

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Division of Environmental Remediation, Remedial Bureau E
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May 28, 2015

Mr. Matt Montante
Gates Circle Holdings, LLC
2760 Kenmore Avenue, Suite 100
Buffalo, New York 14150

RE: 3 Gates Circle, Site ID No. C915272, Buffalo, Erie County
Remedial Investigation/Alternatives Analysis Report & Decision Document

Dear Mr. Montante:

The New York State Department of Environmental Conservation (Department) and the New York State Department of Health (NYSDOH) have reviewed the Remedial Investigation/Alternatives Analysis Report (RI/AAR) for the 3 Gates Circle Site, dated May 2015 and prepared by Benchmark Environmental Engineering & Science, PLLC on behalf of the Gates Circle Holdings, LLC.

The RI/AAR is hereby approved. Please ensure that a copy of the approved RI/AAR is placed in the document repository (ies). The draft report 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 jaspal.walia@dec.ny.gov 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,



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

Enclosure

cc: Robert Schick, NYSDEC
Michael Ryan, NYSDEC
Kelly Lewandowski, NYSDEC
Chad Staniszewski, Region 9

Jaspal Walia, Region 9
Jennifer Dougherty, Region 9
Renata Ockerby, NYSDOH
Christopher Boron, Benchmark
Craig Slater, Slater Law Firm



Department of
Environmental
Conservation

DECISION DOCUMENT

3 Gates Circle Site
Brownfield Cleanup Program
Buffalo, Erie County
Site No. C915272
May 2015



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

DECLARATION STATEMENT - DECISION DOCUMENT

3 Gates Circle Site
Brownfield Cleanup Program
Buffalo, Erie County
Site No. C915272
May 2015

Statement of Purpose and Basis

This document presents the remedy for the 3 Gates Circle 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 3 Gates Circle 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:

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 of Contaminated Soils:

The soils contaminated with petroleum product (No. 6 fuel oil), mercury, and polycyclic

aromatic hydrocarbons (PAHs) will be excavated as follows:

- Following the partial demolition of the Power Plant, petroleum product, impacted soil/fill or other grossly contaminated media, as defined in 6 NYCRR Part 375-1.2(u), will be excavated and transported off-site for disposal. Visual and olfactory observations along with photo-ionization detector (PID) readings will be used to screen soil/fill materials and assist in verifying removal limits of impacted soil/fill. Lateral and vertical excavation will continue until visually impacted soil/fill is removed, and the Part 375 restricted residential use soil cleanup objectives (RRSCOs) are achieved based on confirmatory samples.
- Approximately 600 cubic yards of shallow soils contaminated with mercury and PAHs from four additional areas of the site will be excavated. Impacted soil/fill in these areas will be removed and transported off-site for disposal.

3. Site Cover:

- A site cover will be required to allow for a restricted residential use of the site. The cover will consist either of the structures such as building footprints, asphalt parking lots, concrete walk ways, acceptable backfill or a vegetative cover where upper two feet of exposed surface soil exceed the applicable soil cleanup objectives (SCOs). Where the soil cover is required it will be a minimum of two feet of soil, meeting the SCOs for cover material as set forth in 6 NYCRR Part 375-6.7(d) for restricted residential use. The upper six inches of the soil cover will consist of top soil to maintain a vegetation layer. Any fill material brought to the site will meet the requirements for the identified site use as set forth in 6NYCRR Part 375-6.7(d).

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:

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 cover system discussed in Paragraph 3

Institutional Controls: The Environmental Easement discussed in Paragraph 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 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.

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

Digitally signed by Michael J Cruden
DN: cn=Michael J Cruden, o=DER, ou=RBE,
email=mjcruden@gw.dec.state.ny.us, c=US
Date: 2015.05.19 14:49:55 -04'00'

Date

Michael Cruden, Director
Remedial Bureau E

DECISION DOCUMENT

3 Gates Circle Site
Buffalo, Erie County
Site No. C915272
May 2015

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: CITIZEN PARTICIPATION

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

Buffalo & Erie County Public Library
Attn: Ms. Mary Schiffhauer
633 Elmwood Avenue
Buffalo, NY 14222
Phone: 716-883-6651

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 <http://www.dec.ny.gov/chemical/61092.html>

SECTION 3: SITE DESCRIPTION AND HISTORY

Location: The site property is located at 3 Gates Circle in the City of Buffalo. It consists of approximately 6.9 acres and encompasses the former Millard Fillmore Gates Circle Hospital complex. The property is bounded by Delaware Ave. and commercial properties to the west; Linwood Ave. and a mix of commercial and residential properties to the east; Lafayette Ave. and a mix of commercial and residential properties to the north; and commercial properties to the south.

Site Features: The site is composed of several interconnecting buildings covering most of the site.

Current Zoning and Land Use: The site is currently zoned for commercial purposes. Currently the property is unoccupied.

Past Use of the Site: The site was initially developed for residential use and was partially used for tricycle manufacturing pre-1900. By 1916 the site was beginning to undergo use as a hospital facility, with continued expansion of the hospital complex (Millard Fillmore Gates Circle Hospital) through the early 1970's.

Site Geology and Hydrogeology: The subsurface soils generally consist of non-native soil/fills in upper four feet overlying native soil. The fill materials consist of sands, gravels, cinders, bricks, and slag. The native soil is very hard, medium plasticity, reddish brown lean clay present at varying thicknesses and overlying reddish brown sandy silt. The bedrock is approximately 30 feet below ground surface and is described as gray cherty limestone. Groundwater is approximately 11 feet below ground surface and flows northerly towards Scajaquada Creek.

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: 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

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: <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	Indeno(1,2,3-cd)pyrene
Benzo(a)pyrene	Mercury
Benzo(b)fluoranthene	Naphthalene
Benzo[k]fluoranthene	Petroleum Products
Chrysene	

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.

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.

In 2008, a sub-surface investigation was conducted to address a No. 6 fuel oil spill (Spill # 0751494). Two 12,000 gallon underground storage tanks and surrounding contaminated soils were removed. A collection and treatment system was installed to address the remaining oil in groundwater.

In July 2012, Stohl Environmental conducted a Hazardous Materials Assessment to document the hazardous materials in the hospital buildings and performed further sub-surface investigation. A Remedial Investigation (RI) was conducted in 2014. Soil/fill samples were tested for volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), pesticides, polychlorinated biphenyls (PCBs), metals, and cyanides.

Soil : The data collected during site investigations and RI showed that fill in some areas outside the spill area (contaminated with No. 6 fuel oil) contain polycyclic aromatic hydrocarbons (PAHs) and mercury above the restricted residential soil cleanup objectives (RRSCOs). The PAHs exceeding RRSCOs were up to: 448 ppm naphthalene (SCO-100 ppm); 20 ppm benzo(a)anthracene (SCO-1 ppm); 15 ppm benzo(a)pyrene (SCO-1 ppm); 20 ppm benzo(b)fluoranthene (SCO-1 ppm); 8.1 ppm benzo(k)fluoranthene (SCO-3.9 ppm); 18 ppm chrysene (SCO-3.9 ppm); and 2.56 ppm indeno(1,2,3-cd)pyrene (SCO-0.5 ppm). Among the metals, only mercury exceeded RRSCOs. The levels of mercury were up to 4.2 ppm (SCO-0.81 ppm).

The concentrations of VOCs, PCBs, pesticides, and cyanides did not exceed the RRSCOs.

The site investigations indicate that the contaminated soils are contained within the site.

Groundwater: Groundwater samples from the monitoring wells were tested for VOCs, SVOCs, metals, PCBs, and pesticides. A low level of benzene (2.5 ppb) was found in groundwater in one monitoring well. Levels of total metals for cobalt, lead, vanadium, iron, manganese, sodium and magnesium exceeded groundwater standards which are likely due to historic fill at the 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*.

Contaminated groundwater at the site is not used for drinking or other purposes and the site is served by a public water supply that is not affected by this contamination. Although access to the site is restricted and a majority of the site is covered by buildings and pavement, people who enter the site may come into contact with contaminants in subsurface soil if they dig below these materials.

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.

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 referred to as the Track 4-Restricted use with generic soil cleanup objectives 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:

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impacted soil/fill is removed, and the Part 375 restricted residential use soil cleanup objectives (RRSCOs) are achieved based on confirmatory samples.

- Approximately 600 cubic yards of shallow soils contaminated with mercury and PAHs from four additional areas of the site will be excavated. Impacted soil/fill in these areas will be removed and transported off-site for disposal.

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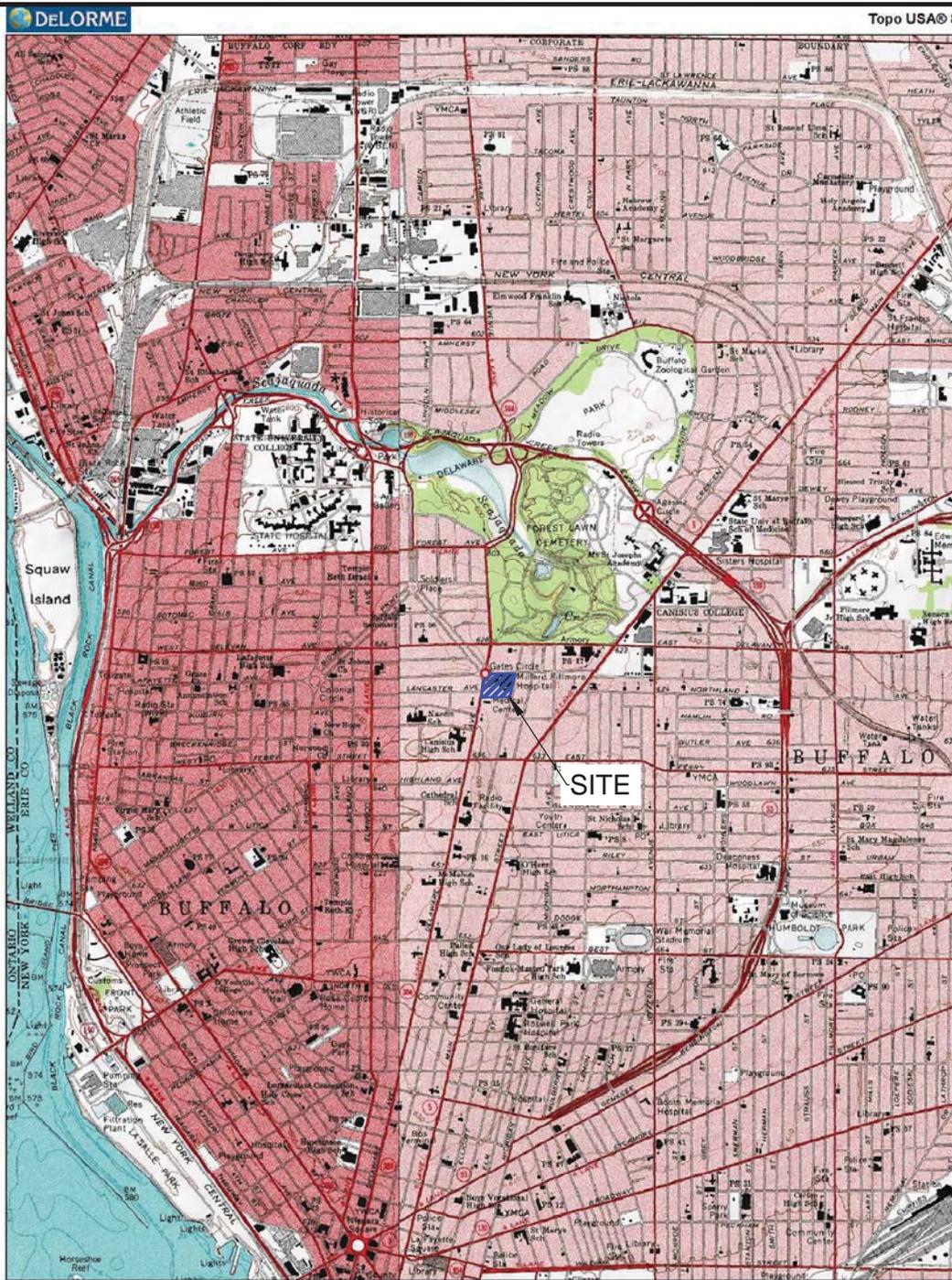
Institutional Controls: The Environmental Easement discussed in Paragraph 4 above.

This plan includes, but may not be limited to:

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- 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.

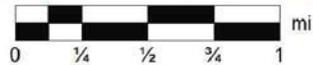
FIGURE 1



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SUITE 300
BUFFALO, NY 14218
(716) 856-0599

SITE LOCATION AND VICINITY MAP

REMEDIAL INVESTIGATION / ALTERNATIVE ANALYSIS REPORT

BROWNFIELD CLEANUP PROGRAM
3 GATES CIRCLE SITE
BUFFALO, NEW YORK

PREPARED FOR

GATES CIRCLE HOLDINGS, LLC

PROJECT NO.: 0309-014-001

DATE: JANUARY 2015

DRAFTED BY: BLR

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