

**PERIODIC REVIEW REPORT (2015)
AMERICAN VALVE MANUFACTURING
NYSDEC SITE NO. 420002**

WORK ASSIGNMENT NO. D007619-17

Prepared for:

**New York State Department of Environmental Conservation
Albany, New York**

Prepared by:

**MACTEC Engineering and Consulting, P.C.
Portland, Maine**

MACTEC: 3612122252

JANUARY 2016

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JANUARY 2016

Submitted by:



Jean Firth
Site Manager

Approved by:



Mark J. Stelmack, P.E.
Principal Professional



CITY OF UTICA

1 KENNEDY PLAZA, UTICA, NEW YORK 13502
DEPARTMENT OF ENGINEERING
315-792-0152 FAX: 315-792-0236

ROBERT M. PALMIERI
Mayor

J. MICHAEL MAHONEY
Deputy City Engineer
mmahoney@cityofutica.com

January 5, 2016

Will Welling, Project Manager
New York State Department of Environmental Conservation
Division of Environmental Remediation, BURE
625 Broadway
Albany, New York 12233-7017

RE: 1212 Saint Vincent Street
Primoshield, Inc.

Dear Mr. Welling:

Acknowledge receipt of letter dated December 24, 2015.

Enclosed please find the completed survey for the above property.

Sincerely,

J. Michael Mahoney
Deputy City Engineer

JMM:sw
Enc.

**New York State Department of Environmental Conservation
Division of Environmental Remediation, 12th Floor**

625 Broadway, Albany, New York 12233
Phone: (518) 402-9553 Fax: (518) 402-9577
Website: www.dec.ny.gov



12/24/2015

J. Michael Mahoney
City of Utica, Dept. of Engineering
1 Kennedy Plaza
Utica, NY 13502

Re: Property Owner Survey: Site Management Periodic Review
Parcels: 318.83-2-33 and 318.83-2-41
Site Name: Primoshield, Inc.
Site No.: 633027
Site Address: 1212 Saint Vincent Street
Utica, NY 13501



Dear Property Owner:

This letter and attached survey have been mailed to you because you are the listed property owner (or their contact) on which a State Superfund site exists that is currently in the Site Management (SM) phase of remediation. This letter is meant to serve as an informative reminder to you and any tenants, occupants or users of the property that sites in active Site Management must undergo a periodic progress review to ensure that the selected remedy continues to be protective. This process and resulting report, referred to as the Periodic Review Report (PRR), documents the implementation of site specific SM requirements. Section 6.3(b) of DER-10 Technical Guidance for Site Investigation and Remediation (see "IV. Reference Documents" in the attached) provides guidance regarding the information that is included in a typical PRR. Additionally, the site referenced may be comprised of multiple tax parcels with different owners. This letter only pertains to the portion of the site that exists on property which is under your direct ownership. To assist the NYSDEC in its periodic review, please respond, sign and date the attached survey (Enclosure 1 "Institutional and Engineering Controls - Property Owner Survey") by January 30, 2016.

Site Management is defined in regulation at 6 NYCRR 375-1.2(at), and in Chapter 6 of DER-10 (see also "III. Helpful Definitions" in the attached). SM may be governed by multiple individual documents (e.g., an Operation, Maintenance, and Monitoring Plan; a Soil Management Plan; etc.) or under the umbrella of one comprehensive Site Management Plan.

A Site Management Plan (SMP) may contain one or all of the following elements, as applicable to the site: a plan to maintain institutional and/or engineering controls ("IC/EC Plan"); a plan for monitoring the performance and effectiveness of the selected remedy ("Monitoring Plan"); and/or a plan for the operation and maintenance of the selected remedy ("O&M Plan"). Additionally, the technical requirements for SM are stated in the decision document (e.g., Record of Decision) and, in some cases, the legal agreement directing the remediation of the site (e.g., order on consent, voluntary agreement, etc.).

When you respond to this survey, please include the enclosed form (Enclosure 1) which documents that, to the best of your knowledge, all Site Management requirements that pertain to the site on your property are being met. The Institutional Controls (ICs) and Engineering Controls (ECs) certification portion of the form should be completed, signed and returned to the NYSDEC. If you cannot verify that all SM requirements are being met, please provide adequate information in response so that actions may be taken to restore the level of protection intended. Instructions for completing the attached forms are included as Enclosure 2 "Survey Instructions."

The survey form should be submitted in either paper or electronic format. Any supporting documents or information (e.g., collected data, reports, copy of current deed) should be submitted in electronic format only. These documents and electronic submissions should be sent to:

Will Welling, Project Manager.
New York State Department of Environmental Conservation
Division of Environmental Remediation, BURE
625 Broadway
Albany, NY 12233-7017

Phone number: 518-402-9813. E-mail: william.welling@dec.ny.gov

Finally, as the state and condition of your property may be influenced by tenants or others users, please share the information contained in this letter and survey so that all controls put in place will provide the greatest level of protection of public health and the environment.

Thank you for your cooperation and assistance.

Sincerely,

Will Welling, Project Manager
NYSDEC

Enclosures

cc: Will Welling, Project Manager
Susan Edwards, Section Chief



**Enclosure 1
Institutional and Engineering Controls - Property Owner Survey**



Site No. 633027	Site Details	Box 1
Site Name Primoshield, Inc.		
Site Address: 1212 Saint Vincent Street	Zip Code: 13501	
City/Town: Utica		
County: Oneida		
Site Acreage: 2.4		
Reporting Period: December 31, 2014 to December 31, 2015		



- | | YES | NO |
|---|-------------------------------------|-------------------------------------|
| 1. Is the information above correct? | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| If NO, include handwritten above or on a separate sheet. | | |
| 2. Has some or all of the site property been sold, subdivided, merged, or undergone a tax map amendment during this Reporting Period? | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 3. Has there been any change of use at the site during this Reporting Period (see 6NYCRR 375-1.11(d))? | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 4. Have any federal, state, and/or local permits (e.g., building, discharge) been issued for or at the property during this Reporting Period? | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| If you answered YES to questions 2, 3 or 4, include documentation with this form. | | |
| 5. Is the site currently undergoing development? | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

- | | YES | NO |
|---|-------------------------------------|--------------------------|
| 6. Is the current site use consistent with the use(s) listed below?
Industrial | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 7. Are all Institutional Controls (ICs) in place and functioning as designed? | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

John Paul King
Signature of Property Owner

1/5/2016
Date

SITE NO. 633027

Box 3

Description of Institutional Controls

<u>Parcel</u>	<u>Owner</u>	<u>Institutional Control</u>
318.83-2-33	City of Utica	Site Management Plan Landuse Restriction Monitoring Plan O&M Plan IC/EC Plan Ground Water Use Restriction Soil Management Plan

The site has a Deed Restriction in place (filed with Oneida County on 10/02/2014) that requires adherence to the Site Management Plan (SMP) dated 8/30/2013. The SMP restricts groundwater use and land use (industrial use only).

Box 4

Description of Engineering Controls

<u>Parcel</u>	<u>Engineering Control</u>
318.83-2-33	Fencing/Access Control Groundwater Containment

The site has an engineering certification dated 3/2/1999. There is a fence to control access and a groundwater collection trench and sump pump which deliver extracted water to the city sewer under permit with Oneida County.

SITE NO. 633027

Box 3

Description of Institutional Controls

<u>Parcel</u>	<u>Owner</u>	<u>Institutional Control</u>
318.83-2-41	City of Utica	Site Management Plan Ground Water Use Restriction Soil Management Plan Landuse Restriction Monitoring Plan O&M Plan IC/EC Plan

The site has a Deed Restriction in place (filed with Oneida County on 10/02/2014) that requires adherence to the Site Management Plan (SMP) dated 8/30/2013. The SMP restricts groundwater use and land use (industrial use only).

Box 4

Description of Engineering Controls

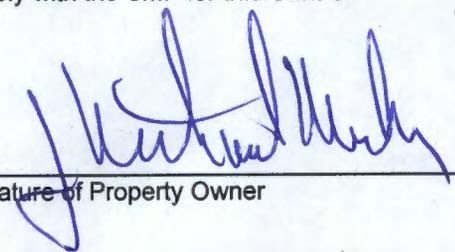
<u>Parcel</u>	<u>Engineering Control</u>
318.83-2-41	Fencing/Access Control Groundwater Containment

The site has an engineering certification dated 3/2/1999. There is a fence to control access and a groundwater collection trench and sump pump which deliver water to the Utica City sewer.

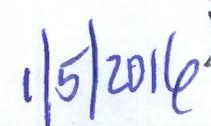
Periodic Review Report (PRR) Survey Statements

For each Institutional or Engineering control listed in Boxes 3 and/or 4, by checking "YES" below I believe all of the following statements to be true:

- (a) the Institutional Control(s) and/or Engineering Control(s) employed at this site remain unchanged since the date that the Control was put in-place, or was last approved by the Department;
- (b) nothing has occurred that would impair the ability of such Control, to protect public health and the environment;
- (c) access to the site will continue to be provided to the Department, to evaluate the remedy, including access to evaluate the continued maintenance of this Control; and
- (d) if a Site Management Plan (SMP) exists, nothing has occurred that would constitute a violation or failure to comply with the SMP for this Control.



Signature of Property Owner



Date

YES NO

Enclosure 2
Survey Instructions

I. Verification of Site Details (Box 1 and Box 2):

Answer the YES/NO questions in the Verification of Site Details Section. The Property Owner may include handwritten changes and/or other supporting documentation, as necessary.

II. Certification of Institutional / Engineering Controls (Boxes 3, 4, and 5)

Review the listed IC/ECs, confirming that all existing controls are listed, and that all existing controls are still applicable. If there is a control that is no longer applicable the Property Owner should petition the Department separately to request approval to remove the control.

In Box 5, complete the certification for all components, as applicable, by checking the corresponding YES/NO checkbox.

If you cannot respond "YES" for each Control listed in Box 3 & Box 4, sign and date the form in Box 5. Attach supporting documentation that explains why a "YES" response could not be rendered. Note that this survey form should be submitted even if an IC or EC cannot be certified at this time.

III. Helpful Definitions

"Change of use" means the erection of any structure on a site, the paving of a site for use as a roadway or parking lot, the creation of a park or other recreational facility on a site, any activity that is likely to disrupt or expose contamination or increase direct human or environmental exposure, or any other conduct that will or may tend to prevent or significantly interfere with a proposed, ongoing, or completed remedial program.

"Site management" means the activities undertaken as the last phase of the remedial program at a site which continue after a certificate of completion is issued. Site management is conducted in accordance with a site management plan, which identifies and implements the institutional and engineering controls required for a site, as well as any necessary monitoring and/or operation and maintenance of the remedy.

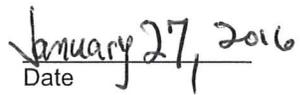
IV. Reference Documents

DER-10 http://www.dec.ny.gov/docs/remediation_hudson_pdf/der10.pdf
Part 375-2.2(a) <http://www.dec.ny.gov/regs/4373.html#15089>



Enclosure 1
Engineering Controls - Standby Consultant/Contractor Certification Form



	Site Details	Box 1
Site No. 420002		
Site Name American Valve Manufacturing		
Site Address: 170 Mansion Street	Zip Code: 12051	
City/Town: Cossackie		
County: Greene		
Site Acreage: 12.0		
Reporting Period: December 31, 2014 to December 31, 2015		
		YES NO
1. Is the information above correct?		<input checked="" type="checkbox"/> <input type="checkbox"/>
If NO, include handwritten above or on a separate sheet.		
2. To your knowledge has some or all of the site property been sold, subdivided, merged, or undergone a tax map amendment during this Reporting Period?		<input type="checkbox"/> <input checked="" type="checkbox"/>
3. To your knowledge has there been any change of use at the site during this Reporting Period (see 6NYCRR 375-1.11(d))?		<input type="checkbox"/> <input checked="" type="checkbox"/>
4. To your knowledge have any federal, state, and/or local permits (e.g., building, discharge) been issued for or at the property during this Reporting Period?		<input type="checkbox"/> <input checked="" type="checkbox"/>
If you answered YES to questions 2 thru 4, include documentation or evidence that documentation has been previously submitted with this certification form.		
5. To your knowledge is the site currently undergoing development?		<input type="checkbox"/> <input checked="" type="checkbox"/>
		Box 2
		YES NO
6. Is the current site use consistent with the use(s) listed below? Commercial and Industrial		<input checked="" type="checkbox"/> <input type="checkbox"/>
7. Are all ICs/ECs in place and functioning as designed?		<input type="checkbox"/> <input checked="" type="checkbox"/>
IF THE ANSWER TO EITHER QUESTION 6 OR 7 IS NO, sign and date below and contact the DEC PM regarding the development of a Corrective Measures Work Plan to address these issues.		
 _____ Signature of Standby Consultant/Contractor		 _____ Date

SITE NO. 420002

Box 3

Description of Institutional Controls

<u>Parcel</u>	<u>Owner</u>	<u>Institutional Control</u>
56.14-2-37	American Valve Co	Soil Management Plan Site Management Plan Monitoring Plan O&M Plan

The Site Management Plan (SMP) includes the procedures and protocols for the long-term monitoring of groundwater, surface water and site drainage sediments. Groundwater monitoring is performed to track potential migration of any residual volatile organic compound (VOC) contamination and determine if naturally occurring attenuation is taking place. Surface water and sediment monitoring is performed at the site outfall to document any foundry sand or residual VOC migration through the site drainage system. The SMP also includes requirement for maintenance of the landfill cap and monitoring wells and requirements to be followed during any excavation along with excavation, periodic certifications, notifications and reporting.

Description of Engineering Controls

Box 4

<u>Parcel</u>	<u>Engineering Control</u>
56.14-2-37	Cover System

On- and off-site foundry sand wastes are consolidated into the disposal site. The foundry sand disposal site is capped. The cap generally consists of an intermediate cover layer, geosynthetic clay liner (GCL), 60 mil textured linear low density polyethylene (LLDPE) geomembrane, barrier protection layer, and vegetative layer (topsoil and seed) complying with 6 NYCRR Part 373. Five landfill gas collection sumps with vents to the ambient air are installed in the cap. The property has an eight-foot high chain-link security fence and 2 locked gates along its perimeter to restrict access.

Periodic Review Report (PRR) Certification Statements

1. I certify by checking "YES" below that:

a) the Periodic Review report and all attachments were prepared under the direction of, and reviewed by, the party making the certification, including data and material prepared by previous contractors for the current certifying period, if any;

b) to the best of my knowledge and belief, the work and conclusions described in this certification are in accordance with the requirements of the site remedial program, and generally accepted engineering practices; and the information presented is accurate and complete.

YES NO

2. If this site has an IC/EC Plan (or equivalent as required in the Decision Document), for each Institutional or Engineering control listed in Boxes 3 and/or 4, I certify by checking "YES" below that all of the following statements are true:

(a) the Institutional Control and/or Engineering Control(s) employed at this site is unchanged since the date that the Control was put in-place, or was last approved by the Department;

(b) nothing has occurred that would impair the ability of such Control, to protect public health and the environment;

(c) nothing has occurred that would constitute a failure to comply with the Site Management Plan, or equivalent if no Site Management Plan exists.

YES NO

IF THE ANSWER TO QUESTION 2 IS NO, sign and date below and contact the DEC PM regarding the development of a Corrective Measures Work Plan to address these issues.

Mark Stetman

Signature of Standby Consultant/Contractor

January 27, 2016

Date

IC/EC CERTIFICATIONS

Box 6

Professional Engineer Signature

I certify that all information in Boxes 2 through 5 are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law.

I Mark Stelmack at MACTEC Engineering & Consulting, PC.
print name
511 Congress St., Suite 200
Portland, ME 04101
(print business address)

am certifying as a Professional Engineer.

Signature of Professional Engineer

Stamp
(Required for PE)



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GLOSSARY OF ACRONYMS AND ABBREVIATIONS

AVM	American Valve Manufacturing
bgs	below ground surface
EC	engineering controls
FS	feasibility study
IC	institutional controls
LTM	long term monitoring
MACTEC	MACTEC Engineering and Consulting, P.C.
NYS	New York State
NYSDEC	New York State Department of Environmental Conservation
OU	operable unit
PRR	Periodic Review Report
RI	remedial investigation
ROD	Record of Decision
SCG	Standards, Criteria, and Guidance
SCO	Soil Cleanup Objective
Site	American Valve Manufacturing site
SM	site management
SMP	site management plan
µg/L	micrograms per liter
USEPA	United States Environmental Protection Agency
VOC	volatile organic compound

EXECUTIVE SUMMARY

The American Valve Manufacturing Site (Site No. 420002; herein referred to as the Site) is a 12.0-acre site located at 170 Mansion Avenue in the village of Coxsackie, New York (Greene County). The Site was remediated in accordance with the Records of Decision (RODs) for Operable Unit 1 (OU1) (foundry sand waste) (New York State Department of Environmental Conservation [NYSDEC], 1997) and OU2 (groundwater and building contamination) (NYSDEC, 1999a). The Site includes an engineered landfill cover system which overlies waste foundry sand remaining after the remedial actions were completed. The contaminants of concern are volatile organic compounds including tetrachloroethene, trichloroethene, 1,2-dichloroethene, vinyl chloride, and lead. Remedial goals outlined in the RODs for the Site are to prevent direct contact with contaminated soil and/or groundwater, and to prevent contaminated surface water and groundwater from migrating off-site. In accordance with the Site Management (SM) Plan (MACTEC Engineering and Consulting, P.C. [MACTEC], 2013b), current SM requirements for monitoring the performance and effectiveness of the remedial measures completed at the Site consist of semi-annual Site inspections and environmental monitoring at 15-month intervals.

This Periodic Review Report summarizes SM activities completed at the Site during 2015 and evaluates the effectiveness of the remedial actions. During the reporting period, SM requirements were met. MACTEC concludes that the remedy for the Site is appropriate.

Additional activities conducted at the Site during 2015 include a soil removal from the northern portion of the property to remove soil containing lead and copper at concentrations above the Residential Soil Cleanup Objectives.

1.0 SITE HISTORY

The American Valve Manufacturing (AVM) site (Site) is located at 170 Mansion Avenue in the village of Coxsackie, New York (Figure 1.1). The property contains approximately 12.0 acres and has a chain-link fence around the perimeter. The Site is bounded on the northwest, east, and south by residential property. The CSX railroad is located on the western boundary of the Site. A water tower and a village cemetery are located adjacent to the Site to the east-southeast. Figure 1.2 shows the current site features.

AVM manufactured valves and pipe fittings at this facility in the past. Various industrial wastes including spent foundry sand were dumped into a landfill on the southern end of the property during the time the company was operating. After the company went out of business, the landfill was abandoned and was not properly closed.

A Remedial Investigation/Feasibility Study (RI/FS) that addressed the presence of lead in the foundry sands, defined as Operable Unit-1 (OU1), was completed in early 1997; a Remedial Design was completed in June 1999. A RI/FS that addressed groundwater contamination (petroleum and volatile organic compounds [VOCs]) and building contamination, defined as OU2, was completed in January 1999, and a Record of Decision (ROD) was signed in March 1999. Remedies for both OUs have been completed, and the Site is now in the site management (SM) phase to monitor the effectiveness of the remedy (MACTEC Engineering and Consulting, P.C. [MACTEC], 2013b). Section 2.4 provides details for additional remediation action activities undertaken at the northern portion of the property during 2015.

2.0 SITE MANAGEMENT STATUS

This Periodic Review Report (PRR) documents the SM activities conducted by MACTEC and its subcontractors during 2015:

- Long Term Monitoring (LTM) – May
- Semi-Annual Site Inspections – May (MACTEC, 2015a) and October (MACTEC, 2015b)
- Soil Sampling at the Adjacent Residential Property – October (MACTEC, 2015c)
- North Parcel Soil Removal and Consolidation – October (MACTEC, 2016)

This PRR was completed using site specific documentation, which includes the Site's RODs (New York State (NYS) Department of Environmental Conservation (NYSDEC), 1997 and 1999a), and the SM Plan (SMP) (MACTEC, 2013b). This PRR was prepared to document that established controls required by the SMP are operational and effective, that the SMP is being implemented and conducted accordingly, and that the remedy remains protective of the environment and/or public health.

SM requirements as described in the SMP are outlined in Table 2.1. These include semi-annual inspection of institutional/engineering controls (IC/EC) at the Site, as well as LTM and analysis of groundwater, surface water, and sediment from existing monitoring locations (see Figure 2.1 for monitoring locations). Existing shallow and deep wells are monitored to evaluate contaminant concentrations in groundwater as compared to the Site cleanup goals (NYS Class GA Standards [6 New York Codes, Rules and Regulations Parts 700-705] for lead and VOCs) (NYS, 1999). Surface water sample results are monitored for comparison to site cleanup goals for lead and VOCs (Technical and Operational Guidance Series 1.1.1, "Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations" [NYSDEC, 1998]). Sediment samples are also collected; results are compared to Technical Guidance for Screening Contaminated Sediments, 1999 for VOCs, semi-VOCs and lead (NYSDEC, 1999b).

SM activities completed during the reporting period and an evaluation of the performance, protectiveness, and effectiveness of the remedy are summarized below.

2.1 INSTITUTIONAL CONTROLS/ENGINEERING CONTROLS PLAN

Contaminated soil exists beneath the ground surface, therefore IC/ECs are required to protect human health and the environment. ICs at the Site consist of the SMP (MACTEC, 2013b) and the RODs (NYSDEC, 1997; NYSDEC 1999a). ECs at the Site include an engineered landfill cover, site access controls, and the Site storm water drainage system. Exposure to remaining contamination in soil/waste at the Site is prevented by an engineered landfill cover system placed over a portion of the Site. Roads providing access to the landfill area are equipped with locked gates. The Site is enclosed by a perimeter fence to restrict access by animals, people, and vehicles, thus preventing damage to the cap. These controls prevent trespassing on the Site, limit future development at the Site, and prevent direct contact with the contaminated soil/waste. The storm water drainage system consists of a surface drainage swale and a culvert that drains from the northwest portion of the landfill toward a drainage basin located adjacent to the CSX railroad.

During the reporting period, the ECs were inspected in May and October 2015 in accordance with the SMP. These controls are in place; however, the following conditions were observed during the May 2015 Site inspections:

- Animal burrowing evidence was observed on the northeast slope of the cover
- Previously noted damage to the fence section near groundwater monitoring wells MPI-22S/D was still present
- Minor ruts near monitoring wells MPI-7S/7D were still present, but conditions were consistent with previous observations
- A small amount of vegetation was noted in the drainage swale
- Insect nests were observed in the well casings of MPS-1S and MPS-1D
- The concrete pad at MW-5S had risen from frost heaving.

The observations noted above were resolved as follows:

- May 2015:
 - Insect nests were removed from the well casings at MPI-1S and MPI-1
- October 2015:
 - Damaged perimeter fence was repaired, new fence was installed, and a new gate and access road were constructed off Cato Street
 - Areas of soil disturbed by animal burrows and landfill ruts were regraded, and hydroseed was installed

- Infringing vegetation in the drainage swale was removed
- The concrete pad at MW-5S was repaired

2.2 LONG TERM MONITORING PLAN

The LTM program described in the SMP includes groundwater elevation monitoring, monitoring well inventory and repair, groundwater sampling and analysis, and surface water/sediment sampling and analysis. Since January 2008, monitoring locations have been sampled at 15 month intervals (see Table 2.1). Results of the LTM conducted in May 2015 are discussed below. The LTM locations are shown on Figure 1.2. Table 2.2 summarizes the sampling and analysis plan for all Site monitoring locations.

2.2.1 Groundwater Elevation Monitoring

Groundwater elevations obtained from the 10 monitoring wells sampled are summarized in Table 2.3. As shown on Figure 2.2, groundwater elevations collected during the reporting period illustrate a west/northwest groundwater flow direction towards the CSX railroad. In addition, overburden groundwater elevations at the Site are relatively shallow, ranging between zero and 11 feet below ground surface (bgs).

2.2.2 Monitoring Well Inventory and Repair

Monitoring well conditions were inspected in May and October of 2015 as part of the Semiannual Inspections. Site inspection records and photographs taken during those inspections are included in Appendix A. The following repair was made in October 2015:

- The concrete pad at MW-5S, which had risen above ground surface due to frost heaving, was repaired.

2.2.3 Environmental Sampling and Analysis

LTM groundwater and surface water sampling and analysis for VOCs and lead were conducted in May 2015 in accordance with the SMP (MACTEC, 2013b). Collection of groundwater samples using HydrasleevesTM was attempted from ten monitoring wells. However, three monitoring wells (MW-5S, MW-22S, and MW-23S) contained insufficient water within the Hydrasleeve, and no

samples were collected from these wells. One surface water grab sample and one sediment sample were collected at location SW-10/SED-10.

Compounds detected in groundwater, surface water, and sediment were tabulated and compared to applicable standards, criteria, and guidance (SCGs) for the Site as defined in the ROD for OU1 (NYSDEC, 1997). The ROD directs comparison of Site compound concentrations to these SCGs to determine whether the landfill cap and drainage continue to be effective. For purposes of this PRR, environmental monitoring results and comparisons to SCGs are discussed below and presented in Tables 2.4 and 2.5.

Groundwater, surface water, and sediment samples collected during the May 2015 sampling event did not contain compounds at concentrations exceeding SCGs; however, groundwater samples were not obtained from three wells during this sampling event. Two of the un-sampled wells had groundwater concentrations exceeding SCGs in 2014.

2.2.3.1 Groundwater

During the reporting period, 7 of the 10 monitoring wells were sampled using a Hydrasleeve™ sampler, a no flow sampling device placed in each well 15 months prior to collecting the sample to allow particulates to settle out of the water column. Three wells were not sampled because an insufficient volume of water was present in the Hydrasleeve™. Groundwater samples were analyzed for VOCs by the United States Environmental Protection Agency (USEPA) Method 8260 and lead by the USEPA Method 6010B. VOCs and lead were not detected at concentrations above SCGs in any of the seven Site monitoring wells that were sampled in 2015. Figure 2.3 shows the most recent analytical results that exceeded SCGs. Since three wells were not sampled in 2015, 2014 exceedances are shown for those wells where appropriate.

Comparison of the 2015 analytical results for the sampled wells to historical findings from 2004 (Malcolm Pirnie, Inc., 2004), 2006 (H2M, 2006a/b), 2008 (MACTEC, 2008), 2009 (MACTEC, 2009), 2012 (MACTEC, 2013a), and 2014 (MACTEC, 2015d) show fluctuating concentrations of lead and VOCs in groundwater. Locations and parameters with observed concentrations in excess of SCGs from 2004 to 2015 are shown below.

Location	Parameter (GA Standard)	2004 (µg/L)	2006 (µg/L)	2008 (µg/L)	2009 (µg/L)	2012 (ug/L)	2014 (ug/L)	2015 (ug/L)
MW-5D	Lead (25)	358	2.4	1.5 B	-	47.1	15.7	-
MW-5S	Vinyl Chloride (2)	-	2 J	2	2	-	-	
MW-5S	1,2-dichloroethene (5)	-	42	44	20	67	32	NM
MPI-22S	Lead (25)	NM	NM	-	1.6 B	-	25.2	NM

Notes:

B = analyte was detected in the laboratory method blank analyzed concurrently with the sample.

Bold = results exceeds NYS GA standard

- = Not detected

NM = Not measured, or sample not submitted for this analysis

µg/L = micrograms per liter

2.2.3.2 Surface Water/Sediment

Surface water/sediment samples were collected in May 2015. In accordance with the SMP, samples from the drainage basin adjacent to the Site and railroad at locations SW-10 and SED-10 (Figure 1.2) were collected and analyzed for VOCs and lead. Several VOCs and lead were detected in the surface water and sediment samples. Concentrations of surface water sample results were generally consistent with previous results. Sediment sample lead results were compared to the SCG. There are no sediment SCGs for VOCs for the Site. Surface water and sediment samples collected during the May 2015 sampling event did not contain compounds at concentrations exceeding their respective SCGs.

2.3 OPERATIONS & MAINTENANCE PLAN

In accordance with the SMP, site-wide inspections are conducted semi-annually and include inspections of the landfill cover system, storm water collection and drainage system, landfill gas vents, and monitoring wells/piezometers.

During the 2015 reporting period, inspections were conducted in May and October. Inspection observations were recorded using Post Closure Inspection Forms, photographic logs, and field notes included with the Semi-annual Inspection Reports – May and October 2015 (MACTEC, 2015a; MACTEC, 2015b) (See Appendix A).

Inspections included observations of:

- Cover system integrity
- Drainage swale conditions
- The LTM network.

Findings of these inspections are provided in Subsections 2.1 and 2.2 above.

2.4 ADDITIONAL SITE ACTIVITIES

The northern portion of the Site property is being considered for redevelopment. Soil sampling activities conducted in 2013 and 2014 (MACTEC, 2013c and MACTEC, 2014) showed two distinct site areas containing lead and copper at concentrations exceeding the NYSDEC Part 375 Residential Soil Cleanup Objectives (SCOs) (NYSDEC, 2006).

To meet the established remedial goals of the Site as described in the 1997 and 1999 RODs, activities were completed in October 2015 to remove residual soils containing copper and lead above their respective Residential SCOs from the Site's northern parcel, and to consolidate those soils within the existing landfill on the southern portion of the Site. Confirmation sampling results from the soil removal demonstrate that soils south of the northern parcel property boundary containing copper and lead concentrations above residential SCOs were effectively removed and consolidated, although residual soil contamination remains along the northern property fence line. Two soil confirmation samples along the fence line contained concentrations of copper and lead above the Residential SCOs of 270 milligrams per kilogram (mg/kg) and 400 mg/kg, respectively; and eight confirmation samples along the fence line contained concentrations exceeding the Residential SCO for copper only. These samples were observed in soil samples collected from 12 inches bgs at the northern fence line separating the Site from adjacent residential properties. As directed by NYSDEC, soil at the fence line was not removed due to the potential for adverse impact to residential properties.

During the soil consolidation activities, a resident abutting the Site expressed concern to the NYSDEC about contamination on their property, and requested that samples be collected. To satisfy this request, two surface soil samples were collected on October 15, 2015 from the

property located at 174 Mansion Street, adjacent to the Site. The samples were collected at depths between zero to six inches bgs and between 12 to 18 inches bgs from one location, approximately ten feet north of the chain-link fence near the southern property line. The samples were analyzed for copper and lead. Results demonstrated that copper and lead were detected at concentrations below Residential SCOs.

Soil sample results from the 174 Mansion Street sampling and soil confirmation results from the northern parcel soil removal are presented in the Construction Completion Report (CCR) (MACTEC, 2016). Appendix B includes two figures from the CCR: (1) a figure showing the limits of the soil excavation, and (2) a figure showing confirmation sample locations and locations of soil sample results exceeding Residential SCOs.

3.0 CONCLUSIONS AND RECOMMENDATIONS

Current SM activities being conducted at the Site are in compliance with the requirements of the Site's SMP, and the SMP for the Site is effective in monitoring the status of remedial goals established in the ROD:

- direct contact with the waste at the Site is eliminated
- migration of groundwater contaminants is prevented
- migration of surface water contaminants is prevented.

Northern Parcel Soil Remediation

- A total of 2,059 cubic yards of residual soil was removed from the Northern Parcel and consolidated on the landfill. Confirmation soil sample results indicate concentrations of copper and lead at concentrations exceeding Residential SCOs were observed at 12 inches bgs at the northern fence line separating the Site from adjacent residential properties. At the direction of the NYSDEC, soil at the fence line was not removed due to the potential for adverse impact to residential properties.

To maintain the Site integrity, the following recommendations are provided:

ICs/ECs Plan - Based on Site Inspection Reports:

- Continue semi-annual inspections as scheduled
- Erosion control should remain in place until the disturbed areas have been stabilized with vegetative growth.

Monitoring Plan

- LTM activities should continue as scheduled (the next 15 month sampling event is scheduled for August 2016).

Site Management Plan

- The SMP should be updated to reflect the changes at the Site as a result of the remedial action conducted.

4.0 REFERENCES

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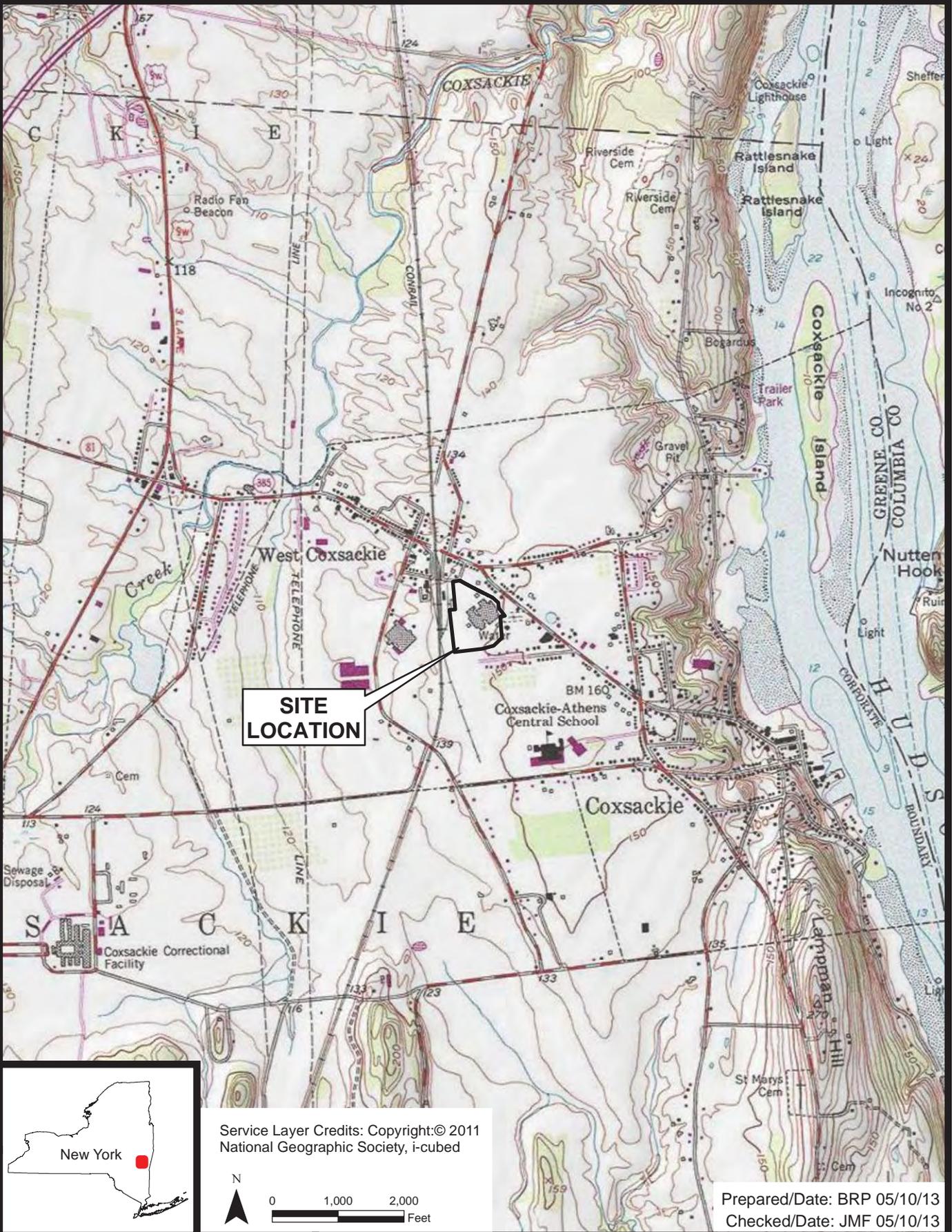
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NYSDEC, 1999b. Technical Guidance for Screening Contaminated Sediments. January 25, 1999.

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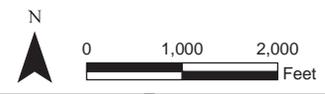
FIGURES



SITE LOCATION



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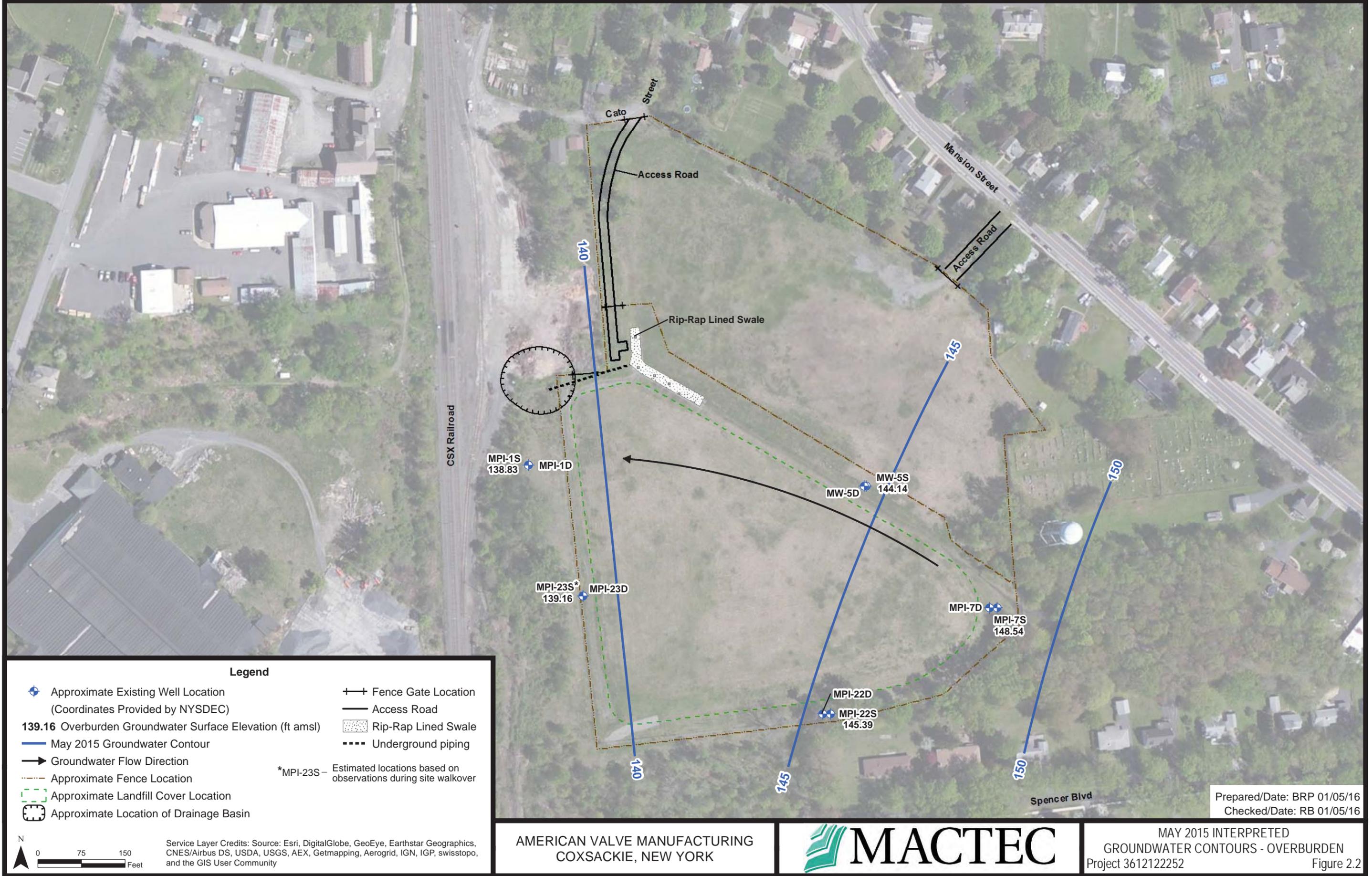


Prepared/Date: BRP 05/10/13
Checked/Date: JMF 05/10/13

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COXSACKIE, NEW YORK



Site Location Map
Project 3612122252 Figure 1.1



Legend

- + Approximate Existing Well Location (Coordinates Provided by NYSDEC)
- 139.16 Overburden Groundwater Surface Elevation (ft amsl)
- May 2015 Groundwater Contour
- Groundwater Flow Direction
- - - Approximate Fence Location
- - - Approximate Landfill Cover Location
- Approximate Location of Drainage Basin
- + Fence Gate Location
- Rip-Rap Lined Swale
- - - Underground piping
- *MPI-23S – Estimated locations based on observations during site walkover



Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

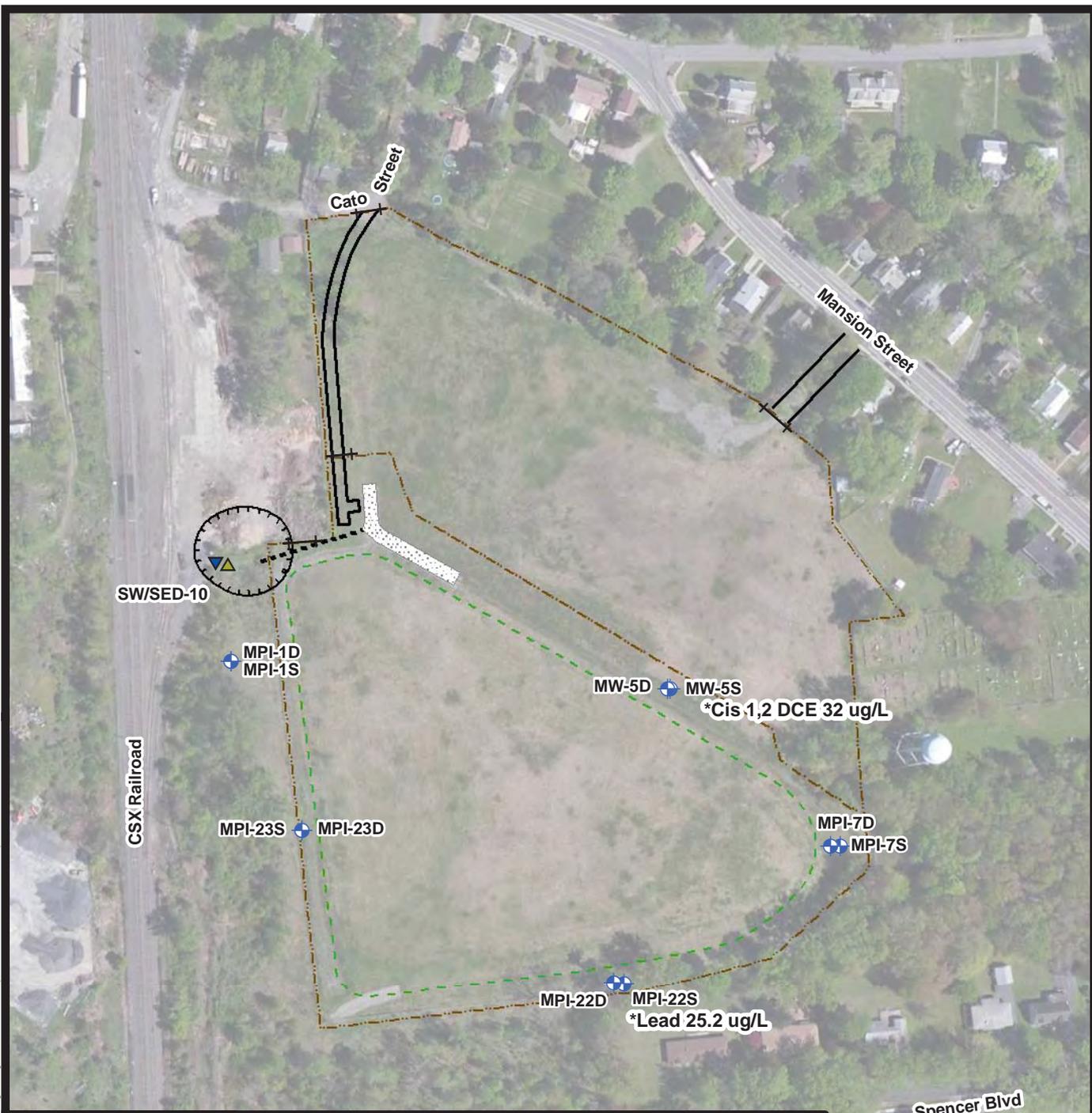
AMERICAN VALVE MANUFACTURING
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MAY 2015 INTERPRETED
GROUNDWATER CONTOURS - OVERBURDEN
Project 3612122252
Figure 2.2

Prepared/Date: BRP 01/05/16
Checked/Date: RB 01/05/16

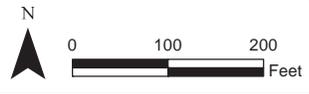
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 Date: 01/15/2016 11:57 AM
 User: brian.peters



Legend

- Approximate Surface Water/Sediment Sample Location
- Approximate Existing Well Location (Coordinates Provided by NYSDEC)
- Underground piping
- Approximate Fence Location
- Fence Gate Location
- Access Road
- Rip-Rap Lined Swale
- Approximate Landfill Cover Location
- Approximate Location of Drainage Basin

*Result is from 2014 LTM. No sample was available from this well in 2015.



Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

Prepared/Date: BRP 01/15/16
 Checked/Date: JMF 01/15/16

NYSDEC
 AMERICAN VALVE MANUFACTURING
 COXSACKIE, NEW YORK



LONG TERM MONITORING
 RESULTS
 PROJECT 361212252 FIGURE 2.3

TABLES

Table 2.1: Site Management Plan Requirements
 (Inspection and Long Term Monitoring)

Component	Action	Required Frequency
LANDFILL		
Landfill Cover System	Inspection	Semi-annually in spring and summer*
Landfill Cover System	Mowing	Annually in late summer/fall**
Site Drainage System	Inspection	Semi-annually in spring and summer*
Site Security	Inspection	Semi-annually in spring and summer
Access Road	Inspection	Semi-annually in spring and summer
Gas Vents	Inspection	Semi-annually in spring and summer
Ground Water Monitoring System	Inspection	Semi-annually in spring and summer
LONG TERM MONITORING		
Ground Water Monitoring Program		
10 monitoring locations	No purge sampling (Hydrasleeve)	Every 15 months (August 2016, November 2017)
Surface Water/Sediment Monitoring Program		
1 monitoring location	Surface Water/Sediment grab sampling	Every 15 months (August 2016, November 2017)

*Additional inspections to occur after a major rain event. A major rain event is defined as a five-year, 24-hour storm.

**NYSDEC currently coordinates mowing

Table 2.2: Long Term Monitoring Sampling and Analysis Plan Requirements

Sample Locations	Total Lead (6010B)	VOC (8260B)
MONITORING WELLS		
MPI-1S	X	X
MPI-1D	X	X
MW-5S	X	X
MW-5D	X	X
MPI-7S	X	X
MPI-7D	X	X
MPI-22S*	X	X
MPI-22D*	X	X
MPI-23S*	X	X
MPI-23D*	X	X
SURFACE WATER		
SW-10 (Northern Drainage Basin)	X	X
SEDIMENT		
SED-10 (Northern Drainage Basin)	X	X

Notes:

An 'X' marked in a column indicates the analysis to be performed for that sample location.

VOCs = Volatile Organic Compounds

*- well installation logs identify these as "MW" instead of "MPI"

Table 2.3: Groundwater Elevation Summary

Well ID	Measuring Point Elevation	Protective Casing Stickup (ft AGS)	Protective Casing Stickup/Well Difference (ft)	Depth to BOW (ft TOR)	May 29, 2015 Depth to Water (ft TOR)	May 29, 2015 Water Elevation (ft MSL)
MPI-1S	145.64	2.75	0.50	22.1	6.81	138.83
MPI-1D	145.75	2.9	0.70	52.3	6.65	139.10
MW-5S	149.25	2.4	0.50	16.2	5.11	144.14
MW-5D	148.90	2.6	1.00	31.9	5.40	143.50
MPI-7S	153.77	2.0	0.38	22.3	5.23	148.54
MPI-7D	154.77	2.7	0.52	37.4	7.78	146.99
MPI-22S	156.35	3.1	0.11	16.0	10.96	145.39
MPI-22D	155.79	3.1	0.57	38.1	11.17	144.62
MPI-23S	149.92	2.7	0.45	16.2	10.76	139.16
MPI-23D	149.51	2.9	0.20	34.6	9.06	140.45

Notes:

ft. = feet
 in = inches
 NA = Not Applicable

TOR = Top of Riser
 AGS = Above Ground Surface
 BOW = bottom of well

MSL = Mean Sea Level

Table 2.4: Groundwater Long Term Monitoring Results – May 2015

		Media		GW		GW		GW		GW		GW	
		Loc Name		MPI-1D		MPI-1S		MPI-22D		MPI-22S		MPI-23D	
		Sample Date		5/29/2015		5/29/2015		5/29/2015		5/29/2015		5/29/2015	
		Sample ID		MPI1D		MPI1S		MPI22D		MPI22S		MPI23D	
		QC Code		FS		FD		FS		FS		FS	
Analysis	Parameter	GA	Units	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
SW6010	Lead	25	ug/L	1.6	UN	1.6	UN	1.7	BN	*		1.6	UN
	Turbidity	NS	ntu	13.0		7.28		25.0		121		15.6	

		Media		GW		GW		GW		GW		GW	
		Loc Name		MPI-23S		MPI-7D		MPI-7S		MW-5D		MW-5S	
		Sample Date		5/29/2015		5/29/2015		5/29/2015		5/29/2015		5/29/2015	
		Sample ID		MPI23S		MPI7D		MPI7S		MW5D		MW5S	
		QC Code		FS		FS		FS		FS		FS	
Analysis	Parameter	GA	Units	Result	Qualifier								
SW6010	Lead	25	ug/L	*		1.6	UN	1.6	UN	1.6	UN	*	
	Turbidity	NS	ntu	*		3.75		13.0		6.98		*	

Notes:

QC Code: FS = field sample; FD = field duplicate

ug/L = micrograms per liter

ntu = Nephelometric turbidity units

U = Target analyte is not detected > the reported detection limit.

B = Compound detected in the blank

N = Compound presumptively present

Bold = Indicates positively detected result

Highlighted cell indicates exceedance of the GA standard

NS = No Standard

* Not analyzed due to insufficient water in Hydrasleeve™

Table 2.5: Surface Water and Sediment Long Term Monitoring Results – May 2015

				Media		
				Loc Name	Sed	
				Sample Date	SED-10	
				Sample ID	5/29/2015	
				QC Code	SED-10	
Analysis	Parameter	Standard	Units		Result	Qualifier
SW8260	2-Butanone	NS	ug/kg		6	
SW8260	Acetone	NS	ug/kg		6.7	
SW8260	Carbon disulfide	NS	ug/kg		1.8	
SW8260	Cis-1,2-Dichloroethene	NS	ug/kg		14	
SW8260	trans-1,2-Dichloroethene	NS	ug/kg		3.1	
SW8260	Trichloroethene	NS	ug/kg		1.8	
SW6010	Lead	500	mg/kg		7.3	

				Media		
				Loc Name	SW	
				Sample Date	SW-10	
				Sample ID	2/20/2014	
				QC Code	SW-10	
Analysis	Parameter	Standard	Units		Result	Qualifier
SW8260	Cis-1,2-Dichloroethene	NS	ug/L		27	
SW8260	Tetrachloroethene	NS	ug/L		2	
SW8260	Trichloroethene	NS	ug/L		6	
SW6010	Lead	NS	ug/L		1.6	UN

Notes:

Standards are applicable standards, criteria, and guidance (SCGs) as defined in the ROD for OU1 (NYSDEC, 1997).

QC Code: FS = field sample

ug/kg = micrograms per kilogram

mg/kg = milligrams per kilogram

ug/L = micrograms per liter

U = Target analyte is not detected > the reported detection limit.

B = Compound detected in the blank

N = Compound presumptively present

Bold = Indicates positively detected result

Highlighted cell indicates exceedance of the GA standard

NS = No Standard

APPENDIX A

FIELD DATA RECORDS

APPENDIX A-1
LONG TERM MONITORING FDR
MAY 2015

Field Data Record
American Valve Manufacturing
Long Term Monitoring

SAMPLER Carl Cadner, Josh Rowe, Dylan Farrell, Jean Firth

OK'd by RCS
1/22/16

DATE Deployed: 02/02/14 DATE Retrieved 5/29/15

Sample Location	Time	Water Level (Ft BTOR)	Turbidity (ntu)	Samples Collected		Comments/Observations
				VOC (8260B)	Lead (6010B)	
MW-1S	0925	6.81	7.28	yes	yes	Beehive removed
MW-1D	0940	6.65	13.0	yes	yes	
X MW-5S	0850	5.11	NM	No	No	Insufficient water to collect full VOC/metals sample. BOW-15.9'
MW-5D	0905	5.40	6.98	yes	yes	
MW-7S	1050	5.23	13.0	yes	yes	Bugs (dead) in bottom of hydrasleeve bag
MW-7D	1055	7.78	3.75	yes	yes	
X MW-22S	1025	10.96	121	No	No	No sample collected due to insufficient water in bag. Similar to other shallow wells with regards to well pressure.
MW-22D	1030	11.17	25.0 N/A (DF)	yes (DF)	yes (DF)	Insufficient water within hydrasleeve. We attempt to use a new hydrasleeve as a bailer to at least take VOC sample.
X MW-23S	1015	10.76	NM	No	No	Attempted to sample hydrasleeve and insufficient H ₂ O within sample bag. Likely due to insufficient pressure allowing water into bag.
MW-23D	1010	9.06	15.6	yes	yes	
SW-10	0945		1.94	yes	yes	
SED-10	0950		NA	yes	yes	collected 1 medium level VOC sample - unpreserved collected 1 Lead 6010B sample which will include percent solids

Notes:
Ft BTOR- feet below top of riser
ntu- nephelometric turbidity units

APPENDIX A-2
SPRING INSPECTION FDRS
MAY 2015

New York Department of Environmental Conservation
 Inactive Hazardous Waste Site
 Inspection Form-Landfills

Checked by:
 Dylan Farrell 06/03/15


Site Name: American Valve		NYSDEC Site Number: 420002	NYSDEC PM: Jean Firm
Site Location: 170 Mansion Ave., Coxsackie, NY		Site Classification # (circle): 1 2 2a 3 ④	Primary Site Contact: Will Welling
Site Inspection Date: 5-29-15	Purpose of Inspection: Site Annual Inspection / Sampling		
Name of Inspector: Karl Ladner + Josh Rowe	Title: Env Tech	Agency/Company: AMEC	Address: 611 Congress St. Pittsford, ME
Phone Number: 207-775-5401			

Landfill Cover System

Cover System Onsite?	Yes	No (Proceed to next Section)		Cover System Observations: Small vegetation growing in drainage swale. (see photo)
Vegetative Cover Condition	Good	Poor	NA	
Evidence of Vegetative Stress	Yes	No	NA	
Mowing Required	Yes	No	NA	
Presence of Debris	Yes	No	NA	
Evidence of Pondered Water	Yes	No	NA	
Exposed Geotextile	Yes	No	NA	
Evidence of Erosion Settlement	Yes	No	NA	
Engineered Drainage Swale Condition	Good	Poor	NA	
Evidence of Leachate Seepage	Yes	No	NA	
Evidence of Erosion	Yes	No	NA	
Presence of Woody Growth	Yes	No	NA	
Animal Burrows	Yes	No	NA	

Last inspection observations (document with photos and describe):

Animal burrows observed on the southern and northeastern portion of the cap. Are burrows still present and how does it compare to the last inspection?

Animal burrows still present. one animal burrow GPS located. for repair.

Woody growth was observed in the swale areas. How does that growth compare to the last inspection?

Improvement noted. however some bush growth is present

Ruts were observed near MPI-7S/7D. how do current conditions compare?

Ruts still present with no change

Has damage to fence near MPI-22S/D been addressed?

Damage still exists. No top rail present at some sections. needs repair.

Stormwater Collection and Drainage

Drainage Channel Condition	Yes	No		Collection System Observations:
Sedimentation	Good	Poor	NA	
Debris	Yes	No	NA	
Erosion/Slope Loss	Yes	No	NA	
Evidence of Leachate Seepage	Yes	No	NA	
Rip-Rap Condition	Good	Poor	NA	
Condition of Synthetic Liner	Good	Poor	NA	
Culvert Condition	Good	Poor	NA	
Other Drainage Structures/Pipes	Good	Poor	NA	
Detention Basin	Good	Poor	NA	

Access Road

Overall Condition	Yes	No		Access Rd Condition Observations:
Potholes Observed	Good	Poor	NA	

APPENDIX D-1

New York Department of Environmental Conservation
Inactive Hazardous Waste Site
Inspection Form-Landfills

Environmental Monitoring Locations			
Is there a monitoring network at the site?	<input checked="" type="radio"/> Yes	<input type="radio"/> No	(Proceed to next)
Monitoring Wells/Piezometers	<input checked="" type="radio"/> Good	<input type="radio"/> Poor	<input type="radio"/> NA
Soil Gas Monitoring Probes	<input checked="" type="radio"/> Good	<input type="radio"/> Poor	<input checked="" type="radio"/> NA
Landfill Gas Vents	<input checked="" type="radio"/> Good	<input type="radio"/> Poor	<input type="radio"/> NA
List other applicable location types and their overall condition			
			Monitoring Network Observations: mw-55 needs concrete repair. (See Photo)

Interviews/Additional Contacts			
Name/Title	Phone:	Company/Entity	Contact Information
None			

Additional Observation Notes:

Will Welling and Zach from the NYSDEC were on-site for a walk through. (10:45 - 11:55) ^{RUSO}

There was no standing water at the time of inspection.

Photograph Log:	
Photograph 1	Top of landfill looking east
Photograph 2	South side perimeter fence and MPI-225/D
Photograph 3	South side perimeter fence without top rail
Photograph 4	Drainage channel w/ small vegetation growth
Photograph 5	MW-55 needing concrete pad repair
Photograph 6	
Photograph 7	
Photograph 8	
Photograph 9	
Photograph 10	

Performance Monitoring	
Were check samples collected during this visit?	<input checked="" type="radio"/> Yes <input type="radio"/> No
Annual Groundwater monitoring was completed	
Sample type collected (circle or write in other):	<input checked="" type="radio"/> Groundwater <input checked="" type="radio"/> Sediment <input type="radio"/> Soil <input checked="" type="radio"/> ^{JWS} Leachate <input type="radio"/> Air <input checked="" type="radio"/> Surface Water
List Parameters/Methods Collected Per Media:	VOE's and Lead in Groundwater, mid-level VOE's and lead in sediment
Analytical Laboratory/Location:	Pace Analytical, Melville, NY
Sample Observations:	NO sample recovery in MW-55, 225, and 235

Well Inspection Checklist

Inspected by: Dylan Farrell, Josh Bowe, Carl Ladner

Checked by: R. I. Wolf BPW 6/3/15

Date: 05/29/15

Well ID	Measuring Point Elevation	Protective Casing Stickup (ft. AGS)	Protective Casing Stickup/Well Difference (ft.)	Depth to Water (ft. TOR)	Well ID Clearly Labeled (Y/N)	Well Lock/Cap (G/F/P)	Protective Casing (G/F/P)	Water in Annular Space (Y/N)	Concrete Pad (G/F/P)	Well Riser/Cap (G/F/P)	Well Obstruction (Y/N)	Comments	BOW
MPI-1S	145.64	32.25	8.00	6.81	yes	G	G	N	G	G	N	Beehive removed from inside of well casing.	21.84
MPI-1D	145.75	35.75	7.50	6.65	yes	G	G	N	G	G	N	Removed insect (wasps) nest from inside	52.39
MW-5S	149.25	28.50	5.50	5.11	yes	G	G	N	P	G	N	well concrete collar has risen from frost heaves	15.9'
MW-5D	148.90	29.50	14.25	5.40	yes	G	G	N	G	G	N		31.85'
MPI-7S	153.77	22.13	8.00	5.23	yes	G	G	N	G	G	N		27.30
MPI-7D	154.77	32.13	9.50	7.78	yes	G	G	N	G	G	N		37.25
MPI-22S	156.35	34.50	1.50	10.96	yes	G	G	N	G	G	N		37.76 BOW: 15.76
MPI-22D	155.79	31.50 NM	1.50 NM	10.96 11.17	yes	G	G	N	G	G	N		37.76 BOW: 37.76
MPI-23S	149.92	31.00	5.50	10.76	yes	G	G	N	G	G	N		15.92
MPI-23D	149.51	32.75	2.63	7.06	yes	G	G	N	G	G	N		34.82

Notes:

G = Good N = No ft. = feet AGS = Above-ground surface
 F = Fair Y = Yes in. = inches TOR = Top of Riser
 P = Poor NA = Not Applicable BOW = bottom of well

Depth to BOW was not measured at the time of the April 2014 inspection so as not to interfere with the hydrosleeve bags. Depth to BOW will be taken the next time the wells are sampled.

Attachment 1 – Spring 2015 Inspection Photographic Log

Client: NYSDEC

Project Number: 3612122252

Site Name: American Valve

Site Location: Cossackie New York.

Photographer:

Karl Ladner

Date:

05/29/2015

Photograph: 1

Direction:

East

Description:

Drainage swale view
east



Photographer:

Karl Ladner

Date:

05/29/2015

Photograph: 2

Direction:

South

Description:

South side perimeter
fence has no horizontal
top rail. Waste high
weeds approaching
MPI-22 S/D



Attachment 1 – Fall Inspection Photographic Log

Client: NYSDEC

Project Number: 3612122252

Site Name: American Valve

Site Location: Cossackie New York.

Photographer:

Karl Ladner

Date:

05/29/2015

Photograph: 3

Direction:

n/a

Description:

South perimeter fence separated from vertical supports.



Photographer:

Karl Ladner

Date:

05/29/2015

Photograph: 4

Direction:

n/a

Description:

Concrete pad around MW-5S heaved up due to frost



Attachment 1 – Fall Inspection Photographic Log

Client: NYSDEC

Project Number: 3612122252

Site Name: American Valve

Site Location: Cossackie New York.

Photographer:

Karl Ladner

Date:

05/29/2015

Photograph: 5

Direction:

East

Description:

Top of landfill looking east towards the entrance gate.



APPENDIX A-3
FALL INSPECTION FDRS
OCTOBER 2015

APPENDIX D-1

New York Department of Environmental Conservation
Inactive Hazardous Waste Site
Inspection Form-Landfills

Site Name: American Valve		NYSDEC Site Number: 420002	NYSDEC PM: <i>Will Wellings</i>
Site Location: 170 Mansion Ave., Coxsackie, NY		Site Classification # (circle): 1 2 2a 3 4	Primary Site Contact:
Site Inspection Date: <i>10/27/15</i>	Purpose of Inspection:		
Name of Inspector: <i>Jeff Tweeddale</i>	Title:	Agency/Company: <i>AMEC</i>	Address:
Phone Number: <i>860 529 7191</i>			

Landfill/Cover System				Cover System Observations:
Cover System Onsite?	Yes	No	(Proceed to next Section)	
Vegetative Cover Condition	<i>Good</i>	Poor	NA	<i>Corrective Actions were performed prior to inspection. Disturbed areas were restored and hydroseed was applied.</i>
Evidence of Vegetative Stress	Yes	<i>No</i>	NA	
Mowing Required	Yes	<i>No</i>	NA	
Presence of Debris	Yes	<i>No</i>	NA	
Evidence of Pounded Water	Yes	<i>No</i>	NA	
Exposed Geotextile	Yes	<i>No</i>	NA	
Evidence of Erosion Settlement	Yes	<i>No</i>	NA	
Engineered Drainage Swale Condition	<i>Good</i>	Poor	NA	
Evidence of Leachate Seepage	Yes	<i>No</i>	NA	
Evidence of Erosion	Yes	<i>No</i>	NA	
Presence of Woody Growth	Yes	<i>No</i>	NA	
Animal Burrows	Yes	<i>No</i>	NA	

Last inspection observations (document with photos and describe):
 Animal burrows observed on the southern and northeastern portion of the cap. Are burrows still present and how does it compare to the last inspection?
Repaired as part of the corrective action

Woody growth was observed in the swale areas. How does that growth compare to the last inspection?
Removed during corrective action

Ruts were observed near MPI-7S/7D. how do current conditions compare?

Has damage to fence near MPI-22S/D been addressed? *Fence repairs were completed*

Stormwater Collection and Drainage				Collection System Observations:
Drainage Channel Condition	Good	Poor	NA	
Sedimentation	<i>Yes</i>	No	NA	
Debris	<i>Yes</i>	No	NA	
Erosion/Slope Loss	<i>Yes</i>	No	NA	
Evidence of Leachate Seepage	Yes	<i>No</i>	NA	
Rip-Rap Condition	<i>Good</i>	Poor	NA	
Condition of Synthetic Liner	<i>Good</i>	Poor	NA	
Culvert Condition	<i>Good</i>	Poor	NA	
Other Drainage Structures/Pipes	<i>Good</i>	Poor	NA	
Detention Basin	Good	Poor	<i>NA</i>	

Access Road				Access Rd Condition Observations:
Overall Condition	Good	Poor	NA	
Potholes Observed	Yes	<i>No</i>	NA	<i>New Access Road was constructed as part of the corrective actions</i>

APPENDIX D-1

New York Department of Environmental Conservation
 Inactive Hazardous Waste Site
 Inspection Form-Landfills

Environmental Monitoring Locations				Monitoring Network Observations:
Is there a monitoring network at the site?	<u>Yes</u>	No	(Proceed to next)	
Monitoring Wells/Piezometers	<u>Good</u>	Poor	NA	
Soil Gas Monitoring Probes	<u>Good</u>	Poor	NA	
Landfill Gas Vents	<u>Good</u>	Poor	NA	
List other applicable location types and their overall condition				

Interviews/Additional Contacts			
Name/Title	Phone:	Company/Entity	Contact Information
N/a			

Additional Observation Notes:

Corrective Actions were performed prior to inspection.
 New fence was installed, damaged fence repaired and a new gate and access road was constructed off Cato St.
 Disturbed soil was graded and hydroseed installed
 Erosion control will remain in place until disturbed areas have been stabilized with vegetative growth.

Photograph Log:
Photograph 1
Photograph 2
Photograph 3
Photograph 4
Photograph 5
Photograph 6
Photograph 7
Photograph 8
Photograph 9
Photograph 10

Performance Monitoring
Were check samples collected during this visit? Yes <u>No</u>
Sample type collected (circle or write in other): Groundwater Sediment Soil Leachate Air Surface Water
List Parameters/Methods Collected Per Media:
Analytical Laboratory/Location:
Sample Observations:

Document: P:\Projects\Projects\COX\36122252\GIS\Map\Documents\Photo_Locations_8.5x11P.mxd
 PDF: P:\Projects\Projects\COX\36122252\GIS\Map\Documents\Photo_Locations_8.5x11P.mxd
 Project: P:\Projects\Projects\COX\36122252\GIS\Map\Documents\Photo_Locations_8.5x11P.mxd
 Date: 10/20/2015 9:11 AM
 Author: brian.peters



Legend

→ Photo Direction and Number	⊕ Fence Gate Location
▲ Approximate Surface Water/Sediment Sample Location	▨ Rip-Rap Lined Swale
⊕ Approximate Existing Well Location (Coordinates Provided by NYSDEC)	⊔ Approximate Fence Location
⋯ Underground piping	⊔ Approximate Landfill Cover Location
	⊔ Approximate Location of Drainage Basin
	▨ Estimated Extent of Lead and Copper in Soil above Residential SCOs

N
 0 100 200 Feet
 Greene County color digital orthoimagery (2013) obtained from New York State GIS Clearinghouse at: gis.ny.gov

Prepared/Date: BRP 10/20/15
 Checked/Date: BW 10/20/15

NYSDEC
 AMERICAN VALVE MANUFACTURING
 COXSACKLE, NEW YORK



LONG TERM MONITORING
 LOCATIONS
 Project 3612122252 Figure 2

Attachment 1 – Pre/Post Repair Photographic Log

Client: NYSDEC

Project Number: 3612122252

Site Name: American Valve Manufacturing

Site Location: Cossackie, New York.

Photographer:

Brad Wolfe

Date:

October 10, 2015

Photograph: 1

Direction:

Northwest

Description:

Excavation area prior to excavation



Photographer:

Jeff Tweeddale

Date:

October 27, 2015

Photograph: 2

Direction:

Northwest

Description:

Excavation area after restoration



Attachment 1 – Pre/Post Repair Photographic Log

Client: NYSDEC

Project Number: 3612122252

Site Name: American Valve Manufacturing

Site Location: Cossackie, New York.

Photographer:

Brad Wolfe

Date:

October 10, 2015

Photograph: 3

Direction:

Northeast

Description:

Area prior to excavation



Photographer:

Jeff Tweeddale

Date:

October 27, 2015

Photograph: 4

Direction:

Northeast

Description:

Excavation area after restoration



Attachment 1 – Pre/Post Repair Photographic Log

Client: NYSDEC

Project Number: 3612122252

Site Name: American Valve Manufacturing

Site Location: Cossackie, New York.

Photographer:

Brad Wolfe

Date:

October 10, 2015

Photograph: 5

Direction:

West

Description:

Landfill topsoil
removal



Photographer:

Jeff Tweeddale

Date:

October 27, 2015

Photograph: 6

Direction:

West

Description:

Landfill topsoil
restoration



Attachment 1 – Pre/Post Repair Photographic Log

Client: NYSDEC

Project Number: 3612122252

Site Name: American Valve Manufacturing

Site Location: Cossackie, New York.

Photographer:

Brad Wolfe

Date:

October 10, 2015

Photograph: 7

Direction:

East

Description:

Landfill cap topsoil removal



Photographer:

Jeff Tweeddale

Date:

October 27, 2015

Photograph: 8

Direction:

East

Description:

Landfill cap restoration



Attachment 1 – Pre/Post Repair Photographic Log

Client: NYSDEC

Project Number: 3612122252

Site Name: American Valve Manufacturing

Site Location: Cossackie, New York.

Photographer:

Brad Wolfe

Date:

October 10, 2015

Photograph: 9

Direction:

North

Description:

Temporary landfill
access road



Photographer:

Jeff Tweeddale

Date:

October 27, 2015

Photograph: 10

Direction:

North

Description:

Access road restoration
and fence installation



APPENDIX B

SOIL REMOVAL FIGURES

APPENDIX B-1
LIMITS OF EXCAVATION

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APPENDIX B-2
CONFIRMATION SAMPLE LOCATIONS



Legend

CS-W98C	Exceeds Copper Residential SCO of 270 mg/kg	▲	Pre-Step Out Sample Location
CS-W04C	Exceeds Copper Residential SCO of 270 mg/kg and Exceeds Lead Residential SCO of 400 mg/kg	■	Confirmation Sample Location
		×-×	Fence
		□	Tax Parcel

Greene County color digital orthoimagery (2013) obtained from New York State GIS Clearinghouse at: gis.ny.gov

NYSDEC
 AMERICAN VALVE MANUFACTURING
 COXSACKIE, NEW YORK



Confirmation Sample Locations
 Project 3612122252
 Figure 4.1

Prepared/Date: BRP 12/11/15
 Checked/Date: BW 12/11/15