

June 12, 2017

Rusty Kestle Remedial Project Manager Superfund Remedial Branch, Section C U.S. Environmental Protection Agency, Region 4 61 Forsyth Street SW Atlanta, GA 30303-8909 VIA EMAIL

Subject: May 2017 Monthly Progress Report

Dear Mr. Kestle:

On behalf of Beazer East, Inc. (Beazer), attached is the May 2017 Monthly Progress Report for the Koppers portion of the Cabot/Koppers Superfund Site in Gainesville, Florida. If you have any questions or comments, please contact me.

Sincerely,

Gregory W. Council, P.E.

Principal Engineer

cc: Kelsey Helton, FDEP

Robin Hallbourg, ACEPD Agustin (Gus) Olmos, ACEPD Kristie Williams, City of Gainesville Yvette Carter, City of Gainesville

Rick Hutton, GRU

Carrie McCoy, Black & Veatch

Josh Hayes, J.M. Waller

John Herbert, GeoHydro Consultants

Patricia Cline, Community Technical Advisor

Linda Paul, Koppers, Inc.

Mitchell Brourman, TRMI

Mike Slenska, TRMI

Donna Kopach, TRMI

Jim Erickson, Tetra Tech

Wayne Reiber, Cabot Corporation

Steve Clark, FTS

John Helton, FTS

Bryan Cotter, Water and Air Research, Community Technical Advisor

MAY 2017 MONTHLY PROGRESS REPORT Cabot/Koppers Superfund Site Gainesville, Florida

1. Compliance Actions:

- Beazer's Operation and Maintenance (O&M) Contractor performed routine treatment plant O&M services for the groundwater extraction and pretreatment system.
- Remedial Design and Remedial Action activities are presently being conducted.

2. Sampling/Test Results and Data:

- Instantaneous flow rates and totalizer volumes were measured in each extraction well.
- The bi-weekly passive NAPL recovery program continues at Upper Hawthorn monitoring wells and temporary injection points (TIPs) installed as part of the In-Situ Geochemical Stabilization (ISGS) program. Two NAPL recovery events were conducted during the month for the monitoring wells and three were conducted for the TIPs.
- Table 1 provides DNAPL collection data for wells at the Former North Lagoon and Drip Track. The
 only monitored TIP outside the Former Process Area and Former South Lagoon is at the Drip Track
 (Table 1). Process Area and South Lagoon recovery data will be included in forthcoming
 performance monitoring submittals.
- A total of 3,938,003 gallons of groundwater were recovered by the Surficial Aquifer drains and extraction well system (both Surficial Aquifer and UFA) during the past month (system run time of 744 hours). The average recovery rate for the month was approximately 88.2 gallons per minute (gpm). The recovery for each component is listed below.
 - Surficial Aquifer
 - Perimeter Extraction Wells: 284,485 gallons
 - Former North Lagoon Drain: 506,700 gallons
 - Former Drip Track Drain: 506,940 gallons
 - Former Process Area Drain: 528,550 gallons
 - Former South Lagoon Drain: 466,580 gallons
 - Upper Floridan Extraction Wells
 - FW-6: 49,771 gallons
 - FW-21B: 160,416 gallons
 - FW-31BE: 987,870 gallons
 - FW-32BE: 446,691 gallons

Approximately 413.7 million gallons have been recovered from the Surficial Aquifer extraction wells and four drains since the start of the Surficial Aquifer containment system in January 1995.

For the month, the total volume of water treated and discharged to the GRU wastewater system was measured to be 2,386,000 gallons. A portion of the water, from Upper Floridan Aquifer wells, was treated and used for on-Property irrigation.

The Former South Lagoon groundwater drain pumps were turned off for approximately 9 hours to pump and clean clarifiers and to treat backwash water.

Perimeter wells EW-10, EW-11, EW-14, EW-15, and EW-17 are down due to low water levels and/or clogged filter packs. EW-15 and EW-17 were redeveloped on May 31, 2017.

3. Plans, Reports, Deliverables and Procedures Completed:

- On May 5, 2017, Beazer submitted the report entitled Design Investigation Work Plan Addendum: Additional Borings for Cutoff Wall Design.
- On May 26, 2017, Beazer submitted the report entitled *Phase I Results for the Former South Lagoon Preliminary Design and Design Investigation Workplan Implementation, Former Cabot Carbon/Koppers Inc. Site Gainesville, Florida.*
- Remedial Design/Remedial Action Status Update Meeting (EPA/Beazer) May 9, 2017.
- Periodic maintenance checks and inspections.
- Treatment-plant component maintenance and repair as needed (caustic pump, carbon vessel gaskets and gauges, sludge pump diverter valve, bag filter vessel). Repaired filter press plates, cleaned sump pumps, and replaced damaged air lines.
- Irrigation breakthrough sampling May 31, 2017.
- Stormwater sampling May 24, 2017.
- Second quarter sampling event May 8 May 12, 2017.
- Replaced EW-15 pump and motor, cleaned flow meter and reinstalled piping.
- Redeveloped EW-15 and EW-17. Planned redevelopment of EW-10, EW-11, and EW-14.
- On-property irrigation using treated groundwater from FW-21B, FW-31BE, and FW-32BE.
- Began drilling supplemental boring for cutoff wall design.

4. Upcoming Actions:

- NAPL collection at Upper Hawthorn monitoring wells: bi-weekly.
- NAPL collection at temporary Upper Hawthorn ISGS injection points: bi-weekly.
- Routine inspection, operation, maintenance, and monitoring.
- Third quarter sampling event August 2 15, 2017.
- Continuation of drilling supplemental borings for cutoff wall design.

5. Schedule Status:

• Minor modifications were made to the project schedule.

6. Community Involvement:

Future community involvement activities will be coordinated with EPA.

Table 1. DNAPL recovery volume (gal) at wells and at Drip Track TIP: May 2017

Date	Well	Volume (gal)				
	HG-10S	Stain				
	HG-10D	Stain				
	HG-12S	0.4				
5/11/2017	HG-12D	ND				
	HG-16S	Stain				
	HG-16D	Stain				
	MW-22B	Stain				
	HG-10S	Stain				
	HG-10D	Stain				
	HG-12S	0.4				
5/26/2017	HG-12D	ND				
	HG-16S	Stain				
	HG-16D	Stain				
	MW-22B	Stain				
5/2/2017	Drip Track	0.6				
5/16/2017	Drip Track	0.5				
5/30/2017	Drip Track	0.3				

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ID	WBS	Task Name	Duration	Predecessors	Start	Fin	sh 2012 H2	2013 H1 H2	2014 H1 H2	2015 H1 H2	2016 H1 H2	H1	017 H2	2018 H1 H2	2019 H1 H2	2020 H1 H2	2021 H1
1	1	Consent Decree for RD/RA	23.8 wk	s	Thu 2/7/13		24/13	-							·		
2	1.1	US DOJ Lodges Donsent Decree with Court	0 day		Thu 2/7/13		2/7/13	•									
3	1.2		4.6 w		Wed 2/13/13		/15/13										
4	1.3	Beazer Submittal: Project Coordinators, Supervising Contractor, Quality Management Plan	0 day	'S	Fri 2/15/13	Fri 2	/15/13	•									
5	1.4	Court Enters Consent Decree Final	0 day	rs .	Tue 7/9/13	Tue	7/9/13	•									
6	1.5		_		Wed 7/24/13	1	I										
7			,]									
8	2	Remedial Design Work Plan (RDWP)	22.3 wk	s	Wed 7/24/13	Thu 12	26/13	—	•								
9	2.1	Prepare RDWP	43 day	rs 6	Wed 7/24/13	Fri 9	20/13										
10	2.2	Beazer Submit RDWP	0 wł	s 9	Fri 9/20/13	Fri 9	/20/13										
11	2.3	EPA Review and Comment RDWP	6.8 wk	s 10	Mon 9/23/13	Thu 1	1/7/13										
12	2.4	Beazer Respond to Comments	4.3 wk	s 11	Fri 11/8/13	Mon 1	2/9/13										
13	2.5	•	0 wł		Mon 12/9/13			•	₹								
14	2.6		2.6 wł		Mon 12/9/13												
15	2.7	EPA Approval RDWP	0 wk	s 14	Thu 12/26/13	Thu 12	26/13		•								
16																	
17		, •	100.8 wk		Fri 9/20/13	1											
18	3.5	,	0 wk		Fri 9/20/13		(20/13	•	👢								
19 20	3.2	-	5 wk	s 19FF	Tue 4/1/14 Tue 4/1/14		5/5/14 5/5/14										
21	3.6	-		s 19FF	Tue 4/1/14 Tue 4/1/14		5/5/14										
22	3.7			s 19FF	Tue 4/1/14 Tue 4/1/14		5/5/14										
23	3.6		33.8 wk		Mon 1/5/15		l l										
24	3.7	·	0 wł		Thu 8/27/15												
25	0.7	Deazer Cubrille Novided Q/11 1	0 111		1110 0/27/10	11100	21710			•							
26	4	Off-Property Soil Replacement (OU-5): DESIGN TRACK #1	121.4 wk	s	Tue 4/30/13	Thu 8	27/15										
27	4.1	Initial Identification of Remediation & Evaluation Parcels	0 wł		Tue 4/30/13			•		·							
28	4.2		23 wł	I I	Thu 5/2/13	1	I										
29	4.3	Community Information Session	0 wk	S	Thu 5/30/13	Thu 5	/30/13	•									
30	4.4		18.8 wk	s	Fri 7/19/13	Wed 11	27/13	-	•								
		2013)			= 1 = 11 = 11 =		4242										
31	4.4.1	Proposal for Sampling (July 2013)	0 wk		Fri 7/19/13		/19/13	•									
32	4.4.2	11 1 3	0 wł 2 day		Mon 7/22/13 Tue 7/30/13			T									
34	4.4.4	•	6.2 w	I I	Thu 8/1/13			<u> </u>									
35	4.4.5		10.8 wk	I I	Fri 9/13/13												
36	4.4.6	· ·			Wed 11/27/13				}								
37	4.5		10.3 wk	I I	Thu 9/26/13												
38	4.5.1	Survey	1.8 wk		Thu 9/26/13												
39	4.5.2	,	3 wk		Wed 10/9/13												
40	4.5.3	-	2 wł	s	Thu 10/10/13	Wed 10	23/13										
41	4.5.4	Sample Analysis	2 wł	s 40	Thu 10/24/13	Wed 1	1/6/13										
42	4.5.5		6 wk		Thu 9/26/13				<u> </u>								
43	4.5.6	Submit Pilot Plan		s 42,41	Wed 11/6/13												
44	4.5.7	Review	I	ık 43	Thu 11/7/13				<u> </u>								
45	4.5.8		0 wk	I I	Wed 11/13/13	1	I	•	7								
46	4.5.9	_			Thu 10/31/13				<u> </u>								
	4.5.10	·		s 46,45	Thu 11/14/13		2/6/13	_									
48	4.6	3	42.4 wk		Mon 9/16/13		7/8/14		<u> </u>								
49	4.6.1	Remedial Design Details	12.4 wk		Thu 11/28/13		21/14										
50	4.6.2		0 wk		Fri 2/21/14		21/14		*								
51	4.6.3		0.8 wł 34 wł		Mon 2/24/14				<u> </u>								
52 53	4.6.4		28 w		Mon 9/16/13 Mon 12/2/13	1	5/9/14 /13/14										
JJ	4.0.5	raivei Designs & Remediation Agreements	20 WF	.5	101011 12/2/13	,	13/14										

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WBS	Task Name	Duration Predecessors	Start	Finish 2012 H2	2013 H1 H2	2014 H1 H2	2015 H1 H2	2016 H1 H2	2017 H1 H2	2018 H1 H2	2019 H1 H2	2020 H1 H2	н
4.6.6	Final Design and RAWP	19.6 wks	Fri 2/21/14	Tue 7/8/14		-							
5 4.6.6.1	Submit Pre-Final Designs & RAWP: Blocks G & H	0 wks	Fri 2/21/14	Fri 2/21/14		•							
6 4.6.6.2		1 wk 55	Fri 2/21/14	Thu 2/27/14		ľ							
4.6.6.3	_	0 wks	Fri 3/7/14	Fri 3/7/14		•							
4.6.6.4		1 day 57	Fri 3/7/14	Fri 3/7/14		T T							
59 4.6.6.5	-	0 wks	Thu 4/3/14	Thu 4/3/14		•							
4.6.6.6		2 days 59	Thu 4/3/14	Fri 4/4/14									
4.6.6.7	_		Wed 4/30/14	I		4 €							
4.6.6.8		0 wks 61	Wed 4/30/14			•							
4.6.6.9	_	0 wks 61FF+3.1 wk	Thu 5/22/14			4 €							
6.6.10		0.6 wks 63	Thu 5/22/14			 							
6.6.11	Submit Pre-Final Designs & RAWP: Block A	0 wks 63FF+3 wks	Thu 6/12/14	Thu 6/12/14		4							
6.6.12	Final Design and RAWP Approval: Block A	0.6 wks 65	Thu 6/12/14	Tue 6/17/14									
6.6.13	Submit Pre-Final Designs & RAWP: Block I	0 wks 65FF+3.5 wk	Mon 7/7/14	Mon 7/7/14		■ •							
6.6.14	Final Design and RAWP Approval: Block I	0.2 wks 67	Tue 7/8/14	Tue 7/8/14		ľ							
4.7	Sampling for Refinement of Remediation Parcels (Feb 2014)	24.8 wks	Wed 2/19/14	Tue 8/12/14		-							
70 4.7.1	Beazer & EPA Sampling	0.2 wks	Wed 2/19/14	Wed 2/19/14									
71 4.7.2	, ,	7.2 wks 70	Thu 2/20/14										
72 4.7.3	-	16 wks 71		Thu 7/31/14									
73 4.7.4		0 wks 72	Thu 7/31/14										
74 4.7.5		0 wks 73	Tue 8/12/14			*							
75 4.8	•	12.2 wks	Mon 6/2/14			-							
76 4.8.1	Access Agreements for Design	2 wks	Mon 6/2/14	Fri 6/13/14									
77 4.8.2		5 wks 76	Mon 6/16/14	Fri 7/18/14									
78 4.8.3	1	5 wks 77SS+1 wk	Mon 6/23/14	Fri 7/25/14									
79 4.8.4	, ,	7 wks 78SS+1 wk	Mon 6/30/14	Fri 8/15/14									
30 4.8.5	_	0 wks	Fri 7/25/14	Fri 7/25/14		•							
31 4.8.6		1 wk 80		Thu 7/31/14		*							
32 4.8.7	- 11	0 days 79	Wed 8/20/14	Wed 8/20/14									
33 4.8.8	Final Design and RAWP Approval: Block K	4 days 82	Wed 8/20/14	Mon 8/25/14		*							
34 4.9	Community Meetings	16.4 wks	Fri 10/25/13	Tue 2/18/14	_								
35 4.9.1	Community Meeting: Landscaping Workshop - City (Oct	2 days	Fri 10/25/13	Mon 10/28/13									
36 4.9.2	Community Meeting (Jan 18 2014)	2 days	Fri 1/17/14	Mon 1/20/14		1							
37 4.9.3	Community Meeting (Feb 18 2014)	0 wks	Tue 2/18/14	Tue 2/18/14		•							
88 4.10	Implementation of Remedial Action	39 wks	Mon 2/17/14	Fri 11/14/14									
39 4.11	Pre-Final Inspection	0 wks 88	Tue 11/18/14	Tue 11/18/14		→ The state of th							
90 4.12	Prepare Implementation Report	36.4 wks 88	Mon 11/17/14	Tue 7/28/15									
91 4.13	Submit Implementation Report	0 wks 90	Tue 7/28/15	Tue 7/28/15			*						
92 4.14	EPA Approval of Implementation Report	0 wks	Thu 8/27/15	Thu 8/27/15			•						
93													
94 5	Cutoff Wall and Stormwater Controls: DESIGN TRACK #2	150.5 wks	Wed 12/17/14	Fri 11/3/17					 	•			
95 5.1	Pre-Design Work Plan	21.2 wks 15	Wed 12/17/14	Wed 5/13/15		1							
96 5.2		0 wks 95	Wed 5/13/15				•						
97 5.3		10 wks 96	Thu 5/14/15	Wed 7/22/15									
98 5.4	Submit Response to Comments and Revised Plan	0 wks 97FS+5.2 wk	Thu 8/27/15	Thu 8/27/15			•						
99 5.5	EPA Approval of Pre-Design Work Plan	0 wks 98FS+0.2 wk	Fri 8/28/15	Fri 8/28/15			•						
00 5.6	Pre-Design Investigation	38 wks	Mon 8/31/15	I				•					
01 5.6.1	Planning & Preparation	4 wks 99	Mon 8/31/15	Fri 9/25/15									
02 5.6.2	Field Work	11 wks 101	Mon 9/28/15	Fri 12/11/15				1					
03 5.6.3	Lab Work	26 wks 102FS-3 wks	Mon 11/23/15	Fri 5/20/16									
04 5.7	Preliminary Design	8.3 wks 103FS-2 wks	Mon 5/9/16	Tue 7/5/16									
05 5.8	Submit Preliminary Design	0 wks 104	Tue 7/5/16					•					
06 5.9	, ,	24 wks 105		Tue 12/20/16									
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Project File: RD Schedule 20170612.mp Date: Mon 6/12/17 Page 2 of 5

							GAINESVILLE REME	DIAL DESIGN							
ID	W	/BS Ta	sk Name	Duration Predecessors	Start	Finish 20	012 2013 H2 H1 H2	2014 H1 H2	2015 H1 H2	2016 H1 H2 H1	2017 H2	2018 H1 H2	2019 H1 H2	2020 H1 H2	2021 H1 F
107		5.10	Pre-Final Design	14.1 wks 106	Fri 5/5/17	Fri 8/11/17	<u> </u>		ПІ П2	<u> </u>		пі п2	NI NZ	пі і пг	пі і г
108	5.	10.1	Supplemental Design Investigation Work Plan	0 wks	Fri 5/5/17	Fri 5/5/17									
		10.2	Review and Approval	3.1 wks 108	Fri 5/5/17	Fri 5/26/17									
110	_	10.3	Supplemental Design Borings	8 wks 109	Fri 5/26/17	Fri 7/21/17									
		10.4	Design Updates	3 wks 110	Fri 7/21/17	Fri 8/11/17									
112		5.11	Review and Comment	5 wks 107	Fri 8/11/17	Fri 9/15/17									
113	_	5.12	Final Design	4 wks 112	Fri 9/15/17	Fri 10/13/17									
114		5.13	Review	3 wks 113	Fri 10/13/17	Fri 11/3/17									
115	_	5.14	EPA Approval of Final Design	0 wks 114	Fri 11/3/17	Fri 11/3/17									
	_			4 wks 115FS-4 wks		Fri 11/3/17									
116	_	5.15	Prepare RAWP		1										
117	-	5.16	Submit RAWP	0 wks 116	Fri 11/3/17	Fri 11/3/17					•				
118	_														
119		6 In	n-Situ Geochemical Stabilization (ISGS): DESIGN TRACK	249.4 wks	Thu 2/7/13	Fri 11/17/17	<u> </u>								
120		6.1		213.4 wks	Thu 2/7/13	Fri 3/10/17									
120															
121		5.1.1	EPA Approval of ISGS Demonstration Work Plan (2012)		Thu 2/7/13	Thu 2/7/13									
122	_	5.1.2	Preliminary Design (included in Demonstration Work Pla		Thu 2/7/13	Thu 2/7/13	•								
123	_	5.1.3	Characterization and DNAPL Recovery (began 2012)	32 wks	Thu 2/7/13	I									
124		5.1.4	Characterization Report and Pilot Test Plan	11.8 wks 123	Thu 9/19/13	I		I							
125	_	3.1.5	Submit Characterization Report and Pilot Test Plan	0 wks 124	Tue 12/10/13			♦							
126	_	3.1.6	Review and Approval of Pilot Test Plan	10 wks 125	Wed 12/11/13	I		<u></u>							
127	6	5.1.7	Technical Working Group Meeting	0 wks	Wed 12/18/13 V			♦ <u></u>							
128	6	5.1.8	Pilot Injection Testing	15 wks 126	Mon 3/17/14	Fri 6/27/14		—							
129	3.1	.8.1	Pre-Pilot Testing & Chemical Delivery	1 wk	Mon 3/17/14	Fri 3/21/14		Ь							
130	3.1	.8.2	Pilot Injections	3 wks 129	Mon 3/24/14	Fri 4/11/14									
131	3.1	.8.3	Borings in Injection Area	1 wk 130FS+10 wk	Mon 6/23/14	Fri 6/27/14		- +							
132		3.1.9	Technical Working Group Meeting	0 wks	Thu 7/10/14	Thu 7/10/14		•							
		1.10	Pre-Final Design	44 wks 130	Mon 4/14/14	Fri 2/13/15		<u> </u>							
134		1.11	Submit Pre-Final Design	0 wks 133	Fri 2/13/15	Fri 2/13/15			*						
		1.12	Review and Comment	6 wks 134	Mon 2/16/15	I			\\\\\\\						
	_	1.13	Final Design and RAWP	3.2 wks 135	Mon 3/30/15										
	_	1.14	Submit Final Design and RAWP	0 wks 136	Mon 4/20/15	I									
		1.15	Review	0.4 wks 137	Tue 4/21/15										
	_								\						
		1.16	EPA Approval of Final Design and RAWP	0 wks 138	Wed 4/22/15										
	_	1.17	Implementation of Process-Area ISGS Injections	12 wks 139FS+7 wks											
		1.18	Prepare Implementation Report	26.1 wks 140	Tue 9/29/15										
		1.19	Submit Implementation Report	0 wks 141	Tue 3/29/16	I			↓	•					
		1.20	Post-Injection Effectiveness Monitoring	52 wks 140	Tue 9/29/15										
		1.21	Submit Phase II Performance Monitoring Report	0 wks	Mon 8/1/16					•					
		1.22	Review	20.4 wks 144	Mon 8/1/16										
146	6.	1.23	Submit Revised Phase II Performance Monitoring	0 wks 145	Tue 12/20/16	Tue 12/20/16				•					
	1_	4.0.1	Report	7.0	W- 140/0:15	F-: 0/10/17				\downarrow					
147	_		Review	7.6 wks 146	Wed 12/21/16										
148	6.	1.25	EPA Approval of Phase II Montoring Report and Additional Treatment	0 wks 147	Fri 2/10/17	Fri 2/10/17				•					
149	6	1.26	Follow-Up ISGS Injections	4 wks 148	Mon 2/13/17	Fri 3/10/17				🛨					
	ال.	1.20	1 0110W-0h 1000 Hillections	041 CAW F	1011 2/13/17	1113/10/17				•					
150	-		Couth Laman	407 .ula-	Ma = 0/2/4 /	Fr: 44/47/17									
151	_	6.2	South Lagoon	167 wks	Mon 9/8/14										
152	_	5.2.1	Preliminary Design & Design Investigation Work Plan	32.2 wks		Mon 4/20/15									
153		5.2.2	Submit Preliminary Design & Design Investigation Work		Mon 4/20/15										
154	6	5.2.3	Review of Preliminary Design & Design Investigation Work Plan	45 wks 153	Tue 4/21/15	Mon 2/29/16									
155	6	6.2.4	Prepare Revised Preliminary Design & Design Investigation Work Plan	3.1 wks 154	Tue 3/1/16	Tue 3/22/16				-					
156	6	3.2.5	Review and Approval of Work Plan	24.6 wks 155	Tue 3/22/16	Fri 9/9/16				<u> </u>					
157	6	5.2.6	Installation of Borings and DNAPL Recovery Wells	15.4 wks 156	Thu 4/13/17	Fri 7/28/17				- *					
Project Date: N	Mor	n 6/12/1		sed for current tasks	Task	1	Milestone •	Summary V		,	1			1	

15 15			<u> </u>			GAINESVILLE				1			1	1
8 12.6.1 Pennes Recultural and Pennet to Additional and Pennet to Additional and Pennet and Comment 9.1.5.2.2 Review and Comment 1.7.5.2.1 Review and Comment 1.7.5.2.2 Review and Comment 1.7.5.2.2 Review and Comment 1.7.5.2.2 Review and Review and Comment 1.7.5.2.2 Review and Review and Comment 1.7.5.2.2 Review and Review) WBS Task Na	ame	Duration Predecessors	Start	Finish			2014 H1 H2	2015 H1 H2	2016 H1 H2	2017 H1 H2	2018 H1 H2	2019 H1 H2	2020 H1 H2
12 2 6 Installation of Admitted Montages 5 5 46 15 15 16 17 17 17 17 17 17 17	58 5.2.6.1	Phase I Results and Plan for Additional Borings	0 wks	Thu 4/13/17	Thu 4/13/17			•						
160 12.5	159 3.2.6.2		4.8 wks 158	Thu 4/13/17	Tue 5/16/17									
160 12.5	160 5.2.6.3	Revised Plan for Additional Borings	1.6 wks 159	Wed 5/17/17	Fri 5/26/17						$\ \underline{\mathbb{K}} \ $			
1807 2.9.6 Installation of Addressin Design On Addressin Street Date 1.3 wish 157 1.5	161 5.2.6.4	Review and Approval	3 wks 160	Mon 5/29/17	Fri 6/16/17						<u> </u>			
156 15.2 Pen-Fine Totalign	162 3.2.6.5	Installation of Additional Borings	6 wks 161	Mon 6/19/17	Fri 7/28/17									
156 6.2.5 Submit Perfinal Design	163 6.2.7 (Collection of Baseline Data	13 wks 157	Mon 7/31/17	Fri 10/27/17									
	164 6.2.8 F	Pre-Final Design	6 wks 157	Mon 7/31/17	Fri 9/8/17						—			
	165 6.2.9	Submit Pre-Final Design	0 wks 164	Fri 9/8/17	Fri 9/8/17									
196 12-11	166 6.2.10 F	Review and Comment	3 wks 165	Mon 9/11/17	Fri 9/29/17									
170 22.14 E.P.A. Approval of Franci Design and RAWIP	167 6.2.11 F	Final Design and RAWP	4 wks 166	Mon 10/2/17	Fri 10/27/17									
170 2.1 E.P.A. Agunor of Frend Design and RAWP	168 6.2.12 5	Submit Final Design and RAWP	0 wks 167	Fri 10/27/17	Fri 10/27/17									
170 2.14 EPA Agrorous of Friel Design and RAWP		Review	3 wks 168	Mon 10/30/17	Fri 11/17/17						**			
171 7 In-Situs Solidification/Stabilization (SSSS): DESIGN TRACK 47 wks Mon 87/77 Fig 52/3/0 172 7.1 Pie-Design Investigation & Treatability Test Workplan S. wks 15 Mon 87/77 Fig 22/3/1 173 7.1 Pie-Design Investigation & Treatability Test S. wks 15 Mon 87/77 Fig 22/3/1 174 7.1 Pie-Design Investigation & Treatability Test S. wks 17 Mon 10/2/7 Fig 22/3/1 175 7.1 Pier Test Workplan O wks 17 Mon 77/2/3/8 Fig 10/2/7 176 7.5 Pier Test Workplan O wks 17 Mon 10/1/3/8 Fig 10/2/18 177 7.6 Pier Sess Submit Piblic Test Workplan O wks 17 Fig 27/9/8 Fig 27/9/8 180 7.8 Conduct Piblic Test S. wks 18 Mon 10/1/3/8 Fig 27/9/8 181 7.9 Prediminary Design O wks 15 Mon 31/1/9/8 Fig 27/9/8 181 7.9 Prediminary Design O wks 15 Mon 10/1/3/8 Fig 27/9/8 181 7.1 Service and Approval S. wks 18 Mon 11/1/9/18 Fig 27/9/8 181 7.1 Service and Comment O wks 18 Mon 11/1/9/19 Fig 27/9/8 181 7.1 Service and Comment O wks 18 Mon 11/1/9/19 Fig 27/9/9 181 7.1 Review and Comment O wks 18 Mon 11/1/9/19 Fig 27/9/9 181 7.1 Review and Comment O wks 18 Mon 11/1/9/19 Fig 27/9/9 181 7.1 Review and Comment O wks 18 Mon 11/1/9/19 Fig 28/9/9 181 7.1 Review and Approval S. wks 18 Mon 18/9/9 Fig 10/2/9/9 181 7.1 Review and Comments CESION TRACK #5 8 Wks 18 Mon 18/7/7 Fig 38/9/9 181 7.1 Submit Review of Service Comments CESION TRACK #5 8 Wks 18 Mon 18/7/7 Fig 39/9/9 181 7.1 Submit Review of Service Comments CESION TRACK #5 8 Wks 18 Mon 18/7/7 Fig 39/9/9 181 7.1 Submit Review of Service Comments CESION TRACK #5 8 Wks 18 Mon 18/7/7 Fig 39/9/9 181 7.1 Submit Review of Service Comments CESION TRACK #5 8 Wks 18 Mon 18/7/7 Fig 39/9/9 182 7.1 Submit Review of Service Comments CESION TRACK #5		EPA Approval of Final Design and RAWP												
7.7 7-1 Pre-Design Investigation & Treatability Test Workplan 8 wks 15 Mon 87/17 Fri 8/29/17 Fri 8/29/19 Fri 9/29/19 Fri 9	171		4.1=											_
174		I Solidification/Stabilization (ISS/S): DESIGN TRACK	147 WKS	Mon 8///1/	Fri 5/29/20									
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170														
177 7.5 Pilot Teal Workplain 12 wish 176 Mon 7/23/16 Fri 10/12/16 Pri		• • • • • • • • • • • • • • • • • • • •												
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179 7.7 Review and Approval 8 s/ssi 178 Mon 101-5148 Fri 1271/18 Biol 7.7 Conduct Pilot Test 13 s/ssi 179 Mon 1270-718 Fri 338/19 Fri 871/19 F		·												
180 7,8 Conduct Pilot Test		•												
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132 7.10 Submit Pre-Design O wks 181 Fin 67/19 Fin 67												i		
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186	7.11 Rev	view and Comment	10 wks 182											
186 7.14 Final Design 6 w/s 185 Mon 1/27/20 Fri 3/6/20 187 7.15 Review and Approval 4 w/s 186 Mon 3/9/20 Fri 4/3/20 188 7.16 EPA Approval of Final Design 0 w/s 187 Fri 4/3/20 Fri 4/3/20 189 7.17 Prepare RAWP 8 w/s 188 Mon 4/6/20 Fri 5/29/20 190 7.18 Submit RAWP 0 w/s 189 Fri 5/29/20 191 192 8 Other Engineered Components: DESIGN TRACK #5 87 w/s Mon 8/7/17 Fri 4/5/19 193 8.1 Pre-Design Work Plan 6 w/s Mon 8/7/17 Fri 4/5/19 194 8.2 Submit Pre-Design Work Plan 0 w/s 193 Fri 9/15/17 Fri 9/15/17 195 8.3 Review and Approval 6 w/s 194 Mon 9/18/17 Fri 9/15/17 196 8.4 EPA Approval of Pre-Design Work Plan 0 w/s 195 Fri 10/27/17 Fri 10/27/17 197 8.5 Pre-Design Work Plan 0 w/s 196 Mon 10/30/17 Fri 4/27/18 198 8.6 Pre-Design Investigation 26 w/s 196 Mon 10/30/17 Fri 4/27/18 199 8.7 Submit Preliminary Design 6 w/s 197 Mon 4/30/18 Fri 6/8/18 199 8.7 Submit Preliminary Design 0 w/s 198 Fri 6/8/18 190 8.8 Pre-Final Design 13 w/s 200 Mon 17/23/18 Fri 10/19/18 201 8.9 Pre-Final Design 13 w/s 200 Mon 17/23/18 Fri 10/19/18 202 8.10 Review and Comment 6 w/s 201 Mon 10/22/18 Fri 10/19/18 203 8.11 Era Approval of Final Design 0 w/s 204 Mon 12/3/18 Fri 10/19/19 204 8.12 Review 4 w/s 203 Mon 11/4/19 Fri 2/8/19 205 8.13 EPA Approval of Final Design 0 w/s 204 Fri 1/6/19 206 8.14 Prepare RAWP 8 w/s 205 Mon 2/11/19 Fri 4/5/19	7.12 Pre-	e-Final Design	13 wks 183	Mon 8/19/19										
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192 8 Other Engineered Components: DESIGN TRACK #5 87 wks Mon 877/17 Fri 4/5/19 193 8.1 Pre-Design Work Plan 6 wks Mon 877/17 Fri 9/15/17 194 8.2 Submit Pre-Design Work Plan 0 wks 193 Fri 9/15/17 195 8.3 Review and Approval 6 wks 194 Mon 9/18/17 Fri 10/27/17 196 8.4 EPA Approval of Pre-Design Work Plan 0 wks 195 Fri 10/27/17 Fri 10/27/17 197 8.5 Pre-Design Investigation 26 wks 196 Mon 10/30/17 Fri 4/27/18 198 8.6 Preliminary Design 6 wks 197 Mon 4/30/18 Fri 6/8/18 199 8.7 Submit Preliminary Design 0 wks 198 Fri 6/8/18 Fri 6/8/18 190 8.8 Review and Comment 6 wks 199 Mon 6/11/18 Fri 7/20/18 201 8.9 Pre-Final Design 13 wks 200 Mon 7/23/18 Fri 10/19/18 202 8.10 Review and Comment 6 wks 201 Mon 10/22/18 Fri 11/30/18 203 8.11 Final Design 6 wks 202 Mon 12/3/18 Fri 11/11/19 204 8.12 Review 4 wks 203 Mon 1/14/19 Fri 2/8/19 205 8.13 EPA Approval of Final Design 0 wks 204 Fri 2/8/19 Fri 2/8/19 206 8.14 Prepare RAWP 8 wks 205 Mon 2/11/19 Fri 4/5/19 207 8.15 Submit RAWP 0 wks 206 Fri 4/5/19 208 Triangle Fri 1/5/19 Fri 4/5/19 209 Review 1 wks 200 Review 1/4/5/19 200 Review 1/4/5/19 Review 1/4/5/19 201 Review 1/4/5/19 Review 1/4/5/19 202 Review 1/4/5/19 Review 1/4/5/19 203 Review 1/4/5/19 Review 1/4/5/19 204 Review 1/4/5/19 Review 1/4/5/19 205 Review 1/4/5/19 Review 1/4/5/19 206 Review 1/4/5/19 Review 1/4/5/19 207 Review 1/4/5/19 Review 1/4/5/19 208 Review 1/4/5/19 Review 1/4/5/19 208 Review 1/4/5/19 Review 1/4/5/19 208 Review 1/4/5/19 Review 1/4/5/19 209 Review 1/4/5/19 Review 1/4/5/19 200 Review 1/4/5/19 Review 1/4/5/19 201 Review 1/4/5/19 Review 1/4/5/19 202 Review 1/4/5/19 Review 1		bmit RAWP	0 wks 189	Fri 5/29/20	Fri 5/29/20									•
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207 8.15 Submit RAWP 0 wks 206 Fri 4/5/19 Fri 4/5/19 208													•	
208		•												
		omit RAWP	0 wks 206	Fri 4/5/19	Fri 4/5/19								•	
200 Olipotitutional Control														
			161.6 wks	Tue 7/9/13			\downarrow							
210 9.1 Prepare Institutional Control Implementation and 6.8 wks 5 Tue 7/9/13 Fri 8/23/13 Assurance Plan (ICIAP)			6.8 wks 5	Tue 7/9/13	Fri 8/23/13									

							G	AINESVIL	LE REMED	IAL DESIGN							
ID	WBS	Task Name	Duration	Predecessors	Start	Finish	2012 H2	H1	013 H2	2014 H1 H2	2015 H1 H2	2016 H1 H2	2017 H1 H2	2018 H1 H2	2019 H1 H2	2020 H1 H2	2021 H1 H2
211	9.2	Submit ICIAP	0 wks	210	Fri 8/23/13	Fri 8/23/13	3		•		•						
212	9.3	Review	12.5 wks	211	Mon 8/26/13	Wed 11/20/13	3										
213	9.4	Beazer Respond to Comments	0 wks	212	Fri 8/28/15	Fri 8/28/15	5										
214	9.5	Beazer Submit Responses & ICIAP Version 2	0 wks	213	Fri 8/28/15	Fri 8/28/15	5										
215	9.6	Review	3 wks	214	Fri 8/28/15	Thu 9/17/15	5				<u> </u>						
216	9.7	EPA and FDEP Approval of ICIAP	0 wks	215	Thu 9/17/15	Thu 9/17/15	5				•						
217	9.8	Implement Beazer-Property Restrictive Covenant	47 wks		Fri 9/18/15	Thu 8/11/16	5				-						
218	9.8.1	Draft Proprietary Controls Package	13 wks	216	Fri 9/18/15	Thu 12/17/15	5										
219	9.8.2	Submit Draft Proprietary Controls Package	0 wks	218	Thu 12/17/15	Thu 12/17/15	5				•						
220	9.8.3	Review and Updating	8 wks	219	Fri 12/18/15	Thu 2/11/16	5										
221	9.8.4	Update Title Search and Prepare Public Notice	8 wks	220	Fri 2/12/16	Thu 4/7/16	5										
222	9.8.5	Beazer Publish Public Notice	0 wks	221	Thu 4/7/16	Thu 4/7/16	5					•					
223	9.8.6	Public Comment Period	4.4 wks	222	Fri 4/8/16	Mon 5/9/16	5										
224	9.8.7	Address Comments and Exectute Restrictive Covenant	t 5 wks	223	Tue 5/10/16	Mon 6/13/16	5					<u> </u>					
225	9.8.8	Record Restrictive Covenant at Alacha County Clerk of	0 wks	224	Mon 6/13/16	Mon 6/13/16	5					•					
226	9.8.9	Prepare Final Proprietary Controls Package	8.6 wks	225	Tue 6/14/16	Thu 8/11/16	5										
227	9.8.10	Submit Final Proprietary Controls Package	0 wks	226	Thu 8/11/16	Thu 8/11/16	5										

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