New York State Department of Environmental Conservation Division of Environmental Remediation Remedial Bureau E, 12th Floor 625 Broadway, Albany, New York 12233-7017 Phone: (518) 402-9814 • Fax: (518) 402-9819 Website: www.dec.ny.gov



December 16, 2014

Mr. Frank Ciminelli Conventus Partners, LLC 350 Essjay Road, Suite 100 Williamsville, New York 14221

Mr. Frank Ciminelli F.L.C. 50 High Street Corporation 350 Essjay Road, Suite 100 Williamsville, New York 14221

Mr. Joseph Kessler Kaleida Properties, Inc. 726 Exchange Street, Suite 522 Buffalo, New York 14210

Mr. Joseph Kessler Kaleida Health 726 Exchange Street, Suite 522 Buffalo, New York 14210

> RE: Former Mobil Service Station 99-MST Site ID No. C915260, Buffalo, Erie County Remedial Investigation, Interim Remedial Measures and Alternatives Analysis Report & Decision Document

Dear Messrs. Ciminelli and Kessler:

The New York State Department of Environmental Conservation (Department) and the New York State Department of Health (NYSDOH) have reviewed the Remedial Investigation, Interim Remedial Measures, and Alternatives Analysis Report (RI/IRM/AAR) for the Former Mobil Service Station 99-MST site dated November 28, 2014 and prepared by C&S Engineers, Inc., on behalf of the Conventus Partners, LLC, F.L.C., 50 High Street Corporation, Kaleida Properties, Inc., and Kaleida Health. The RI/IRM/AAR is hereby approved. Please ensure that a copy of the approved RI/IRM/AAR is placed in the document repository(ies). The draft plan should be removed.

Enclosed is a copy of the Department's Decision Document for the site. The remedy is to be implemented in accordance with this Decision Document. Please ensure that a copy of the Decision Document is placed in the document repository(ies).

Please contact the Department's Project Manager, Jaspal S. Walia, at (716) 851-7220 or <u>jaspal.walia@dec.ny.gov</u> at your earliest convenience to discuss next steps. Please recall the Department requires seven (7) days notice prior to the start of field work.

Sincerely,

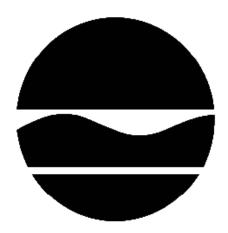
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Michael J. Cruden, P.E. Director, Remedial Bureau E Division of Environmental Remediation

ec: Robert Schick, NYSDEC Michael Ryan, NYSDEC Kelly Lewandowski, NYSDEC Martin Doster, Region 9, Buffalo Jaspal S. Walia, Region 9, Buffalo Patrick Foster, Esq., Region 9, Buffalo Matthew Forcucci, NYSDOH Charlotte Bethoney, NYSDOH Mark Colmerauer, C&S Engineers, Inc. Marc A. Romanowski, Esq., Harter Secrest & Emery, LLP

# **DECISION DOCUMENT**

Former Mobil Service Station 99-MST Brownfield Cleanup Program Buffalo, Erie County Site No. C915260 December 2014



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

# **DECLARATION STATEMENT - DECISION DOCUMENT**

# Former Mobil Service Station 99-MST Brownfield Cleanup Program Buffalo, Erie County Site No. C915260 December 2014

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

This document presents the remedy for the Former Mobil Service Station 99-MST site, a brownfield cleanup site. The remedial program was chosen in accordance with the New York State Environmental Conservation Law and Title 6 of the Official Compilation of Codes, Rules and Regulations of the State of New York (6 NYCRR) Part 375.

This decision is based on the Administrative Record of the New York State Department of Environmental Conservation (the Department) for the Former Mobil Service Station 99-MST site and the public's input to the proposed remedy presented by the Department.

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

The elements of the selected remedy are as follows:

Remedy Description:

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. No Further Action for Soils:

The Interim Remedial Measure (IRM) achieved the Restricted-Residential Soil Cleanup Objectives, therefore, no further action is required for the on-site soils.

- 3. Groundwater Treatment and Monitoring:
- Contaminated groundwater will be treated in-situ by injecting oxygen release compounds (ORC) to break down the remaining petroleum hydrocarbons to achieve groundwater standards.
- The progress of the treatment will be monitored under a site management plan (SMP).
- 4. Institutional Control:

Imposition of an institutional control in the form of an environmental easement for the controlled property that: requires the remedial party or site owner to complete and submit to the Department a periodic certification of institutional and engineering controls in accordance with Part 375-1.8 (h)(3);

- allows the use and development of the controlled property for restricted residential, commercial and industrial uses as defined by Part 375-1.8(g), although land use is subject to local zoning laws;
- restricts the use of groundwater as a source of potable or process water, without necessary water quality treatment as determined by the NYSDOH or County DOH;
- requires compliance with the Department approved Site Management Plan.
- 5. 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;

Engineering Controls: The groundwater treatment and monitoring discussed in Paragraph 3.

Institutional Controls: The Environmental Easement discussed in Paragraph 4 above.

This plan includes, but may not be limited to:

- descriptions of the provisions of the environmental easement including any land use, and groundwater use restrictions;
- provisions for the management and inspection of the identified engineering controls;
- maintaining site access controls and Department notification;

- the steps necessary for the periodic reviews and certification of the institutional and/or engineering controls.
- b. Monitoring Plan to assess the performance and effectiveness of the remedy. The plan includes, but may not be limited to:
  - monitoring of groundwater to assess the performance and effectiveness of the ٠ remedy:
  - a schedule of monitoring and frequency of submittals to the Department;
- The groundwater treatment and monitoring plan which details the remediation of c. remaining groundwater contamination.
- 6. **Future Construction** 
  - If new buildings constructed on the site do not include an enclosed subgrade . parking area then a soil vapor intrusion evaluation will be completed for new buildings constructed on the site and appropriate actions to minimize potential exposure will be implemented.

#### Declaration

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

# Michael J Cruden, O=DEK, OU=KBE, email=mjcruden@gw.dec.state.ny.us, c=US

Digitally signed by Michael J Cruden Date: 2014.12.12 10:12:02 -05'00'

Date

Michael Cruden, Director Remedial Bureau E

# **DECISION DOCUMENT**

Former Mobil Service Station 99-MST Buffalo, Erie County Site No. C915260 December 2014

#### SECTION 1: SUMMARY AND PURPOSE

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

The New York State Brownfield Cleanup Program (BCP) is a voluntary program. The goal of the BCP is to enhance private-sector cleanups of brownfields and to reduce development pressure on "greenfields." A brownfield site is real property, the redevelopment or reuse of which may be complicated by the presence or potential presence of a contaminant.

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

#### SECTION 2: <u>CITIZEN PARTICIPATION</u>

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

Buffalo and Erie County Public Library Attn: Reference Librarian 1 Lafayette Square Buffalo, NY 14203-1887 Phone: 716-858-8900

#### **Receive Site Citizen Participation Information By Email**

Please note that the Department's Division of Environmental Remediation (DER) is "going paperless" relative to citizen participation information. The ultimate goal is to distribute citizen

participation information about contaminated sites electronically by way of county email listservs. Information will be distributed for all sites that are being investigated and cleaned up in a particular county under the State Superfund Program, Environmental Restoration Program, Brownfield Cleanup Program, Voluntary Cleanup Program, and Resource Conservation and Recovery Act Program. We encourage the public to sign up for one or more county listservs at <u>http://www.dec.ny.gov/chemical/61092.html</u>

# SECTION 3: SITE DESCRIPTION AND HISTORY

Location: This site is located at 979 Main Street in the City of Buffalo. The site borders with Goodrich Street on north, High Street on south, and a parking lot for the Buffalo General Hospital on the east. The underground subway system is along the Main Street on the west.

Site Features:

This 1.72 acres site consists of two parcels.

#### Current Zoning/Use(s):

The site is located within the commercial zoning district. Currently a medical office building is being constructed on the site. The land use in the project area is characterized as urban mixed use, primarily commercial and community services. The community services include public and private medical and hospital facilities.

#### Past Use(s) of the Site:

The Exxon/Mobil and its predecessors operated a gas station from approximately 1940s to 1982. The gas station building was demolished in 1982. Four underground storage tanks (USTs) were removed between 1981 and 2007. Other previous businesses at the site included an auto repair shop, UB medical and dental departments, a restaurant, and a motel.

#### Site Geology and Hydrogeology:

Overburden soils in the area consist primarily of fill material at the ground surface. Geotechnical boring logs collected from the site in 2010 indicate that fill material such as sand, gravel and bricks varies in thickness from 2 to 10 feet across the site. Soil underlying the fill is comprised of interbedded sands and silt that are brown to olive - brown in color. Overburden soils are underlain by the Onondaga Limestone (bedrock), which is at approximately 100 feet below ground surface (bgs). The groundwater is approx. 32 feet bgs and flows towards northeast.

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

# SECTION 6: SITE CONTAMINATION

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

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

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

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

# 6.1.1: Standards, Criteria, and Guidance (SCGs)

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

To determine whether the contaminants identified in various media are present at levels of concern, the data from the RI were compared to media-specific SCGs. The Department has developed SCGs for groundwater, surface water, sediments, and soil. The NYSDOH has developed SCGs

for drinking water and soil vapor intrusion. For a full listing of all SCGs see: <u>http://www.dec.ny.gov/regulations/61794.html</u>

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

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

Xylenes (mixed)	Ethylbenzene
Benzene	1,2,4-Trimethylbenzene
Toluene	Naphthalene

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

- groundwater - 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.

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

#### Excavation of Contaminated Soils:

Interim Remedial Measure (IRM): A Remedial Investigation and IRM activities were conducted concurrently from December 2012 to August 2013.

Prior to start of IRM, all four sides of the excavation (almost the entire site) were shored by steel sheet piles. The depth of sheet piles varied from 40 to 50 feet below ground surface (bgs). The excavation was conducted within the shoring system. Depth of excavation was approximately 40 feet bgs in the source area and met Restricted-Residential SCOs. Approximately 16,000 cubic yards of contaminated soil were excavated and disposed off-site at a permitted disposal facility or treatment facility. Approximately 537,000 gallons of groundwater and LNAPL (light non-aqueous phase liquid) were also removed by pumping and sent off-site for treatment and disposal. The deeper excavation was filled in with flowable fill followed by crushed rock fill to bring the floor grade to design depths for the redevelopment of the site.

Groundwater Remediation:

After completion of the IRM, the levels of benzene, toluene, ethylbenzene, and xylenes (BTEX) in groundwater in the source area were reduced from 73,180 ppb to 13,420 ppb. In order to further reduce concentration of petroleum hydrocarbons in groundwater, oxygen release compounds such as RegenOX (sodium percarbonate) and/or Klozur Activated Persulfate (sodium persulfate) were injected into three on-site monitoring wells in December 2013 and July 2014. The groundwater sampling conducted in March 2014 indicates that the contamination in groundwater is decreasing.

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

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

This site is contaminated with petroleum hydrocarbons due to leaking underground storage tanks (USTs) from the former Mobil Service Station. Four underground storage tanks (USTs) were removed in 1981 (4,000 gal, 3,000 gal), 1982 (6,000 gal), and 2007 (1,000 gal). Prior to the IRMs, elevated levels of petroleum related compounds such as benzene, toluene, ethylbenzene, and xylenes were found in both soil and groundwater at the site during site investigations.

Contamination remaining after the IRM:

Soil: Post excavation soil samples were collected from the bottom of the excavation, from approximately 30x30 foot grids and were tested for volatile organic compounds (VOCs). Twelve post-excavation soil samples were also tested for SVOCs (semi-volatile organic compounds), PCBs (polychlorinated bi-phenyls), pesticides, and metals. Depth of these soil samples varied from 26 feet to 40 feet bgs. The soil samples collected at the bottom of the excavation met Restricted Residential Soil Cleanup Objectives.

Groundwater: Following excavation activities within the sheet piled area, seven new monitoring wells were installed within the excavated area. Depth of monitoring wells was approximately 16 feet below the basement floor elevation or 43 feet bgs. Contamination due to BTEX in five of the seven monitoring wells varied from 116 ppb to 15,110 ppb. Groundwater levels exceeded the groundwater standards for benzene (8.8-4,800 ppb; std.-1.0 ppb), toluene (42 -220 ppb; std. - 5 ppb), ethylbenzene (20-1,600 ppb; std.- 5 ppb) and total xylenes (85-6,800 ppb; std. - 5 ppb) during March 2014 sampling.

Off-site groundwater contamination is being addressed under a separate Spill stipulation (Spill No. 9500234).

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

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

Measures are in place to control the potential for coming in contact with residual subsurface soil and groundwater contamination remaining on the site.

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

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

The remedial action objectives for this site are:

#### <u>Groundwater</u>

## **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.
- Prevent the discharge of contaminants to surface water.

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

# **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.

# <u>Soil</u>

# **RAOs for Soil Vapor**

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

# SECTION 7: <u>ELEMENTS OF THE SELECTED REMEDY</u>

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 use with generic soil cleanup objectives remedy.

The selected remedy is referred to as the Groundwater Treatment and Monitoring remedy.

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

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. No Further Action for Soils:

The Interim Remedial Measure (IRM) achieved the Restricted-Residential Soil Cleanup Objectives, therefore, no further action is required for the on-site soils.

- 3. Groundwater Treatment and Monitoring:
- Contaminated groundwater will continue to be treated in-situ by injecting oxygen release compounds (ORC) to break down the remaining petroleum hydrocarbons to achieve groundwater standards.
- The progress of the treatment will be monitored under a site management plan (SMP) and treatment will continue until remedial action objectives are met.
- 4. Institutional Control:

Imposition of an institutional control in the form of an environmental easement for the controlled property that: requires the remedial party or site owner to complete and submit to the Department a periodic certification of institutional and engineering controls in accordance with Part 375-1.8 (h)(3);

- allows the use and development of the controlled property for restricted residential, commercial and industrial uses as defined by Part 375-1.8(g), although land use is subject to local zoning laws;
- restricts the use of groundwater as a source of potable or process water, without necessary water quality treatment as determined by the NYSDOH or County DOH; and
- requires compliance with the Department approved Site Management Plan.
- 5. 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;

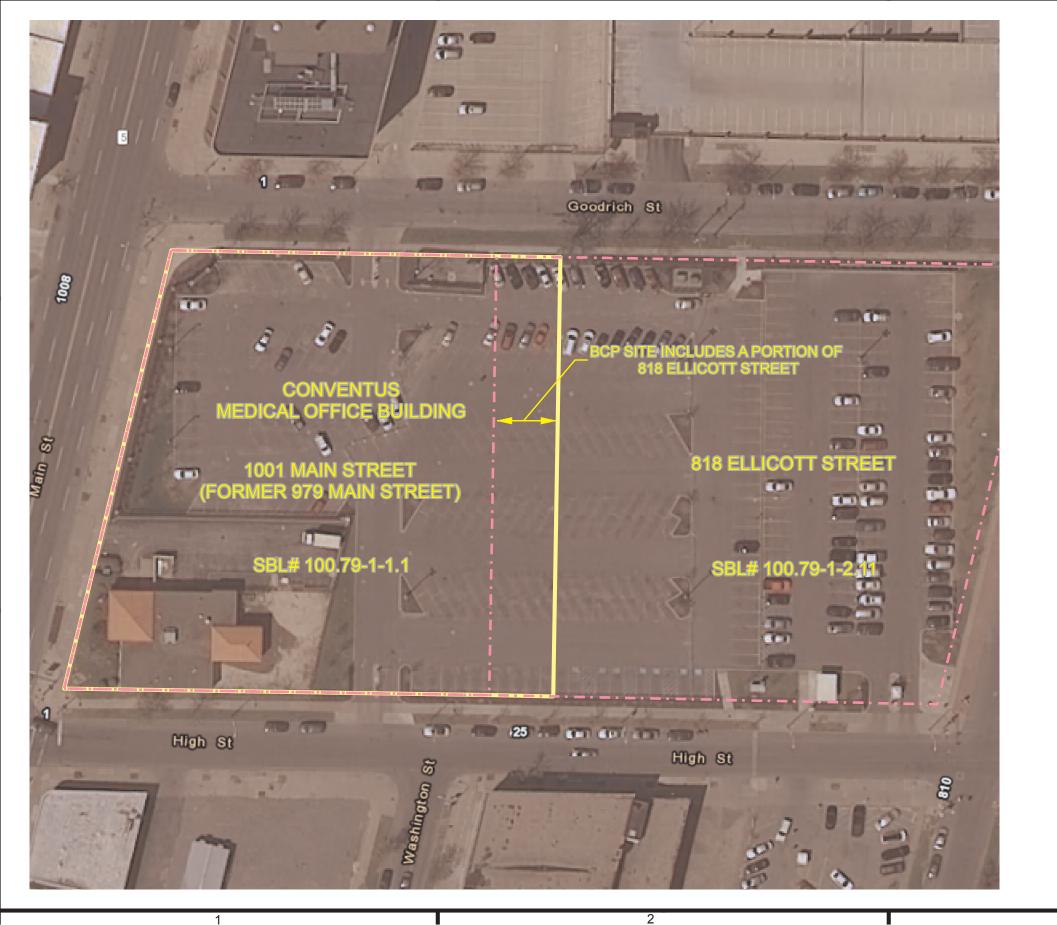
Engineering Controls: The groundwater treatment and monitoring discussed in Paragraph 3

Institutional Controls: The Environmental Easement discussed in Paragraph 4 above.

This plan includes, but may not be limited to:

- descriptions of the provisions of the environmental easement including any land use, and groundwater use restrictions;
- provisions for the management and inspection of the identified engineering controls;
- maintaining site access controls and Department notification;
- the steps necessary for the periodic reviews and certification of the institutional and/or engineering controls.
- b. Monitoring Plan to assess the performance and effectiveness of the remedy. The plan includes, but may not be limited to:
  - monitoring of groundwater to assess the performance and effectiveness of the remedy;
  - a schedule of monitoring and frequency of submittals to the Department;
- c. The groundwater treatment and monitoring plan which details the remediation of remaining groundwater contamination.
- 6. Future Construction

• If new buildings constructed on the site do not include an enclosed subgrade parking area then a soil vapor intrusion evaluation will be completed for new buildings constructed on the site and appropriate actions to minimize potential exposure will be implemented.



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