

Technical Memorandum #17-05

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October 20, 2017

- TO: Scott Hansen, USEPA Jamie Dunn, WDNR
- CC: Craig Melodia, Steven Ales, Eric Ealy, Terry Coss, Tom Perry, Kristen Carney, Brian Elwood, Mike Bebeau, Pat Carr, Mike Palmer, Steve Laszewski, Pete Joy, John D'Antuono, Keith Summers, Alan Buell, Brad Hay, Steve Garbaciak, Ken Aukerman, Brian Bell, Kris Gamble
- FR: Denis Roznowski
- RE: Contingency Plan for 2017 End of Construction Season Ashland/NSP Lakefront Site

Introduction

Northern States Power Company of Wisconsin (NSPW) and Foth Infrastructure & Environment/Envirocon Joint Venture (FE JV) have reviewed dredging progress for the Ashland/NSP Lakefront Site (Site) Phase 2 project and have decided to complete mechanical dredging in 2017, but forgo initiation of hydraulic dredging clean-up pass operations until spring 2018. Key to this decision are concerns with worker safety and reduced equipment efficiency due to the onset of freezing temperatures. The City of Ashland, Wisconsin Department of Natural Resources, and Environmental Protection Agency technical and legal staff were notified of this decision via phone and email on October 12 and 13, 2017 by NSPW technical and legal project leads.

This Technical Memorandum #17-05 (memorandum) describes the 2017 project close out procedures and schedule as well as the 2018 construction schedule for completion of hydraulic clean-up pass operations, restorative layer placement and demobilization/ restoration. This memorandum is being provided in response to the Agencies' request for a plan describing how any deviation from the schedule will be addressed, specifically for the details of how the Site will be closed out until work can resume in spring 2018.

This memorandum describes schedule and work items (contingencies) that will be performed differently than described in the *Final Design for Phase 2 Wet Dredge* (FE JV, 2017). Please refer to the attached figure illustrating the dredge sequences discussed in this memorandum.

A Joint Venture of Foth Infrastructure & Environment, LLC and Envirocon, Inc.

Contingencies for Mechanical Dredging Completion in 2017/Hydraulic Dredging Not Initiated Until 2018

<u>2017</u>

Contingencies Initiated:

- 1. Mechanical dredging completion sequence (see Figure 1, attached)
 - a. Complete Sequence 2 dredging and any re-dredging (assumed Nov. 3)
 - b. Complete Sequence 3 dredging and any re-dredging (assumed Nov. 9)
 - c. Interim post-mechanical sampling Seq. 2/3 completed (assumed Nov. 8)
 - d. Apply alum/remove Buffer Curtains (assumed completed Nov.11)
 - e. Complete Sequence 1 dredging and any re-dredging (assumed Nov. 20)
 - f. Interim post-mechanical sampling Seq. 1 completed (assumed Nov. 18)
 - g. Apply alum (assume complete Nov. 20)
 - h. Remove Primary Breakwater Curtain (assumed Nov. 21)
- 2. Hydraulic dredge is not mobilized to the Site.
- 3. Rock Protection Curtains are removed and disposed.
- 4. Secondary Breakwater Curtain remains in place.
- 5. East Pad used to store geotextile tubes containing sediment evacuated from modutanks at completion of dredging season.
- 6. One dredge plant and three hopper barges are removed from the water, decontaminated, and demobilized from the Site.
- 7. One dredge plant and three hopper barges remain on site and, weather permitting, are removed from the water and decontaminated. If weather does not permit, they will remain in the water over winter (excavator will be relocated on shore and decontaminated).
- 8. Process equipment and heavy equipment will be decontaminated. Some equipment will winter over and some will be demobilized form the Site.
- 9. Sediment Processing Tent (SPT) will be emptied of all processed material and floor is repaired with asphalt. Dust Collectors and TIGG units are decontaminated and demobilized. Air Filtration Units (AFUs) will remain on Site.
- 10. With all decontamination activities complete, Dredge Water Treatment System (DWTS) will be drained; multi-media and Granulated Activated Carbon (GAC) will be removed from vessels and disposed of (Note: If GAC has remaining adsorption capacity, it will be stored for use in 2018); and chemicals stored outside will be moved into the tent or offsite location if climate control is required to preserve the chemicals. The outfall pipe will be removed from the lake and staged inland of the shoreline bulkhead wall.
- 11. SPT and DWTS tents will remain on Site.
- 12. Temporary fence will be placed along bulkhead wall to secure north Site perimeter.
- 13. Office trailers and storage units will remain on Site over winter.

See the attached detailed schedule for the 2017 timeline of key activities.

<u>2018</u>

Contingencies Initiated:

- 1. Mobilize hydraulic dredge April 2018
- 2. Check Secondary Breakwater Curtain for integrity. Repair/replace as necessary (immediately after ice-out)
- 3. Start up DWTS
- 4. Prepare SPT for geotextile tube dewatering
- 5. Delivery of restorative layer material May/June
- 6. Commence hydraulic dredging end of April
- 7. Perform interim post-hydraulic sediment sampling progressively
- 8. Perform hydraulic re-dredging as warranted
- 9. Perform sediment confirmation sampling
- 10. Re-dredge (mechanical or hydraulic) based on confirmation sample results and re-sample (anticipate completion by early June)

Planned 2018 Activities from Final Design

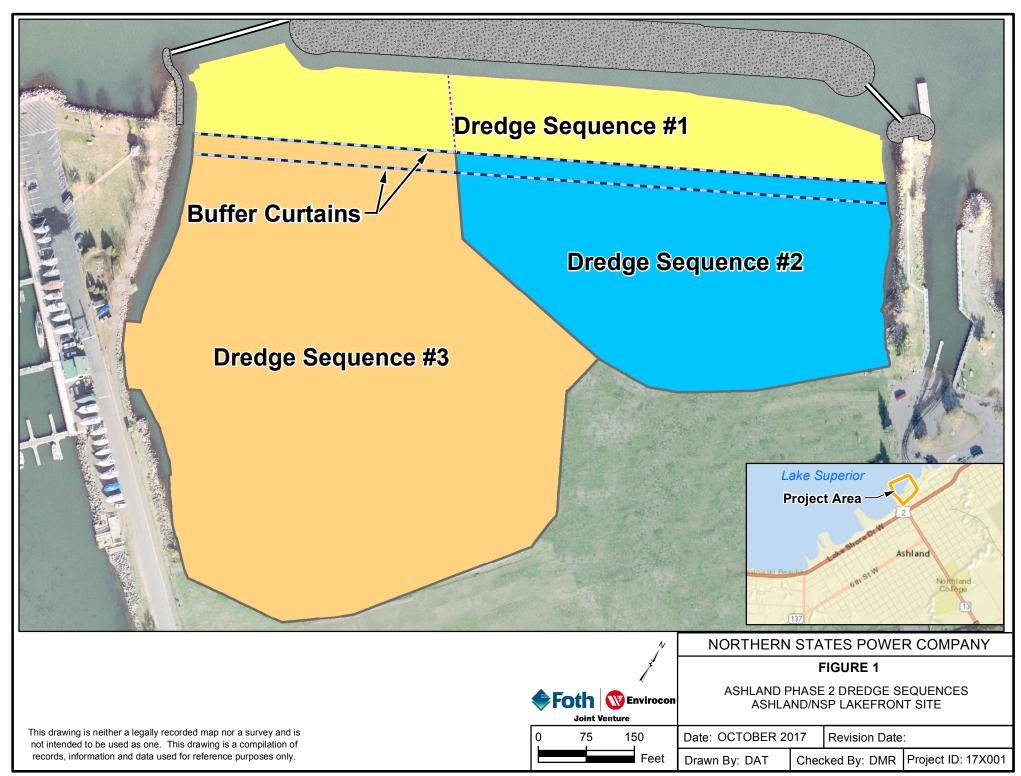
- 1. Mobilize restorative layer plant (early June)
- 2. Place restorative layer (complete by July 16)
- 3. Remove Secondary Barrier Curtain
- 4. Install external partial depth turbidity barrier outside gaps
- 5. Remove West and East Gap closures
- 6. Decon and demobilize/complete upland restoration

See the attached detailed schedule for the 2018 timeline of key activities.

References

Foth Infrastructure & Environment/Envirocon Joint Venture, 2017. *Final (100%) Design* for Phase 2 Wet Dredge – Ashland/NSP Lakefront Site. March 2017. Attachments

Figure 1 Schedule



	land Wet Dredge 20171010 (Scenario 2)				Xcel Ashland W	/et Dredge WB	S Sch Layou	t			Rur		16-Oct-1 19-Oct-1	7						
ctivity ID	Activity Name	OD	RD	Physical %	Start	Finish	TF	~	Oct	Qtr 4, 2017		lan	Qtr 1, 201	B Mar	Apr	Qtr 2, 2018	-	+	Qtr 3, 2018	
1487704C-2	2 1487704 Xcel Ashland Wet Dredge 20171010 (Scenaric	358	217		20-Mar-17 A	07-Sep-18	3 0	p		Nov	Dec	Jan	Feb	IVIAI	Apr	Мау	Jun	Jul	Aug	Sep
1487704C-2	2.01 2016 Infrastructure Development	0	0				0				1 1 1 1						1 1 1 1			
1487704C-2	2.02 2017 Season	214	50		20-Mar-17 A	14-Dec-17	216													
A0050	Operate Dewatering, Offload and Sediment Stabilization Processes	133	22	83.46%	19-May-17 A	09-Nov-17	216				1 1 1 1									
A0070	Transportation and Disposal	167	30	82.04%	19-May-17 A	18-Nov-17	236			1 1 1 1										
A0060	DWTS Operation	214	31	85.51%	20-Mar-17 A	20-Nov-17	231				+ 			 			4			
A0040	Mobilize, Install, Commence Water Monitoring	197	50	74.62%	07-Apr-17 A	14-Dec-17	216										1 1 1 1 1			
A0030	Mobilize, Install, Commence Air/Noise Monitoring	197	50	74.62%	07-Apr-17 A	14-Dec-17	216										1 1 1 1			
1487704C-2.	02.01 SEQUENCE - 1	9	9		10-Nov-17	20-Nov-17	216			 	 									
DMU10230	SEQ-1 Apply Alum in SEQ Area 2&3 / Allow Settling Time (New Scope, New Strategy)	2	2	0%	10-Nov-17	11-Nov-17	216			0										
DMU10250	SEQ-1 Remove Buffer Curtains (New Scope, New Strategy)	1	1	0%	13-Nov-17	13-Nov-17	216			I										
DMU10260	SEQ-1 Mechanical Dredge Final Clean-up (2000 CY @ 500 CY/Day) (New Scope, New Strategy)	4	4	0%	14-Nov-17	17-Nov-17	216													
DMU10270	SEQ-1 Collect and Process Post Mechanical Core Samples in DMU-1&2 (New Scope, New Strategy)	1	1	0%	18-Nov-17	18-Nov-17	216			I	1 1 1 1									
DMU10280		1	1	0%	20-Nov-17	20-Nov-17	216			I										
1487704C-2.	02.02 SEQUENCE - 2 / 3	88	50		25-Aug-17 A	14-Dec-17	216													
DMU20030	SEQ-3 Shoreline Sheetpile Stain Removal DMU-2	6	6	0%	16-Oct-17	21-Oct-17	160			- 										
DMU20030	-	45	19		25-Aug-17 A					_	1									
	CY/D)(22,000 CY @ 700 CY/D)																			
DMU20050	SEQ-3 Collect and Process Post Mechanical Core Samples in DMU-2	30	20	47%	06-Oct-17 A	08-Nov-17	216	┝━╸┊╹												
DMU20240	SEQ-3 Mechanical Cleaning of Pilot and Extended Pilot Area in DMU-2 (New Strategy/New Scope)	3	3	0%	07-Nov-17	09-Nov-17	244			٥										
DMU20060		3	3	0%	07-Nov-17	09-Nov-17	216			0										
DMU20115	1487704 Mechanical Substantial Completion	0	0	0%		20-Nov-17	231			♦	 ! !				-	- -			- 	
DMU20120	Weather Days (10) and Stand Down Days (5)	4	4	0%	21-Nov-17	27-Nov-17	231										1 1 1			
DMU20130	2017 Demob & Winterization	20	20	0%	20-Nov-17	14-Dec-17	216				1						1 1 1			
1487704C-2	2.03 2018 Season	116	116		16-Apr-18	07-Sep-18	3 0				1 1 1 1 1			 			1 1 1 1 1			
A0100	Ice Out	0	0	0%	16-Apr-18*		0			1 1 1 1	 	 		 	\$	1 1 1	 	 	 	
A0120	Assess Breakwater Barrier System (Repair as necessary)	3	3	0%	16-Apr-18	18-Apr-18	2								0	÷				
DMU10300	Mobilization Hydraulic Dredge and Site Preparation	5	5	0%	16-Apr-18	20-Apr-18	0													
Remainir	ng Level of Effort Remaining Work Primary Baseline		Dooc	1 of 2	Date	R	evision		Checke	ed		Ар	proved				1			
	evel of Effort Critical Remaining Work + Baseline Milestone		гауе		16-Oct-17	Noe Vala	adez, Jr.	Alan Bu	ell & Bra	d Hay						Fo	th	E	nviroc	on
															4		Joint V	enture		

1487704 Xcel Ashland Wet Dredge 20171010 (Scenario 2)					Data Date: 16-Oct-17 Run Date: 19-Oct-17										
Activity ID Activity Name			RD	Physical	Start	Finish	TF			Qtr 4, 2017	Kun	Date.	19-Oct-1 / Qtr 1, 2018		
,				%				p	Oct	Nov	Dec	Jan	Feb	M	
DMU20270	Set-up the DWTS for 2018 Season	5	5	0%	16-Apr-18	20-Apr-18	111						-	-	
DMU10190	Hydraulic Dredge Set-up & Shakedown	5	5	0%	21-Apr-18	26-Apr-18	0					1 1			
DMU20080	Hydraulic Dredge Removal (732,000 SF @ 40,000 SF/Day, Double Shift), Includes Null Areas	18	18	0%	27-Apr-18	17-May-18	0					1 1 1 1 1 1		 	
DMU20090	Collect and Process Post Hydraulic Core Samples	16	16	0%	01-May-18	18-May-18	2								
DMU20100	Residual Redredge	3	3	0%	18-May-18	21-May-18	0		-			 		1	
DMU20110	Final Confirmation Sampling	14	14	0%	09-May-18	24-May-18	2		_			 		1	
DMU20150	Geotube Curing	7	7	0%	22-May-18	01-Jun-18	38					 		1	
DMU20250	Mechanical or Residual Redredge (As necessary)	5	5	0%	25-May-18	02-Jun-18	2					 			
A0110	Mobilize Restorative Layer Plant Setup	10	10	0%	22-May-18	05-Jun-18	0					1	· · · · · · · · · · · · · · · · · · ·	1	
DMU20140	Geotube Stabilization	4	4	0%	02-Jun-18	06-Jun-18	38					 			
DMU20160	Transport and Dispose Geotube Sediments	4	4	0%	07-Jun-18	11-Jun-18	38					 		1	
DMU20170	Decon Geotube Pad	2	2	0%	12-Jun-18	13-Jun-18	38					 			
DMU20280	DWTS Operation 2018	43	43	0%	21-Apr-18	13-Jun-18	38					 			
A0140	Sheet Pile Coating Repair (Divers)	20	20	0%	22-May-18	16-Jun-18	55					1	· F · · · · · · · · · · · · · · · · · ·		
DMU20290	Demobilize DWTS System	10	10	0%	14-Jun-18	25-Jun-18	48					 			
DMU20300	Demobilize Material Processing Tent (MPT)	10	10	0%	14-Jun-18	25-Jun-18	38					 			
A0130	Deliver Restorative Layer Materials (28,000 tons)	30	30	0%	19-May-18	26-Jun-18	8					 			
DMU20310	Demobilize DWTS Tent	10	10	0%	26-Jun-18	10-Jul-18	38					 		1	
A0150	Place Restorative Layer (16 Acres @ 0.5 Acre/Day)	32	32	0%	06-Jun-18	16-Jul-18	0					,			
A0160	Remove Gap Coffers	23	23	0%	17-Jul-18	11-Aug-18	0					 			
A0170	Remove Barrier System, As Necessary	5	5	0%	13-Aug-18	17-Aug-18	0					 			
DMU20260	2018 Weather Days (5)	5	5	0%	18-Aug-18	23-Aug-18	0					 			
A0180	2018 Demobilization	10	10	0%	24-Aug-18	07-Sep-18	0								

Remaining Level of Effort Remaining Work Primary Baseline Page 2 of 2 Date Revision Criecked Approve Actual Level of Effort Image 2 of 2 Image 2 of 2 16-Oct-17 Noe Valadez, Jr. Alan Buell & Brad Hay Image 2 of 2 Image 2 of 2	
Actual Work Milestone % Complete	

