



February 22, 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: January 2018 Monthly Progress Report**

Dear Mr. Miller:

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

**JANUARY 2018  
MONTHLY PROGRESS REPORT  
Cabot/Koppers Superfund Site  
Gainesville, Florida**

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**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 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 3,991,924 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 89.4 gallons per minute (gpm). The recovery for each component is listed below.
  - Surficial Aquifer
    - Perimeter Extraction Wells: 538,812 gallons
    - Former North Lagoon Drain: 333,800 gallons
    - Former Drip Track Drain: 511,870 gallons
    - Former Process Area Drain: 494,800 gallons
    - Former South Lagoon Drain: 474,740 gallons
  - Upper Floridan Extraction Wells
    - FW-6: 41,933 gallons
    - FW-21B: 180,518 gallons
    - FW-31BE: 947,310 gallons
    - FW-32BE: 468,141 gallons

Approximately 432.5 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 2,472,000 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.

Perimeter well EW-3 was restarted on January 4, 2018. It had been shut down due to sanding.

### **3. Plans, Reports, Deliverables and Procedures Completed:**

- Submitted *Phase I for the Former South Lagoon Preliminary Design and Design Investigation Workplan Implementation (Version 2)* on January 9.
- Remedial Design/Remedial Action Status Update Meeting (EPA/Beazer) January 16, 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). Repaired plant transfer pump, repaired vac pumps, repaired frost damage to water lines, gauges and valves, repaired press hydraulics, repaired chemical pumps, repaired feed pump motor couplers, flushed lines, and various electrical repairs.
- Irrigation breakthrough sampling January 31, 2018.
- Stormwater Rinsate sampling January 4, 2018.
- Stormwater Sampling January 29, 2018.
- Replaced EW-3 pump.
- Repaired FW-6 compressor.
- Repaired weir probe.
- On-property irrigation using treated groundwater from FW-21B, FW-31BE, and FW-32BE.
- Shipped 16 drums treatment sludge, 46 drums spent carbon, 4 drums DNAPL, and 4 drums PPE on January 22, 2018.

### **4. Upcoming Actions:**

- First quarter sampling event February 12- 23, 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.

### **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: Jan 2018

Date	Well	Volume (gal)
1/5/2018	HG-10S	Stain
	HG-10D	Stain
	HG-12S	0.4
	HG-12D	ND
	HG-16S	Stain
	HG-16D	Stain
	MW-22B	Stain
1/19/2018	HG-10S	Stain
	HG-10D	Stain
	HG-12S	0.5
	HG-12D	ND
	HG-16S	Stain
	HG-16D	Stain
	MW-22B	Stain
1/9/2018	Drip Track	0.3
1/23/2018	Drip Track	0.5

GAINESVILLE REMEDIAL DESIGN

ID	WBS	Task Name	Duration	Predecessors	Start	Finish	2012		2013		2014		2015		2016		2017		2018		2019		2020		2021	
							H1	H2																		
1	1	<b>Consent Decree for RD/RA</b>	<b>23.8 wks</b>		<b>Thu 2/7/13</b>	<b>Wed 7/24/13</b>																				
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																				
6	1.5	EPA Issues Authorization to Proceed with Remedial Design	0 days		Wed 7/24/13	Wed 7/24/13																				
7																										
8	2	<b>Remedial Design Work Plan (RDWP)</b>	<b>22.3 wks</b>		<b>Wed 7/24/13</b>	<b>Thu 12/26/13</b>																				
9	2.1	Prepare RDWP	43 days	6	Wed 7/24/13	Fri 9/20/13																				
10	2.2	Beazer Submit RDWP	0 wks	9	Fri 9/20/13	Fri 9/20/13																				
11	2.3	EPA Review and Comment RDWP	6.8 wks	10	Mon 9/23/13	Thu 11/7/13																				
12	2.4	Beazer Respond to Comments	4.3 wks	11	Fri 11/8/13	Mon 12/9/13																				
13	2.5	Beazer Submit Responses and RDWP Version 2	0 wks	12	Mon 12/9/13	Mon 12/9/13																				
14	2.6	EPA Review	2.6 wks	13	Mon 12/9/13	Thu 12/26/13																				
15	2.7	EPA Approval RDWP	0 wks	14	Thu 12/26/13	Thu 12/26/13																				
16																										
17	3	<b>Supporting Plans for RD/RA</b>	<b>100.8 wks</b>		<b>Fri 9/20/13</b>	<b>Thu 8/27/15</b>																				
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																				
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	3.7	Beazer Submit Revised QAPP	0 wks	23	Thu 8/27/15	Thu 8/27/15																				
25																										
26	4	<b>Off-Property Soil Replacement (OU-5): DESIGN TRACK #1</b>	<b>121.4 wks</b>		<b>Tue 4/30/13</b>	<b>Thu 8/27/15</b>																				
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	<b>Sampling for Refinement of Remediation Parcels (July 2013)</b>	<b>18.8 wks</b>		<b>Fri 7/19/13</b>	<b>Wed 11/27/13</b>																				
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	4.4.4	Analysis and Validation	6.2 wks	33	Thu 8/1/13	Thu 9/12/13																				
35	4.4.5	Data Summary Report	10.8 wks	34	Fri 9/13/13	Wed 11/27/13																				
36	4.4.6	Beazer Submit Data Summary and Fingerprinting Report	0 wks	35	Wed 11/27/13	Wed 11/27/13																				
37	4.5	<b>Pilot Home Soil Replacement</b>	<b>10.3 wks</b>		<b>Thu 9/26/13</b>	<b>Fri 12/6/13</b>																				
38	4.5.1	Survey	1.8 wks		Thu 9/26/13	Tue 10/8/13																				
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	4.5.4	Sample Analysis	2 wks	40	Thu 10/24/13	Wed 11/6/13																				
42	4.5.5	Pilot Plan	6 wks		Thu 9/26/13	Wed 11/6/13																				
43	4.5.6	Submit Pilot Plan	0 wks	42,41	Wed 11/6/13	Wed 11/6/13																				
44	4.5.7	Review	1 wk	43	Thu 11/7/13	Wed 11/13/13																				
45	4.5.8	EPA Approval of Pilot Plan	0 wks	44	Wed 11/13/13	Wed 11/13/13																				
46	4.5.9	Permitting	2 wks	45FF	Thu 10/31/13	Wed 11/13/13																				
47	4.5.10	Pilot Implementation	3.3 wks	46,45	Thu 11/14/13	Fri 12/6/13																				
48	4.6	<b>Blocks A-I Remediation Design</b>	<b>42.4 wks</b>		<b>Mon 9/16/13</b>	<b>Tue 7/8/14</b>																				
49	4.6.1	Remedial Design Details	12.4 wks	35	Thu 11/28/13	Fri 2/21/14																				
50	4.6.2	Submit RD Details	0 wks	49	Fri 2/21/14	Fri 2/21/14																				
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	2012		2013		2014		2015		2016		2017		2018		2019		2020		2021	
							H1	H2																		
54	4.6.6	<b>Final Design and RAWP</b>	<b>19.6 wks</b>		<b>Fri 2/21/14</b>	<b>Tue 7/8/14</b>																				
55	4.6.6.1	Submit Pre-Final Designs & RAWP: Blocks G & H	0 wks		Fri 2/21/14	Fri 2/21/14																				
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	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	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	59FF+4 wks	Wed 4/30/14	Wed 4/30/14																				
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	61FF+3.1 wk	Thu 5/22/14	Thu 5/22/14																				
64	4.6.6.10	Final Design and RAWP Approval: Block B	0.6 wks	63	Thu 5/22/14	Tue 5/27/14																				
65	4.6.6.11	Submit Pre-Final Designs & RAWP: Block A	0 wks	63FF+3 wks	Thu 6/12/14	Thu 6/12/14																				
66	4.6.6.12	Final Design and RAWP Approval: Block A	0.6 wks	65	Thu 6/12/14	Tue 6/17/14																				
67	4.6.6.13	Submit Pre-Final Designs & RAWP: Block I	0 wks	65FF+3.5 wk	Mon 7/7/14	Mon 7/7/14																				
68	4.6.6.14	Final Design and RAWP Approval: Block I	0.2 wks	67	Tue 7/8/14	Tue 7/8/14																				
69	4.7	<b>Sampling for Refinement of Remediation Parcels (Feb 2014)</b>	<b>24.8 wks</b>		<b>Wed 2/19/14</b>	<b>Tue 8/12/14</b>																				
70	4.7.1	Beazer & EPA Sampling	0.2 wks		Wed 2/19/14	Wed 2/19/14																				
71	4.7.2	Analysis and Validation	7.2 wks	70	Thu 2/20/14	Thu 4/10/14																				
72	4.7.3	Data Summary Report Addendum	16 wks	71	Fri 4/11/14	Thu 7/31/14																				
73	4.7.4	Beazer Submit Report Addendum	0 wks	72	Thu 7/31/14	Thu 7/31/14																				
74	4.7.5	Call to discuss Report Addendum	0 wks	73	Tue 8/12/14	Tue 8/12/14																				
75	4.8	<b>Blocks J &amp; K Remediation Design</b>	<b>12.2 wks</b>		<b>Mon 6/2/14</b>	<b>Mon 8/25/14</b>																				
76	4.8.1	Access Agreements for Design	2 wks		Mon 6/2/14	Fri 6/13/14																				
77	4.8.2	Surveying & Interviews	5 wks	76	Mon 6/16/14	Fri 7/18/14																				
78	4.8.3	Preliminary Design	5 wks	77SS+1 wk	Mon 6/23/14	Fri 7/25/14																				
79	4.8.4	Pre-Final Design and Access	7 wks	78SS+1 wk	Mon 6/30/14	Fri 8/15/14																				
80	4.8.5	RAWP: Block J	0 wks		Fri 7/25/14	Fri 7/25/14																				
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	4.8.8	Final Design and RAWP Approval: Block K	4 days	82	Wed 8/20/14	Mon 8/25/14																				
84	4.9	<b>Community Meetings</b>	<b>16.4 wks</b>		<b>Fri 10/25/13</b>	<b>Tue 2/18/14</b>																				
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	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	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	<b>Cutoff Wall and Stormwater Controls: DESIGN TRACK #2</b>	<b>197.6 wks</b>		<b>Wed 12/17/14</b>	<b>Thu 9/27/18</b>																				
95	5.1	Pre-Design Work Plan	21.2 wks	15	Wed 12/17/14	Wed 5/13/15																				
96	5.2	Submit Pre-Design Work Plan	0 wks	95	Wed 5/13/15	Wed 5/13/15																				
97	5.3	Review and Comment	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																				
100	5.6	<b>Pre-Design Investigation</b>	<b>38 wks</b>		<b>Mon 8/31/15</b>	<b>Fri 5/20/16</b>																				
101	5.6.1	Planning & Preparation	4 wks	99	Mon 8/31/15	Fri 9/25/15																				
102	5.6.2	Field Work	11 wks	101	Mon 9/28/15	Fri 12/11/15																				
103	5.6.3	Lab Work	26 wks	102FS-3 wks	Mon 11/23/15	Fri 5/20/16																				
104	5.7	Preliminary Design	8.3 wks	103FS-2 wks	Mon 5/9/16	Tue 7/5/16																				
105	5.8	Submit Preliminary Design	0 wks	104	Tue 7/5/16	Tue 7/5/16																				
106	5.9	Review and Comment	24 wks	105	Tue 7/5/16	Tue 12/20/16																				

GAINESVILLE REMEDIAL DESIGN

ID	WBS	Task Name	Duration	Predecessors	Start	Finish	2012		2013		2014		2015		2016		2017		2018		2019		2020		2021	
							H1	H2																		
107	5.10	<b>Pre-Final Design</b>	48.2 wks	106	Fri 5/5/17	Thu 4/5/18																				
108	5.10.1	Supplemental Design Investigation Work Plan	0 wks		Fri 5/5/17	Fri 5/5/17																				
109	5.10.2	Review and Approval	3.1 wks	108	Fri 5/5/17	Fri 5/26/17																				
110	5.10.3	Supplemental Design Borings	5 wks	109	Mon 5/29/17	Fri 6/30/17																				
111	5.10.4	<b>Design Updates</b>	40 wks	110	Mon 7/3/17	Thu 4/5/18																				
112	5.11	Review and Comment	3 wks	107	Fri 4/6/18	Thu 4/26/18																				
113	5.12	Final Design	8 wks	112	Fri 4/27/18	Thu 6/21/18																				
114	5.13	Review	4 wks	113	Fri 6/22/18	Thu 7/19/18																				
115	5.14	EPA Approval of Final Design	0 wks	114	Thu 7/19/18	Thu 7/19/18																				
116	5.15	Prepare RAWP	10 wks	115	Fri 7/20/18	Thu 9/27/18																				
117	5.16	Submit RAWP	0 wks	116	Thu 9/27/18	Thu 9/27/18																				
118																										
119	6	<b>In-Situ Geochemical Stabilization (ISGS): DESIGN TRACK #3</b>	334 wks		Thu 2/7/13	Tue 7/2/19																				
120	6.1	<b>Process Area</b>	334 wks		Thu 2/7/13	Tue 7/2/19																				
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 Pla	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	6.1.4	Characterization Report and Pilot Test Plan	11.8 wks	123	Thu 9/19/13	Tue 12/10/13																				
125	6.1.5	Submit Characterization Report and Pilot Test Plan	0 wks	124	Tue 12/10/13	Tue 12/10/13																				
126	6.1.6	Review and Approval of Pilot Test Plan	10 wks	125	Wed 12/11/13	Tue 2/18/14																				
127	6.1.7	Technical Working Group Meeting	0 wks		Wed 12/18/13	Wed 12/18/13																				
128	6.1.8	<b>Pilot Injection Testing</b>	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	6.1.8.2	Pilot Injections	3 wks	129	Mon 3/24/14	Fri 4/11/14																				
131	6.1.8.3	Borings in Injection Area	1 wk	130FS+10 w	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	6.1.11	Submit Pre-Final Design	0 wks	133	Fri 2/13/15	Fri 2/13/15																				
135	6.1.12	Review and Comment	6 wks	134	Mon 2/16/15	Fri 3/27/15																				
136	6.1.13	Final Design and RAWP	3.2 wks	135	Mon 3/30/15	Mon 4/20/15																				
137	6.1.14	Submit Final Design and RAWP	0 wks	136	Mon 4/20/15	Mon 4/20/15																				
138	6.1.15	Review	0.4 wks	137	Tue 4/21/15	Wed 4/22/15																				
139	6.1.16	EPA Approval of Final Design and RAWP	0 wks	138	Wed 4/22/15	Wed 4/22/15																				
140	6.1.17	Implementation of Process-Area ISGS Injections	12 wks	139FS+7 wks	Tue 7/7/15	Mon 9/28/15																				
141	6.1.18	Prepare Implementation Report	26.1 wks	140,177	Wed 7/4/18	Wed 1/2/19																				
142	6.1.19	Submit Implementation Report	0 wks	141	Wed 1/2/19	Wed 1/2/19																				
143	6.1.20	Post-Injection Effectiveness Monitoring	52 wks	140,177	Wed 7/4/18	Tue 7/2/19																				
144	6.1.21	Submit Phase II Performance Monitoring Report	0 wks		Mon 8/1/16	Mon 8/1/16																				
145	6.1.22	Review	20.4 wks	144	Mon 8/1/16	Tue 12/20/16																				
146	6.1.23	Submit Revised Phase II Performance Monitoring Report	0 wks	145	Tue 12/20/16	Tue 12/20/16																				
147	6.1.24	Review	7.6 wks	146	Wed 12/21/16	Fri 2/10/17																				
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	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	6.1.28	Review and Comment	2.8 wks	150	Fri 8/18/17	Wed 9/6/17																				
152	6.1.29	Updated Plan for Confirmation Borings	0 wks	151	Wed 9/6/17	Wed 9/6/17																				
153	6.1.30	Conduct Follow-Up Borings/Testing	11 wks	152	Thu 9/7/17	Wed 11/22/17																				
154	6.1.31	Prepare Evaluation Report	5.2 wks	153	Thu 11/23/17	Thu 12/28/17																				
155	6.1.32	Submit Evaluation Report	0 wks	154	Thu 12/28/17	Thu 12/28/17																				
156																										
157	6.2	<b>South Lagoon</b>	224.6 wks		Mon 9/8/14	Tue 12/25/18																				
158	6.2.1	Preliminary Design & Design Investigation Work Plan	32.2 wks		Mon 9/8/14	Mon 4/20/15																				

GAINESVILLE REMEDIAL DESIGN

ID	WBS	Task Name	Duration	Predecessors	Start	Finish	2012		2013		2014		2015		2016		2017		2018		2019		2020		2021	
							H1	H2																		
159	6.2.2	Submit Preliminary Design & Design Investigation Work	0 wks	158	Mon 4/20/15	Mon 4/20/15																				
160	6.2.3	Review of Preliminary Design & Design Investigation Work Plan	45 wks	159	Tue 4/21/15	Mon 2/29/16																				
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	6.2.5	Review and Approval of Work Plan	24.6 wks	161	Tue 3/22/16	Fri 9/9/16																				
163	6.2.6	Installation of Borings and DNAPL Recovery Wells	15.4 wks	162	Thu 4/13/17	Fri 7/28/17																				
164	6.2.6.1	Phase I Results and Plan for Additional Borings	0 wks		Thu 4/13/17	Thu 4/13/17																				
165	6.2.6.2	Review and Comment	4.8 wks	164	Thu 4/13/17	Tue 5/16/17																				
166	6.2.6.3	Revised Plan for Additional Borings	1.6 wks	165	Wed 5/17/17	Fri 5/26/17																				
167	6.2.6.4	Review and Approval	3.4 wks	166	Mon 5/29/17	Tue 6/20/17																				
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	6.2.9	Submit Pre-Final Design	0 wks	170	Wed 10/18/17	Wed 10/18/17																				
172	6.2.10	Review and Comment	13.4 wks	171	Thu 10/19/17	Thu 1/18/18																				
173	6.2.11	Final Design and RAWP	4.6 wks	172	Fri 1/19/18	Tue 2/20/18																				
174	6.2.12	Submit Final Design and RAWP	0 wks	173	Tue 2/20/18	Tue 2/20/18																				
175	6.2.13	Review	3 wks	174	Wed 2/21/18	Tue 3/13/18																				
176	6.2.14	EPA Approval of Final Design and RAWP	0 wks	175	Tue 3/13/18	Tue 3/13/18																				
177	6.2.15	Implementation of Process-Area ISGS Injections	16 wks	176	Wed 3/14/18	Tue 7/3/18																				
178	6.2.16	Prepare Implementation Report	25 wks	140,177	Wed 7/4/18	Tue 12/25/18																				
179	6.2.17	Submit Implementation Report	0 wks	178	Tue 12/25/18	Tue 12/25/18																				
180																										
181	7	<b>In-Situ Solidification/Stabilization (ISS/S): DESIGN TRACK #4</b>	<b>130 wks</b>		<b>Mon 4/2/18</b>	<b>Fri 9/25/20</b>																				
182	7.1	Pre-Design Investigation & Treatability Test Workplan	6 wks	15	Mon 4/2/18	Fri 5/11/18																				
183	7.2	Beazer Submit Pre-Design Investigation & Treatability Test	0 wks	182	Fri 5/11/18	Fri 5/11/18																				
184	7.3	Review and Approval	5 wks	183	Mon 5/14/18	Fri 6/15/18																				
185	7.4	Conduct Pre-Design Investigation & Treatability Test	26 wks	184	Mon 6/18/18	Fri 12/14/18																				
186	7.5	Pilot Test Workplan	9 wks	185	Mon 12/17/18	Fri 2/15/19																				
187	7.6	Beazer Submit Pilot Test Workplan	0 wks	186	Fri 2/15/19	Fri 2/15/19																				
188	7.7	Review and Approval	8 wks	187	Mon 2/18/19	Fri 4/12/19																				
189	7.8	Conduct Pilot Test	13 wks	188	Mon 4/15/19	Fri 7/12/19																				
190	7.9	Preliminary Design	12 wks	189	Mon 7/15/19	Fri 10/4/19																				
191	7.10	Submit Preliminary Design	0 wks	190	Fri 10/4/19	Fri 10/4/19																				
192	7.11	Review and Comment	10 wks	191	Mon 10/7/19	Fri 12/13/19																				
193	7.12	Pre-Final Design	13 wks	192	Mon 12/16/19	Fri 3/13/20																				
194	7.13	Review and Comment	10 wks	193	Mon 3/16/20	Fri 5/22/20																				
195	7.14	Final Design	6 wks	194	Mon 5/25/20	Fri 7/3/20																				
196	7.15	Review and Approval	4 wks	195	Mon 7/6/20	Fri 7/31/20																				
197	7.16	EPA Approval of Final Design	0 wks	196	Fri 7/31/20	Fri 7/31/20																				
198	7.17	Prepare RAWP	8 wks	197	Mon 8/3/20	Fri 9/25/20																				
199	7.18	Submit RAWP	0 wks	198	Fri 9/25/20	Fri 9/25/20																				
200																										
201	8	<b>Other Engineered Components: DESIGN TRACK #5</b>	<b>57 wks</b>		<b>Mon 3/19/18</b>	<b>Fri 4/19/19</b>																				
202	8.1	Pre-Design Work Plan	5 wks		Mon 3/19/18	Fri 4/20/18																				
203	8.2	Submit Pre-Design Work Plan	0 wks	202	Fri 4/20/18	Fri 4/20/18																				
204	8.3	Review and Approval	6 wks	203	Mon 4/23/18	Fri 6/1/18																				
205	8.4	EPA Approval of Pre-Design Work Plan	0 wks	204	Fri 6/1/18	Fri 6/1/18																				
206	8.5	Pre-Design Investigation	13 wks	205	Mon 6/4/18	Fri 8/31/18																				
207	8.6	Preliminary Design	6 wks	206	Mon 9/3/18	Fri 10/12/18																				
208	8.7	Submit Preliminary Design	0 wks	207	Fri 10/12/18	Fri 10/12/18																				
209	8.8	Review and Comment	5 wks	208	Mon 10/15/18	Fri 11/16/18																				
210	8.9	Pre-Final Design	7 wks	209	Mon 11/19/18	Fri 1/4/19																				

GAINESVILLE REMEDIAL DESIGN

ID	WBS	Task Name	Duration	Predecessors	Start	Finish	2012		2013		2014		2015		2016		2017		2018		2019		2020		2021	
							H1	H2																		
211	8.10	Review and Comment	3 wks	210	Mon 1/7/19	Fri 1/25/19																				
212	8.11	Final Design	3 wks	211	Mon 1/28/19	Fri 2/15/19																				
213	8.12	Review	1 wk	212	Mon 2/18/19	Fri 2/22/19																				
214	8.13	EPA Approval of Final Design	0 wks	213	Fri 2/22/19	Fri 2/22/19																				
215	8.14	Prepare RAWP	8 wks	214	Mon 2/25/19	Fri 4/19/19																				
216	8.15	Submit RAWP	0 wks	215	Fri 4/19/19	Fri 4/19/19																				
217																										
218	9	<b>Institutional Control</b>	<b>295 wks</b>		<b>Tue 7/9/13</b>	<b>Fri 3/1/19</b>																				
219	9.1	Prepare Institutional Control Implementation and Assurance Plan (ICIAP)	6.8 wks	5	Tue 7/9/13	Fri 8/23/13																				
220	9.2	Submit ICIAP	0 wks	219	Fri 8/23/13	Fri 8/23/13																				
221	9.3	Review	12.5 wks	220	Mon 8/26/13	Wed 11/20/13																				
222	9.4	Beazer Respond to Comments	6 wks	221	Mon 2/5/18	Fri 3/16/18																				
223	9.5	Beazer Submit Responses & ICIAP Version 2	0 wks	222	Fri 3/16/18	Fri 3/16/18																				
224	9.6	Review	3 wks	223	Mon 3/19/18	Fri 4/6/18																				
225	9.7	EPA and FDEP Approval of ICIAP	0 wks	224	Fri 4/6/18	Fri 4/6/18																				
226	9.8	<b>Implement Beazer-Property Restrictive Covenant</b>	<b>47 wks</b>		<b>Mon 4/9/18</b>	<b>Fri 3/1/19</b>																				
227	9.8.1	Draft Proprietary Controls Package	13 wks	225	Mon 4/9/18	Fri 7/6/18																				
228	9.8.2	Submit Draft Proprietary Controls Package	0 wks	227	Fri 7/6/18	Fri 7/6/18																				
229	9.8.3	Review and Updating	8 wks	228	Mon 7/9/18	Fri 8/31/18																				
230	9.8.4	Update Title Search and Prepare Public Notice	8 wks	229	Mon 9/3/18	Fri 10/26/18																				
231	9.8.5	Beazer Publish Public Notice	0 wks	230	Fri 10/26/18	Fri 10/26/18																				
232	9.8.6	Public Comment Period	4.4 wks	231	Mon 10/29/18	Tue 11/27/18																				
233	9.8.7	Address Comments and Execute Restrictive Covenant	5 wks	232	Wed 11/28/18	Tue 1/1/19																				
234	9.8.8	Record Restrictive Covenant at Alacha County Clerk of C	0 wks	233	Tue 1/1/19	Tue 1/1/19																				
235	9.8.9	Prepare Final Proprietary Controls Package	8.6 wks	234	Wed 1/2/19	Fri 3/1/19																				
236	9.8.10	Submit Final Proprietary Controls Package	0 wks	235	Fri 3/1/19	Fri 3/1/19																				