RECORD OF DECISION

B. Millens Scrapyard
State Superfund Project
Kingston, Ulster County
Site No. 356030
March 2018

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

DECLARATION STATEMENT - RECORD OF DECISION

B. Millens Scrapyard
State Superfund Project
Kingston, Ulster County
Site No. 356030
March 2018

Statement of Purpose and Basis

This document presents the remedy for the B. Millens Scrapyard site, a Class 2 inactive hazardous waste disposal site. The remedial program was chosen in accordance with the New York State Environmental Conservation Law and Title 6 of the Official Compilation of Codes, Rules and Regulations of the State of New York (6 NYCRR) Part 375, and is not inconsistent with the National Oil and Hazardous Substances Pollution Contingency Plan of March 8, 1990 (40CFR300), as amended.

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

Description of Selected Remedy

During the course of the investigation certain actions, known as interim remedial measures (IRMs), were undertaken at the above referenced site. An IRM is conducted at a site when a source of contamination or exposure pathway can be effectively addressed before completion of the remedial investigation (RI) or feasibility study (FS). The IRM(s) undertaken at this site are discussed in Section 6.2.

Based on the implementation of the IRM(s), the findings of the investigation of this site indicate that the site no longer poses a threat to human health or the environment; therefore No Further Action is the selected remedy. The remedy may include continued operation of a remedial system if one was installed during the IRM and the implementation of any prescribed institutional controls/engineering controls (ICs/ECs) that have been identified as being part of the remedy for the site.

The IRM(s) conducted at the site attained the remediation objectives identified for this site in Section 6.5 for the protection of public health and the environment.

New York State Department of Health Acceptance

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

Declaration

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

March 19, 2018

Date

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

RECORD OF DECISION

B. Millens Scrapyard
Kingston, Ulster County
Site No. 356030
March 2018

SECTION 1: SUMMARY AND PURPOSE

The New York State Department of Environmental Conservation (the Department), in consultation with the New York State Department of Health (NYSDOH), has selected a remedy for the above referenced site. The disposal of hazardous wastes at the site resulted in threats to public health and the environment that were addressed by actions known as interim remedial measures (IRMs), which were undertaken at the site. An IRM is conducted at a site when a source of contamination or exposure pathway can be effectively addressed before completion of the remedial investigation (RI) or feasibility study (FS). The IRMs undertaken at this site are discussed in Section 6.2.

Based on the implementation of the IRM(s), the findings of the investigation of this site indicate that the site no longer poses a threat to human health or the environment. The IRM(s) conducted at the site attained the remediation objectives identified for this site, which are presented in Section 6.5, for the protection of public health and the environment. No Further Action is the remedy selected by this Record of Decision (ROD). A No Further Action remedy may include site management, which will include continued operation of any remedial system installed during the IRM and the implementation of any prescribed controls that have been identified as being part of the remedy for the site. This ROD identifies the IRM(s) conducted and discusses the basis for No Further Action.

The New York State Inactive Hazardous Waste Disposal Site Remedial Program (also known as the State Superfund Program) is an enforcement program, the mission of which is to identify and characterize suspected inactive hazardous waste disposal sites and to investigate and remediate those sites found to pose a significant threat to public health and environment.

The 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 repositories:

Kingston Library
Attn: Kristen Charles-Scaringi
55 Franklin Street
Kingston, NY 12401
Phone: (845) 339-4260

NYSDEC
Attn: Wendy Rosenbach
21 South Putt Corners Road
New Paltz, NY 12561
Phone: (845) 256-3018

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

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

Receive Site Citizen Participation Information By Email

Please note that the Department's Division of Environmental Remediation (DER) is "going paperless" relative to citizen participation information. The ultimate goal is to distribute citizen participation information about contaminated sites electronically by way of county email listservs. Information will be distributed for all sites that are being investigated and cleaned up in a particular county under the State Superfund Program, Environmental Restoration Program, Brownfield Cleanup Program, 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 1.5-acre site consisting of three contiguous tax parcels is located in an old industrial area of the City of Kingston in Ulster County. A former Manufactured Gas Plant (currently a natural gas distribution facility), a railroad line, and Rondout Creek are located south of the site. A commercial property lies to the west, North Street lies to the east, and East Strand Street lies to the north of the site. Residential properties lie to the north of East Strand Street.

Site Features: The site is mostly level, with a surface elevation of approximately eight feet above sea level, and a shallow downward slope toward the south. Outside of a portion of the site that is covered by an existing unoccupied building, the site surface consists of areas of soil, crushed stone, a concrete slab and an asphalt paved area. The site is enclosed on the east and west sides by a chain link fence and on the north by a chain link fence and the building. The south side of

the site is presently open to the trolley tracks.

Current Zoning and Land Use: The site is zoned for industrial use and is currently vacant. Surrounding land uses include a natural gas regulator station and gas transmission/distribution lines and the Roundout Creek to the south, the Children's Home of Kingston and a residential neighborhood to the north and vacant former industrial properties to the east and west including former scrap yard operations and a petroleum bulk storage facility.

Past Use of the Site: The site had operated as a scrap yard and automobile/metals recycler for at least 50 years. More than 2,800 tons of contaminated soil was excavated in late 2009 and early 2010 by the responsible party without State oversight, significantly reducing the soil contamination at the site prior to remedial investigation activities in 2012 and 2013. During this remedial effort, some potentially contaminated water was discharged off-site to a property east of North Street also owned by the responsible party and which also operated as a scrap metal related business and is a potential hazardous waste site (â€œPâ€ site) known as the Millens Staging Area (Site Number 356040).

Site Geology and Hydrology: Shallow geology consists of fill material including gravel, stone brick and crushed concrete overlying silty sand. Groundwater is found around 4-5 feet below ground surface and flows radially from the site toward the Rondout 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 commercial use (which allows for 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 investigation to the appropriate standards, criteria and guidance values (SCGs) for the identified land use and the unrestricted use SCGs for the site contaminants is included in the Tables for the media being evaluated in Exhibit A.

SECTION 5: ENFORCEMENT STATUS

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

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

B. Millens Sons, Inc.

The Department and B. Millens Sons, Inc. (Millens) entered into an Order on Consent in September 1998, which required Millens to implement a full remedial program at the site.

However, due to the failure of the Responsible Party (RP) to submit an acceptable Remedial Action Plan (RAP), a Notice of Non-Compliance was issued in June 2008. The site was listed as a class 2 site on the Registry of Inactive Hazardous Waste Disposal Sites on December 11, 2008. A second Notice of Non-Compliance was issued in May 2009, after which the site was referred to the State Superfund to conduct a Feasibility Study. In late 2009, the responsible party performed unauthorized excavation of contaminated soil at the site, as described in Section 3 above. Because this excavation changed the site conditions, the previous investigation results and Draft Feasibility Study were no longer current.

A revised State-funded Remedial Investigation was completed in 2014 to assess the extent of contamination following the unauthorized site disturbance, and a State-funded Feasibility Study was completed in 2015.

In December 2014 the Department and Millens executed an Order on Consent which obligated Millens to perform a soil removal IRM, groundwater remediation pilot study, payment of state costs and future work necessary to complete the remedial program at the site.

SECTION 6: SITE CONTAMINATION

6.1: Summary of the Remedial Investigation

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

The following general activities are conducted during an RI:

- Research of historical information,
- Geophysical survey to determine the lateral extent of wastes,
- Test pits, soil borings, and monitoring well installations,
- Sampling of waste, surface and subsurface soils, groundwater, and soil vapor,
- Sampling of surface water and sediment,
- Ecological and Human Health Exposure Assessments.

The analytical data collected on this site includes data for:

- groundwater
- soil

6.1.1: Standards, Criteria, and Guidance (SCGs)

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

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

6.1.2: RI Results

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

lead	manganese
cadmium	benzo(a)pyrene
chromium	benzo(a)anthracene
mercury	benzo(b)fluoranthene
arsenic	chrysene
benzene	indeno(1,2,3-CD)pyrene
ethylbenzene	dibenz[a,h]anthracene
toluene	PCB aroclor 1242
xylene (mixed)	PCB aroclor 1248
MTBE (methyl-tert-butyl ether)	PCB aroclor 1254
copper	PCB aroclor 1260

Based on the investigation results, comparison to the SCGs, and the potential public health and environmental exposure routes, certain media and areas of the site required remediation. These media were addressed by the IRM(s) described in Section 6.2. More complete information can be found in the RI Report and the IRM Construction Completion Report.

6.2: Interim Remedial Measures

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

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

Excavation, Enhanced Biological Degradation and Installation of a Soil Cover

Based on the initial results of the 2012/2013 remedial investigation, an interim remedial measure was performed to consolidate off-site contaminated soil back to the site and construct a cover over the exposed soil at the site. A groundwater remediation technology pilot study was also conducted during the IRM implementation. The IRM consisted of the following:

Excavation

During January and February 2016, approximately 325 cubic yards of off-site soil were excavated from an irregularly shaped area of approximately 3,750 square feet and returned to the site for placement below the cover. The excavation targeted the off-site discharge area described in Section 3 above, areas of potential runoff associated with the discharge based on topography, and accessible areas in proximity to the discharge (Figure 4). Some additional small areas located between the site fence and the site property lines as shown on Figure 2 were also excavated. The off-site discharge area was determined prior to the IRM to be located within the boundaries of the Millens Staging Area P-Site (Site #356040). Pre-excavation sampling at the discharge location identified low-level PCBs (0.565 parts per million [ppm] maximum) and various metals exceeding commercial soil cleanup objectives (SCOs). No volatile organic compounds (VOCs) or semi-volatile organic compounds (SVOCs) exceeding the unrestricted SCOs were detected. The upper end of the range of lead and mercury concentrations in the discharge area pre-excavation samples exceeded in some cases the upper end of the range of these elements in the Millens Staging area site. These elements as well as PCBs were used as indicators of IRM excavation progress. Post-excavation soil samples determined that the discharge area met unrestricted SCOs. Most of the post-excavation samples met unrestricted or residential SCOs for mercury, lead and PCBs, with slight exceedances in one sample along the gas line protection zone where no excavation was permitted by the utility, and an exceedance for lead (410 ppm) in one floor sample at 4 feet below grade. Any other exceedances were within the Millens staging area or north of the excavation where the discharge would not have been the source. Based on the post-excavation samples, any contamination attributable to the discharge was remediated to either unrestricted, residential SCOs; or slightly exceeded the residential SCOs but at levels consistent with contamination in this area unrelated to the site.

The resulting excavation varied from approximately 1-foot deep at the southeast end to approximately 4 feet deep at the northwest end. Crushed stone meeting the Department's criteria for unrestricted use (natural stone from a permitted mine) was utilized to backfill the off-site excavation. Areas between the fence and property lines were backfilled with a minimum of two feet of soil meeting unrestricted SCOs.

On-site Cover

After the off-site soil was consolidated on the site, a cover consisting asphalt pavement or soil and crushed stone meeting SCOs for commercial use was placed over the entire site. The site cover consists of either the existing site building, asphalt pavement, a concrete slab, soil or crushed stone. The portion of the cover system consisting of soil is a minimum of one foot of soil meeting the SCOs for commercial use, placed over a demarcation layer, with the upper six inches of soil of sufficient quality to maintain a vegetative layer. See Figure 2.

Enhanced Bioremediation
As part of the IRM, a pilot study of enhanced biological degradation using Oxygen Release Compound (ORC) was implemented to treat the area of groundwater contamination in the southeast portion of the site. A total of 2,400 pounds of ORC solution was injected between January 12, 2016 to January 19, 2016. As a result of the pilot ORC injection, the groundwater currently meets groundwater standards and no further groundwater remediation is needed for the site. Prior to the IRM, benzene was as high as 64 parts per billion (ppb), toluene was as high as 140 ppb, ethylbenzene was as high as 28 ppb, total xylenes were as high as 155 ppb, MTBE was as high as 700 ppb and acetone was as high as 22 ppb. By December 2016, groundwater at all monitoring wells met groundwater standards for these compounds, except p/m xylene which was detected at 5.6 ppb, slightly exceeding the standard of 5 ppb. Similar results were found in June 2017.

A Construction Completion Report for the IRM was approved in June 2016.

6.3: Summary of Environmental Assessment

This section summarizes the assessment of existing and potential future environmental impacts presented by the site. Environmental impacts may include existing and potential future exposure pathways to fish and wildlife receptors, wetlands, groundwater resources, and surface water.

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

Nature and Extent of Contamination:

The interim remedial measure (IRM) completed in May 2016 resulted in installation of a site cover, in-situ treatment of groundwater contamination and excavation of a limited area of off-site soil and consolidation of this soil beneath the cover system. The IRM eliminated the potential for contact with, and migration of contaminated soil from the site, and has reduced groundwater contamination in monitored locations within and downgradient of the target area.

Because no contaminated soil was removed from the site as part of the IRM, and additional contaminated soil from off-site was consolidated beneath the on-site cover, low levels of contamination in soil remain at the site below the site cover. This soil contamination includes:

- polychlorinated biphenyls (PCBs) up to 4.6 ppm;
- metals including lead up to 2,500 ppm, cadmium up to 25.1 ppm and mercury up to 15.4 ppm;
- semi-volatile organic compounds (SVOCs) including benzo(a)pyrene up to 17 ppm, benzo(a)anthracene up to 20 ppm, benzo(b)fluoranthene up to 22 ppm, benzo(k)fluoranthene up to 12 ppm, chrysene up to 20 ppm, dibenz(a,h,)anthracene up to 2.9 ppm, and ideno(1,2,3-cd)pyrene up to 21 ppm); and,
- volatile organic compounds (VOCs) including xylene up to 39 ppm.

The groundwater treatment has successfully addressed the site VOC contamination and groundwater meets standards for all contaminants, with the exception of xylene, which slightly exceeds the 5 ppb standard, with levels ranging from non-detect to 5.6 ppb.

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 some contaminated soils remain at the site below a clean cover, people will not come in contact with contaminated soils 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. Volatile organic compounds in the soil, groundwater, or other sources may move into the soil vapor (air spaces within the soil), which in turn may move into buildings and affect the indoor air quality. This process 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 the site is vacant, the inhalation of site-related contaminants due to soil vapor intrusion does not represent a current concern. The potential exists for the inhalation of site contaminants due to soil vapor intrusion for any future on-site redevelopment and occupancy. 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.
- 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.
- Remove the source of ground or surface water contamination.

Soil

RAOs for Public Health Protection

- Prevent ingestion/direct contact with contaminated soil.
- Prevent inhalation of or exposure from contaminants volatilizing from contaminants in soil.

RAOs for Environmental Protection

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

Soil Vapor

RAOs for Public Health Protection

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

SECTION 7: SUMMARY OF SELECTED REMEDY

No Further Action

Based on the results of the investigations at the site, the IRM that has been performed, and the evaluation presented here, the Department is selecting No Further Action as the remedy for the site. This No Further Action remedy includes continued implementation of the enhanced bioremediation of groundwater and the implementation of ICs/ECs (soil cover and environmental easement) as the selected 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.

Institutional Control

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

Site Management Plan

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

1. 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 above.

Engineering Controls: The soil cover discussed in Paragraph 6.2

This plan includes, but may not be limited to:

- An Excavation Plan which details the provisions for management of future excavations in areas of remaining contamination;
- descriptions of the provisions of the environmental easement including any land use and groundwater use restrictions;
- a provision for evaluation of the potential for soil vapor intrusion for any occupied buildings on the site, including provision for implementing actions recommended to address exposures related to soil vapor intrusion;
- a provision that should a building foundation or building slab be removed in the future, a cover system consistent with that described in Paragraph 6.2 above will be placed in any areas where the upper one foot of exposed surface soil exceeds the applicable soil cleanup objectives (SCOs)
- provisions for the management and inspection of the identified engineering controls;
- maintaining site access controls and Department notification; and
- the steps necessary for the periodic reviews and certification of the institutional and/or engineering controls.

2. A 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;
- monitoring for vapor intrusion for any buildings on the site, as may be required by the Institutional and Engineering Control Plan discussed above.

Exhibit A

Nature and Extent of Contamination

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

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

Waste/Source Areas

As described in the RI report, waste/source materials identified at the site were impacting groundwater.

Wastes are defined in 6 NYCRR Part 375-1.2(aw) and include solid, industrial and/or hazardous wastes. Source areas are defined in 6 NYCRR Part 375(au). Source areas are areas of concern at a site where substantial quantities of contaminants are found which can migrate and release significant levels of contaminants to another environmental medium. Wastes and source areas were identified at the site including soil contaminated with gasoline VOCs in the northeast corner of the site which resulted in the groundwater contamination in the southeast corner of the site. Extensive soil removal prior to the RI/FS and IRM appears to have removed the source of the VOCs to groundwater.

The waste/source areas identified at the site were addressed by the excavation discussed in Section 3.

Groundwater

Groundwater samples were collected from overburden monitoring wells. The samples were collected to document post-IRM groundwater conditions on and off the site. The results indicate that only meta (m) xylene and para (p) xylene, slightly exceed the SCG for their combined concentration in one well. These VOCs were detected in the southeast corner of the site. Figure 3 shows the most recent post-IRM VOC concentrations and groundwater flow direction. Groundwater contamination identified during the RI was addressed during the IRM described in Section 6.2.

Table 1 - Groundwater Post-IRM Analytical Results June 2017

Detected Constituents	Concentration Range Detected (ppb)[a]	SGC[b] (ppb)	Frequency Exceeding SCG
VOCs			
Benzene	ND – 1.0	1	0 of 8
Toluene	ND – 3.6	5	0 of 8
Ethylbenzene	ND – 1.3J	5	0 of 8
M/P-Xylene	ND – 5.2	5	1 of 8
O-Xylene	ND – 2.5	5	0 of 8
MtBE	ND – 3.9	10	0 of 8

a - ppb: parts per billion, which is equivalent to micrograms per liter, ug/L, in water.
b- SCG: Standard Criteria or Guidance - Ambient Water Quality Standards and Guidance Values (TOGs 1.1.1), 6 NYCRR Part 703.

Soil

Multiple remedial investigations have been conducted at this site since the late 1990s both prior and subsequent to the site being listed on the Registry of Inactive Hazardous Waste Disposal Sites. Prior to the most recent RI, approximately 2,800 tons of the most contaminated soil previously identified at this site were excavated and disposed of off-site, and the site was backfilled with imported concrete, crushed stone and stone dust. The most recent RI documented the conditions of the on-site soil subsequent to the excavation, and included investigation of a small off-site area in the area where water from the excavation dewatering was discharged. Off-site shallow soils were sampled from 0 – 6 inches below ground surface (bgs) and subsurface soils were sampled from 6 inches to 2 feet bgs. These results indicated that the soils exceeded unrestricted and restricted commercial SCOs for SVOCs, metals and PCBs. It was subsequently verified by review of video documentation of the discharge and images that the discharge occurred within the boundary of the Millens Staging Area P-site (356040). The original off-site sampling was not located at the discharge location. Subsequent sampling at the actual discharge location indicated no exceedances of VOCs or SVOCs. Three samples exceeded the unrestricted PCB SCO but were all less than 1 ppm. Metals were the primary contaminants of concern in the discharge area but were not significantly different than pre-existing contamination elsewhere in this area.

Table 2 - On-Site Soil RI Data

Detected Constituents	Concentration Range Detected (ppm)[a]	Unrestricted SCG[b] (ppm)	Frequency Exceeding Unrestricted SCG	Restricted Use SCG[c] (ppm)	Frequency Exceeding Restricted SCG
VOCs					
Acetone	ND – 0.38	0.05	6 of 44	.05 [d]	5 of 44
Xylenes	ND – 39	0.26	8 of 44	1.6 [d]	5 of 44
Ethylbenzene	ND – 6.8	1 [d]	1 of 44	1 [d]	1 of 44
SVOCs					
Benzo(a)anthracene	0.073 - 19	1	3 of 44	5.6	1 of 44
Benzo(a)pyrene	0.071 - 17	1	3 of 44	1	3 of 44
Benzo(b)fluoranthene	0.13 - 15	1	3 of 44	5.6	1 of 44
Benzo(k)fluoranthene	0.073 - 12	0.8	3 of 44	56	0 of 44
Chrysene	0.065 - 18	1	2 of 44	56	0 of 44
Dibenzo(a,h)anthracene	0.52 – 2.9	0.33	2 of 44	0.56	1 of 44
Ideno(1,2,3-cd)pyrene	0.081 – 9.6	0.5	3 of 44	5.6	1 of 44
3 & 4 Methylphenol	ND – 2.8	0.33	1 of 44	500	0 of 44
Phenol	ND – 1.2	0.33	1 of 44	500	0 of 44
Inorganics					
Arsenic	0.813 – 21.5	13	2 of 44	16	1 of 44

Detected Constituents	Concentration Range Detected (ppm)[a]	Unrestricted SCG[b] (ppm)	Frequency Exceeding Unrestricted SCG	Restricted Use SCG[c] (ppm)	Frequency Exceeding Restricted SCG
Barium	8.5 – 417	350	1 of 44	400	1 of 44
Cadmium	0.015 – 25.1	2.5	4 of 44	9.3	1 of 44
Chromium	2.0 – 41.8	30	1 of 44	1500	0 of 44
Copper	3.0 – 624	50	6 of 44	270	1 of 44
Lead	1.7 – 2,500	63	10 of 44	1000	1 of 44
Mercury	0.003 – 15.4	0.18	5 of 44	2.8	1 of 44
Nickel	3.0 – 80.2	30	2 of 44	310	0 of 44
Zinc	9.6 – 3,030	109	14 of 44	10,000	0 of 44
Pesticides/PCBs					
Total PCBs	ND – 4.6	0.1	9 of 44	1	7 of 44

a - ppm: parts per million, which is equivalent to milligrams per kilogram, mg/kg, in soil;
b - SCG: Part 375-6.8(a), Unrestricted Soil Cleanup Objectives.
c - SCG: Part 375-6.8(b), Restricted Use Soil Cleanup Objectives for the Protection of Public Health for Commercial Use, unless otherwise noted.
d - SCG: Part 375-6.8(b), Restricted Use Soil Cleanup Objectives for the Protection of Groundwater.

Table 3 - Off-Site Soil RI Data (soil which was excavated from off-site and returned to the site beneath the cover)

Detected Constituents	Concentration Range Detected (ppm)[a]	Unrestricted SCG[b] (ppm)	Frequency Exceeding Unrestricted SCG	Restricted Use SCG[c] (ppm)	Frequency Exceeding Restricted SCG
SVOCs					
Benzo(a)anthracene	ND – 20	1	30 of 49	1	30 of 49
Benzo(a)pyrene	ND – 14	1	30 of 49	1	30 of 49
Benzo(b)fluoranthene	ND - 22	1	32 of 49	1	32 of 49
Benzo(k)fluoranthene	ND – 9.4	0.8	27 of 49	1	23 of 49
Chrysene	ND - 20	1	30 of 49	1	30 of 49
Dibenzo(a,h)anthracene	ND – 2.2	0.33	9 of 49	0.33	9 of 49
Ideno(1,2,3-cd)pyrene	ND - 21	0.5	37 of 49	0.5	37 of 49
Inorganics					
Arsenic	10.7 – 14.2	13	2 of 7	16	0 of 7
Cadmium	4.8 – 7	2.5	7 of 7	2.5	7 of 7
Chromium	45.9 – 73.5	30	7 of 7	36	7 of 7
Copper	286 - 463	50	7 of 7	270	7 of 7
Lead	747 – 1,110	63	7 of 7	400	7 of 7
Mercury	ND – 1.2	0.18	5 of 7	0.81	4 of 7

Detected Constituents	Concentration Range Detected (ppm)[a]	Unrestricted SCG[b] (ppm)	Frequency Exceeding Unrestricted SCG	Restricted Use SCG[c] (ppm)	Frequency Exceeding Restricted SCG
Nickel	48.4 – 66.1	30	7 of 7	36	7 of 7
Zinc	1310 - 1970	109	7 of 7	2,200	0 of 7
Pesticides/PCBs					
Total PCBs	ND – 1.86	0.1	24 of 29	1	11 of 29

a - ppm: parts per million, which is equivalent to milligrams per kilogram, mg/kg, in soil;
b - SCG: Part 375-6.8(a), Unrestricted Soil Cleanup Objectives.
c - SCG: Part 375-6.8(b), Restricted Use Soil Cleanup Objectives for the Protection of Public Health for Residential Use, unless otherwise noted.
d - SCG: Part 375-6.8(b), Restricted Use Soil Cleanup Objectives for the Protection of Groundwater.

Off-site soil contamination identified during the RI was addressed during the IRM described in Section 6.2. This included the area of potential surface water flow from the discharge area. Post IRM endpoint sampling indicates that many of the samples met residential SCOs and the concentrations in nearly all soil samples were well below restricted commercial concentrations. The portion of the off-site excavation that was within the P-site boundary is enclosed by a fence, and sidewall and floor confirmation samples which are outside the boundary of the P-site meet residential SCOs with the exception of low concentrations of PAHs, cadmium, lead and mercury which slightly exceed residential SCOs but are well below commercial SCOs against the gas line buffer (Figure 4). The excavation area was backfilled with clean crushed stone. This area is historically and currently industrial.

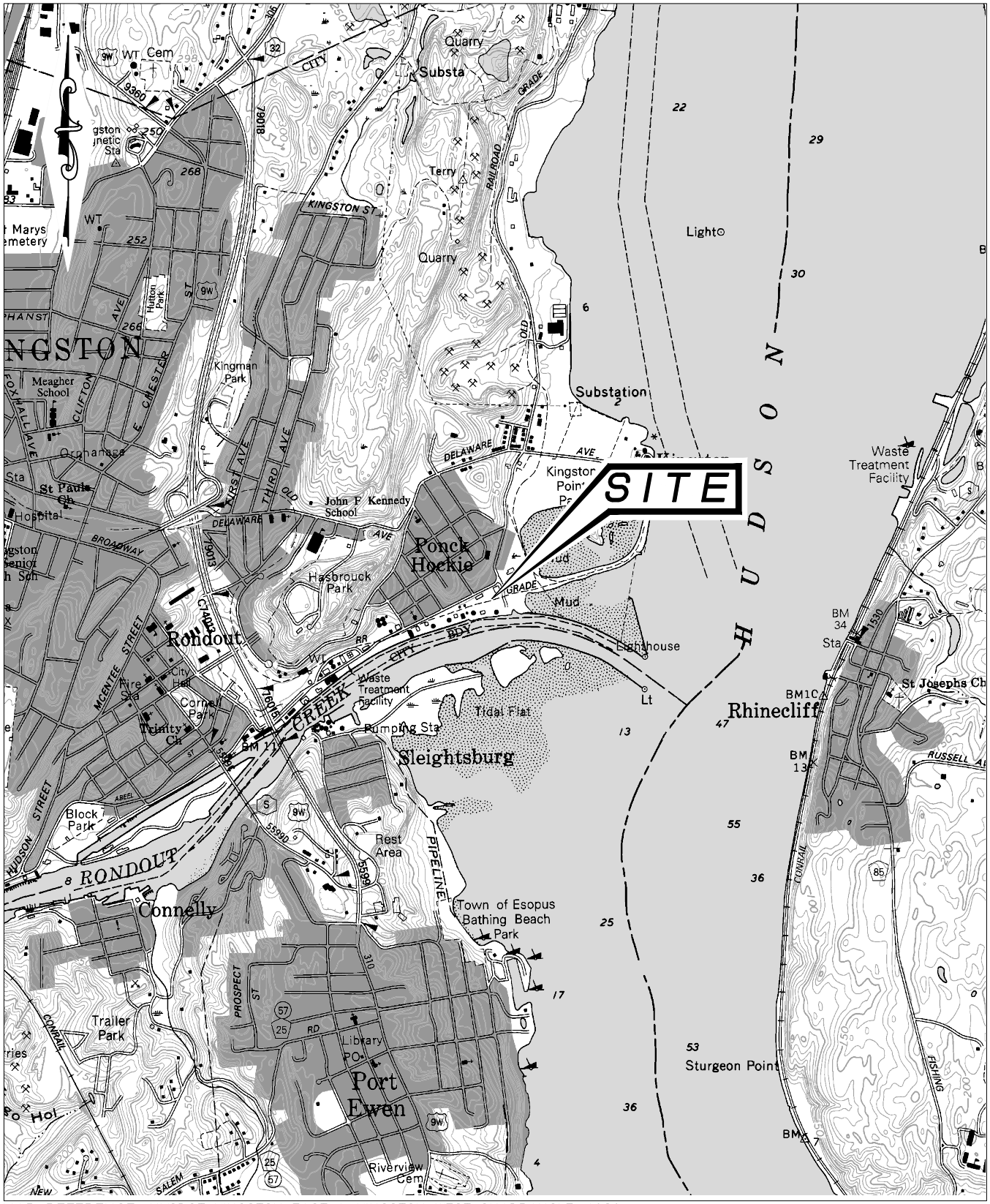
Table 4 - Off-Site Soil (Post-IRM Samples)

Detected Constituents	Concentration Range Detected (ppm)[a]	Unrestricted SCG[b] (ppm)	Frequency Exceeding Unrestricted SCG	Restricted Use	Frequency Exceeding Restricted SCG
SVOCs					
Benzo(a) anthracene	ND – 2.5	1	6 of 15	1	6 of 15
Benzo(a)pyrene	ND – 1.9	1	6 of 15	1	6 of 15
Benzo(b)fluoranthene	ND – 3.5	1	9 of 15	1	9 of 15
Benzo(k)fluoranthene	ND – 1.4	0.8	4 of 15	1	3 of 15
Chrysene	ND – 2.2	1	6 of 15	1	6 of 15
Ideno(1,2,3-cd)pyrene	ND – 1.9	0.5	10 of 15	0.5	10 of 15
Inorganics					
Arsenic	4.1 - 26	13	3 of 15	16	2 of 15
Cadmium	ND – 11	2.5	4 of 15	2.5	4 of 15
Chromium	7.1 – 110	30	5 of 15	36	4 of 15
Copper	16 – 1200	50	11 of 15	270	5 of 15
Lead	26 – 930	63	14 of 18	400	7 of 14
Mercury	0.13 – 1.8	0.18	15 of 18	0.81	4 of 18

Detected Constituents	Concentration Range Detected (ppm)[a]	Unrestricted SCG[b] (ppm)	Frequency Exceeding Unrestricted SCG	Restricted Use	Frequency Exceeding Restricted SCG
Pesticides/PCBs					
Total PCBs	ND – 0.379	0.1	8 of 15	1	0 of 15

a - ppm: parts per million, which is equivalent to milligrams per kilogram, mg/kg, in soil;
b - SCG: Part 375-6.8(a), Unrestricted Soil Cleanup Objectives.
c - SCG: Part 375-6.8(b), Restricted Use Soil Cleanup Objectives for the Protection of Public Health for {Residential} Use, unless otherwise noted.

Based on the findings of the Remedial Investigation, the past disposal of hazardous waste has resulted in the contamination of soil. The site contaminants identified in soil which were considered to be the primary contaminants of concern were, SVOCs, metals and PCBs, however, this contamination has been addressed by the IRMs discussed in Section 6.2.



MAP REFERENCE: NYSDOT KINGSTON EAST & KINGSTON WEST QUADRANGLE, 1989.

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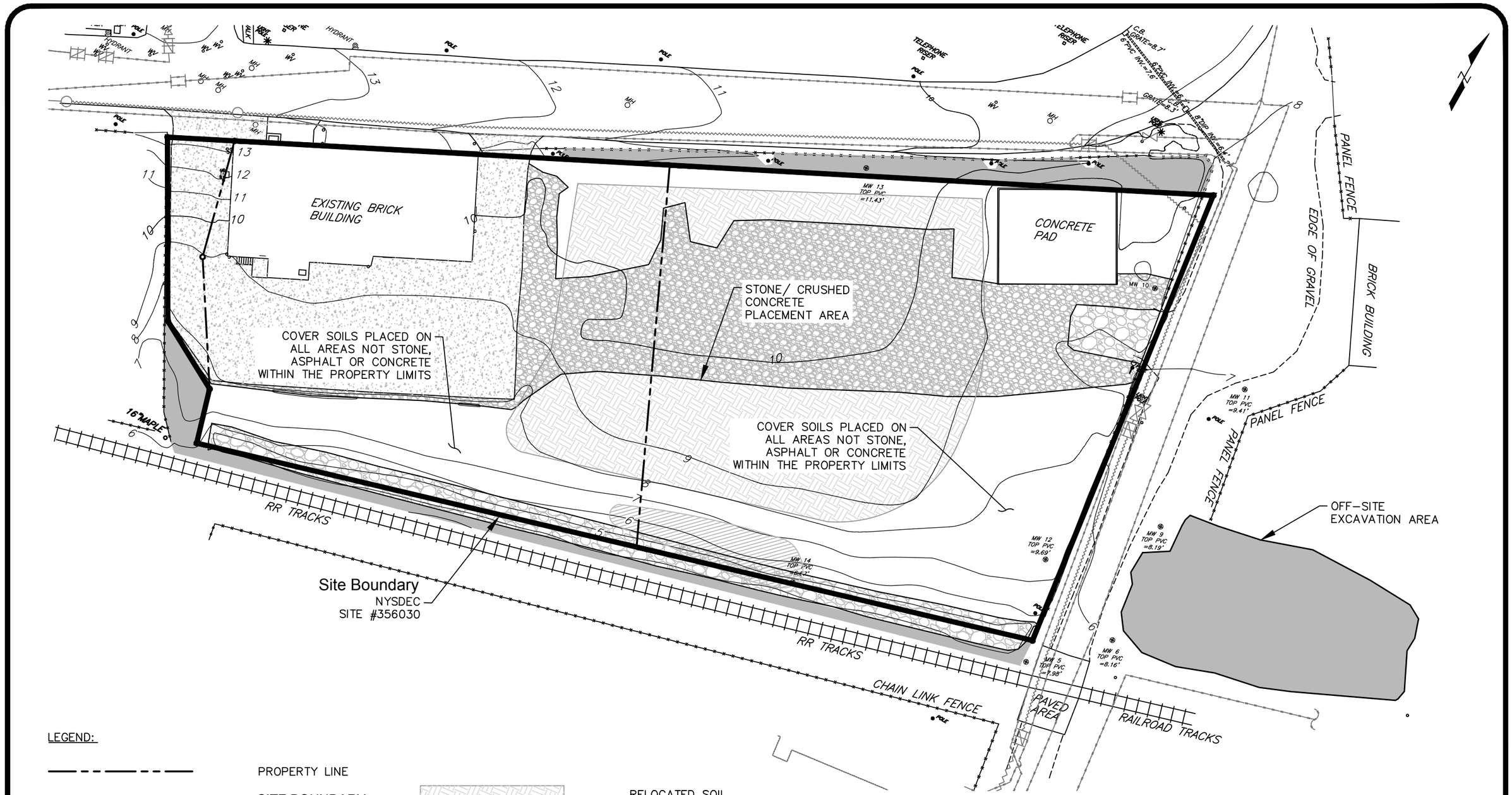
SITE LOCATION MAP
B. MILLENS SONS, INC.
290 EAST STRAND STREET
CITY OF KINGSTON ULSTER CO., NEW YORK

PROJ. No.:	DATE:	SCALE:	DWG. NO.	FIGURE
27023	04/12/2016	1" = 2000'	27023006	1

S:\Drawings\27023 - Millens Scrap Metal Recycling\27023006_F-1 - Site Loc SWEETT 4/11/2016 2:27 PM



LEGEND:

- PROPERTY LINE
- SITE BOUNDARY
- EXISTING CONTOUR
- EXISTING FENCE
- EXISTING GAS MAIN
- INACTIVE GAS MAIN
- STONE/ CRUSHED CONCRETE COVER
- RELOCATED SOIL PLACEMENT AREA
- ASPHALT
- EXCAVATION AREAS
- VISUALLY IMPACTED SOIL EXCAVATION AREA

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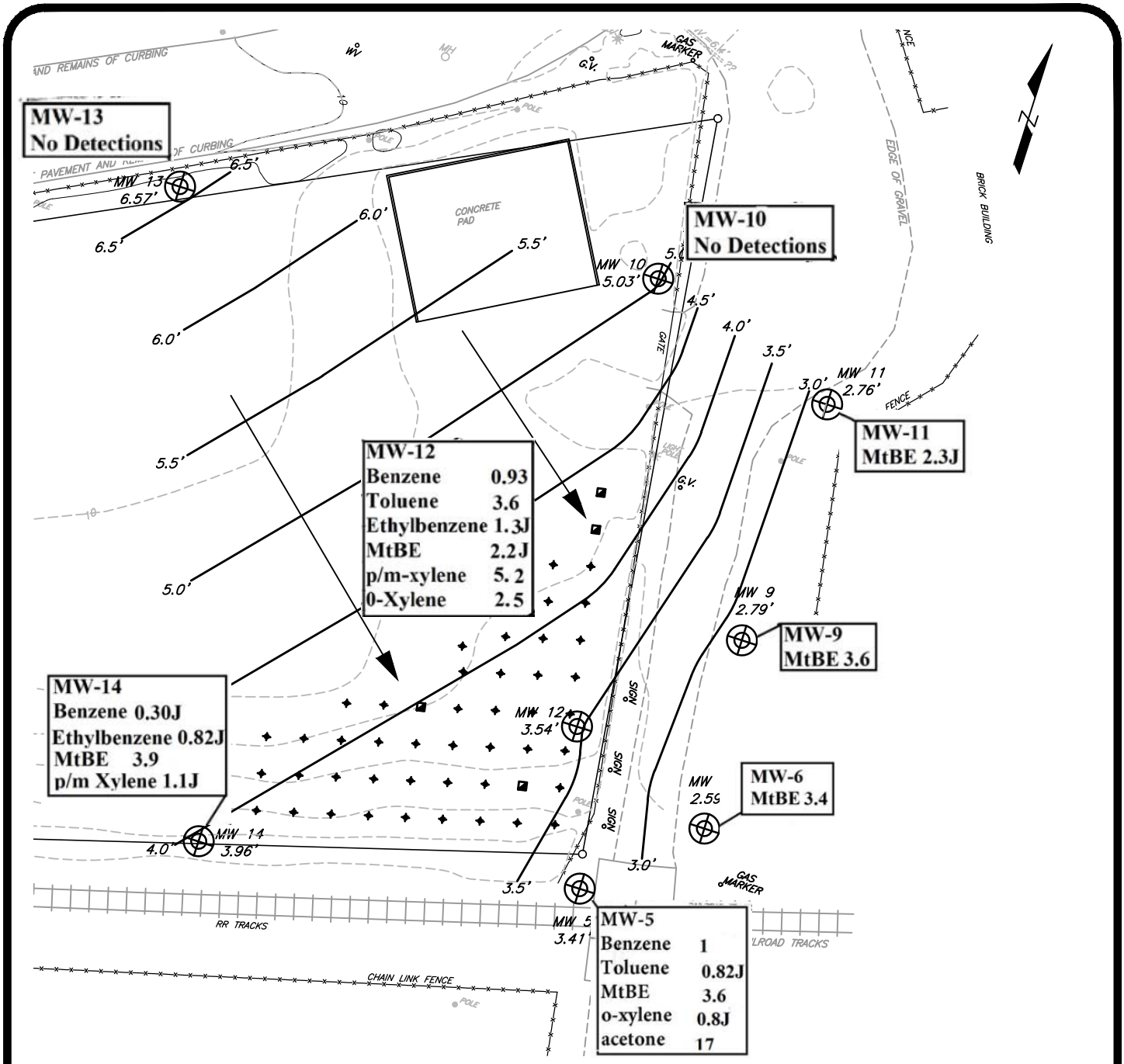
EXCAVATION AND COVER SYSTEM
RECORD PLAN
B. MILLENS & SONS INC.
290 EAST STRAND STREET
CITY OF KINGSTON ULSTER CO., NEW YORK

PROJ. No.:	27023	DATE:	10/06/2017	SCALE:	1" = 40'	DWG. NO.	27023066	FIGURE	2

S:\Drawings\27023 - Millens Scrap Metal Recycling\27023066_F-1 - Record Plan.dwg SWEETT 12/13/2017 3:38 PM



LEGEND:

- PROPERTY LINE
- GW CONTOUR (DASHED WHERE INFERRED)
- MONITORING WELL (GW ELEVATION)
- GROUNDWWATER FLOW DIRECTION
- INJECTION POINT (TYP.)
- NO ORC INJECTED (BORING REFUSED INJECTION)

NOTES:
1. MW# 1, 2, 4R, AND 7R DECOMMISSIONED ON OR ABOUT 1/19/2016.

MAP REFERENCE: BASEMAP SURVEY BY RICHARD PAUL HANBACK P.L.S. DATED NOVEMBER 19, 2015
GAS MAIN LOCATION FROM CENTRAL HUDSON KINGSTON DISTRICT MAPS, SHEETS 5 AND 6 LAST REVISED MAY, 7 2013
GROUNDWATER ELEVATIONS MEASURED BY STERLING ENVIRONMENTAL JUNE 20, 2017.

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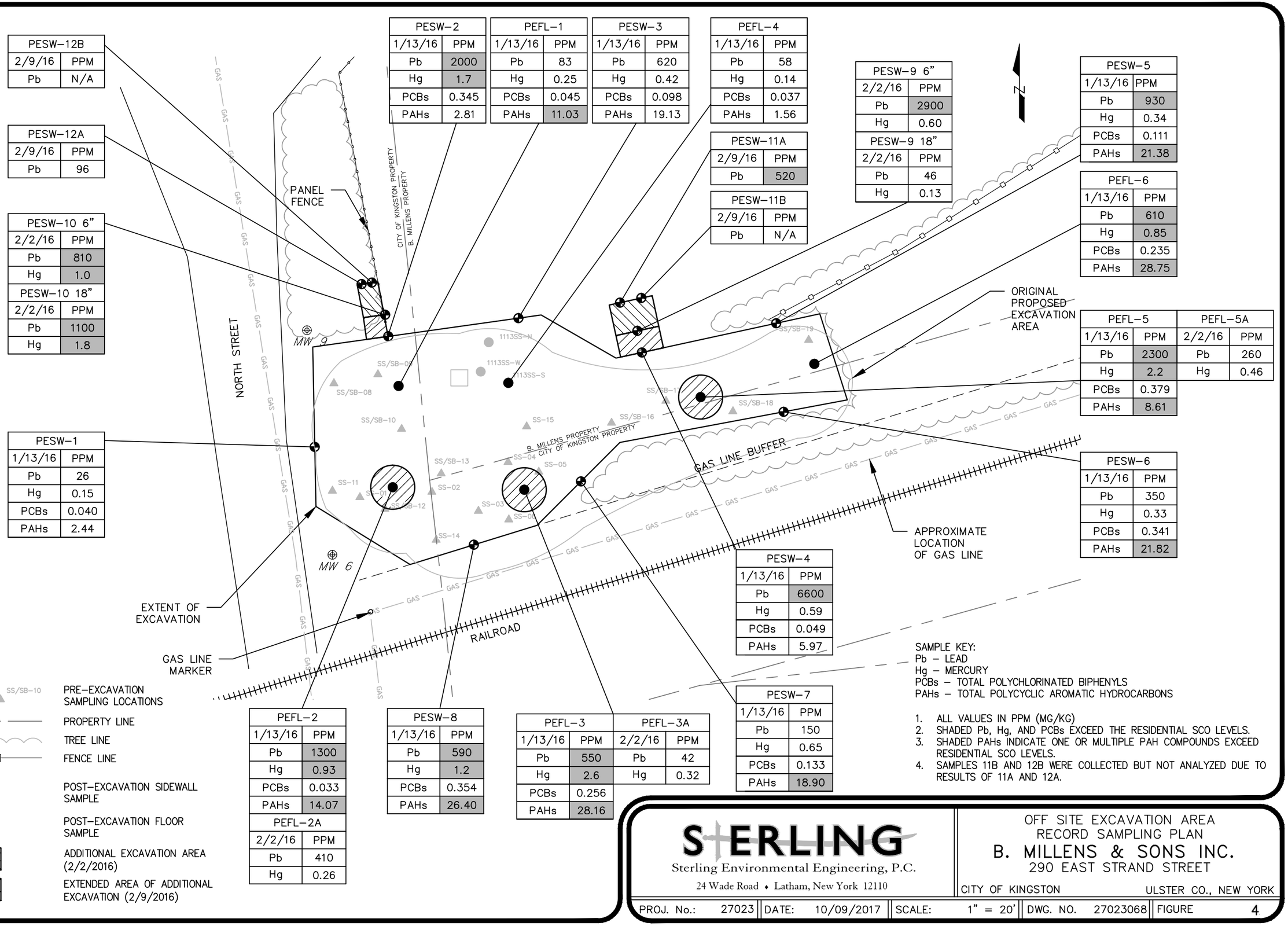
GROUNDWATER CONTOUR & FLOW MAP
JUNE 20, 2017
B. MILLENS & SONS, INC.
290 EAST STRAND STREET
CITY OF KINGSTON ULSTER CO., NEW YORK

PROJ. No.:	DATE:	SCALE:	DWG. NO.	FIGURE
27023	10/6/2017	1" = 40'	27023067	3

S:\Drawings\27023 – Millens Scrap Metal Recycling\27023067_F-2 – GW Contour and Flow Map.dwg SWEETT 10/12/2017 2:58 PM



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OFF SITE EXCAVATION AREA
RECORD SAMPLING PLAN
B. MILLENS & SONS INC.
290 EAST STRAND STREET
CITY OF KINGSTON ULSTER CO., NEW YORK

PROJ. No.:	DATE:	SCALE:	DWG. NO.	FIGURE
27023	10/09/2017	1” = 20’	27023068	4

S:\Drawings\27023 – Millens Scrap Metal Recycling\27023068_F-3 – Off Site Record Plan.dwg SWEETT 10/9/2017 12:41 PM

APPENDIX A

Responsiveness Summary

RESPONSIVENESS SUMMARY

B. Millens Scrapyard State Superfund Project
Kingston, Ulster County, New York
Site No. 356030

The Proposed Remedial Action Plan (PRAP) for the B. Millens Scrapyard site was prepared by the New York State Department of Environmental Conservation (the Department) in consultation with the New York State Department of Health (NYSDOH) and was issued to the document repositories on February 14, 2018. The PRAP outlined the remedial measure proposed for the contaminated soil and groundwater at the B. Millens Scrapyard site.

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

A public meeting was held on February 28, 2018, which included a presentation of the remedial investigation, feasibility study (RI/FS) and Interim Remedial Measure (IRM) for the B. Millens Scrapyard site as well as a discussion of the proposed remedy. The meeting provided an opportunity for citizens to discuss their concerns, ask questions and comment on the proposed remedy. These comments have become part of the Administrative Record for this site. The public comment period for the PRAP ended on March 14, 2018

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

COMMENT 1: What was the disposition location for the 2,800 tons of soil excavated from the site by Millens in 2009/2010?

RESPONSE 1: Records indicate that soil was shipped to three different facilities:

- Chemical Waste Management Model City Landfill;
- Deep Green in New Windsor, NY (now ACV Enviro's Soil Processing Facility); and
- Ontario County Landfill.

COMMENT 2: What are the responsibilities of future owners of this property?

RESPONSE 2: The property will have an environmental easement that runs with the land in perpetuity, unless extinguished. The easement is an institutional control which memorializes the restrictions on the property and the requirements and ongoing responsibilities. Restrictions include limiting the use of the property to commercial use and preventing the use of groundwater without proper treatment. Other responsibilities include providing the Department access to the site, performing periodic inspections and certifying that the engineering and institutional controls (ECs/ICs) remain in place and are effective, and that no changes to the ECs/ICs or use of the site have occurred which would result in the remedy no longer being effective. It also requires compliance with the Site Management Plan (SMP), which outlines all ongoing maintenance and monitoring and reporting requirements. Additionally, in the event of planned occupancy of the site building or construction of new buildings on the site, a soil vapor intrusion evaluation is required.

The allocation of responsibilities between the site owner and responsible party (RP) for the site (Millens) will be established in the SMP.

APPENDIX B

Administrative Record

Administrative Record

B. Millens Scrapyard
State Superfund Project
Kingston, Ulster County, New York
Site No. 356030

1. Proposed Remedial Action Plan for the B. Millens Scrapyard site, dated February 2018, prepared by the Department

2. Referral Memorandum dated May 21, 2009 for Feasibility Study and IRM

3. "Remedial Investigation Report", August 2014, prepared by EA Engineering, P.C. and its affiliate EA Science and Technology

4. "Feasibility Study Report", July 2015, prepared by EA Engineering, P.C. and its affiliate EA Science and Technology

5. "Construction Completion Report", June 2016, prepared by Sterling Environmental Engineering, P.C.