Final Second Five-Year Review Report for the Hudson River PCBs Superfund Site

APPENDIX 10

FIVE-YEAR REVIEW SITE INSPECTION CHECKLIST

Prepared by:

Ecology & Environment, Inc.

April 2019

Final Second Five-Year Review Report for the Hudson River PCBs Superfund Site

APPENDIX 10-1

FIVE-YEAR REVIEW SITE INSPECTION CHECKLIST OU-1

Prepared by:

Ecology & Environment, Inc.

April 2019

Five-Year Review Site Inspection Checklist – OU1

I. SITE INFORMATION	
Site name: Hudson River PCBs Superfund Site, OU1: Remnant Deposit Sites	**Date of inspection: March 2, 2017**
Location and Region: New York, Hudson Falls and Fort Edward	**EPA ID:** NYD980763841
Agency, office, or company leading the five-year review: EPA Region 2	**Weather/temperature: Clear, Windy; 37° F**

Remedy Includes: (Check all that apply)

- X Landfill cover/containment
- X Access controls
- ☐ Institutional controls
- ☐ Groundwater pump and treatment
- ☐ Surface water collection and treatment
- ☐ Other:
- ☐ Monitored natural attenuation/recovery
- ☐ Groundwater containment
- ☐ Vertical barrier walls

Attachments: X Inspection team roster attached X Site map attached

II. INTERVIEWS (Not Applicable - See Part 4 Other Interviews)

1. **System Operations site manager**

_____ _____ _____
Name Title Date

Interviewed ☐ at site ☐ at office ☐ by phone Phone no. _____

Problems, suggestions; ☐ Report attached _____

2. System Operations Staff _____ _____ _____
Name Title Date

Interviewed ☐ at site ☐ at office ☐ by phone Phone no. _____

Problems, suggestions; ☐ Report attached _____

3. **Local regulatory authorities and response agencies** (i.e., State and Tribal offices, emergency response office, police department, office of public health or environmental health, zoning office, recorder of deeds, or other city and county offices, etc.) Fill in all that apply.

Agency _____
Contact _____ _____ _____ _____
Name Title Date Phone no.
Problems; suggestions; ☐ Report attached _____
_____

Agency _____
Contact _____ _____ _____ _____
Name Title Date Phone no.
Problems; suggestions; ☐ Report attached _____
_____

Agency _____
Contact _____ _____ _____ _____
Name Title Date Phone no.
Problems; suggestions; ☐ Report attached _____
_____

Agency _____
Contact _____ _____ _____ _____
Name Title Date Phone no.
Problems; suggestions; ☐ Report attached _____
_____

4. **Other interviews** (optional) ☐ Report attached.

Meetings between Environmental Protection Agency (EPA) and General Electric (GE) have generally occurred on a weekly basis over the past five years.

III. ON-SITE DOCUMENTS & RECORDS VERIFIED (Check all that apply)

1. System Operations **Documents**

☐ System Operations manual(s)	☐ Readily available	☐ Up to date	☐ N/A
X As-built drawings	X Readily available	X Up to date	☐ N/A
X Maintenance logs	X Readily available	X Up to date	☐ N/A

Remarks: Documents produced by GE are provided to the EPA..

2. **Site-Specific Health and Safety Plan** X Readily available X Up to date ☐ N/A
☐ Contingency plan/emergency response plan ☐ Readily available X Up to date ☐ N/A
Remarks: GE keeps Health and Safety Plans for the Remnant Deposits.

3. **System Operations and OSHA Training Records** ☐ Readily available ☐ Up to date X N/A
Remarks

4. **Permits and Service Agreements**

☐ Air discharge permit	☐ Readily available	☐ Up to date	X N/A
☐ Effluent discharge	☐ Readily available	☐ Up to date	X N/A
☐ Waste disposal, POTW	☐ Readily available	☐ Up to date	X N/A
☐ Other permits:_____	☐ Readily available	☐ Up to date	X N/A

Remarks:

6.	**Discharge Compliance Records**			
	☐ Air	☐ Readily available	☐ Up to date	X N/A
	☐ Water (effluent)	☐ Readily available	☐ Up to date	X N/A
	Remarks: _____			
7.	**Daily Access/Security Logs**	☐ Readily available	☐ Up to date	X N/A
	Remarks: Access is controlled and restricted with fences surrounding deposits.			

IV. SYSTEM OPERATIONS COSTS

1. **System Operations Organization**

☐ State in-house ☐ Contractor for State
X PRP in-house X Contractor for PRP
☐ Federal Facility in-house ☐ Contractor for Federal Facility
☐ Other

Remarks: Handled by GE and contractors.

2. **System Operations Cost Records**

X N/A ☐ Readily available ☐ Up to date
X Funding mechanism/agreement in place (GE performing remedy, including O&M, pursuant to 1990 consent decree with the United States)
Original System Operations cost estimate_____ ☐ Breakdown attached

Total annual cost by year for review period if available

From_____	To_____	_____	☐ Breakdown attached
Date	Date	Total cost	
From_____	To_____	_____	☐ Breakdown attached
Date	Date	Total cost	
From_____	To_____	_____	☐ Breakdown attached
Date	Date	Total cost	
From_____	To_____	_____	☐ Breakdown attached
Date	Date	Total cost	
From_____	To_____	_____	☐ Breakdown attached
Date	Date	Total cost	

V. ACCESS AND INSTITUTIONAL CONTROLS X Applicable ☐ N/A

A. Fencing

1. **Fencing damaged** X Location shown on site map X Gates secured ☐ N/A

Remarks: OU1 fencing shows some signs of vandalism. Areas of vandalism were noted by GE for repair.

B. Other Access Restrictions

1. **Signs and other security measures** ☐ Location shown on site map ☐ N/A

Remarks: OU1 remnant site signs were inspected on March 2, 2017 and were satisfactory. These signs are inspected regularly.

C. Institutional Controls (ICs)

1. **Implementation and enforcement**

Remarks: EPA, New York State, and GE are researching ownership of the remnant sites so that an appropriate institutional control can be permanently established.

2.	**Adequacy** ☐ ICs are adequate X ICs are inadequate ☐ N/A Remarks: See Above.
D. General	
1.	**Vandalism/trespassing** ☐ Location shown on site map ☐ No vandalism evident Remarks Signs are checked regularly. If reported missing, signs are replaced. Fencing is checked regularly; if vandalism or signs of trespassing are noted, repairs are made. Vandalism was noted in the 2016 OM&M inspection and again in the 2017 FYR inspection and damage will be repaired.
2.	**Land use changes on site** Remarks: None.
3.	**Land use changes off site** Remarks: None.

VI. GENERAL SITE CONDITIONS	
A. Roads	x Applicable ☐ N/A
1.	**Roads damaged** ☐ Location shown on site map X Roads adequate ☐ N/A Remarks: No issues observed.
B. Other Site Conditions	
	Remarks: Containment layers intact and no issues with drainage swales onsite.

Inspection Roster

Organization	Name
EPA	Michael Cheplowitz
Ecology & Environment, Inc.	Max Martin
NYSDEC	David Tromp
NYSDEC	Alex Czuhanich
General Electric	Bob Gibson
Parsons	Jeff Mirarchi
O'Brien and Gere (OBG)	Paul Curran
OBG	Rebecca McDonald

VII. OVERALL OBSERVATIONS	
A.	**Implementation of the Remedy**
	Describe issues and observations relating to whether the remedy is effective and functioning as designed. Begin with a brief statement of what the remedy is to accomplish (i.e., to contain contaminant plume, minimize infiltration and gas emission, etc.). The remedy at the formerly exposed remnant deposits at the Site currently protects human health and the environment as the in-place containment and cap system prevents human exposure, and as perimeter fencing and signage continue to be maintained. However, in order for the remedy to be protective in the long-term, an institutional control needs be implemented to ensure that future use of remnant deposits does not compromise the integrity of the cap system or result in unsafe exposures. Containment of contaminated sediments is functioning as expected.

B.	**Adequacy of System Operations** Remarks: None.
	Describe issues and observations related to the implementation and scope of System Operation procedures. In particular, discuss their relationship to the current and long-term protectiveness of the remedy. In order for the remedy to be protective in the long-term, an institutional control needs be implemented to ensure that future use of remnant deposits does not compromise the integrity of the cap system or result in unsafe exposures.
C.	**Early Indicators of Potential Remedy Problems**
	Describe issues and observations such as unexpected changes in the cost or scope of System Operations or a high frequency of unscheduled repairs that suggest that the protectiveness of the remedy may be compromised in the future. N/A
D.	**Opportunities for Optimization**
	Describe possible opportunities for optimization in monitoring tasks or the operation of the remedy. N/A

Final Second Five-Year Review Report for the Hudson River PCBs Superfund Site

APPENDIX 10-2

FIVE-YEAR REVIEW SITE INSPECTION CHECKLIST OU-2

Prepared by:

Ecology & Environment, Inc.

April 2019

Five-Year Review Site Inspection Checklist – OU2

I. SITE INFORMATION	
Site name: Hudson River PCBs Superfund Site	**Date of inspection:11/10/2016**
Location and Region: New York, Hudson Falls to Battery in NYC	**EPA ID:** NYD980763841
Agency, office, or company leading the five-year review: EPA Region 2	**Weather/temperature: Clear/39° F.**

Remedy Includes: (Check all that apply)

- X Landfill cover/containment
- ☐ Access controls
- X Institutional controls
- ☐ Groundwater pump and treatment
- ☐ Surface water collection and treatment
- ☐ Other: Dredging of contaminated sediments
- X Monitored natural attenuation/recovery
- ☐ Groundwater containment
- ☐ Vertical barrier walls

Attachments: X Inspection team roster attached ☐ Site map attached

II. INTERVIEWS (Not Applicable - See Part 4 Other Interviews)

1. **System Operations site manager**

_____ _____ _____
Name Title Date

Interviewed ☐ at site ☐ at office ☐ by phone Phone no. _____

Problems, suggestions; ☐ Report attached _____

2. System Operations **Staff** _____ _____ _____
Name Title Date

Interviewed ☐ at site ☐ at office ☐ by phone Phone no. _____

Problems, suggestions; ☐ Report attached _____

3. **Local regulatory authorities and response agencies** (i.e., State and Tribal offices, emergency response office, police department, office of public health or environmental health, zoning office, recorder of deeds, or other city and county offices, etc.) Fill in all that apply.

Agency _____
Contact _____ _____ _____ _____
Name Title Date Phone no.
Problems; suggestions; ☐ Report attached _____
_____

Agency _____
Contact _____ _____ _____ _____
Name Title Date Phone no.
Problems; suggestions; ☐ Report attached _____
_____

Agency _____
Contact _____ _____ _____ _____
Name Title Date Phone no.
Problems; suggestions; ☐ Report attached _____
_____

Agency _____
Contact _____ _____ _____ _____
Name Title Date Phone no.
Problems; suggestions; ☐ Report attached _____

4. **Other interviews** (optional) ☐ Report attached.

Meetings between EPA and GE have generally occurred on a weekly basis over the past five years. EPA interacted with GE contractors on a daily basis during its oversight of the dredging operations.

III. ON-SITE DOCUMENTS & RECORDS VERIFIED (Check all that apply)

1. System Operations Documents

☐ System Operations manual(s)	☐ Readily available	☐ Up to date	☐ N/A
X As-built drawings	☐ Readily available	☐ Up to date	☐ N/A
☐ Maintenance logs	☐ Readily available	☐ Up to date	☐ N/A

Remarks: Documents produced by GE and its contractors are provided to the EPA and are kept at the EPA field office located on 187 Wolf Road, Albany, New York. .

2.

Site-Specific Health and Safety Plan	X Readily available	x Up to date	☐ N/A
☐ Contingency plan/emergency response plan	X Readily available	x Up to date	☐ N/A

Remarks: Community Health and Safety Plan was also in place.

3. **System Operations and OSHA Training Records** ☐ Readily available ☐ Up to date X N/A
Remarks

4. **Permits and Service Agreements**

☐ Air discharge permit	☐ Readily available	☐ Up to date	☐ N/A
X Effluent discharge	X Readily available	☐ Up to date	☐ N/A
☐ Waste disposal, POTW	☐ Readily available	☐ Up to date	☐ N/A
x Other permits: TSCA Disposal	X Readily available	☐ Up to date	☐ N/A

Remarks: Effluent permits for the Fort Edward sediment processing facility are managed and documented by GE's Contractors. The discharge permitted outfall for the onsite WTP was plugged and welded closed in December 2016. O&M will not include effluent discharge. Off-site disposal facilities maintained their own TSCA and other necessary permits.

6. **Discharge Compliance Records**

☐ Air	☐ Readily available	☐ Up to date	☐ N/A
X Water (effluent)	X Readily available	☐ Up to date	X N/A

Remarks: Discharge compliance records are kept by GE and EPA.

7. **Daily Access/Security Logs** X Readily available ☐ Up to date ☐ N/A

Remarks: Daily Access and security logs were kept for manned on-land facilities and are maintained by GE.

IV. SYSTEM OPERATIONS COSTS

1. **System Operations Organization**

☐ State in-house	☐ Contractor for State
X PRP in-house	X Contractor for PRP
☐ Federal Facility in-house	☐ Contractor for Federal Facility
☐ Other	

Remarks: Handled by GE and their contractors.

2. **System Operations Cost Records**

X N/A ☐ Readily available ☐ Up to date

X Funding mechanism/agreement in place (GE performing remedy, including O&M, pursuant to 2006 consent decree with the United States)

Original System Operations cost estimate_____ ☐ Breakdown attached

Total annual cost by year for review period if available

From_____	To_____	_____	☐ Breakdown attached
Date	Date	Total cost	
From_____	To_____	_____	☐ Breakdown attached
Date	Date	Total cost	
From_____	To_____	_____	☐ Breakdown attached
Date	Date	Total cost	
From_____	To_____	_____	☐ Breakdown attached
Date	Date	Total cost	
From_____	To_____	_____	☐ Breakdown attached
Date	Date	Total cost	

V. ACCESS AND INSTITUTIONAL CONTROLS X Applicable ☐ N/A

A. Fencing

1. **Fencing damaged** ☐ Location shown on site map ☐ Gates secured ☐ N/A
Remarks: Fencing for OU2 land facilities are intact/in-place as required or requested by property owners.

B. Other Access Restrictions

1. **Signs and other security measures** ☐ Location shown on site map ☐ N/A
Remarks: Fishing advisory signs along the Hudson River are checked regularly and replaced as needed. . All project related signage for facilities were checked regularly while in use, all support facility signage removed at time of inspection.

C. Institutional Controls (ICs)

1. **Implementation and enforcement**
Site conditions imply ICs not properly implemented ☐ Yes X No ☐ N/A
Site conditions imply ICs not being fully enforced ☐ Yes X No ☐ N/A
Type of monitoring (*e.g.*, self-reporting, drive by) Drive-by
Enforcement: Fishing license and/or enrollment in the recreational marine fishing registry required to fish in the Hudson River. New York State (NYS) Department of Health (DOH) issues fish advisories and NYS Department of Environmental Conservation (DEC) issues regulations for fishing in the Hudson River.
Frequency: Continuous
Responsible party/agency: USEPA, NYS DOH and NYS DEC.
Contact: Bridget Boyd NYSDOH Public Health Specialist (518) 402-7860
Kevin Farrar NYSDEC Section Chief (518) 402-9778
Name Title Date Phone no.
Reporting is up-to-date X Yes ☐ No ☐ N/A
Reports are verified by the lead agency X Yes ☐ No ☐ N/A
Specific requirements in deed or decision documents have been met X Yes ☐ No ☐ N/A
Violations have been reported ☐ Yes ☐ No X N/A
Other problems or suggestions: x Report attached
NYSDOH maintains an outreach program to inform the public about the regulations and advisories. A discussion of this program is included in Appendix 13.

2. **Adequacy** X ICs are adequate ☐ ICs are inadequate ☐ N/A
Remarks: Advisories and restrictions in place, exposures to public are being controlled. However, there is evidence that some anglers disregard the advisories/restrictions and consume fish along the Hudson River (Upper and Lower Sections Hudson River).

D. General

1. **Vandalism/trespassing** ☐ Location shown on site map ☐ No vandalism evident
Remarks Signs are checked regularly, if reported missing, signs are replaced.

2. **Land use changes on site** X N/A
Remarks

3. **Land use changes off site** X N/A
Remarks

4. **Implementation of fish consumption advisories**
Remarks: Advisories are in place. NYSDOH in process of making regular updates to the outreach program.

5. **Implementation of fishing restrictions**
Remarks: NYSDEC regulations include catch and release only for the Hudson River from Troy Dam upstream to Bakers Falls in the Village of Hudson Falls and tributaries in this section to first barrier impassable by fish, including Mohawk River below Route 32 bridge.

VI. GENERAL SITE CONDITIONS			
A. Roads	x Applicable	☐ N/A	
1. **Roads damaged**	☐ Location shown on site map	X Roads adequate	☐ N/A
Remarks: No issues observed.			

B. Land Facility Inspections

Name	Inspection Date	Purpose of Site	Identified Incomplete or Deficient Items	Follow Up
Green Island Crew Parking	11/10/2016	Crew Change Location and Parking	None	N/A
Waterford boat launch & parking area	11/10/2016	Crew Change Location and Parking	None	N/A
Lock C1	11/10/2016	Crew Change Location and Parking	None	N/A
Mechanicville City Dock	11/10/2016	Crew Change Location	None	N/A
CU95 Land Support	11/10/2016	Backfill Loading Area, Access to CU 95, Parking and Crew Change	None	N/A
RBLA (Rensselaer Barge Loading Area)	11/10/2016	Dredging Support, Crew Change Location, Crew Parking, Backfill Loading Area	None	N/A
RBLA Parking	11/10/2016	-	None	N/A
Lock C3	11/10/2016	Crew Change Location	None	N/A
Admiral's Marina	11/10/2016	Crew Change Location, Support Vessel Docking, Crew Parking	None	N/A
Alcove Marina	11/10/2016	Crew Change Location, Support Vessel Docking, Crew Parking	None	N/A
Schuyler Yacht Basin	11/10/2016	Crew Change Location, Support Vessel Docking, Crew Parking	None	N/A
Saratoga Rod & Gun Club	11/10/2016	Crew Change Location and Parking	None	N/A
Wood Chip Offload Area	11/10/2016	-	None	N/A
SBLA (Saratoga Barge Loading Area)	11/10/2016	Contractor Offices and Dredging Support, Crew Change Location, Crew Parking, Backfill Loading Area	None	N/A
LBLA (Landlocked Barge Loading Area)	11/10/2016	Contractor Offices and Dredging Support, Crew Change Location, Crew Parking, Backfill Loading Area	None	N/A
Landlock Boat Launch – West Shore	11/10/2016	Boat Launch for Landlock Area	None	N/A
Landlock Boat Launch – East Shore	11/10/2016	Boat Launch for Landlock Area	None	N/A
CU51 Access – Griffin Island	11/10/2016	Land Removal Access for CU 51	None	N/A
Work Support Marina	11/10/2016	Contractor Offices and Dredging Support, Crew Change Location, Crew Parking	None	N/A

B. Land Facility Inspections				
Name	**Inspection Date**	**Purpose of Site**	**Identified Incomplete or Deficient Items**	**Follow Up**
Green Island Crew Parking	11/10/2016	Crew Change Location and Parking	None	N/A
MBLA (Moreau Barge Loading Area)	11/10/2016	Backfill Loading Area	None	N/A
GSP (General Support Property)	11/10/2016	Contractor Offices and Dredging Support, Crew Change Location, Crew Parking	None	N/A
CU60-2 Transfer Area	11/10/2016	Support Area for CU60-2, Dredging Support	None	N/A
Crocker's Reef Parking Area	11/10/2016	Crew Change Location and Parking	None	N/A
Hot Spot 28 Access	11/10/2016	Habitat Supplies Launching Area	None	N/A
ITA (Isthmus Transload Area)	11/10/2016	Transloading of Dredged Material from Landlock Area, Dredging Support	None	N/A
Senecal Lane (ITA Access)	11/10/2016	ITA Land Access	None	N/A
Route 4 Parking	11/10/2016	Crew Parking Area	None	N/A
Fort Edward Sediment Processing Facility	11/30/2016	Unloading, Processing, and Transportation of Dredged Material and Water	None	N/A

Note: Inspections of these facilities were conducted on 11/10/16 and 11/30/16. For the purpose of the Certification of Remedial Action requirements, these inspections are considered Early Inspections. If no issues arise during the Early Inspections, EPA can accept the Early Inspections as Final Inspections at its discretion.

Inspection Roster	
Organization	**Name**
EPA	Gary Klawinski
EPA	Dave King
Ecology & Environment, Inc.	Max Martin
NYSDEC	David Tromp
NYSDEC	Jason Johnson
General Electric	John Haggard
General Electric	Bob Gibson
Parsons	Jeff Mirarchi
NYSCC	James Candiloro

VIII. OVERALL OBSERVATIONS	
A.	**Implementation of the Remedy**
	Describe issues and observations relating to whether the remedy is effective and functioning as designed. Begin with a brief statement of what the remedy is to accomplish (i.e., to contain contaminant plume, minimize infiltration and gas emission, etc.). The goals of the remedy are to reduce the risks to humans and ecological receptors by reducing PCB levels in fish and to minimize the downstream transport of PCBs, by reducing PCB concentrations in river sediments through dredging and MNA. Dredging as prescribed in the ROD has been completed and backfill completed. Habitat reconstruction has been completed and is being monitored for benchmark and success criteria. Monitoring of natural recovery will continue into the future.
B.	**Adequacy of System Operations**
	Describe issues and observations related to the implementation and scope of System Operation procedures. In particular, discuss their relationship to the current and long-term protectiveness of the remedy. Land-based facilities have been demobilized and restored. OM&M sediment sampling commenced in the fall of 2016, and OM&M plans for water and fish monitoring will be finalized in the spring of 2017. OM&M for Phase 1 and Phase 2 caps and habitat is still ongoing. OM&M plans are being reviewed on an ongoing basis.
C.	**Early Indicators of Potential Remedy Problems**
	Describe issues and observations such as unexpected changes in the cost or scope of System Operations or a high frequency of unscheduled repairs that suggest that the protectiveness of the remedy may be compromised in the future. Data collection for OM&M underway (sediment, fish, water). Data are being reviewed as they are received. No problems noted to date.
D.	**Opportunities for Optimization**
	Describe possible opportunities for optimization in monitoring tasks or the operation of the remedy. Scope for OM&M program under continuous review. Some adjustments to the monitoring program may be made as necessary in the future.

Final Second Five-Year Review Report for the Hudson River PCBs Superfund Site

APPENDIX 10

FIVE-YEAR REVIEW SITE INSPECTION CHECKLIST

Attachment 10-A Post-Closure Inspection Summary Report for Fort Edward PCB Remnant Site Remediation Project

Sites 2, 3, 4 and 5

Prepared by:

Ecology & Environment, Inc.

April 2019

OBG

FINAL REPORT

Post-Closure Inspection Summary Report for Fort Edward PCB Remnant Site Remediation Project Sites 2, 3, 4 and 5

General Electric Company

December 2016

DECEMBER 22, 2016 |0612| 61606

Post-Closure Inspection Summary Report for Fort Edward PCB Remnant Site Remediation Project Sites 2, 3, 4 and 5

Prepared for:
General Electric Company

PAUL T. CURRAN, P.E., DIVISION MANAGER
O'BRIEN & GERE ENGINEERS, INC.

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APPENDICES

A Site 2 Inspection Checklist and Site Map

B Site 3 Inspection Checklist and Site Map

C Site 4 Inspection Checklist and Site Map

D Site 5 Inspection Checklist and Site Map

1. INTRODUCTION

On October 19, 2016, O'Brien & Gere Engineers, Inc. (OBG) performed inspections of the Fort Edward Polychlorinated Biphenyl (PCB) Remnant Deposits Sites 2, 3, 4, and 5 located along the Upper Hudson River in Washington and Saratoga Counties, New York. The purpose of the inspections was to evaluate and document the continuing performance of the in-place remedial system at the sites and to identify potential problems and maintenance requirements in a timely and consistent manner. This report documents the semi-annual site inspections.

The October 2016 inspections were the 46th round of semi-annual inspections conducted according to the schedule approved under the Consent Decree (Civil Action No. 90-CV-575) between General Electric Company (GE) and the United States Environmental Protection Agency (USEPA). The inspections were performed in accordance with the USEPA-approved *Post-Closure Maintenance Plan (PCMP) for the Fort Edward PCB Remnant Site Remediation Project* prepared by J&L Engineering and submitted to USEPA on August 20, 1992. Site inspection checklist forms appearing in Appendices A through D of the PCMP were used during the inspections to document the condition of each site.

Maintenance activities were also conducted from October 10 to 14, 2016 on Remnant Deposits Sites 2, 3, 4, and 5. Maintenance activities included mowing the vegetative cover, removing vegetative and woody growth and debris, filling in animal holes, and repairing and securing site fencing and gates. Final inspections of the maintenance activities were conducted on October 19, 2016 following completion of the maintenance activities on each site.

Based on a review of rainfall data collected at the Warren County Airport in Glens Falls, New York and the Glens Falls Farm weather station, no significant rain events (defined in the PCMP as 2.5 inches of rain in a 24-hour period) were observed between the June 2016 and October 2016 semi-annual inspections. As required by the PCMP, supplemental site inspections are scheduled to be conducted if a significant rain event occurs.

The next semi-annual inspection is scheduled for June 2017.

2. INSPECTION SUMMARY

This section summarizes the results of each site inspection and recommended maintenance actions, if necessary. The site inspections consisted of items outlined in Section 3 of the PCMP and included inspections of the access roads, vegetative cover, site drainage, and site security. Copies of the completed site inspection checklists are appended to this report.

2.1. SITE 2 INSPECTION

Site 2 was inspected on October 19, 2016. In general, the site was observed to be in good condition.

2.1.1. Roadway Condition

The access road to the site was in good condition. No erosion or loss of vegetation was observed.

2.1.2. Diversion Ditches

The roadside diversion ditches along the west side of the access road and at the intersection of the road with the grass-lined swale appeared to be in good condition. The vegetation was well established within the drainage swales.

2.1.3. Roadway Side Slopes

The sloped area to the east of the access road was observed to be in good condition and stable. The vegetation appeared to be well established over the roadway side slopes.

2.1.4. Culverts

Water was observed flowing through the culvert running beneath the access road, and the culvert was observed to be functioning properly. Some fallen trees were present off site, and did not appear to obstruct flow.

2.1.5. Site Security

Consistent with previous inspections, the gate hinge was observed to be stiff due to minor vandalism. The extent of the fencing on the east side of the gate allows walking access to the site. Evidence of trespassing was not observed. The perimeter signs were in good condition.

2.1.6. Vegetative Cover

The vegetative cover was well established at Site 2, and the overall condition of the vegetation appeared to be good. No woody plants, exposed geosynthetic fabric, or areas of large-scale settlement were observed. Consistent with previous inspections, one small area of settlement was observed on the southern portion of the cap.

The gas vent pipes were in good condition. There was no evidence of erosion around the gas vent pipes.

2.1.7. Site Drainage

The two stream transfer channels at Site 2 appeared to be stable and functioning. Flow was observed in the northern stream transfer channel. The southern stream transfer channel was dry at the time of inspection. Additionally, flow was observed at the intersection of the northern stream transfer channel and the grass-lined drainage swales. Ponded water was observed in the southern grass-lined drainage swale.

The grass-lined drainage swales at Site 2 appeared to be in good condition. The drainage swales appeared to have good vegetative cover overall. The rip rap strips in the southern grass-lined drainage swale were also in good condition. Two small trees were observed to have fallen over the southern grass-lined drainage swale, and did not appear to impact integrity of the swale.

The rip rap along the river bank appeared to be stable and in good condition.

2.1.8. Site 2 Maintenance Repairs/Action Items

Maintenance repairs were completed prior to the October 2016 inspection, and included mowing of the vegetative cover, removal of vegetative growth and lubrication of access gate hinges.

As a result of the October 2016 inspection, the following maintenance repairs and action items were identified:

Conditions Requiring Immediate Attention

No items requiring immediate attention were noted.

Conditions Requiring Short-Term Attention

Prior to the next semi-annual inspection scheduled for June 2017, the following item should be addressed:

- The two fallen trees should be removed from the southern grass-lined swale.

Conditions Requiring Continued Monitoring

The following items should be monitored during the next inspection to see if the conditions deteriorate:

- The condition of the access gate hinge should be monitored.
- The small area of settlement on the southern portion of the cap should be monitored.

2.2. SITE 3 INSPECTION

Site 3 was inspected on October 19, 2016. In general, the site was observed to be in good condition.

2.2.1. Roadway Condition

The access road was observed to be in good condition. The portion of the access road at the bottom of the slope that was regraded by the New York State Department of Environmental Conservation (NYSDEC) contractor during the Former 004 Outfall soil removal project in 2004 was in good condition, containing no significant erosion at the time of the Site 3 inspection. A few minor gullies were observed on the slide slope of the access road.

2.2.2. Diversion Ditches

Diversion ditches were observed to be in good condition with no impacts on drainage.

2.2.3. Culverts

The 36-inch diameter culvert running beneath the access road was in good condition and appeared to be functioning properly. The culvert was dry at the time of the Site 3 inspection.

2.2.4. Site Security

The access gates were intact and in good working order. There were signs of unauthorized vehicular traffic at the site, including a section of fence close to the second access gate that was cut, and the fence was rolled back. Additional signs of unauthorized trespassing included several pieces of litter. The litter was removed by OBG on the day of the inspection.

2.2.5. Vegetative Cover

The vegetative cover at Site 3 was generally in good condition. No significant ponded water or large scale settlement was observed on the cover. Consistent with previous inspections, two small areas of settlement were observed on the northern portion of the cap. The small settlement areas have not increased in size since the last inspection and did not appear to impact the integrity of the cover. One burrowed animal hole was also observed on the northern portion of the cap.

The gas vent pipes were observed to be in good condition. There was no evidence of erosion around the gas vent pipes.

2.2.6. Site Drainage

The Site 3 drainage features were generally in good condition. The vegetative cover was generally well established.

As mentioned above, the eastern drainage swale on the northern portion of the site was modified and an access road was constructed over it in 2004. This access road crosses the stream transfer channel.

The drainage across the stream transfer channel has been maintained using perforated corrugated pipe and gravel. The gravel road in the area of the northern stream transfer channel was in good condition at the time of the Site 3 inspection.

The grass-lined drainage swales at Site 3 were generally dry and in good condition. The vegetative cover was well established.

The northern and southern stream transfer channels at Site 3 appeared to be in good condition. No significant siltation or potential blockage was observed at the channels' inlets or outlets.

The rip rap along the river bank appeared to be stable and in good condition. No erosion or exposed geosynthetic fabric was evident along the shore.

2.2.7. Site 3 Maintenance Repairs/Action Items

Maintenance repairs were completed prior to the October 2016 inspection, and included mowing of the vegetative cover, removal of vegetative growth, and lubrication of access gate hinges.

As a result of the October 2016 inspection, the following maintenance repairs and action items were identified:

Conditions Requiring Immediate Attention

No items requiring immediate attention were noted.

Conditions Requiring Short-Term Attention

Prior to the next semi-annual inspection scheduled for June 2017, the following item should be addressed:

- The section of cut fence should be repaired.
- The burrowed animal hole in the northern portion of the cap should be filled.

Conditions Requiring Continued Monitoring

The following item should be monitored during the next inspection to see if the conditions deteriorate:

- The small areas of settlement observed during the previous inspection and the areas of settlement repaired in December 2011, October and November 2012, July 2014, and October 2015 on the northern portion of Site 3 should be monitored for signs of additional settlement.
- The lower access road should be monitored for signs of additional gullies.

2.3. SITE 4 INSPECTION

Site 4 was inspected on October 19, 2016. In general, the site was observed to be in good condition.

2.3.1. Roadway Condition

The primary access roads were observed to be in good condition.

2.3.2. Rip Rap-Lined Channels

The channel running from the western side of the access road through the culvert and toward the river appeared to be in good condition. The southern rip rap-lined channel was also in good condition. The channels were dry at the time of the inspection.

2.3.3. Culverts

The northern and southern culverts were generally in good condition. The culverts were dry at the time of the inspection. A minor crack in the top of the 12-inch diameter southern culvert was observed, and does not appear to impact the integrity of the pipe.

2.3.4. Site Security

Consistent with previous inspections, the southern access gate had minor damage likely caused by trespassers, but was still in working order; the northern access gate was in good working order. The perimeter signs on both gates were intact and properly secured.

Fencing installed near the northern and southern access gates has not entirely deterred trespassing via all-terrain vehicle (ATV) traffic. Evidence of ATV traffic was observed on the southern portion of the cap. Additional signs of unauthorized trespassing included litter. The litter was removed by OBG on the day of the inspection. The perimeter signs were in good condition.

2.3.5. Vegetative Cover

The vegetative cover at Site 4 was generally in good condition. Exposed soil associated with the ATV traffic was observed on the southern portion of the cap.

Overall, no large scale settlement was observed on the Site 4 cover. Consistent with previous inspections, several small settlement areas (approximately 0.5 to 1 foot deep) were observed near a gas vent pipe in the central portion of the site. These small settlement areas have not increased in size and did not appear to impact the integrity of the cover. No ponded areas or erosion gullies related to the vegetative cover were observed.

The gas vent pipes were observed to be in good condition. There was no evidence of erosion around the gas vent pipes.

2.3.6. Site Drainage

The perimeter drainage swales were generally in good condition. All grass-lined drainage swales were dry at the time of the inspection.

The stream transfer channels appeared to be functioning properly. All stream transfer channels were dry at the time of inspection.

The rip rap along the river bank appeared to be stable. No erosion or exposed geosynthetic fabric was evident along the shore.

The collection area located in the northwestern portion of the site appeared to be in good condition. Minor vegetative growth was noted.

2.3.7. Site 4 Maintenance Repairs/Action Items

Maintenance repairs were completed prior to the October 2016 inspection, and included the mowing of the vegetative cover, removal of vegetative growth, and lubrication of access gate hinges.

As a result of the October 2016 inspection, the following maintenance repairs and action items were identified:

Conditions Requiring Immediate Attention

No items requiring immediate attention were noted.

Conditions Requiring Short-Term Attention

No items requiring short-term attention were noted.

Conditions Requiring Continued Monitoring

The following items should be monitored during the next inspection to see if the conditions deteriorate:

- The small areas of settlement in the central portion of the site should continue to be visually inspected for additional settlement. If the sizes of the settlement areas change, then the areas should be evaluated to identify the cause of the settlement and the appropriate repairs necessary.
- Measures taken to prevent site access from ATV traffic will continue to be monitored and repaired as necessary.

2.4. SITE 5 INSPECTION

Site 5 was inspected on October 19, 2016. In general, the site was observed to be in good condition.

2.4.1. Roadway Condition

The access roads were observed to be in good condition. Irving Tissue maintains the east access road.

2.4.2. Roadway Side Slopes

The sloped area adjacent to the east access road was observed to be in good condition.

2.4.3. Culverts

The two culverts at the eastern end of the site were dry and observed to be in good condition at the time of the inspection.

2.4.4. Site Security

The east entrance gate, which is maintained by Irving Tissue, was in good condition. National Grid installed an access gate with warning signs posted near the western entrance from McCrea Street. Consistent with previous

inspections, a section of the chain link fence at the western end of the site was rolled back. Trespassers were observed fishing along the shoreline during the October 2016 maintenance event. The fence surrounding the Fort Edward waterline valve was in good condition.

2.4.5. Vegetative Cover

The vegetative cover was well established at Site 5 and the overall condition of the vegetative cover was good. Overall, no major surface depressions, ponded areas, or erosion gullies related to the vegetative cover were observed. Consistent with previous inspections, one small settlement area was observed in the center of the site. The small settlement area has not increased in size and did not appear to impact the integrity of the cover.

The gas vent pipes were observed to be in good condition. There was no evidence of erosion around the gas vent pipes.

2.4.6. Site Drainage

In general, the perimeter drainage swales were observed to be in good condition. The drainage swales were dry at the time of the inspection.

The rip rap along the river bank was observed to be stable. No exposed geosynthetic fabric was evident along the shore.

2.4.7. Site 5 Maintenance Repairs/Action Items

Maintenance repairs were completed prior to the October 2016 inspection, and included the mowing of the vegetative cover, removal of vegetative growth, and lubrication of access gate hinges.

As a result of the October 2016 inspection, the following maintenance repairs and action items were identified:

Conditions Requiring Immediate Attention

No items requiring immediate attention were observed.

Conditions Requiring Short-Term Attention

No items requiring short-term attention were observed.

Conditions Requiring Continued Monitoring

The following items should be monitored during the next inspection to see if the conditions deteriorate:

- The small area of settlement in the center of the site should continue to be visually inspected for additional settlement. If the size of the settlement changes, then the area should be evaluated to identify the cause of the settlement and the appropriate repairs necessary.

Site 2 Inspection Checklist and Site Map

INSPECTOR'S NAME: Rebecca McDonald, Maureen Gardner DATE: October 19, 2016

TIME START: 10:23 WEATHER CONDITIONS: Sunny, 70s

(Inspection items are numbered in accordance with the attached site map)

1.) CONDITION OF ROAD CULVERT OUTLET (1 UNIT):

QUESTION: IS THE FLOW BEING DIRECTED AWAY FROM SITE? Yes. Flow noted at this time.

ANY EROSION, UNDERCUTTING OR OBSTRUCTIONS TO FLOW OR PERFORMANCE? Fallen trees present off site, but do not appear to cause interference.

2.) CONDITION OF ACCESS ROAD:

QUESTION: GENERAL CONDITION? Good.

ANY EROSION OR LOSS OF VEGETATION? No.

3.) INTERSECTION OF ACCESS ROAD SWALE AND GRASS LINED SWALE:

QUESTION: GENERAL CONDITION? Good.

ANY EROSION, LOSS OF VEGETATION OR DEBRIS ACCUMULATION? No.

4.) CONDITION OF ACCESS ROAD SLOPE:

QUESTION: ANY EROSION OR LOSS OF VEGETATION? No.

5.) CONDITION OF GRASS LINED DRAINAGE SWALE:

QUESTION: ANY EROSION, LOSS OF VEGETATION, PONDING, DEBRIS OR GENERAL DETERIORATION? No. Grass-lined drainage swale is dry at this time.

GENERAL CONDITION BEGINNING TO END? Good.

6.) CONDITION OF RIVER RIP RAP ALONG ENTIRE SITE 2 SHORE:

QUESTION: ANY EROSION OF TOP SOIL AT EDGE OF RIP RAP? No.

ANY BEDDING STONE OR GEOTEXTILE EXPOSED? No.

ANY DEBRIS, VEGETATIVE INTERFERENCE OR UNDERCUTTING? No.

GENERAL CONDITION FROM BEGINNING TO END? Good.

7.) CONDITION OF STREAM TRANSFER CHANNEL: (CONTINUED ON PAGE 3 OF 5)

QUESTION: EROSION OF TOP SOIL AT EDGE OF RIP RAP? No.

ANY LINER OR GEOTEXTILE EXPOSED? No.

ANY DEBRIS? No.

ANY VEGETATIVE INTERFERENCE? No.

INLET CONDITION AND OUTLET CONDITION? Good. No flow noted at the inlet and outlet at this time.

SCOURING OR UNDERCUTTING OF LINER SYSTEM? No.

GENERAL CONDITION OF CHANNEL? Good.

8.) CONDITION OF GRASS LINED DRAINAGE SWALE:

QUESTION: GENERAL CONDITION INCLUDING VEGETATION Good. Vegetative cover is well established.

ANY EROSION, DEBRIS OR PONDING? Yes, two small trees that had fallen are present over swales, but do not appear to interfere with flow.

CONDITION OF RIP RAP STRIPS (2 STRIPS)? Good.

GENERAL CONDITION FROM BEGINNING TO END? Good.

9.) CONDITION OF GAS VENTS – NO SMOKING NEAR VENTS: (3 UNITS)

QUESTION: ANY EVIDENCE OF EROSION AROUND PIPES? No evidence of erosion around the gas vent pipes.

ARE VENT PIPES INTACT? Yes.

10.) CONDITION OF GRASS LINED DRAINAGE SWALE:

QUESTION: ANY EROSION, PONDING OR DEBRIS? Yes, ponding of water noted in the swale.

CONDITION OF VEGETATION? Good. Vegetative cover is well established.

CONDITION WHERE RUN-OFF ENTERS SWALE? Good. Flow noted at intersection with northern stream transfer channel.

GENERAL CONDITION BEGINNING TO END? Good.

11.) CONDITION OF STREAM TRANSFER CHANNEL: (CONTINUED ON PAGE 4 OF 5)

QUESTION: EROSION OF TOP SOIL AT EDGE OF RIP RAP? No.

ANY LINER OR GEOTEXTILE EXPOSED? No.

ANY DEBRIS OR VEGETATION INTERFERENCE? Flow noted along stream transfer channel.

11.) CONDITION OF STREAM TRANSFER CHANNEL: (CONTINUED FROM PAGE 3 OF 5)

OUTLET CONDITION? Good. Flow noted at outlet.

SCOURING OR UNDERCUTTING OF LINER SYSTEM? No.

12.) CONDITION OF GAS VENTS – NO SMOKING NEAR VENTS: (3 UNITS)

QUESTION: ANY EVIDENCE OF EROSION AROUND PIPES? No.

ARE VENT PIPES INTACT? Yes, all vent pipes are intact.

13.) OVERALL CONDITION OF CAP:

QUESTION: GENERAL CONDITION OF VEGETATION (ANY WOODY, DISCOLORED OR NOXIOUS VEGETATION)? Vegetative cover is generally good.

ANY EXPOSED SOIL, RILLS OR GULLIES, SETTLEMENT OR PONDING? Consistent with previous inspections, one small area of settlement on the southern portion of the cap, but does not appear to impact integrity of the cap.

IS SAND OR GEOSYNTHETIC EXPOSED? No.

ANY LARGE SCALE DIFFERENTIAL SETTLEMENT NOTED? No.

INSPECTION SUMMARY:

A.) TRESPASSING AND VANDALISM: (CONTINUED ON PAGE 5 OF 5)

POINTS OF ENTRY: Walking access along the east side of the gate.

* METHOD OF ENTRY? (SIGNS OF VEHICULAR TRAFFIC?) None.
* ANY LITTER? No.

TYPE OF VANDALISM? None.

* CONDITION OF LOCK? Good.

DAMAGE? None.

* CONDITION OF PERIMETER SIGNS? Good.

NUMBER OF OCCURRENCES (ESTIMATE)? None.

* CONDITION OF FENCE (ON EITHER SIDE OF GATE)? Good.

INSPECTION SUMMARY:

A.) TRESPASSING AND VANDALISM: (CONTINUED FROM PAGE 4 OF 5)

* NECESSARY REPAIRS? None.

* CONDITION OF GATE? Fair. Consistent with previous inspections, gate hinge is stiff due to minor vandalism when opening and closing.

* ANY NECESSARY REPAIRS? No. Gate still functioning properly.

* LUBE GATE HINGE AND LOCK? *Gate lubricated October 2016.*

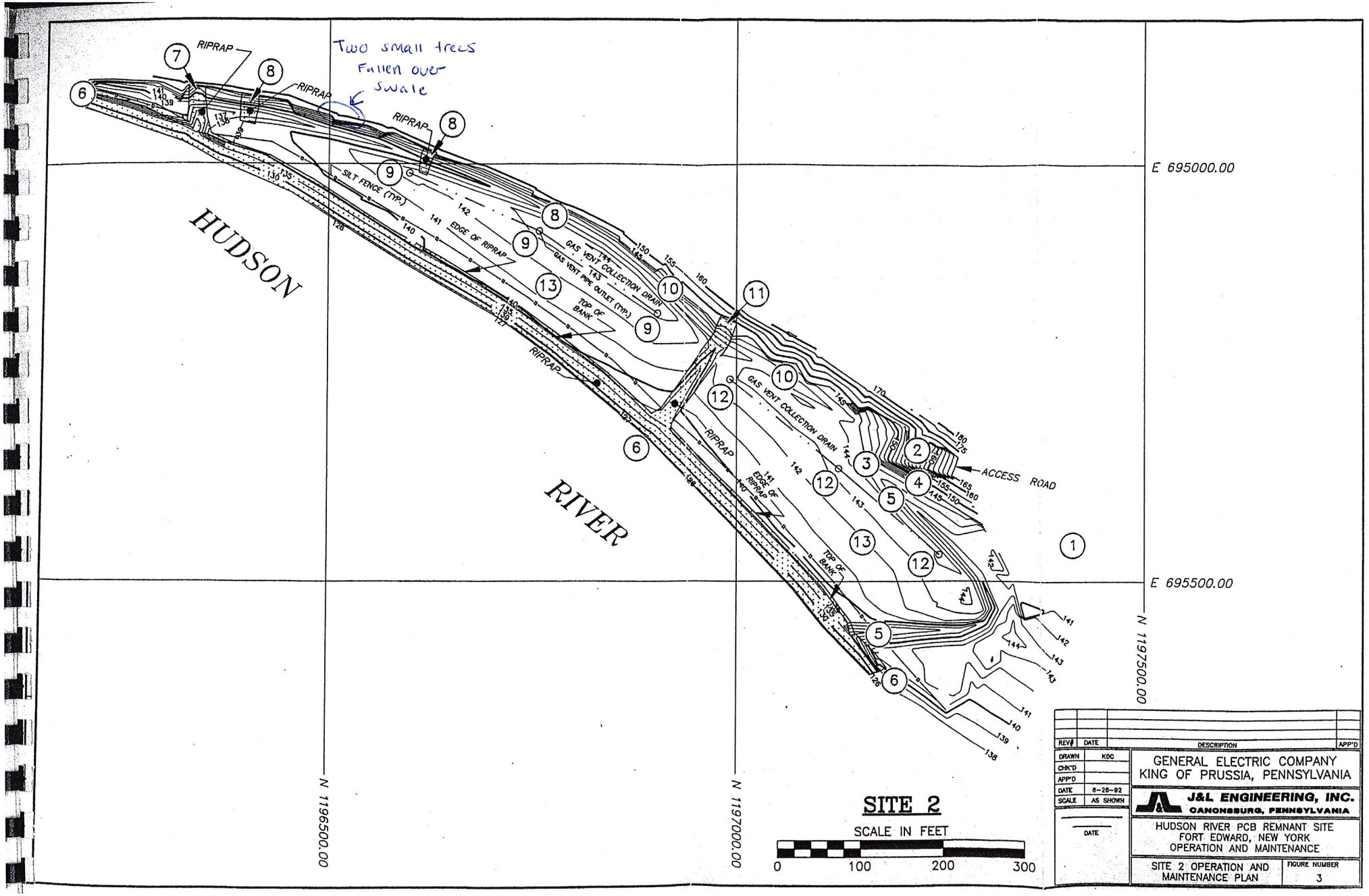
SUGGESTED REMEDIATION: The small area of settlement should be monitored (Question 13). The condition of the access gate hinge should be monitored. (Inspection Summary A).

IMMEDIATE ACTION REQUIRED: None.

SHORT TERM ACTION REQUIRED: The small trees should be removed from swale (Question 8).

TIME FINISH: 10:42 WEATHER CONDITION: Sunny, 70s

INSPECTOR SIGNATURE: Rebecca McDonnell



REV#	DATE	DESCRIPTION	APP'D
DRAWN	KDC		
CHK'D			
APP'D			
DATE	6-28-92		
SCALE	AS SHOWN		

DATE

GENERAL ELECTRIC COMPANY
KING OF PRUSSIA, PENNSYLVANIA

J&L ENGINEERING, INC.
CANONSBURG, PENNSYLVANIA

HUDSON RIVER PCB REMNANT SITE
FORT EDWARD, NEW YORK
OPERATION AND MAINTENANCE

SITE 2 OPERATION AND MAINTENANCE PLAN

FIGURE NUMBER 3

Site 3 Inspection Checklist and Site Map

INSPECTOR'S NAME: Rebecca McDonald, Maureen Gardner DATE: October 19, 2016

TIME START: 11:00 WEATHER CONDITIONS: Sunny, 70s

(Inspection items are numbered in accordance with the attached site map)

1.) CONDITION OF ACCESS ROAD:

QUESTION: GENERAL CONDITION? Good.

ANY EROSION OR LOSS OF VEGETATION? No.

2.) CONDITION OF 36" ROAD CULVERT OUTLET (1 UNIT):

QUESTION: ANY EROSION UNDERCUTTING OR OBSTRUCTIONS TO FLOW OR PERFORMANCE?

No. No flow noted at time of inspection.

3.) CONDITION OF GRASS LINED DRAINAGE SWALE:

QUESTION: ANY EROSION, LOSS OF VEGETATION, PONDING, DEBRIS OR GENERAL DETERIORATION? No.

GENERAL CONDITION BEGINNING TO END? Good. Vegetative cover is well established.

4.) CONDITION OF RIVER RIP RAP ALONG SITE 3 SHORE: (CONTINUED ON PAGE 2 OF 7)

QUESTION: ANY EROSION OF TOP SOIL AT EDGE OF RIP RAP? No.

4.) CONDITION OF RIVER RIP RAP ALONG SITE 3 SHORE: (CONTINUED FROM PAGE 1 OF 7)

ANY BEDDING STONE OR GEOTEXTILE EXPOSED? No.

ANY DEBRIS, VEGETATIVE INTERFERENCE OR UNDERCUTTING? No.

GENERAL CONDITION FROM BEGINNING TO END? Good.

5.) OVERALL CONDITION OF CAP:

QUESTION: GENERAL CONDITION OF VEGETATION (ANY WOODY, DISCOLORED OR NOXIOUS VEGETATION)? Good. Vegetative cover is well established.

ANY EXPOSED SOIL, RILLS OR GULLIES, SETTLEMENT OR PONDING? No.

IS SAND OR GEOSYNTHETIC EXPOSED? No.

ANY LARGE SCALE DIFFERENTIAL SETTLEMENT NOTED? No.

6.) CONDITION OF GAS VENTS – NO SMOKING NEAR VENTS: (6 UNITS)

QUESTION: ANY EVIDENCE OF EROSION AROUND PIPES? No.

ARE VENT PIPES INTACT? Yes.

7.) CONDITION OF STREAM TRANSFER CHANNEL:

QUESTION: EROSION OF TOP SOIL AT EDGE OF RIP RAP? No.

ANY LINER OR GEOTEXTILE EXPOSED? No.

ANY DEBRIS OR VEGETATIVE INTERFERENCE? No.

INLET CONDITION AND OUTLET CONDITION? Good.

SCOURING OR UNDERCUTTING OF LINER SYSTEM? No.

GENERAL CONDITION OF CHANNEL? Good. Stream transfer channel is dry at this time.

8.) CONDITION OF GRASS LINED DRAINAGE SWALE:

QUESTION: GENERAL CONDITION INCLUDING VEGETATION? Good. Vegetative cover is well established on a portion of the swale, the remaining is covered with road.

ANY EROSION, DEBRIS OR PONDING? Grass lined drainage swale is dry at this time.

GENERAL CONDITION BEGINNING TO END? Good. Both the swale and access road are in good condition.

9.) CONDITION OF GAS VENTS – NO SMOKING NEAR VENTS: (5 UNITS)

QUESTION: ANY EVIDENCE OF EROSION AROUND PIPES? No.

ARE VENT PIPES INTACT? Yes.

10.) CONDITION OF RIVER RIP RAP ALONG ENTIRE SITE 3 SHORE: (CONTINUED ON PAGE 4 OF 7)

QUESTION: ANY EROSION OF TOP SOIL AT EDGE OF RIP RAP? No.

10.) CONDITION OF RIVER RIP RAP ALONG SITE 3 SHORE (CONTINUED FROM PAGE 3 OF 7)

ANY BEDDING STONE OR GEOTEXTILE EXPOSED? No.

ANY DEBRIS, VEGETATIVE INTERFERENCE OR UNDERCUTTING? No.

GENERAL CONDITION FROM BEGINNING TO END? Good.

11.) OVERALL CONDITION OF CAP:

QUESTION: GENERAL CONDITION OF VEGETATION (ANY WOODY, DISCOLORED OR NOXIOUS VEGETATION)? Good. Vegetative cover is well established.

ANY EXPOSED SOIL, RILLS OR GULLIES, SETTLEMENT OR PONDING? No.

IS SAND OR GEOSYNTHETIC EXPOSED? No.

ANY LARGE SCALE DIFFERENTIAL SETTLEMENT NOTED? No.

12.) CONDITION OF STREAM TRANSFER CHANNEL: (CONTINUED ON PAGE 5 OF 7)

QUESTION: EROSION OF TOP SOIL AT EDGE OF RIP RAP? No.

ANY LINER OR GEOTEXTILE EXPOSED? No.

ANY DEBRIS OR VEGETATIVE INTERFERENCE? No.

INLET CONDITION AND OUTLET CONDITION? Good.

SCOURING OR UNDERCUTTING OF LINER SYSTEM? No.

12.) CONDITION OF STREAM TRANSFER CHANNEL: (CONTINUED FROM PAGE 4 OF 7)

GENERAL CONDITION OF CHANNEL? Good. Stream transfer channel is dry at this time.

13.) CONDITION OF GRASS LINED DRAINAGE SWALE:

QUESTION: GENERAL CONDITION INCLUDING VEGETATION? The eastern drainage swale on the northern portion of the site was modified by NYSDEC and an access road was constructed over it in 2004. Very small gullies on side slope of the access road do not appear to impact function of road.

ANY EROSION, DEBRIS OR PONDING? Grass-lined drainage swale is dry at this time.

CONDITION OF RIP RAP STRIPS? NA

CONDITION OF RIP RAP THAT EXTENDS TO RIVER? Good.

GENERAL CONDITION BEGINNING TO END? Good. Drainage swale is dry and appears to functioning properly.

14.) CONDITION OF RIVER RIP RAP ALONG SITE 3 SHORE:

QUESTION: ANY EROSION OF TOP SOIL AT EDGE OF RIP RAP? No.

ANY BEDDING STONE OR GEOTEXTILE EXPOSED? No.

ANY DEBRIS? No.

GENERAL CONDITION FROM BEGINNING TO END? Good.

15.) CONDITION OF GRASS LINED DRAINAGE SWALE:

QUESTION: GENERAL CONDITION INCLUDING VEGETATION? Good.

ANY EROSION, DEBRIS OR PONDING? No.

CONDITION OF RIP-RAP THAT EXTENDS TO STREAM TRANSFER CHANNEL? Good.

GENERAL CONDITION FROM BEGINNING TO END? Good.

16.) CONDITION OF GAS VENTS – NO SMOKING NEAR VENTS: (5 UNITS)

QUESTION: ANY EVIDENCE OF EROSION AROUND PIPES? No.

ARE VENT PIPES INTACT? Yes, all vent pipes are intact.

COMMENTS: Gas vent pipes are in good condition.

17.) OVERALL CONDITION OF CAP:

QUESTION: GENERAL CONDITION OF VEGETATION (ANY WOODY, DISCOLORED OR NOXIOUS VEGETATION)? Good. Vegetative cover is well established.

ANY EXPOSED SOIL, (PATCHY VEGETATION), SETTLEMENT OR PONDING? Consistent with previous inspections, two small areas of settlement are present, but do not appear to impact the integrity of the cap. One small animal hole observed on cap.

IS SAND OR GEOSYNTHETIC EXPOSED? No.

ANY LOW POINTS OR PONDING EVIDENT? No.

ANY LARGE SCALE DIFFERENTIAL SETTLEMENT NOTED? No areas of large scale settlement are noted.

INSPECTION SUMMARY:

A.) TRESPASSING AND VANDALISM:

POINTS OF ENTRY: Yes.

* METHOD OF ENTRY? (SIGNS OF VEHICULAR TRAFFIC?) Yes, cut fence before second access gate.

* ANY LITTER? Yes, nine pieces of litter.

TYPE OF VANDALISM? Yes, fence cut and litter.

* CONDITION OF LOCK? First and second access gate locks are in good condition.

DAMAGE? Yes, fence was cut.

* CONDITION OF PERIMETER SIGNS? Good.

NUMBER OF OCCURRENCES (ESTIMATE)? None.

SUGGESTED REMEDIATION? None.

* CONDITION OF FENCE (ON EITHER SIDE OF GATE)? One section of fence cut and rolled back for access.

* NECESSARY REPAIRS? Yes, fence should be repaired.

* CONDITION OF GATE? Good.

* NECESSARY REPAIRS? No.

* LUBE GATE HINGE AND LOCK? *Gate hinge lubed October 2016.*

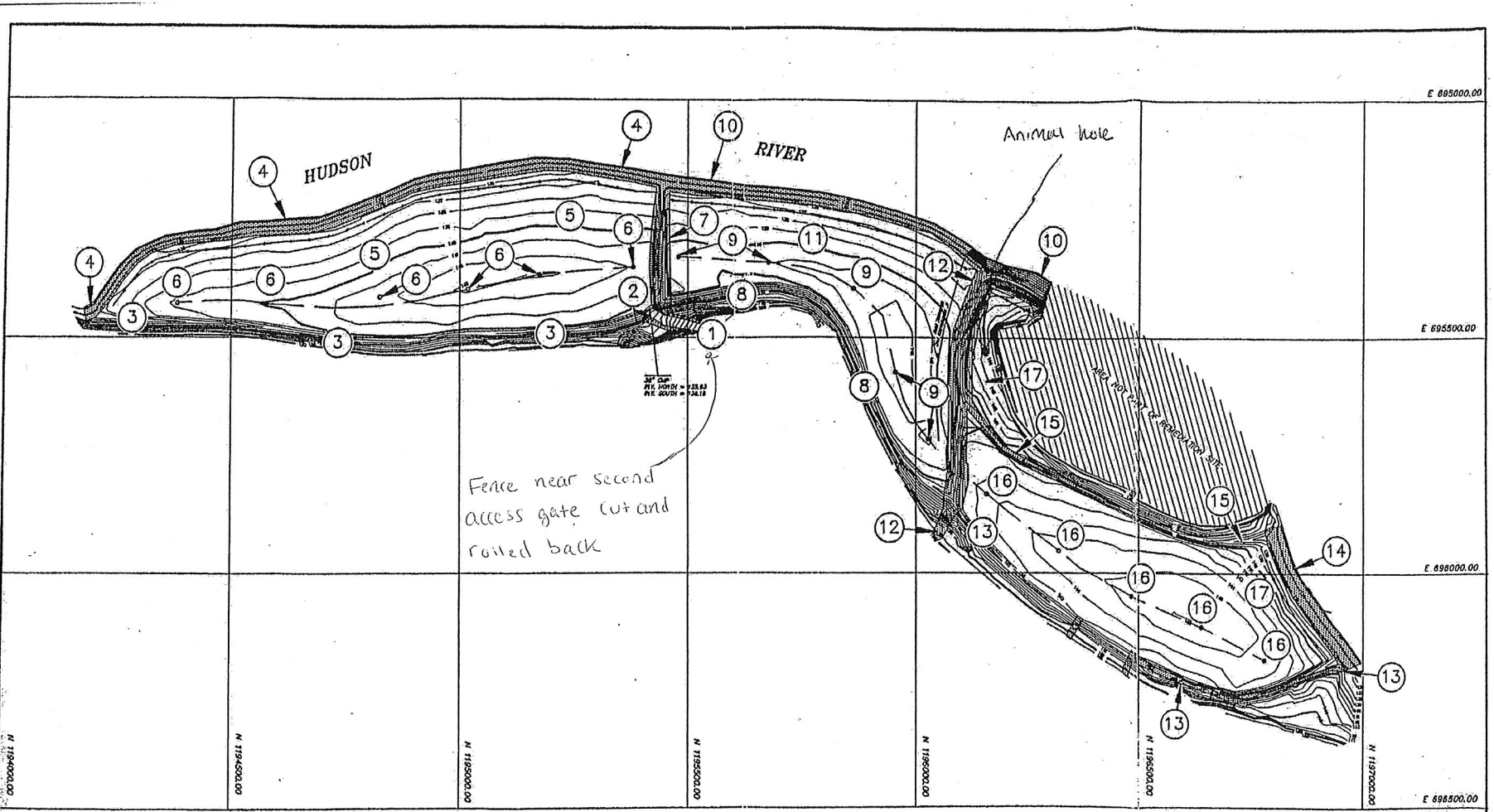
IMMEDIATE ACTION REQUIRED: None.

SHORT TERM ACTION REQUIRED: The animal hole should be filled in (Question 17). The fence should be repaired (Question A).

LONG TERM ACTION REQUIRED: The road should be monitored (question 13). The areas of settlement should continue to be monitored (Question 17).

TIME FINISH: 11:55 WEATHER CONDITION: Sunny, 70s

INSPECTOR SIGNATURE: Rebecca McDonnell



SITE 3

SCALE IN FEET

0 200 400 600

REV'S	DATE	DESCRIPTION	APP'D
DRAWN	KDO		
CHK'D			
APP'D			
DATE	8-28-92		
SCALE	AS SHOWN		

DATE

GENERAL ELECTRIC COMPANY
KING OF PRUSSIA, PENNSYLVANIA

J&L ENGINEERING, INC.
CANONSBURG, PENNSYLVANIA

HUDSON RIVER PCB REMNANT SITE
FORT EDWARD, NEW YORK
OPERATION AND MAINTENANCE

SITE 3 OPERATION AND MAINTENANCE PLAN

FIGURE NUMBER 4

Site 4 Inspection Checklist and Site Map

INSPECTOR'S NAME: Rebecca McDonald, Maureen Gardner DATE: October 19, 2016

TIME START: 9:15 WEATHER CONDITIONS: Sunny, 70

(Inspection items are numbered in accordance with the attached site map)

1.) CONDITION OF ACCESS ROAD:

QUESTION: GENERAL CONDITION? Good

ANY EROSION OR LOSS OF VEGETATION? No.

2.) CONDITION OF 30" CMP (1 UNIT):

QUESTION: IS THE FLOW BEING DIRECTED AWAY FROM SITE? Yes, no flow noted at the time of inspection.

ANY EROSION, UNDERCUTTING OR OBSTRUCTIONS TO FLOW OR PERFORMANCE? No.

3.) CONDITION OF RIP RAP LINED CHANNEL:

QUESTION: ANY EROSION OF TOP SOIL AT EDGE OF RIP RAP? No.

ANY BEDDING STONE OR GEOTEXTILE EXPOSED? No.

ANY VEGETATIVE INTERFERENCE, PONDING, UNDERCUTTING OR BREECHES? No.

GENERAL CONDITION? Good.

4.) CONDITION AT COLLECTION AREA:

QUESTION: ANY EVIDENCE OF BREECHES, EROSION OR VEGETATIVE INTERFERENCE? Minor vegetative growth noted, but does not appear to cause interference.

GENERAL CONDITION? Good.

5.) CONDITION OF GRASS LINED DRAINAGE SWALE:

QUESTION: GENERAL CONDITION INCLUDING VEGETATION? Good. Vegetative cover is generally well established.

ANY EROSION, DEBRIS OR PONDING? No, swale was dry at time of inspection.

GENERAL CONDITION BEGINNING TO END? Good.

6.) CONDITION OF GAS VENTS – NO SMOKING NEAR VENTS: (3 UNITS)

QUESTION: ANY EVIDENCE OF EROSION AROUND PIPES? No.

ARE VENT PIPES INTACT? Yes, all gas vent pipes are intact.

7.) OVERALL CONDITION OF CAP:

QUESTION: GENERAL CONDITION OF VEGETATION (ANY WOODY, DISCOLORED OR NOXIOUS VEGETATION)? Good. Vegetative cover is well established.

ANY EXPOSED SOIL, RILLS OR GULLIES, SETTLEMENT OR PONDING? No.

IS SAND OR GEOSYNTHETIC EXPOSED? No.

ANY LARGE SCALE DIFFERENTIAL SETTLEMENT NOTED? No.

8.) CONDITION OF RIVER RIP RAP FROM NORTH END OF SITE TO STREAM TRANSFER CHANNEL

QUESTION: ANY EROSION OF TOP SOIL AT EDGE OF RIP RAP? No.

ANY BEDDING STONE OR GEOTEXTILE EXPOSED? No.

ANY DEBRIS, VEGETATIVE INTERFERENCE OR UNDERCUTTING? No.

GENERAL CONDITION OF RIP RAP? Good.

9.) CONDITION OF STREAM TRANSFER CHANNEL:

QUESTION: EROSION OF TOP SOIL AT EDGE OF RIP RAP? No.

ANY LINER OR GEOTEXTILE EXPOSED? No.

ANY DEBRIS OR VEGETATIVE INTERFERENCE? No.

INLET CONDITION AND OUTLET CONDITION? Good.

CONDITION AT SWALE JUNCTION? Good.

ANY SCOURING OR UNDERCUTTING OF LINER SYSTEM? No.

ANY EROSION AT TOE OF FILL SLOPE? No.

GENERAL CONDITION OF CHANNEL? Good.

10.) CONDITION OF GRASS LINED DRAINAGE SWALE:

QUESTION: ANY EROSION, PONDING OR DEBRIS? No.

CONDITION OF VEGETATION? Good. Vegetative cover is well established.

CONDITION WHERE RUN-OFF ENTERS SWALE (2 PLACES)? Good.

GENERAL CONDITION FROM BEGINNING TO END? Good.

11.) CONDITION OF GAS VENTS – NO SMOKING NEAR VENTS: (6 UNITS)

QUESTION: ANY EVIDENCE OF EROSION AROUND PIPES? No.

ARE VENT PIPES INTACT? Yes.

12.) CONDITION OF RIVER RIP RAP FROM STREAM TRANSFER CHANNEL TO SOUTH END OF SITE:

QUESTION: ANY EROSION OF TOP SOIL AT EDGE OF RIP RAP? No.

ANY BEDDING STONE OR GEOTEXTILE EXPOSED? No.

ANY DEBRIS OR VEGETATIVE INTERFERENCE? None.

GENERAL CONDITION OF RIP RAP? Good.

CONDITION OF WARNING SIGNS? Good.

13.) CONDITION OF STREAM TRANSFER CHANNEL:

QUESTION: EROSION OF TOP SOIL AT EDGE OF RIP RAP? No.

ANY LINER OR GEOTEXTILE EXPOSED? No.

ANY DEBRIS OR VEGETATIVE INTERFERENCE? No.

INLET CONDITION AND OUTLET CONDITION? Good.

SCOURING OR UNDERCUTTING OF LINER SYSTEM? No.

14.) CONDITION OF GRASS LINED DRAINAGE SWALE: (CONTINUED ON PAGE 5 OF 7)

QUESTION: GENERAL CONDITION INCLUDING VEGETATION? Good.

ANY EROSION, DEBRIS OR PONDING? No.

CONDITION WHERE RUN-OFF ENTERS SWALE? Good.

14.) CONDITION OF GRASS LINED DRAINAGE SWALE: (CONTINUED FROM PAGE 4 OF 7)

GENERAL CONDITION FROM BEGINNING TO END? Good.

15.) CONDITION OF FORT EDWARD WATER LINE BERM:

QUESTION: ANY EROSION AT TOE OF SLOPE? No.

ANY RILLS OR GULLIES ON SIDE SLOPES? No.

16.) CONDITION OF 24" CMP:

QUESTION: ANY OBSTRUCTIONS TO FLOW OR PERFORMANCE? No.

IS FLOW BEING DIRECTED PROPERLY? Yes. No flow at the time of inspection.

17.) CONDITION OF ACCESS ROAD:

QUESTION: GENERAL CONDITION? Good.

ANY EROSION OR LOSS OF VEGETATION? No.

18.) CONDITION OF 12" CMP PIPE:

QUESTION: IS PIPE FUNCTIONING PROPERLY? Yes. No flow at the time of inspection.

ANY DEBRIS OR VEGETATIVE INTERFERENCE? No.

ANY BREECHES OR EROSION NOTED? No. There is a small crack on the top of the pipe, but does not appear to impact function.

19.) CONDITION OF RIP RAP LINED CHANNEL: (CONTINUED ON PAGE 6 OF 7)

QUESTION: ANY EROSION OF TOP SOIL AT EDGE OF RIP RAP? No.

ANY BEDDING STONE OR GEOTEXTILE EXPOSED? No.

ANY SCOURING OR UNDERCUTTING? No.

19.) CONDITION OF RIP RAP LINED CHANNEL: (CONTINUED FROM PAGE 5 OF 7)

ANY VEGETATIVE INTERFERENCE? No.

ANY PONDING? No.

GENERAL CONDITION? Good.

20.) CONDITION OF STREAM TRANSFER CHANNEL:

QUESTION: EROSION OF TOP SOIL AT EDGE OF RIP RAP? No.

ANY LINER OR GEOTEXTILE EXPOSED? No.

ANY DEBRIS OR VEGETATIVE INTERFERENCE? No.

INLET CONDITION AND OUTLET CONDITION? Good. Inlet and outlet dry at this time.

SCOURING OR UNDERCUTTING OF LINER SYSTEM? No.

GENERAL CONDITION OF CHANNEL? Good.

21.) OVERALL CONDITION OF CAP:

QUESTION: GENERAL CONDITION OF VEGETATION (ANY WOODY, DISCOLORED OR NOXIOUS VEGETATION)? Overall condition is good.

ANY EXPOSED SOIL, RILLS OR GULLIES, SETTLEMENT OR PONDING? Yes, where ATV tracks exist. Consistent with previous inspections, several small settlement areas (approximately 0.5 to 1 foot deep) were observed near a gas vent pipe in the central portion of the site. These small settlement areas have not increased in size and did not appear to impact the integrity of the cover.

IS SAND OR GEOSYNTHETIC EXPOSED? Yes, sand exposed where ATV tracks exist.

ANY LARGE SCALE DIFFERENTIAL SETTLEMENT NOTED? No.

ANY DEBRIS? No.

22.) CONDITION AT WATER LINE VALVE: (NOTIFY FORT EDWARD IF NECESSARY)

QUESTION: CONDITION FENCE AROUND WATER LINE VALVE? Good.

INSPECTION SUMMARY:

A.) TRESPASSING AND VANDALISM:

POINTS OF ENTRY: One.

* METHOD OF ENTRY? (SIGNS OF VEHICULAR TRAFFIC?) ATV traffic.
* ANY LITTER? No.

TYPE OF VANDALISM? None.

* CONDITION OF LOCK? Locks on both gates in good condition.

DAMAGE? None.

* CONDITION OF PERIMETER SIGNS? Good.

NUMBER OF OCCURRENCES (ESTIMATE)? None.

* CONDITION OF FENCE (ON EITHER SIDE OF GATE)? Good.
* NECESSARY REPAIRS? None.
* CONDITION OF GATE? Fair, minor damage to southern access gate.
* NECESSARY REPAIRS? No. Gate still functioning properly.
* LUBE GATE HINGE AND LOCK? *Gates lubed October 2016.*

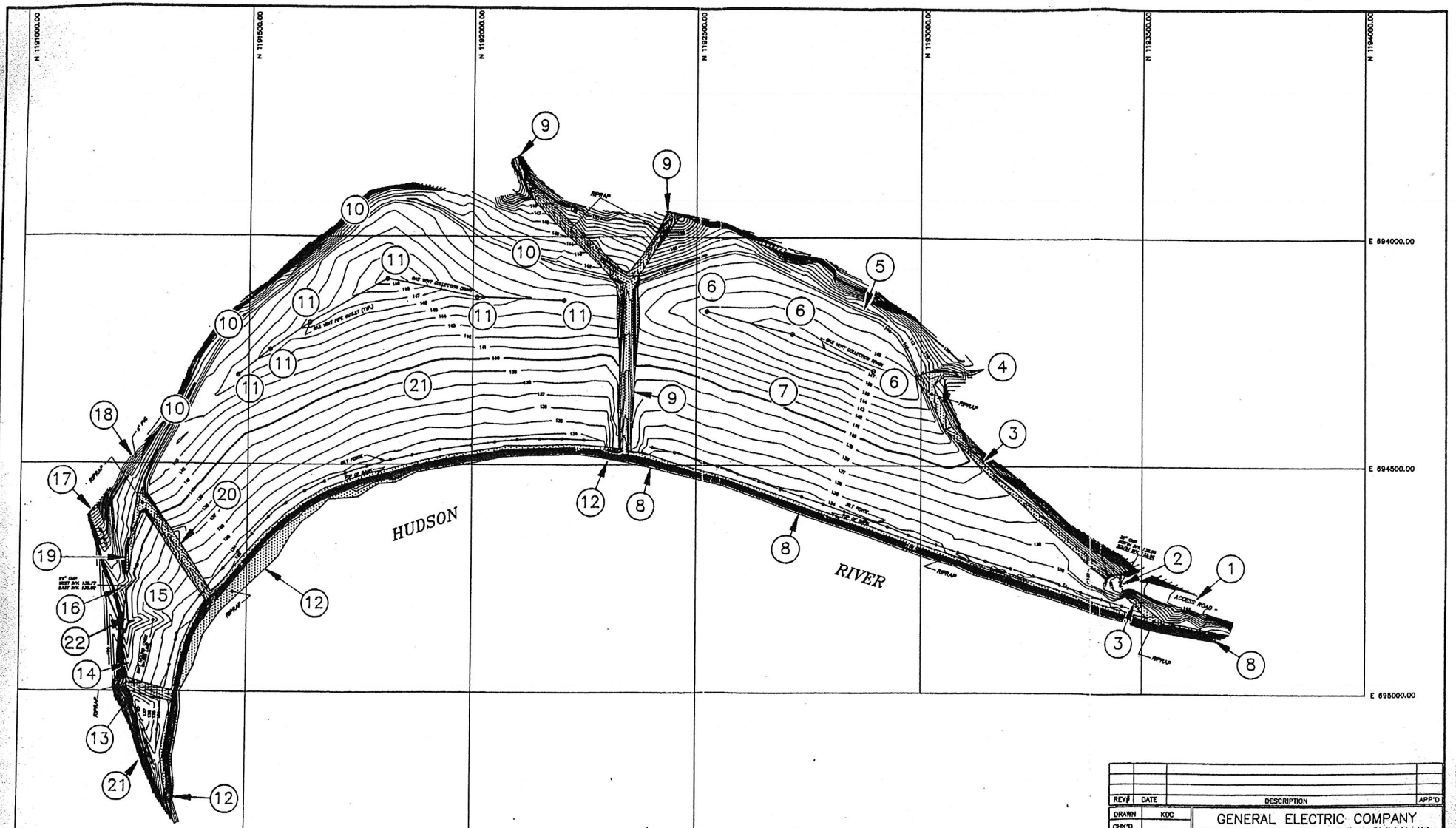
SUGGESTED REMEDIATION: The ATV traffic and areas of settlement should continue to be monitored (Question 21).

IMMEDIATE ACTION REQUIRED: None.

SHORT TERM ACTION REQUIRED: None.

TIME FINISH: 10:07 AM WEATHER CONDITION: Sunny, 70

INSPECTOR SIGNATURE: Rebecca McDonald



SITE 4

SCALE IN FEET

0 200 400 600

REV#	DATE	DESCRIPTION	APP'D

DRAWN	KDC
CHK'D	
APP'D	
DATE	6-26-92
SCALE	AS SHOWN

DATE

GENERAL ELECTRIC COMPANY
KING OF PRUSSIA, PENNSYLVANIA

J&L ENGINEERING, INC.
CANONSBURG, PENNSYLVANIA

HUDSON RIVER PCB REMNANT SITE
FORT EDWARD, NEW YORK
OPERATION AND MAINTENANCE

SITE 4 OPERATION AND MAINTENANCE PLAN

FIGURE NUMBER 5

Site 5 Inspection Checklist and Site Map

INSPECTOR'S NAME: Rebecca McDonald, Maureen Gardner DATE: October 19, 2016

TIME START: 13:10 WEATHER CONDITIONS: Sunny, 70s

(Inspection items are numbered in accordance with the attached site map)

1.) CONDITION OF ACCESS ROAD:

QUESTION: GENERAL CONDITION? Good. Large gate installed by National Grid at western access point. Fence rolled back beyond National Grid's gate. Eastern access point through Irving Tissue in good condition.

ANY EROSION OR LOSS OF VEGETATION? No.

2.) CONDITION OF 30" CMP (2 UNITS):

QUESTION: IS THE FLOW BEING DIRECTED AWAY FROM SITE? Yes. No flow observed at the time of inspection.

ANY EROSION, UNDERCUTTING OR OBSTRUCTIONS TO FLOW OR PERFORMANCE? No.

3.) CONDITION OF GRASS LINED DRAINAGE SWALE:

QUESTION: ANY EROSION, LOSS OF VEGETATION, PONDING, DEBRIS OR GENERAL DETERIORATION? No. Vegetation is well established.

GENERAL CONDITION BEGINNING TO END? Good.

4.) CONDITION OF 36" CMP (1 UNIT):

QUESTION: IS CULVERT FUNCTIONING PROPERLY? Yes. No flow observed at the time of inspection.

ANY EROSION, UNDERCUTTING OR OBSTRUCTIONS TO FLOW OR PERFORMANCE? No.

5.) CONDITION OF GRASS LINED DRAINAGE SWALE: (CONTINUED ON PAGE 2 OF 4)

QUESTION: ANY EROSION, LOSS OF VEGETATION, PONDING OR GENERAL DETERIORATION? No.

5.) CONDITION OF GRASS LINED DRAINAGE SWALE: (CONTINUED FROM PAGE 1 OF 4)

GENERAL CONDITION FROM BEGINNING TO END? Good.

6.) CONDITION OF GRASS LINED DRAINAGE SWALE:

QUESTION: ANY EROSION, LOSS OF VEGETATION, PONDING OR GENERAL DETERIORATION?

No.

GENERAL CONDITION FROM BEGINNING TO END? Good.

7.) CONDITION AT WATER LINE VALVE: (NOTIFY FORT EDWARD IF NECESSARY)

QUESTION: CONDITION OF FENCE AROUND WATER LINE VALVE? Good. Woody growth along fence line.

8.) CONDITION OF RIVER RIP RAP ALONG ENTIRE SITE:

QUESTION: ANY EROSION OF TOP SOIL AT EDGE OF RIP RAP? No.

ANY BEDDING STONE OR GEOTEXTILE EXPOSED? No.

ANY DEBRIS, VEGETATIVE INTERFERENCE OR UNDERCUTTING? No.

GENERAL CONDITION OF RIP RAP? Good.

9.) CONDITION OF GRASS LINED DRAINAGE SWALE: (CONTINUED ON PAGE 3 OF 4)

QUESTION: ANY EROSION, PONDING OR DEBRIS? No. Drainage swale is dry at this time.

CONDITION WHERE RUN-OFF ENTERS SWALE? Good.

9.) CONDITION OF GRASS LINED DRAINAGE SWALE: (CONTINUED FROM PAGE 2 OF 4)

GENERAL CONDITION FROM BEGINNING TO END? Good.

10.) CONDITION OF FORT EDWARD 15" EMERGENCY STORM SEWER:

QUESTION: ANY LEAKAGE OR CORROSION EVIDENT? No.

APPEARANCE OF SLOPE? Good. Vegetative cover is well established.

CONDITION OF DISCHARGE? Good.

ANY DEBRIS? No.

11.) CONDITION OF GAS VENTS – NO SMOKING NEAR VENTS (6 UNITS):

QUESTION: ANY EVIDENCE OF EROSION AROUND PIPES? No.

ARE VENT PIPES INTACT? Yes, all vent pipes are intact.

12.) OVERALL CONDITION OF CAP:

QUESTION: GENERAL CONDITION OF VEGETATION (ANY WOODY, DISCOLORED OR NOXIOUS VEGETATION)? Good vegetative cover overall.

ANY EXPOSED SOIL, RILLS OR GULLIES, SETTLEMENT OR PONDING? Yes, consistent with previous inspections, one small settlement appears noted, but does not appear to impact integrity of cap.

IS SAND OR GEOSYNTHETIC EXPOSED? No.

ANY LARGE SCALE DIFFERENTIAL SETTLEMENT NOTED? No.

ANY DEBRIS? No.

INSPECTION SUMMARY:

A.) TRESPASSING AND VANDALISM:

POINTS OF ENTRY: Western access point can be accessed by walking around National Grid fence. Trespassers were observed fishing along the shoreline during the October 2016 maintenance event.

* METHOD OF ENTRY? (SIGNS OF VEHICULAR TRAFFIC?) Walking.
* ANY LITTER? Yes, one item.

TYPE OF VANDALISM? None.

* CONDITION OF LOCK? Good.

DAMAGE? None.

* CONDITION OF PERIMETER SIGNS? Good.

NUMBER OF OCCURRENCES (ESTIMATE)? None.

* CONDITION OF FENCE (ON EITHER SIDE OF GATE)? Good. Fence is rolled back at western access point.
* NECESSARY REPAIRS? None.
* CONDITION OF GATE? Good.
* NECESSARY REPAIRS? No.
* LUBE GATE HINGE AND LOCK? *Gate hinge lubed October 2016.*

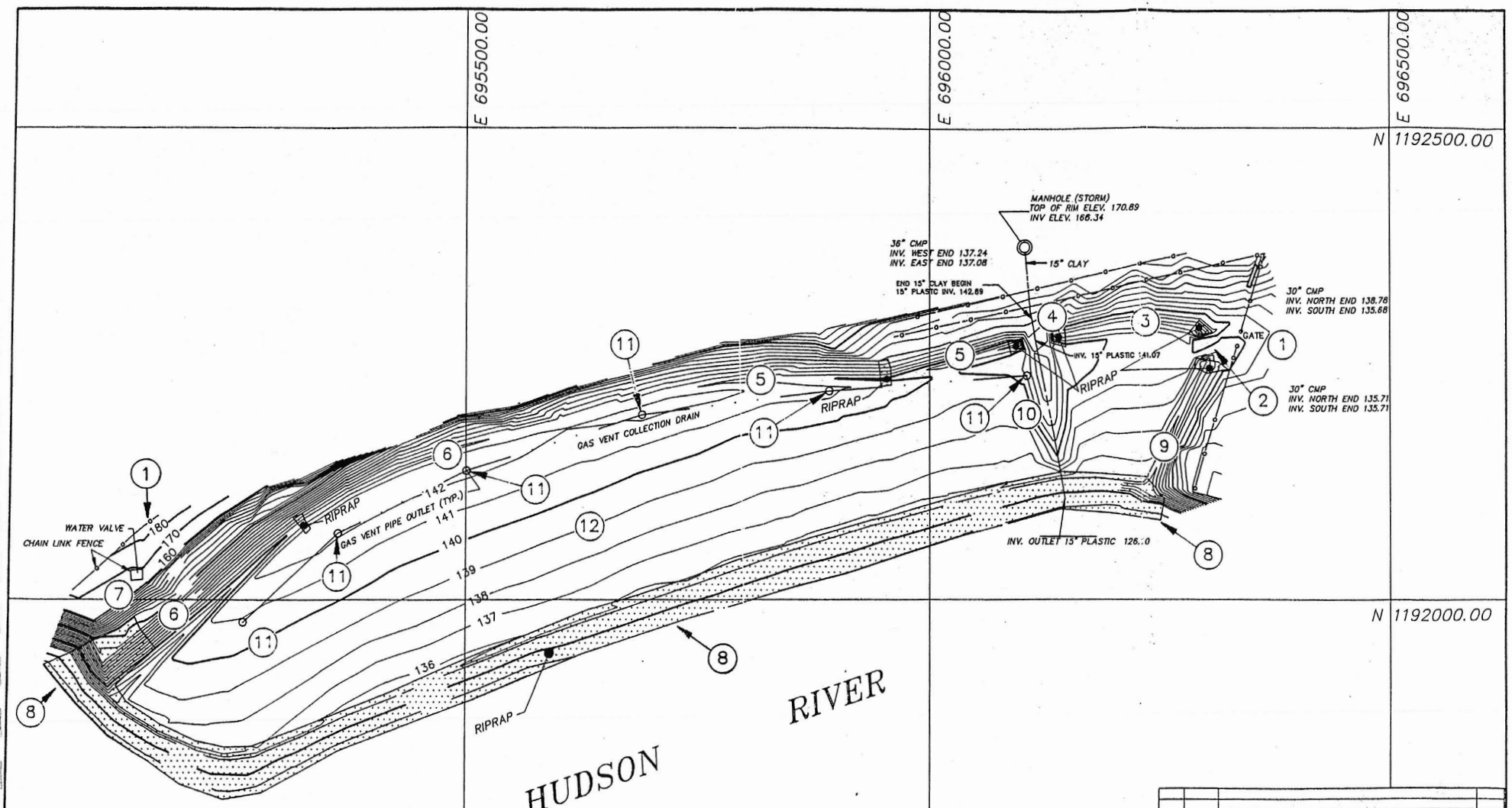
SUGGESTED REMEDIATION: The area of settlement should be monitored (Question 12).

IMMEDIATE ACTION REQUIRED: None.

SHORT TERM ACTION REQUIRED: None.

TIME FINISH: 14:40 WEATHER CONDITION: Sunny, 70s

INSPECTOR SIGNATURE: Rebecca McDonnell



SITE 5

SCALE IN FEET

0 100 200 300

REV#	DATE	DESCRIPTION	APP'D
DRAWN	KDC		
CHK'D			
APP'D			
DATE	8-26-92		
SCALE	AS SHOWN		

DATE

GENERAL ELECTRIC COMPANY
KING OF PRUSSIA, PENNSYLVANIA

J&L ENGINEERING, INC.
CANONSBURG, PENNSYLVANIA

HUDSON RIVER PCB REMNANT SITE
FORT EDWARD, NEW YORK
OPERATION AND MAINTENANCE

SITE 5 OPERATION AND MAINTENANCE PLAN

FIGURE NUMBER 6

Final Second Five-Year Review Report for the Hudson River PCBs Superfund Site

APPENDIX 10

FIVE-YEAR REVIEW SITE INSPECTION CHECKLIST

Attachment 10-B Inspection Photo Log

Prepared by:

Ecology & Environment, Inc.

April 2019

Attachment B – Inspection Photo Log

Photo Name	Time Taken	Location of Photographer	Direction of Photo	Subject
030217_0301	1318	End of access road, Site 3	South	Southern extent of Site 3
030217_0302	1318	End of access road, Site 3	West	Western extent of Site 3
030217_0303	1327	South end of Site 3	North	Site 3
030217_0304	1336	South end of Site 3	West	Sign on river edge of Site 3
030217_0305	1337	South end of Site 3	West	Western extent of Site 3 and Southern extent of Site 2
030217_0306	1337	South end of Site 3	West	Western extent of Site 3 and Southern extent of Site 2
030217_0307	1338	Middle of Site 3	North	Northern extent of Site 3
030217_0308	1341	Middle of Site 3	West	Sign on river edge, Site 2
030217_0309	1341	Middle of Site 3	West	Rip-rap on edge of Site 2
030217_0310	1341	Middle of Site 3	West	Rip-rap on edge of Site 2
030217_0311	1353	North end of Site 3	West	Settlement area in north of Site 3
030217_0312	1354	North end of Site 3	West	North end of Site 3 and North end of Site 2
030217_0313	1356	North end of Site 3	West	North end of Site 2
030217_0314	1402	Bottom of Site 3 access road	North	Site 3 access road
030217_0501	1422	Eastern edge of Site 5	South	Site 5 drainage swale
030217_0502	1422	Eastern edge of Site 5	West	Site 5 drainage swale
030217_0503	1422	Eastern edge of Site 5	East	Site 5 access gate and sign facing wrong direction
030217_0504	1422	Eastern edge of Site 5	North	Trees and fence on north edge of Site 5
030217_0505	1422	Eastern edge of Site 5	Northwest	Trees on north edge of Site 5
030217_0506	1423	Middle of Site 5	South	Southern extent of Site 5 and Hudson River
030217_0507	1423	Middle of Site 5	South	Southern extent of Site 5 and Hudson River
030217_0508	1424	Middle of Site 5	North	Trees on north edge of Site 5
030217_0509	1424	Middle of Site 5	South	Sign on Site 5
030217_0510	1429	Western edge of Site 5	Southwest	Southern extent of Site 4
030217_0511	1429	Western edge of Site 5	West	Mid/Southern extent of Site 4
030217_0512	1430	Western edge of Site 5	West	Mid extent of Site 4
030217_0513	1430	Western edge of Site 5	Northwest	Northern extent of Site 4
030217_0514	1430	Western edge of Site 5	West	Drainage swale on Site 4
030217_0201	1503	Middle of Site 2	Northeast	Northern extent of Site 2

Attachment B – Inspection Photo Log

Photo Name	Time Taken	Location of Photographer	Direction of Photo	Subject
030217_0202	1503	Middle of Site 2	North	Drainage swale on Site 2
030217_0203	1503	Middle of Site 2	Southeast	Drainage swale on Site 2
030217_0204	1503	Middle of Site 2	South	Southern extent of Site 2
030217_0205	1503	Middle of Site 2	Southeast	Southern extent of Site 2 and Southern extent of Site 3

030217_0301

030217_0302

030217_0303

030217_0304

030217_0305

030217_0306

030217_0307

030217_0308

030217_0309

030217_0310

030217_0311

030217_0312

030217_0313

030217_0314

030217_0501

030217_0502

030217_0503

030217_0504

	
030217_0505	030217_0506
	
030217_0507	030217_0508

030217_0509

030217_0510

030217_0511

030217_0512

	
030217_0513	030217_0514
	
030217_0201	030217_0202

	
030217_0203	030217_0204
	
030217_0205	