

ASHLAND/NSP LAKEFRONT SITE – Wet Dredge Pilot Study

CERCLA Docket No. V-W-14-C-006

USEPA ID# WISFN0507952

OCTOBER 2016 MONTHLY PROGRESS REPORT (No. 7)

Pursuant to Paragraph 53 of the Amended and Restated Administrative Settlement Agreement and Order on Consent for Wet Dredge Pilot Study of Chequamegon Bay at the Ashland/Northern States Power Lakefront Superfund Site (AOC), effective March 18, 2016, Northern States Power Company (NSPW), a Wisconsin Corporation, submits the following Monthly Progress Report for Wet Dredge Pilot Study Construction.

A. Activity for this Reporting Period

The following is a summary of the actions that were taken toward compliance with the AOC during this reporting period:

- Commenced 2016 upland site infrastructure modifications as outlined in Technical Memorandum #16-6 on October 1, 2016 and was performed throughout the month.
- Completed decontamination of Mahaffey structure and associated equipment.
- Marine contractor commenced decontamination and demobilization activities.
- Extended Pilot Study Area (EPSA) post-dredge confirmation sediment sampling was performed on October 4, 2016.
- Performed additional hydraulic dredging of EPSA cell C16 on October 10, 2016 based on post-dredge confirmation sample results.
- Performed post-dredge confirmation re-sampling of EPSA cell C16 on October 10, 2016.
- Performed restorative layer placement in EPSA October 10 – 12, 2016.
- Performed EPSA restorative layer thickness verification on October 13, 2016.
- Performed Pilot Study Dredge Area (PSDA) restorative layer residual sediment sampling on October 14, 2016.
- Removed the full-length (10ft) impermeable curtain and oil boom inside the Primary barrier on October 14, 2016.
- Water Quality Management contingency (alum application) implementation as follows:
 - pre-alum application water quality sampling October 19, 2016
 - deployment of 12 buckets for “floc” material collection October 20, 2016
 - alum application October 20, 2016
 - post-alum application water quality sampling October 21, 2016
 - retrieval of 12 buckets for “floc” material laboratory analysis October 21, 2016
- Confirmed turbidity within the Primary barrier system was below 17 NTUs above background allowing for the scheduled removal of the Primary Curtain, Primary Curtain A, and the Secondary Curtain on October 21, 2016.
- Removed Primary Curtain, Primary Curtain A, and the Secondary Curtain associated with the Primary barrier system and associated fence posts on October 24 - 25, 2016.
- Commenced post-construction water quality monitoring COC sampling, per the Monitoring Plan to remove the gap barrier curtains and West Peninsula rock protection, on October 26, 2016.
- Removed the East Peninsula and Breakwater rock protection barrier system and associated fence posts (including fence posts for West Peninsula rock protection) on October 29, 2016.
- Completed water quality containment areas intra-system in-situ measurements and sampling.

- Performed water quality performance monitoring in-situ measurement and sampling.
- Performed real-time water quality monitoring in-situ measurements.
- Performed sheen visibility checks beyond the tertiary curtain with documentation every 4 hours.
- Performed manual noise monitoring.
- Performed manual hand-held air monitoring.
- Performed real-time air monitoring.
- Continued water treatment activities.

B. Analytical Data Received

Laboratory and field data were generated related to the following:

- Performance water quality monitoring
- Containment areas intra-system water quality monitoring
- Post-dredge sediment sampling
- PSDA Restorative Layer residual sediment sampling
- Post-Construction (including pre/post alum) water quality monitoring
- Flocculation associated with alum application
- Air monitoring
- Noise monitoring

As discussed with USEPA, data is available to USEPA and other regulatory agencies on the Wet Dredge Pilot Study project SharePoint website.

C. Challenges Encountered and Corrective Actions Taken

- The table below provides a summary of the surface water turbidity Alert and Action Level response notifications that were received during the month of October while performing on the water activities associated within the EPSA.

Date	Response Level Type	Monitoring Event	Location	Delta above Background (NTU)	Time of Incident
10/15/2016	Alert	NA	B-4	17.59	18:00 – 19:00
10/17/2016	Alert	NA	B-3	33.86	07:00 – 08:00
10/17/2016	Alert	NA	B-3	31.25	09:00 – 10:00
10/17/2016	Alert	NA	B-2	33.31	11:00 – 12:00
10/17/2016	Alert	NA	B-2	24.17	12:00 – 13:00
10/17/2016	Alert	NA	B-1	18.01	13:00 – 14:00

10/17/2016	Alert	NA	B-3	29.28	13:00 – 14:00
10/17/2016	Alert	NA	B-2	24.25	14:00 – 15:00
10/17/2016	Alert	NA	B-3	22.87	14:00 – 15:00
10/17/2016	Alert	NA	B-2	17.27	16:00 – 17:00
10/17/2016	Alert	NA	B-3	23.32	16:00 – 17:00
10/17/2016	Alert	NA	B-1	18.12	17:00 – 18:00
10/17/2016	Alert	NA	B-2	31.20	17:00 – 18:00
10/17/2016	Alert	NA	B-2	21.69	18:00 – 19:00
10/17/2016	Alert	NA	B-1	21.68	19:00 – 20:00
10/17/2016	Alert	NA	B-2	27.37	19:00 – 20:00
10/17/2016	Alert	NA	B-3	22.78	19:00 – 20:00
10/17/2016	Alert	NA	B-1	22.43	20:00 – 21:00
10/17/2016	Alert	NA	B-2	25.69	20:00 – 21:00
10/17/2016	Alert	NA	B-2	24.51	21:00 – 22:00
10/17/2016	Alert	NA	B-2	21.29	22:00 – 23:00
10/18/2016	Alert	NA	B-1	23.61	24:00 – 00:00
10/18/2016	Alert	NA	B-2	28.11	24:00 – 00:00
10/18/2016	Action	NA*	B-3	37.46	24:00 – 00:00

10/18/2016	Alert	NA	B-1	24.75	02:00 – 03:00
10/18/2016	Alert	NA	B-2	19.30	02:00 – 03:00
10/18/2016	Alert	NA	B-3	25.40	02:00 – 03:00
10/18/2016	Alert	NA	B-1	22.91	03:00 – 04:00
10/18/2016	Alert	NA	B-1	18.08	05:00 – 06:00
10/18/2016	Alert	NA	B-2	17.48	05:00 – 06:00
10/18/2016	Alert	NA	B-1	23.01	06:00 – 07:00
10/18/2016	Alert	NA	B-2	18.68	06:00 – 07:00
10/18/2016	Alert	NA	B-3	18.20	06:00 – 07:00
10/18/2016	Alert	NA	B-1	21.11	08:00 – 09:00
10/18/2016	Action	Yes**	B-3	38.71	08:00 – 09:00
10/18/2016	Alert	NA	B-1	22.19	09:00 – 10:00
10/18/2016	Alert	NA	B-4	21.63	09:00 – 10:00

*Action Level occurrence overnight – COC sampling protocol, per the Monitoring Plan, was not required.

**Per the Monitoring Plan, samples were collected at the surface and 2/3 intervals at location.

Upcoming Activities

The following data collection or other activities are anticipated to be conducted over the next 6 weeks:

- Complete water treatment activities.
- Complete decontamination and demobilization of land and marine-based equipment.
- Remove West Peninsula rock protection and gaps barrier system components pending favorable water quality conditions.
- Continue 2016 upland site infrastructure modifications.

D. Modifications Proposed or Approved

- Submitted Appendices for the *60% Design for Phase 2 Wet Dredge (60% Design)* to the Agencies for review, on October 3, 2016.
- Received approval to commence construction of upland site infrastructure modifications in 2016 to support 2017/2018 full-scale Phase 2 operations, on October 3, 2016.
- Submitted Tech Memo #16-07 to Agencies regarding Water Quality Contingencies Settling Calculations, for approval, on October 4, 2016.
- Submitted Tech Memo #16-08 to Agencies regarding Implementation of Water Quality Management Contingency, for approval, on October 6, 2016. Received contingent approval from the Agencies to implement the Plan on October, 14, 2016. Responded to Agencies contingent approval comments on October 17, 2016. Received a Permit Equivalency Addendum from WDNR on October 18, 2016, authorizing implementation of the Plan (alum addition within Primary barrier confines).
- Submitted revised Tech Memo # 16-06 to Agencies regarding 2016 Upland Site Infrastructure Modifications, incorporating WDNR comments received September 30, 2016, for approval, on October 7, 2016.
- On October 7, 2016 requested Agencies approval to collect post-dredge confirmation samples in Extended Pilot area C16-R without need to wait 72 hours after hydraulically dredging this area. This request was approved by WDNR on October 10, 2016.
- On October 7, 2016 requested Agencies approval to commence restorative layer placement in the Extended Pilot Study Area. Received approval from the Agencies to place the restorative layer on October 10, 2016.
- Participated in a 60% Design meeting in Madison, WI with the Agencies on October 19, 2016.
- On October 24/25, 2016 received confirmation from the Agencies to remove the east peninsula and breakwater rock protection barriers and the Primary and Secondary barrier systems.
- On October 28, 2016 received written comments from the Agencies on the *60% Design*.

E. Community Involvement

The following activities associated with the Public Communication and Involvement Plan, led by the Wisconsin Department of Natural Resources (WDNR), were conducted during this reporting period.

- Public informational meeting scheduled for November 3, 2016