroclor 1248 **DDT** 

Based on the investigation results, comparison to the SCGs, and the potential public health and environmental exposure routes, certain media and areas of the site required remediation. These media were addressed by the IRM described in Section 6.2. More complete information can be found in the RI Report, the IRM Construction Completion Report, and the Final Engineering Report.

#### **6.2:** Interim Remedial Measures

PCB aroclor 1260

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 has been completed at this site:

Prior to the IRM, the primary contaminants of concern in soil were semi-volatile organic compounds (SVOCs), metals, pesticides and polychlorinated biphenyls (PCBs). Compounds that exceeded their unrestricted use soil cleanup objectives (USCOs) included (maximum concentrations given): benzo(a)anthracene (4.5 parts per million [ppm] compared to the USCO of 1 ppm), benzo(a)pyrene (3.8 ppm compared to the USCO of 1 ppm), benzo(b)fluoranthene (5.1 ppm compared to the USCO of 1 ppm), benzo(k)fluoranthene (1.3 ppm compared to the USCO of 0.8 ppm), chrysene (4 ppm compared to the USCO of 1 ppm), dibenzo(a,h)anthracene (0.89 ppm compared to the USCO of 0.33 ppm), indeno(1,2,3 c,d)pyrene (3.2 ppm compared to the USCO of 0.5 ppm), barium (4,320 ppm compared to the USCO of 350 ppm), cadmium (2.7 ppm compared to the USCO of 2.5 ppm), copper (62.3 ppm compared to the USCO of 50 ppm), lead (412 ppm compared to the USCO of 63 ppm), mercury (0.72 ppm compared to the USCO of 0.18 ppm), nickel (59.9 ppm compared to the USCO of 30 ppm), zinc (587 ppm compared to the USCO of 109 ppm), 4,4-DDE (0.017 ppm compared to the USCO of 0.0033 ppm), 4,4-DDT (0.0275 ppm compared to the USCO of 0.0033 ppm), aroclor 1242 (0.417 ppm compared to the USCO of 0.1 ppm), aroclor 1248 (0.272 ppm compared to the USCO of 0.1 ppm), and aroclor 1260 (0.698 ppm compared to the USCO of 0.1 ppm).

Prior to the IRM, groundwater sampling indicated impacts of SVOCs, metals and per- and polyfluoroalkyl substances (PFAS). One SVOC (benzo(a)anthracene at 0.01 parts of billion [ppb] compared to 0.002 ppb), two metals (manganese at 41,000 ppb compared to 300 ppb and sodium at 292,000 ppb compared to 20,000 ppb), and two PFAS compounds (perfluorooctanoic acid [PFOA] at 21.9 parts per trillion [ppt] compared to 10 ppt and perfluorooctane sulfonic acid

[PFOS] at 25.8 ppt compared to 10 ppt) were detected at concentrations above their respective ambient water quality standards or guidance values (AWQS) given.

Prior to the IRM, soil vapor samples were collected during the remedial investigation. No indoor air samples were collected since the site was vacant at that time. Trichloroethylene was detected in soil vapor at a maximum concentration of 8.76 micrograms per cubic meter (µg/m3). This compound was not detected in soil or groundwater above its USCO or AWQS. Since indoor air samples were not collected, the comparison of soil vapor results to the Soil Vapor/Indoor Air Matrix cannot be completed.

Excavation and Off-site Disposal of Soil Exceeding Unrestricted Use Soil Cleanup Objectives (USCOs)

During the RI, all on-site soil exceeding USCOs were excavated to depths up to 25 ft below grade (bg) and properly disposed of off-site as an IRM. A total of 30,626 tons of contaminated soil was removed from the site. Post-excavation confirmatory soil samples were collected from the limits of the excavation to demonstrate that the IRM achieved USCOs, as documented in the November 2022 Construction Completion Report. Clean fill meeting the requirements of 6 NYCRR Part 375-6.7(d) was brought in to complete the backfilling of the excavation and establish design grades. A figure indicating the site-wide IRM excavation is attached as Figure 2.

## **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.

Nature and Extent of Contamination: Based on investigations conducted to date, prior to the IRM, the primary contaminants of concern included SVOCs and metals in soil and groundwater, pesticides and PCBs in soil, and volatile organic compounds (VOCs) in soil vapor. Impacts were identified in soil across the site to depths up to 23.5 feet below grade (ft bg).

Soil: Following completion of the on-site IRM, all soil above USCOs have been removed and disposed of off-site. Data do not indicate site-related soil impacts have migrated off-site.

Groundwater: Post-IRM groundwater sampling has indicated very low concentrations of chloroform (maximum concentration of 8.98 ppb compared to the AWQS of 7 ppb) and secondary naturally occurring metals (iron, magnesium and manganese), as well as low levels of PFOS (maximum concentration of 14.2 ppt) and PFOA (maximum concentration of 35.4 ppt). While the PFOS and PFOA concentrations exceed the 10 ppt Maximum Contaminant Level (MCL) for each compound, they are not indicative of a source area and are expected to be consistent with the concentrations coming onto the site, similar to other sites in the area that also contain no potential source. Additionally, the area is served by municipal water. The IRM is complete and has removed all soil above USCOs, and thus any possible site-related source

material that may contribute to groundwater contamination. Data do not indicate site-related groundwater impacts have migrated off-site.

Soil Vapor: The complete excavation of soil exceeding USCOs across the entire site as part of the IRM removed any potentially impacted soil in the unsaturated zone and has addressed potential soil vapor intrusion concerns for any future buildings constructed on-site, as well as the potential migration of soil vapor off-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*.

People are not drinking the contaminated groundwater because the area is served by a public water supply that is not affected by this contamination. The source of soil and soil vapor contamination has been removed from the site; therefore, contact with contaminants is not expected.

#### 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.

#### 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.

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## 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**

Based on the results of the investigations at the site, the IRM that has been performed, and the evaluation presented here, the Department is selecting No Further Action as the remedy for the site. The Department believes that this remedy is protective of human health and the environment and satisfies the remediation objectives described in Section 6.5.

To address the Groundwater RAO for public health, 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 the potable use of groundwater without prior approval.

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