

DECISION DOCUMENT

236-246 Gold Street
Brownfield Cleanup Program
Brooklyn, Kings County
Site No. C224413
June 2025



**Department of
Environmental
Conservation**

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

DECLARATION STATEMENT - DECISION DOCUMENT

236-246 Gold Street
Brownfield Cleanup Program
Brooklyn, Kings County
Site No. C224413
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Statement of Purpose and Basis

This document presents the remedy for the 236-246 Gold Street brownfield cleanup site. The remedial program was chosen in accordance with the New York State Environmental Conservation Law and Title 6 of the Official Compilation of Codes, Rules and Regulations of the State of New York (6 NYCRR) Part 375.

This decision is based on the Administrative Record of the New York State Department of Environmental Conservation (NYSDEC) for the 236-246 Gold Street site and the public's input to the proposed remedy presented by NYSDEC.

Description of Selected Remedy

The elements of the selected remedy are as follows:

1. Remedial Design

A remedial design program will be implemented to provide the details necessary for the construction, operation, optimization, maintenance, and monitoring of the remedial program. Green remediation principles and techniques will be implemented to the extent feasible in the design, implementation, and site management of the remedy as per DER-31. The major green remediation components are as follows:

- Considering the environmental impacts of treatment technologies and remedy stewardship over the long term;
- Reducing direct and indirect greenhouse gases and other emissions;
- Increasing energy efficiency and minimizing use of non-renewable energy;
- Conserving and efficiently managing resources and materials;
- Reducing waste, increasing recycling and increasing reuse of materials which would otherwise be considered a waste;
- Maximizing habitat value and creating habitat when possible;
- Fostering green and healthy communities and working landscapes which balance ecological, economic and social goals;
- Integrating the remedy with the end use where possible and encouraging green and sustainable re-development; and

- Additionally, to incorporate green remediation principles and techniques to the extent feasible in the future development at this site, any future on-site buildings shall be constructed, at a minimum, to meet the 2020 Energy Conservation Construction Code of New York (or most recent edition) to improve energy efficiency as an element of construction.

As part of the remedial design program, to evaluate the remedy with respect to green and sustainable remediation principles, an environmental footprint analysis will be completed. The environmental footprint analysis will be completed using an accepted environmental footprint analysis calculator such as SEFA (Spreadsheets for Environmental Footprint Analysis, USEPA), SiteWise™ (available in the Sustainable Remediation Forum [SURF] library) or similar Department accepted tool. Water consumption, greenhouse gas emissions, renewable and non-renewable energy use, waste reduction and material use will be estimated, and goals for the project related to these green and sustainable remediation metrics, as well as for minimizing community impacts, protecting habitats and natural and cultural resources, and promoting environmental justice, will be incorporated into the remedial design program, as appropriate. The project design specifications will include detailed requirements to achieve the green and sustainable remediation goals. Further, progress with respect to green and sustainable remediation metrics will be tracked during implementation of the remedial action and reported in the Final Engineering Report (FER), including a comparison to the goals established during the remedial design program.

Additionally, the remedial design program will include a climate change vulnerability assessment, to evaluate the impact of climate change on the project site and the proposed remedy. Potential vulnerabilities associated with extreme weather events (e.g., hurricanes, lightning, heat stress and drought), flooding, and sea level rise will be identified, and the remedial design program will incorporate measures to minimize the impact of climate change on potential identified vulnerabilities.

2. Excavation

Excavation and off-site disposal of all on-site soils which exceed restricted-residential soil cleanup objectives (RRSCOs), as defined by 6 NYCRR Part 375-6.8, in the upper 15 feet. If a Track 2 restricted-residential cleanup is achieved, a Cover System will not be a required element of the remedy.

Approximately 1,137 cubic yards of material will be removed from the site. If found on the site, any underground storage tanks (USTs), fuel dispensers, underground piping or other structures will be excavated and properly disposed off-site. Collection and analysis of confirmation and documentation samples at the remedial excavation depths will be used to verify that SCOs for the site have been achieved. If confirmation sampling indicates that SCOs were not achieved at the stated remedial depth, the Applicant must notify NYSDEC, submit the sample results and, in consultation with NYSDEC, determine if further remedial excavation is necessary. Further excavation for development will proceed after confirmation samples demonstrate that SCOs for the site have been achieved.

To ensure proper handling and disposal of excavated material, waste characterization sampling

will be completed for all identified contaminated site material. Waste characterization sampling will be performed exclusively for the purposes of off-site disposal in a manner suitable to receiving facilities and in conformance with applicable federal, state and local laws, rules, and regulations and facility-specific permits.

3. Backfill

On-site soil which does not exceed the above excavation criteria for any constituent may be used to backfill the excavation or re-grade the site. Clean fill meeting the requirements of 6 NYCRR Part 375-6.7(d) will be brought in to complete the backfilling of the excavation and establish the designed grades at the site.

4. Vapor Mitigation

Any on-site buildings will be required to have a Sub-Slab Depressurization System (SSDS), or other acceptable measures, to mitigate the migration of vapors into the building from the subsurface.

5. Institutional Controls

Imposition of an institutional control in the form of an environmental easement for the controlled property which will:

- require the remedial party or site owner to complete and submit to NYSDEC a periodic certification of institutional and engineering controls in accordance with Part 375-1.8 (h)(3);
- allow the use and development of the controlled property for restricted residential use, as defined by Part 375-1.8(g), although land use is subject to local zoning laws;
- restrict the use of groundwater as a source of potable or process water, without necessary water quality treatment as determined by the NYSDOH or NYCDOHMH; and
- require compliance with NYSDEC approved Site Management Plan.

6. Site Management Plan

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 remedial element 5 above.
 - Engineering Controls: The SSDS discussed in remedial element 4 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/or groundwater use restrictions;
 - provisions for the management and inspection of the identified engineering controls;
 - maintaining site access controls and NYSDEC 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 soil vapor, to assess the performance and effectiveness of the remedy; and
 - a schedule of monitoring and frequency of submittals to NYSDEC.
- c. an Operation and Maintenance (O&M) Plan to ensure continued operation, maintenance, inspection, and reporting of any mechanical or physical components of the active vapor mitigation system. The plan includes, but is not limited to:
- procedures for operating and maintaining the system;
 - compliance inspection of the system to ensure proper O&M as well as providing the data for any necessary reporting.

Declaration

The remedy conforms with promulgated standards and criteria that are directly applicable, or that are relevant and appropriate and takes into consideration NYSDEC guidance, as appropriate. The remedy is protective of public health and the environment.

June 4, 2025

Date



Scott Deyette, Director
Remedial Bureau B

DECISION DOCUMENT

236-246 Gold Street
Brooklyn, Kings County
Site No. C224413
May 2025

SECTION 1: SUMMARY AND PURPOSE

The New York State Department of Environmental Conservation (NYSDEC), in consultation with the New York State Department of Health (NYSDOH), has selected a remedy for the above referenced site. The disposal of contaminants at the site has resulted in threats to public health and the environment that would be addressed by the remedy. The disposal or release of contaminants at this site, as more fully described in this document, has contaminated various environmental media. Contaminants include hazardous waste and/or petroleum.

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

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

SECTION 2: CITIZEN PARTICIPATION

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

DECInfo Locator - Web Application
<https://gisservices.dec.ny.gov/gis/dil/index.html?rs=C224413>

Brooklyn Community Board #2
350 Jay Street, 8th Floor
Brooklyn, NY 11201
Phone: (718) -596-5410

Brooklyn Public Library - Brooklyn Heights Branch
286 Cadman Plaza West
Brooklyn, NY 11201
Phone: (718) 623-7100

Receive Site Citizen Participation Information By Email

Please note that NYSDEC'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, located at 236-246 Gold Street, Brooklyn, NY (Tax Block 121, Lots 33, 35, 36, and 37), is a rectangular shaped parcel located on the western side of Gold Street, between Concord Street and Tillary Street. The site is approximately 11,054 square feet (0.25 acres) in area and has approximately 125 feet of frontage along Gold Street and is approximately 88 feet deep.

Site Features:

The site is currently vacant and there are no buildings/structures. A majority of the site is covered with asphalt.

Current Zoning and Land Use:

The site is currently inactive and zoned for medium-density residential use (R6B). The surrounding parcels are currently used for a combination of residential and commercial.

Past Use of the Site:

The site was developed as early as 1887 with a two-story commercial building identified as the Brooklyn Fire Department and a tin smith at Lot 33 on the northeastern portion of the site. Five two- to four-story residential buildings, a three-story structure, and a shed were identified on the remainder of the site. By 1904, the three-story structure has been identified as a residential property. The fire department and tin smith were reidentified as a wagon house. By 1915, the wagon house had been labelled as a wagon builder. Additionally, the southernmost residential building had been identified as commercial, and in 1938 the building had been demolished. By 1950, the wagon builder had been identified as "rags." By 1969, all buildings at the site had been demolished and the lot remained unchanged until 2003, when parking had been identified throughout the site. City directory listings document historic use of the site for a blacksmith, a wagon builder, a waste materials corporation, and residential use. Contamination detected onsite is likely due to the presence of historic urban fill across the site, as well as historic use of the site for metalworking.

Site Geology and Hydrogeology:

The subject property is located at an average elevation of approximately 31 feet above mean sea level and is relatively flat. The site is underlain by a continuous layer of historic urban fill consisting of brown, silty sand with gravel, concrete fragments, brick fragments, coal fragments, ash, glass, and wood ranging in thickness from five to ten feet. The fill layer is underlain by a native layer of brown, fine- to coarse-grained sand to at least 15 feet below ground surface (ft-bgs). Groundwater at the site was measured at approximately 24 to 27 ft-bgs. Groundwater flows to the northeast, towards the East River.

A site location map is attached as Figure 1.

SECTION 4: LAND USE AND PHYSICAL SETTING

NYSDEC may consider the current, intended, and reasonably anticipated future land use of the site and its surroundings when evaluating a remedy for soil remediation. For this site, an alternative that restricts 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) was evaluated in addition to an alternative which would allow for unrestricted use of the site.

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

SECTION 5: ENFORCEMENT STATUS

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

SECTION 6: SITE CONTAMINATION

6.1: Summary of the Remedial Investigation

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

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

The RI is intended to identify the nature (or type) of contamination which may be present at a site and the extent of that contamination in the environment on the site, or leaving the site. The RI reports on data gathered to determine if the soil, groundwater, soil vapor, indoor air, surface water or sediments may have been contaminated. Monitoring wells are installed to assess groundwater and soil borings or test pits are installed to sample soil and/or waste(s) identified. If other natural resources are present, such as surface water bodies or wetlands, the water and sediment may be

sampled as well. Based on the presence of contaminants in soil and groundwater, soil vapor will also be sampled for the presence of contamination. Data collected in the RI influence the development of remedial alternatives. The RI report is available for review in the site document repository and the results are summarized in section 6.3.

The analytical data collected on this site includes data for:

- groundwater
- soil
- soil vapor

6.1.1: Standards, Criteria, and Guidance (SCGs)

The remedy must conform to promulgated standards and criteria that are directly applicable or that are relevant and appropriate. The selection of a remedy must also take into consideration guidance, as appropriate. Standards, Criteria and Guidance are hereafter called SCGs.

To determine whether the contaminants identified in various media are present at levels of concern, the data from the RI were compared to media-specific SCGs. NYSDEC has developed SCGs for groundwater, surface water, sediments, and soil. The NYSDOH has developed SCGs for drinking water and soil vapor intrusion. For a full listing of all SCGs see: <http://www.dec.ny.gov/regulations/61794.html>

6.1.2: RI Results

The data have identified contaminants of concern. A "contaminant of concern" is a contaminant that is sufficiently present in frequency and concentration in the environment to require evaluation for remedial action. Not all contaminants identified on the property are contaminants of concern. The nature and extent of contamination and environmental media requiring action are summarized below. Additionally, the RI Report contains a full discussion of the data. The contaminant(s) of concern identified at this site is/are:

benzo(a)anthracene	lead
benzo(a)pyrene	mercury
benzo(b)fluoranthene	tetrachloroethene (PCE)
benzo(k)fluoranthene	trichloroethene (TCE)
chrysene	chloroform
dibenz[a,h]anthracene	cis-1,2-dichloroethene
indeno(1,2,3-cd)pyrene	toluene
arsenic	ethylbenzene
barium	1,2,4-trimethylbenzene
copper	

The contaminants of concern exceed the applicable SCGs for:

- soil

6.2: Interim Remedial Measures

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

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

6.3: Summary of Environmental Assessment

This section summarizes the assessment of existing and potential future environmental impacts presented by the site. Environmental impacts may include existing and potential future exposure pathways to fish and wildlife receptors, wetlands, groundwater resources, and surface water. The RI report presents a detailed discussion of any existing and potential impacts from the site to fish and wildlife receptors.

Nature and Extent of Contamination:

Soil and groundwater were analyzed for volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), metals, polychlorinated biphenyls (PCBs), per- and polyfluoroalkyl substances (PFAS), and pesticides. Soil vapor was analyzed for VOCs. The primary contaminants of concern include SVOCs and metals in soil, and VOCs in soil vapor.

Soil:

Exceedances of the restricted residential use soil cleanup objectives (RRSCOs) were identified sitewide at depths up to 2 ft below ground surface (bgs) and at individual hotspots up to 12 ft bgs. Fill material varied in depth, with the majority of site-wide fill located in the upper 10 ft bgs. SVOCs detected at concentrations exceeding their respective RRSCOs include benzo(a)anthracene up to 14.4 parts per million (ppm) (RRSCO of 1 ppm), benzo(a)pyrene up to 11.2 ppm (RRSCO of 1 ppm), benzo(b)fluoranthene up to 13.8 ppm (RRSCO of 1 ppm), benzo(k)fluoranthene up to 5.4 ppm (RRSCO of 3.9 ppm), chrysene up to 12.9 ppm (RRSCO of 3.9 ppm), dibenzo(a,h)anthracene up to 4 ppm (RRSCO of 0.33 ppm), and indeno-(1,2,3-c,d)pyrene up to 5 ppm (RRSCO of 0.5 ppm). Metals detected at concentrations exceeding RRSCOs include arsenic up to 336 ppm (RRSCO of 16 ppm), barium up to 4,660 ppm (RRSCO of 400 ppm), copper up to 444 ppm (RRSCO of 270 ppm), lead up to 23,800 ppm (RRSCO of 400 ppm), and mercury up to 2.02 ppm (RRSCO of 0.81 ppm). PCBs were detected at concentrations up to 14.7 ppm, exceeding the RRSCO of 1 ppm.

No VOCs, pesticides or PFAS were detected above their respective RRSCOs or guidance values. Data does not indicate any off-site impacts in soil related to this site.

Groundwater:

The only dissolved metals detected at concentrations exceeding their respective Ambient Water Quality Standards and Guidance Values (AWQSGVs) were naturally occurring minerals such as magnesium, manganese, and sodium and are not considered site related. PFAS detected at concentrations exceeding their respective AWQSGVs include perfluorooctanesulfonic acid (PFOS) at 75.6 parts per trillion (ppt) (AWQGV of 2.7 ppt) and perfluorooctanoic acid (PFOA)

up to 111 ppt (AWQSGV of 6.7 ppt). However, the concentrations remain stable across the site implying that the source is off-site and these contaminants are not site-related.

No VOCs, SVOCs, pesticides, or PCBs were detected above their respective AWQSGV in groundwater samples.

Data does not indicate any off-site impacts in groundwater related to this site.

Soil Vapor:

Various chlorinated VOCs were detected in soil vapor including PCE up to 37.3 micrograms per cubic meter (ug/m³), TCE up to 13.4 ug/m³, chloroform up to 6.8 ug/m³, and cis-1,2-dichloroethene up to 1.47 ug/m³. Petroleum-related VOCs were also detected in soil vapor, most notably toluene up to 13.9 ug/m³, ethylbenzene up to 95.5 ug/m³, 1,2,4-trimethylbenzene up to 1.97 ug/m³, and n-hexane up to 123.3 ug/m³.

Data does not indicate any off-site impacts in soil vapor related to this site.

6.4: Summary of Human Exposure Pathways

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

Direct contact with contaminants in the soil is unlikely because the majority of the site is covered with asphalt. 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 soil vapor (air spaces within the soil) may move into buildings and affect the indoor air quality. This process, which is similar to the movement of radon gas from the subsurface into the indoor air of buildings, is referred to as soil vapor intrusion. Because there is no on-site building, inhalation of site contaminants in indoor air due to soil vapor intrusion does not represent a concern for the site in its current condition. However, the potential exists for the inhalation of site contaminants due to soil vapor intrusion for any future on-site development. In addition, environmental sampling indicates soil vapor intrusion is not a concern for off-site buildings.

6.5: Summary of the Remediation Objectives

The objectives for the remedial program have been established through the remedy selection process stated in 6 NYCRR Part 375. The goal for the remedial program is to restore the site to pre-disposal conditions to the extent feasible. At a minimum, the remedy shall eliminate or mitigate all significant threats to public health and the environment presented by the contamination identified at the site through the proper application of scientific and engineering principles.

The remedial action objectives for this site are:

Groundwater

RAOs for Public Health Protection

- Prevent ingestion of groundwater with contaminant levels exceeding drinking water standards.

Soil

RAOs for Public Health Protection

- Prevent ingestion/direct contact with contaminated soil.

RAOs for Environmental Protection

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

Soil Vapor

RAOs for Public Health Protection

- Mitigate impacts to public health resulting from existing, or the potential for, soil vapor intrusion into buildings at a site.

SECTION 7: ELEMENTS OF THE SELECTED REMEDY

The alternatives developed for the site and the evaluation of the remedial criteria are presented in the Alternative Analysis. The remedy is selected pursuant to the remedy selection criteria set forth in DER-10, Technical Guidance for Site Investigation and Remediation and 6 NYCRR Part 375.

The selected remedy is a Track 2: Restricted Residential use with generic soil cleanup objectives remedy.

The selected remedy is referred to as the Excavation and Vapor Mitigation remedy.

The elements of the selected remedy, as shown in Figure 2, 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;
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- Reducing waste, increasing recycling and increasing reuse of materials which would otherwise be considered a waste;
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- Fostering green and healthy communities and working landscapes which balance ecological, economic and social goals;

- Integrating the remedy with the end use where possible and encouraging green and sustainable re-development; and
- Additionally, to incorporate green remediation principles and techniques to the extent feasible in the future development at this site, any future on-site buildings shall be constructed, at a minimum, to meet the 2020 Energy Conservation Construction Code of New York (or most recent edition) to improve energy efficiency as an element of construction.

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Additionally, the remedial design program will include a climate change vulnerability assessment, to evaluate the impact of climate change on the project site and the proposed remedy. Potential vulnerabilities associated with extreme weather events (e.g., hurricanes, lightning, heat stress and drought), flooding, and sea level rise will be identified, and the remedial design program will incorporate measures to minimize the impact of climate change on potential identified vulnerabilities.

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5. Institutional Controls

Imposition of an institutional control in the form of an environmental easement for the controlled property which will:

- require the remedial party or site owner to complete and submit to NYSDEC a periodic certification of institutional and engineering controls in accordance with Part 375-1.8 (h)(3);
- allow the use and development of the controlled property for restricted residential use, as defined by Part 375-1.8(g), although land use is subject to local zoning laws;
- restrict the use of groundwater as a source of potable or process water, without necessary water quality treatment as determined by the NYSDOH or NYCDOHMH; and
- require compliance with NYSDEC approved Site Management Plan.

6. Site Management Plan

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

- d. 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 remedial element 5 above.
 - Engineering Controls: The SSDS discussed in remedial element 4 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/or groundwater use restrictions;
 - provisions for the management and inspection of the identified engineering controls;
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 - the steps necessary for the periodic reviews and certification of the institutional and/or engineering controls.
- e. a Monitoring Plan to assess the performance and effectiveness of the remedy. The plan includes, but may not be limited to:
- monitoring of soil vapor, to assess the performance and effectiveness of the remedy; and
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- f. an Operation and Maintenance (O&M) Plan to ensure continued operation, maintenance, inspection, and reporting of any mechanical or physical components of the active vapor mitigation system. The plan includes, but is not limited to:
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