

DECISION DOCUMENT

NM - Anthony St. - Watertown MGP
Voluntary Cleanup Program
Watertown, Jefferson County
Site No. V00473
September 2014



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

DECLARATION STATEMENT - DECISION DOCUMENT

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Voluntary Cleanup Program
Watertown, Jefferson County
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Statement of Purpose and Basis

This document presents the remedy for the NM - Anthony St. - Watertown MGP site, a voluntary cleanup site. The remedial program was chosen in accordance with the New York State Environmental Conservation Law and applicable guidance.

This decision is based on the Administrative Record of the New York State Department of Environmental Conservation (the Department) for the NM - Anthony St. - Watertown MGP site and the public's input to the proposed remedy presented by the Department.

Description of Selected Remedy

The elements of the remedy are as follows:

Based on the results of the investigations at the site, and the evaluation presented in the alternative analysis report, the Department is proposing Site Management with Institutional Controls to restrict the use of the site and groundwater as the proposed remedy for the site. The Department believes that this remedy is protective of human health and the environment and satisfies the remediation objectives described in Section 6.5.

1. Green remediation principles and techniques will be implemented to the extent feasible in the 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 gas and other emissions;
- Increasing energy efficiency and minimizing use of non-renewable energy;
- Conserving and efficiently managing resources and materials; and
- Reducing waste, increasing recycling and increasing reuse of materials which would otherwise be considered a waste.

2. A site cover currently exists and will be maintained to allow for restricted-residential use of the site. Any site redevelopment will maintain a site cover, which may consist either of the structures such as buildings, pavement, sidewalks comprising the site development or a soil cover in areas where the upper two feet of exposed soil will exceed the applicable soil cleanup objectives (SCOs) for restricted residential use of the site. Where a 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 soil cover will be placed over a demarcation layer, with the upper six inches of the soil of sufficient quality to maintain a vegetation layer. Any fill material brought to the site will meet the requirements for restricted residential site use as set forth in 6 NYCRR Part 375-6.7(d).

3. Imposition of an institutional control in the form of a Deed Restriction 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.

4. 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:

- i) Institutional Controls: The Deed Restriction discussed in Paragraph 3 above;
- ii) Engineering Controls: The site cover discussed in Paragraph 2.

This plan includes but is not limited to:

- an Excavation Plan which details the provisions for management of future excavations in areas of remaining contamination;
- a provision for further investigation and remediation if any of the existing buildings are demolished, or if the subsurface is otherwise made accessible. The nature and extent of contamination in areas where access was previously limited or unavailable will be investigated in a timely manner. Based on the investigation results, a plan will be developed for the removal and/or treatment of any source areas to the extent feasible. Any necessary remediation will be completed prior to, or in association with, redevelopment. This includes the Empsall Plaza, portion of J.B Wise Place and the adjacent parking lot.

- descriptions of the provisions of the deed restriction including any land use, and groundwater use restrictions;
- 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 engineering controls.

b). a Monitoring Plan to assess the current conditions at the site. The plan includes, but may not be limited to:

- monitoring of groundwater to assess any change in the current conditions; and
- a schedule of monitoring and frequency of submittals to the Department.

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.

September 2, 2014
Date

George Heitzman
George Heitzman, Director
Remedial Bureau C

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SECTION 1: SUMMARY AND PURPOSE

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

The Voluntary Cleanup Program (VCP) is a voluntary program. The goal of the VCP is to enhance private sector cleanup of brownfields by enabling parties to remediate sites using private rather than public funds and to reduce the development pressures on "greenfields." 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:

Roswell P. Flower Memorial Library
229 Washington St.
Watertown, NY 13601
Phone: 315.785.7705

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 is located on 1.6 acres of land approximately 150 feet southwest of City Center Drive, 200 feet northeast of Court Street and 300 feet southwest of the Black River.

Site Features: The site now contains the Empsall Plaza and another commercial building, a portion of J.B Wise Place, including a City of Watertown municipal parking lot/picnic pavilion.

Current Zoning/Use(s): The site and surrounding area are currently zoned and used for commercial uses, with multifamily dwellings (except on any street level floor). The Brighton Apartments are located on floors two through eight of the Empsall Plaza.

Past Use of the Site: The former manufactured gas plant (MGP) operated at the site from approximately 1884 until it ceased operations in 1909. Demolition of the former MGP infrastructure began in 1909 and all MGP related above ground structures were removed from the site by 1949. Some subsurface structures still remain.

Site Geology and Hydrogeology: The site geology consists of a fill unit 9 to 15 feet thick with isolated overburden perched water pockets (6 feet below ground surface [bgs]) underlain by a Rockland limestone unit 10 to 15 feet thick. The water table within the bedrock is located 22 feet bgs, and groundwater flows to the northeast towards the Black River.

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, at a minimum, 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 DER-10, Technical Guidance for Site Investigation and Remediation were/was evaluated.

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 voluntary cleanup agreement is with a responsible party. The agreement requires the party to address on-site and off-site contamination. Accordingly, no enforcement actions are necessary.

The Department and Niagara Mohawk/National Grid entered into a Voluntary Order D0-0001-

0011 on January 25, 2002. The Order obligates Niagara Mohawk/National Grid to implement a full remedial program at the site.

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:

- air
- groundwater
- soil
- sub-slab 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. 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:

COAL TAR	XYLENE (MIXED)
BENZENE	Polycyclic Aromatic Hydrocarbons (PAHs),
TOLUENE	Total
ETHYLBENZENE	CYANIDES(SOLUBLE CYANIDE SALTS)

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.

Nature and Extent of Contamination: Subsurface soil contaminant levels ranged from non-detect to 170 parts per million (ppm) of total benzene, toluene, ethylbenzene and xylene (BTEX); non-detect to 1700 ppm of total polycyclic aromatic hydrocarbons (PAHs); and non-detect to 21 ppm of total cyanide. These impacts ranged from 6 to 15 feet below the ground surface (bgs) and were generally present on the bedrock surface and within the subsurface foundations of three former gas holders. Impacted soil was addressed as part of the City of Watertown water supply/sewer infrastructure and parking lot reconstruction project. Residual impacted soil remains at depths ranging from six to ten feet below grade. In groundwater, only benzene at 4.3 parts per billion (ppb) and cyanide at 596 ppb were above their ambient water quality standards in monitoring wells screened in the perched overburden groundwater. One on-site bedrock well contained the following concentrations of contaminants: benzene 6600 ppb, ethylbenzene 3500 ppb, toluene 11000 ppb, total xylenes 6000 ppb, acenaphthene 74 ppb and naphthalene 3400 ppb.

The areas of heaviest contamination are generally within the three former gas holder foundations located just above and immediately below the bedrock surface. The three former gas holder foundations are located partially or totally below the two commercial buildings and are inaccessible at this time. Groundwater contamination is limited in extent to within, immediately adjacent to, or below the holders. No off-site impacts to groundwater were found.

The soil vapor intrusion evaluation included the collection of three sub-slab vapor samples and one ambient air sample. The concentrations of all the contaminants measured in sub-slab vapor samples are below levels that would present a concern for soil vapor intrusion and effects on indoor air quality.

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*.

Since the site is covered with buildings and pavement, people will not come in contact with contaminated soils and groundwater unless they dig below the surface materials. People are not drinking the contaminated groundwater because the area is served by a public water supply that is not affected by this contamination.

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.
- 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.

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.

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.

The selected remedy is referred to as the Site Management Plan with Institutional Controls remedy.

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

Based on the results of the investigations at the site, and the evaluation presented in the alternative analysis report, the Department is proposing Site Management with Institutional Controls to restrict the use of the site and groundwater as the proposed remedy for the site. The Department believes that this remedy is protective of human health and the environment and satisfies the remediation objectives described in Section 6.5.

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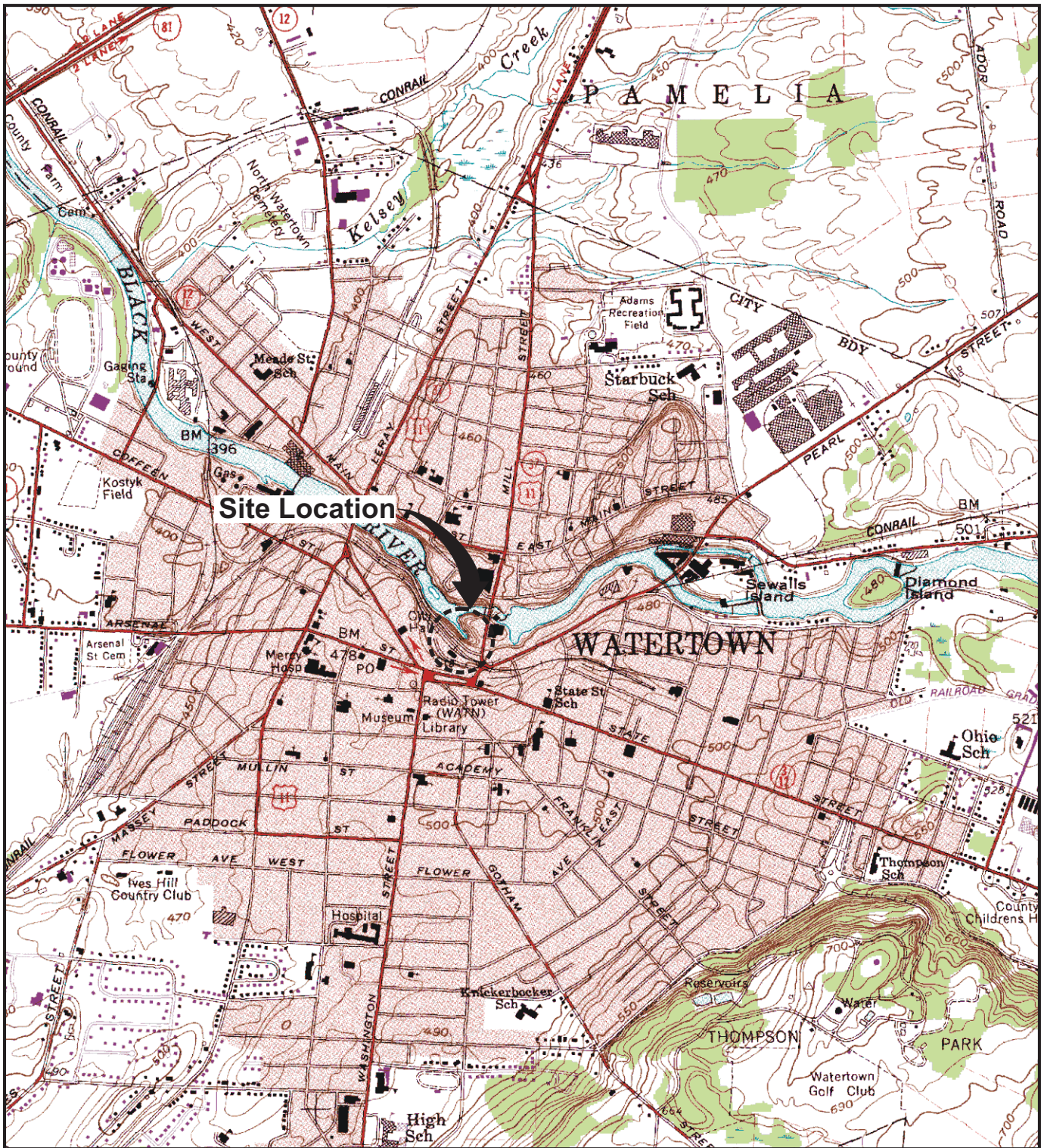
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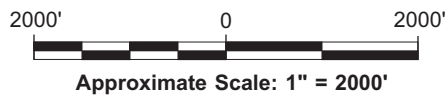
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- monitoring of groundwater to assess any change in the current conditions; and
 - a schedule of monitoring and frequency of submittals to the Department.



REFERENCE: BASE MAP USGS 7.5 MIN. QUAD., WATERTOWN, N.Y. 1959, PHOTOREVISED 1982.



NATIONAL GRID
WATERTOWN (ANTHONY STREET) FORMER MGP SITE

DECISION DOCUMENT



FIGURE
1

