Former Drive & Park Inc. Site Brownfield Cleanup Program Poughkeepsie, Dutchess County Site No. C314111 December 2010



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

# **DECLARATION STATEMENT - DECISION DOCUMENT**

Former Drive & Park Inc. Site Brownfield Cleanup Program Poughkeepsie, Dutchess County Site No. C314111 December 2010

#### Statement of Purpose and Basis

This document presents the remedy for the Former Drive & Park Inc. Site site, a brownfield cleanup site. The remedial program was chosen in accordance with the New York State Environmental Conservation Law, 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 Former Drive & Park Inc. Site site and the public's input to the proposed remedy presented by the Department.

#### **Description of Selected Remedy**

The elements of the proposed remedy are as follows:

1. Maintenance of the site cover to allow for commercial use of the site. The cover will consist either of an impermeable surface (such as a concrete slab, asphalt paving, etc.) or at least one foot of clean soil, as defined by 6 NYCRR 375-6.7(d), underlain by a demarcation layer, such as a geotextile.

2. Maintenance of a monitoring well network. Monitoring wells will be used to monitor groundwater on- and off-site to assure the contaminant levels in groundwater continue to decline.

3. Imposition of an institutional control in the form of an environmental easement for the site that:

• 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):

• subject to local zoning laws, allows the use and development of the controlled property for commercial use;

• restricts the use of groundwater as a source of potable or process water, without necessary water quality treatment as determined by the Department, NYSDOH or County DOH;

- prohibits agriculture or vegetable gardens on the controlled property; and
- requires compliance with the Department-approved Site Management Plan.

4. Since the remedy results in contamination remaining at the site that does not allow for unrestricted use, a Site Management Plan is required, which includes the following:

(a) an Institutional and Engineering Control Plan that identifies all use restrictions and engineering controls for the site and details the steps and media-specific requirements necessary to assure the following institutional and/or engineering controls remain in place and effective and include:

(i) an excavation plan which details the provisions for management of future excavations in areas of remaining contamination;

(ii) descriptions of the provisions of the environmental easement including any land use, and groundwater use restrictions;

(iii) provisions for the management and inspection of the identified engineering controls;

(iv) maintaining site access controls and Department notification; and

(v) the steps necessary for the periodic reviews and certification of the institutional and/or engineering controls; and

(b) a Monitoring Plan to assess the performance and effectiveness of the remedy. The plan includes, but may not be limited to:

(i) monitoring of groundwater on- and off-site to assess the performance and effectiveness of the remedy;

(ii) a schedule of monitoring and frequency of submittals to the Department; and

(iii) provision to evaluate the potential for vapor intrusion for any buildings developed on the site in the future, including provision for implementing actions recommended to address exposures related to soil vapor intrusion.

#### **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.

12/14/10

Date

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Michael Ryan, 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 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: SITE DESCRIPTION AND HISTORY

Location Description: The Former Drive and Park Inc. Site is approximately 2.7 acres in area and is located at 28 IBM Road in the Town of Poughkeepsie, Dutchess County just south of the city limits.

Predominant Site Features: Approximately 14,000 square feet of the eastern portion of the property is occupied by office space and maintenance bay structures. The remainder of the site property is used primarily for vehicle storage and is paved with asphalt and concrete, with the exception of several landscaped traffic berms.

Current use: The site is currently an active car rental facility.

Surrounding Zoning and Uses: The area surrounding the site is commercial/residential in character. Neighboring properties include an IBM business campus to the north, commercial facilities to the east and west and a residential property and a designated wetland to the south. The property adjacent to the site to the south is the location of a day care facility.

Historical Source(s) of Contamination: The site was used for a gas station from approximately 1953 to 1973 and a car rental business from approximately 1977 to the present. A release of gasoline at the site was reported on December 9, 1986. The contamination is attributed to a release from former underground storage tanks (USTs), which had been used by the car rental business and were replaced in 1986.

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

Site Geology and Hydrogeology: The geology of the site consists of silty sand overlying an intermittent peat layer and an intermittent gravel layer, with an underlying layer of fine-grained silt and clay. Shallow groundwater flow is generally to the south and southeast. The depth of groundwater at the site ranges from 3 to 10 feet below ground surface.

A site location map is attached as Figure 1.

### SECTION 3: 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 commercial or industrial as described in Part 375-1.8(g) are being evaluated in addition to an alternative which would allow for unrestricted use of the site.

A comparison of the results of the investigation 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 4: ENFORCEMENT STATUS

The Applicant under the Brownfield Cleanup Agreement is a Participant. The Applicant has an obligation to address on-site and off-site contamination. Accordingly, no enforcement actions are necessary.

### SECTION 5: SITE CONTAMINATION

#### 5.1: <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 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 5.4.

## 5.1.1: 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

## 5.1.2: <u>RI Information</u>

The analytical data collected on this site includes data for:

- air
- groundwater
- soil
- sediment
- soil vapor

The data has 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:

benzenc	ethylbenzene
toluene	xylene (mixed)

The contaminant(s) of concern exceed the applicable standards, criteria and guidance for:

- groundwater

- soil

## 5.2: 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(s) has/have been completed at this site based on conditions observed during the RI.

## IRM - Soil Excavation

An IRM was performed on- and off-site between December 2005 and July 2006. Approximately 17,750 tons of petroleum contaminated soil were excavated and removed from the site and approximately 6,150 tons of petroleum contaminated soil was excavated and removed from an adjacent off-site parcel. Following the excavation, a demarcation layer was installed, the excavation area was backfilled with re-usable site soil and clean imported fill material and the on-site area was repaved. To enhance biodegradation of petroleum hydrocarbons remaining in the subsurface both on- and off-site, an Oxygen Release Compound (ORC) was added to the backfill material.

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

This section describes the current or potential human exposures to persons at or around the site that may result from the contamination. A more detailed discussion of the human exposure pathways can be found in the RI Report (or appropriate document) available at the document repository. An exposure pathway describes the means by which an individual may be exposed to contaminants originating from a site. An exposure pathway has five elements: [1] a contaminant source, [2] contaminant release and transport mechanisms, [3] a point of exposure, [4] a route of exposure, and [5] a receptor population.

Contaminant release and transport mechanisms carry contaminants from the source to a point where people may be exposed. The exposure point is a location where actual or potential human contact with a contaminated medium may occur. The route of exposure is the manner in which a contaminant actually enters or contacts the body (e.g., ingestion, inhalation, or direct contact). The receptor population is the people who are, or may be, exposed to contaminants at a point of exposure.

An exposure pathway is complete when all five elements of an exposure pathway exist. An exposure pathway is considered a potential pathway when one or more of the elements currently does not exist, but could in the future.

Contact with contaminated soil is not expected since the site is paved with asphalt and concrete. Drinking contaminated groundwater is not likely since public water serves the area. The potential for soil vapor intrusion was investigated at the adjacent day care center, and no further actions are deemed necessary.

## 5.4: <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 the existing and potential impacts from the site to fish and wildlife receptors.

Nature and Extent of Contamination: Based upon the remedial investigation conducted, the primary contaminants of concern in the soils and groundwater on and off the site include volatile organic compounds (VOCs) associated with petroleum, including benzene, toluene, ethylbenzene and xylenes (BTEX). The contamination has been reduced/removed since much of the petroleum contaminated soil was removed from on-site and off-site and an oxygen release compound was applied during the backfilling operation to further mitigate potential impact to the groundwater. The highest remaining levels of contaminants in soil are in an off-site area at a depth of 10 feet below ground surface (toluene 15 ppm, ethylbenzene 7.8 ppm, m,p-xylenes 37 ppm and o-xylene 13 ppm). VOCs including benzene, ethylbenzene, xylene and MTBE remain in groundwater above applicable SCGs (27 parts per billion (ppb), 14 ppb, 43 ppb and 74 ppb), however, current data indicates generally low levels approaching the SCG for each. Attainment of groundwater standards is anticipated over time. Sediment samples have detected VOCs (benzene 2.3 ppm, toluene 27 ppm, ethylbenzene 170 ppm and xylene 800 ppm) in the adjacent wetland. The impacted sediments do not extend more than 25 feet east of the former excavation; and impacts were not detected in sediment samples collected from the unnamed stream located in the eastern portion of the wetland.

## SECTION 6: ELEMENTS OF THE SELECTED REMEDY

The alternatives developed for the site and evaluation of the remedial criteria are present 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 remedy proposed is a Track 4: Restricted usc with site-specific soil cleanup objectives remedy.

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

1. Maintenance of the site cover to allow for commercial use of the site. The cover will consist either of an impermeable surface (such as a concrete slab, asphalt paving, etc.) or at least one foot of clean soil, as defined by 6 NYCRR 375-6.7(d), underlain by a demarcation layer, such as a geotextile.

2. Maintenance of a monitoring well network. Monitoring wells will be used to monitor groundwater on- and off-site to assure the contaminant levels in groundwater continue to decline.

3. Imposition of an institutional control in the form of an environmental easement for the site that:

• 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):

• subject to local zoning laws, allows the use and development of the controlled property for commercial use;

• restricts the use of groundwater as a source of potable or process water, without necessary water quality treatment as determined by the Department, NYSDOH or County DOH;

• prohibits agriculture or vegetable gardens on the controlled property; and

• requires compliance with the Department-approved Site Management Plan.

4. Since the remedy results in contamination remaining at the site that does not allow for unrestricted use, a Site Management Plan is required, which includes the following:
(a) an Institutional and Engineering Control Plan that identifies all use restrictions and engineering controls for the site and details the steps and media-specific requirements necessary to assure the following institutional and/or engineering controls remain in place and effective and include:

(i) an excavation plan which details the provisions for management of future excavations in areas of remaining contamination;

(ii) descriptions of the provisions of the environmental easement including any land use, and groundwater use restrictions;

(iii) provisions for the management and inspection of the identified engineering controls;

(iv) maintaining site access controls and Department notification; and

(v) the steps necessary for the periodic reviews and certification of the institutional and/or engineering controls; and

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(i) monitoring of groundwater on- and off-site to assess the performance and effectiveness of the remedy;

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DECISION DOCUMENT

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