FTS
Field & Technical Services
200 Third Avenue • Carnegie, PA 15106 • Phone: 412-429-2694 • Fax: 412-279-4512

April 24, 2020

Mr. John Sager
Wisconsin Department of Natural Resources
1701 North Fourth Street
Superior, WI 54880
Telephone #715-392-7822

RE: Former Koppers Inc. Facility, Superior Wisconsin
WDNR DNR BRRTs No: 0216000484
WDNR Facility ID: 816009810

Subject: 2018 On-Property Corrective Measures Monitoring & Maintenance Report

Dear Mr. Sager:

Field and Technical Services LLC (FTS), on behalf of Beazer East, Inc. (Beazer), and in accordance with the Operation and Maintenance Plan, On-Property Corrective Measures (O&M Plan; Arcadis, revised September 2011), is submitting this On-Property Corrective Measures Annual Monitoring & Maintenance Report for 2018, for the Former Koppers Inc. Facility in Superior, Wisconsin (the Site). This report documents the monitoring and maintenance activities conducted during 2018 for the completed on-property corrective measures (i.e., surface covers and Outfall 001 drainage ditch liner system; Figure 1).

The 2018 monitoring activities included the following:

- Monitoring the two collection sumps beneath the restored Outfall 001 drainage ditch for the presence of dense, non-aqueous phase liquid (DNAPL; performed on October 3, 2018); and
- Visually inspecting the surface covers and Outfall 001 drainage ditch liner system (performed on October 3, 2018).

Table 1 summarizes the DNAPL collection sump monitoring results. As indicated in Table 1, DNAPL has not been detected in either of the collection sumps to date.

The October 3, 2018 inspection observations and photographs are presented in a Site Inspection Form in Attachment 1. No issues were observed in Areas A, F1, F2, G, H, or S or at Outfall 001 drainage ditch during the October 2018 inspection.

If you have questions regarding this submittal or require additional information, please call me at (412) 429-2694 or Jane Patarcity of Beazer at (412) 208-8813.

Sincerely,

Field and Technical Services

Angela M Gatchie

Angela Gatchie
Project Manager

Attachments

cc: Jane Patarcity, Beazer
Linda Paul, Koppers
David Bessingpas, Arcadis
Terry Peterson, TRP

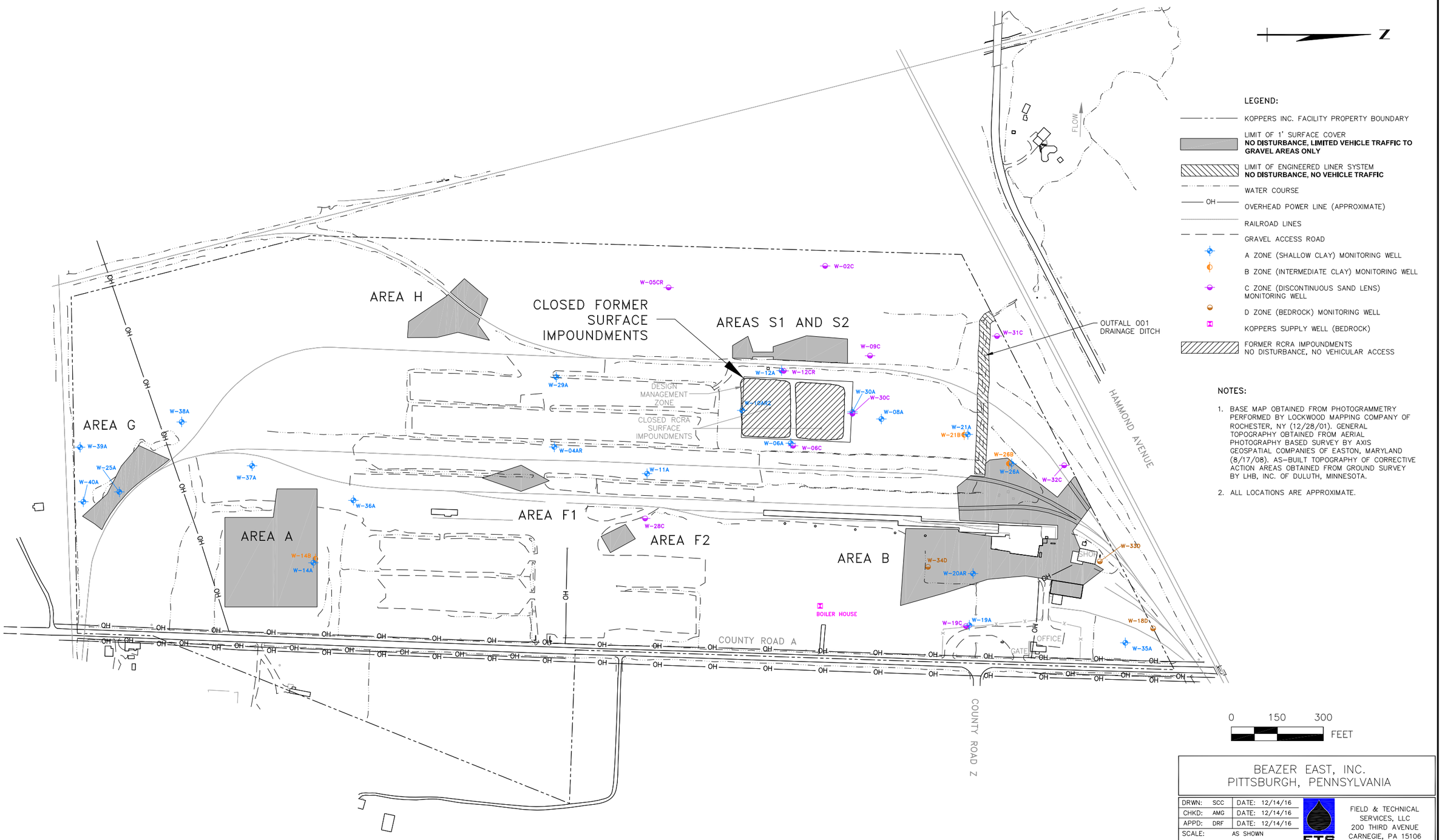
TABLE

Table 1
Summary of Outfall 001 Drainage Ditch Sump DNAPL Monitoring/Removal Data [1]
Former Koppers Inc. Facility - Superior, WI

Date	Depth to Water (ft)	Depth to DNAPL (ft)	Depth to Sump Bottom (ft)	DNAPL Thickness (ft)	DNAPL Volume Removed (gal)	Notes/Comments
East Sump						
1/31/11	11.65	--	20.76	--	--	No DNAPL detected with interface probe or visible on PVC
2/25/11	10.01	--	20.78	--	--	No DNAPL detected with interface probe or visible on PVC; silt on PVC
3/28/11	Not measured - ice present at 11.60 feet below top of riser pipe				--	
4/12/11	12.55	--	20.82	--	--	No DNAPL detected with interface probe or visible on PVC; silt on probe tip
5/19/11	12.80	--	20.78	--	--	No DNAPL detected with interface probe or visible on PVC; silt on probe tip
6/30/11	12.96	--	20.79	--	--	No DNAPL detected with interface probe or visible on PVC; silt on probe tip
9/9/11	13.11	--	20.79	--	--	No DNAPL detected with interface probe or visible on PVC; silt on probe tip
10/21/11	13.20	--	20.85	--	--	No DNAPL detected with interface probe or visible on PVC
6/26/12	13.03	--	21.85 [2]	--	--	No DNAPL detected with interface probe or visible on PVC
9/25/12	13.47	--	20.83	--	--	No DNAPL detected with interface probe or visible on PVC; silt on probe tip
5/1/13	Not measured - ice present at 13.25 feet below top of riser pipe					
8/21/13	13.40	--	20.83	--	--	No DNAPL detected with interface probe or visible on PVC
6/26/14	13.49	--	20.84	--	--	No DNAPL detected with interface probe or visible on PVC; silt on probe tip
7/16/15	13.10	--	20.90	--	--	No DNAPL detected with interface probe or visible on PVC; silt on probe tip
12/06/16	12.46	--	20.82	--	--	No DNAPL detected with interface probe or visible on PVC; silt on probe tip
10/05/17	11.95	--	20.20	--	--	No DNAPL detected with interface probe or visible on PVC; silt on probe tip
10/03/18	13.11	--	20.76	--	--	No DNAPL detected with interface probe or visible on PVC; silt on probe tip
West Sump						
1/31/11	10.20	--	20.90	--	--	No DNAPL detected with interface probe or visible on PVC
2/25/11	Not measured - ice present at 10.05 feet below top of riser pipe				--	
3/28/11	Not measured - ice present at 9.50 feet below top of riser pipe				--	
4/12/11	Not measured - ice present at 10.00 feet below top of riser pipe				--	
5/19/11	10.62	--	20.89	--	--	No DNAPL detected with interface probe or visible on PVC
6/30/11	10.75	--	21.54 [2]	--	--	No DNAPL detected with interface probe or visible on PVC
9/9/11	11.05	--	21.54 [2]	--	--	No DNAPL detected with interface probe or visible on PVC
10/21/11	11.07	--	20.93	--	--	No DNAPL detected with interface probe or visible on PVC
6/26/12	10.84	--	20.90	--	--	No DNAPL detected with interface probe or visible on PVC
9/25/12	11.54	--	20.92	--	--	No DNAPL detected with interface probe or visible on PVC
5/1/13	10.23	--	20.91	--	--	No DNAPL detected with interface probe or visible on PVC
8/21/13	11.59	--	20.85	--	--	No DNAPL detected with interface probe or visible on PVC
6/26/14	11.07	--	20.92	--	--	No DNAPL detected with interface probe or visible on PVC
7/16/15	11.21	--	20.94	--	--	No DNAPL detected with interface probe or visible on PVC
12/06/16	11.22	--	20.88	--	--	No DNAPL detected with interface probe or visible on PVC
10/05/17	10.48	--	20.00	--	--	No DNAPL detected with interface probe or visible on PVC
10/03/18	11.89	--	21.62	--	--	No DNAPL detected with interface probe or visible on PVC

Notes:
1. Measurements obtained using an oil/water interface probe affixed to 3/4-inch PVC pipe.
2. Probe advanced into horizontal portion of pipe.

FIGURE



LEGEND:

- KOPPERS INC. FACILITY PROPERTY BOUNDARY
- LIMIT OF 1' SURFACE COVER **NO DISTURBANCE, LIMITED VEHICLE TRAFFIC TO GRAVEL AREAS ONLY**
- LIMIT OF ENGINEERED LINER SYSTEM **NO DISTURBANCE, NO VEHICLE TRAFFIC**
- WATER COURSE
- OH — OVERHEAD POWER LINE (APPROXIMATE)
- RAILROAD LINES
- GRAVEL ACCESS ROAD
- A ZONE (SHALLOW CLAY) MONITORING WELL
- B ZONE (INTERMEDIATE CLAY) MONITORING WELL
- C ZONE (DISCONTINUOUS SAND LENS) MONITORING WELL
- D ZONE (BEDROCK) MONITORING WELL
- KOPPERS SUPPLY WELL (BEDROCK)
- FORMER RCRA IMPOUNDMENTS NO DISTURBANCE, NO VEHICULAR ACCESS

NOTES:

1. BASE MAP OBTAINED FROM PHOTOGRAMMETRY PERFORMED BY LOCKWOOD MAPPING COMPANY OF ROCHESTER, NY (12/28/01). GENERAL TOPOGRAPHY OBTAINED FROM AERIAL PHOTOGRAPHY BASED SURVEY BY AXIS GEOSPATIAL COMPANIES OF EASTON, MARYLAND (8/17/08). AS-BUILT TOPOGRAPHY OF CORRECTIVE ACTION AREAS OBTAINED FROM GROUND SURVEY BY LHB, INC. OF DULUTH, MINNESOTA.
2. ALL LOCATIONS ARE APPROXIMATE.

0 150 300
FEET

REFERENCE:
1. CAD FILES PROVIDED BY ARCADIS FOR A FIGURE ENTITLED SITE PLAN AND DENOTED AS FIGURE 1.

BEAZER EAST, INC.
PITTSBURGH, PENNSYLVANIA

DRWN:	SCC	DATE: 12/14/16	FIELD & TECHNICAL SERVICES, LLC 200 THIRD AVENUE CARNEGIE, PA 15106
CHKD:	AMG	DATE: 12/14/16	
APPD:	DRF	DATE: 12/14/16	
SCALE:	AS SHOWN		
ISSUE DATE:			

FTS

KOPPERS INC. PLANT
SUPERIOR, WISCONSIN

SITE PLAN

PROJECT NO: 0M055609
DRAWING NUMBER
FIGURE 1

ATTACHMENT 1

Site Inspection – 10/3/18

Former Koppers Inc. Facility – Superior, WI

By Field & Technical Services

Jena Lexie
10/5/2018

Photographs:

Area A Photo 1, looking Northeast from West side:

Area A Photo 2, looking East from West side:

Area B Photo 1, looking South from North East central area:

Area B Photo 2, looking West from Eastern edge:

Area B Photo 3, looking South from North Central area:

Area B Photo 4, looking South from North West along (ruts in grass along gravel):

Area B Photo 5, Close up of ruts from photo 4:

Area B Photo 6, Close up of ruts from photo 4:

Area F1 Photo 1, looking South from North end:

Area F2 Photo 1, Looking Northeast from Southwest:

Area G Photo 1, looking Southeast from Northwest corner:

Area G Photo 2, looking Northwest from Southeast corner:

Area H Photo 1, (East side of RR tracks) looking Southwest from Eastern side:

Area H Photo 2, (West side of RR tracks) looking Southwest from western side:

Area S Photo 1, looking North from center of area:

Area S Photo 2, looking South from center of area:

Outfall 001 Drainage Ditch Photo 1, looking West from eastern edge:

Outfall 001 Drainage Ditch Photo 2, looking west from center:

Post Construction Site Inspection Form
Beazer East, Inc.
Koppers Inc. Facility, Superior, Wisconsin

Inspection Date: 10/3/18

Weather Conditions: overcast Light rain 50

Inspector Name and Organization: Brenday Rick, FTS

Inspector Signature: Brenda Rick

Area A

(check one)	No	Yes	If yes, provide description and take photos
Excessive erosion	X		
Evidence of excessive settling or ponding	X		
Areas lacking well-established vegetation	X		

Action Items: N/A

Photographs: Photo: 1; Looking NE from west side of ~~Site~~ area
Photo: 2; Looking E from west side of area BR 10/3/18
Photo: ____;
Photo: ____;
Photo: ____;

Area B

(check one)	No	Yes	If yes, provide description and take photos
Excessive erosion	X		
Evidence of excessive settling or ponding		X	ruts on western area, photos 5 & 6
Areas lacking well-established vegetation	X		

Action Items: ____

Photographs: Photo: 1; Looking South from North East central area
Photo: 2; Looking west from eastern edge
Photo: 3; Looking south from North ~~East~~ East section
Photo: 4; South from North west
Photo: 5+6; close up of ruts

Area F-1

(check one)	No	Yes	If yes, provide description and take photos
Excessive erosion	X		
Evidence of excessive settling or ponding	X		
Areas lacking well-established vegetation	X		

Action Items: N/A

Photographs: Photo: 1 ; Looking South from North edge

Photo: _____ ;

Photo: _____ ;

Photo: _____ ;

Photo: _____ ;

Area F-2

(check one)	No	Yes	If yes, provide description and take photos
Excessive erosion	X		
Evidence of excessive settling or ponding	X		
Areas lacking well-established vegetation	X		

Action Items: _____

Photographs: Photo: 11 ; Looking north east from South west

Photo: _____ ;

Photo: _____ ;

Photo: _____ ;

Photo: _____ ;

Area G

(check one)	No	Yes	If yes, provide description and take photos
Excessive erosion	X		
Evidence of excessive settling or ponding	X		
Areas lacking well-established vegetation	X		

Action Items: _____

Photographs: Photo: 1 ; looking SE from NW

Photo: 2 ; looking NW from SE

Photo: _____ ; _____

Photo: _____ ; _____

Photo: _____ ; _____

Area H

(check one)	No	Yes	If yes, provide description and take photos
Excessive erosion	X		
Evidence of excessive settling or ponding	X		
Areas lacking well-established vegetation	X		

Action Items: _____

Photographs: Photo: 1 ; SW from Eastern side

Photo: 2 ; " " western side

Photo: _____ ; _____

Photo: _____ ; _____

Photo: _____ ; _____

Areas S-1 and S-2

(check one)	No	Yes	If yes, provide description and take photos
Excessive erosion	X		
Evidence of excessive settling or ponding	X		
Areas lacking well-established vegetation	X		

Action Items: _____

Photographs: Photo: 1 ; north from center of area

Photo: 2 ; South " " " "

Photo: _____ ; _____

Photo: _____ ; _____

Photo: _____ ; _____

Outfall 001 Drainage Ditch

(check one)	No	Yes	If yes, provide description and take photos
Excessive erosion	X		
Evidence of excessive settling or ponding	X		
Areas lacking well-established vegetation	X		

Action Items: _____

Photographs: Photo: 1 ; West from eastern edge

Photo: 2 ; West from center

Photo: _____ ; _____

Photo: _____ ; _____

Photo: _____ ; _____