

**PERIODIC REVIEW REPORT (2013)
PRIMOSHIELD INC.
NYSDEC SITE NO. 633027**

WORK ASSIGNMENT NO. D007619-18

Prepared for:

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

Prepared by:

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

MACTEC: 3612122251

FEBRUARY 2014

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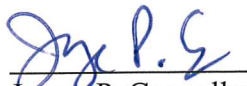
MACTEC Engineering and Consulting, P.C.
Portland, Maine

MACTEC: 3612122251


FEBRUARY 2014

Submitted by:

Approved by:



Jayme P. Connolly
Project Manager



Mark Stelmack, P.E.
Principal Professional



Enclosure 1
Engineering Controls - Standby Consultant/Contractor Certification Form



Site Details		Box 1
Site No.	633027	
Site Name Primoshield, Inc.		
Site Address: 1212 Saint Vincent Street Zip Code: 13501		
City/Town: Utica		
County: Oneida		
Site Acreage: 2.4 <i>0.82</i>		
Reporting Period: December 31, 2012 to December 31, 2013		
	YES	NO
1. Is the information above correct?	<input type="checkbox"/>	<input checked="" 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 checked="" type="checkbox"/>	<input 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.		
<i>Mark Stelmack</i> Signature of Standby Consultant/Contractor		<i>2-10-14</i> Date

SITE NO. 633027

Box 3

Description of Institutional Controls

Parcel

Owner

Institutional Control

318.83-2-33

City of Utica

The site has dated **8/30/2013**
The site has a ROD dated 3/30/1995. A Site Management Plan is in draft. A Deed Restriction is required by VI ICAR memo (2009).

318.83-2-41

City of Utica

The site has dated **8/30/2013**
The site has a ROD dated 3/30/1995. A Site Management Plan is in draft. A Deed Restriction is needed per the VI ICAR memo (2009).

Box 4

Description of Engineering Controls

Parcel

Engineering Control

318.83-2-33

Groundwater Treatment System
Fencing/Access Control

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

318.83-2-41

Groundwater Treatment System
Fencing/Access Control

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

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 Stelmack
Signature of Standby Consultant/Contractor

2-10-14
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

EC	engineering controls
GWCS	groundwater treatment collection system
IC	institutional controls
LTM	long term monitoring
MACTEC	MACTEC Engineering and Consulting, P.C.
mg/L	milligram(s) per liter
NYSDEC	New York State Department of Environmental Conservation
POTW	Publicly Owned Treatment Works
PRR	Periodic Review Report
RAO	remedial action objective
RI	remedial investigation
ROD	Record of Decision
Site	Primoshield site
SM	site management
SMP	site management plan
ug/L	microgram(s) per liter
USEPA	United States Environmental Protection Agency
VOC	volatile organic compound

EXECUTIVE SUMMARY

The Primoshield Inc. Site (Site No. 633027; hereinafter referred to as the Site) is a former metal electroplating facility located at 1212 St. Vincent Street in Utica, Oneida County, New York (Figure ES.1). In March 1995 a Record of Decision (ROD) was signed for the Site; the ROD established the following Remedial Action Objectives (RAOs):

- Reduce, control or eliminate the contamination present within the soils on Site.
- Eliminate the threat to surface waters by eliminating any future contaminated surface water run-off from the contaminated soils on Site, and any potential future discharge from site sewer lines to the Oneida County Sewer System.
- Eliminate the potential for direct human contact with the contaminated soils onsite.
- Mitigate the impacts of contaminated groundwater to the environment and to nearby residents.
- Prevent to the extent possible migration of contaminants in the soils to groundwater.
- Provide for attainment of standards, criteria, and guidance values for groundwater quality at the limits of the area of concern.
- Remediate the Site and adjoining property to provide for future delisting and unrestricted use.

A Site Management (SM) Plan (SMP) has been created which outlines the controls established to meet the ROD. Because remaining contaminated groundwater exists beneath the Site, engineering controls (ECs)/institutional controls are required to protect human health and the environment. EC systems at the Site include: the groundwater collection system, site access controls, and groundwater monitoring wells. The SMP includes a soil excavation plan because post remediation sampling was not conducted to document remaining soil conditions; therefore, contaminant concentrations greater than the Soil Cleanup Objectives may be present at the Site. The remedial processes will be considered to be completed when effectiveness monitoring indicates that the remedy has achieved the RAOs identified by the decision document.

This Periodic Review Report summarizes the SM activities completed at the Site during 2013 and evaluates the effectiveness of the remedial actions. During the reporting period, SM requirements were met. Contaminants of concern at the Site include volatile organic compounds (VOCs), cadmium, chromium, lead, nickel and cyanide. The groundwater collection system discharge

monitoring sample results from March 2013 showed detections of VOCs, nickel, zinc, and copper all below the discharge criteria. MACTEC Engineering and Consulting P.C. concludes that the remedy for the Site is effective.

1.0 SITE HISTORY

Primoshield Inc. (the Site), a former metal electroplating facility, is located at 1212 St. Vincent Street, Utica, New York. The Site is comprised of two parcels owned by the City of Utica totaling approximately 0.82 acres in size and is located between Conkling Avenue and St. Vincent Street. The Site is designated as 1223 Conkling Avenue (tax map parcel number 41) and 1212 St. Vincent Street (tax map parcel number 33) and is located in a mixed commercial/residential area. The St. Agnes R.C. cemetery is located immediately to the southeast of the Site. The Mohawk River is located down-gradient, approximately one and one half miles to the north of the Site. Figure 1.1 shows the current site features.

Primoshield Inc. operated a metal electroplating facility from the early 1970's until August 1985. The property consisted of a factory (production building), a small laboratory and a small storage trailer, all of which were in an advanced state of disrepair at the time the Site was abandoned in 1985. Additionally, a large number of drums and open vats containing chemicals were left behind. Later in that year there was a fire at the facility. The local citizens communicated their health concerns to the New York State Department of Environmental Conservation (NYSDEC), and samples collected in December 1985 showed a high risk to the public from the Site. Consequently, on March 12, 1986, NYSDEC formally petitioned the United States Environmental Protection Agency (USEPA) to remediate the Site, including but not limited to the cleanup and removal of all the surficial and containerized hazardous wastes as well as the installation of a fence and gate system to secure the Site.

Following the fire in 1985, the facility was abandoned by its owners, and the City of Utica assumed ownership of the Site through tax foreclosure. In December 1989, NYSDEC signed a negotiated Consent Order with the City of Utica in which the city agreed to perform a Remedial Investigation (RI)/Feasibility Study to further investigate and remediate residual hazardous waste contamination remaining at the Site. The RI identified cadmium, chromium, nickel, and cyanide in surficial soils and trichloroethene, 1,1,1-trichloroethane, 1,1-dichloroethane, and chromium in groundwater at the Site. The site was re-assigned by NYSDEC as a State Superfund project in November of 1996 because the City of Utica had inadequate funds to complete the remediation.

According to the Record of Decision (ROD), signed on March 30, 1995, the preferred remedy was:

- Excavation and disposal of hazardous and non-hazardous soils,
- Building demolition, and installation,
- Operation, maintenance and monitoring of a groundwater collection system, the purpose of which is to intercept and collect contaminated groundwater.

The originally installed groundwater treatment system was designed to intercept and collect the plume of contaminated groundwater and treat the water by carbon filtration, with effluent discharged to the Publicly Owned Treatment Works (POTW). However, because contaminated groundwater concentrations decreased to levels below the discharge criteria, the carbon filters have not been in use since 2001 and the groundwater treatment system continues to be used for groundwater collection to intercept and collect contaminated groundwater. Site Management (SM) is currently underway and consists of:

- Semi-annual site inspections;
- Semi-annual POTW discharge monitoring; and
- Long term monitoring (LTM) consisting of five quarterly (every 15 months) groundwater monitoring.

In 2013, three site inspections were performed, and the LTM event was conducted in March 2013.

2.0 SITE MANAGMENT STATUS

This Periodic Review Report (PRR) documents SM activities from January 2013 through December 2013 and includes:

- January 2013 Site Inspection;
- March 2013 Site Inspection and Discharge Monitoring (MACTEC Engineering and Consulting, P.C. [MACTEC], 2013c);
- March 2013 LTM;
- September 2013 Inspection, Discharge Monitoring, and Maintenance.

This report was completed using site-specific documentation including the Site's ROD (NYSDEC, 1995), the SM Plan (SMP) (MACTEC, 2013b), periodic site inspection and environmental monitoring reports (MACTEC, 2013d; MACTEC, 2013c; and MACTEC, 2013a). This review was conducted to confirm that controls established according to the SMP are operational and effective, that the SM requirements are being implemented and conducted accordingly, and that the remedy remains protective of the environment and/or public health.

SM requirements, as detailed in the SMP, are outlined in Table 2.1. These include:

- Semi-annual inspections (changed from quarterly in March of 2013 based on the findings of the 2012 PRR) of institutional/engineering controls (IC/ECs) at the Site;
- Semi-annual discharge monitoring;
- and LTM of groundwater from existing monitoring wells, see Figure 2.1.

Existing wells are monitored to evaluate contaminant of concern concentrations (i.e., cadmium, chromium, lead, nickel, cyanide and volatile organic compounds [VOCs]) in groundwater vs. site cleanup goals (New York State Class GA Standards [6 New York Codes, Rules and Regulations Parts 700-705]).

A summary of SM activities completed during the reporting period and an evaluation of the performance, protectiveness, and effectiveness of the remedy is provided below.

2.1 INSTITUTIONAL CONTROLS/ENGINEERING CONTROLS PLAN

Because contaminated soil exists beneath the ground surface, IC/ECs are required to protect human health and the environment. Engineering control systems at the Site include: the groundwater collection system, site access controls, and groundwater monitoring wells.

Restrictions are imposed pursuant to the SMP and include:

- Allow access to the Site for operation of the groundwater collection system (GWCS).
- Groundwater extraction, for anything other than collection at the GWCS, is prohibited.
- Animal production for human consumption is prohibited
- Vegetable gardens are prohibited onsite unless planted in gardens where soil achieves the residential use soil clean-up objectives.
- Site use is limited to industrial uses only.
- Site owner(s) must follow the requirements of this SMP.
- Excavation on the property is prohibited without written permission from the NYSDEC.

Based on the inspections conducted in 2013, there has not been a change in property use and the Site is in compliance with these ICs. Inspections of the EC were conducted (January, March, and September) as well as the semi-annual discharge monitoring (March and September). The ECs are in place; however as noted during the site inspections (See Appendix A), repairs of the chain-link fence are needed.

Other notable EC observations made during 2013 include:

- In March 2013, the basket strainers were taken offline with the permission of the NYSDEC and Oneida County Department of Water Quality & Pollution Control (see Section 2.3 below).
- In June 2013 MACTEC staff conducted a site visit to check that the groundwater collection system was functioning properly without the basket strainers. The groundwater collection pump was found not working and could not be started again at that time. The NYSDEC project manager conducted a subsequent site visit and was able to re-start the pump.
- During MACTEC's June 2013 site visit, the nearest downgradient neighbor communicated to MACTEC personnel that during the last heavy rain fall the northern most clean-out associated with the groundwater collection system had overflowed into her back yard.
- In August 2013, the pump was found not operating again. It was determined that the pump needed to be replaced. The pump replacement was completed in late August.

- During the September 2013 inspection, maintenance activities were conducted on the collection vault and pump. The pump was lifted off the bottom of the vault and placed on pavers to reduce the amount of sediment flowing through the pump and into the collection system. During this activity remnants of old equipment no longer in use were also removed from the vault (floats and wiring) and pavers were placed around the vault to prevent debris from falling into it when opened.

2.2 LONG TERM MONITORING PLAN

The requirement for the groundwater monitoring program in the SMP includes groundwater elevation monitoring, monitoring well inventory and repair, and groundwater sampling and analysis. Monitoring locations have been sampled since 1999 and are currently scheduled for sampling at 15 month intervals. The Site monitoring locations are shown on Figure 2.1; Table 2.2 summarizes the LTM sampling and analysis plan.

2.2.1 Groundwater Elevation Monitoring

Groundwater elevations were measured in March 2013 and compared to the water level measurements from previous years (Table 2.3). Measured water levels and interpreted groundwater flow direction from March 2013 are consistent with those reported previously.

2.2.2 Monitoring Well Inventory and Repair

Monitoring well inspections were conducted in March 2013 in conjunction with the LTM sampling event. The majority of the monitoring wells were observed to be in good condition; however, two wells exhibited cracking of the concrete pad and were found to be tilted (P-101S and P-101D) and another the concrete pad was slightly heaved (P-108).

2.2.3 LTM Sampling and Analysis

Environmental samples were collected in March 2013 as part of the LTM program (see Table 2.4). Shallow groundwater contamination at concentrations exceeding Class GA standards was observed as shown on Figure 2.1. The GA standard for 1,2-dichlorethane (0.6 microgram per liter [ug/L]) was exceeded in P-103 (0.96 ug/L), as well as the standard for trichloroethene (5 ug/L) and nickel (100 ug/L) in P-107S (7.4 ug/L and 139 ug/L respectively) (See Appendix B).

2.2.4 Performance Monitoring

Discharge of effluent from the groundwater collection system is permitted by the Oneida County Department of Water Quality & Water Pollution Control. Groundwater Remediation Discharge Permit No. GW-040 establishes semiannual monitoring requirements and discharge criteria. During the reporting period, effluent samples were collected (in March and September) and analyzed by USEPA Methods: VOCs by 624; copper, nickel and zinc by 200.7, cyanide by 9012B, and pH by SM4500-H+. The following compounds were detected; as shown none of the concentrations exceeded the discharge criteria.

POLLUTANT/PARAMETER	PERMITTED LIMIT	March 2013 Results	September 2013 Results
pH (units)	5.0-12.5	7.19	7.24
Cadmium, mg/L	1	0.00035U	0.005U
Chromium, mg/L	5	0.00082U	0.0010U
Copper, mg/L	3	0.0029	0.020U
Lead, mg/L	5	0.00081U	0.050U
Nickel, mg/L	2	0.037	0.043
Zinc, mg/L	4	0.0028	0.020U
Cyanide, mg/L	3	0.01U	0.01U
Total VOCs, mg/L	2.0*	0.024	0.030

*Total Volatile Organics is the sum of all detectable VOCs substances as determined using the USEPA Method 624.

U= Not Detected; value represents quantization limit.

Bold values indicate a detected pollutant/parameter

mg/L = milligrams per liter

2.3 O&M PLAN

According to the SMP, site wide inspections are to be conducted quarterly; however based on recommendations in the 2012 PRR, the frequency was reduced to semi-annual beginning with the March 2013 inspection. The semi-annual inspections include the inspection and maintenance of the perimeter fence, on-site and off-site monitoring wells, and inspection and monitoring of the groundwater collection system.

Inspections were conducted in January, March, and September. Inspection observations were recorded using Inspection Forms, photographic logs, and field notes included with the various reports (see Appendix A).

The reading from the flow totalizer taken in January 2013 was observed to be low (274,114 gal). The on-line strainer was observed to be clogged with fine silt and organic debris. The strainer was cleaned and the flow was observed to resume to normal. Both strainers were put on-line in parallel to minimize the time frame for clogging. A review of the system design revealed the purpose of the strainers was to remove particulate before the carbon filters. Particulates can clog the carbon thus requiring more frequent changes. Because the system is no longer used for treatment and the carbon filters are no longer used, the basket strainers were deemed not necessary. MACTEC discussed the need for the strainers with the Oneida County Department of Water Quality & Pollution Control; the agency agreed that solids removal is not a condition of permit GW-040. In March the strainers were removed from the system. The flow totalizer reading for March was 493,359 gal. The flow totalizer reading for September was observed to be 551,885 gal (see Appendix A for the Operation and Maintenance Tracking Log).

Between at least December 2010 and November 2012 the groundwater collection system at the site was not operating. Groundwater levels were measured when the system was shutdown in December 2011, after the system was running for approximately one month in December 2012, and again in March 2013. An evaluation of water levels when the system was not operating and after it was restarted shows no significant difference in elevation (Table 2.3).

3.0 CONCLUSIONS AND RECOMMENDATIONS

Current SM activities being conducted are in compliance with the requirements of the Site's SMP. Based on a review of the data collected during this reporting period the remedy continues to be protective of public health and the environment and is in compliance with the ROD.

Sample analysis shows effluent from the groundwater collection system met the requirements of the Oneida County Department of Water Quality & Pollution Control discharge permit at the time of sample collection. The site inspections conducted in 2013 indicate that the collection system is functioning properly and ICs are in place and effective.

The groundwater collection system is currently operating and achieving its objective of intercepting and collecting contaminated groundwater.

Based on the findings presented in this PRR, the following recommendations are provided:

ICs/ECs Plan

- Conduct repairs to the fence to ensure site access is controlled. MACTEC is in the process of coordinating with a fence contractor to complete needed repairs by the spring.
- Continue to conduct inspections of the facility as required by the SMP to ensure the EC/ICs are in place and are effective.

Monitoring Plan

- Continue to conduct performance monitoring of the groundwater collection system discharge as required by the POTW permit.
- Conduct LTM to evaluate the effectiveness of the groundwater collection system as required by the SMP.

ROD Remedial Action Objectives:

Based on a review of available historical documentation, the following Remedial Action Objectives (RAOs) for the Site have been achieved:

- Reduce, control or eliminate the contamination present within the soils on site.

- Eliminate the threat to surface waters by eliminating any future contaminated surface water run-off from the contaminated soils on site, and any potential future discharge from site sewer lines to the Oneida County Sewer System.
- Prevent to the extent possible migration of contaminants in the soils to groundwater.

Based on the findings presented herein, the SMP for the Site is effective in monitoring the status of the following RAOs:

- Eliminate the potential for direct human contact with the contaminated soils onsite.
- Mitigate the impacts of contaminated groundwater to the environment and to nearby residents.

Based on a review of available historical data the following RAOs have not been achieved:

- Provide for attainment of standards, criteria, and guidance values for groundwater quality at the limits of the area of concern.
- Remediate the Site and adjoining property to provide for future delisting and unrestricted use.

To meet these RAOs, the following is recommended:

- Collect soil samples onsite to evaluate if the current concentrations of site contaminants of concern meet the Soil Clean-up Objectives for unrestricted use.
- Evaluate contaminant of concern concentrations in groundwater relative to nearby receptors to determine if there is any exposure from groundwater or soil vapor intrusion. This can be accomplished by installing a monitoring well at a location that is downgradient of Trench 2 and upgradient of the nearby residence.

4.0 REFERENCES

MACTEC Engineering and Consulting, P.C. (MACTEC), 2013a. Site Inspection Report, Primoshield Inc. – September 2013.

MACTEC, 2013b. Site Management Plan, Primoshield Inc. – August 2013

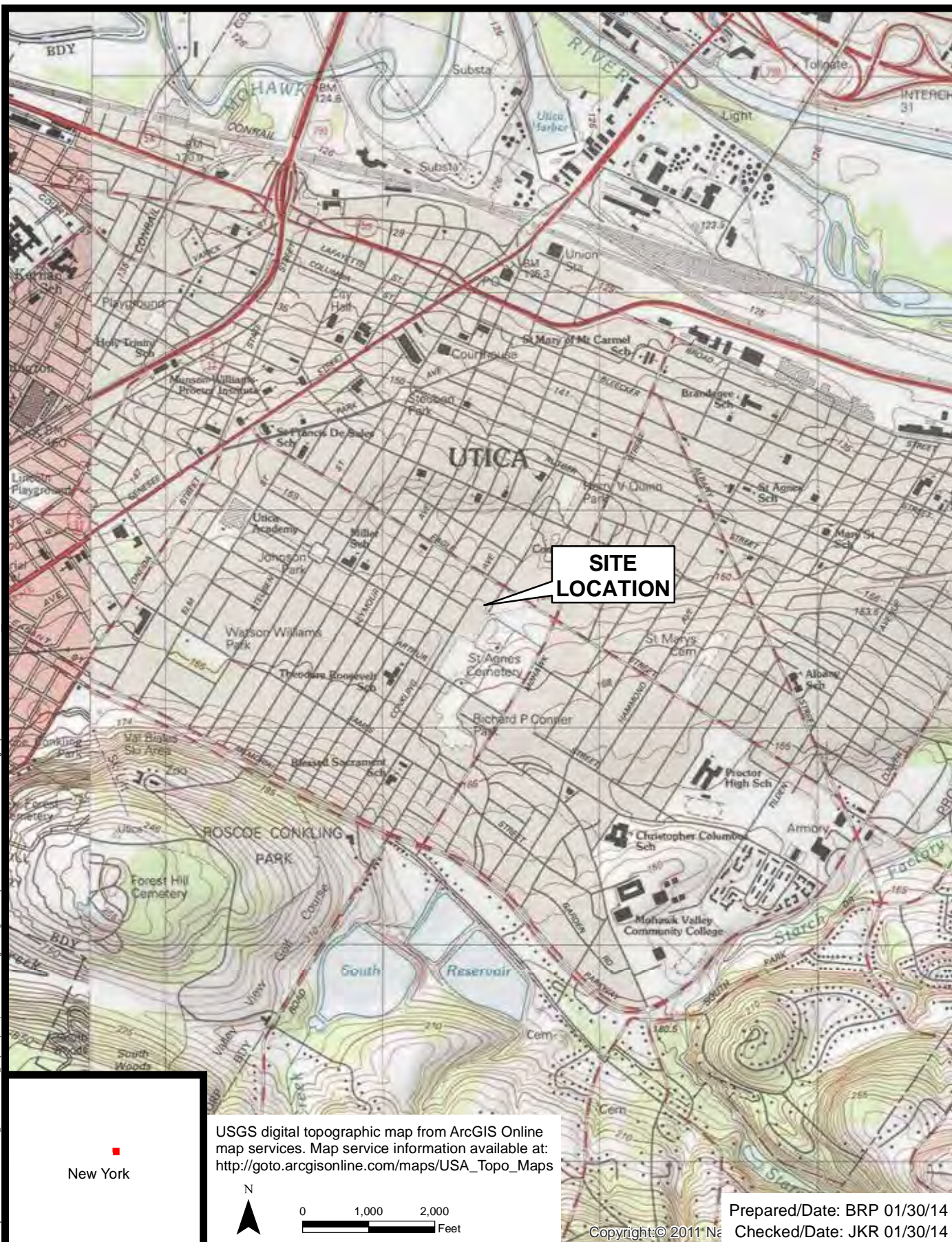
MACTEC, 2013c. Site Inspection and Discharge Monitoring Report, Primoshield Inc. – March 2013.

MACTEC, 2013d. Site Inspection Report, Primoshield Inc. – January 2013.

New York State Department of Environmental Conservation, 1995. Primoshield Plating Site, Site Number 633027, City of Utica Oneida County, New York, Record of Decision. March, 1995.

FIGURES

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PRIMOSHIELD INC.
UTICA, NEW YORK



SITE LOCATION
Project 3612112176 Figure ES.1



Legend

- | | |
|-------------------------------|-------------------------------------|
| ● Cleanout access point | --- Perimeter Fence |
| ⊕ 4-foot diameter manhole | --- Perimeter Fence Gate |
| Ⓢ Discharge to sanitary sewer | ➡ Approximate GW flow direction |
| ⊕ Groundwater Monitoring Well | - - - Underground collection trench |



0 50 100
Feet

Oneida County color digital orthoimagery (2008) from New York
 State GIS Clearinghouse at: <http://www.nysgis.state.ny.us>

Prepared/Date: BRP 01/30/14
 Checked/Date: JMF 01/30/14

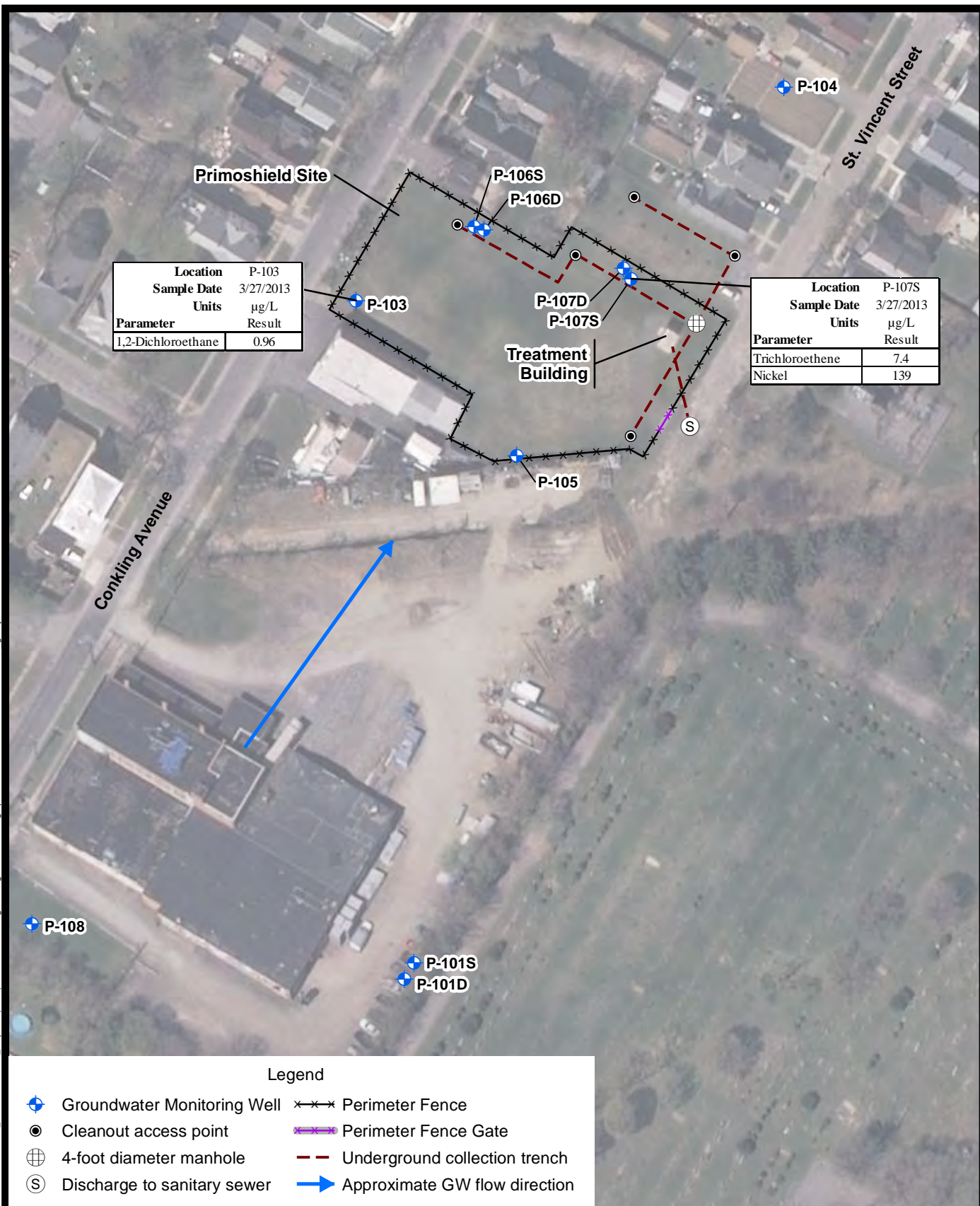
PRIMOSHIELD INC.
 UTICA, NEW YORK



SITE PLAN

Project 3612122251 Figure 1.1

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ysect\Contract D007619\Projects\Primoshield - SM\4.0_Deliverables\4.1_Reports\2013_PRR Jan 2014\figures\Figure 2.1 Findings.pdf 1/30/2014 10:28 AM rebecca.gabryszewski



0 50 100
Feet

Oneida County color digital orthoimagery (2008) from New York
State GIS Clearinghouse at: <http://www.nysgis.state.ny.us>

Prepared/Date: BRP 01/30/14
Checked/Date: RG 01/30/14

PRIMOSHIELD INC.
UTICA, NEW YORK



March 2013 Findings
Project 3612122251 Figure 2.1

TABLES

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

Component	Action	Required Frequency
TREATMENT SYSTEM		
Treatment System	Inspection	Semi-annually in spring and summer
Effluent	Grab sample	Semi-annually in spring and summer
ENVIRONMENTAL MONITORING		
Groundwater Monitoring Program		
10 monitoring locations	Low flow sampling	Every 15 months (June 2014, September 2015, December 2016)
Groundwater Monitoring System	Inspection	Every 15 months (June 2014, September 2015, December 2016)

Table 2.2: Sampling and Analysis Plan

Performance Monitoring - Semi-Annual		
Sample Locations	pH (150.1) Metals (200.7)* Cyanide (9010)	VOC (624)
Effluent	X	X
Monitoring Wells - 15 Month**		
Sample Locations	Metals (6010B)	VOC (8260B)
P-103	X	X
P-104	X	X
P-105	X	X
P-106S	X	X
P-106D	X	X
P-107S	X	X
P-107D	X	X
P-108	X	X
P-101S	X	X
P-101D	X	X

Notes:

*- Cadmium, chromium, copper, lead, nickel and zinc.

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

VOCs = Volatile Organic Compounds

** - Samples collected in March 2013; next monitoring event is June 2014.

Table 2.3: Summary of Monitoring Well Measurements

Primoshield Site 1212 St Vincent Street, Utica, NY.

Well ID	Ground Elevation (feet msl)	Estimated Measurement Point Elevation (feet msl)	Stickup on Casing (feet)	TOC to TOR (feet)	12/20/2011 Depth to BOW (feet TOR)	12/20/2011 Water Level (feet TOR)	12/11/2012 Water Level (feet TOR)	3/27/2013 Water Level (feet TOR)	12/20/2011 Water Elevation (feet msl)	12/11/2012 Water Elevation (feet msl)	3/27/2013 Water Elevation (feet msl)
P-101-S	525.0	Unknown	NM	NM	18.5	>18.45 (DRY)	>18.45 (DRY)	>18.45 (DRY)	NM	NM	NM
P-101-D	525.0	527.2	2.6	0.39	86.9	28.18	28.48	28.07	499.03	498.73	499.14
P-103	521.8	524.3	2.8	0.34	18.1	7.04	6.74	6.77	517.22	517.52	517.49
P-104	516.1	518.0	2.2	0.33	17.4	6.15	4.25	5.22	511.82	513.72	512.75
P-105	522.7	525.1	2.9	0.48	18.2	4.75	3.85	4.35	520.37	521.27	520.77
P-106-S	521.1	524.8	4.0	0.27	18.5	7.38	5.81	6.62	517.45	519.02	518.21
P-106-D	520.8	524.3	3.9	0.39	77.6	28.81	29.11	28.73	495.50	495.20	495.58
P-107-S	519.4	522.1	2.9	0.21	17.2	6.43	4.89	6.43	515.66	517.20	515.66
P-107-D	519.3	522.0	3.2	0.50	77.7	29.28	29.57	29.13	492.72	492.43	492.87
P-108	530.0	532.2	2.5	0.27	18.7	5.91	5.96	5.31	526.32	526.27	526.92

Notes:

- 1) Ground Elevation from monitoring well logs included in Monitoring Plan for Primoshield Plating January 2004.
- 2) Measurement Point Elevation calculated using the ground elevation and field measurements of casing stickup and the distance from the top of riser to the top of casing; therefore, the water elevations are approximate
- 3) NM = Not measured

Table 2.4: Summary of Compounds Detected - March 2013

Location Sample ID Sample Date Qc Code			P-101D 633027P101DXX 3/27/2013 FS		P-103 633027P103XX 3/27/2013 FS		P-104 633027P104XD 3/27/2013 FD		P-104 633027P104XX 3/27/2013 FS		P-105 633027P105XX 3/26/2013 FS	
Parameter	GA	Units	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
VOCs												
1,1,1-Trichloroethane	5	µg/L	5 U		4.6 J		5 U		5 U		5 U	
1,1-Dichloroethane	5	µg/L	5 U		1.3 J		5 U		5 U		5 U	
1,2-Dichloroethane	0.6	µg/L	5 U		0.96 J		5 U		5 U		5 U	
Bromomethane	5	µg/L	5 U		5 U		5 U		5 U		5 U	
Trichloroethene	5	µg/L	5 U		0.94 J		5 U		5 U		5 U	
Metals (Total)												
Cadmium	5	µg/L	0.353 U		0.353 U		0.353 U		0.353 U		0.353 U	
Chromium	50	µg/L	0.816 U		0.816 U		0.816 U		0.816 U		0.816 U	
Copper	200	µg/L	7.3 U		1.8 U		2.3 U		3.3 U		1.8 U	
Nickel	100	µg/L	1 U		2 J		1 U		1 U		1 U	
Zinc	2000	µg/L	7.4 U		2 U		2.7 U		2.6 U		2.2 U	
Metals (Dissolved)												
Cadmium	5	µg/L										
Chromium	50	µg/L										
Copper	200	µg/L										
Nickel	100	µg/L										
Zinc	2000	µg/L										

Notes:

Only compounds detected shown

GA = NYS Class GA groundwater quality standard,
 Part 703.

Shaded/Bold = Result exceeds GA standard.

J = result estimated

U = not detected

ug/L = micrograms per liter

Blank cell represents compound not tested for.

Table 2.4: Summary of Compounds Detected - March 2013

Location			P-106D		P-106S		P-107D		P-107S		P-108	
Sample ID			633027P106DXX		633027P106SXX		633027P107DXX		633027P107SXX		633027P108XX	
Sample Date			3/27/2013		3/27/2013		3/27/2013		3/27/2013		3/27/2013	
Qc Code			FS		FS		FS		FS		FS	
Parameter	GA	Units	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
VOCs												
1,1,1-Trichloroethane	5	µg/L	5 U		0.64 J		5 U		0.93 J		5 U	
1,1-Dichloroethane	5	µg/L	5 U		5 U		5 U		1.4 J		5 U	
1,2-Dichloroethane	0.6	µg/L	5 U		5 U		5 U		5 U		5 U	
Bromomethane	5	µg/L	5 U		5 U		5 U		5 U		5 U	
Trichloroethene	5	µg/L	5 U		0.6 J		5 U		7.4		5 U	
Metals (Total)												
Cadmium	5	µg/L	0.353 U		0.353 U		0.353 U		0.849 J		0.353 U	
Chromium	50	µg/L	1.2 U		0.816 U		11.3		6.6 J		0.816 U	
Copper	200	µg/L	3.1 U		1.8 U		14.4 U		5.4 U		1.8 U	
Nickel	100	µg/L	1 U		1 U		10.5 J		139		1 U	
Zinc	2000	µg/L	5.6 U		2 U		26.8		20.2		1.2 U	
Metals (Dissolved)												
Cadmium	5	µg/L					0.353 U		0.571 J			
Chromium	50	µg/L					3 U		1.1 U			
Copper	200	µg/L					6.6 U		2.9 U			
Nickel	100	µg/L					3.6 J		101			
Zinc	2000	µg/L					9.8 U		9.2 J			

Notes:

Only compounds detected shown

GA = NYS Class GA groundwater quality standard,
 Part 703.

Shaded/Bold = Result exceeds GA standard.

J = result estimated

U = not detected

ug/L = micrograms per liter

Blank cell represents compound not tested for.

APPENDIX A

SITE INSPECTION FORMS AND PHOTOGRAPHS (2013)

Primoshield Operating Parameters

Date	Time	Initials	Description	Totalizer (gal)	# Days (since last reading)	# Gallons (since last reading)	Approx Flow at totalizer (gpm)	Total Flow (gal / mo)	Comments
Aug-11 12/20 - 21/2011		AMEC AMEC	Installed new sump pump in vault so that CSE not required Site Inspection	not in operation					pump installation
1/16/2012		AMEC	pumped ~ 5100 gal and had to clean filters 5 times	not in operation					pump troubleshooting
			System not in operation while DEC performed troubleshooting on pump and PLC						
			System Start-up						
11/6/2012	9:50 9:51 13:30	JK, AMEC	Qtrly Insepction & Semiannual Discharge Sampling Depart Site	147,325 147,354 147,365 147,465 150,660	0.01	3,335			system in automode; pump not running system running for 1 min system running for 1 min system running for 3 min
12/11/2012		JK, AMEC	WLM event - checked pump vault upon site visit on-line basket strainer clogged; observed very low flow switched to off-line strainer; flow resumed cleaned clogged strainer and put on-line	179,400	35	28,740			low flow at totalizer upon arrival to site flow resumed after cleaning basket strainers
1/4/2013		WW, DEC	on site to shovel; pump observed in working order	263,384	24	83,984			
1/10/2013	8:15 10:30	JK, AMEC	Qrtly Inspection On-line strainer was observed clogged with fine silt and organic debris (debris may have entered from opening vault cover). Low flow (~ 5 gpm). Strainer was cleaned; flow resumed (~ 30 gpm) Both strainers on-line in parallel to minimize clogging	274,114 274,927	6 6	10,730 813	5 30		low flow at totalizer upon arrival to site photo taken flow resumed after cleaning basket strainer
3/26/2013	9:55	JK	System in auto; cycling upon arrival. Basket strainers operating in tandem. Cleaned basket strainers. Basket strainers removed.	493,359	75	218,432	not recorded		
6/27/2013		CL/KL	System check to evaluate operation without strainers - system observed non-operational. System not operational - DEC on site to evaluate system. Manually re-set the motor starter; the pump turned on. Measured 30 gpm flow. Didn't remove manhole cover, but vault assumed to be full due to recent heavy rains & flooding in the area.	516,562 516,562	93 6	23,203 -	not recorded 30		water level in the manhole was quite high measuring 3.25' from the top of the metal rim of the manhole which is approximately equal to the ground surface
9/19/2013 9/19/2013		DL/KL BG	Lift pump and place on pavers. Removed old equipment (floats & wiring) System in auto; cycling upon arrival.	551,885	78	35,323	not recorded		

Primoshield Plating, Inc.

1/10/13 - Quarterly Inspection

3612122251.03

0815 Jeri Kiburz (AMEC) onsite. System in auto and operating ok., however, there is very little flow ~5 gpm. Online basket strainer is clogged. Switched strainers and flow increased to ~30 gpm. Totalizer reading upon arrival was 274,114 gal.

0830 Performed quarterly inspection

0855 Pump shut off - system cycling.

Opened vault manhole cover and inspected vault. Water level in between mid and low floats. Electrical box appears dry and vault appears ok. Could hear water trickling into vault from trenches.

Took photos of vault and closed manhole.

0920 Took photos of all system piping - influent to effluent
Took photos of treatment bldg. inside and outside.

1000 Opened basket strainers and cleaned both.

Strainer was clogged with fine silt and some organic debris which probably entered the vault when the manhole cover was removed for vault inspections.

After cleaning the clogged filter, observed a small (~2 in.) tear in the stainless steel mesh (Photos taken)

Reassembled basket strainers and tested for leaks.

There were no leaks observed.

Left strainers to operate in tandem so that both would be online and accepting water.

Flow rate after reassembly - 30 gpm.

Totalizer reading upon departure - 274,927 gal.

1045 Secured site / offsite.

ELG

Inspection Form-Treatment Systems

New York Department of Environmental Conservation
Inactive Hazardous Waste Site

Site Name: <u>Primoshield Plating, Inc.</u>		NYSDEC Site Number: <u>3027</u>	NYSDEC PM: <u>Will Wellington</u>
Site Location: <u>Utica, NY</u>		Site Classification # (circle): 1 2 2a 3 4	Primary Site Contact: <u>NYSDEC PM</u>
Site Inspection Date: <u>1/10/13</u>		Purpose of Inspection: <u>Quarterly O + M Inspection</u>	
Name of Inspector: <u>Jeri Kiburu</u>		Title: <u>Env. Tech</u>	Agency/Company: <u>AMEC</u>
Phone Number: <u>518-848-8426 (cell)</u>		Address:	

Treatment Systems

System Status				General Observations:
System in Operation During Visit?	<u>Yes</u>	<u>No</u>		
Manned on a Fulltime basis?	<u>Yes</u>	<u>No</u>		
Maintenance Logs Current?	<u>Yes</u>	<u>No</u>	<u>NA</u>	
Equipment Calibration Logs Current?	<u>Yes</u>	<u>No</u>	<u>NA</u>	
Discharge Monitoring				
Does the system require a discharge permit or discharge to a POTW?	<u>Yes</u>	<u>No</u>		
Is Permit Performance Monitoring Implemented?	<u>Yes</u>	<u>No</u>		
Condition of Operational Controls				
Condition of Gauges	<u>Good</u>	<u>Poor</u>	<u>NA</u>	
Condition of flow meters	<u>Good</u>	<u>Poor</u>	<u>NA</u>	
Condition of System Alarms	<u>Good</u>	<u>Poor</u>	<u>NA</u>	
Condition of Pumps	<u>Good</u>	<u>Poor</u>	<u>NA</u>	
Condition of Flow Pipes or Hoses	<u>Good</u>	<u>Poor</u>	<u>NA</u>	
Pipes Labeled with Direction of Flow and Contents	<u>Yes</u>	<u>No</u>	<u>NA</u>	
Condition of Valves	<u>Good</u>	<u>Poor</u>	<u>NA</u>	
Condition of Containment Structures (berms etc.)	<u>Good</u>	<u>Poor</u>	<u>NA</u>	
Evidence of Leaking	<u>Yes</u>	<u>No</u>	<u>NA</u>	
Condition of Feed/Extraction Pumps	<u>Good</u>	<u>Poor</u>	<u>NA</u>	
Vaulted Area Condition	<u>Good</u>	<u>Poor</u>	<u>NA</u>	
Lighting in Work Areas Adequate	<u>Yes</u>	<u>No</u>	<u>NA</u>	
Condition of Collection/Discharge Trenches				
Clean of Debris	<u>Good</u>	<u>Poor</u>	<u>NA</u>	
Evidence of Sedimentation	<u>Good</u>	<u>Poor</u>	<u>NA</u>	
Air Stripper Condition				
Noticeable Odors	<u>Yes</u>	<u>No</u>	<u>NA</u>	
Air Emission Permit Required	<u>Yes</u>	<u>No</u>	<u>NA</u>	
Permit Performance Monitoring Implemented	<u>Yes</u>	<u>No</u>	<u>NA</u>	
Condition of Storage Tanks/Containers				
Evidence of Leaks	<u>Yes</u>	<u>No</u>	<u>NA</u>	
Tank Compatible with Contents	<u>Yes</u>	<u>No</u>	<u>NA</u>	
Evidence of Leaks	<u>Yes</u>	<u>No</u>	<u>NA</u>	
Labeled Appropriately	<u>Yes</u>	<u>No</u>	<u>NA</u>	
Condition of Filter Presses				
Condition of Extraction Wells/Recharge Wells	<u>Good</u>	<u>Poor</u>	<u>NA</u>	

← condition good, however, unsure if they are working properly as there is no reading when filters are clogged

List other applicable treatment systems/components and their overall condition:

Chemical Handling Practices

Are good management practices and handling requirements being applied?	<u>Yes</u>	<u>No</u>	<u>NA</u>	General Observations: <u>No chemicals used</u>
Does the usage of chemical for the treatment system appear to meet O&M specifications?	<u>Yes</u>	<u>No</u>	<u>NA</u>	

Inspection Form-Treatment Systems

New York Department of Environmental Conservation
Inactive Hazardous Waste Site

Interviews/Additional Contacts			
Name/Title	Phone:	Company/Entity	Contact Information
Jeri Kibucz Env. Tech	518 848-8426	AMEC	

Additional Observation Notes:

Field Notes Attached

Photograph Log:
See Photo Log Attached
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 <input checked="" type="radio"/> No
Sample type collected (circle or write in other): Groundwater Sediment Soil Leachate Air Surface Water
List Parameters/Methods Collected Per Media:
No Samples Collected
Analytical Laboratory/Location:
NA
Sample Observations:
NA

Primoshield
January 10, 2013



Photo 1 – View from ground surface inside vault



Photo 2 – Start of system piping (influent)
Looking southeast inside treatment building



Photo 3 – System piping; pressure sensor next to gauge at right, sample port is next to gauge on left, basket strainers in the center.
Looking northeast inside treatment building



Photo 6 – System piping; Looking North inside treatment building



Photo 7 – System piping, showing connection from hard Pipe to flex hose; looking north inside treatment building



Photo 9 – System piping, flex hose connection back to hard pipe



Photo 11 – System piping, left is totalizer and at the right a sample port



Photo 16 – Electrical panel; looking northeast in treatment building



Photo 18 – looking down on basket strainers, covers off; treatment building



Photo 19 – Close up of basket strainer removed from housing; fine silts and some organic debris visible.



Photo 20 – Close up of basket strainer after cleaning; small tear in the screen is visible at top, center of photo.



Photo 26 – looking northwest of locked gate.



Photo 30 – looking northwest from outside fenced area, northeast side of the treatment building. Small bare spot in the center of the photo is the location of the vault.

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

pg 1 of 2

Site Name: <i>Primoshield Inc.</i>		NYSDEC Site Number: <i>633027</i>	NYSDEC PM: <i>Will Welling</i>
Site Location: <i>St. Vincent Street, Utica, NY</i>		Site Classification # (circle): 1 2 2a 3 4	Primary Site Contact: <i>Will Welling</i> <i>WV</i>
Site Inspection Date: <i>3/26/13</i>		Purpose of Inspection: <i>Quarterly</i>	
Name of Inspector: <i>Jeri Kiburz</i>	Title: <i>Env. Tech.</i>	Agency/Company: <i>MACTEC/AMEC</i>	Address: <i>511 Congress Street, Suite 200 Portland, ME 04101</i>
Phone Number: <i>518-848-8426 (cell)</i>			

Treatment Systems			
System/Status	Yes	No	General Observations:
System in Operation During Visit?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<p>System in auto and cycling upon arrival. Switched to manual and pump began operating ok.</p> <p>Switched pump off and cleaned basket strainers. Strainers had been operating in tandem and both were ~50%.</p> <p>Very fine silt removed. Per J. Connolly (AMEC) strainers were removed from housing and system operating w/o them.</p>
Manned on a Fulltime basis?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Maintenance Logs Current?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Equipment Calibration Logs Current?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Pump working?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Initial flow rate (gpm):	<i>~28</i>		
Pressure before basket strainers (P1):	<i>0</i>		
Pressure after basket strainers: (P2)	<i>0</i>		
Basket Strainer Inspected and cleaned?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Flow rate after cleaning filters (gpm):	<i>~30</i>		
Pressuer after cleaning basket strainers: (P1)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Totalizer reading (gallons)	<i>493359 @ 0955am.</i>		
Discharge/Monitoring	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Does the system require a discharge permit or discharge to a POTW?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Is Permit Performance Monitoring Implemented?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Condition of Operational Controls	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Condition of Gauges	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Condition of flow meters	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Condition of System Alarms	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Condition of Pumps	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Condition of Flow Pipes or Hoses	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Pipes Labeled with Direction of Flow and Contents	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Condition of Valves	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Condition of Containment Structures (berms etc.)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Evidence of Leaking	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Condition of Feed/Extraction Pumps	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Vaulted Area Condition	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Lighting in Work Areas Adequate	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Condition of Collection/Discharge/Trenches	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Clean of Debris	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Evidence of Sedimentation	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Air Stripping Condition	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Noticeable Odors	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Air Emission Permit Required	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Permit Performance Monitoring Implemented	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Condition of Storage Tanks/Containers	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Evidence of Leaks	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Tank Compatible with Contents	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Evidence of Leaks	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Labeled Appropriately	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Condition of Filter Presses	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Condition of Extraction Vents/Recharge Vents	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

List other applicable treatment systems/components and their overall condition:

Chemical Handling Practices			
Are good management practices and handling requirements being applied?	Yes	No	General Observations:
Does the usage of chemical for the treatment system appear to meet O&M specifications?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<p>No Chemicals in use!</p>
	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

Primo shield
3/26/13

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

pg. 2 of 2

(JK)

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

Additional Observation Notes:

wells 1075 - concrete pad heaved, casing very loose.
1015 - casing bent.

Perimeter Fencing in need of repair in 2 locations.

Photograph Log:

Photograph 1	Monitoring well P1015 damage view
Photograph 2	Monitoring well P-1010 cracked concrete
Photograph 3	Monitoring well P-1010 (front) & P-1015 (Back)
Photograph 4	Monitoring well P-108 slight heaving of concrete pad (view1)
Photograph 5	Monitoring well P-108 slight heaving of concrete pad (view2)
Photograph 6	Basket Strainers from the Treatment system
Photograph 7	View of holders for the basket strainers
Photograph 8	Electric control panel on north wall of treatment building
Photograph 9	Monitoring well P-1075
Photograph 10	Monitoring well P-1070 (see list of remaining photos)

Performance Monitoring

Were check samples collected during this visit? ☒ Yes ☐ No

Sample type collected (circle or write in other): Groundwater Effluent Discharge Monitoring

List Parameters/Methods Collected Per Media:

VOC (624)
Cyanide (9010)
pH (150.1)
Cadmium, Chromium, Copper, Lead, Nickel, Zinc (200.7)

Analytical Laboratory/Location:

Sample Observations:

Photo Log (con'd)

11. North end of Treatment building and water collection manhole
12. collection manhole
13. Monitoring wells P-106S (back) and P-106D (front)
14. Slightly heaved cleanout cap near P-106S/D
15. Monitoring well P-103
16. Gap in fence near P-106S/D
17. Fence after repair
18. Hole in fence near northwest corner, Conkling Avenue
19. Fence after repair (temporary)
20. Loose fence post against building and southern perimeter of fence
21. Monitoring well P-105
22. Cleanout cover in southeast corner of site
23. South end of Treatment building and gravel entry drive
24. Cleanout cover North of site looking south
25. Collection manhole cover
26. north end interior of Treatment building



Photo 1: Monitoring Well P101S damage view



Photo 2: Monitoring Well P-101D cracked concrete, tilted possibly from snow plowing.



Photo 3: Monitoring Well P-101D (front) and P-101S (back)



Photo 4: Monitoring Well P-108 slight heaving of concrete pad (view 1)



Photo 5: Monitoring Well P-108 slight heaving of concrete pad (view 2)



Photo 6: Basket strainers from the Treatment system



Photo 7: View of holders for the basket strainers



Photo 8: Electric control panel on north wall of Treatment building



Photo 9: Monitoring Well P-107S



Photo 10: Monitoring Well P-107D



Photo 11: North end of Treatment building and water collection manhole



Photo 12: Collection manhole



Photo 13: Monitoring Wells P-106S (back) and P-106D (front)



Photo 14: Slightly heaved cleanout cap near P-106S/D



Photo 15: Monitoring Well P-103



Photo 16: Gap in fence near P-106S/D

Primoshield, Incorporated - March 2013
Photographs



Photo 17: Fence after repair



Photo 18: Hole in fence near northwest corner, Conkling Avenue



Photo 19: Fence after repair (temporary)



Photo 20: Loose fence post against building and southern perimeter of site (repair pending)



Photo 21: Monitoring Well P-105



Photo 22: Cleanout cover in southeast corner of site



Photo 23: South end of Treatment building and gravel entry drive



Photo 24: Cleanout cover north of site looking south



Photo 25: Collection manhole cover



Photo 26: North end interior of Treatment building

**New York Department of Environmental Conservation
Inactive Hazardous Waste Site
Inspection Form-Treatment Systems**

Site Name: Primoshield Inc.		NYSDEC Site Number: 633027	NYSDEC PM: Will Welling
Site Location: St. Vincent Street, Utica, NY		Site Classification # (circle): 1 2 2a 3 4	Primary Site Contact: Will Welling
Site Inspection Date: 9/19/13		Purpose of Inspection: Quarterly	
Name of Inspector: Bob Garrett	Title: Env't Scientist	Agency/Company: MACTEC/AMEC	Address: 511 Congress Street, Suite 200 Portland, ME 04101
Phone Number: (518) 372-0905			

Treatment Systems

System Status	General Observations:		
System in Operation During Visit?	<input checked="" type="radio"/> Yes	<input type="radio"/> No	<p>- System in auto and cycling upon arrival.</p> <p>- Pavers installed in area surrounding recovery well manhole.</p>
Manned on a Fulltime basis?	<input checked="" type="radio"/> Yes	<input checked="" type="radio"/> No	
Maintenance Logs Current?	<input checked="" type="radio"/> Yes	<input type="radio"/> No	
Equipment Calibration Logs Current?	<input checked="" type="radio"/> Yes	<input type="radio"/> No	
Pump working?	<input checked="" type="radio"/> Yes	<input type="radio"/> No	
Initial flow rate (gpm):	NA		
Pressure before basket strainers (P1):	0 & Permanently Removed		
Pressure after basket strainers (P2):	<input checked="" type="radio"/> Yes	<input type="radio"/> No	
Basket Strainer Inspected and cleaned?	<input checked="" type="radio"/> Yes	<input type="radio"/> No	
Flow rate after cleaning filters (gpm):	NA		
Pressurizer after cleaning basket strainers (P1)	<input checked="" type="radio"/> Yes	<input checked="" type="radio"/> No	
Totalizer reading (gallons)	551885		
Discharge Monitoring	<input checked="" type="radio"/> Yes	<input type="radio"/> No	
Does the system require a discharge permit or discharge to a POTW?	<input checked="" type="radio"/> Yes	<input type="radio"/> No	
Is Permit Performance Monitoring Implemented?	<input checked="" type="radio"/> Yes	<input type="radio"/> No	
Condition of Operational Controls	<input checked="" type="radio"/> Good	<input type="radio"/> Poor	<input type="radio"/> NA
Condition of Gauges	<input checked="" type="radio"/> Good	<input type="radio"/> Poor	<input type="radio"/> NA
Condition of flow meters	<input checked="" type="radio"/> Good	<input type="radio"/> Poor	<input type="radio"/> NA
Condition of System Alarms	<input checked="" type="radio"/> Good	<input type="radio"/> Poor	<input type="radio"/> NA
Condition of Pumps	<input checked="" type="radio"/> Good	<input type="radio"/> Poor	<input type="radio"/> NA
Condition of Flow Pipes or Hoses	<input checked="" type="radio"/> Good	<input type="radio"/> Poor	<input type="radio"/> NA
Pipes Labeled with Direction of Flow and Contents	<input checked="" type="radio"/> Yes	<input checked="" type="radio"/> No	<input type="radio"/> NA
Condition of Valves	<input checked="" type="radio"/> Good	<input type="radio"/> Poor	<input type="radio"/> NA
Condition of Containment Structures (berms etc.)	<input checked="" type="radio"/> Good	<input type="radio"/> Poor	<input checked="" type="radio"/> NA
Evidence of Leaking	<input checked="" type="radio"/> Yes	<input checked="" type="radio"/> No	<input type="radio"/> NA
Condition of Feed/Extraction Pumps	<input checked="" type="radio"/> Good	<input type="radio"/> Poor	<input checked="" type="radio"/> NA
Vaulted Area Condition	<input checked="" type="radio"/> Good	<input type="radio"/> Poor	<input type="radio"/> NA
Lighting in Work Areas Adequate	<input checked="" type="radio"/> Yes	<input type="radio"/> No	<input type="radio"/> NA
Condition of Collection/Discharge Trenches	<input checked="" type="radio"/> Good	<input type="radio"/> Poor	<input type="radio"/> NA
Clean of Debris	<input checked="" type="radio"/> Good	<input type="radio"/> Poor	<input type="radio"/> NA
Evidence of Sedimentation	<input checked="" type="radio"/> Good	<input type="radio"/> Poor	<input checked="" type="radio"/> NA
Air Stripper Condition	<input checked="" type="radio"/> Good	<input type="radio"/> Poor	<input type="radio"/> NA
Noticeable Odors	<input checked="" type="radio"/> Yes	<input type="radio"/> No	<input type="radio"/> NA
Air Emission Permit Required	<input checked="" type="radio"/> Yes	<input type="radio"/> No	<input type="radio"/> NA
Permit Performance Monitoring Implemented	<input checked="" type="radio"/> Yes	<input type="radio"/> No	<input type="radio"/> NA
Condition of Storage Tanks/Containers	<input checked="" type="radio"/> Good	<input type="radio"/> Poor	<input type="radio"/> NA
Evidence of Leaks	<input checked="" type="radio"/> Yes	<input type="radio"/> No	<input type="radio"/> NA
Tank Compatible with Contents	<input checked="" type="radio"/> Yes	<input type="radio"/> No	<input type="radio"/> NA
Evidence of Leaks	<input checked="" type="radio"/> Yes	<input type="radio"/> No	<input type="radio"/> NA
Labeled Appropriately	<input checked="" type="radio"/> Yes	<input type="radio"/> No	<input type="radio"/> NA
Condition of Filter Presses	<input checked="" type="radio"/> Good	<input type="radio"/> Poor	<input type="radio"/> NA
Condition of Extraction Wells/Recharge Wells	<input checked="" type="radio"/> Good	<input type="radio"/> Poor	<input checked="" type="radio"/> NA

List other applicable treatment systems/components and their overall condition:

Chemical Handling Practices				General Observations:
Are good management practices and handling requirements being applied?	<input checked="" type="radio"/> Yes	<input type="radio"/> No	<input checked="" type="radio"/> NA	
Does the usage of chemical for the treatment system appear to meet O&M specifications?	<input checked="" type="radio"/> Yes	<input type="radio"/> No	<input checked="" type="radio"/> NA	

No Chemicals in Use

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

Primoshield

Interviews/Additional Contacts

Name/Title	Phone:	Company/Entity	Contact Information

Additional Observation Notes:

Perimeter fencing in need of repairs.

- Southeast section has overgrowth of trees infringing on fence.
- Fence is leaning along the southern perimeter due to neighboring property debris.
- Growth along the Southwest perimeter is infringing on fence.
- Gap is present in between the fence post and neighboring building.
- Fence repairs required along the northern perimeter.
- Vegetation requires trimming along the northern perimeter.

Photograph Log:

Photograph 1	Vault with new pavers
Photograph 2	Vault with new pavers
Photograph 3	Inside the vault
Photograph 4	CSE collecting sediment samples
Photograph 5	CSE collecting samples from the vault.
Photograph 6	Sediment from the vault
Photograph 7	Barbed wire missing or in disrepair along the Southern perimeter
Photograph 8	Gap in fence along the Southern perimeter.
Photograph 9	Gate on St. Vincent Street.
Photograph 10	Leaning fence along the southeast perimeter.

Performance Monitoring

Were check samples collected during this visit? ☒ Yes ☐ No

Sample type collected (circle or write in other): Groundwater Effluent

List Parameters/Methods Collected Per Media:

Voc (624)
Cyanide (9010)
pH (150.1)
Cadmium, Chromium, Copper, Lead, Nickel, Zinc (200.7)

Analytical Laboratory/Location:

ALS

Sample Observations:

Clear

Photology (cont.)

Photograph 11: Missing top rail and barbed wire along the northeast perimeter.

Photograph 12: Tree growth along the southern perimeter of the fence.

Photograph 13: Tree growth through the fence at the southeast perimeter.

Photograph 14: Tree growth through the fence at the southeast perimeter.

Photograph 15: Treatment building - South.

Photograph 16: Treatment building - North.



Photo 1: Vault with new pavers



Photo 2: vault



Photo 3: Inside the vault



Photo 4: CSE collecting sediment samples.



Photo 5: CSE collecting samples from the vault



Photo 6: Sediment from the Vault

Primoshield, Incorporated - September 2013
Photographs



Photo 7: Barbed wire missing or in disrepair along the southern perimeter.



Photo 8: Gap in fence - south

Primoshield, Incorporated - September 2013
Photographs



Photo 9: Gate on St Vincent Street



Photo 10: Leaning fence - south east



Photo 11: Missing top rail and barbed wire - northwest



Photo 12: Tree Growth along fence - south



Photo 13: Tree growing through fence - southeast



Photo 14: Tree growing through fence - southeast



Photo 15: Treatment building - south



Photo 16: Treatment building - north

APPENDIX B

COMPOUNDS DETECTED IN SITE MEDIA (2013)

**CHEMISTRY REVIEW REPORT
MARCH 2013 SAMPLING
PRIMOSHIELD INCORPORATED SITE
UTICA, NEW YORK**

1.0 INTRODUCTION

Water samples were collected on March 26 and March 27, 2013 at the Primoshield Incorporated Site (Site) in Utica, New York and shipped to ALS Environmental, located in Rochester, NY for analysis. Samples were analyzed by one or more of the following methods:

- Volatile Organic Compounds (VOCs) by Method 8260B
- Total/Dissolved Metals by Method 6010C

Results were reported in sample delivery group (SDG) R1302097. A listing of samples included in this chemistry review is presented in Table 1. A summary of the analytical results is presented in Table 2. A summary of sample results qualified during this review is presented in Table 3 (Qualification Action Summary).

Deliverables for the off-site laboratory analyses included a Category A deliverable as defined in the New York State Department of Environmental Conservation (NYSDEC) Analytical Services Protocols (NYSDEC, 2005) and a QA/QC summary package.

A chemistry review of the data was completed, which included evaluations of data package completeness, holding times, QC data (blanks, field duplicates, lab control samples, surrogate recovery, and matrix spikes), electronic data reporting, and data qualification.

U = target analyte is not detected at or above the reported detection limit

J = concentration is estimated

Results are interpreted to be usable as reported by the laboratory unless discussed in the following section.

2.0 VOLATILE ORGANIC COMPOUNDS (VOCs) – METHOD 8260B

Blank Contamination

Blank contamination from bromomethane was observed in Trip Blank 633027TB1 (0.48 µg/L), the method blank dated April 6, 2013 (0.55 µg/L) and in the method blank dated April 8, 2013 (0.75 µg/L). An action level was established at five times the blank concentration for bromomethane. Detections of bromomethane in associated water samples in SDG R1302097 were less than the action level and were qualified as not detected (U) at the reporting limit.

3.0 Metals – Method 6010C

Blanks

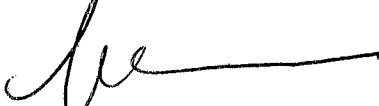
Chromium (1.164 µg/L), copper (7.487 µg/L), lead (1.18 µg/L) and zinc (1.55 µg/L) were detected in the instrument calibration blanks and method blank. Action levels were calculated at five times the maximum concentrations detected in the blanks and compared to sample results. Low level detections of chromium, copper, lead and zinc in one or more samples were qualified as non-detected (U) at the report concentration.

Reference:

New York State Department of Environmental Conservation (NYSDEC), 2005. "Analytical Services Protocols"; July 2005.

USEPA Region 2, 2006a. "Validating Volatile Organic Compounds by Gas Chromatography/Mass Spectrometry SW-846 Method 8260B"; SOP # HW-24, Revision 2, Hazardous Waste Support Branch; October 2006.

Data Validator: Michael Washburn



Date: 5/8/2013

Reviewed by: Christian Ricardi, NRCC-EAC



Date: 5/8/2013

TABLE 1 - SAMPLE SUMMARY
 CHEMISTRY REVIEW REPORT
 MARCH 2013 SAMPLING
 PRIMOSHIELD INCORPORATED SITE
 UTICA, NEW YORK

SDG	Media	Location	Sample Date	Sample ID	Class	VOC	Metals	Metals
					Analysis Method Fraction Qc Code	SW8260C T	SW6010C T	SW6010C D
R1302097	GW	P-101D	3/27/2013	633027P101DXX	FS	35	6	
R1302097	GW	P-103	3/27/2013	633027P103XX	FS	35	6	
R1302097	GW	P-104	3/27/2013	633027P104XX	FS	35	6	
R1302097	GW	P-104	3/27/2013	633027P104XD	FD	35	6	
R1302097	GW	P-105	3/26/2013	633027P105XX	FS	35	6	
R1302097	GW	P-106D	3/27/2013	633027P106DXX	FS	35	6	
R1302097	GW	P-106S	3/27/2013	633027P106SXX	FS	35	6	
R1302097	GW	P-107D	3/27/2013	633027P107DXX	FS	35	6	6
R1302097	GW	P-107S	3/27/2013	633027P107SXX	FS	35	6	6
R1302097	GW	P-108	3/27/2013	633027P108XX	FS	35	6	
R1302097	BW	QC	3/26/2013	633027TB1	TB	35		

Notes:

GW = Groundwater sample

BW = Blank sample

FS = Field sample

FD = Field duplicate

T = Total fraction

D = Dissolved fraction

QC = Quality control sample

TB = Trip blank

TABLE 2 - ANALYTICAL SUMMARY
CHEMISTRY REVIEW REPORT
MARCH 2013 SAMPLING
PRIMOSHIELD INCORPORATED SITE
UTICA, NEW YORK

Sample Delivery Group				R1302097		R1302097		R1302097	
Location				P-101D		P-103		P-104	
Sample Date				3/27/2013		3/27/2013		3/27/2013	
Sample ID				633027P101DXX		633027P103XX		633027P104XX	
Qc Code				FS		FS		FS	
Analysis	Fraction	Parameter	Units	Result	Qualifier	Result	Qualifier	Result	Qualifier
SW8260C	N	1,1,1-Trichloroethane	ug/l	5 U		4.6 J		5 U	
SW8260C	N	1,1,2,2-Tetrachloroethane	ug/l	5 U		5 U		5 U	
SW8260C	N	1,1,2-Trichloroethane	ug/l	5 U		5 U		5 U	
SW8260C	N	1,1-Dichloroethane	ug/l	5 U		1.3 J		5 U	
SW8260C	N	1,1-Dichloroethene	ug/l	5 U		5 U		5 U	
SW8260C	N	1,2-Dichloroethane	ug/l	5 U		0.96 J		5 U	
SW8260C	N	1,2-Dichloropropane	ug/l	5 U		5 U		5 U	
SW8260C	N	2-Butanone	ug/l	10 U		10 U		10 U	
SW8260C	N	2-Hexanone	ug/l	10 U		10 U		10 U	
SW8260C	N	4-Methyl-2-pentanone	ug/l	10 U		10 U		10 U	
SW8260C	N	Acetone	ug/l	10 U		10 U		10 U	
SW8260C	N	Benzene	ug/l	5 U		5 U		5 U	
SW8260C	N	Bromodichloromethane	ug/l	5 U		5 U		5 U	
SW8260C	N	Bromoform	ug/l	5 U		5 U		5 U	
SW8260C	N	Bromomethane	ug/l	5 U		5 U		5 U	
SW8260C	N	Carbon disulfide	ug/l	10 U		10 U		10 U	
SW8260C	N	Carbon tetrachloride	ug/l	5 U		5 U		5 U	
SW8260C	N	Chlorobenzene	ug/l	5 U		5 U		5 U	
SW8260C	N	Chlorodibromomethane	ug/l	5 U		5 U		5 U	
SW8260C	N	Chloroethane	ug/l	5 U		5 U		5 U	
SW8260C	N	Chloroform	ug/l	5 U		5 U		5 U	
SW8260C	N	Chloromethane	ug/l	5 U		5 U		5 U	
SW8260C	N	Cis-1,2-Dichloroethene	ug/l	5 U		5 U		5 U	
SW8260C	N	cis-1,3-Dichloropropene	ug/l	5 U		5 U		5 U	
SW8260C	N	Ethyl benzene	ug/l	5 U		5 U		5 U	
SW8260C	N	Methylene chloride	ug/l	5 U		5 U		5 U	
SW8260C	N	Styrene	ug/l	5 U		5 U		5 U	
SW8260C	N	Tetrachloroethene	ug/l	5 U		5 U		5 U	
SW8260C	N	Toluene	ug/l	5 U		5 U		5 U	
SW8260C	N	trans-1,2-Dichloroethene	ug/l	5 U		5 U		5 U	
SW8260C	N	trans-1,3-Dichloropropene	ug/l	5 U		5 U		5 U	
SW8260C	N	Trichloroethene	ug/l	5 U		0.94 J		5 U	
SW8260C	N	Vinyl chloride	ug/l	5 U		5 U		5 U	
SW8260C	N	Xylene, o	ug/l	5 U		5 U		5 U	
SW8260C	N	Xylenes (m&p)	ug/l	5 U		5 U		5 U	
SW6010C	T	Cadmium	ug/l	0.353 U		0.353 U		0.353 U	
SW6010C	T	Chromium	ug/l	0.816 U		0.816 U		0.816 U	
SW6010C	T	Copper	ug/l	7.3 U		1.8 U		3.3 U	
SW6010C	T	Lead	ug/l	1.3 U		0.813 U		0.958 U	
SW6010C	T	Nickel	ug/l	1 U		2 J		1 U	
SW6010C	T	Zinc	ug/l	7.4 U		2 U		2.6 U	
SW6010C	D	Cadmium	ug/l						
SW6010C	D	Chromium	ug/l						
SW6010C	D	Copper	ug/l						
SW6010C	D	Lead	ug/l						
SW6010C	D	Nickel	ug/l						
SW6010C	D	Zinc	ug/l						

Notes:

ug/l = microgram per liter

T = Total fraction

D = Dissolved fraction

J = Result is estimated

U = Result is not detected at the reporting limit

FS = Field sample

FD = Field duplicate sample

TB = Trip blank sample

TABLE 2 - ANALYTICAL SUMMARY
CHEMISTRY REVIEW REPORT
MARCH 2013 SAMPLING
PRIMOSHIELD INCORPORATED SITE
UTICA, NEW YORK

Sample Delivery Group				R1302097		R1302097		R1302097	
Location				P-104		P-105		P-106D	
Sample Date				3/27/2013		3/26/2013		3/27/2013	
Sample ID				633027P104XD		633027P105XX		633027P106DXX	
Qc Code				FD		FS		FS	
Analysis	Fraction	Parameter	Units	Result	Qualifier	Result	Qualifier	Result	Qualifier
SW8260C	N	1,1,1-Trichloroethane	ug/l	5 U		5 U		5 U	
SW8260C	N	1,1,2,2-Tetrachloroethane	ug/l	5 U		5 U		5 U	
SW8260C	N	1,1,2-Trichloroethane	ug/l	5 U		5 U		5 U	
SW8260C	N	1,1-Dichloroethane	ug/l	5 U		5 U		5 U	
SW8260C	N	1,1-Dichloroethene	ug/l	5 U		5 U		5 U	
SW8260C	N	1,2-Dichloroethane	ug/l	5 U		5 U		5 U	
SW8260C	N	1,2-Dichloropropane	ug/l	5 U		5 U		5 U	
SW8260C	N	2-Butanone	ug/l	10 U		10 U		10 U	
SW8260C	N	2-Hexanone	ug/l	10 U		10 U		10 U	
SW8260C	N	4-Methyl-2-pentanone	ug/l	10 U		10 U		10 U	
SW8260C	N	Acetone	ug/l	10 U		10 U		10 U	
SW8260C	N	Benzene	ug/l	5 U		5 U		5 U	
SW8260C	N	Bromodichloromethane	ug/l	5 U		5 U		5 U	
SW8260C	N	Bromoform	ug/l	5 U		5 U		5 U	
SW8260C	N	Bromomethane	ug/l	5 U		5 U		5 U	
SW8260C	N	Carbon disulfide	ug/l	10 U		10 U		10 U	
SW8260C	N	Carbon tetrachloride	ug/l	5 U		5 U		5 U	
SW8260C	N	Chlorobenzene	ug/l	5 U		5 U		5 U	
SW8260C	N	Chlorodibromomethane	ug/l	5 U		5 U		5 U	
SW8260C	N	Chloroethane	ug/l	5 U		5 U		5 U	
SW8260C	N	Chloroform	ug/l	5 U		5 U		5 U	
SW8260C	N	Chloromethane	ug/l	5 U		5 U		5 U	
SW8260C	N	Cis-1,2-Dichloroethene	ug/l	5 U		5 U		5 U	
SW8260C	N	cis-1,3-Dichloropropene	ug/l	5 U		5 U		5 U	
SW8260C	N	Ethyl benzene	ug/l	5 U		5 U		5 U	
SW8260C	N	Methylene chloride	ug/l	5 U		5 U		5 U	
SW8260C	N	Styrene	ug/l	5 U		5 U		5 U	
SW8260C	N	Tetrachloroethene	ug/l	5 U		5 U		5 U	
SW8260C	N	Toluene	ug/l	5 U		5 U		5 U	
SW8260C	N	trans-1,2-Dichloroethene	ug/l	5 U		5 U		5 U	
SW8260C	N	trans-1,3-Dichloropropene	ug/l	5 U		5 U		5 U	
SW8260C	N	Trichloroethene	ug/l	5 U		5 U		5 U	
SW8260C	N	Vinyl chloride	ug/l	5 U		5 U		5 U	
SW8260C	N	Xylene, o	ug/l	5 U		5 U		5 U	
SW8260C	N	Xylenes (m&p)	ug/l	5 U		5 U		5 U	
SW6010C	T	Cadmium	ug/l	0.353 U		0.353 U		0.353 U	
SW6010C	T	Chromium	ug/l	0.816 U		0.816 U		1.2 U	
SW6010C	T	Copper	ug/l	2.3 U		1.8 U		3.1 U	
SW6010C	T	Lead	ug/l	0.813 U		0.813 U		0.813 U	
SW6010C	T	Nickel	ug/l	1 U		1 U		1 U	
SW6010C	T	Zinc	ug/l	2.7 U		2.2 U		5.6 U	
SW6010C	D	Cadmium	ug/l						
SW6010C	D	Chromium	ug/l						
SW6010C	D	Copper	ug/l						
SW6010C	D	Lead	ug/l						
SW6010C	D	Nickel	ug/l						
SW6010C	D	Zinc	ug/l						

Notes:

ug/l = microgram per liter

T = Total fraction

D = Dissolved fraction

J = Result is estimated

U = Result is not detected at the reporting limit

FS = Field sample

FD = Field duplicate sample

TB = Trip blank sample

TABLE 2 - ANALYTICAL SUMMARY
CHEMISTRY REVIEW REPORT
MARCH 2013 SAMPLING
PRIMOSHIELD INCORPORATED SITE
UTICA, NEW YORK

Sample Delivery Group				R1302097		R1302097		R1302097	
Location				P-106S		P-107D		P-107S	
Sample Date				3/27/2013		3/27/2013		3/27/2013	
Sample ID				633027P106SXX		633027P107DXX		633027P107SXX	
Qc Code				FS		FS		FS	
Analysis	Fraction	Parameter	Units	Result	Qualifier	Result	Qualifier	Result	Qualifier
SW8260C	N	1,1,1-Trichloroethane	ug/l	0.64 J		5 U		0.93 J	
SW8260C	N	1,1,2,2-Tetrachloroethane	ug/l	5 U		5 U		5 U	
SW8260C	N	1,1,2-Trichloroethane	ug/l	5 U		5 U		5 U	
SW8260C	N	1,1-Dichloroethane	ug/l	5 U		5 U		1.4 J	
SW8260C	N	1,1-Dichloroethene	ug/l	5 U		5 U		5 U	
SW8260C	N	1,2-Dichloroethane	ug/l	5 U		5 U		5 U	
SW8260C	N	1,2-Dichloropropane	ug/l	5 U		5 U		5 U	
SW8260C	N	2-Butanone	ug/l	10 U		10 U		10 U	
SW8260C	N	2-Hexanone	ug/l	10 U		10 U		10 U	
SW8260C	N	4-Methyl-2-pentanone	ug/l	10 U		10 U		10 U	
SW8260C	N	Acetone	ug/l	10 U		10 U		10 U	
SW8260C	N	Benzene	ug/l	5 U		5 U		5 U	
SW8260C	N	Bromodichloromethane	ug/l	5 U		5 U		5 U	
SW8260C	N	Bromoform	ug/l	5 U		5 U		5 U	
SW8260C	N	Bromomethane	ug/l	5 U		5 U		5 U	
SW8260C	N	Carbon disulfide	ug/l	10 U		10 U		10 U	
SW8260C	N	Carbon tetrachloride	ug/l	5 U		5 U		5 U	
SW8260C	N	Chlorobenzene	ug/l	5 U		5 U		5 U	
SW8260C	N	Chlorodibromomethane	ug/l	5 U		5 U		5 U	
SW8260C	N	Chloroethane	ug/l	5 U		5 U		5 U	
SW8260C	N	Chloroform	ug/l	5 U		5 U		5 U	
SW8260C	N	Chloromethane	ug/l	5 U		5 U		5 U	
SW8260C	N	Cis-1,2-Dichloroethene	ug/l	5 U		5 U		5 U	
SW8260C	N	cis-1,3-Dichloropropene	ug/l	5 U		5 U		5 U	
SW8260C	N	Ethyl benzene	ug/l	5 U		5 U		5 U	
SW8260C	N	Methylene chloride	ug/l	5 U		5 U		5 U	
SW8260C	N	Styrene	ug/l	5 U		5 U		5 U	
SW8260C	N	Tetrachloroethene	ug/l	5 U		5 U		5 U	
SW8260C	N	Toluene	ug/l	5 U		5 U		5 U	
SW8260C	N	trans-1,2-Dichloroethene	ug/l	5 U		5 U		5 U	
SW8260C	N	trans-1,3-Dichloropropene	ug/l	5 U		5 U		5 U	
SW8260C	N	Trichloroethene	ug/l	0.6 J		5 U		7.4	
SW8260C	N	Vinyl chloride	ug/l	5 U		5 U		5 U	
SW8260C	N	Xylene, o	ug/l	5 U		5 U		5 U	
SW8260C	N	Xylenes (m&p)	ug/l	5 U		5 U		5 U	
SW6010C	T	Cadmium	ug/l	0.353 U		0.353 U		0.849 J	
SW6010C	T	Chromium	ug/l	0.816 U		11.3		6.6 J	
SW6010C	T	Copper	ug/l	1.8 U		14.4 U		5.4 U	
SW6010C	T	Lead	ug/l	0.813 U		5.3 U		0.813 U	
SW6010C	T	Nickel	ug/l	1 U		10.5 J		139	
SW6010C	T	Zinc	ug/l	2 U		26.8		20.2	
SW6010C	D	Cadmium	ug/l			0.353 U		0.571 J	
SW6010C	D	Chromium	ug/l			3 U		1.1 U	
SW6010C	D	Copper	ug/l			6.6 U		2.9 U	
SW6010C	D	Lead	ug/l			2.4 U		0.813 U	
SW6010C	D	Nickel	ug/l			3.6 J		101	
SW6010C	D	Zinc	ug/l			9.8 U		9.2 J	

Notes:

ug/l = microgram per liter

T = Total fraction

D = Dissolved fraction

J = Result is estimated

U = Result is not detected at the reporting limit

FS = Field sample

FD = Field duplicate sample

TB = Trip blank sample

TABLE 2 - ANALYTICAL SUMMARY
CHEMISTRY REVIEW REPORT
MARCH 2013 SAMPLING
PRIMOSHIELD INCORPORATED SITE
UTICA, NEW YORK

Sample Delivery Group				R1302097		R1302097	
Location				P-108		QC	
Sample Date				3/27/2013		3/26/2013	
Sample ID				633027P108XX		633027TB1	
Qc Code				FS		TB	
Analysis	Fraction	Parameter	Units	Result	Qualifier	Result	Qualifier
SW8260C	N	1,1,1-Trichloroethane	ug/l	5	U	5	U
SW8260C	N	1,1,2,2-Tetrachloroethane	ug/l	5	U	5	U
SW8260C	N	1,1,2-Trichloroethane	ug/l	5	U	5	U
SW8260C	N	1,1-Dichloroethane	ug/l	5	U	5	U
SW8260C	N	1,1-Dichloroethene	ug/l	5	U	5	U
SW8260C	N	1,2-Dichloroethane	ug/l	5	U	5	U
SW8260C	N	1,2-Dichloropropane	ug/l	5	U	5	U
SW8260C	N	2-Butanone	ug/l	10	U	10	U
SW8260C	N	2-Hexanone	ug/l	10	U	10	U
SW8260C	N	4-Methyl-2-pentanone	ug/l	10	U	10	U
SW8260C	N	Acetone	ug/l	10	U	10	U
SW8260C	N	Benzene	ug/l	5	U	5	U
SW8260C	N	Bromodichloromethane	ug/l	5	U	5	U
SW8260C	N	Bromoform	ug/l	5	U	5	U
SW8260C	N	Bromomethane	ug/l	5	U	0.48	BJ
SW8260C	N	Carbon disulfide	ug/l	10	U	10	U
SW8260C	N	Carbon tetrachloride	ug/l	5	U	5	U
SW8260C	N	Chlorobenzene	ug/l	5	U	5	U
SW8260C	N	Chlorodibromomethane	ug/l	5	U	5	U
SW8260C	N	Chloroethane	ug/l	5	U	5	U
SW8260C	N	Chloroform	ug/l	5	U	5	U
SW8260C	N	Chloromethane	ug/l	5	U	5	U
SW8260C	N	Cis-1,2-Dichloroethene	ug/l	5	U	5	U
SW8260C	N	cis-1,3-Dichloropropene	ug/l	5	U	5	U
SW8260C	N	Ethyl benzene	ug/l	5	U	5	U
SW8260C	N	Methylene chloride	ug/l	5	U	5	U
SW8260C	N	Styrene	ug/l	5	U	5	U
SW8260C	N	Tetrachloroethene	ug/l	5	U	5	U
SW8260C	N	Toluene	ug/l	5	U	5	U
SW8260C	N	trans-1,2-Dichloroethene	ug/l	5	U	5	U
SW8260C	N	trans-1,3-Dichloropropene	ug/l	5	U	5	U
SW8260C	N	Trichloroethene	ug/l	5	U	5	U
SW8260C	N	Vinyl chloride	ug/l	5	U	5	U
SW8260C	N	Xylene, o	ug/l	5	U	5	U
SW8260C	N	Xylenes (m&p)	ug/l	5	U	5	U
SW6010C	T	Cadmium	ug/l	0.353	U		
SW6010C	T	Chromium	ug/l	0.816	U		
SW6010C	T	Copper	ug/l	1.8	U		
SW6010C	T	Lead	ug/l	0.813	U		
SW6010C	T	Nickel	ug/l	1	U		
SW6010C	T	Zinc	ug/l	1.2	U		
SW6010C	D	Cadmium	ug/l				
SW6010C	D	Chromium	ug/l				
SW6010C	D	Copper	ug/l				
SW6010C	D	Lead	ug/l				
SW6010C	D	Nickel	ug/l				
SW6010C	D	Zinc	ug/l				

Notes:

ug/l = microgram per liter

T = Total fraction

D = Dissolved fraction

J = Result is estimated

U = Result is not detected at the reporting limit

FS = Field sample

FD = Field duplicate sample

TB = Trip blank sample

TABLE 3 - QUALIFICATION ACTION SUMMARY
 CHEMISTRY REVIEW REPORT
 MARCH 2013 SAMPLING
 PRIMOSHIELD INCORPORATED SITE
 UTICA, NEW YORK

SDG	Analysis Method	Lab Sample Id	Field Sample ID	Parameter Name	Lab Result	Lab Qualifier	Validated Result	Validation Qualifier	Val Reason Code	Result Units	Lab Id
R1302097	SW8260C	R1302097-009	633027P105XX	Bromomethane	0.43 BJ		5 U		BL1	ug/l	CASR
R1302097	SW8260C	R1302097-011	633027P107SXX	Bromomethane	0.35 BJ		5 U		BL1	ug/l	CASR
R1302097	SW8260C	R1302097-013	633027P106SXX	Bromomethane	0.31 BJ		5 U		BL1	ug/l	CASR
R1302097	SW6010C	R1302097-001	633027P101DXX	Copper	7.3 J		7.3 U		BL1	ug/l	CASR
R1302097	SW6010C	R1302097-001	633027P101DXX	Lead	1.3 J		1.3 U		BL1	ug/l	CASR
R1302097	SW6010C	R1302097-001	633027P101DXX	Zinc	7.4 J		7.4 U		BL1	ug/l	CASR
R1302097	SW6010C	R1302097-002	633027P104XX	Copper	3.3 J		3.3 U		BL1	ug/l	CASR
R1302097	SW6010C	R1302097-002	633027P104XX	Lead	0.958 J		0.958 U		BL1	ug/l	CASR
R1302097	SW6010C	R1302097-002	633027P104XX	Zinc	2.6 J		2.6 U		BL1	ug/l	CASR
R1302097	SW6010C	R1302097-003	633027P104XD	Copper	2.3 J		2.3 U		BL1	ug/l	CASR
R1302097	SW6010C	R1302097-003	633027P104XD	Zinc	2.7 J		2.7 U		BL1	ug/l	CASR
R1302097	SW6010C	R1302097-004	633027P108XX	Zinc	1.2 J		1.2 U		BL1	ug/l	CASR
R1302097	SW6010C	R1302097-005	633027P107DXX	Copper	14.4 J		14.4 U		BL1	ug/l	CASR
R1302097	SW6010C	R1302097-005	633027P107DXX	Lead	5.3 J		5.3 U		BL1	ug/l	CASR
R1302097	SW6010C	R1302097-006	633027P107DXX	Chromium	3 J		3 U		BL1	ug/l	CASR
R1302097	SW6010C	R1302097-006	633027P107DXX	Copper	6.6 J		6.6 U		BL1	ug/l	CASR
R1302097	SW6010C	R1302097-006	633027P107DXX	Lead	2.4 J		2.4 U		BL1	ug/l	CASR
R1302097	SW6010C	R1302097-006	633027P107DXX	Zinc	9.8 J		9.8 U		BL1	ug/l	CASR
R1302097	SW6010C	R1302097-007	633027P103XX	Zinc	2 J		2 U		BL1	ug/l	CASR
R1302097	SW6010C	R1302097-008	633027P106DXX	Chromium	1.2 J		1.2 U		BL1	ug/l	CASR
R1302097	SW6010C	R1302097-008	633027P106DXX	Copper	3.1 J		3.1 U		BL1	ug/l	CASR
R1302097	SW6010C	R1302097-008	633027P106DXX	Zinc	5.6 J		5.6 U		BL1	ug/l	CASR
R1302097	SW6010C	R1302097-009	633027P105XX	Zinc	2.2 J		2.2 U		BL1	ug/l	CASR
R1302097	SW6010C	R1302097-011	633027P107SXX	Copper	5.4 J		5.4 U		BL1	ug/l	CASR
R1302097	SW6010C	R1302097-012	633027P107SXX	Chromium	1.1 J		1.1 U		BL1	ug/l	CASR
R1302097	SW6010C	R1302097-012	633027P107SXX	Copper	2.9 J		2.9 U		BL1	ug/l	CASR
R1302097	SW6010C	R1302097-013	633027P106SXX	Zinc	2 J		2 U		BL1	ug/l	CASR

Notes:

BL1 = Blank contamination in a laboratory blank

U = Not detected at the reporting limit

ug/l = microgram per liter

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client: AMEC Environmental & Infrastructure (Formerly MACTEC)
Project: NYSDEC Primoshield/3612122251
Sample Matrix: Water

Service Request: R1306992
Date Collected: 9/19/13 1120
Date Received: 9/21/13
Date Analyzed: 9/25/13 18:30

Sample Name: 633027 EFFLUENT
Lab Code: R1306992-001

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 624
Data File Name: I:\ACQUDATA\MSVOA6\DATA\092513\L0262.D\

Analysis Lot: 360085
Instrument Name: R-MS-06
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	MRL	Note
71-55-6	1,1,1-Trichloroethane (TCA)	13		1.0	
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	
75-34-3	1,1-Dichloroethane (1,1-DCA)	1.6		1.0	
75-35-4	1,1-Dichloroethene (1,1-DCE)	1.0	U	1.0	
107-06-2	1,2-Dichloroethane	1.0	U	1.0	
78-87-5	1,2-Dichloropropane	1.0	U	1.0	
110-75-8	2-Chloroethyl Vinyl Ether	10	U	10	
107-02-8	Acrolein	10	U	10	
107-13-1	Acrylonitrile	10	U	10	
71-43-2	Benzene	1.0	U	1.0	
75-27-4	Bromodichloromethane	1.0	U	1.0	
75-25-2	Bromoform	1.0	U	1.0	
74-83-9	Bromomethane	1.0	U	1.0	
56-23-5	Carbon Tetrachloride	1.0	U	1.0	
108-90-7	Chlorobenzene	1.0	U	1.0	
75-00-3	Chloroethane	1.0	U	1.0	
67-66-3	Chloroform	1.0	U	1.0	
74-87-3	Chloromethane	1.0	U	1.0	
124-48-1	Dibromochloromethane	1.0	U	1.0	
75-09-2	Methylene Chloride	1.0	U	1.0	
100-41-4	Ethylbenzene	1.0	U	1.0	
127-18-4	Tetrachloroethene (PCE)	1.0	U	1.0	
108-88-3	Toluene	1.0	U	1.0	
79-01-6	Trichloroethene (TCE)	30		1.0	
75-69-4	Trichlorofluoromethane (CFC 11)	1.0	U	1.0	
75-01-4	Vinyl Chloride	1.0	U	1.0	
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	
179601-23-1	m,p-Xylenes	2.0	U	2.0	
95-47-6	o-Xylene	1.0	U	1.0	
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client: AMEC Environmental & Infrastructure (Formerly MACTEC)
Project: NYSDEC Primoshield/3612122251
Sample Matrix: Water

Service Request: R1306992
Date Collected: 9/19/13 1120
Date Received: 9/21/13
Date Analyzed: 9/25/13 18:30

Sample Name: 633027 EFFLUENT
Lab Code: R1306992-001

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 624
Data File Name: I:\ACQUDATA\MSVOA6\DATA\092513\L0262.D\

Analysis Lot: 360085
Instrument Name: R-MS-06
Dilution Factor: 1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
1,2-Dichloroethane-d4	100	81-127	9/25/13 18:30	
4-Bromofluorobenzene	103	79-123	9/25/13 18:30	
Toluene-d8	101	83-120	9/25/13 18:30	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client: AMEC Environmental & Infrastructure (Formerly MACTEC)
Project: NYSDEC Primoshield/3612122251
Sample Matrix: Water
Sample Name: 633027 EFFLUENT
Lab Code: R1306992-001

Service Request: R1306992
Date Collected: 9/19/13 1120
Date Received: 9/21/13

Basis: NA

General Chemistry Parameters

Analyte Name	Method	Result	Q	Units	MRL	Dilution Factor	Date Extracted	Date Analyzed	Note
Cyanide, Total	9012B	0.010	U	mg/L	0.010	1	9/25/13	9/25/13 16:57	
pH	SM 4500-H+ B	7.24		pH Units		1	NA	10/1/13 12:56	H
Temperature of pH Analysis	SM 4500-H+ B	20.2		deg C		1	NA	10/1/13 12:56	H

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client: AMEC Environmental & Infrastructure (Formerly MACTEC)
Project: NYSDEC Primoshield/3612122251
Sample Matrix: Water
Sample Name: 633027 EFFLUENT
Lab Code: R1306992-001

Service Request: R1306992
Date Collected: 9/19/13 1120
Date Received: 9/21/13

Basis: NA

Inorganic Parameters

Analyte Name	Method	Result	Q	Units	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Note
Cadmium, Total	200.7	5.0	U	µg/L	5.0		1	10/ 1/13	10/6/13 18:56	
Chromium, Total	200.7	10	U	µg/L	10		1	10/ 1/13	10/6/13 18:56	
Copper, Total	200.7	20	U	µg/L	20		1	10/ 1/13	10/6/13 18:56	
Lead, Total	200.7	50	U	µg/L	50	2	1	10/ 1/13	10/6/13 18:56	
Nickel, Total	200.7	43		µg/L	40		1	10/ 1/13	10/6/13 18:56	
Zinc, Total	200.7	20	U	µg/L	20		1	10/ 1/13	10/6/13 18:56	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client: AMEC Environmental & Infrastructure (Formerly MACTEC)
Project: NYSDEC Primoshield/3612122251
Sample Matrix: Water

Service Request: R1306992
Date Collected: 9/19/13 1120
Date Received: 9/21/13
Date Analyzed: 9/25/13 19:00

Sample Name: TRIP BLANK
Lab Code: R1306992-002

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 624
Data File Name: I:\ACQUDATA\MSVOA6\DATA\092513\L0263.D\

Analysis Lot: 360085
Instrument Name: R-MS-06
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	MRL	Note
71-55-6	1,1,1-Trichloroethane (TCA)	1.0	U	1.0	
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	
75-34-3	1,1-Dichloroethane (1,1-DCA)	1.0	U	1.0	
75-35-4	1,1-Dichloroethene (1,1-DCE)	1.0	U	1.0	
107-06-2	1,2-Dichloroethane	1.0	U	1.0	
78-87-5	1,2-Dichloropropane	1.0	U	1.0	
110-75-8	2-Chloroethyl Vinyl Ether	10	U	10	
107-02-8	Acrolein	10	U	10	
107-13-1	Acrylonitrile	10	U	10	
71-43-2	Benzene	1.0	U	1.0	
75-27-4	Bromodichloromethane	1.0	U	1.0	
75-25-2	Bromoform	1.0	U	1.0	
74-83-9	Bromomethane	1.0	U	1.0	
56-23-5	Carbon Tetrachloride	1.0	U	1.0	
108-90-7	Chlorobenzene	1.0	U	1.0	
75-00-3	Chloroethane	1.0	U	1.0	
67-66-3	Chloroform	1.0	U	1.0	
74-87-3	Chloromethane	1.0	U	1.0	
124-48-1	Dibromochloromethane	1.0	U	1.0	
75-09-2	Methylene Chloride	1.0	U	1.0	
100-41-4	Ethylbenzene	1.0	U	1.0	
127-18-4	Tetrachloroethene (PCE)	1.0	U	1.0	
108-88-3	Toluene	1.0	U	1.0	
79-01-6	Trichloroethene (TCE)	1.0	U	1.0	
75-69-4	Trichlorofluoromethane (CFC 11)	1.0	U	1.0	
75-01-4	Vinyl Chloride	1.0	U	1.0	
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	
179601-23-1	m,p-Xylenes	2.0	U	2.0	
95-47-6	o-Xylene	1.0	U	1.0	
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client: AMEC Environmental & Infrastructure (Formerly MACTEC)
Project: NYSDEC Primoshield/3612122251
Sample Matrix: Water

Service Request: R1306992
Date Collected: 9/19/13 1120
Date Received: 9/21/13
Date Analyzed: 9/25/13 19:00

Sample Name: TRIP BLANK
Lab Code: R1306992-002

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 624
Data File Name: I:\ACQUDATA\MSVOA6\DATA\092513\L0263.D\

Analysis Lot: 360085
Instrument Name: R-MS-06
Dilution Factor: 1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
1,2-Dichloroethane-d4	104	81-127	9/25/13 19:00	
4-Bromofluorobenzene	101	79-123	9/25/13 19:00	
Toluene-d8	101	83-120	9/25/13 19:00	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client: AMEC Environmental & Infrastructure (Formerly MACTEC)
Project: NYSDEC Primoshield/3612122251
Sample Matrix: Soil

Service Request: R1306992
Date Collected: 9/19/13 1500
Date Received: 9/21/13
Date Analyzed: 9/25/13 11:37

Sample Name: 633027 VAULT SEDIMENT
Lab Code: R1306992-003

Units: µg/Kg
Basis: Dry
Percent Solids: 50.2

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\MSVOA7\DATA\092513\K5229.D\

Analysis Lot: 360184
Instrument Name: R-MS-07
Dilution Factor: .6

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
71-55-6	1,1,1-Trichloroethane (TCA)	14		6.0	0.88	
79-34-5	1,1,2,2-Tetrachloroethane	6.0	U	6.0	0.97	
79-00-5	1,1,2-Trichloroethane	6.0	U	6.0	0.88	
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	6.0	U	6.0	1.5	
75-34-3	1,1-Dichloroethane (1,1-DCA)	3.5	J	6.0	1.5	
75-35-4	1,1-Dichloroethene (1,1-DCE)	1.9	J	6.0	1.6	
120-82-1	1,2,4-Trichlorobenzene	6.0	U	6.0	0.71	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	6.0	U	6.0	2.3	
106-93-4	1,2-Dibromoethane	6.0	U	6.0	1.5	
95-50-1	1,2-Dichlorobenzene	6.0	U	6.0	0.73	
107-06-2	1,2-Dichloroethane	6.0	U	6.0	0.73	
78-87-5	1,2-Dichloropropane	6.0	U	6.0	1.2	
541-73-1	1,3-Dichlorobenzene	6.0	U	6.0	0.76	
106-46-7	1,4-Dichlorobenzene	6.0	U	6.0	0.67	
78-93-3	2-Butanone (MEK)	6.0	U	6.0	2.8	
591-78-6	2-Hexanone	6.0	U	6.0	1.5	
75-65-0	2-Methyl-2-propanol (tert-Butyl Alcohol)	120	U	120	31	
108-10-1	4-Methyl-2-pentanone	6.0	U	6.0	1.2	
67-64-1	Acetone	6.0	U	6.0	3.4	
71-43-2	Benzene	6.0	U	6.0	0.35	
75-27-4	Bromodichloromethane	6.0	U	6.0	0.73	
75-25-2	Bromoform	6.0	U	6.0	1.2	
74-83-9	Bromomethane	6.0	U	6.0	1.7	
75-15-0	Carbon Disulfide	6.0	U	6.0	1.5	
56-23-5	Carbon Tetrachloride	6.0	U	6.0	1.1	
108-90-7	Chlorobenzene	6.0	U	6.0	0.35	
75-00-3	Chloroethane	6.0	U	6.0	3.5	
67-66-3	Chloroform	6.0	U	6.0	1.6	
74-87-3	Chloromethane	6.0	U	6.0	0.48	
110-82-7	Cyclohexane	6.0	U	6.0	1.7	
124-48-1	Dibromochloromethane	6.0	U	6.0	0.88	
75-71-8	Dichlorodifluoromethane (CFC 12)	6.0	U	6.0	2.3	
75-09-2	Dichloromethane	6.0	U	6.0	0.69	
100-41-4	Ethylbenzene	6.0	U	6.0	0.28	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client: AMEC Environmental & Infrastructure (Formerly MACTEC)
Project: NYSDEC Primoshield/3612122251
Sample Matrix: Soil

Service Request: R1306992
Date Collected: 9/19/13 1500
Date Received: 9/21/13
Date Analyzed: 9/25/13 11:37

Sample Name: 633027 VAULT SEDIMENT
Lab Code: R1306992-003

Units: µg/Kg
Basis: Dry
Percent Solids: 50.2

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\MSVOA7\DATA\092513\K5229.D\

Analysis Lot: 360184
Instrument Name: R-MS-07
Dilution Factor: .6

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
98-82-8	Isopropylbenzene (Cumene)	6.0	U	6.0	0.81	
79-20-9	Methyl Acetate	6.0	U	6.0	2.1	
1634-04-4	Methyl tert-Butyl Ether	6.0	U	6.0	1.2	
108-87-2	Methylcyclohexane	6.0	U	6.0	1.5	
91-20-3	Naphthalene	6.0	U	6.0	0.61	
100-42-5	Styrene	6.0	U	6.0	0.36	
127-18-4	Tetrachloroethene (PCE)	6.0	U	6.0	1.1	
108-88-3	Toluene	6.0	U	6.0	1.2	
79-01-6	Trichloroethene (TCE)	78		6.0	1.3	
75-69-4	Trichlorofluoromethane (CFC 11)	6.0	U	6.0	0.79	
75-01-4	Vinyl Chloride	6.0	U	6.0	2.2	
156-59-2	cis-1,2-Dichloroethene	6.1		6.0	1.2	
10061-01-5	cis-1,3-Dichloropropene	6.0	U	6.0	1.1	
179601-23-1	m,p-Xylenes	12	U	12	1.4	
95-47-6	o-Xylene	6.0	U	6.0	0.58	
156-60-5	trans-1,2-Dichloroethene	6.0	U	6.0	1.1	
10061-02-6	trans-1,3-Dichloropropene	6.0	U	6.0	0.24	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	100	51-136	9/25/13 11:37	
Dibromofluoromethane	98	63-138	9/25/13 11:37	
Toluene-d8	101	66-138	9/25/13 11:37	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client: AMEC Environmental & Infrastructure (Formerly MACTEC)
Project: NYSDEC Primoshield/3612122251
Sample Matrix: Soil

Sample Name: 633027 VAULT SEDIMENT
Lab Code: R1306992-003
Run Type: Reanalysis

Service Request: R1306992
Date Collected: 9/19/13 1500
Date Received: 9/21/13
Date Analyzed: 9/24/13 17:48

Units: µg/Kg
Basis: Dry
Percent Solids: 50.2

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\MSVOA7\DATA\092413\K5215.D\

Analysis Lot: 359969
Instrument Name: R-MS-07
Dilution Factor: .7

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
71-55-6	1,1,1-Trichloroethane (TCA)	25		7.0	1.1	
79-34-5	1,1,2,2-Tetrachloroethane	7.0	U	7.0	1.2	
79-00-5	1,1,2-Trichloroethane	7.0	U	7.0	1.1	
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	7.0	U	7.0	1.8	
75-34-3	1,1-Dichloroethane (1,1-DCA)	6.2	J	7.0	1.8	
75-35-4	1,1-Dichloroethene (1,1-DCE)	3.2	J	7.0	1.8	
120-82-1	1,2,4-Trichlorobenzene	7.0	U	7.0	0.83	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	7.0	U	7.0	2.7	
106-93-4	1,2-Dibromoethane	7.0	U	7.0	1.7	
95-50-1	1,2-Dichlorobenzene	7.0	U	7.0	0.86	
107-06-2	1,2-Dichloroethane	7.0	U	7.0	0.86	
78-87-5	1,2-Dichloropropane	7.0	U	7.0	1.4	
541-73-1	1,3-Dichlorobenzene	7.0	U	7.0	0.88	
106-46-7	1,4-Dichlorobenzene	7.0	U	7.0	0.79	
78-93-3	2-Butanone (MEK)	7.0	U	7.0	3.2	
591-78-6	2-Hexanone	7.0	U	7.0	1.7	
75-65-0	2-Methyl-2-propanol (tert-Butyl Alcohol)	140	U	140	36	
108-10-1	4-Methyl-2-pentanone	7.0	U	7.0	1.4	
67-64-1	Acetone	7.0	U	7.0	4.0	
71-43-2	Benzene	7.0	U	7.0	0.41	
75-27-4	Bromodichloromethane	7.0	U	7.0	0.86	
75-25-2	Bromoform	7.0	U	7.0	1.3	
74-83-9	Bromomethane	7.0	U	7.0	2.0	
75-15-0	Carbon Disulfide	7.0	U	7.0	1.8	
56-23-5	Carbon Tetrachloride	7.0	U	7.0	1.3	
108-90-7	Chlorobenzene	7.0	U	7.0	0.41	
75-00-3	Chloroethane	7.0	U	7.0	4.1	
67-66-3	Chloroform	7.0	U	7.0	1.8	
74-87-3	Chloromethane	7.0	U	7.0	0.56	
110-82-7	Cyclohexane	7.0	U	7.0	2.0	
124-48-1	Dibromochloromethane	7.0	U	7.0	1.1	
75-71-8	Dichlorodifluoromethane (CFC 12)	7.0	U	7.0	2.7	
75-09-2	Dichloromethane	1.8	J	7.0	0.80	
100-41-4	Ethylbenzene	7.0	U	7.0	0.33	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client: AMEC Environmental & Infrastructure (Formerly MACTEC)
Project: NYSDEC Primoshield/3612122251
Sample Matrix: Soil

Service Request: R1306992
Date Collected: 9/19/13 1500
Date Received: 9/21/13
Date Analyzed: 9/24/13 17:48

Sample Name: 633027 VAULT SEDIMENT
Lab Code: R1306992-003
Run Type: Reanalysis

Units: µg/Kg
Basis: Dry
Percent Solids: 50.2

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\MSVOA7\DATA\092413\K5215.D\

Analysis Lot: 359969
Instrument Name: R-MS-07
Dilution Factor: .7

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
98-82-8	Isopropylbenzene (Cumene)	7.0	U	7.0	0.94	
79-20-9	Methyl Acetate	7.0	U	7.0	2.5	
1634-04-4	Methyl tert-Butyl Ether	7.0	U	7.0	1.4	
108-87-2	Methylcyclohexane	7.0	U	7.0	1.7	
91-20-3	Naphthalene	7.0	U	7.0	0.72	
100-42-5	Styrene	7.0	U	7.0	0.42	
127-18-4	Tetrachloroethene (PCE)	1.5	J	7.0	1.3	
108-88-3	Toluene	7.0	U	7.0	1.4	
79-01-6	Trichloroethene (TCE)	230		7.0	1.5	
75-69-4	Trichlorofluoromethane (CFC 11)	7.0	U	7.0	0.93	
75-01-4	Vinyl Chloride	7.0	U	7.0	2.6	
156-59-2	cis-1,2-Dichloroethene	15		7.0	1.4	
10061-01-5	cis-1,3-Dichloropropene	7.0	U	7.0	1.3	
179601-23-1	m,p-Xylenes	14	U	14	1.6	
95-47-6	o-Xylene	7.0	U	7.0	0.67	
156-60-5	trans-1,2-Dichloroethene	7.0	U	7.0	1.2	
10061-02-6	trans-1,3-Dichloropropene	7.0	U	7.0	0.28	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	82	51-136	9/24/13 17:48	
Dibromofluoromethane	101	63-138	9/24/13 17:48	
Toluene-d8	117	66-138	9/24/13 17:48	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client: AMEC Environmental & Infrastructure (Formerly MACTEC)
Project: NYSDEC Primoshield/3612122251
Sample Matrix: Soil
Sample Name: 633027 VAULT SEDIMENT
Lab Code: R1306992-003

Service Request: R1306992
Date Collected: 9/19/13 1500
Date Received: 9/21/13
Basis: Dry
Percent Solids: 50.2

General Chemistry Parameters

Analyte Name	Method	Result	Q	Units	MRL	Dilution Factor	Date Extracted	Date Analyzed	Note
Cyanide, Total	9012B	0.20	U	mg/Kg	0.20	1	10/ 1/13	10/2/13 11:23	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client: AMEC Environmental & Infrastructure (Formerly MACTEC)
Project: NYSDEC Primoshield/3612122251
Sample Matrix: Soil
Sample Name: 633027 VAULT SEDIMENT
Lab Code: R1306992-003

Service Request: R1306992
Date Collected: 9/19/13 1500
Date Received: 9/21/13

Basis: NA

General Chemistry Parameters

Analyte Name	Method	Result	Q	Units	MRL	Dilution Factor	Date Extracted	Date Analyzed	Note
Solids, Total	160.3 Modified	50.2		Percent	1.0	1	NA	9/25/13 10:25	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client: AMEC Environmental & Infrastructure (Formerly MACTEC)
Project: NYSDEC Primoshield/3612122251
Sample Matrix: Soil
Sample Name: 633027 VAULT SEDIMENT
Lab Code: R1306992-003

Service Request: R1306992
Date Collected: 9/19/13 1500
Date Received: 9/21/13

Basis: Dry
Percent Solids: 50.2

Inorganic Parameters

Analyte Name	Method	Result	Q	Units	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Note
Cadmium, Total	6010C	1.08		mg/Kg	0.96	0.12	1	10/ 3/13	10/4/13 23:59	
Chromium, Total	6010C	32.7		mg/Kg	1.9	0.2	1	10/ 3/13	10/7/13 11:32	
Copper, Total	6010C	61.9		mg/Kg	3.8	1.3	1	10/ 3/13	10/4/13 23:59	
Lead, Total	6010C	143		mg/Kg	10	0.4	1	10/ 3/13	10/4/13 23:59	
Nickel, Total	6010C	242		mg/Kg	7.7	0.2	1	10/ 3/13	10/4/13 23:59	
Zinc, Total	6010C	354		mg/Kg	3.8	0.2	1	10/ 3/13	10/4/13 23:59	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client: AMEC Environmental & Infrastructure (Formerly MACTEC)
Project: NYSDEC Primoshield/3612122251
Sample Matrix: Water
Sample Name: Method Blank
Lab Code: R1306992-MB1

Service Request: R1306992
Date Collected: NA
Date Received: NA
Basis: NA

General Chemistry Parameters

Analyte Name	Method	Result	Q	Units	MRL	Dilution Factor	Date Extracted	Date Analyzed	Note
Cyanide, Total	9012B	0.010	U	mg/L	0.010	1	9/25/13	9/25/13 16:51	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client: AMEC Environmental & Infrastructure (Formerly MACTEC)
Project: NYSDEC Primoshield/3612122251
Sample Matrix: Water
Sample Name: Method Blank
Lab Code: R1306992-MB1

Service Request: R1306992
Date Collected: NA
Date Received: NA
Basis: NA

Inorganic Parameters

Analyte Name	Method	Result	Q	Units	MRL	Dilution Factor	Date Extracted	Date Analyzed	Note
Cadmium, Total	200.7	5.0	U	µg/L	5.0	1	10/ 1/13	10/6/13 17:14	
Chromium, Total	200.7	10	U	µg/L	10	1	10/ 1/13	10/6/13 17:14	
Copper, Total	200.7	20	U	µg/L	20	1	10/ 1/13	10/6/13 17:14	
Nickel, Total	200.7	40	U	µg/L	40	1	10/ 1/13	10/6/13 17:14	
Zinc, Total	200.7	20	U	µg/L	20	1	10/ 1/13	10/6/13 17:14	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client: AMEC Environmental & Infrastructure (Formerly MACTEC)
Project: NYSDEC Primoshield/3612122251
Sample Matrix: Soil
Sample Name: Method Blank
Lab Code: R1306992-MB2

Service Request: R1306992
Date Collected: NA
Date Received: NA
Basis: Dry

General Chemistry Parameters

Analyte Name	Method	Result	Q	Units	MRL	Dilution Factor	Date Extracted	Date Analyzed	Note
Cyanide, Total	9012B	0.10	U	mg/Kg	0.10	1	10/ 1/13	10/2/13 11:08	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client: AMEC Environmental & Infrastructure (Formerly MACTEC)
Project: NYSDEC Primoshield/3612122251
Sample Matrix: Soil
Sample Name: Method Blank
Lab Code: R1306992-MB2

Service Request: R1306992
Date Collected: NA
Date Received: NA
Basis: NA

General Chemistry Parameters

Analyte Name	Method	Result	Q	Units	MRL	Dilution Factor	Date Extracted	Date Analyzed	Note
Solids, Total	160.3 Modified	1.0	U	Percent	1.0	1	NA	9/25/13 10:25	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client: AMEC Environmental & Infrastructure (Formerly MACTEC)
Project: NYSDEC Primoshield/3612122251
Sample Matrix: Soil
Sample Name: Method Blank
Lab Code: R1306992-MB2

Service Request: R1306992
Date Collected: NA
Date Received: NA
Basis: Dry

Inorganic Parameters

Analyte Name	Method	Result	Q	Units	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Note
Cadmium, Total	6010C	0.50	U	mg/Kg	0.50	0.06	1	10/ 3/13	10/4/13 23:42	
Chromium, Total	6010C	1.2		mg/Kg	1.0	0.10	1	10/ 3/13	10/4/13 23:42	
Copper, Total	6010C	2.0	U	mg/Kg	2.0	0.7	1	10/ 3/13	10/4/13 23:42	
Lead, Total	6010C	5.0	U	mg/Kg	5.0	0.2	1	10/ 3/13	10/4/13 23:42	
Nickel, Total	6010C	4.0	U	mg/Kg	4.0	0.09	1	10/ 3/13	10/4/13 23:42	
Zinc, Total	6010C	1.6	J	mg/Kg	2.0	0.08	1	10/ 3/13	10/4/13 23:42	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client: AMEC Environmental & Infrastructure (Formerly MACTEC)
Project: NYSDEC Primoshield/3612122251
Sample Matrix: Soil

Service Request: R1306992
Date Collected: NA
Date Received: NA
Date Analyzed: 9/24/13 11:34

Sample Name: Method Blank
Lab Code: RQ1311611-05

Units: µg/Kg
Basis: Dry

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\MSVOA7\DATA\092413\K5205.D\

Analysis Lot: 359969
Instrument Name: R-MS-07
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
71-55-6	1,1,1-Trichloroethane (TCA)	5.0	U	5.0	0.73	
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U	5.0	0.81	
79-00-5	1,1,2-Trichloroethane	5.0	U	5.0	0.73	
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	5.0	U	5.0	1.3	
75-34-3	1,1-Dichloroethane (1,1-DCA)	5.0	U	5.0	1.3	
75-35-4	1,1-Dichloroethene (1,1-DCE)	5.0	U	5.0	1.3	
120-82-1	1,2,4-Trichlorobenzene	5.0	U	5.0	0.59	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	5.0	U	5.0	1.9	
106-93-4	1,2-Dibromoethane	5.0	U	5.0	1.3	
95-50-1	1,2-Dichlorobenzene	5.0	U	5.0	0.61	
107-06-2	1,2-Dichloroethane	5.0	U	5.0	0.61	
78-87-5	1,2-Dichloropropane	5.0	U	5.0	0.97	
541-73-1	1,3-Dichlorobenzene	5.0	U	5.0	0.63	
106-46-7	1,4-Dichlorobenzene	5.0	U	5.0	0.56	
78-93-3	2-Butanone (MEK)	5.0	U	5.0	2.3	
591-78-6	2-Hexanone	5.0	U	5.0	1.3	
75-65-0	2-Methyl-2-propanol (tert-Butyl Alcohol)	100	U	100	26	
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.98	
67-64-1	Acetone	5.0	U	5.0	2.9	
71-43-2	Benzene	5.0	U	5.0	0.29	
75-27-4	Bromodichloromethane	5.0	U	5.0	0.61	
75-25-2	Bromoform	5.0	U	5.0	0.93	
74-83-9	Bromomethane	5.0	U	5.0	1.4	
75-15-0	Carbon Disulfide	5.0	U	5.0	1.3	
56-23-5	Carbon Tetrachloride	5.0	U	5.0	0.92	
108-90-7	Chlorobenzene	5.0	U	5.0	0.29	
75-00-3	Chloroethane	5.0	U	5.0	2.9	
67-66-3	Chloroform	5.0	U	5.0	1.3	
74-87-3	Chloromethane	5.0	U	5.0	0.40	
110-82-7	Cyclohexane	5.0	U	5.0	1.4	
124-48-1	Dibromochloromethane	5.0	U	5.0	0.73	
75-71-8	Dichlorodifluoromethane (CFC 12)	5.0	U	5.0	1.9	
75-09-2	Dichloromethane	5.0	U	5.0	0.57	
100-41-4	Ethylbenzene	5.0	U	5.0	0.23	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client: AMEC Environmental & Infrastructure (Formerly MACTEC)
Project: NYSDEC Primoshield/3612122251
Sample Matrix: Soil

Service Request: R1306992
Date Collected: NA
Date Received: NA
Date Analyzed: 9/24/13 11:34

Sample Name: Method Blank
Lab Code: RQ1311611-05

Units: µg/Kg
Basis: Dry

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\MSVOA7\DATA\092413\K5205.D\

Analysis Lot: 359969
Instrument Name: R-MS-07
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
98-82-8	Isopropylbenzene (Cumene)	5.0	U	5.0	0.67	
79-20-9	Methyl Acetate	5.0	U	5.0	1.8	
1634-04-4	Methyl tert-Butyl Ether	5.0	U	5.0	0.94	
108-87-2	Methylcyclohexane	5.0	U	5.0	1.2	
91-20-3	Naphthalene	0.60	J	5.0	0.51	
100-42-5	Styrene	5.0	U	5.0	0.30	
127-18-4	Tetrachloroethene (PCE)	5.0	U	5.0	0.88	
108-88-3	Toluene	5.0	U	5.0	1.0	
79-01-6	Trichloroethene (TCE)	5.0	U	5.0	1.1	
75-69-4	Trichlorofluoromethane (CFC 11)	5.0	U	5.0	0.66	
75-01-4	Vinyl Chloride	5.0	U	5.0	1.9	
156-59-2	cis-1,2-Dichloroethene	5.0	U	5.0	0.95	
10061-01-5	cis-1,3-Dichloropropene	5.0	U	5.0	0.90	
179601-23-1	m,p-Xylenes	10	U	10	1.1	
95-47-6	o-Xylene	5.0	U	5.0	0.48	
156-60-5	trans-1,2-Dichloroethene	5.0	U	5.0	0.86	
10061-02-6	trans-1,3-Dichloropropene	5.0	U	5.0	0.20	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	106	51-136	9/24/13 11:34	
Dibromofluoromethane	103	63-138	9/24/13 11:34	
Toluene-d8	100	66-138	9/24/13 11:34	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client: AMEC Environmental & Infrastructure (Formerly MACTEC)
Project: NYSDEC Primoshield/3612122251
Sample Matrix: Water

Service Request: R1306992
Date Collected: NA
Date Received: NA
Date Analyzed: 9/25/13 12:44

Sample Name: Method Blank
Lab Code: RQ1311676-04

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 624
Data File Name: I:\ACQUDATA\MSVOA6\DATA\092513\L0251.D\

Analysis Lot: 360085
Instrument Name: R-MS-06
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	MRL	Note
71-55-6	1,1,1-Trichloroethane (TCA)	1.0	U	1.0	
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	
75-34-3	1,1-Dichloroethane (1,1-DCA)	1.0	U	1.0	
75-35-4	1,1-Dichloroethene (1,1-DCE)	1.0	U	1.0	
107-06-2	1,2-Dichloroethane	1.0	U	1.0	
78-87-5	1,2-Dichloropropane	1.0	U	1.0	
110-75-8	2-Chloroethyl Vinyl Ether	10	U	10	
107-02-8	Acrolein	10	U	10	
107-13-1	Acrylonitrile	10	U	10	
71-43-2	Benzene	1.0	U	1.0	
75-27-4	Bromodichloromethane	1.0	U	1.0	
75-25-2	Bromoform	1.0	U	1.0	
74-83-9	Bromomethane	1.0	U	1.0	
56-23-5	Carbon Tetrachloride	1.0	U	1.0	
108-90-7	Chlorobenzene	1.0	U	1.0	
75-00-3	Chloroethane	1.0	U	1.0	
67-66-3	Chloroform	1.0	U	1.0	
74-87-3	Chloromethane	1.0	U	1.0	
124-48-1	Dibromochloromethane	1.0	U	1.0	
75-09-2	Methylene Chloride	1.0	U	1.0	
100-41-4	Ethylbenzene	1.0	U	1.0	
127-18-4	Tetrachloroethene (PCE)	1.0	U	1.0	
108-88-3	Toluene	1.0	U	1.0	
79-01-6	Trichloroethene (TCE)	1.0	U	1.0	
75-69-4	Trichlorofluoromethane (CFC 11)	1.0	U	1.0	
75-01-4	Vinyl Chloride	1.0	U	1.0	
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	
179601-23-1	m,p-Xylenes	2.0	U	2.0	
95-47-6	o-Xylene	1.0	U	1.0	
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client: AMEC Environmental & Infrastructure (Formerly MACTEC)
Project: NYSDEC Primoshield/3612122251
Sample Matrix: Water

Service Request: R1306992
Date Collected: NA
Date Received: NA
Date Analyzed: 9/25/13 12:44

Sample Name: Method Blank
Lab Code: RQ1311676-04

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 624
Data File Name: I:\ACQUDATA\MSVOA6\DATA\092513\L0251.D\

Analysis Lot: 360085
Instrument Name: R-MS-06
Dilution Factor: 1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
1,2-Dichloroethane-d4	97	81-127	9/25/13 12:44	
4-Bromofluorobenzene	100	79-123	9/25/13 12:44	
Toluene-d8	99	83-120	9/25/13 12:44	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client: AMEC Environmental & Infrastructure (Formerly MACTEC)
Project: NYSDEC Primoshield/3612122251
Sample Matrix: Soil

Service Request: R1306992
Date Collected: NA
Date Received: NA
Date Analyzed: 9/25/13 11:00

Sample Name: Method Blank
Lab Code: RQ1311693-04

Units: µg/Kg
Basis: Dry

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\MSVOA7\DATA\092513\K5228.D\

Analysis Lot: 360184
Instrument Name: R-MS-07
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
71-55-6	1,1,1-Trichloroethane (TCA)	5.0	U	5.0	0.73	
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U	5.0	0.81	
79-00-5	1,1,2-Trichloroethane	5.0	U	5.0	0.73	
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	5.0	U	5.0	1.3	
75-34-3	1,1-Dichloroethane (1,1-DCA)	5.0	U	5.0	1.3	
75-35-4	1,1-Dichloroethene (1,1-DCE)	5.0	U	5.0	1.3	
120-82-1	1,2,4-Trichlorobenzene	5.0	U	5.0	0.59	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	5.0	U	5.0	1.9	
106-93-4	1,2-Dibromoethane	5.0	U	5.0	1.3	
95-50-1	1,2-Dichlorobenzene	5.0	U	5.0	0.61	
107-06-2	1,2-Dichloroethane	5.0	U	5.0	0.61	
78-87-5	1,2-Dichloropropane	5.0	U	5.0	0.97	
541-73-1	1,3-Dichlorobenzene	5.0	U	5.0	0.63	
106-46-7	1,4-Dichlorobenzene	5.0	U	5.0	0.56	
78-93-3	2-Butanone (MEK)	5.0	U	5.0	2.3	
591-78-6	2-Hexanone	5.0	U	5.0	1.3	
75-65-0	2-Methyl-2-propanol (tert-Butyl Alcohol)	100	U	100	26	
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.98	
67-64-1	Acetone	5.0	U	5.0	2.9	
71-43-2	Benzene	5.0	U	5.0	0.29	
75-27-4	Bromodichloromethane	5.0	U	5.0	0.61	
75-25-2	Bromoform	5.0	U	5.0	0.93	
74-83-9	Bromomethane	5.0	U	5.0	1.4	
75-15-0	Carbon Disulfide	5.0	U	5.0	1.3	
56-23-5	Carbon Tetrachloride	5.0	U	5.0	0.92	
108-90-7	Chlorobenzene	5.0	U	5.0	0.29	
75-00-3	Chloroethane	5.0	U	5.0	2.9	
67-66-3	Chloroform	5.0	U	5.0	1.3	
74-87-3	Chloromethane	5.0	U	5.0	0.40	
110-82-7	Cyclohexane	5.0	U	5.0	1.4	
124-48-1	Dibromochloromethane	5.0	U	5.0	0.73	
75-71-8	Dichlorodifluoromethane (CFC 12)	5.0	U	5.0	1.9	
75-09-2	Dichloromethane	5.0	U	5.0	0.57	
100-41-4	Ethylbenzene	5.0	U	5.0	0.23	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client: AMEC Environmental & Infrastructure (Formerly MACTEC)
Project: NYSDEC Primoshield/3612122251
Sample Matrix: Soil

Service Request: R1306992
Date Collected: NA
Date Received: NA
Date Analyzed: 9/25/13 11:00

Sample Name: Method Blank
Lab Code: RQ1311693-04

Units: µg/Kg
Basis: Dry

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\MSVOA7\DATA\092513\K5228.D\

Analysis Lot: 360184
Instrument Name: R-MS-07
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
98-82-8	Isopropylbenzene (Cumene)	5.0	U	5.0	0.67	
79-20-9	Methyl Acetate	5.0	U	5.0	1.8	
1634-04-4	Methyl tert-Butyl Ether	5.0	U	5.0	0.94	
108-87-2	Methylcyclohexane	5.0	U	5.0	1.2	
91-20-3	Naphthalene	0.62	J	5.0	0.51	
100-42-5	Styrene	5.0	U	5.0	0.30	
127-18-4	Tetrachloroethene (PCE)	5.0	U	5.0	0.88	
108-88-3	Toluene	5.0	U	5.0	1.0	
79-01-6	Trichloroethene (TCE)	5.0	U	5.0	1.1	
75-69-4	Trichlorofluoromethane (CFC 11)	5.0	U	5.0	0.66	
75-01-4	Vinyl Chloride	5.0	U	5.0	1.9	
156-59-2	cis-1,2-Dichloroethene	5.0	U	5.0	0.95	
10061-01-5	cis-1,3-Dichloropropene	5.0	U	5.0	0.90	
179601-23-1	m,p-Xylenes	10	U	10	1.1	
95-47-6	o-Xylene	5.0	U	5.0	0.48	
156-60-5	trans-1,2-Dichloroethene	5.0	U	5.0	0.86	
10061-02-6	trans-1,3-Dichloropropene	5.0	U	5.0	0.20	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	103	51-136	9/25/13 11:00	
Dibromofluoromethane	102	63-138	9/25/13 11:00	
Toluene-d8	99	66-138	9/25/13 11:00	