



engineering and constructing a better tomorrow

January 30, 2019

Mr. Robert Strang  
Division of Environmental Remediation  
New York State Department of Environmental Conservation  
625 Broadway  
Albany, New York 12233

Subject: **2018 Annual Report**  
**American Valve Manufacturing, Site 420002**  
**MACTEC Engineering and Consulting, P.C., Project No. 3612122252**

Dear Mr. Strang:

MACTEC Engineering and Consulting, P.C., (MACTEC), under contract to the New York State Department of Environmental Conservation (NYSDEC) is submitting this letter report describing the 2018 site activities completed and observations noted at the former American Valve Manufacturing site (Site) (NYSDEC Site 420002) in the village of Coxsackie, New York (Figure 1). This report presents the following:

- Site History
- 2018 Scope of Work
- Institutional Controls / Engineering Controls (IC/ECs)
- Site Inspections and Operation, Monitoring, and Maintenance (OM&M) Activities
- Recommendation(s) for the coming year (2019).

## **Site History**

The Site is located at 170 Mansion Avenue in the Village of Coxsackie, Greene County, New York, and is currently identified as Section 56.14 Block 2 and Lot 37 on the Greene County Tax Map. The original Site was 12.5 acres in size when the Records of Decision (RODs) were signed in 1997 and 1999 (NYSDEC, 1997; NYSDEC 1999). In 2017 the NYSDEC modified the Site boundary and reduced the area of the Site to 9.8 acres, which includes the landfill and associated features (i.e. fence, drainage swales, access road). The Site no longer includes the Northern Parcel. The Site is bounded by undeveloped property (the Northern Parcel) to the north, residential properties and Spencer Boulevard to the south, the village water tower to the east, and CSX railroad to the west. Figure 2 shows the current Site features.

American Valve Manufacturing (AVM) manufactured valves and pipe fittings at this facility between 1904 and 1986. During the time the company was operating, various industrial wastes including spent foundry sand were disposed onsite, including disposal into an unlined landfill on the southern end of the property. After the company went out of business, the abandoned landfill was not properly closed (NYSDEC, 1997).

A Remedial Investigation (RI)/Feasibility Study (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. An 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 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, 2017a). Required SM activities are summarized in Table 1 and include semi-annual Site inspections and long-term monitoring of groundwater, surface water, and sediment (MACTEC, 2017a).

## **2018 Scope of Work**

Work conducted at the Site in 2018 included Site management activities (Site inspections and repairs), and restoration activities associated with remedial action activities conducted in 2017, as described in the sections below.

## **Institutional Controls / Engineering Controls**

Since remaining contamination exists at the Site, institutional controls (ICs) and engineering controls (ECs) are required to protect human health and the environment. ECs include the landfill cover system (or cap), Site access controls including a perimeter fence with locking gates, an engineered Site surface water drainage system, and groundwater monitoring wells.

Requirements/restrictions (ICs) imposed pursuant to the Site Management Plan (SMP) include:

- use of the property for restricted industrial and commercial use provided that the long-term ICs/ECs included in this SMP are employed;
- operation and maintenance of ECs as specified in the SMP;
- inspection of ECs at a frequency and in a manner defined in the SMP.
- prohibition of use of groundwater underlying the property without necessary water quality treatment as determined by the New York State Department of Health or the Greene County Department of Health to render it safe for use as drinking water or for industrial purposes; user must first notify and obtain written approval to do so from the Greene County Department of Health.
- performance of groundwater and other environmental or public health monitoring as defined in the SMP;
- reporting of data and information pertinent to Site management at the frequency and in a manner as defined in the SMP;
- conducting future activities that will disturb remaining contaminated material in accordance with this SMP;
- monitoring to assess the performance and effectiveness of the remedy as defined in the SMP;
- providing access to the Site to agents, employees or other representatives of the State of New York with reasonable prior notice to the property owner to assure compliance with the restrictions identified by the SMP.
- protection and replacement as necessary of on-Site environmental monitoring devices, including but not limited to, groundwater monitoring wells, to ensure the devices function in the manner specified in this SMP.
- prohibition of vegetable gardens and farming, including cattle and dairy farming, on the Site
- prohibition of property used for a less restrictive use without additional remediation and amendment of the SMP by the NYSDEC.

The IC/ECs are in place and observations pertaining to them during 2018 are summarized in the following section.

### **Semi-Annual Site Inspections**

Semi-annual Site inspections were completed on May 17, 2018 and October 30, 2018.

Inspection observations were recorded using post-closure inspection forms, photographic logs, and field notes included with the May and October 2018 Semi-annual Inspection Reports (MACTEC, 2018a and 2018b).

#### **Inspection Observations**

The storm water collection and drainage system, access road, and monitoring well and gas vent network were inspected and observed to be in good condition during the May and October 2018 Site inspections, similar to previous events (MACTEC, 2018a and 2018b). Animal burrows in the landfill cap which were identified during the fall 2017 inspection were repaired in May as described in the following section. However, in October one animal burrow was identified along the western flank of the landfill, and an animal tunnel was observed under the western portion of the fence. Tire marks associated with tree removal were identified during the May inspection, however they were observed to be filling in naturally with soil and vegetation during the October inspection (MACTEC, 2018b). Trees that were cut down during the May 2018 fence repair were still located on the southern portion of the landfill during the October inspection (MACTEC, 2018b).

During the May and October 2018 Site inspections, trees were observed encroaching on the perimeter fence in two locations along the southern and western edges of the Site (MACTEC, 2018a and 2018b).

#### **Inspection Maintenance**

During the May 2018 Site inspection, the three animal burrows observed on the cap were filled with clean soil (MACTEC, 2018a). Trees along the Site's southern fence line that were recommended for removal in the 2017 Periodic Review Report (MACTEC, 2018d) were cut down during the May Site inspection. Advantage Tree (subcontractor) removed these trees on May 16, 2018 and ground two of the three stumps to the ground surface. The third was left at the request of the NYSDEC project manager. Branches from the trees were chipped and removed from the Site; however, due to wet conditions, which precluded access by logging trucks, the logs currently remain onsite inside the fence south of the landfill cap. After the trees

were removed, the damaged section of the fence was repaired by Siena Fence (subcontractor) on May 17, 2018 (MACTEC, 2018a).

No maintenance activities were performed during the October 2018 Site inspection (MACTEC, 2018b).

### **Long Term Monitoring**

Since January 2008, monitoring locations have been sampled at 15-month intervals. The LTM sampling and analysis plan is shown in Table 2. LTM was not conducted in 2018; the next LTM event is scheduled for March 2019.

### **Remedial Action Activities**

Soil removal activities were conducted in 2017 along the northern border of the Northern Parcel. Restoration activities related to this removal action were conducted from May 14 to May 17, 2018 in accordance with the MACTEC Field Activities Plan (MACTEC, 2017b). May 2018 construction activities included surveying property boundaries, re-grading and seeding areas that were excavated during remedial action activities in 2017, grading the excavated soil that was put on the landfill, and replacing the fence that had been removed in 2017 prior to excavation. Activities were conducted by Environmental Waste Minimization, Inc. (EWMI) of Northampton, Pennsylvania, and overseen and inspected by MACTEC's on-site project representative. Inspection reports were prepared at the end of each day and are included in the Remedial Action Completion Report (MACTEC, 2018c). In May 2018, 140 cubic yards of top soil were obtained from Wm. Biers Inc. to regrade low-lying areas on the residential properties specifically in regions of spring flooding. A summary of topsoil analytical results is provided in the Remedial Action Completion Report (MACTEC, 2018c). The fill was placed using a John Deere 650 J XLT Bulldozer and compacted using the bulldozer blade. After excavation areas were regraded, grass seed and straw were laid to complete the restorative process. Trees and shrubs were planted on two properties.

Surveying activities were subcontracted by EWMI to Bob Ihlenberg, PLC of Hudson, New York. In May 2018, Mr. Ihlenberg resurveyed property boundaries to confirm the replacement fence would be installed on the Site property. Survey documentation, including existing conditions, and identification of the soil

excavation area, were provided by EWMI and are included in the Remedial Action Completion Report (MACTEC, 2018c).

### **Conclusions and Recommendations**

The May and October 2018 Site inspections showed the landfill cap and drainage system at the Site are functioning as intended and indicate that the Site management efforts being implemented are consistent with the requirements of the Site Management Plan.

The May 2018 remedial actions successfully regraded and stabilized areas where soil was excavated and the area on the landfill where the excavated soil was placed in 2017. The fence was replaced and repaired where it had been removed for excavation and where dead/dying trees were removed from the southern portion of the Site.

The following actions should be taken to address issues observed during the 2018 Site inspections:

- The animal burrows observed during the October 2018 Site inspection should be filled with soil.
- The logs remaining from the trees which were cut down during May 2018 fence repair activities should be removed from the landfill to prevent additional erosion or damage to the cap.
- Additional vegetation noted in Site inspections to be encroaching along the fence on the southern perimeter should be removed.
- Along the western perimeter, tree trimming should be performed to prevent damage to the fence.
- Repairs to the fence should be made as needed.

If you have questions or concerns, please feel free to call us at 207-775-5401.

Sincerely,

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



Rebecca Brosnan

Site Manager



Jean Firth, P.G.

Project Manager



Enclosures (5)

- Figure 1 Site Location Map
- Figure 2 Site Features
- Table 1 Site Management Plan Requirements
- Table 2 Long Term Monitoring Sampling and Analysis Plan

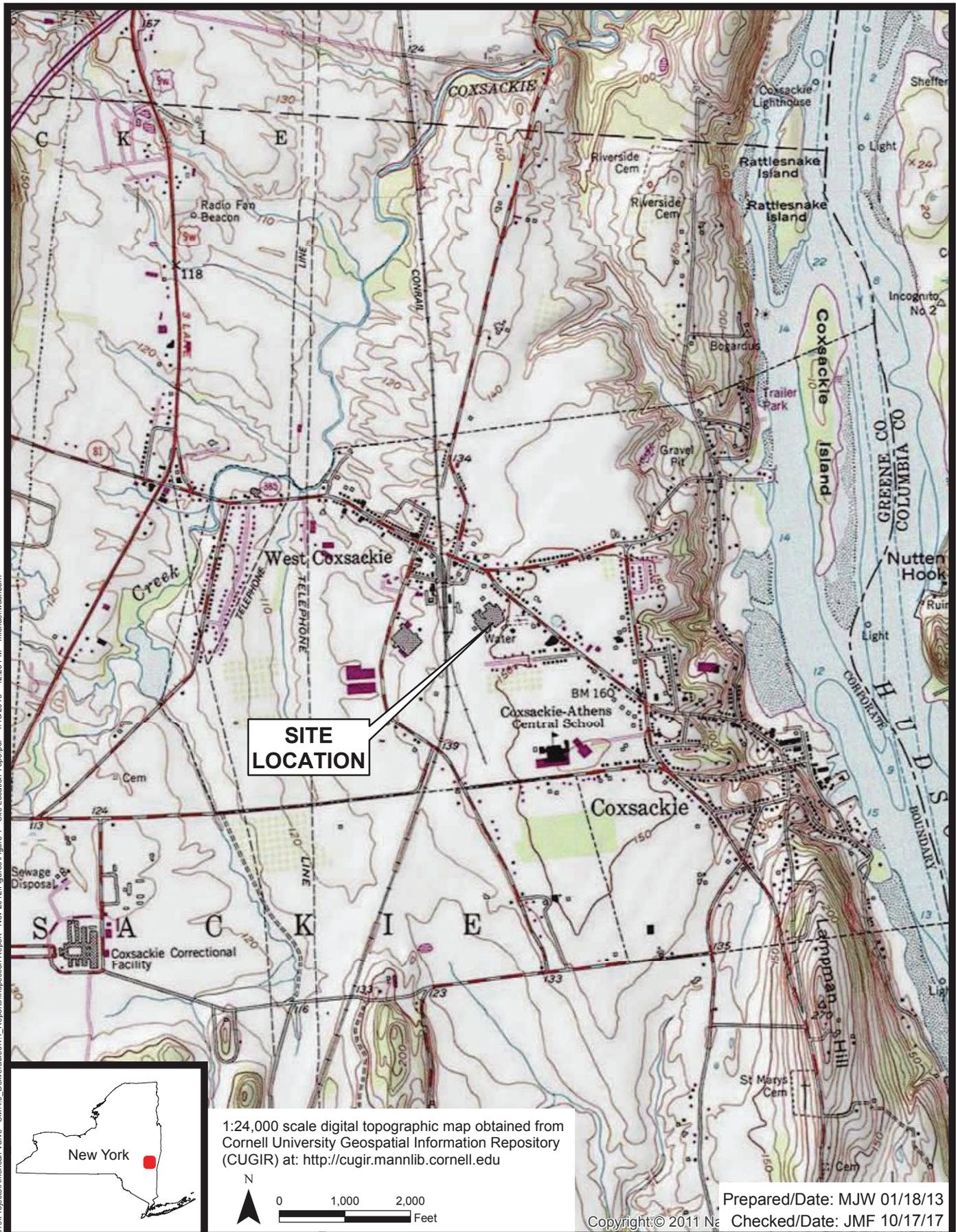
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## **REFERENCES**

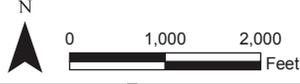
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- MACTEC, 2018d. Periodic Review Report - 2017. January 2018.
- New York State Department of Environmental Conservation (NYSDEC), 1997. Record of Decision. American Valve Manufacturing, OPERABLE UNIT 1, Inactive Hazardous Waste Site, Cocksackie, Greene County, NY, Site No. 420002. March 1997.
- NYSDEC, 1999. Record of Decision. American Valve Manufacturing, OPERABLE UNIT 2, Inactive Hazardous Waste Site, Cocksackie, Greene County, NY, Site No. 420002. March 1999.

## **FIGURES**

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used1\Contract D007619\Projects\American Valve - SW\4.0 Deliverables\4.1 Reports\Inspection Report - Nov 2012\Figures\Figure 1 - Site Location\_Topo.pdf 1/18/2013 12:25 PM michael.washburn



1:24,000 scale digital topographic map obtained from Cornell University Geospatial Information Repository (CUGIR) at: <http://cugir.mannlib.cornell.edu>



Prepared/Date: MJW 01/18/13  
Checked/Date: JMF 10/17/17

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NYSDEC  
AMERICAN VALVE MANUFACTURING  
COXSACKIE, NEW YORK



SITE LOCATION MAP  
PROJECT 3612252  
FIGURE 1



Legend	
	Approximate Surface Water/Sediment Sample Location
	Monitoring Well (Approximate Location)
	Underground piping
	Fence Location and IC/EC Boundary
	Access Road
	Site Boundary
	Rip-Rap Lined Drainage Swale
	Approximate Landfill Cover Location
	Approximate Location of Drainage Basin
	Approximate Location of Excavated Soil from the 2017 Residential Soil Removal Action

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

Prepared/Date: BRP 01/28/19  
 Checked/Date: JMF 01/28/19

NYSDEC  
 AMERICAN VALVE MANUFACTURING  
 COXSACKIE, NEW YORK



SITE FEATURES  
 Project 3612122252  
 Figure 2

## **TABLES**

**Table 1: Site Management Plan Requirements**  
 Inspection and Long Term Monitoring

Component	Action	Required Frequency
<b>LANDFILL</b>		
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
<b>LONG TERM MONITORING</b>		
<b>Ground Water Monitoring Program</b>		
10 monitoring locations	No purge sampling (Hydrasleeve)	Every 15 months (December 2017, March 2019)
<b>Surface Water/Sediment Monitoring Program</b>		
1 monitoring location	Surface Water/Sediment grab sampling	Every 15 months (December 2017, March 2019)

\* 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: Long Term Monitoring Sampling and Analysis Plan**

Sample Locations	Total Lead (6010B)	VOC (8260B)
<b>Monitoring Wells</b>		
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
<b>Surface Water</b>		
SW-10 (Northern Outfall)	X	X
<b>Sediment</b>		
SED-10 (Northern Outfall)	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"