



April 16, 2017

Scott Miller
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: March 2018 Monthly Progress Report

Dear Mr. Miller:

On behalf of Beazer East, Inc. (Beazer), attached is the March 2018 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,

A handwritten signature in blue ink, appearing to read 'Gregory W. Council'.

Gregory W. Council, P.E.
Principal Engineer

cc: Kelsey Helton, FDEP
Brandie Stringer, FDEP
Rusty Kestle, USEPA
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 Brouman, 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
Mark Taylor, Weston Solutions

**MARCH 2018
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. Three NAPL recovery events were conducted during the month for the monitoring wells and two 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 3,968,103 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 88.9 gallons per minute (gpm). The recovery for each component is listed below.
 - Surficial Aquifer
 - Perimeter Extraction Wells: 542,396 gallons
 - Former North Lagoon Drain: 435,190 gallons
 - Former Drip Track Drain: 483,380 gallons
 - Former Process Area Drain: 478,290 gallons
 - Former South Lagoon Drain: 472,580 gallons
 - Upper Floridan Extraction Wells
 - FW-6: 34,450 gallons
 - FW-21B: 165,149 gallons
 - FW-31BE: 906,960 gallons
 - FW-32BE: 449,708 gallons

Approximately 437.1 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 2,561,000 gallons. A portion of the water, from Upper Floridan Aquifer wells, was treated and used for on-Property irrigation.

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

3. Plans, Reports, Deliverables and Procedures Completed:

- Remedial Design/Remedial Action Status Update Meeting (EPA/Beazer) March 19, 2018.
- 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). Installed, repaired and tested filter press pump, repaired plant plumbing, repaired clarifier effluent line, flushed chemical lines, and added air filter to filter press.
- Irrigation breakthrough sampling March 15, 2018.
- TSE Sampling March 22, 2018.
- Replaced EW-10 pump head.
- Repaired FW-6 compressor.
- Repaired EW flow meters.
- Repaired FW-6 compressor and regulator.
- Shipped 2 drums DNAPL, 30 drums treatment sludge, and 3 drums PPE on March 19, 2018.
- On-property irrigation using treated groundwater from FW-21B, FW-31BE, and FW-32BE.

4. Upcoming Actions:

- Second quarter sampling event May 14 - 18, 2018.
- 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.
- ISGS Implementation in Former South Lagoon area: April 30-July 2.

5. Schedule Status:

- The project schedule is attached.

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: Mar 2018

Date	Well	Volume (gal)
3/2/2018	HG-10S	Stain
	HG-10D	Stain
	HG-12S	0.4
	HG-12D	ND
	HG-16S	Stain
	HG-16D	Stain
	MW-22B	Stain
3/15/3018	HG-10S	Stain
	HG-10D	Stain
	HG-12S	0.4
	HG-12D	ND
	HG-16S	Stain
	HG-16D	Stain
	MW-22B	Stain
3/29/2018	HG-10S	Stain
	HG-10D	Stain
	HG-12S	0.4
	HG-12D	ND
	HG-16S	Stain
	HG-16D	Stain
	MW-22B	Stain
3/6/2018	Drip Track	0.5
3/20/2018	Drip Track	0.4

GAINESVILLE REMEDIAL DESIGN

ID	WBS	Task Name	Duration	Predecessors	Start	Finish	Successors	2012		2013		2014		2015		2016		2017		2018		2019		2020		2021		
								H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1
1	1	Consent Decree for RD/RA	23.8 wks		Thu 2/7/13	Wed 7/24/13																						
2	1.1	US DOJ Lodges Donsent Decree with Court	0 days		Thu 2/7/13	Thu 2/7/13																						
3	1.2	Public Comment on Consent Decree	4.6 wks		Wed 2/13/13	Fri 3/15/13																						
4	1.3	Beazer Submittal: Project Coordinators, Supervising Contractor, Quality Management Plan	0 days		Fri 2/15/13	Fri 2/15/13																						
5	1.4	Court Enters Consent Decree Final	0 days		Tue 7/9/13	Tue 7/9/13	220																					
6	1.5	EPA Issues Authorization to Proceed with Remedial Design	0 days		Wed 7/24/13	Wed 7/24/13	9																					
7																												
8	2	Remedial Design Work Plan (RDWP)	22.3 wks		Wed 7/24/13	Thu 12/26/13																						
9	2.1	Prepare RDWP	43 days	6	Wed 7/24/13	Fri 9/20/13	10																					
10	2.2	Beazer Submit RDWP	0 wks	9	Fri 9/20/13	Fri 9/20/13	11,19,18																					
11	2.3	EPA Review and Comment RDWP	6.8 wks	10	Mon 9/23/13	Thu 11/7/13	12																					
12	2.4	Beazer Respond to Comments	4.3 wks	11	Fri 11/8/13	Mon 12/9/13	13																					
13	2.5	Beazer Submit Responses and RDWP Version 2	0 wks	12	Mon 12/9/13	Mon 12/9/13	14																					
14	2.6	EPA Review	2.6 wks	13	Mon 12/9/13	Thu 12/26/13	15																					
15	2.7	EPA Approval RDWP	0 wks	14	Thu 12/26/13	Thu 12/26/13	183,95																					
16																												
17	3	Supporting Plans for RD/RA	100.8 wks		Fri 9/20/13	Thu 8/27/15																						
18	3.5	Beazer Submit Health & Safety Plan	0 wks	10	Fri 9/20/13	Fri 9/20/13																						
19	3.2	Materials Management Plan	5 wks	10	Tue 4/1/14	Mon 5/5/14	20FF,21FF,22FF																					
20	3.6	Stormwater Management Plan	5 wks	19FF	Tue 4/1/14	Mon 5/5/14																						
21	3.7	Noise and Dust Control Plan	5 wks	19FF	Tue 4/1/14	Mon 5/5/14																						
22	3.5	Equipment Decontamination Plan	5 wks	19FF	Tue 4/1/14	Mon 5/5/14																						
23	3.6	Beazer update QAPP	33.8 wks		Mon 1/5/15	Thu 8/27/15	24																					
24	3.7	Beazer Submit Revised QAPP	0 wks	23	Thu 8/27/15	Thu 8/27/15																						
25																												
26	4	Off-Property Soil Replacement (OU-5): DESIGN TRACK #1	121.4 wks		Tue 4/30/13	Thu 8/27/15																						
27	4.1	Initial Identification of Remediation & Evaluation Parcels	0 wks		Tue 4/30/13	Tue 4/30/13																						
28	4.2	Obtain Access Agreements for Surveys & Sampling	23 wks		Thu 5/2/13	Wed 10/9/13																						
29	4.3	Community Information Session	0 wks		Thu 5/30/13	Thu 5/30/13																						
30	4.4	Sampling for Refinement of Remediation Parcels (July 2013)	18.8 wks		Fri 7/19/13	Wed 11/27/13																						
31	4.4.1	Proposal for Sampling (July 2013)	0 wks		Fri 7/19/13	Fri 7/19/13																						
32	4.4.2	EPA Approval of Sampling	0 wks		Mon 7/22/13	Mon 7/22/13																						
33	4.4.3	Sample Collection	2 days		Tue 7/30/13	Wed 7/31/13	34																					
34	4.4.4	Analysis and Validation	6.2 wks	33	Thu 8/1/13	Thu 9/12/13	35																					
35	4.4.5	Data Summary Report	10.8 wks	34	Fri 9/13/13	Wed 11/27/13	49,36																					
36	4.4.6	Beazer Submit Data Summary and Fingerprinting Repor	0 wks	35	Wed 11/27/13	Wed 11/27/13																						
37	4.5	Pilot Home Soil Replacement	10.3 wks		Thu 9/26/13	Fri 12/6/13																						
38	4.5.1	Survey	1.8 wks		Thu 9/26/13	Tue 10/8/13	39																					
39	4.5.2	Design & Interview	3 wks	38	Wed 10/9/13	Tue 10/29/13																						
40	4.5.3	Borrow Sampling	2 wks		Thu 10/10/13	Wed 10/23/13	41																					
41	4.5.4	Sample Analysis	2 wks	40	Thu 10/24/13	Wed 11/6/13	43																					
42	4.5.5	Pilot Plan	6 wks		Thu 9/26/13	Wed 11/6/13	43																					
43	4.5.6	Submit Pilot Plan	0 wks	42,41	Wed 11/6/13	Wed 11/6/13	44																					
44	4.5.7	Review	1 wk	43	Thu 11/7/13	Wed 11/13/13	45																					
45	4.5.8	EPA Approval of Pilot Plan	0 wks	44	Wed 11/13/13	Wed 11/13/13	47,46FF																					
46	4.5.9	Permitting	2 wks	45FF	Thu 10/31/13	Wed 11/13/13	47																					
47	4.5.10	Pilot Implementation	3.3 wks	46,45	Thu 11/14/13	Fri 12/6/13																						
48	4.6	Blocks A-I Remediation Design	42.4 wks		Mon 9/16/13	Tue 7/8/14																						
49	4.6.1	Remedial Design Details	12.4 wks	35	Thu 11/28/13	Fri 2/21/14	50																					
50	4.6.2	Submit RD Details	0 wks	49	Fri 2/21/14	Fri 2/21/14	51																					
51	4.6.3	Review and Comment	0.8 wks	50	Mon 2/24/14	Thu 2/27/14																						
52	4.6.4	Surveying & Interviews	34 wks		Mon 9/16/13	Fri 5/9/14																						
53	4.6.5	Parcel Designs & Remediation Agreements	28 wks		Mon 12/2/13	Fri 6/13/14																						

GAINESVILLE REMEDIAL DESIGN

ID	WBS	Task Name	Duration	Predecessors	Start	Finish	Successors	2012		2013		2014		2015		2016		2017		2018		2019		2020		2021	
								H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	
54	4.6.6	Final Design and RAWP	19.6 wks		Fri 2/21/14	Tue 7/8/14																					
55	4.6.6.1	Submit Pre-Final Designs & RAWP: Blocks G & H	0 wks		Fri 2/21/14	Fri 2/21/14	56																				
56	4.6.6.2	Final Design and RAWP Approval: Blocks G-H	1 wk	55	Fri 2/21/14	Thu 2/27/14																					
57	4.6.6.3	Submit Pre-Final Designs & RAWP: Blocks E&F	0 wks		Fri 3/7/14	Fri 3/7/14	58																				
58	4.6.6.4	Final Design and RAWP Approval: Blocks E&F	1 day	57	Fri 3/7/14	Fri 3/7/14																					
59	4.6.6.5	Submit Pre-Final Designs & RAWP: Block D	0 wks		Thu 4/3/14	Thu 4/3/14	60,61																				
60	4.6.6.6	Final Design and RAWP Approval: Block D	2 days	59	Thu 4/3/14	Fri 4/4/14																					
61	4.6.6.7	Submit Pre-Final Designs & RAWP: Block C	0 wks	59	Wed 4/30/14	Wed 4/30/14	62,63																				
62	4.6.6.8	Final Design and RAWP Approval: Block C	0 wks	61	Wed 4/30/14	Wed 4/30/14																					
63	4.6.6.9	Submit Pre-Final Designs & RAWP: Block B	0 wks	61	Thu 5/22/14	Thu 5/22/14	64,65																				
64	6.6.10	Final Design and RAWP Approval: Block B	0.6 wks	63	Thu 5/22/14	Tue 5/27/14																					
65	6.6.11	Submit Pre-Final Designs & RAWP: Block A	0 wks	63	Thu 6/12/14	Thu 6/12/14	66,67																				
66	6.6.12	Final Design and RAWP Approval: Block A	0.6 wks	65	Thu 6/12/14	Tue 6/17/14																					
67	6.6.13	Submit Pre-Final Designs & RAWP: Block I	0 wks	65	Mon 7/7/14	Mon 7/7/14	68																				
68	6.6.14	Final Design and RAWP Approval: Block I	0.2 wks	67	Tue 7/8/14	Tue 7/8/14																					
69	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																				
71	4.7.2	Analysis and Validation	7.2 wks	70	Thu 2/20/14	Thu 4/10/14	72																				
72	4.7.3	Data Summary Report Addendum	16 wks	71	Fri 4/11/14	Thu 7/31/14	73																				
73	4.7.4	Beazer Submit Report Addendum	0 wks	72	Thu 7/31/14	Thu 7/31/14	74																				
74	4.7.5	Call to discuss Report Addendum	0 wks	73	Tue 8/12/14	Tue 8/12/14																					
75	4.8	Blocks J & K Remediation Design	12.2 wks		Mon 6/2/14	Mon 8/25/14																					
76	4.8.1	Access Agreements for Design	2 wks		Mon 6/2/14	Fri 6/13/14	77																				
77	4.8.2	Surveying & Interviews	5 wks	76	Mon 6/16/14	Fri 7/18/14	78																				
78	4.8.3	Preliminary Design	5 wks	77	Mon 6/23/14	Fri 7/25/14	79																				
79	4.8.4	Pre-Final Design and Access	7 wks	78	Mon 6/30/14	Fri 8/15/14	82																				
80	4.8.5	RAWP: Block J	0 wks		Fri 7/25/14	Fri 7/25/14	81																				
81	4.8.6	Final Design & RAWP Approval: Block J	1 wk	80	Fri 7/25/14	Thu 7/31/14																					
82	4.8.7	RAWP: Block K	0 days	79	Wed 8/20/14	Wed 8/20/14	83																				
83	4.8.8	Final Design and RAWP Approval: Block K	4 days	82	Wed 8/20/14	Mon 8/25/14																					
84	4.9	Community Meetings	16.4 wks		Fri 10/25/13	Tue 2/18/14																					
85	4.9.1	Community Meeting: Landscaping Workshop - City (Oct	2 days		Fri 10/25/13	Mon 10/28/13																					
86	4.9.2	Community Meeting (Jan 18 2014)	2 days		Fri 1/17/14	Mon 1/20/14																					
87	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	89,90																				
89	4.11	Pre-Final Inspection	0 wks	88	Tue 11/18/14	Tue 11/18/14																					
90	4.12	Prepare Implementation Report	36.4 wks	88	Mon 11/17/14	Tue 7/28/15	91																				
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	196.6 wks		Wed 12/17/14	Thu 9/20/18																					
95	5.1	Pre-Design Work Plan	21.2 wks	15	Wed 12/17/14	Wed 5/13/15	96																				
96	5.2	Submit Pre-Design Work Plan	0 wks	95	Wed 5/13/15	Wed 5/13/15	97																				
97	5.3	Review and Comment	10 wks	96	Thu 5/14/15	Wed 7/22/15	98																				
98	5.4	Submit Response to Comments and Revised Plan	0 wks	97	Thu 8/27/15	Thu 8/27/15	99																				
99	5.5	EPA Approval of Pre-Design Work Plan	0 wks	98	Fri 8/28/15	Fri 8/28/15	101																				
100	5.6	Pre-Design Investigation	38 wks		Mon 8/31/15	Fri 5/20/16																					
101	5.6.1	Planning & Preparation	4 wks	99	Mon 8/31/15	Fri 9/25/15	102																				
102	5.6.2	Field Work	11 wks	101	Mon 9/28/15	Fri 12/11/15	103																				
103	5.6.3	Lab Work	26 wks	102	Mon 11/23/15	Fri 5/20/16	104																				
104	5.7	Preliminary Design	8.3 wks	103	Mon 5/9/16	Tue 7/5/16	105																				
105	5.8	Submit Preliminary Design	0 wks	104	Tue 7/5/16	Tue 7/5/16	106																				
106	5.9	Review and Comment	24 wks	105	Tue 7/5/16	Tue 12/20/16	107																				

GAINESVILLE REMEDIAL DESIGN

ID	WBS	Task Name	Duration	Predecessors	Start	Finish	Successors	2012		2013		2014		2015		2016		2017		2018		2019		2020		2021		
								H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1
107	5.10	Pre-Final Design	52.2 wks	106	Fri 5/5/17	Thu 5/3/18	112																					
108	5.10.1	Supplemental Design Investigation Work Plan	0 wks		Fri 5/5/17	Fri 5/5/17	109																					
109	5.10.2	Review and Approval	3.1 wks	108	Fri 5/5/17	Fri 5/26/17	110																					
110	5.10.3	Supplemental Design Borings	5 wks	109	Mon 5/29/17	Fri 6/30/17	111																					
111	5.10.4	Design Updates	44 wks	110	Mon 7/3/17	Thu 5/3/18																						
112	5.11	Review and Comment	3 wks	107	Fri 5/4/18	Thu 5/24/18	113																					
113	5.12	Final Design	8 wks	112	Fri 5/25/18	Thu 7/19/18	114																					
114	5.13	Review	2 wks	113	Fri 7/20/18	Thu 8/2/18	115																					
115	5.14	EPA Approval of Final Design	0 wks	114	Thu 8/2/18	Thu 8/2/18	116																					
116	5.15	Prepare RAWP	7 wks	115	Fri 8/3/18	Thu 9/20/18	117																					
117	5.16	Submit RAWP	0 wks	116	Thu 9/20/18	Thu 9/20/18																						
118																												
119	6	In-Situ Geochemical Stabilization (ISGS): DESIGN TRACK #3	333.8 wks		Thu 2/7/13	Mon 7/1/19																						
120	6.1	Process Area	333.8 wks		Thu 2/7/13	Mon 7/1/19																						
121	6.1.1	EPA Approval of ISGS Demonstration Work Plan (2012)	0 wks		Thu 2/7/13	Thu 2/7/13																						
122	6.1.2	Preliminary Design (included in Demonstration Work Plan)	0 wks		Thu 2/7/13	Thu 2/7/13																						
123	6.1.3	Characterization and DNAPL Recovery (began 2012)	32 wks		Thu 2/7/13	Wed 9/18/13	124																					
124	6.1.4	Characterization Report and Pilot Test Plan	11.8 wks	123	Thu 9/19/13	Tue 12/10/13	125																					
125	6.1.5	Submit Characterization Report and Pilot Test Plan	0 wks	124	Tue 12/10/13	Tue 12/10/13	126																					
126	6.1.6	Review and Approval of Pilot Test Plan	10 wks	125	Wed 12/11/13	Tue 2/18/14	128																					
127	6.1.7	Technical Working Group Meeting	0 wks		Wed 12/18/13	Wed 12/18/13																						
128	6.1.8	Pilot Injection Testing	15 wks	126	Mon 3/17/14	Fri 6/27/14																						
129	6.1.8.1	Pre-Pilot Testing & Chemical Delivery	1 wk		Mon 3/17/14	Fri 3/21/14	130																					
130	6.1.8.2	Pilot Injections	3 wks	129	Mon 3/24/14	Fri 4/11/14	133,131FS+10 wks																					
131	6.1.8.3	Borings in Injection Area	1 wk	130FS+10 wks	Mon 6/23/14	Fri 6/27/14																						
132	6.1.9	Technical Working Group Meeting	0 wks		Thu 7/10/14	Thu 7/10/14																						
133	6.1.10	Pre-Final Design	44 wks	130	Mon 4/14/14	Fri 2/13/15	134																					
134	6.1.11	Submit Pre-Final Design	0 wks	133	Fri 2/13/15	Fri 2/13/15	135																					
135	6.1.12	Review and Comment	6 wks	134	Mon 2/16/15	Fri 3/27/15	136																					
136	6.1.13	Final Design and RAWP	3.2 wks	135	Mon 3/30/15	Mon 4/20/15	137																					
137	6.1.14	Submit Final Design and RAWP	0 wks	136	Mon 4/20/15	Mon 4/20/15	138																					
138	6.1.15	Review	0.4 wks	137	Tue 4/21/15	Wed 4/22/15	139																					
139	6.1.16	EPA Approval of Final Design and RAWP	0 wks	138	Wed 4/22/15	Wed 4/22/15	140FS+7 wks																					
140	6.1.17	Implementation of Process-Area ISGS Injections	12 wks	139FS+7 wks	Tue 7/7/15	Mon 9/28/15	141,143,179																					
141	6.1.18	Prepare Implementation Report	26.1 wks	140,178	Tue 7/3/18	Tue 1/1/19	142																					
142	6.1.19	Submit Implementation Report	0 wks	141	Tue 1/1/19	Tue 1/1/19																						
143	6.1.20	Post-Injection Effectiveness Monitoring	52 wks	140,178	Tue 7/3/18	Mon 7/1/19																						
144	6.1.21	Submit Phase II Performance Monitoring Report	0 wks		Mon 8/1/16	Mon 8/1/16	145																					
145	6.1.22	Review	20.4 wks	144	Mon 8/1/16	Tue 12/20/16	146																					
146	6.1.23	Submit Revised Phase II Performance Monitoring Report	0 wks	145	Tue 12/20/16	Tue 12/20/16	147																					
147	6.1.24	Review	7.6 wks	146	Wed 12/21/16	Fri 2/10/17	148																					
148	6.1.25	EPA Approval of Phase II Monitoring Report and Additional Treatment	0 wks	147	Fri 2/10/17	Fri 2/10/17	149																					
149	6.1.26	Follow-Up ISGS Injections	4 wks	148	Mon 2/13/17	Fri 3/10/17																						
150	6.1.27	Plan for Confirmation Borings	0 wks		Fri 8/18/17	Fri 8/18/17	151																					
151	6.1.28	Review and Comment	2.8 wks	150	Fri 8/18/17	Wed 9/6/17	152																					
152	6.1.29	Updated Plan for Confirmation Borings	0 wks	151	Wed 9/6/17	Wed 9/6/17	153																					
153	6.1.30	Conduct Follow-Up Borings/Testing	11 wks	152	Thu 9/7/17	Wed 11/22/17	154																					
154	6.1.31	Prepare Evaluation Report	5.2 wks	153	Thu 11/23/17	Thu 12/28/17	155																					
155	6.1.32	Submit Evaluation Report	0 wks	154	Thu 12/28/17	Thu 12/28/17																						
156																												
157	6.2	South Lagoon	224.4 wks		Mon 9/8/14	Mon 12/24/18																						
158	6.2.1	Preliminary Design & Design Investigation Work Plan	32.2 wks		Mon 9/8/14	Mon 4/20/15	159																					

GAINESVILLE REMEDIAL DESIGN

ID	WBS	Task Name	Duration	Predecessors	Start	Finish	Successors	2012		2013		2014		2015		2016		2017		2018		2019		2020		2021		
								H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1
159	6.2.2	Submit Preliminary Design & Design Investigation Work	0 wks	158	Mon 4/20/15	Mon 4/20/15	160																					
160	6.2.3	Review of Preliminary Design & Design Investigation Work Plan	45 wks	159	Tue 4/21/15	Mon 2/29/16	161																					
161	6.2.4	Prepare Revised Preliminary Design & Design Investigation Work Plan	3.1 wks	160	Tue 3/1/16	Tue 3/22/16	162																					
162	6.2.5	Review and Approval of Work Plan	24.6 wks	161	Tue 3/22/16	Fri 9/9/16	163																					
163	6.2.6	Installation of Borings and DNAPL Recovery Wells	15.4 wks	162	Thu 4/13/17	Fri 7/28/17	170,169																					
164	6.2.6.1	Phase I Results and Plan for Additional Borings	0 wks		Thu 4/13/17	Thu 4/13/17	165																					
165	6.2.6.2	Review and Comment	4.8 wks	164	Thu 4/13/17	Tue 5/16/17	166																					
166	6.2.6.3	Revised Plan for Additional Borings	1.6 wks	165	Wed 5/17/17	Fri 5/26/17	167																					
167	6.2.6.4	Review and Approval	3.4 wks	166	Mon 5/29/17	Tue 6/20/17	168																					
168	6.2.6.5	Installation of Additional Borings	5.6 wks	167	Wed 6/21/17	Fri 7/28/17																						
169	6.2.7	Collection of Baseline Data	23 wks	163	Mon 7/31/17	Thu 1/4/18																						
170	6.2.8	Pre-Final Design	11.6 wks	163	Mon 7/31/17	Wed 10/18/17	171																					
171	6.2.9	Submit Pre-Final Design	0 wks	170	Wed 10/18/17	Wed 10/18/17	172																					
172	6.2.10	Review and Comment	13.4 wks	171	Thu 10/19/17	Thu 1/18/18	173																					
173	6.2.11	Final Design and RAWP	5.4 wks	172	Fri 1/19/18	Mon 2/26/18	174																					
174	6.2.12	Submit Final Design and RAWP	0 wks	173	Mon 2/26/18	Mon 2/26/18	175																					
175	6.2.13	Review	1.8 wks	174	Tue 2/27/18	Fri 3/9/18	176																					
176	6.2.14	EPA Approval of Final Design and RAWP	0 wks	175	Fri 3/9/18	Fri 3/9/18	177																					
177	6.2.15	Prepare for ISGS Injections	7 wks	176	Mon 3/12/18	Fri 4/27/18	178																					
178	6.2.16	Implementation of Process-Area ISGS Injections	9.2 wks	177	Mon 4/30/18	Mon 7/2/18	141,143,179																					
179	6.2.17	Prepare Implementation Report	25 wks	140,178	Tue 7/3/18	Mon 12/24/18	180																					
180	6.2.18	Submit Implementation Report	0 wks	179	Mon 12/24/18	Mon 12/24/18																						
181																												
182	7	In-Situ Solidification/Stabilization (ISS/S): DESIGN TRACK #4	126 wks		Mon 5/7/18	Fri 10/2/20																						
183	7.1	Pre-Design Investigation & Treatability Test Workplan	6 wks	15	Mon 5/7/18	Fri 6/15/18	184																					
184	7.2	Beazer Submit Pre-Design Investigation & Treatability Test	0 wks	183	Fri 6/15/18	Fri 6/15/18	185																					
185	7.3	Review and Approval	5 wks	184	Mon 6/18/18	Fri 7/20/18	186																					
186	7.4	Conduct Pre-Design Investigation & Treatability Test	26 wks	185	Mon 7/23/18	Fri 1/18/19	187																					
187	7.5	Pilot Test Workplan	8 wks	186	Mon 1/21/19	Fri 3/15/19	188																					
188	7.6	Beazer Submit Pilot Test Workplan	0 wks	187	Fri 3/15/19	Fri 3/15/19	189																					
189	7.7	Review and Approval	8 wks	188	Mon 3/18/19	Fri 5/10/19	190																					
190	7.8	Conduct Pilot Test	12 wks	189	Mon 5/13/19	Fri 8/2/19	191																					
191	7.9	Preliminary Design	12 wks	190	Mon 8/5/19	Fri 10/25/19	192																					
192	7.10	Submit Preliminary Design	0 wks	191	Fri 10/25/19	Fri 10/25/19	193																					
193	7.11	Review and Comment	10 wks	192	Mon 10/28/19	Fri 1/3/20	194																					
194	7.12	Pre-Final Design	12 wks	193	Mon 1/6/20	Fri 3/27/20	195																					
195	7.13	Review and Comment	9 wks	194	Mon 3/30/20	Fri 5/29/20	196																					
196	7.14	Final Design	6 wks	195	Mon 6/1/20	Fri 7/10/20	197																					
197	7.15	Review and Approval	4 wks	196	Mon 7/13/20	Fri 8/7/20	198																					
198	7.16	EPA Approval of Final Design	0 wks	197	Fri 8/7/20	Fri 8/7/20	199																					
199	7.17	Prepare RAWP	8 wks	198	Mon 8/10/20	Fri 10/2/20	200																					
200	7.18	Submit RAWP	0 wks	199	Fri 10/2/20	Fri 10/2/20																						
201																												
202	8	Other Engineered Components: DESIGN TRACK #5	57 wks		Mon 5/7/18	Fri 6/7/19																						
203	8.1	Pre-Design Work Plan	5 wks		Mon 5/7/18	Fri 6/8/18	204																					
204	8.2	Submit Pre-Design Work Plan	0 wks	203	Fri 6/8/18	Fri 6/8/18	205																					
205	8.3	Review and Approval	6 wks	204	Mon 6/11/18	Fri 7/20/18	206																					
206	8.4	EPA Approval of Pre-Design Work Plan	0 wks	205	Fri 7/20/18	Fri 7/20/18	207																					
207	8.5	Pre-Design Investigation	13 wks	206	Mon 7/23/18	Fri 10/19/18	208																					
208	8.6	Preliminary Design	6 wks	207	Mon 10/22/18	Fri 11/30/18	209																					
209	8.7	Submit Preliminary Design	0 wks	208	Fri 11/30/18	Fri 11/30/18	210																					
210	8.8	Review and Comment	5 wks	209	Mon 12/3/18	Fri 1/4/19	211																					

GAINESVILLE REMEDIAL DESIGN

ID	WBS	Task Name	Duration	Predecessors	Start	Finish	Successors	2012		2013		2014		2015		2016		2017		2018		2019		2020		2021	
								H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2			
211	8.9	Pre-Final Design	7 wks	210	Mon 1/7/19	Fri 2/22/19	212																				
212	8.10	Review and Comment	3 wks	211	Mon 2/25/19	Fri 3/15/19	213																				
213	8.11	Final Design	3 wks	212	Mon 3/18/19	Fri 4/5/19	214																				
214	8.12	Review	1 wk	213	Mon 4/8/19	Fri 4/12/19	215																				
215	8.13	EPA Approval of Final Design	0 wks	214	Fri 4/12/19	Fri 4/12/19	216																				
216	8.14	Prepare RAWP	8 wks	215	Mon 4/15/19	Fri 6/7/19	217																				
217	8.15	Submit RAWP	0 wks	216	Fri 6/7/19	Fri 6/7/19																					
218																											
219	9	Institutional Control	307 wks		Tue 7/9/13	Fri 5/24/19																					
220	9.1	Prepare Institutional Control Implementation and Assurance Plan (ICIAP)	6.8 wks	5	Tue 7/9/13	Fri 8/23/13	221																				
221	9.2	Submit ICIAP	0 wks	220	Fri 8/23/13	Fri 8/23/13	222																				
222	9.3	Review	12.5 wks	221	Mon 8/26/13	Wed 11/20/13	223																				
223	9.4	Beazer Respond to Comments	6 wks	222	Mon 4/30/18	Fri 6/8/18	224																				
224	9.5	Beazer Submit Responses & ICIAP Version 2	0 wks	223	Fri 6/8/18	Fri 6/8/18	225																				
225	9.6	Review	3 wks	224	Mon 6/11/18	Fri 6/29/18	226																				
226	9.7	EPA and FDEP Approval of ICIAP	0 wks	225	Fri 6/29/18	Fri 6/29/18	228																				
227	9.8	Implement Beazer-Property Restrictive Covenant	47 wks		Mon 7/2/18	Fri 5/24/19																					
228	9.8.1	Draft Proprietary Controls Package	13 wks	226	Mon 7/2/18	Fri 9/28/18	229																				
229	9.8.2	Submit Draft Proprietary Controls Package	0 wks	228	Fri 9/28/18	Fri 9/28/18	230																				
230	9.8.3	Review and Updating	8 wks	229	Mon 10/1/18	Fri 11/23/18	231																				
231	9.8.4	Update Title Search and Prepare Public Notice	8 wks	230	Mon 11/26/18	Fri 1/18/19	232																				
232	9.8.5	Beazer Publish Public Notice	0 wks	231	Fri 1/18/19	Fri 1/18/19	233																				
233	9.8.6	Public Comment Period	4.4 wks	232	Mon 1/21/19	Tue 2/19/19	234																				
234	9.8.7	Address Comments and Execute Restrictive Covenant	5 wks	233	Wed 2/20/19	Tue 3/26/19	235																				
235	9.8.8	Record Restrictive Covenant at Alacha County Clerk of C	0 wks	234	Tue 3/26/19	Tue 3/26/19	236																				
236	9.8.9	Prepare Final Proprietary Controls Package	8.6 wks	235	Wed 3/27/19	Fri 5/24/19	237																				
237	9.8.10	Submit Final Proprietary Controls Package	0 wks	236	Fri 5/24/19	Fri 5/24/19																					