



August 10, 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: **July 2017 Monthly Progress Report**

Dear Mr. Kestle:

On behalf of Beazer East, Inc. (Beazer), attached is the July 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
Scott Miller, 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

JULY 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 4,059,539 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 732 hours). The average recovery rate for the month was approximately 92.4 gallons per minute (gpm). The recovery for each component is listed below.
 - Surficial Aquifer
 - Perimeter Extraction Wells: 519,549 gallons
 - Former North Lagoon Drain: 496,590 gallons
 - Former Drip Track Drain: 482,520 gallons
 - Former Process Area Drain: 509,730 gallons
 - Former South Lagoon Drain: 469,830 gallons
 - Upper Floridan Extraction Wells
 - FW-6: 54,166 gallons
 - FW-21B: 153,554 gallons
 - FW-31BE: 936,720 gallons
 - FW-32BE: 436,880 gallons

Approximately 418.4 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 2,463,000 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 6 hours to pump and clean clarifiers and to treat backwash water.

System was down for 2 hrs on July 3, 2017 for repair to the Ferric Chloride line and 10 hrs on July 10, 2017 due to a failed interlock.

3. Plans, Reports, Deliverables and Procedures Completed:

- Remedial Design/Remedial Action Status Update Meeting (EPA/Beazer) July 18, 2017.
- Additional borings for South Lagoon ISGS program: July 17-28, 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 FeCl pump, replaced tank float switch, replaced compressor coalesce filter, replaced plant sump pump and replaced various plant gauges.
- Irrigation breakthrough sampling July 19, 2017.
- Carbon breakthrough sampling July 19, 2017.
- Stormwater Rinsate sampling July 11, 2017.
- Replaced EW-13 and EW-14 pumps.
- Replaced EW-8 pump motor.
- Repaired FW-6 compressor.
- Clean FW-6 flow meter.
- Shipped FW-6 flow meter for warranty repair. Estimated flow rate of 1.4 gpm from July 18 to 31, 2017.
- Shipped 6 drums treatment sludge, 8 drums DNAPL, 49 drums drilling mud and 8 drums PPE on July 17, 2017
- On-property irrigation using treated groundwater from FW-21B, FW-31BE, and FW-32BE.

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.

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)
7/6/2017	HG-10S	Stain
	HG-10D	Stain
	HG-12S	0.4
	HG-12D	ND
	HG-16S	Stain
	HG-16D	Stain
	MW-22B	Stain
7/20/2017	HG-10S	Stain
	HG-10D	Stain
	HG-12S	0.4
	HG-12D	ND
	HG-16S	Stain
	HG-16D	Stain
	MW-22B	Stain
7/11/2017	Drip Track	0.3
7/25/2017	Drip Track	0.3

GAINESVILLE REMEDIAL DESIGN

ID	WBS	Task Name	Duration	Predecessors	Start	Finish	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
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																				
6	1.5	EPA Issues Authorization to Proceed with Remedial Design	0 days		Wed 7/24/13	Wed 7/24/13																				
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	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	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																				
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	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	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 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	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	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	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	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	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	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	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	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	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	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	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	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	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	Cutoff Wall and Stormwater Controls: DESIGN TRACK #2	156.6 wks		Wed 12/17/14	Fri 12/15/17																				
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	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	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	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2		
107	5.10	Pre-Final Design	20.2 wks	106	Fri 5/5/17	Fri 9/22/17																				
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	Design Updates	12 wks	110	Mon 7/3/17	Fri 9/22/17																				
112	5.11	Review and Comment	5 wks	107	Mon 9/25/17	Fri 10/27/17																				
113	5.12	Final Design	4 wks	112	Mon 10/30/17	Fri 11/24/17																				
114	5.13	Review	3 wks	113	Mon 11/27/17	Fri 12/15/17																				
115	5.14	EPA Approval of Final Design	0 wks	114	Fri 12/15/17	Fri 12/15/17																				
116	5.15	Prepare RAWP	4 wks	115FS-4 wks	Mon 11/20/17	Fri 12/15/17																				
117	5.16	Submit RAWP	0 wks	116	Fri 12/15/17	Fri 12/15/17																				
118																										
119	6	In-Situ Geochemical Stabilization (ISGS): DESIGN TRACK #3	251.4 wks		Thu 2/7/13	Fri 12/1/17																				
120	6.1	Process Area	236.2 wks		Thu 2/7/13	Fri 8/18/17																				
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	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	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	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 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	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	Tue 9/29/15	Tue 3/29/16																				
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	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																										
152																										
153	6.2	South Lagoon	169 wks		Mon 9/8/14	Fri 12/1/17																				
154	6.2.1	Preliminary Design & Design Investigation Work Plan	32.2 wks		Mon 9/8/14	Mon 4/20/15																				
155	6.2.2	Submit Preliminary Design & Design Investigation Work	0 wks	154	Mon 4/20/15	Mon 4/20/15																				
156	6.2.3	Review of Preliminary Design & Design Investigation Work Plan	45 wks	155	Tue 4/21/15	Mon 2/29/16																				
157	6.2.4	Prepare Revised Preliminary Design & Design Investigation Work Plan	3.1 wks	156	Tue 3/1/16	Tue 3/22/16																				

GAINESVILLE REMEDIAL DESIGN

ID	WBS	Task Name	Duration	Predecessors	Start	Finish	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	6.2.5	Review and Approval of Work Plan	24.6 wks	157	Tue 3/22/16	Fri 9/9/16																				
159	6.2.6	Installation of Borings and DNAPL Recovery Wells	15.4 wks	158	Thu 4/13/17	Fri 7/28/17																				
160	5.2.6.1	Phase I Results and Plan for Additional Borings	0 wks		Thu 4/13/17	Thu 4/13/17																				
161	5.2.6.2	Review and Comment	4.8 wks	160	Thu 4/13/17	Tue 5/16/17																				
162	5.2.6.3	Revised Plan for Additional Borings	1.6 wks	161	Wed 5/17/17	Fri 5/26/17																				
163	5.2.6.4	Review and Approval	3.4 wks	162	Mon 5/29/17	Tue 6/20/17																				
164	5.2.6.5	Installation of Additional Borings	5.6 wks	163	Wed 6/21/17	Fri 7/28/17																				
165	6.2.7	Collection of Baseline Data	13 wks	159	Mon 7/31/17	Fri 10/27/17																				
166	6.2.8	Pre-Final Design	8 wks	159	Mon 7/31/17	Fri 9/22/17																				
167	6.2.9	Submit Pre-Final Design	0 wks	166	Fri 9/22/17	Fri 9/22/17																				
168	6.2.10	Review and Comment	3 wks	167	Mon 9/25/17	Fri 10/13/17																				
169	6.2.11	Final Design and RAWP	4 wks	168	Mon 10/16/17	Fri 11/10/17																				
170	6.2.12	Submit Final Design and RAWP	0 wks	169	Fri 11/10/17	Fri 11/10/17																				
171	6.2.13	Review	3 wks	170	Mon 11/13/17	Fri 12/1/17																				
172	6.2.14	EPA Approval of Final Design and RAWP	0 wks	171	Fri 12/1/17	Fri 12/1/17																				
173																										
174	7	In-Situ Solidification/Stabilization (ISS/S): DESIGN TRACK #4	142 wks		Mon 9/4/17	Fri 5/22/20																				
175	7.1	Pre-Design Investigation & Treatability Test Workplan	6 wks	15	Mon 9/4/17	Fri 10/13/17																				
176	7.2	Beazer Submit Pre-Design Investigation & Treatability Test	0 wks	175	Fri 10/13/17	Fri 10/13/17																				
177	7.3	Review and Approval	8 wks	176	Mon 10/16/17	Fri 12/8/17																				
178	7.4	Conduct Pre-Design Investigation & Treatability Test	33 wks	177	Mon 12/11/17	Fri 7/27/18																				
179	7.5	Pilot Test Workplan	11 wks	178	Mon 7/30/18	Fri 10/12/18																				
180	7.6	Beazer Submit Pilot Test Workplan	0 wks	179	Fri 10/12/18	Fri 10/12/18																				
181	7.7	Review and Approval	8 wks	180	Mon 10/15/18	Fri 12/7/18																				
182	7.8	Conduct Pilot Test	13 wks	181	Mon 12/10/18	Fri 3/8/19																				
183	7.9	Preliminary Design	12 wks	182	Mon 3/11/19	Fri 5/31/19																				
184	7.10	Submit Preliminary Design	0 wks	183	Fri 5/31/19	Fri 5/31/19																				
185	7.11	Review and Comment	10 wks	184	Mon 6/3/19	Fri 8/9/19																				
186	7.12	Pre-Final Design	13 wks	185	Mon 8/12/19	Fri 11/8/19																				
187	7.13	Review and Comment	10 wks	186	Mon 11/11/19	Fri 1/17/20																				
188	7.14	Final Design	6 wks	187	Mon 1/20/20	Fri 2/28/20																				
189	7.15	Review and Approval	4 wks	188	Mon 3/2/20	Fri 3/27/20																				
190	7.16	EPA Approval of Final Design	0 wks	189	Fri 3/27/20	Fri 3/27/20																				
191	7.17	Prepare RAWP	8 wks	190	Mon 3/30/20	Fri 5/22/20																				
192	7.18	Submit RAWP	0 wks	191	Fri 5/22/20	Fri 5/22/20																				
193																										
194	8	Other Engineered Components: DESIGN TRACK #5	87 wks		Mon 9/4/17	Fri 5/3/19																				
195	8.1	Pre-Design Work Plan	6 wks		Mon 9/4/17	Fri 10/13/17																				
196	8.2	Submit Pre-Design Work Plan	0 wks	195	Fri 10/13/17	Fri 10/13/17																				
197	8.3	Review and Approval	6 wks	196	Mon 10/16/17	Fri 11/24/17																				
198	8.4	EPA Approval of Pre-Design Work Plan	0 wks	197	Fri 11/24/17	Fri 11/24/17																				
199	8.5	Pre-Design Investigation	26 wks	198	Mon 11/27/17	Fri 5/25/18																				
200	8.6	Preliminary Design	6 wks	199	Mon 5/28/18	Fri 7/6/18																				
201	8.7	Submit Preliminary Design	0 wks	200	Fri 7/6/18	Fri 7/6/18																				
202	8.8	Review and Comment	6 wks	201	Mon 7/9/18	Fri 8/17/18																				
203	8.9	Pre-Final Design	13 wks	202	Mon 8/20/18	Fri 11/16/18																				
204	8.10	Review and Comment	6 wks	203	Mon 11/19/18	Fri 12/28/18																				
205	8.11	Final Design	6 wks	204	Mon 12/31/18	Fri 2/8/19																				
206	8.12	Review	4 wks	205	Mon 2/11/19	Fri 3/8/19																				
207	8.13	EPA Approval of Final Design	0 wks	206	Fri 3/8/19	Fri 3/8/19																				
208	8.14	Prepare RAWP	8 wks	207	Mon 3/11/19	Fri 5/3/19																				
209	8.15	Submit RAWP	0 wks	208	Fri 5/3/19	Fri 5/3/19																				
210																										

GAINESVILLE REMEDIAL DESIGN

ID	WBS	Task Name	Duration	Predecessors	Start	Finish	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	
211	9	Institutional Control	161.6 wks		Tue 7/9/13	Thu 8/11/16																				
212	9.1	Prepare Institutional Control Implementation and Assurance Plan (ICIAP)	6.8 wks	5	Tue 7/9/13	Fri 8/23/13																				
213	9.2	Submit ICIAP	0 wks	212	Fri 8/23/13	Fri 8/23/13																				
214	9.3	Review	12.5 wks	213	Mon 8/26/13	Wed 11/20/13																				
215	9.4	Beazer Respond to Comments	0 wks	214	Fri 8/28/15	Fri 8/28/15																				
216	9.5	Beazer Submit Responses & ICIAP Version 2	0 wks	215	Fri 8/28/15	Fri 8/28/15																				
217	9.6	Review	3 wks	216	Fri 8/28/15	Thu 9/17/15																				
218	9.7	EPA and FDEP Approval of ICIAP	0 wks	217	Thu 9/17/15	Thu 9/17/15																				
219	9.8	Implement Beazer-Property Restrictive Covenant	47 wks		Fri 9/18/15	Thu 8/11/16																				
220	9.8.1	Draft Proprietary Controls Package	13 wks	218	Fri 9/18/15	Thu 12/17/15																				
221	9.8.2	Submit Draft Proprietary Controls Package	0 wks	220	Thu 12/17/15	Thu 12/17/15																				
222	9.8.3	Review and Updating	8 wks	221	Fri 12/18/15	Thu 2/11/16																				
223	9.8.4	Update Title Search and Prepare Public Notice	8 wks	222	Fri 2/12/16	Thu 4/7/16																				
224	9.8.5	Beazer Publish Public Notice	0 wks	223	Thu 4/7/16	Thu 4/7/16																				
225	9.8.6	Public Comment Period	4.4 wks	224	Fri 4/8/16	Mon 5/9/16																				
226	9.8.7	Address Comments and Execute Restrictive Covenant	5 wks	225	Tue 5/10/16	Mon 6/13/16																				
227	9.8.8	Record Restrictive Covenant at Alacha County Clerk of C	0 wks	226	Mon 6/13/16	Mon 6/13/16																				
228	9.8.9	Prepare Final Proprietary Controls Package	8.6 wks	227	Tue 6/14/16	Thu 8/11/16																				
229	9.8.10	Submit Final Proprietary Controls Package	0 wks	228	Thu 8/11/16	Thu 8/11/16																				