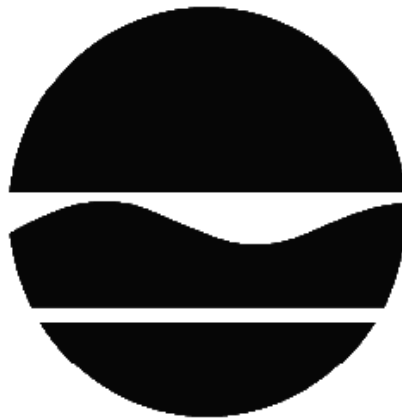


RECORD OF DECISION

Former NuHart Plastic Manufacturing
State Superfund Project
Brooklyn, Kings County
Site No. 224136
March 2019



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

DECLARATION STATEMENT - RECORD OF DECISION

Former NuHart Plastic Manufacturing
State Superfund Project
Brooklyn, Kings County
Site No. 224136
March 2019

Statement of Purpose and Basis

This document presents the remedy for the Former NuHart Plastic Manufacturing site, a Class 2 inactive hazardous waste disposal 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, and is not inconsistent with the National Oil and Hazardous Substances Pollution Contingency Plan of March 8, 1990 (40CFR300), as amended.

This decision is based on the Administrative Record of the New York State Department of Environmental Conservation (the Department) for the Former NuHart Plastic Manufacturing site and the public's input to the selected remedy presented by the Department. A listing of the documents included as a part of the Administrative Record is included in Appendix B of the ROD.

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; and

- Integrating the remedy with the end use where possible and encouraging green and sustainable re-development.

2. Excavation (OU1)

The existing on-site building(s) will be demolished and materials which can't be beneficially reused on site will be taken off-site for property disposal in order to implement the remedy. Excavation and off-site disposal of contaminant source areas, including:

- Grossly contaminated soil as defined in 6NYCRR Part 375-1.2(u);
- Concentrated soil or semi-solid hazardous substance per 6 NYCRR Part 375-1.2(au);
- Non-aqueous phase liquids;
- Soil with visual waste material or non-aqueous phase liquid;
- Soil which exceeds the protection of groundwater soil cleanup objectives (PGWSCOs), as defined by 6 NYCRR Part 375-6.8 for those contaminants found in the site groundwater above standards;
- Soil that creates a nuisance condition, as defined in Commissioner Policy CP-51 section G;
- Grossly contaminated soil that may be present in proximity to the Underground Storage Tanks (USTs) and piping trench systems formerly used to store and convey phthalates and lubricating oil during the former plastic manufacturing process;
- VOC-impacted soil that are above the water table in the northeastern corner of the site; and
- Excavation and removal of any underground storage tanks (USTs), fuel dispensers, underground piping or other structures associated with a source of contamination.

Approximately 22,500 cubic yards of soil will be excavated in total. An estimated 6,600 cubic yards is expected to be disposed off-site as hazardous waste, and the remaining material is anticipated to be non-hazardous historic fill and un-impacted native soil.

3. Backfill (OU-1)

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

4. LNAPL Physical Barriers (OU-1 and OU-2)

Installation of two physical barriers to support the on-site excavation and prevent further off-site LNAPL migration.

- Shoring will be installed as a physical barrier around the entire perimeter of the on-site excavation area down to about 30 feet below grade
- Installation of a physical barrier to prevent LNAPL migration onto the off-site property located to the southwest of the site.

5. Cover System (OU-1)

A site cover will be required to allow for restricted residential use of the site in areas where the upper two feet of exposed surface soil will exceed the applicable soil cleanup objectives (SCOs). Where a soil cover is to be used it will be a minimum of two feet of soil placed over a demarcation layer, with the upper six inches of soil of sufficient quality to maintain a vegetative

layer. Soil cover material, including any fill material brought to the site, will meet the SCOs for cover material for the use of the site as set forth in 6 NYCRR Part 375-6.7(d). Substitution of other materials and components may be allowed where such components already exist or are a component of the tangible property to be placed as part of site redevelopment. Such components may include, but are not necessarily limited to: pavement, concrete, paved surface parking areas, sidewalks, building foundations and building slabs.

6. LNAPL Recovery (OU-2)

Installation and operation of a network of recovery wells and/or trenches located off-site to recover mobile LNAPL from the subsurface. The number, depth, type and spacing of the recovery wells and/or trenches will be determined during the design phase of the remedy. LNAPL will be collected periodically from each well; however, if wells are determined by the Department to accumulate large quantities of LNAPL over extended time periods, they can be converted to automated collection. Enhancement of the recovery via surfactant injection to increase the mobility of the LNAPL may also be considered. A monitoring program will be implemented for groundwater and LNAPL to monitor the effectiveness of the LNAPL recovery effort.

7. Air Sparging/ Soil Vapor Extraction (OU-1 and OU-2)

Air sparging will be implemented to address the groundwater plume contaminated by volatile organic compounds (VOCs) identified in the northeast portion of the site and in the downgradient vicinity of the site. VOCs will be physically removed from the groundwater and soil below the water table (saturated soil) by injecting air into the subsurface. The injected air rising through the groundwater will volatilize and transfer the VOCs from the groundwater and/or soil into the injected air. The VOCs are carried with the injected air into the vadose zone (the area below the ground surface but above the water table) where a soil vapor extraction (SVE) system, designed to remove the injected air, will be installed. The SVE system will apply a vacuum to wells that have been installed into the vadose zone to remove the VOCs along with the air introduced by the sparging process. The air extracted from the SVE wells will be treated as necessary prior to being discharged to the atmosphere.

The number, depth, type and spacing of the AS/SVE wells will be determined during the design phase of the remedy.

8. Vapor Mitigation (OU-1 and OU-2)

Any on-site and off-site buildings impacted by the contaminants migrating from the site will be required to have a sub-slab depressurization system, or other acceptable measure, to mitigate the migration of vapors into the building from soil or groundwater. The sub-slab depressurization system will be installed in the on-site buildings to be constructed at the site. An evaluation will be conducted, as discussed in paragraph 11 below, to determine whether sub-slab depressurization systems are necessary in off-site properties north of Clay Street pending site access from the owner(s)

9. Treatment Remedy Shutdown

The operation of the components of the remedy would continue until the remedial objectives have been achieved, or until the Department determines that continued operation is technically

impracticable or not feasible.

10. Institutional Controls (OU-1)

Imposition of an institutional control in the form of an environmental easement for the controlled property that 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, 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 NYCDOHMH; and
- require compliance with the Department-approved Site Management Plan.

11. Site Management Plan (OU-1 and OU-2)

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 ensure the following institutional and/or engineering controls remain in place and effective:
 - Institutional Controls: The Environmental Easement discussed in paragraph 10 above.
 - Engineering Controls: The migration barriers, site cover, LNAPL recovery, AS/SVE, and vapor mitigation systems discussed in paragraphs 4 through 8 above

This plan includes, but may not be limited to:

- an Excavation Plan which details the provisions for management of future excavations in areas of remaining contamination;
 - 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 buildings in off-site areas of contamination, including provision for implementing actions recommended to address exposures related to soil vapor intrusion;
 - a provision that should a building foundation or building slab be removed in the future, a cover system consistent with that described in paragraph 8 above will be place in any area where the upper two feet of exposed surface soil exceed the applicable soil cleanup objectives (SCOs)
 - provisions for the management and inspection of the identified engineering controls;
 - maintaining site access controls and Department notification; and
 - the steps necessary for the periodic reviews and certification of the institutional and/or engineering controls.
- b) a Monitoring Plan to assess the performance and effectiveness of the remedy. The plan includes, but may not be limited to:

- monitoring of LNAPL, groundwater and soil vapor to assess the performance and effectiveness of the remedy;
 - a schedule of monitoring and frequency of submittals to the Department;
 - monitoring for vapor intrusion for any buildings on the site, as may be required by the Institutional and Engineering Control Plan discussed above.
- c) 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.

New York State Department of Health Acceptance

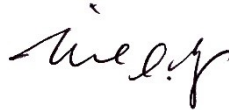
The New York State Department of Health (NYSDOH) concurs that the remedy for this site is protective of human health.

Declaration

The selected remedy is protective of human health and the environment, complies with State and Federal requirements that are legally applicable or relevant and appropriate to the remedial action to the extent practicable, and is cost effective. This remedy utilizes permanent solutions and alternative treatment or resource recovery technologies, to the maximum extent practicable, and satisfies the preference for remedies that reduce toxicity, mobility, or volume as a principal element.

March 28, 2019

 Date



 Michael J. Ryan, P.E., Director
 Division of Environmental Remediation

RECORD OF DECISION

Former NuHart Plastic Manufacturing
Brooklyn, Kings County
Site No. 224136
February 2019

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 hazardous wastes 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 hazardous wastes 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 Inactive Hazardous Waste Disposal Site Remedial Program (also known as the State Superfund Program) is an enforcement program, the mission of which is to identify and characterize suspected inactive hazardous waste disposal sites and to investigate and remediate those sites found to pose a significant threat to public health and environment. The New York State Hazardous Waste Management Program (also known as the RCRA Program) requires corrective action for releases of hazardous waste and hazardous constituents to the environment. This facility is subject to both of these programs and this document meets the RCRA program requirements for the final Statement of Basis.

The Department has issued this document in accordance with the requirements of New York State Environmental Conservation Law and Title 6 of the Official Compilation of Codes, Rules and Regulations of the State of New York (6 NYCRR) Parts 373 (RCRA) and 375 (State Superfund). This document serves as the RCRA Program final Statement of Basis for the corrective action(s) completed at the site, as well as the State Superfund Record of Decision (ROD). 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 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:

Brooklyn Community Board No. 1

435 Graham Avenue
Brooklyn, NY 11211
Phone: 718-389-0009

NYSDEC Region 2 Headquarters
Attn: Bryan Wong
47-40 21st Street
Long Island City, NY 11101
Phone: 718-482-4905

North Brooklyn Development Corporation
148-150 Huron Street
Brooklyn, NY 11222
Phone: 718-349-9044

A public meeting was also conducted. At the meeting, the findings of the remedial investigation (RI) and the feasibility study (FS) were presented along with a summary of the remedy. After the presentation, a question-and-answer period was held, during which verbal or written comments were accepted on the remedy.

Comments on the remedy received during the comment period are summarized and addressed in the responsiveness summary section of the ROD.

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 280 Franklin Street in the Greenpoint section of Brooklyn, Kings County, New York. The approximately one-acre site is identified on the tax map as Block 2487, Lots 1, 10, 12, 72 and 78. The site is bordered immediately to the north by Clay Street followed by commercial/industrial buildings, to the east by remaining portions of the Nuhart Plastic Manufacturing facility that are not associated with this NYS Inactive Hazardous Waste Disposal site, to the south by Dupont Street followed by multi-family residential structures, and to the west by Franklin Street followed by a New York City playground.

Site Features:

The dimensions of the site are approximately 240 feet by 200 feet. The site is entirely covered by a complex of industrial buildings that were constructed at different times.

Current Zoning and Land Use:

The site is zoned M1-2/R6, which designates the site as manufacturing with a residential overlay. The on-site building is currently vacant.

Past Use of the Site:

The site has been in used for various manufacturing and commercial purposes since 1887. It has been used for manufacturing, as an office, for storage, and for shipping and receiving. Prior to the late 1940s, the site and the surrounding lots were used as a boiler shop for Logan Ironworks, two stables, a gas and light fixture factory, a sheet metal works, a soap factory, a waterproofing factory, and a scrap metal facility. The subject property was developed for plastic manufacturing purposes in the late 1940s to early 1950s, and has remained relatively unchanged since that time. From 1983 to 2004, NuHart and Company made vinyl siding and sheeting at the site. After 2004, NuHart vacated the on-site buildings.

There are 12 underground storage tanks (USTs) located on the site. According to records, these tanks were emptied and closed. There are also two large aboveground silos on site. The Petroleum Bulk Storage (PBS) facility number is 2-608875, and the Chemical Bulk Storage (CBS) facility number is 2-000444. Liquid plasticizers stored included bis(2-ethylhexyl)phthalate, bis(2-ethylhexyl)adipate, and palatinol 711P phthalate.

Operable Units:

The site was divided into two operable units. An operable unit represents a portion of a remedial program for a site that for technical or administrative reasons can be addressed separately to investigate, eliminate or mitigate a release, threat of release or exposure pathway resulting from the site contamination.

Operable unit 1 (OU1) is the on-site source area and associated contamination. OU2 consists of the off-site groundwater and soil vapor plumes.

Operable Unit (OU) Numbers 01 and 02 are the subject of this document.

Site Geology and Hydrogeology:

Soil at the site consists of a layer of urban fill extending from the surface to about 8 feet below the onsite slab, underlain by sand, silty sand and/or sandy silt. Groundwater is encountered at a depth of approximately 10 to 15 feet below grade surface and flows generally westerly to northwesterly towards the East River.

Operable Unit (OU) Numbers 01 and 02 are the subject of this document.

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 (or an alternative) that restrict(s) 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/was evaluated in addition to an alternative which would allow for unrestricted use of the site.

A comparison of the results of the 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 included in the Tables for the media being evaluated in Exhibit A.

SECTION 5: ENFORCEMENT STATUS

Potentially Responsible Parties (PRPs) are those who may be legally liable for contamination at a site. This may include past or present owners and operators, waste generators, and haulers.

The PRPs for the site, documented to date, include:

49 Dupont Realty Corp.

NuHart and Company

Dupont Street Developers LLC

49 Dupont Realty Corporation

Dupont Street Developers LLC

The Department and 49 Dupont Realty Corp. entered into a Consent Order on January 18, 2011. The Order was amended on February 7, 2014 to add a new owner (Dupont Street Developers LLC). The Order obligates the responsible parties to implement a full remedial program.

SECTION 6: SITE CONTAMINATION

6.1: Summary of the Remedial Investigation

A Remedial Investigation (RI) has been conducted. The purpose of the RI was to define the nature and extent of any contamination resulting from previous activities at the site. The field activities and findings of the investigation are described in the RI Report.

The following general activities are conducted during an RI:

- Research of historical information,
- Geophysical survey to determine the lateral extent of wastes,

- Test pits, soil borings, and monitoring well installations,
- Sampling of waste, surface and subsurface soils, groundwater, and soil vapor,
- Sampling of surface water and sediment,
- Ecological and Human Health Exposure Assessments.

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. The tables found in Exhibit A list the applicable SCGs in the footnotes. 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 hazardous waste 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 in Exhibit A. Additionally, the RI Report contains a full discussion of the data. The contaminant(s) of concern identified at this site is/are:

For OU: 01

- | | |
|----------------------------|---------------------------|
| bis(2-ethylhexyl)phthalate | dichloroethene (cis-1,2-) |
| dioctyl phthalate | vinyl chloride |
| trichloroethene (TCE) | |

For OU: 02

- | | |
|----------------------------|-----------------------|
| bis(2-ethylhexyl)phthalate | trichloroethene (TCE) |
| dioctyl phthalate | vinyl chloride |

dichloroethene (cis-1,2-)

As illustrated in Exhibit A, the contaminant(s) of concern exceed the applicable SCGs for:

- groundwater
- 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 Record of Decision.

The following IRM(s) has/have been completed at this site based on conditions observed during the RI.

IRM - LNAPL Recovery

An Interim Remedial Measure (IRM) consisting of light non-aqueous phase liquid (LNAPL) recovery at the site was initiated under the spill program in November 2006. The IRM consists of the removal of LNAPL from recovery wells via manual bailing and automated product-seeking equipment. An Operation, Maintenance and Monitoring (OM&M) Plan for the IRM was prepared to describe the implementation, management, and performance evaluation activities under the IRM. IRM activities are monitored on a monthly basis.

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.

Based upon the resources and pathways identified and the toxicity of the contaminants of ecological concern at this site, a Fish and Wildlife Resources Impact Analysis (FWRIA) was deemed not necessary for OUs 01 and 02.

Nature and Extent of Contamination:

Soil and groundwater samples from both on-site and off-site were analyzed for volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), PCBs, pesticides and metals. Based upon investigation conducted to date, the primary contaminants of concern for both OU1 and OU2 include phthalates (specifically bis(2-ethylhexyl) phthalate and di-n-octyl phthalate) and VOCs (specifically trichloroethylene and its decomposition products).

Soil - VOCs in soil are found both on and off-site at levels above unrestricted use soil cleanup objectives (UUSCOs) in a limited area in the northeast portion of the site and extending off-site beneath the sidewalk on the south side of Clay Street. The highest soil contamination concentration of trichloroethylene (TCE) was reported at 14 parts per million (ppm) compared to

the UUSCO of 0.47 ppm. Other VOCs detect above the UUSCOs include: cis-1,2-dichloroethylene (DCE) with maximum concentration of 2.4 ppm (UUSCO is 0.25 ppm). SVOCs in soil were identified both onsite and off-site above UUSCOs, including bis(2-ethylhexyl) phthalate (DEHP) at a concentration of 59,200 ppm (UUSCO is 50 ppm) and di-n-octyl phthalate (DOP) at a concentration of 3,010 ppm (UUSCO is 100 ppm). The following site-specific chemicals were identified in soil exceeding the restricted residential SCOs: bis(2-ethylhexyl) phthalate, di-n-octyl phthalate, cis-1,2-dichloroethene, and TCE.

Groundwater - Phthalates are present as an LNAPL plume floating on the groundwater surface beneath most of the site and extending off-site to the west and southwest. Dissolved-phase phthalates were detected above NYSDEC groundwater standards in several wells generally located on the periphery of the LNAPL plume. The maximum concentration of DEHP was reported at 1,750 parts per billion, or ppb (compared to the groundwater standard of 5 ppb) and DOP at 87.1 ppb (compared to the groundwater standard of 50 ppb). Dissolved-phase TCE and its associated breakdown product DCE were found in the northeast portion of the site and extending a short distance off-site to the northwest at concentrations exceeding the groundwater standards of 5 ppb. The maximum concentrations of TCE was reported at 33,000 ppb, and DCE at 2,700 ppb.

Soil Vapor - VOCs were detected in on-site sub-slab soil vapor beneath the northeastern portion of the site building with the greatest impacts coinciding with the chlorinated VOC-impacted groundwater in this area. Sub-slab vapor contaminant concentrations were detected up to a maximum of 43,000 micrograms per cubic meter (ug/m³) for TCE, 2,500 ug/m³ for PCE, and 3,700 ug/m³ for DCE.

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 site is covered with buildings and pavement. People are not drinking the contaminated groundwater because the area is served by a public water supply that is not affected by this contamination. Volatile organic compounds in the groundwater may move into the soil vapor (air spaces within the soil), which in turn may move into overlying buildings and affect the indoor air quality. This process, which is similar to the movement of radon gas from the subsurface into the indoor air of buildings, is referred to as soil vapor intrusion. The potential exists for the inhalation of site contaminants due to soil vapor intrusion for any future on-site redevelopment or occupancy. Furthermore, the potential for off-site soil vapor intrusion should be evaluated, as appropriate, if off-site property owners grant access.

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:

For OU 01:

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.

For OU 02:

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.
- Prevent impacts to biota from ingestion/direct contact with soil causing toxicity or impacts from bioaccumulation through the terrestrial food chain.

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: SUMMARY OF THE SELECTED REMEDY

To be selected the remedy must be protective of human health and the environment, be cost-effective, comply with other statutory requirements, and utilize permanent solutions, alternative technologies or resource recovery technologies to the maximum extent practicable. The remedy must also attain the remedial action objectives identified for the site, which are presented in Section 6.5. Potential remedial alternatives for the Site were identified, screened and evaluated in the feasibility study (FS) report.

A summary of the remedial alternatives that were considered for this site is presented in Exhibit B. Cost information is presented in the form of present worth, which represents the amount of money invested in the current year that would be sufficient to cover all present and future costs associated with the alternative. This enables the costs of remedial alternatives to be compared on a common basis. As a convention, a time frame of 30 years is used to evaluate present worth costs for alternatives with an indefinite duration. This does not imply that operation, maintenance, or monitoring would cease after 30 years if remediation goals are not achieved. A summary of the Remedial Alternatives Costs is included as Exhibit C.

The basis for the Department's remedy is set forth at Exhibit D.

For OU 01 Remedial Program, the selected remedy is referred to as the Excavation, Air Sparge/Soil Vapor Extraction, Vapor Mitigation, and LNAPL Mitigation Barrier remedy.

For OU 02 Remedial Program, the selected remedy is referred to as the Air Sparge/Soil Vapor Extraction, Vapor Mitigation, LNAPL Migration Barrier and Recovery remedy.

The estimated present worth cost to implement the remedy is \$30,700,000. The cost to construct the remedy is estimated to be \$20,300,000 and the estimated average annual cost is \$1,380,000.

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; and
- Integrating the remedy with the end use where possible and encouraging green and sustainable re-development.

2. Excavation (OU1)

The existing on-site building(s) will be demolished and materials which can't be beneficially reused on site will be taken off-site for property disposal in order to implement the remedy. Excavation and off-site disposal of contaminant source areas, including:

- Grossly contaminated soil as defined in 6NYCRR Part 375-1.2(u);
- Concentrated soil or semi-solid hazardous substance per 6 NYCRR Part 375-1.2(au);
- Non-aqueous phase liquids;
- Soil with visual waste material or non-aqueous phase liquid;
- Soil which exceeds the protection of groundwater soil cleanup objectives (PGWSCOs), as defined by 6 NYCRR Part 375-6.8 for those contaminants found in the site groundwater above standards;
- Soil that creates a nuisance condition, as defined in Commissioner Policy CP-51 section G;
- Grossly contaminated soil that may be present in proximity to the Underground Storage Tanks (USTs) and piping trench systems formerly used to store and convey phthalates and lubricating oil during the former plastic manufacturing process;
- VOC-impacted soil that are above the water table in the northeastern corner of the site; and
- Excavation and removal of any underground storage tanks (USTs), fuel dispensers, underground piping or other structures associated with a source of contamination.

Approximately 22,500 cubic yards of soil will be excavated in total. An estimated 6,600 cubic yards is expected to be disposed off-site as hazardous waste, and the remaining material is anticipated to be non-hazardous historic fill and un-impacted native soil.

3. Backfill (OU-1)

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

4. LNAPL Physical Barriers (OU-1 and OU-2)

Installation of two physical barriers to support the on-site excavation and prevent further off-site LNAPL migration.

- Shoring will be installed as a physical barrier around the entire perimeter of the on-site excavation area down to about 30 feet below grade
- Installation of a physical barrier to prevent LNAPL migration onto the off-site property located to the southwest of the site.

5. Cover System (OU-1)

A site cover will be required to allow for restricted residential use of the site in areas where the upper two feet of exposed surface soil will exceed the applicable soil cleanup objectives (SCOs). Where a soil cover is to be used it will be a minimum of two feet of soil placed over a demarcation layer, with the upper six inches of soil of sufficient quality to maintain a vegetative layer. Soil cover material, including any fill material brought to the site, will meet the SCOs for cover material for the use of the site as set forth in 6 NYCRR Part 375-6.7(d). Substitution of other materials and components may be allowed where such components already exist or are a component of the tangible property to be placed as part of site redevelopment. Such components may include, but are not necessarily limited to: pavement, concrete, paved surface parking areas, sidewalks, building foundations and building slabs.

6. LNAPL Recovery (OU-2)

Installation and operation of a network of recovery wells and/or trenches located off-site to recover mobile LNAPL from the subsurface. The number, depth, type and spacing of the recovery wells and/or trenches will be determined during the design phase of the remedy. LNAPL will be collected periodically from each well; however, if wells are determined by the Department to accumulate large quantities of LNAPL over extended time periods, they can be converted to automated collection. Enhancement of the recovery via surfactant injection to increase the mobility of the LNAPL may also be considered. A monitoring program will be implemented for groundwater and LNAPL to monitor the effectiveness of the LNAPL recovery effort.

7. Air Sparging/ Soil Vapor Extraction (OU-1 and OU-2)

Air sparging will be implemented to address the groundwater plume contaminated by volatile organic compounds (VOCs) identified in the northeast portion of the site and in the downgradient vicinity of the site. VOCs will be physically removed from the groundwater and soil below the water table (saturated soil) by injecting air into the subsurface. The injected air rising through the groundwater will volatilize and transfer the VOCs from the groundwater and/or soil into the injected air. The VOCs are carried with the injected air into the vadose zone (the area below the ground surface but above the water table) where a soil vapor extraction (SVE) system, designed to remove the injected air, will be installed. The SVE system will apply

a vacuum to wells that have been installed into the vadose zone to remove the VOCs along with the air introduced by the sparging process. The air extracted from the SVE wells will be treated as necessary prior to being discharged to the atmosphere.

The number, depth, type and spacing of the AS/SVE wells will be determined during the design phase of the remedy.

8. Vapor Mitigation (OU-1 and OU-2)

Any on-site and off-site buildings impacted by the contaminants migrating from the site will be required to have a sub-slab depressurization system, or other acceptable measure, to mitigate the migration of vapors into the building from soil or groundwater. The sub-slab depressurization system will be installed in the on-site buildings to be constructed at the site. An evaluation will be conducted, as discussed in paragraph 11 below, to determine whether sub-slab depressurization systems are necessary in off-site properties north of Clay Street pending site access from the owner(s)

9. Treatment Remedy Shutdown

The operation of the components of the remedy would continue until the remedial objectives have been achieved, or until the Department determines that continued operation is technically impracticable or not feasible.

10. Institutional Controls (OU-1)

Imposition of an institutional control in the form of an environmental easement for the controlled property that 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, 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 NYCDOHMH; and
- require compliance with the Department-approved Site Management Plan.

11. Site Management Plan (OU-1 and OU-2)

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 ensure the following institutional and/or engineering controls remain in place and effective:
 - Institutional Controls: The Environmental Easement discussed in paragraph 10 above.
 - Engineering Controls: The migration barriers, site cover, LNAPL recovery, AS/SVE, and vapor mitigation systems discussed in paragraphs 4 through 8 above

This plan includes, but may not be limited to:

- an Excavation Plan which details the provisions for management of future excavations in areas of remaining contamination;
 - 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 buildings in off-site areas of contamination, including provision for implementing actions recommended to address exposures related to soil vapor intrusion;
 - a provision that should a building foundation or building slab be removed in the future, a cover system consistent with that described in paragraph 8 above will be place in any area where the upper two feet of exposed surface soil exceed the applicable soil cleanup objectives (SCOs)
 - provisions for the management and inspection of the identified engineering controls;
 - maintaining site access controls and Department notification; and
 - the steps necessary for the periodic reviews and certification of the institutional and/or engineering controls.
- b) a Monitoring Plan to assess the performance and effectiveness of the remedy. The plan includes, but may not be limited to:
- monitoring of LNAPL, groundwater and soil vapor to assess the performance and effectiveness of the remedy;
 - a schedule of monitoring and frequency of submittals to the Department;
 - monitoring for vapor intrusion for any buildings on the site, as may be required by the Institutional and Engineering Control Plan discussed above.
- c) 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.

Exhibit A

Nature and Extent of Contamination

This section describes the findings of the Remedial Investigation for all environmental media that were evaluated. As described in Section 6.1, samples were collected from various environmental media to characterize the nature and extent of contamination.

For each medium for which contamination was identified, a table summarizes the findings of the investigation. The tables present the range of contamination found at the site in the media and compares the data with the applicable SCGs for the site. The contaminants are arranged into four categories: volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), pesticides/polychlorinated biphenyls (PCBs), and inorganics (metals and cyanide). For comparison purposes, the SCGs are provided for each medium that allows for unrestricted use. For soil, if applicable, the Restricted Use SCGs identified in Section 4 and Section 6.1.1 are also presented.

Waste/Source Areas

As described in the RI report, waste/source materials were identified at the site and are impacting groundwater, soil, and/or soil vapor.

Wastes are defined in 6 NYCRR Part 375-1.2(aw) and include solid, industrial and/or hazardous wastes. Source areas are defined in 6 NYCRR Part 375(au). Source areas are areas of concern at a site where substantial quantities of contaminants are found which can migrate and release significant levels of contaminants to another environmental medium. Wastes and source areas were identified at the site in areas where former industrial operations occurred, around the former solvent underground storage tanks, and around the piping/trench system. The phthalates and lubricating oil were most likely released from the tanks and piping/trench systems. Phthalates and phthalate/oil mixtures are present in soil and as a light non-aqueous-phase liquid (LNAPL) plume floating on the groundwater surface. Figure 2 presents the extent of the LNAPL plume both on- and off-site. PCBs were identified in waste profiles during the disposal of the LNAPL recovered from the on-site recovery system in 2015. In order to identify the source of the PCBs, LNAPL from various wells and the temporary storage containers were sampled and tested for PCBs in 2015. Those results indicate that low levels of PCBs were detected (ranging from ND to 6 ppm).

Certain waste/source areas identified at the site were addressed by the IRM(s) described in Section 6.2. The remaining waste/source area(s) identified during the RI will be addressed in the remedy selection process.

Groundwater

Groundwater samples were collected from wells to assess the groundwater conditions both on- and off-site. The samples were analyzed for volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), and metals to determine the nature and extent of contamination related to the historical operations at the site. Soil sample results from investigations completed under the spill program circa 2006 indicated no pesticides were detected, and only trace levels (0.05 to 0.07 ppm) of PCBs were detected. Based on the soil results from the 2006 investigation, pesticides and PCBs were not considered to be contaminants of concern for this site, and therefore groundwater samples were not analyzed for PCBs or pesticides. The investigation results indicate that contamination in the groundwater at the site exceeds the SCGs for VOCs, SVOCs and metals.

The primary groundwater contaminants are chlorinated solvents, which are present in groundwater beneath the northeastern portion of the site and extend offsite to the north-northwest. Figure 3 provides a generalized representation of the area of groundwater contamination that exceeds drinking water standards. SVOCs and metals have been reported above SCGs but are a lesser concern due to their location, nature, relatively low concentration, and/or low occurrence frequency.

Table 1 – Groundwater

Detected Constituents	Concentration Range Detected (ppb)	SCG (ppb)	Frequency Exceeding SCG
-----------------------	------------------------------------	-----------	-------------------------

SVOC NYS CLASS GA			
Benzo(A)Anthracene	0.0500-4.40	0.002	20/20
Benzo(A)Pyrene	0.0500-5.24	0	20/20
Benzo(B)Fluoranthene	0.0500-4.45	0.002	20/20
Benzo(K)Fluoranthene	0.0500-3.74	0.002	20/20
Bis(2-Ethylhexyl) Phthalate	0.500-1,750	5	11/20
Chrysene	0.0500-4.49	0.002	20/20
Indeno(1,2,3-C,D)Pyrene	0.0500-2.97	0.002	20/20
Nitrobenzene	0.250-2.13	0.4	15/20
Pentachlorophenol	0.250-3.76	1	10/15
Phenol	1.13-3.27	1	15/15
VOC NYS CLASS GA			
1,1,2-Trichloroethane	0.200-50.0	1	19/35
1,2,3-Trichloropropane	0.730-2.50	0.04	13/13
1,2-Dibromo-3-Chloropropane	0.200-50.0	0.04	35/35
1,2-Dibromoethane (Ethylene Dibromide)	0.200-50.0	0.0006	35/35
1,2-Dichloroethane	0.200-50.0	0.6	22/35
1,2-Dichloropropane	0.200-50.0	1	17/35
1,4-Dichlorobenzene	0.200-50.0	3	9/48
Benzene	0.200-50.0	1	17/35
Cis-1,2-Dichloroethylene	0.200-2,700	5	9/35
Cis-1,3-Dichloropropene	0.200-50.0	0.4	20/35
Dibromochloromethane	0.200-50.0	50	1/35
Hexachlorobutadiene	0.430-3.58	0.5	28/33
Methylene Chloride	1.00-250	5	9/35
Trans-1,3-Dichloropropene	0.200-50.0	0.4	25/35
Trichloroethylene (TCE)	0.160-33,000	5	12/35
Vinyl Chloride	0.200-120	2	19/35
Xylenes, Total	0.550-150	5	17/35

a - ppb: parts per billion, which is equivalent to micrograms per liter, ug/L, in water.

b - SCG: Standard Criteria or Guidance - Ambient Water Quality Standards and Guidance Values (TOGs 1.1.1), 6 NYCRR Part 703, Surface water and Groundwater Quality Standards, and Part 5 of the New York State Sanitary Code (10 NYCRR Part 5).

Based on the findings of the RI, the presence of chlorinated solvents has resulted in the contamination of groundwater. The site contaminants that are considered to be the primary contaminants of concern which will drive the remediation of groundwater to be addressed by the remedy selection process are: trichloroethene (TCE) and associated degradation products.

Soil

Soil samples were collected at the site during the RI, and during prior site activities. Soil sample results from investigations completed under the spill program in 2006 indicated that no pesticides were detected and only trace levels (0.05 and 0.07 ppm) of PCBs were detected. Based on the 2006 soil results, pesticides and PCBs were not considered to be contaminants of concern for this site and therefore additional soil samples under the RI did not analyzed for these chemicals. The samples were analyzed for VOCs, SVOCs, and metals to determine the nature and extent of contamination related to historical operation at the site. Soil samples were collected at different depths from the surface to a maximum depth of 30 feet below grade both on-site and off-site. The sample results indicated that on-site soil contamination exceeds the SCGs for chlorinated VOCs (TCE and associated degradation products) in a limited area in the northeastern portion of the site and extends off-site to the north beneath the sidewalk on the south side of Clay Street. The impacted soil has been identified at depths from 10 to 25 feet below grade surface. SVOCs detected on site are limited to bis (2-ethylhexyl) phthalate (DEHP) and di-n-octyl phthalate (DOP) in soil located at and near the groundwater interface in the area where LNAPL is present. DEHP and DOP are also found in off-site soil at and near the groundwater interface where LNAPL is present. The DEHP and DOP concentrations exceed the unrestricted use SCOs. Various metals were detected in excess of the unrestricted use SCOs in both on-site and off-site locations, however, these detections are most likely related to materials in historical fill and are characteristic of historic fill commonly found in the New York City metropolitan area. The sampling result for soil samples for the RI are presented in Table 2. Figure 4 shows the location of soil samples collected during the RI and prior studies.

Table 2 - Soil

Detected Constituents	Concentration Range Detected (ppm)	Unrestricted Use SCG (ppm)	Frequency Exceeding Unrestricted Use SCG	Restricted Residential Use SCG (ppm)	Frequency Exceeding Restricted Use SCG
Pesticides/PCBs PART 375					
Hexachlorobenzene	0.0281-767	0.33	21/54	1.2	20/54
SVOC PART 375					
Bis (2-ethylhexyl) phthalate	0-59,200			50 ^e	18/53
Di-N-Octyl phthalate	0-3,010			100 ^e	11/53
2-Methylphenol (O-Cresol)	0.0281-1,730	0.33	18/47	100	6/47
Acenaphthene	0.0281-2,730	20	12/54	100	8/54
Acenaphthylene	0.0281-1,320	100	7/54	100	7/54
Anthracene	0.0281-1,170	100	7/54	100	7/54
Benzo(A)Anthracene	0.0281-1,820	1	20/54	1	20/54
Benzo(A)Pyrene	0.0281-1,230	1	20/54	1	20/54

Benzo(B)Fluoranthene	0.0281-1,790	1	21/54	1	21/54
Benzo(G,H,I)Perylene	0.0281-1,410	100	7/54	100	7/54
Benzo(K)Fluoranthene	0.0281-1,820	0.8	21/54	3.9	19/54
Chrysene	0.0281-1,900	1	20/54	3.9	19/54
Dibenz(A,H)Anthracene	0.0281-1,190	0.33	21/54	0.33	21/54
Dibenzofuran	0.0281-1,520	7	14/54	59	8/54
Fluoranthene	0.0281-2,730	100	8/54	100	8/54
Fluorene	0.0281-1,320	30	8/54	100	7/54
Indeno(1,2,3-C,D)Pyrene	0.0281-1,730	0.5	21/54	0.5	21/54
Naphthalene	0.000600-1,410	12	11/121	100	7/121
Pentachlorophenol	0.0281-1,320	0.8	18/47	6.7	12/47
Phenanthrene	0.0281-1,740	100	7/54	100	7/54
Phenol	0.0281-1,880	0.33	18/47	100	6/47
Pyrene	0.0281-1,690	100	7/54	100	7/54
VOC PART 375					
1,2-Dichlorobenzene	0.000530-2,060	1.1	21/94	100	7/94
1,3-Dichlorobenzene	0.000540-2,240	2.4	19/94	49	8/94
1,4-Dichlorobenzene	0.000780-1,610	1.8	19/94	13	12/94
Cis-1,2-Dichloroethylene	0.000350-2.40	0.25	4/68	0.25 ^d	4/68
Trichloroethylene (TCE)	0.000600-14.0	0.47	9/68	0.47 ^d	9/68
Vinyl Chloride	0.000330-0.270	0.02	5/68	0.02 ^d	5/68

a - ppm: parts per million, which is equivalent to milligrams per kilogram, mg/kg, in soil;

b - SCG: Part 375-6.8(a), Unrestricted Soil Cleanup Objectives.

c - SCG: Part 375-6.8(b), Restricted Use Soil Cleanup Objectives for the Protection of Public Health for Restricted Residential Use, unless otherwise noted.

d - SCG: Part 375-6.8(b), Restricted Use Soil Cleanup Objectives for the Protection of Groundwater.

e - SCG: final Commissioner Policy CP-51

Based on the findings of the Remedial Investigation, the past disposal of hazardous waste has resulted in the contamination of soil. The site contaminants identified in soil which are considered to be the primary contaminants of concern, to be addressed by the remedy selection process are, chlorinated VOCs (TCE and associated degradation products) and phthalates (DEHP, DOP).

Soil Vapor

The evaluation of the potential for soil vapor intrusion resulting from the presence of site related soil or groundwater contamination was evaluated by the sampling of soil vapor. At this site, due to the presence of buildings in the impacted area, a full suite of samples was collected to evaluate whether soil vapor intrusion was occurring.

Samples were collected on-site and off-site locations, and one off-site property where access were granted. The results from these samples indicated the chlorinated VOC contamination related to the on-site disposal of

hazardous wastes was detected in soil vapor and is present beneath the northeastern portion of the site building, with the greatest impacts coinciding with chlorinated VOC-impacted groundwater in this area. The chlorinated VOCs in soil vapor have migrated off-site to the east and north of the site generally consistent with groundwater flow and vapor phase dispersion. The site-related chlorinated VOC soil vapor impacts extend off-site to the east beneath a portion of the adjoining former NuHart facility, but do not extend to the east end of this building or to the off-site residential properties to the east of the site. The chlorinated VOC soil vapor impacts extend to the north, across Clay Street, but do not extend as far northward as the north side of Commercial Street, as demonstrated by soil vapor data from the nearby Greenpoint Landing property. Figure 5 provides the soil vapor chlorinated VOC plume both on-site and off-site.

Based on the concentration detected, the primary soil vapor contaminants are PCE and TCE which are associated with the former site operations. Actions are needed to address exposure at the on-site structure, in the off-site adjoining former NuHart facility structure to the east of the site, and at least three adjacent off-site properties on the north side of Clay Street.

Based on the findings of the Remedial Investigation, the disposal of hazardous waste has resulted in the contamination of soil vapor. The site contaminants that are considered to be the primary contaminants of concern which will drive the remediation of soil vapor to be addressed by the remedy selection process are chlorinated VOCs (PCE, TCE).

Exhibit B

Description of Remedial Alternatives

The following alternatives were considered based on the remedial action objectives (see Section 6.5) to address the contaminated media identified at the site as described in Exhibit A.

Alternative 1: No Further Action

The No Further Action Alternative recognizes the remediation of the site completed by the IRM(s) described in Section 6.2. This alternative leaves the site in its present condition and does not provide any additional protection of the environment.

Present Worth: \$0
Capital Cost: \$0
Annual Costs: \$0

Alternative 2: AS/SVE, Off-Site Barrier, LNAPL Extraction/Disposal, Limited On-Site Source Removal, Groundwater/LNAPL Monitoring, Soil Vapor/SVI Monitoring, and ECs/ICs

This alternative includes limited excavation and off-site disposal of on-site source infrastructure and associated soils. The area of excavation under this alternative consists of the USTs and piping trench system formerly used to store and convey phthalates and lubricating oil during the former manufacturing process, and impacted soils that directly overlie or underlie these structures. The soil removal would be limited to one foot below the depth of the structures. This alternative also calls for installation of an air sparging/soil vapor extraction (AS/SVE) system to address the VOC impacted soil and groundwater identified on the northeastern portion of the site and in the downgradient vicinity of the site. On-site and off-site LNAPL extraction would be accomplished using either high viscosity product pumps or belt skimmers to reduce LNAPL mass. The installation of off-site groundwater cutoff wall is intended to protect the property designated as a proposed public school and prevent any migration of LNAPL onto that property.

A monitoring program would be implemented for groundwater, LNAPL, and soil vapor. The groundwater monitoring program will be used to confirm that the impacts continue to be limited to the immediate proximity of the site. The LNAPL monitoring will document the anticipated reduction of the LNAPL extent and apparent thickness over time. Soil vapor monitoring will be used to assess the soil vapor conditions over time and serve as a trigger for implementing SVI mitigation measure should the need arise.

This alternative also employs site management, including institutional and engineering controls (IC/EC), to ensure the remedy continues to be protective and to ensure the safe reuse of the property where contamination will remain in place.

Present Worth: \$11,400,000
Capital Cost: \$2,870,000
Annual Costs: \$1,000,000

Alternative 3: AS/SVE, Off-Site Barrier with LNAPL Extraction/Disposal, Targeted On-Site Source Removal and ISCO, Off-Site SSDS, Option for On-Site ISS, Groundwater/LNAPL Monitoring, and ICs/ECs

This alternative includes targeted excavation and off-site disposal of on-site soil impacted by LNAPL and in the VOC source area to a depth of approximately 10 feet below grade. The soil targeted for excavation under this alternative consists of LNAPL-saturated soil that is present in proximity to the USTs and piping/trench systems, and the VOC-impacted soil above the water table in the northeast corner of the site.

This alternative includes two options for addressing on-site LNAPL below the excavation depth, as follows:

Option 1 - On-site LNAPL extraction using either high viscosity product pumps or belt skimmers to reduce LNAPL mass in the on-site plume.

Option 2 – On-site in-situ stabilization (ISS) of LNAPL in lieu of on-site recovery to treat LNAPL identified between 10 and 18 feet below grade. Details of the ISS would be defined under the remedial design prior to implementation.

This alternative also calls for the installation of an AS/SVE system to address the VOC-impacted soil (below the water table) and groundwater identified on the northeastern portion of the site and in the downgradient vicinity of the site. It also includes enhanced treatment for VOC-impacted soil and groundwater by application of in-situ chemical oxidants (ISCO) to the exposed soil/groundwater surface in the open excavation prior to backfilling. Selection and design of the ISCO treatment would be made during the remedial design process.

Off-site LNAPL extraction would be accomplished using either high viscosity product pumps or belt skimmers to reduce LNAPL mass off-site under Franklin Street. The installation of the off-site groundwater cutoff wall is intended to protect the property designated as a proposed public school and prevent any migration of LNAPL onto that property. Sub-slab depressurization (SSD) systems and/or vapor barriers would be installed to mitigate soil vapor intrusion (SVI) for the off-site buildings on the north side of Clay Street (48 Commercial Street, 15 and 19 Clay Street, assuming access is granted by owners) and adjoining NuHart facility building to the east in proximity to the area where TCE-impacted soil vapor had been identified and potential for SVI had been documented.

A monitoring program will be implemented for groundwater, LNAPL, and soil vapor. The groundwater monitoring program will be used to confirm that the impacts continue to be limited to the immediate proximity of the site. The LNAPL monitoring will document the anticipated reduction of the LNAPL extent and apparent thickness over time. The soil vapor monitoring will be used to assess the soil vapor conditions over time and to assess whether the SVI mitigation measures are effective.

This alternative also employs site management, including institutional and engineering controls (IC/EC), to ensure the remedy continues to be protective and to ensure the safe reuse of the property where contamination will remain in place.

<i>Present Worth (with ISS Option):</i>	\$24,300,000
<i>Capital Cost (with ISS Option):</i>	\$4,330,000
<i>Annual Costs (with ISS Option):</i>	\$1380,000
 <i>Present Worth:</i>	 \$15,100,000

Capital Cost:..... \$4,330,000
 Annual Costs:..... \$1,380,000

Alternative 4: AS/SVE, On-Site and Off-Site Barrier, On-Site Soil and LNAPL Excavation, Off-Site LNAPL Recovery, Vapor Mitigation, and ICs/ECs

This alternative will include full excavation of on-site LNAPL and VOC-impacted soil. This will be accomplished by excavation and off-site disposal of soil to a depth of approximately 16 feet below the site building floor. The soil targeted under this alternative consists of the majority of the Class 2 site. As part of the support for the on-site excavation, shoring will be installed around the entire perimeter of the excavation area. It is anticipated that the shoring to the south, north and west would remain in place following the completion of excavation to prevent LNAPL that may remain outside of the excavation from re-entering the remediated area. AS/SVE will be used to address the remaining dissolved VOCs and VOC-impacted soil.

Off-site LNAPL extraction would be accomplished using either high viscosity product pumps or belt skimmers to reduce LNAPL mass off-site under Franklin Street. The installation of the off-site groundwater cutoff wall is intended to protect the property designated as a proposed public school and prevent any migration of LNAPL onto that property. Sub-slab depressurization (SSD) systems and/or vapor barriers would be installed to mitigate soil vapor intrusion (SVI) for the off-site buildings on the north side of Clay Street (48 Commercial Street, 15 and 19 Clay Street, assuming access is granted by owners) and adjoining NuHart facility building to the east in proximity to the area where TCE-impacted soil vapor had been identified and potential for SVI had been documented.

A monitoring program will be implemented for groundwater, LNAPL, and soil vapor. The groundwater monitoring program will be used to confirm that the remedy is effective. The LNAPL monitoring will document the anticipated reduction of the off-site LNAPL extent and apparent thickness over time. The soil vapor monitoring will be used to assess the soil vapor conditions over time and to assess whether the SVI mitigation measure are effective.

This alternative also employs site management, including institutional and engineering controls (IC/EC), to ensure the remedy continues to be protective and to ensure the safe reuse of the property where contamination will remain in place.

Present Worth:..... \$30,700,000
 Capital Cost:..... \$20,300,000
 Annual Costs:..... \$1,380,000

Alternative 5: AS/SVE, Off-Site Barrier, On-Site Barrier, In-Situ Thermal Treatment with LNAPL Recovery, Targeted On-Site Source Removal, Vapor Mitigation and ICs/ECs

This alternative will consist of off-site LNAPL extraction using either high viscosity product pumps or belt skimmers to reduce LNAPL mass off-site under Franklin Street. Targeted excavation and off-site disposal of on-site soil impacted by LNAPL and VOCs would be conducted to a depth of approximately 10 feet below grade. The soil targeted under this alternative consists of LNAPL-saturated soil that is present in proximity to the USTs and piping trench systems formerly used to store and convey phthalates and lubricating oil during the former

manufacturing process, and the VOC-impacted soil (above the water table) in the northeast corner of the site. In addition, a groundwater cutoff wall is intended to protect the property designated as a proposed public school and prevent any migration of the LNAPL onto that property.

On-site LNAPL will be addressed through thermal conductive heating (TCH) to enhance LNAPL recovery. The removal of on-site LNAPL will reduce any potential subsequent migration of LNAPL mass off-site. In addition, a groundwater cutoff wall will be installed on the site around the LNAPL mass to further reduce the potential for off-site migration and aid the TCH enhanced recovery efforts. The TCH may also address a portion of the dissolved VOC plume where it overlaps the LNAPL footprint. AS/SVE will be used to address the remaining VOCs in soil and groundwater.

Off-site LNAPL extraction would be accomplished using either high viscosity product pumps or belt skimmers to reduce LNAPL mass off-site under Franklin Street. The installation of the off-site groundwater cutoff wall is intended to protect the property designated as a proposed public school and prevent any migration of LNAPL onto that property. Sub-slab depressurization (SSD) systems and/or vapor barriers would be installed to mitigate soil vapor intrusion (SVI) for the off-site buildings on the north side of Clay Street (48 Commercial Street, 15 and 19 Clay Street, assuming access is granted by owners) and adjoining NuHart facility building to the east in proximity to the area where TCE-impacted soil vapor had been identified and potential for SVI had been documented.

A monitoring program will be implemented for groundwater, LNAPL, and soil vapor. The groundwater monitoring program will be used to confirm that the remedy is effective. The LNAPL monitoring will document the anticipated reduction of the off-site LNAPL extent and apparent thickness over time. The soil vapor monitoring will be used to assess the soil vapor conditions over time and to assess whether the SVI mitigation measure are effective.

This alternative also employs site management, including institutional and engineering controls (IC/EC), to ensure the remedy continue to be protective and to ensure the safe reuse of the property where contamination will remain in place.

<i>Present Worth:</i>	<i>\$18,600,000</i>
<i>Capital Cost:</i>	<i>\$8,250,000</i>
<i>Annual Costs:</i>	<i>\$1,340,000</i>

Exhibit C

Remedial Alternative Costs

Remedial Alternative	Capital Cost (\$)	Annual Costs (\$)	Total Present Worth (\$)
1. No Action	0	0	0
2. AS/SVE, Off-Site Barrier, LNAPL Extraction/Disposal, Limited On-Site Source Removal, Groundwater/LNAPL Monitoring, Soil Vapor/SVI Monitoring, and ECs/ICs	\$2,870,000	\$1,000,000	\$11,400,000
3. AS/SVE, Off-Site Barrier with LNAPL Extraction/Disposal, Targeted On-Site Source Removal and ISCO, Off-Site SSDS, Option for On-Site ISS, Groundwater/ LNAPL Monitoring, and ICs/ECs	\$4,330,000	\$1,380,000	\$15,100,000 (\$24,300,00)
4. AS/SVE, On-Site and Off-Site Barrier, On-Site Soil and LNAPL Excavation, Off-Site LNAPL Recovery, Vapor Mitigation, and ICs/ECs	\$20,300,000	\$1,380,000	\$30,700,000
5. AS/SVE, Off-Site Barrier, On-Site Barrier, In-Situ Thermal Treatment with LNAPL Recovery, Targeted On-Site Source Removal, Vapor Mitigation and ICs/ECs	\$8,250,000	\$1,340,000	\$18,600,000

Exhibit D

SUMMARY OF THE SELECTED REMEDY

The Department is selecting Alternative 4, **AS/SVE, On-Site and Off-Site Barrier, On-Site Soil and LNAPL Excavation, Off-Site LNAPL Recovery, Off-Site SSDS, and ICs/ECs** as the remedy for this site. Alternative 4 would achieve the remediation goals for the site by using multiple technologies to remove the contamination from the soil and groundwater, preventing off-site NAPL migration, destroying the contamination in the groundwater, monitoring the soil vapor and groundwater to ensure the concentration of the contaminants continues to decrease, and managing remaining contamination and associated human exposures. The elements of this remedy are described in Section 7. The selected remedy is depicted in Figures 6 through 10.

Basis for Selection

The selected remedy is based on the results of the RI and the evaluation of alternatives. The criteria to which potential remedial alternatives are compared are defined in 6 NYCRR Part 375. A detailed discussion of the evaluation criteria and comparative analysis is included in the FS report.

The first two evaluation criteria are termed "threshold criteria" and must be satisfied in order for an alternative to be considered for selection.

1. Protection of Human Health and the Environment. This criterion is an overall evaluation of each alternative's ability to protect public health and the environment.

Alternative 1 does not provide any protection to public health and the environment and will not be evaluated further.

Alternatives 2, 3, and 5 comply with this criterion but to a lesser degree or with lower certainty, specifically as it relates to the time-frame to achieve the remedial action objectives.

The selected remedy Alternative 4 will satisfy this criterion by removing the on-site contaminated soils, removing on-site and off-site LNAPL, treating any on-site groundwater contamination, thereby preventing the further migration of the groundwater plume, capturing soil vapor, and managing remaining contamination to prevent human exposures. The on-site and off-site physical barrier will prevent further migration of the LNAPL plume both on and off-site. This alternative, once fully completed, is more protective than Alternatives 1, 2, 3 and 5.

2. Compliance with New York State Standards, Criteria, and Guidance (SCGs). Compliance with SCGs addresses whether a remedy will meet environmental laws, regulations, and other standards and criteria. In addition, this criterion includes the consideration of guidance which the Department has determined to be applicable on a case-specific basis.

Alternatives 2 and 3 would achieve the SCGs on-site and off-site to the extent practicable, but over a longer time frame. Alternatives 2 and 3 would include on-site excavation only to a limited depth or in targeted areas, and would rely on longer-term remedial elements to address the remaining on-site source areas. Alternative 4 complies with SCGs on-site, and to the extent practicable off-site. For the on-site source, Alternative 4 will achieve compliance by fully excavating the on-site LNAPL and VOC contaminated source areas. Alternative 5 may achieve the SCGs; however, this alternative includes the use of technology that is relatively new, and is unproven for use in treating phthalates.

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

3. Long-term Effectiveness and Permanence. This criterion evaluates the long-term effectiveness of the remedial alternatives after implementation. If wastes or treated residuals remain on-site after the selected remedy has been implemented, the following items are evaluated: 1) the magnitude of the remaining risks, 2) the adequacy of the engineering and/or institutional controls intended to limit the risk, and 3) the reliability of these controls.

Alternatives 2 through 5 all provide adequate long-term effectiveness but at varied timeframes, and all require engineering controls and institutional controls to achieve long-term permanence. Long-term effectiveness is best accomplished by Alternative 4, which provides the most significant reduction the volume of the LNAPL source and VOC impacted soil contamination, which would in turn reduce both the potential for soil vapor intrusion and off-site migration of the VOC plume. Alternative 5 would use heat to enhance the LNAPL recovery for the on-site LNAPL, which can help in speed up the on-site LNAPL recovery process. Alternative 2 and 3 will be the least effective at quickly reducing the on-site source area LNAPL contamination.

4. Reduction of Toxicity, Mobility or Volume. Preference is given to alternatives that permanently and significantly reduce the toxicity, mobility or volume of the wastes at the site.

Alternative 4 will quickly and permanently remove on-site LNAPL contamination and provide a reduction in toxicity, mobility and volume. The removal of the source area contamination will also significantly limit the continued source area contribution to the off-site plume and reduce the potential for VOC soil vapor intrusion. Alternatives 3, 4 and 5 will provide additional reduction in toxicity, mobility and volume by treating the off-site portion of the source area contamination. Alternative 2 and 3 will provide a much slower reduction in on-site LNAPL contaminant toxicity, mobility and volume as compared to the other alternatives.

5. Short-term Impacts and Effectiveness. The potential short-term adverse impacts of the remedial action upon the community, the workers, and the environment during the construction and/or implementation are evaluated. The length of time needed to achieve the remedial objectives is also estimated and compared against the other alternatives.

All the alternatives would be expected to have some short-term impacts associated with their activities. Each alternative involves some degree of intrusive activities which may temporarily disrupt the surrounding residential community via noise, odor, and increased truck traffic. These impacts may be minimized with careful coordination with the municipality and surrounding landowners during remedial design. A community air monitoring plan (CAMP) and health and safety plan (HASP) would be required during remediation activities for each of the alternatives presented.

Alternatives 2 would be expected to have less short-term impacts than alternatives 3, 4 and 5 due to the limited volume of soil that would be removed from the site. The time needed to achieve the remediation goals is the shortest for Alternative 4 and 5. Alternatives 2 and 3 will takes the longer to achieve the remediation goals.

6. Implementability. The technical and administrative feasibility of implementing each alternative are evaluated. Technical feasibility includes the difficulties associated with the construction of the remedy and the ability to monitor its effectiveness. For administrative feasibility, the availability of the necessary personnel and materials is evaluated along with potential difficulties in obtaining specific operating approvals, access for construction, institutional controls, and so forth.

Alternatives 2, 3 and 4 are considered implementable from a technical standpoint, since they all use proven technologies for treating contamination. The on-site LNAPL and soil excavated under Alternative 4 would necessitate increased truck traffic on local roads for several months. Alternative 5 is also implementable, but the on-site thermal enhanced LNAPL recovery and ISCO injection to treat phthalates would require careful monitoring to assess its effectiveness. The results of the thermal treatability study indicate some uncertainty regarding the implementability of Alternative 5. Alternatives 2 through 5 all have similar off-site implementability by use of similar technologies (i.e., off-site barrier, AS/SVE, LNAPL extraction via recovery wells, SSDS) for treating groundwater, LNAPL, and soil vapor identified off-site

7. Cost-Effectiveness. Capital costs and annual operation, maintenance, and monitoring costs are estimated for each alternative and compared on a present worth basis. Although cost-effectiveness is the last balancing criterion evaluated, where two or more alternatives have met the requirements of the other criteria, it can be used as the basis for the final decision.

The relative costs of the alternatives vary significantly. Alternative 2 has the lowest cost, but the remedy does not account for off-site soil vapor mitigation. Alternative 4 is expected to be the most expensive but would provide the most effective remedy for on-site contaminant sources. The capital cost for Alternatives 2, 3 and 5 would be less than Alternative 4, but the annual maintenance cost for all of these alternatives is similar since the off-site remedy elements are similar. While Alternative 5 has a lower capital cost than Alternative 4, uncertainty about the effectiveness of the technology as indicated by the treatability study means the cost estimate may not be accurate since this alternative may not be as effective.

8. Land Use. When cleanup to pre-disposal conditions is determined to be infeasible, the Department may consider the current, intended, and reasonable anticipated future land use of the site and its surroundings in the selection of the soil remedy.

The site is currently vacant; however, the anticipated future use of the site is commercial and residential.

It is expected that Alternatives 3 through 5 would each provide an acceptable level of cleanup for future site redevelopment. Alternatives 2, 3 and 5 are the least desirable because in addition to being the slowest remedial methods they would most likely leave on-site LNAPL source(s). Alternative 4 is the most desirable since it will permanently remove or treat the entire on-site source area in the shortest time. Alternatives 2 through 5 all require that remaining contamination be monitored and controlled with a site management plan, and institutional and engineering controls.



The final criterion, Community Acceptance, is considered a "modifying criterion" and is taken into account after evaluating those above. It is evaluated after public comments on the Proposed Remedial Action Plan have been received.

9. Community Acceptance. Concerns of the community regarding the investigation, the evaluation of alternatives, and the PRAP are evaluated. A responsiveness summary will be prepared that describes public comments received and the manner in which the Department will address the concerns raised.

Alternative 4 is being selected because, as described above, it satisfies the threshold criteria and provides the best balance of the balancing criterion.



Figure 1 - Site Boundary Map
Former NuHart Plastic Manufacturing
Site No. 224136

- Legend**
-  Former NuHart Property Boundary
 -  Superfund Site Boundary



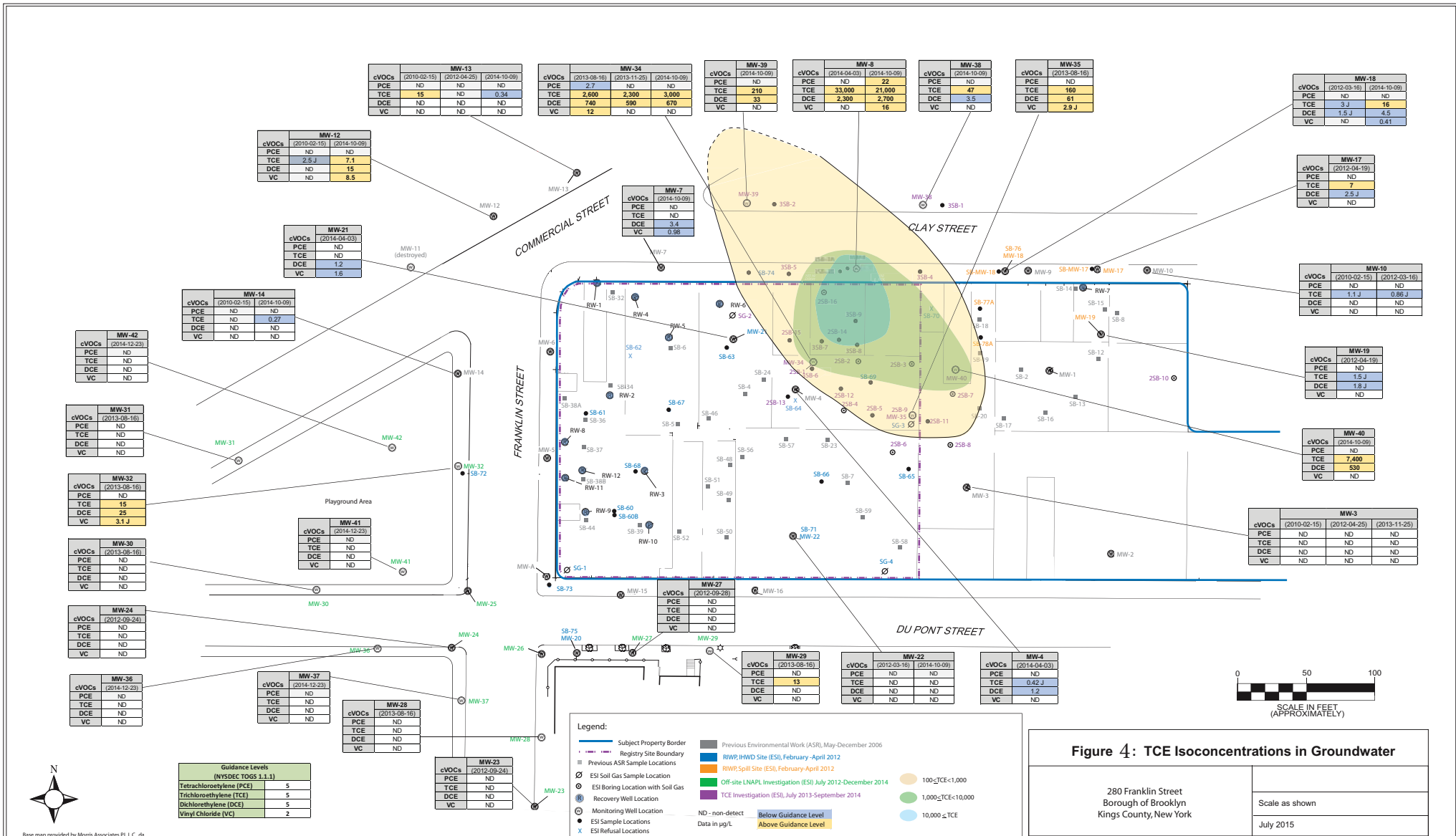
- Legend**
- LNAPL Extent
 - Superfund Site Boundary

**Figure 2 - Areal Extent of LNAPL
In Groundwater**



Figure 3 - TCE Groundwater Plume

- Legend**
- - - TCE Plume in GW
 - Superfund Site Boundary



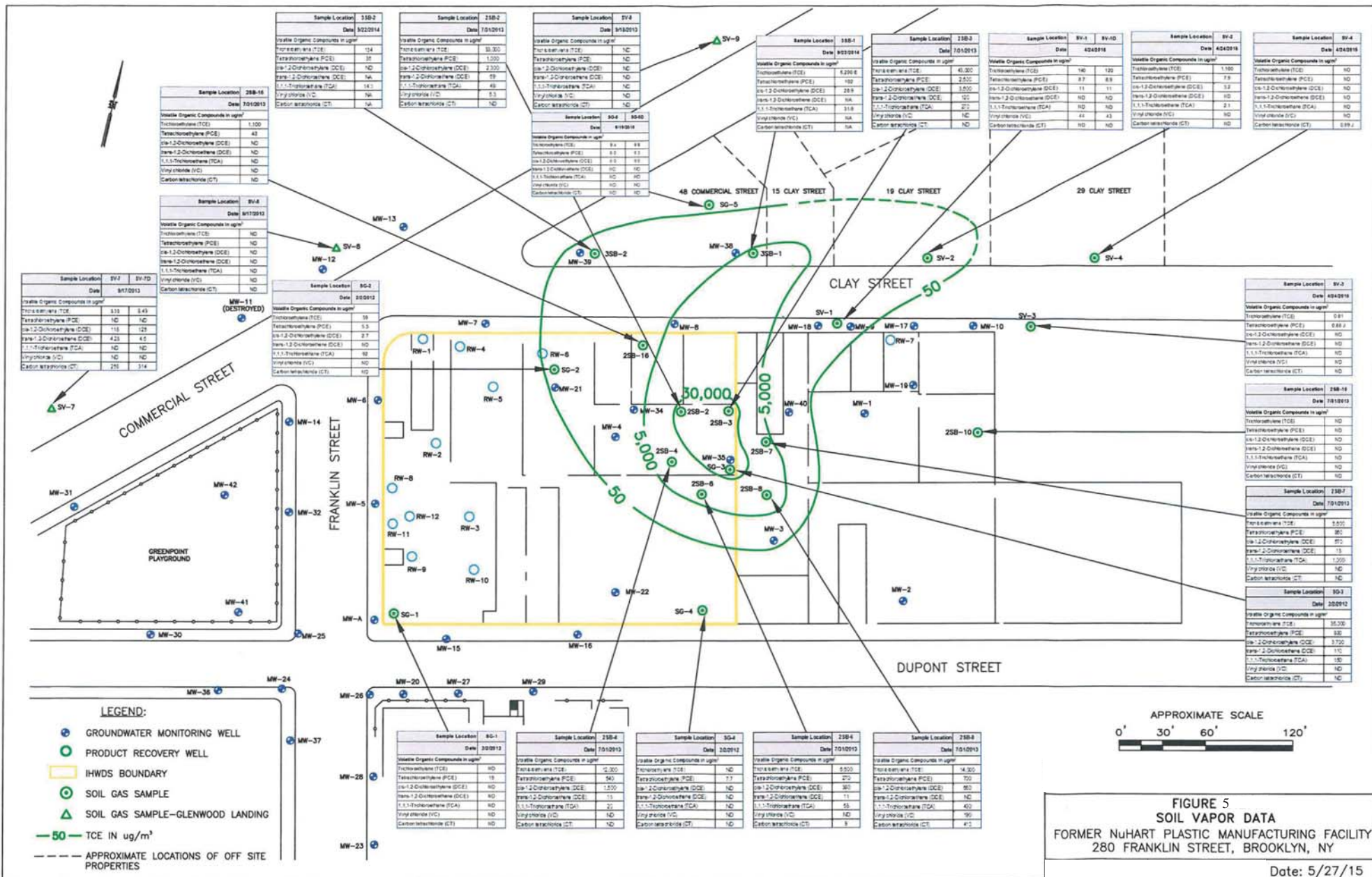






Figure 6 - On-Site Excavation Area

- Legend**
-  LNAPL Extent
 -  Superfund Site Boundary
 -  Excavation Area



- Legend**
- LNAPL Extent
 - Physical Barriers
 - Off Site LNAPL Extraction Area
 - Superfund Site Boundary

Figure 7 - Physical Barriers/ Off-Site LNAPL Extraction Area



Figure 8 - AS/SVE Treatment Area

- Legend**
- - - TCE Plume in GW
 - AS/SVE Treatment Area
 - Superfund Site Boundary





Figure 9 - Groundwater/LNAPL Monitoring Area

- Legend**
- GW and LNAPL Monitoring Area
 - Superfund Site Boundary



Figure 10 - Vapor Mitigation Area

- Legend**
-  Vapor Mitigation Area
 -  Superfund Site Boundary

APPENDIX A

Responsiveness Summary

RESPONSIVENESS SUMMARY

**Former NuHart Plastic Manufacturing
State Superfund Project
Kings County, New York
Site No. 224136**

The Proposed Remedial Action Plan (PRAP) for the Former NuHart Plastic Manufacturing site was prepared by the New York State Department of Environmental Conservation (DEC) in consultation with the New York State Department of Health (DOH) and was issued to the document repositories on September 18, 2018. The PRAP outlined the remedial measure proposed for the contaminated soil, groundwater and soil vapor at the Former NuHart Plastic Manufacturing site.

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

A public meeting was held on October 4, 2018, which included a presentation of the remedial investigation feasibility study (RI/FS) for the Former NuHart Plastic Manufacturing site as well as a discussion of the proposed remedy. The meeting provided an opportunity for citizens to discuss their concerns, ask questions and comment on the proposed remedy. These comments have become part of the Administrative Record for this site. The public comment period was to have ended on October 20, 2018, however it was extended to November 19, 2018, at the request of the public.

The following glossary of terms and acronyms is provided to assist the public in reviewing this document.

Term or Acronym	Definition
CAMP	Community Air Monitoring Plan
DOH	New York State Department of Health
DEC	New York State Department of Environmental Conservation
LNAPL	Light, non-aqueous phase liquid. LNAPL at this site is a mixture of phthalates and petroleum that does not readily mix with water and is present on the groundwater.
NYC DOB	New York City Department of Buildings
ROD	Record of Decision
RP	Remedial Party

This responsiveness summary responds to all questions and comments raised during the public comment period. The following are the comments received, with DEC's responses:

Comments Related to Independent Monitor

COMMENT 1: Who will do the on-site oversight of the remedial process?

RESPONSE 1: The remedial engineer of record, who is a licensed Professional Engineer retained by the Remedial Party (RP), will oversee all remedial activities at the site and must certify that all work was implemented in substantial conformance with the DEC-approved work plan. The engineer of record will be required to submit daily reports to the DEC and DOH documenting activities at the site. DEC staff will inspect the site periodically to ensure that remedial activities are being implemented in compliance with the approved work plan.

COMMENT 2: DEC should appoint an independent engineer to oversee the remediation work, monitor the cleanup and ensure that there are no impacts to the community and workers. On-site monitors have been used at other industrial site around the state, like Tonawanda Coke and Eastman Kodak.

RESPONSE 2: DEC has initiated discussions with the RP to develop a plan for an independent monitor. The monitor would be hired by DEC, which will be reimbursed by the RP through cost recovery under the Consent Order.

Comments Related to Off-site Soil Vapor north of Clay St.

COMMENT 3: What authority does DEC have to deal with off-site contamination where access is denied? Will DEC continue to try to gain access to the offsite properties to the north of the site? DEC, the DOH and other parties must ensure that the off-site TCE contamination is cleaned up as soon as possible. Given the likelihood that this chemical is migrating into buildings across the street from the site, possibly posing health risks to workers, including sensitive populations such as women of childbearing age, this is especially urgent.

DEC and DOH should continually reach out to these businesses and workers with the aim of conducting indoor air and sub slab air sampling to evaluate the presence of TCE particularly before, during, and after the remediation to ensure that workers and other stakeholders are meaningfully protected and that any TCE vapor intrusion is mitigated and eventually eliminated.

We urge DEC and DOH to take any additional efforts to contact nearby business owners and residents to conduct soil vapor and indoor air monitoring, especially across Clay Street. Residents want to ensure that the remedies are reducing or eliminating vapor intrusion, if it may in fact be occurring because we assume there is TCE in the soil and likely vapor intrusion.

RESPONSE 3: During the remedial investigation phase, the DEC and DOH worked with Councilmember Levin's office to obtain access to the off-site buildings. Attempts to obtain access for off-site vapor sampling will continue on a periodic basis.

COMMENT 4: In the PRAP, the date on Figure 5 (Soil Vapor Data) is 5/27/2015. Is this the last time the soil gas samples were tested? Could you please release the results of that testing? This project cannot go ahead if the extent of the soil vapor plume is not known.

RESPONSE 4: The date on figure 5 in the PRAP is the date that the figure was generated by the consultant. The figure compiles all available soil vapor data. The sample results presented in this figure cover the period from 2012 to 2015. The latest round of soil vapor samples was completed

in June 2015. Based on these results, the extent of soil vapor has been delineated in all directions with the exception of two properties located on the north side of Clay Street. Access to those properties was denied by the owners. DEC and the RP will continue to attempt to gain access to those properties.

COMMENT 5: Soil vapor data at the SG-5 vapor well at 48 Commercial Street did show some contamination but is excluded from the plume outline. What is the reason for the exclusion?

RESPONSE 5: As shown in the legend, the lines on the figure represent isoconcentrations, meaning that sample points between that line and the next line fall within that concentration range. For purposes of presenting the data in a visual format, various concentration ranges were selected. The consultant elected not to include a zero line. While the SG-5 location was not included within the bounds of the 50 ug/m² isopleth, the sampling results are presented on the figure.

COMMENT 6: Could the building behind 19 Clay Street be tested for soil vapor? If not, could the sidewalk behind 19 Clay Street on Commercial Street be tested?

RESPONSE 6: As documented in the Supplemental Remedial Investigation Report dated October 2015, the property owner of 19 Clay Street denied access to complete soil vapor intrusion sampling. We then requested the RP's consultant to collect a soil vapor sample from the southeast sidewalk of Commercial Street behind 19 Clay Street; however, the sidewalk access permit could not be obtained due to presence of major electric and gas utilities. In lieu of sampling the southeast sidewalk, a soil vapor sample was collected from the northwest sidewalk of Commercial Street (location SV-9).

COMMENT 7: Could you please test for soil vapor at 53 Clay Street? It is possible that soil vapor has by now reached the building.

RESPONSE 7: Soil vapor data from the supplemental investigation indicate that there were no detections of TCE at the soil vapor point on the sidewalk in front of the 29 Clay Street property (SV-4); therefore, no additional delineation was conducted to the east of that sample point. The property at 53 Clay Street (a.k.a. Former BRT Railroad Car Barn) was investigated and remediated through the Brownfield Cleanup Program as site no. C224153 and obtained a certificate of completion in December 2013. Soil vapor sampling conducted at the 53 Clay Street property as part of the investigation of that site found concentrations of TCE ranging from non-detect to 3.92 ug/m³.

COMMENT 8: The PRAP calls for vapor extraction of soil TCE and we agree that the approach is the best one for this particular site, as explained in the PRAP. But we have a serious concern about the accuracy of this component in the absence of better data on the extent of the existing vapor plume across Clay Street from the site. DEC acknowledges that TCE vapors off site may extend under the properties across Clay Street, but the property owners refused to allow sampling on their property. The absence of data on the TCE vapor plume beneath those properties places an undue limit on the accuracy with which the remedial design can address the vapor extraction. Accordingly, we urge DEC to either access those properties or obtain data on soil vapor beneath those properties. To obtain soil vapor data beneath the Clay Street properties, is it possible that

current soil vapor samples at the property line, within the known plume and across the properties under Commercial Street (on all sides around the TCE plume) would provide a more complete assessment of the vapor plume?

RESPONSE 8: The Remedial Investigation included sampling immediately in front of the buildings in question on Clay Street, as well as sampling on Commercial Street behind those buildings. That data will be used in the design of the vapor extraction system to ensure that vapors do not continue to migrate off-site.

Comments Related to Remedy Selection

COMMENT 9: Where can citizens find more information about the precise criteria used by the DEC to evaluate the current plan? These criteria were referenced in a recent public meeting, but they were not described in detail. I would like to understand more thoroughly the factors resulting in the DEC's current proposal.

RESPONSE 9: DEC's regulations at 6 NYCRR Part 375-1.8(f) list the criteria that must be evaluated during the remedial selection process. The RP and DEC screen each alternative to make sure the remedy is technically suitable for the site. Following the initial screening, DEC and DOH weigh the remaining alternatives against a number of other factors, including:

- overall protection of public health and the environment;
- reduction in toxicity, mobility and volume of hazardous waste (e.g., by thermal destruction, biological or chemical treatments or containment wall construction);
- long-term effectiveness and permanence;
- short-term effectiveness and potential impacts during remediation;
- implementation and technical reliability;
- compliance with statutory requirements;
- community acceptance;
- cost effectiveness; and
- land use.

COMMENT 10: Who chose Alternative 4?

RESPONSE 10: DEC selected Alternative 4 after carefully reviewing the various alternatives presented in the Feasibility Study. Alternative 4 was determined to be the best alternative based on the nine remedy selection criteria listed in 6NYCRR Part 375-1.8(f).

COMMENT 11: There seems to be a lot of actions planned for within the site but why isn't the offsite contamination proposed to be excavated? Was there ever a consideration for tunneling beneath the contamination to drain it? What will ensure that the site does not become re-contaminated?

RESPONSE 11: The phthalate plume that extends off-site to the southwest under the sidewalk and street cannot be excavated due to the presence of many utilities, including sewer, electric lines and a high-pressure gas main. In lieu of excavation, engineering controls such as LNAPL recovery

wells and an air sparge/soil vapor extraction system, will be used to remediate the offsite contamination areas. A physical barrier installed around the on-site excavation area will prevent the off-site LNAPL under the sidewalk and street from re-contaminating the property following excavation of the on-site area.

COMMENT 12: Will trenches be installed for the remedy?

RESPONSE 12: The method of LNAPL recovery for the off-site area (i.e., wells and/or trenches) will be determined during the remedial design phase. The wells and/or trenches would be constructed under the sidewalks and would not be accessible to the public.

COMMENT 13: How deep will the remediation excavate on the site? Until clean? The plan states that the excavation must go to 15-20 feet. I believe it needs to go as far as down as is necessary to remove any contaminants and the plan should explicitly state as such. I believe it is important to remove all on site contamination, including TCE and phthalates plumes, to unrestricted residential use standards because the parcel is zoned for residential use and will likely be developed according to that zoning. The PRAP indicates that the removal will meet NY standards for soil and residual contamination for residential use of the property. We recommend the clean-up should meet unrestricted residential soil clean-up standards.

RESPONSE 13: The elements of the remedy section 7 (page 9 of the PRAP and page 14 of the ROD) does not specify the excavation depth; instead it lists the criteria that defines the source of contamination that needs to be excavated. The remedial design will have more detail on the depth of the soil to be excavated. The goal of the on-site remedy is to excavate all of the source area. The proposed remedy will achieve, at a minimum, the remedial action objectives for restricted residential use of the site. This is the appropriate use category for multi-family residential buildings.

COMMENT 14: The PRAP has a section on using soil cover in places where soil left in place might not meet standards. The PRAP calls for complete removal under the site building. Please confirm that this element is standard language but not applicable to this site under the plan that will be implemented.

RESPONSE 14: For this site, the final design of the proposed redevelopment is not known. The cover system will contain, at a minimum, a combination of impervious surfaces (asphalt, concrete) and/or at least 2 feet of clean soil meeting the restricted residential soil cleanup objectives in any unpaved areas. If the site is fully excavated, the backfill would serve as the soil cover in any areas not covered by impervious surfaces.

COMMENT 15: I remain concerned about the off-site phthalate plume. I support the local community groups' position that the off-site phthalate plume should be monitored and extracted in a way that is out of the public right of way, presents no risk of contamination by monitoring or extraction, and should be cleaned up to unrestricted residential use, or as close as possible. While outside of the scope of the PRAP, I remain concerned about the off-site phthalate plume as it relates to plans to build an elementary and middle school kitty-corner to the Nuhart site.

RESPONSE 15: Monitoring of the off-site phthalate plume will be one of the elements of the off-site phthalate recovery process. The phthalate recovery will be designed to be out of the public right of way to the extent practical.

COMMENT 16: The PRAP calls for installation of physical barriers to contain phthalate LNAPL - what is the nature of the barrier and how will the decision on depth of that barrier be made? One concern is that the physical barrier needs to be as deep as the contamination, permanent and not a slurry wall. I believe that any barrier walls on adjacent parcels should be completed prior to remediation commencing.

RESPONSE 16: Details of the design and selection of the physical barrier will be worked out during the remedial design phase. The depth of the barrier must be at least a few feet below the LNAPL to ensure that the barrier is able to contain the LNAPL from further migration.

Comments Related to Air Monitoring

COMMENT 17: Can air monitoring extend beyond the borders of the foot print of the site? The DEP tank demolition project led to dust moving from the site into the neighborhood.

RESPONSE 17: Implementation of the remedy will be completed following demolition of the on-site building. The building demolition will be done under a permit from NYC DOB, which has dust monitoring requirements. The building demolition activity is not part of the remedy and is therefore not subject to DEC requirements. A community air monitoring plan (CAMP) will be implemented during all ground intrusive activities, including the remedial work. The CAMP will require continuous monitoring of volatile organic compounds and particulates (i.e., dust, which includes metals and other non-volatile substances that adhere to soil particles) at the upwind and downwind perimeters of the work area and provide the necessary level of protection for the community from any potential release of airborne contaminants. Action levels have been established that would require specific contingency actions to reduce or eliminate emissions and/or require a work shutdown. These measures will prevent the off-site migration of contaminants at levels that would represent a health risk to the community. Additionally, the CAMP helps to confirm that work activities do not spread contamination off-site through the air. There will also be a health and safety plan in place which will be designed to ensure the workers, work environment, and surrounding community are protected, and remediation is conducted in a safe fashion.

COMMENT 18: The neighbors/residents need to be confident that site-related activities will not expose the residents and visitors to harmful conditions during any part of the work. The community has raised concerns about dust, odors, noise, truck traffic, and possible off-gassing of VOCs during the remediation. DEC should do all it can to ensure off site impacts are mitigated to the greatest extent practicable to safeguard children's and public health, promote environmental justice and address community concerns. We recommend the use of covering during the building demolition and tents during the excavation of the site itself. The tent needs to be a negative pressure tent that is closed all the way around the base and employs an exhaust fan with a filter to capture any vapors from the site. To what extent will air testing take place during activities at the site? There are small children living in close proximity to the site and the contaminants can cause serious health issues

in children especially, but also in adults. It will be imperative that air is tested around the site continuously.

RESPONSE 18: The remedial excavation activities will be conducted within a negative-pressure tent with air treatment to reduce the potential for dust, vapor and odor impacts. In addition, a CAMP will be implemented during any ground intrusive work at the site as discussed in Response 17. Regarding the use of a cover during building demolition, that activity is regulated by the NYC Department of Buildings.

COMMENT 19: What area will the monitoring cover? For example, will air quality be checked as far over as Box street? Regular ambient air monitoring should be taken across the site, and in adjacent areas to ensure TCE, phthalate, excessive particulate matter, and other relevant compounds are not being released into the community. And for how long will the site be monitored? We want 24 hour air-quality monitoring.

With the vapor tent, the remediation needs to establish air monitoring stations for VOCs, SVOCs, dust (particulates), metals and insure that site chemicals (particularly phthalates and TCE) are monitored. Air monitors need to be at the perimeter of the property and in neighborhood on Clay, Franklin and Dupont street, at a minimum.

RESPONSE 19: See Response 17. Typically, the CAMP program is limited to the immediate downwind area of the site to ensure that the data is representative of impacts from the site and not from other, unrelated sources (such as trucks or other construction sites). The CAMP monitoring is required during any activity that involves active soil disturbance. Therefore, when work is not being conducted on-site (i.e., at night, on weekends) air monitoring will not be conducted. All excavations will be conducted within a negative pressure enclosure and ventilated air will be treated prior to discharge to the surrounding atmosphere. Therefore, no releases of site-related contaminants are anticipated from the site during the remedial activities.

COMMENT 20: With volatile substances being cleaned and unearthed, higher than normal standards should be put in place to monitor the air quality before mitigation (to create a baseline), during mitigation (tracking in real time so people can make informed decision as simple as opening a home window), and post mitigation (to ensure stability). The air monitors need to be able to detect any traces that could come from the toxic substance (i.e., lead, asbestos, TCE, Mercury).

RESPONSE 20: See Responses 17 and 19. Regarding lead and asbestos, please note that prior to building demolition, DOB requires certification that the building is free of lead and asbestos.

Comments Related to Sharing Data with the Public / Website

COMMENT 21: There is concern that the public meeting held on October 4th, while well attended, did not adequately reach key members of the community. Specifically, there is a large community of elderly and Polish speaking residents that live in close proximity to the NuHart site. We request that the NYSDEC work with local community groups, the council member's office and leadership of the Dupont Street senior center to hold another meeting about NuHart, the proposed cleanup,

what it means for those living nearby and also have an English/Polish translator present for the meeting.

RESPONSE 21: Notices announcing the public comment period and public meeting were issued in English, Spanish and Polish to ensure that all members of the community were able to have input on the process.

COMMENT 22: Is there a specific plan for sharing air monitoring data with the public? Are there other sites where air monitoring data was shared routinely with the community?

My primary concern is maintaining a transparent process. I'd like to understand how information on the status of the project, new findings with regard to contamination, and air quality testing will be relayed to the community. I'd like to see a website be created and frequently updated. It's my understanding that the plan calls for air monitoring. I feel strongly that air monitoring data should be made accessible to the community throughout the duration of the project.

RESPONSE 22: All remediation sites under DEC oversight are required to submit daily and monthly reports which are part of the public record for the project. The daily reports include air monitoring (VOC and particulate/dust) observations. Remediation at portions of the Queens West BCP site included a website set up by the RP to share air monitoring data with the public.

DEC has been in discussions with the RP regarding publicly sharing data. The RP has indicated that they are actively working to set up a website to share key project documents, progress reports and Community Air Monitoring Plan (CAMP) data.

COMMENT 23: Where can we access the latest testing results on the site?

RESPONSE 23: All the testing results are available in the Remedial Investigation Report dated July 30, 2015 and Supplemental Remedial Investigation Report dated October 2015. These documents are available at the document repositories and will be put on the website when it is set up.

COMMENT 24: Can the DEC commit to monitoring air quality during the proposed excavation both inside and around the site? As importantly, will the DEC commit to sharing results of air quality monitoring online in a manner that will be easy to interpret by laypersons? (For example, could results be color-coded green, orange, and red to indicate levels of pollutant detected through monitoring?)

RESPONSE 24: See Responses 17, 19 and 27. CAMP monitoring will be performed by the RP's consultant, and the data will be reported in the daily and monthly reports. The data will be compared against criteria established by DOH and excursions from the criteria will be highlighted. Furthermore, the consultant hired by North Brooklyn Neighbors (f/k/a Neighbors Allied for Good Growth) under the DEC Technical Assistance Grant can assist the community with interpreting the results. If monitoring indicates that action levels are exceeded, the CAMP requires immediate action to eliminate exceedences up to, and including, stopping work if necessary.

COMMENT 25: The community should be apprised of any emergent reduction in air/soil/water quality, any contaminants or off-gasses that have breached the barriers or failed to be contained, any elevated levels of dust or noise, etc. This should be done on a daily or other frequent, ongoing basis as is required to fairly inform residents of the risks they may be at.

RESPONSE 25: See Responses 17, 19, 24 and 26.

COMMENT 26: In addition to the website, we recommend the developer and DEC work together to also create a regular email and print newsletter to share updates on the clean-up process.

RESPONSE 26: Additional community outreach can be included in the site's Citizen Participation Plan.

COMMENT 27: As the cleanup progresses we would like to see regular updates made publicly available via a website/online portal. The community deserves up-to-date information to better understand the remediation, how it is advancing, issues that arise, etc. any reports filed by responsible parties, their contractors and subcontractors should be easily accessible. The Greenpoint Oil spill, for instance, has a very informative website maintained by NYSDEC, it contains the latest progress reports, background on the site, recent mappings of the plumes and clear contact information for the DEC and DOH, NuHart deserves a similar treatment.

RESPONSE 27: DEC is committed to maintaining a transparent process and will continue to provide periodic updates to the community. As noted above, DEC has been in discussions with the RP regarding publicly sharing data. The RP has indicated that they are actively working to set up a website to share key project documents, progress reports and Community Air Monitoring Plan (CAMP) data.

COMMENT 28: The community needs regular notification of the activities and conditions at the site before, during and immediately following all site activities, First, each resident or business in the vicinity need to receive a notice of the public involvement and information plan. Importantly, DEC needs to insure that some entity establish and maintains a website for the DEC and developer to share the results of air and environmental monitoring in real time during the clean-up. Such websites have been used and are in use at other state and federal superfund cleanup sites, including the Hudson River PCB removal action. Monitoring results that cannot be posted in real time need to be posted as soon as available, e.g. within 24 hours.

RESPONSE 28: See Responses 24, 26 and 27.

Comments Related to Flooding

COMMENT 29: How does the remedial plan address the potential for migration of contamination during the remedial activities, specifically with respect to flooding?

RESPONSE 29: The proposed remedy requires the installation of physical barriers (i.e., waterproof shoring) around the entire perimeter of the on-site excavation, and an off-site physical barrier to prevent migration of light, non-aqueous phase liquid (LNAPL). LNAPL at this site is a

mixture of phthalates and petroleum related chemicals that do not readily mix with water and are present in an underground layer which is floating on top of the groundwater. In addition, a contingency plan will be included in the remedial design to address any unexpected conditions, such as extreme weather-related events, that may occur during implementation of the remedy to prevent contamination from migrating from the site.

COMMENT 30: Was the plume affected by [Superstorm] Sandy? Why is one plume moving north and one plume heading south?

RESPONSE 30: Groundwater beneath the site was not impacted by surface flooding as a result of Superstorm Sandy. This is supported by monitoring well observations and measurements before and after October 2012, which showed no appreciable difference in groundwater elevation or flow direction. The differences in the observed flow direction between the dissolved VOC plume in the northeastern portion of the site and the LNAPL plume in the southwestern portion of the site is likely due to several factors. The regional groundwater flow direction near the site is to the northwest (based on the site's proximity to the East River/Newtown Creek), and the dissolved VOC plume follows this flow direction. The LNAPL plume, on the other hand, is influenced by the complex underground utilities beneath the intersection of Franklin and Dupont Streets which creates a preferential pathway that can impact the local groundwater flow. Furthermore, the localized LNAPL thickness creates its own hydraulic force, which creates a separate hydraulic gradient that flows in whatever direction provides the easiest pathway. The presence of many tanks, underground piping, etc. in the southwestern portion of the site (which is also the source of the LNAPL) creates additional preferential pathways to allow LNAPL to migrate in that direction, independent of the regional groundwater flow direction.

COMMENT 31: We are concerned about our safety during potential flooding of the area in any potential weather incident (hurricanes) since the site is in a flood zone. We were told that this will be accounted for in the cleanup plan, but it must be expressed that planning for possible flooding is absolutely necessary to ensure that nearby residence remain safe from contamination in the event of flooding.

RESPONSE 31: The remedial design/remedial work plan will include a contingency plan that lays out details to address any unexpected condition, such as flooding, to ensure that nearby community remains safe during the remedial activities. This will include, but not be limited to, perimeter erosion and sediment controls. Please note that once the excavation begins, the site will be below grade, meaning that any rains or flooding will likely be contained on the site.

Comments Related to Plume Migration / School Siting

COMMENT 32: We have concerns about building a school near the site. How long for the offsite contamination to be remediated?

RESPONSE 32: The siting of a school at the property located southwest of the site is not within DEC's jurisdiction. However, the remedy selected in the ROD provides adequate protection for any proposed use (school, residential, etc.). The duration of the remedy is unknown at this time.

The remedial design will provide more information on the recovery rate, which will provide some indication of the duration of off-site LNAPL recovery activities.

COMMENT 33: Will the wall block contamination from moving towards the school site? Is it guaranteed to work?

RESPONSE 33: The physical barrier wall proposed in the selected remedy is intended to prevent the LNAPL from migrating further off-site towards the proposed school site. While no remedy is guaranteed, hydraulic barriers are a proven technology that have been used at many other remedial sites throughout the state.

COMMENT 34: There is significant concern, worry and distress about the building of an elementary school adjacent the NuHart site. While we appreciate NYSDEC's commitment to containing the plume the potential of migration, soil vapor exposure and accidents during remediation will likely cause significant mental stress for parents, children and staff of the proposed school. We ask that NYSDEC play a more active role in the city's conversation about relocation this facility whose site was chosen well before we understood the extent of contamination lying at its literal door step.

RESPONSE 34: DEC has no jurisdiction over the siting of the school; however, the remedy selected will ensure that occupants of any building(s) constructed on the parcel, regardless of use, will be protected against exposure to contaminants.

COMMENT 35: How much is the LNAPL plume currently moving? Is this migration significant regarding how much time will go by in the remediation project? How does the remediation project take into account this migration distance? Will the remediation project be completed before the construction of the proposed school will begin?

RESPONSE 35: LNAPL viscosity and migration rates were evaluated as part of the Feasibility Study. The FS concluded that, under current conditions, the LNAPL migration rate is relatively slow (ranging from 0.0012 to 0.18 feet per year). The slow migration rate is borne out by monitoring data collected periodically since 2012, which showed no appreciable change in the areal extent of the LNAPL plume. The selected remedial approach for off-site LNAPL consists of active recovery, and the elevated viscosity of the LNAPL will likely result in a longer duration for that recovery.

COMMENT 36: What is the barrier made of to prevent migration of LNAPL? This barrier needs to be permanent.

RESPONSE 36: The barrier wall construction details will be developed during the remedial design phase. The barrier will be permanent.

Comments Related to Health Concerns

COMMENT 37: What about the park across the street? Could people be exposed to contaminants there?

RESPONSE 37: Based on information available from Remedial Investigation Report (RIR) and Supplemental RIR, there are no current exposures to users of the park. No LNAPL was identified beneath the park area, and people using the park will not be likely to have contact or ingest soils that are below the asphalt or concrete surface in the park area. The chemicals present in the LNAPL identified east of the park area under the sidewalks of Dupont and Franklin Street are not prone to become vapors or seep out of the surface.

COMMENT 38: How do we know that the TCE cleanup will be protective of public health?

RESPONSE 38: The remedy will be protective of public health based on the following: After on-site buildings are demolished, contaminant source areas will be removed from the site and replaced with appropriate backfill. A site cover system will be required to allow for restricted-residential use of the site in accordance with 6 NYCRR Part 375. Use and development of the site will be restricted to restricted-residential, commercial, and industrial uses. An excavation plan will be developed to ensure human exposures to residually contaminated soils are properly managed. Physical barriers will be placed to prevent further off-site migration of contaminants in groundwater and a network recovery wells and/or trenches will be installed off-site to recover light non-aqueous phase liquid. Air sparging and soil vapor extraction will also be implemented to remove volatile organic compounds from the groundwater and soil vapor. Use of groundwater at the site, without appropriate water quality treatment, will be restricted on-site by an easement placed on the site. Article 141 of the NYCDOH code restricts use of groundwater off-site. Any on-site buildings, will be required to have sub-slab depressurization systems, or similarly engineered systems, to mitigate exposures related to soil vapor intrusion. A soil vapor intrusion evaluation will be completed, and appropriate actions implemented, for buildings north of Clay Street pending access from the owners. In addition, soil vapor extraction will be implemented to remediate volatile chemicals in the subsurface.

COMMENT 39: Numerous families with young children reside in the immediate vicinity of the NuHart complex. They all have the right to clean air and a healthy living environment.

RESPONSE 39: The intent of the proposed remedy is to remediate the site and remove a significant amount of hazardous waste that currently exists at the site, which will result in improved environmental conditions.

COMMENT 40: The NuHart complex enclosed two large plumes of phthalates, trichloroethylene and many other contaminants in the soil and groundwater. These toxins will become airborne during the anticipated demolition.

RESPONSE 40: See Responses 17 and 19.

COMMENT 41: I really believe that monitoring of pollutants should extend beyond the NuHart location itself as this vapor will travel with the wind. I'm already nervous about keeping my windows open once this process begins.

RESPONSE 41: See Responses 17 and 19.

COMMENT 42: We are concerned about the phthalate plume that extends out into the street and playground on Franklin Street and want regular monitoring of the wells to ascertain that the plume is not spreading further during the cleanup period.

RESPONSE 42: The routine gauging of monitoring wells has been on-going since 2012, and this effort will be one of the components of the remedial activities. The data obtained will be used to assess the remedy and ensure that the off-site phthalate plume remains stable or is shrinking.

COMMENT 43: There is deep concern as to how the existing contamination and the proposed cleanup will threaten human health for those living, working or recreating near the site. With an extensive vapor removal plan proposed we appreciate the value in monitoring local air quality for potential airborne chemicals but feel strongly that the monitoring be made accessible to the public. This means accessibility to real time air-quality data through an easy to navigate website/portal. The benefit of such a system would allow neighbors to better understand the threats posed by the cleanup and also aid the NYSDEC in keeping an eye on any potentially dangerous spikes in air borne contaminants.

RESPONSE 43: See Responses 17, 19 and 24. The clean-up will be performed in a way that will minimize the potential for the community to be exposed to site-related contamination. Although we have not fully assessed the potential for exposures to chemicals via soil vapor intrusion into all buildings potentially affected to the northeast, we will assess any potentially affected building that provides access. See also Responses 24 and 27.

Comments Related to Schedule / Remedial Design / Remedy Monitoring

COMMENT 44: How long will the demolition & cleanup take? We have been given no clear timeline. It also seems like there's a big chance that toxins will be left underground as we do not know if it all can be removed.

RESPONSE 44: The developer indicated that the time frame for the demolition is anticipated to be around two to three months. The timeline and schedule for the implementation of the remedy will be provided in detail in the remedial design. The selected remedy is to remove the identified contamination on-site and off-site to the extent practical. Due to the utilities beneath the sidewalk and roadway on Dupont and Franklin Streets, the removal of phthalates identified in the sidewalk will be completed over a longer time-frame than the on-site excavation, which has few if any obstacles.

COMMENT 45: We are concerned about the timing of the cleanup starting as you may be aware, the "L" train is going to be shut down starting in April 2019. This means much more traffic and stress in Greenpoint as residents may start driving more, and there will be more crowding on public transportation from Greenpoint to Long Island City for the no. 7 train. This will put enormous stress on working people such as ourselves and our children who go to school in Manhattan. Having clean up start at NuHart simultaneously will put enormous strain on our resources and time, and those of many of our neighbors.

RESPONSE 45: The schedule for implementing the remedy will be included in the remedial design. It is in the best interest of the public and the environment to implement the remedy in the most expedient manner possible; however, the schedule will likely be driven in part by the RP's development schedule. Since the remedy will not rely on public transportation, the effects of increased congestion on the subway should have no impact on the remedy schedule.

COMMENT 46: It is important that a community meeting be held prior to excavation to explain final details on the plan and weekly updates given to the community during the excavation. Will there be opportunity for the public to comment and provide input on the remedial design program? The community is concerned about the details of the remediation.

RESPONSE 46: Based on the public interest in the site, DEC will hold a meeting with the public to provide more details on the site remedy once the remedial design is completed and before the remedy implementation begins. While there is no formal comment period on the remedial design, the document will be available for the public to review. Furthermore, DEC will continue to provide outreach to the public to keep the community informed of the details of the remediation.

COMMENT 47: When will be the remedial design be available?

RESPONSE 47: There is currently no set schedule for the submittal of the remedial design. The RP's consultant will be required to provide a schedule for the submittal once they are added to the consent order, which will be required by DEC when the RP acquires the property.

COMMENT 48: What is the timeline for the TCE off site contamination to be cleaned up via the sparging and vapor collection?

RESPONSE 48: The timeline cleanup of the off-site TCE contamination will be included in the remedial design/remedial work plan. The effectiveness of the remedy will be monitored, including monitoring the effectiveness of the soil vapor extraction system that will be used to remediate the TCE plume

COMMENT 49: How long will the remediation take to complete? How much of the off-site phthalate contamination will be cleaned up? We recognized that a precise estimate of duration is not possible at this time, especially without the completion of the remedial design, but we request some approximation at the earliest opportunity.

RESPONSE 49: After the Department issues the Record of Decision (ROD), the RP and their consultant will develop and submit a remedial design for DEC approval, which lays out the details about how the selected remedy will be implemented. The remedial design will include a schedule for implementing the remedy. The selected remedy for cleanup of the off-site phthalate plume primarily involves active recovery utilizing recovery wells/trenches. The viscosity of the LNAPL is relatively high, which means that the active product recovery will likely occur over the long term (possibly a decade or more).

COMMENT 50: Engage in an on-going evaluation of the remedial method to ensure its effectiveness.

RESPONSE 50: The remedial design/remedial action work plan will include required monitoring to evaluate the effectiveness of the remedy. That data will be reviewed by DEC and DOH to ensure protection of the community.

COMMENT 51: Where will the excavated contaminated material be moved? How will it be disposed of? What precautions will be in place to ensure that the contaminants do not leak out or spread during transport?

RESPONSE 51: Details regarding how and where the contaminated material will be disposed off-site will be included in the remedial design/remedial action work plan, which both DEC and DOH will review and approve. The engineer of record overseeing remedy implementation must assess each proposed disposal facility to ensure the facility is licensed to receive the material, and must provide certification that all material exported from the site was properly disposed. This will be documented in the FER, which will include all waste disposal manifests.

COMMENT 52: Another longstanding concern is how monitoring and recovery activities on and near the site may potentially leave harmful chemicals on public sidewalks and streets. The community needs full assurance that those performing the work are thorough in their protocols and that no toxic soil or groundwater unintentionally end up in the public spaces where neighbors, including children, might come into contact with them. Every time there is utility work around the site many local residents are deeply concerned that those activities are not being properly coordinated or overseen with NYSDEC and DOH and thus creating a human health threat. We ask for strong oversight by NYSDEC and very clear communication in public area so that public is aware of proper safety procedures in place.

RESPONSE 52: The remedial design/remedial work plan will include detailed procedures for how the monitoring and recovery activities near the site must be done. The procedures will be reviewed by DEC and DOH to ensure that they are safe and appropriate. Regarding other excavation activities in the vicinity of the site, please note that as a result of community concerns, DEC worked with NYCDOT to establish a permit “hold” in areas surrounding the site. This means that whenever any entity applies for a street opening permit, NYCDOT refers them to DEC for review of the proposed plans to determine whether the proposed work has the potential to encounter contamination related to the site. If it does, DEC requires the permit applicant to coordinate with the RP’s consultant to ensure proper procedures are followed.

COMMENT 53: The community needs better information regarding the protocols for decontaminating any trucks or equipment that is exposed to the underground toxins and leaving the site via public egress. We need full assurance that the cleanup is not creating inadvertent exposure pathways to these carcinogenic compounds underground and equipment leaving the site receives proper decontamination. We ask that more detail be provide to the community and NYSDEC have strong enforcements on such activities during the cleanup.

RESPONSE 53: Detailed procedures regarding decontaminating trucks and equipment leaving the site will be included in the remedial design. These documents will be available to the public.

Comments Related to Dust / Odors

COMMENT 54: Ensure that off-site impacts are mitigated to safeguard public health and the environment especially when it comes to dust, odors, and noise pollution. Odor control is necessary to ensure that nearby residents are not unnecessarily exposed to substance that could trigger asthma attacks or other health problems. The remediation site must be contained.

RESPONSE 54: The on-site excavation will be performed under a negative pressure tent, and exhaust from the tent will pass through treatment filters before discharge. This approach will greatly minimize the potential for dust, odors and contamination leaving the site during the excavation activities. In addition, DEC will require the implementation of the CAMP to monitor VOCs and particulates at the upwind and downwind perimeter of the designated work area to provide a measure of protection for the downwind community from potential airborne contaminants released as a direct result of the remedial activities.

Noise issues fall under NYC DOB and NYC DEP jurisdiction.

COMMENT 55: There must be a comprehensive dust mitigation plan that is closely monitored which must involve on-site washing down of trucks to ensure that those trucks are not tracking any contaminated dust or mud through neighborhood streets. Dust needs to be controlled as effectively as possible going beyond even basic regulatory requirements. The community is asking for constant cleaning and watering down of dust beyond what is required to prevent dust impacting nearby street, homes, apartments, the park, etc. Trucks need to be washed down thoroughly before driving on neighborhood streets. Decontamination pad should be built in order to prevent tracking dirt into the streets. There should also be on-site water and storm water control and management plans. If trucks are being washed, we don't want to create conditions where runoff is created during wet or dry weather conditions

RESPONSE 55: The remedial design/remedial work plan will include detailed procedures and protocols for dust mitigation, and the CAMP will be required during the remedial activities. Results of the CAMP monitoring inform the need for additional mitigation measures. The remedial design/remedial work plan will include detailed plans for dust and odor controls, stormwater and erosion controls, and a plan for decontamination of trucks moving waste from the site.

COMMENT 56: During the process outlined in Alternative 4, will the potential noise and odors mentioned be consistent throughout the project or only come at specific times of day, month, year? We recommend work be minimized during the early morning hours, evenings, and weekends at a minimum. Are the odors potential harmful to the public? Are the odors of concern to people with asthma, COPD, or other similar health issues?

RESPONSE 56: It is anticipated that the potential noise and odors mentioned in alternative 4 will be during working hours, which are established in the NYC DOB permit. Odors alone are not generally harmful, however sensitive individuals may experience short term effects from odors, but those effects would not be long-lasting and would dissipate when the odors diminish. However, since the work is going to be performed under a tent, the likelihood of odors should be limited. If odors are detected by members of the community and they are unsure if odors are coming from

the remedial work, they should contact DEC and DOH to investigate if additional measures are needed to control odors.

Comments Related to Demolition / NYC Dept. of Building Issues

COMMENT 57: The NuHart complex enclosed two large plumes of phthalates, trichloroethylene and many other contaminants in the soil and groundwater. These toxins will become airborne during the anticipated demolition.

RESPONSE 57: The building demolition will be done while keeping the existing building floor slab in place. Under this scenario, it is unlikely that identified contaminants would become airborne during the demolition. The removal of the slab and the excavation of the contaminated soil would take place under a negative pressure structure to reduce the possibility of contaminants being released into the community.

COMMENT 58: How will the building be safely demolished? What about lead and asbestos?

RESPONSE 58: Building demolition is regulated by NYC DOB. Prior to issuing the demolition permit, the RP must provide certification to NYC DOB that all lead and asbestos abatement has been completed. Additional testing of certain building materials in the area where hazardous waste was stored is required by DEC under the approved Resource Conservation and Recovery Act (RCRA) Facility Closure Plan.

COMMENT 59: Off-site contamination should not be disturbed during demolition and building construction, in particular, the TCE and phthalates plumes.

RESPONSE 59: The off-site contamination will not be disturbed during the building demolition. The schedule/sequence for remedial action and building construction will be included in the remedial design/remedial action work plan.

COMMENT 60: What is the plan to address disruption to the area as a result of workers & trucks? Will they start early & end at night?

RESPONSE 60: Work hours are set by, and must be in compliance with, the building permit issued by NYC DOB.

COMMENT 61: We are concerned about vibration from the cleanup work and future building impacting on the structure and foundation of our building (the houses are from the late 19th century and are wood frame.) Reduce noise and vibrations using best available control technologies (for example, polymer blocks could be considered during pile driving). Monitor nearby building for cracks and other sign of stress caused by demolition and construction activities

RESPONSE 61: All demolition, excavation and development-related activities remediation must comply with the requirements of the NYC DOB construction permits, which require monitoring of adjacent structures to ensure that no structural impacts occur.

COMMENT 62: We are concerned about vermin, rats spreading contamination. These vermin might move from the site to our property because of future digging related to the cleanup, bringing contamination from various substances inside the building with them. The concern is that this cannot be controlled and that some of the contamination may come to our property and cause us harm.

RESPONSE 62: The NYC DOB requires that adequate pre-demolition extermination be performed before the demolition permit will be issued.

COMMENT 63: Humane relocation of cat, opossum, raccoon colonies and other urban wildlife, and integrated pest management (IPM) practices must be pursued, as well as garbage on the work site minimized to reduce the chances of rodent and other infestations.

RESPONSE 63: DEC will discuss the schedule for demolition with the RP to minimize impacts on wildlife at the site. The NYC DOB requires that adequate pre-demolition extermination be performed before the demolition permit will be issued.

COMMENT 64: Avoid weekend work at the site. any work done on weekends, if absolutely necessary during the clean-up, should not be noisy, a significant disturbance or nuisance to neighbors or park goers

RESPONSE 64: Working hours for construction projects are regulated by NYC DOB.

COMMENT 65: Will the current buildings on site be demolished during soil excavation process? Does this have potential to reveal new contaminants or other health concerns for humans (particulate matter, traffic concerns, accidental water line or electric power line damage)?

RESPONSE 65: Building demolition will be completed before the excavation begin. The demolition activities will be done under a NYC DOB permit, which has specific requirements related to dust control, utility clearance, etc. The extent of contaminants both on- and off-site was defined during the Remedial Investigation. No additional contaminants are anticipated to be encountered during the demolition.

COMMENT 66: We are concerned with the earth movement clause in the developers' insurance. When will the community be able to review the insurance aspect of the developer's project?

RESPONSE 66: For all construction-related activities, the RP must comply with NYC DOB permit requirements. This is not under the jurisdiction of DEC.

Comments Related to Truck Routes / Parking

COMMENT 67: What about traffic patterns and truck routing from the site? Minimize truck route on residential streets. Design truck routes to ensure the least impact to community residents and business, especially on residential street like Dupont Street, Clay Street, and neighboring blocks.

RESPONSE 67: Trucks entering and leaving the site are required to follow the established NYC DOT truck routes.

COMMENT 68: How much of the street will be off limits to parking and where will employees park? Will any of the road adjacent to the site need to be closed for any amount of time during the duration of the remediation project? Can we change alternative side regulation to alleviate the loss of maybe 60 parking space? Ensure that workers and eventual building residents have adequate parking so that existing community residents also have enough parking during the clean-up.

RESPONSE 68: Parking enforcement and construction zones are established by NYC DOT. This issue is not within DEC's jurisdiction. Parking requirements for new developments are documented in the NYC Zoning Resolution.

COMMENT 69: Transport of toxic waste leaving the building - there should be a specific plan or instruction of which street route would imbue the least exposure for trucks leaving the building. Logistically there are freight doors on Dupont Street and Clay Street. However, a specific recommendation should be made where trucks (though washed before leaving the site), should be specifically routed in the most efficient route and one which does not pass directly in front of a playground near our most vulnerable population. I feel that Clay Street at the corner is the widest exit for these toxic materials to start their path offsite.

RESPONSE 69: Truck routes used to get in and out of the site must be consistent with the NYC DOT truck routes, and the remedial design will include detailed procedures for how the trucks leaving the site will be decontaminated and covered to ensure that no contaminated material is tracked off-site.

Other Comments

COMMENT 70: If the property changes ownership does this all stop? Does it continue on the same timeline?

RESPONSE 70: Once the ROD is issued, the remedy would be implemented by the RP. The RP could sell the property to a new owner, but the remedy would need to be implemented as documented in the ROD. The new owner may have a different schedule for implementing the remedy.

COMMENT 71: Can someone else (another developer) change the remedy?

RESPONSE 71: Yes, another developer can request to change an element of the selected remedy, but it must go through a formal ROD revision process, which would include another public comment period. Any proposed revision to the remedy must demonstrate that it provides an equal or higher level of protection and/or compliance with the evaluation criteria as the current remedy. The procedure required to modify the selected remedy also depends on the extent of the modification to the selected remedy.

COMMENT 72 We want a responsible contractor to do the work. Will workers be trained?

RESPONSE 72: All contractors and subcontractor involved in implementing the selected remedy must have the proper Occupational Safety and Health Administration (OSHA) training. The remedial engineer must certify to this, and all documentation and training records will be included in the Final Engineering Report.

COMMENT 73: Who pays for the cleanup?

RESPONSE 73: The RP is responsible for the cost of cleanup both on-site and off-site.

COMMENT 74: What is the name of the company that performed the remedial investigation and compiled the feasibility study?

RESPONSE 74: The remedial investigation at the site was completed primarily by Ecosystems Strategies, Inc.; and FPM Group. The Feasibility Study was prepared by Goldberg Zoino & Associates of New York, P.C. d/b/a GZA GeoEnvironmental of New York.

COMMENT 75: The developer, Dupont Street Developers LLC, paid for the remedial investigation. There is clearly a conflict of interest due to the fact that the investigation company is paid by the developer. They would be biased to reflect the results to be most advantageous to the developer. Has this issue be addressed? How was any bias eliminated?

RESPONSE 75: All investigation work at this site was performed under the oversight of both DEC and DOH, in accordance with the consent order executed between the RP and DEC, and in conformance with work plans that were thoroughly reviewed and approved by both DEC and DOH. This is standard practice for the majority of sites in the State Superfund Program. The consultant must certify that the work was performed in accordance with the approved plans. Samples collected are sent to an independent laboratory for analysis. The lab is certified under DOH regulations. The data is also evaluated independently by DEC and DOH.

COMMENT 76: Is there any requirement for the developer and other involved parties to post signage at the site making it clear that a cleanup of dangerous toxins is taking place there? If there is a requirement, how will it be enforced?

RESPONSE 76: DEC regulations do not require a sign to be posted identifying the property as a State Superfund site. Furthermore, NYC Building Code §3301.9 prohibits display of any signage other than building permits on the exterior of construction projects.

COMMENT 77: The NuHart lot was sold at a bargain price to a profit-only driven developer - the only one that would take on the daunting clean up onus – because he will do it cheaply and unsafely, without adhering to the plan set forth with the DEC. This developer does not care about amassing violations and/or fines. He does not care about the safety of the residents of his properties or their neighbor.

RESPONSE 77: The RP will be required to strictly adhere to all approved plans and specifications. DEC will conduct routine inspections during the implementation of the remedy to

ensure compliance. Failure to conform to the approved plans will result in stop-work orders, violations, and/or significant fines. In addition, if the RP is unwilling or unable to complete the remedy, the State may pursue other avenues to complete the remediation in a manner protective of the community. See also Responses 1 and 2.

COMMENT 78: If the current plan needs to be deviated from, what is the process and how will this be communicated to the local community? I understand that the extent of contamination is difficult to fully understand given that a building is located on top of the site. Should unexpected findings occur, and the plan of action need to be revisited, how will this be conducted?

RESPONSE 78: Depending on the type of deviation from the selected remedy, there are several options that can be pursued:

1. If the deviation is minor, the DEC will generate a memorandum for the site file that describes the deviation(s) and the basis for the change. Based upon public interest in the site, a fact sheet may be distribution to the site mailing list.
2. If the change is significant but not fundamental, DEC will issue an Explanation of Significant Difference (ESD), which is a notice that a change to the remedy has been made. Formal amendment of the ROD is not required in this case because DEC is not reconsidering the overall remedy. The ESD is placed in the document repository and a fact sheet is issued announcing the change and comment period, if any.
3. Fundamental changes to remedies require a ROD amendment. This would involve the same process as that associated with the issuance of the original ROD in terms of citizen participation, documentation, and approvals.

In all cases, the deviation(s) will be documented in the Final Engineering Report.

COMMENT 79: The area around NuHart is already dirty - who will be responsible to ensure that it doesn't become a junk site?

RESPONSE 79: The property owner is responsible to ensure that the site and its perimeter remain clean. Please note that trash and other debris unrelated to the contaminated soil and groundwater is not under DEC's jurisdiction, but rather is regulated by the NYC Department of Sanitation.

COMMENT 80: Expediently and comprehensively clean up phthalates and TCE plume. Comply with unrestricted residential use clean-up standards so that on-site contamination achieves "pre-release" condition. The TCE plume should also be cleaned up to unrestricted residential use standards. This is important as young families with young children are likely to move into the building when complete;

RESPONSE 80: While the goal for the on-site and off-site remedial program is to restore the site to pre-disposal conditions to the extent feasible, the nature and extent of contamination at this site does not allow pre-release conditions to be realistically achieved. At a minimum, the remedy will eliminate or mitigate all significant threats to public health and the environment presented by the contamination identified at the site. The proposed remedy will achieve a restricted residential cleanup, which is the appropriate use category for a multi-family residence.

COMMENT 81: Expediently and comprehensively clean up off-site phthalates plume. Design monitoring wells to minimized community impacts while ensuring timely and extensive cleanup of the off-site contamination. For example, off-site contamination should be extracted and or remediated out of the public right of way, within the boundaries of the existing property. The off-site plume should be cleaned up to “pre-release” conditions and, to the greatest extent feasible, unrestricted residential use standards.

RESPONSE 81: See Response 80.

COMMENT 82: There are two responsible parties, NuHart and Dupont Street Developers, LLC. Are these two companies working together to complete the remediation process? How are they distributing the cost of the remediation? What happens if the two companies disagree on how to move forward with the remediation process? Are the parties ready to communicate/collaborate with other companies/governmental agencies to remediate contaminants that are off site?

RESPONSE 82: The RPs are jointly liable for cleanup at the site. Cost-sharing arrangements are not required to be shared with DEC. Failure by any of the parties to comply with the requirements of the Consent Order would be considered a violation of the Environmental Conservation Law (ECL) and/or DEC’s Regulations, which could result in assessment of fines and/or other penalties.

COMMENT 83: The monthly reports and activities described indicate the presence of PCBs. PCBs and dioxins need to be measured to confirm the absence of both contaminant group both before and after the remediation.

RESPONSE 83: The contaminants listed under the operable units are the contaminants that drive the remedy, but not necessarily all the contaminants identified at the site. PCBs were identified in recovered LNAPL during waste characterization sampling prior to disposal in 2015. Subsequently, LNAPL from the on-site wells was tested to identify the extent of the PCB. That testing identified a localized area on the western portion of the site in the vicinity of RW-12 with a maximum concentration of 6.71 parts per million (ppm) PCBs. For comparison, the hazardous waste threshold for PCBs is 50 ppm (i.e., concentrations of PCBs above 50 ppm are considered hazardous waste). The selected remedy for addressing on-site contamination will address the noted PCB contamination identified on-site.

COMMENT 84: Does the soil vapor extraction technique help remediate any other contaminant from the soil or groundwater? How many extraction wells are required to remediate the entire plume? We assume that wells will be located off site to complete the remediation process. When the soil vapor is extracted, the ROD needs to indicate how it will be stored and disposed, and what measures will be taken to ensure residents walking in the neighborhood are not exposed during the clean-up. How often will the extracted contaminant be removed from the site? The stored contaminated material or all types need to be secured at all times, especially given that the nearby residents, park, and proposed school.

RESPONSE 84: The soil vapor extraction (SVE) technique will treat contaminants that have high vapor pressure in both soil and groundwater. The details and engineering basis of the SVE well

layout and design, including treatment and storage of contaminants extracted by the system, will be provided in the remedial design/remedial work plan.

COMMENT 85: How frequently will samples be taken to ensure the effectiveness of this remediation plan? If this remediation technique is shown to be ineffective, how does that change funding/time of the project? Will the schedule of sample monitoring be released to the public?

RESPONSE 85: The remedial design will include details related to what data/parameters will be sampled to ensure the effectiveness of the selected remedy. The remedial design will also include a contingency plan to address any problems that might arise during the remediation. The schedule for sample monitoring will be available to the public in the remedial design/remedial work plan.

COMMENT 86: Some contaminants listed in the table (e.g., PERC and vinyl chloride) are above the SCG, but these were not listed as contaminants of concern previously in the PRAP. How are these contaminants being remediated during this project?

RESPONSE 86: The contaminants listed under the operable units are the contaminants that drive the remedy, but not necessarily all the contaminants identified at the site. The selected remedy for the volatile organic compounds on the site (which includes not just TCE, but also PCE and other VOCs) includes excavation of source areas, as well as soil vapor extraction and groundwater treatment. This approach will address the soil and groundwater contamination identified on-site. The SVE and vapor mitigation that will be installed both on-site and off-site will address any potential vapor migration issue related to the VOCs.

COMMENT 87: Institutional controls need to be defined and explained. Institutional controls usually mean deed restriction, signs, regulations, etc. How will these be enforced in the future when there are new residents in the neighborhood? Institutional controls only work if people know about them and take appropriate action.

RESPONSE 87: The selected remedy for the site will require an environmental easement. The easement is a property right granted to the State of New York that restricts the use of the property and requires compliance with the DEC-approved Site Management Plan (SMP). The SMP has requirements for periodic inspections, monitoring, maintenance and reporting to DEC and DOH. Furthermore, the easement requires any owners who acquire a future property interest in the site (such as ownership or leasehold) to comply with the SMP. The easement and SMP have been proven to be effective institutional controls on other contaminated sites remediated under DEC's jurisdiction.

COMMENT 88: I've lived on Dupont St with my family since 1980 and since 1984 have lived about a half block away from the NuHart site. While the facility was open and active, it spewed chemicals onto the soil that we gardened on and ate from. It contaminated the air we breathed. It caused horrific odors. It contributed to, if not caused the asthma's, brain diseases, autoimmune diseases, and birth defects in our family. Our family, our neighbors, our community, became sick from chemicals which we would later be introduced to as phthalates, TCE and others. During the 1990's we witnessed the corner of Dupont St and Manhattan Ave being blocked off and people dressed in protective gear dealing with a chemical event on that block. We were never told the

truth or about the details about what happened that day. We learned over time and after losing loved ones that the health and environmental agencies who were supposed to be protecting us, didn't. So it is so important that with each comment you collect that you recognize the illnesses, and the emotional and physical pain that many endured. And it is very important for the NYSDEC and DOH to protect this community from even one more incidence of environmental exposure and pain.

The community needs this cleanup to be done fully, quickly, carefully and to the highest standard. This community needs to be at the table every step of the way during this process and be provided with regular updates, contact information, and access to information as well as air monitoring results in real time. We need the existing protective regulations to be followed and improved! The arms of enforcement must be stern when the rules are broken and when the community health is at risk. It is so important that this environmental cleanup causes no further harm so we as a community can put the horrible legacy of NuHart to rest for good and not worry anymore.

The NYSDEC and DOH should continue to work with our local elected officials, other involved government agencies and others to ensure that my family and community are protected from further harm. Our community and my family must not be re-exposed to chemicals, contaminated soil, dust, odors, idling trucks, dirty trucks, dirty sidewalks, dirty streets, debris, excessive noise or vibrations, garbage, rats or any other impact resulting from the demolition and cleanup of the Nu-Hart site.

RESPONSE 88: DEC is committed to completing the successful remediation of this site with the full knowledge and cooperation of the community, and to overseeing a remedial clean-up that is protective of public health and the environment. The clean-up will be consistent with standards set for "restricted residential use", which is suitable for the anticipated future use of the site for a multiple unit residential building.

APPENDIX B

Administrative Record

ADMINISTRATIVE RECORD

**Former NuHart Plastic Manufacturing
State Superfund Project
Kings County, New York
Site No. 224136**

1. *Proposed Remedial Action Plan for the Former NuHart Plastic Manufacturing site*, dated September 2018, prepared by the Department.
2. Order on Consent, Index No. R2-0654-11-10, between the Department and 49 Dupont Realty Corp., executed on January 18, 2011.
3. Amended Order on Consent to add a new owner (Dupont Street Developers LLC), executed on February 7, 2014.
4. *Underground Tank Closure Report*, dated July 2006, prepared by Advanced Site Restoration, LLC (ASR)
5. *Phase II Site Assessment*, dated April 2007, prepared by ASR
6. *Citizen Participation Plan*, dated April 2011, prepared by Ecosystems Strategies, Inc. (ESI)
7. *Remedial Investigation Work Plan*, dated November 2011, prepared by ESI
8. *Remedial Investigation Report*, dated July 30, 2015, prepared by ESI
9. *Supplemental Remedial Investigation Report*, dated October 2015, prepared by FPM Group
10. *Feasibility Study Report*, dated January 19, 2017, prepared by Goldberg Zoino & Associates of New York, P.C. d/b/a GZA GeoEnvironmental Of New York
11. Email dated October 16, 2018 from Desire Wittig
12. Email dated October 24, 2018 from Sarah Balistreri
13. Email dated October 24, 2018 from Yejin Yoo
14. Email dated November 11, 2018 from Giovanna Taylor
15. Email dated November 13, 2018 from Colleen Large
16. Email dated November 14, 2018 from Kate Jensen
17. Email dated November 15, 2018 from Rohanie
18. Letter dated November 16, 2018 from NYS Assemblymember Joseph R. Lentol
19. Letter dated November 16, 2018 from Brooklyn Community Board No. 1
20. Email dated November 18, 2018 from Dafna Naphtali
21. Email dated November 18, 2018 from Laura Hoffmann
22. Email dated November 19, 2018 from Heather Milburn
23. Email dated November 19, 2018 from Megan Noh
24. Email dated November 19, 2018 from NYC Councilmember Stephen Levin
25. Letter dated November 19, 2018 from Environmental Stewardship Concepts, LLC (consultant for North Brooklyn Neighbors f/k/a Neighbors Allied for Good Growth)
26. Letter dated November 19, 2018 from North Brooklyn Neighbors