



July 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: **June 2017 Monthly Progress Report**

Dear Mr. Kestle:

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

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

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 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

**JUNE 2017**  
**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 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 3,668,292 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 720 hours). The average recovery rate for the month was approximately 84.9 gallons per minute (gpm). The recovery for each component is listed below.
  - Surficial Aquifer
    - Perimeter Extraction Wells: 366,206 gallons
    - Former North Lagoon Drain: 403,920 gallons
    - Former Drip Track Drain: 478,140 gallons
    - Former Process Area Drain: 452,130 gallons
    - Former South Lagoon Drain: 464,580 gallons
  - Upper Floridan Extraction Wells
    - FW-6: 57,276 gallons
    - FW-21B: 145,616 gallons
    - FW-31BE: 896,280 gallons
    - FW-32BE: 404,144 gallons

Approximately 415.9 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 2,209,000 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 9.5 hours to pump and clean clarifiers and to treat backwash water.

Perimeter wells EW-10, EW-11, and EW-14 were down due to low water levels and/or clogged filter packs. EW-11 and EW-14 were redeveloped and restarted on June 21, 2017. EW-10 was redeveloped and restarted on June 27, 2017

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

- Remedial Design/Remedial Action Status Update Meeting (EPA/Beazer) June 21, 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). Replaced chemical poly lines, repaired air lines, repaired chemical pump and washed down plant.
- Irrigation breakthrough sampling June 21, 2017.
- TSE Sampling June 21, 2017.
- Repaired EW-11 electrical panel.
- Installed pump at EW-10 and FW-6.
- Cleaned EW flowmeters and replaced chambers.
- Redeveloped EW-10, EW-11, EW-14, and EW-16.
- Shipped 20 drums treatment sludge, 4 drums DNAPL, 34 drums spent carbon and 3 drums PPE on June 19, 2017
- On-property irrigation using treated groundwater from FW-21B, FW-31BE, and FW-32BE.
- Finished drilling supplemental borings 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: June 2017

Date	Well	Volume (gal)
6/8/2017	HG-10S	Stain
	HG-10D	Stain
	HG-12S	0.25
	HG-12D	ND
	HG-16S	0.3
	HG-16D	Stain
	MW-22B	Stain
6/22/2017	HG-10S	Stain
	HG-10D	Stain
	HG-12S	0.25
	HG-12D	ND
	HG-16S	0.2
	HG-16D	Stain
	MW-22B	Stain
6/13/2017	Drip Track	0.2
6/27/2017	Drip Track	0.5

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	<b>Consent Decree for RD/RA</b>	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	210																					
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	<b>Remedial Design Work Plan (RDWP)</b>	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	173,95																					
16																												
17	3	<b>Supporting Plans for RD/RA</b>	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	<b>Off-Property Soil Replacement (OU-5): DESIGN TRACK #1</b>	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	<b>Sampling for Refinement of Remediation Parcels (July 2013)</b>	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 Report	0 wks	35	Wed 11/27/13	Wed 11/27/13																						
37	4.5	<b>Pilot Home Soil Replacement</b>	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	<b>Blocks A-I Remediation Design</b>	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		
								H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1
54	4.6.6	<b>Final Design and RAWP</b>	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	60,61FF+4 wks																					
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	62,63FF+3.1 wks																					
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	64,65FF+3 wks																					
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	63FF+3 wks	Thu 6/12/14	Thu 6/12/14	66,67FF+3.5 wks																					
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	65FF+3.5 wk	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	<b>Sampling for Refinement of Remediation Parcels (Feb 2014)</b>	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	<b>Blocks J &amp; K Remediation Design</b>	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	78SS+1 wk																					
78	4.8.3	Preliminary Design	5 wks	77SS+1 wk	Mon 6/23/14	Fri 7/25/14	79SS+1 wk																					
79	4.8.4	Pre-Final Design and Access	7 wks	78SS+1 wk	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	<b>Community Meetings</b>	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	<b>Cutoff Wall and Stormwater Controls: DESIGN TRACK #2</b>	150.6 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	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	98FS+5.2 wks																					
98	5.4	Submit Response to Comments and Revised Plan	0 wks	97FS+5.2 wk	Thu 8/27/15	Thu 8/27/15	99FS+0.2 wks																					
99	5.5	EPA Approval of Pre-Design Work Plan	0 wks	98FS+0.2 wk	Fri 8/28/15	Fri 8/28/15	101																					
100	5.6	<b>Pre-Design Investigation</b>	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	103FS-3 wks																					
103	5.6.3	Lab Work	26 wks	102FS-3 wks	Mon 11/23/15	Fri 5/20/16	104FS-2 wks																					
104	5.7	Preliminary Design	8.3 wks	103FS-2 wks	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
107	5.10	<b>Pre-Final Design</b>	14.2 wks	106	Fri 5/5/17	Fri 8/11/17	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	<b>Supplemental Design Borings</b>	5 wks	109	Mon 5/29/17	Fri 6/30/17	111																				
111	5.10.4	Design Updates	6 wks	110	Mon 7/3/17	Fri 8/11/17																					
112	5.11	Review and Comment	5 wks	107	Mon 8/14/17	Fri 9/15/17	113																				
113	5.12	Final Design	4 wks	112	Mon 9/18/17	Fri 10/13/17	114																				
114	5.13	Review	3 wks	113	Mon 10/16/17	Fri 11/3/17	115																				
115	5.14	EPA Approval of Final Design	0 wks	114	Fri 11/3/17	Fri 11/3/17	116FS-4 wks																				
116	5.15	Prepare RAWP	4 wks	115FS-4 wks	Mon 10/9/17	Fri 11/3/17	117																				
117	5.16	Submit RAWP	0 wks	116	Fri 11/3/17	Fri 11/3/17																					
118																											
119	6	<b>In-Situ Geochemical Stabilization (ISGS): DESIGN TRACK #3</b>	249.8 wks		Thu 2/7/13	Tue 11/21/17																					
120	6.1	<b>Process Area</b>	213.4 wks		Thu 2/7/13	Fri 3/10/17																					
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																				
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	<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																				
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																				
141	6.1.18	Prepare Implementation Report	26.1 wks	140	Tue 9/29/15	Tue 3/29/16	142																				
142	6.1.19	Submit Implementation Report	0 wks	141	Tue 3/29/16	Tue 3/29/16																					
143	6.1.20	Post-Injection Effectiveness Monitoring	52 wks	140	Tue 9/29/15	Mon 9/26/16																					
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																											
151	6.2	<b>South Lagoon</b>	167.4 wks		Mon 9/8/14	Tue 11/21/17																					
152	6.2.1	Preliminary Design & Design Investigation Work Plan	32.2 wks		Mon 9/8/14	Mon 4/20/15	153																				
153	6.2.2	Submit Preliminary Design & Design Investigation Work	0 wks	152	Mon 4/20/15	Mon 4/20/15	154																				
154	6.2.3	Review of Preliminary Design & Design Investigation Work Plan	45 wks	153	Tue 4/21/15	Mon 2/29/16	155																				
155	6.2.4	Prepare Revised Preliminary Design & Design Investigation Work Plan	3.1 wks	154	Tue 3/1/16	Tue 3/22/16	156																				
156	6.2.5	Review and Approval of Work Plan	24.6 wks	155	Tue 3/22/16	Fri 9/9/16	157																				
157	6.2.6	<b>Installation of Borings and DNAPL Recovery Wells</b>	15.8 wks	156	Thu 4/13/17	Tue 8/1/17	164,163																				



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
158	3.2.6.1	Phase I Results and Plan for Additional Borings	0 wks		Thu 4/13/17	Thu 4/13/17	159																				
159	3.2.6.2	Review and Comment	4.8 wks	158	Thu 4/13/17	Tue 5/16/17	160																				
160	3.2.6.3	Revised Plan for Additional Borings	1.6 wks	159	Wed 5/17/17	Fri 5/26/17	161																				
161	3.2.6.4	Review and Approval	3.4 wks	160	Mon 5/29/17	Tue 6/20/17	162																				
162	3.2.6.5	Installation of Additional Borings	6 wks	161	Wed 6/21/17	Tue 8/1/17																					
163	6.2.7	Collection of Baseline Data	13 wks	157	Wed 8/2/17	Tue 10/31/17																					
164	6.2.8	Pre-Final Design	6 wks	157	Wed 8/2/17	Tue 9/12/17	165																				
165	6.2.9	Submit Pre-Final Design	0 wks	164	Tue 9/12/17	Tue 9/12/17	166																				
166	6.2.10	Review and Comment	3 wks	165	Wed 9/13/17	Tue 10/3/17	167																				
167	6.2.11	Final Design and RAWP	4 wks	166	Wed 10/4/17	Tue 10/31/17	168																				
168	6.2.12	Submit Final Design and RAWP	0 wks	167	Tue 10/31/17	Tue 10/31/17	169																				
169	6.2.13	Review	3 wks	168	Wed 11/1/17	Tue 11/21/17	170																				
170	6.2.14	EPA Approval of Final Design and RAWP	0 wks	169	Tue 11/21/17	Tue 11/21/17																					
171																											
172	7	<b>In-Situ Solidification/Stabilization (ISS/S): DESIGN TRACK #4</b>	<b>147 wks</b>		<b>Mon 8/7/17</b>	<b>Fri 5/29/20</b>																					
173	7.1	Pre-Design Investigation & Treatability Test Workplan	8 wks	15	Mon 8/7/17	Fri 9/29/17	174																				
174	7.2	Beazer Submit Pre-Design Investigation & Treatability Test	0 wks	173	Fri 9/29/17	Fri 9/29/17	175																				
175	7.3	Review and Approval	8 wks	174	Mon 10/2/17	Fri 11/24/17	176																				
176	7.4	Conduct Pre-Design Investigation & Treatability Test	34 wks	175	Mon 11/27/17	Fri 7/20/18	177																				
177	7.5	Pilot Test Workplan	12 wks	176	Mon 7/23/18	Fri 10/12/18	178																				
178	7.6	Beazer Submit Pilot Test Workplan	0 wks	177	Fri 10/12/18	Fri 10/12/18	179																				
179	7.7	Review and Approval	8 wks	178	Mon 10/15/18	Fri 12/7/18	180																				
180	7.8	Conduct Pilot Test	13 wks	179	Mon 12/10/18	Fri 3/8/19	181																				
181	7.9	Preliminary Design	13 wks	180	Mon 3/11/19	Fri 6/7/19	182																				
182	7.10	Submit Preliminary Design	0 wks	181	Fri 6/7/19	Fri 6/7/19	183																				
183	7.11	Review and Comment	10 wks	182	Mon 6/10/19	Fri 8/16/19	184																				
184	7.12	Pre-Final Design	13 wks	183	Mon 8/19/19	Fri 11/15/19	185																				
185	7.13	Review and Comment	10 wks	184	Mon 11/18/19	Fri 1/24/20	186																				
186	7.14	Final Design	6 wks	185	Mon 1/27/20	Fri 3/6/20	187																				
187	7.15	Review and Approval	4 wks	186	Mon 3/9/20	Fri 4/3/20	188																				
188	7.16	EPA Approval of Final Design	0 wks	187	Fri 4/3/20	Fri 4/3/20	189																				
189	7.17	Prepare RAWP	8 wks	188	Mon 4/6/20	Fri 5/29/20	190																				
190	7.18	Submit RAWP	0 wks	189	Fri 5/29/20	Fri 5/29/20																					
191																											
192	8	<b>Other Engineered Components: DESIGN TRACK #5</b>	<b>87 wks</b>		<b>Mon 8/7/17</b>	<b>Fri 4/5/19</b>																					
193	8.1	Pre-Design Work Plan	6 wks		Mon 8/7/17	Fri 9/15/17	194																				
194	8.2	Submit Pre-Design Work Plan	0 wks	193	Fri 9/15/17	Fri 9/15/17	195																				
195	8.3	Review and Approval	6 wks	194	Mon 9/18/17	Fri 10/27/17	196																				
196	8.4	EPA Approval of Pre-Design Work Plan	0 wks	195	Fri 10/27/17	Fri 10/27/17	197																				
197	8.5	Pre-Design Investigation	26 wks	196	Mon 10/30/17	Fri 4/27/18	198																				
198	8.6	Preliminary Design	6 wks	197	Mon 4/30/18	Fri 6/8/18	199																				
199	8.7	Submit Preliminary Design	0 wks	198	Fri 6/8/18	Fri 6/8/18	200																				
200	8.8	Review and Comment	6 wks	199	Mon 6/11/18	Fri 7/20/18	201																				
201	8.9	Pre-Final Design	13 wks	200	Mon 7/23/18	Fri 10/19/18	202																				
202	8.10	Review and Comment	6 wks	201	Mon 10/22/18	Fri 11/30/18	203																				
203	8.11	Final Design	6 wks	202	Mon 12/3/18	Fri 1/11/19	204																				
204	8.12	Review	4 wks	203	Mon 1/14/19	Fri 2/8/19	205																				
205	8.13	EPA Approval of Final Design	0 wks	204	Fri 2/8/19	Fri 2/8/19	206																				
206	8.14	Prepare RAWP	8 wks	205	Mon 2/11/19	Fri 4/5/19	207																				
207	8.15	Submit RAWP	0 wks	206	Fri 4/5/19	Fri 4/5/19																					
208																											
209	9	<b>Institutional Control</b>	<b>161.6 wks</b>		<b>Tue 7/9/13</b>	<b>Thu 8/11/16</b>																					
210	9.1	Prepare Institutional Control Implementation and Assurance Plan (ICIAP)	6.8 wks	5	Tue 7/9/13	Fri 8/23/13	211																				



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
211	9.2	Submit ICIAP	0 wks	210	Fri 8/23/13	Fri 8/23/13	212																					
212	9.3	Review	12.5 wks	211	Mon 8/26/13	Wed 11/20/13	213																					
213	9.4	Beazer Respond to Comments	0 wks	212	Fri 8/28/15	Fri 8/28/15	214																					
214	9.5	Beazer Submit Responses & ICIAP Version 2	0 wks	213	Fri 8/28/15	Fri 8/28/15	215																					
215	9.6	Review	3 wks	214	Fri 8/28/15	Thu 9/17/15	216																					
216	9.7	EPA and FDEP Approval of ICIAP	0 wks	215	Thu 9/17/15	Thu 9/17/15	218																					
217	9.8	<b>Implement Beazer-Property Restrictive Covenant</b>	<b>47 wks</b>		<b>Fri 9/18/15</b>	<b>Thu 8/11/16</b>																						
218	9.8.1	Draft Proprietary Controls Package	13 wks	216	Fri 9/18/15	Thu 12/17/15	219																					
219	9.8.2	Submit Draft Proprietary Controls Package	0 wks	218	Thu 12/17/15	Thu 12/17/15	220																					
220	9.8.3	Review and Updating	8 wks	219	Fri 12/18/15	Thu 2/11/16	221																					
221	9.8.4	Update Title Search and Prepare Public Notice	8 wks	220	Fri 2/12/16	Thu 4/7/16	222																					
222	9.8.5	Beazer Publish Public Notice	0 wks	221	Thu 4/7/16	Thu 4/7/16	223																					
223	9.8.6	Public Comment Period	4.4 wks	222	Fri 4/8/16	Mon 5/9/16	224																					
224	9.8.7	Address Comments and Execute Restrictive Covenant	5 wks	223	Tue 5/10/16	Mon 6/13/16	225																					
225	9.8.8	Record Restrictive Covenant at Alacha County Clerk of C	0 wks	224	Mon 6/13/16	Mon 6/13/16	226																					
226	9.8.9	Prepare Final Proprietary Controls Package	8.6 wks	225	Tue 6/14/16	Thu 8/11/16	227																					
227	9.8.10	Submit Final Proprietary Controls Package	0 wks	226	Thu 8/11/16	Thu 8/11/16																						