



January 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: **December 2016 Monthly Progress Report**

Dear Mr. Kestle:

On behalf of Beazer East, Inc. (Beazer), attached is the December 2016 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

**DECEMBER 2016
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. NAPL was removed from temporary injection points (TIPs) installed in the Former Process Area 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 and TIPs outside the Former Process Area for December 2016. Process Area recovery data will be included in performance monitoring submittals.
- A total of 3,538,221 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 79.3 gallons per minute (gpm). The recovery for each component is listed below.
 - Surficial Aquifer
 - Perimeter Extraction Wells: 397,601 gallons
 - Former North Lagoon Drain: 393,270 gallons
 - Former Drip Track Drain: 418,250 gallons
 - Former Process Area Drain: 458,680 gallons
 - Former South Lagoon Drain: 419,140 gallons
 - Upper Floridan Extraction Wells
 - FW-6: 4,395 gallons
 - FW-21B: 137,454 gallons
 - FW-31BE: 900,520 gallons
 - FW-32BE: 408,911 gallons

Approximately 403.9 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 2,152,000 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 8 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) December 20, 2016.
- 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 leaks on filter vessels. Replaced interlock tank switch and caustic feed line. Repaired backwash pump.
- Fourth quarter sampling started November 28, 2016 and was completed on December 1, 2016.
- Irrigation breakthrough, stormwater and TSE sampling December 6, 2016.
- Irrigation breakthrough sampling December 29, 2016.
- Cleaned EW-14 pump.
- Replaced EW-1 pump.
- Cleaned and replaced flow meter parts for EW-6, EW-10 and EW-14.
- Investigated process area trench flow meter.
- Shipped 45 drums of drilling mud on December 12, 2016.
- Shipped 30 drums of spent carbon, 10 drums treatment sludge, and 10 drums drilling mud on December 27, 2016.
- On-property irrigation using treated groundwater from FW-6, 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.
- First quarter sampling event January 30 – February 10, 2017.

5. Schedule Status:

- The schedule for Design Track 2 was adjusted to account for additional field investigation required to complete the design.
- Other 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: December 2016

Date	Well	Volume (gal)
12/8/2016	HG-9S	Stain
	HG-10S	Stain
	HG-10D	Stain
	HG-12S	0.3
	HG-12D	ND
	HG-16S	Stain
	HG-16D	Stain
	MW-22B	Stain
12/22/2016	HG-9S	Stain
	HG-10S	Stain
	HG-10D	Stain
	HG-12S	Stain
	HG-12D	ND
	HG-16S	Stain
	HG-16D	Stain
	MW-22B	Stain
12/13/2016	Drip Track	0.5
12/27/2017	Drip Track	0.5

GAINESVILLE REMEDIAL DESIGN

ID	WBS	Task Name	Duration	Predecessors	Start	Finish	2012		2013		2014		2015		2016		2017		2018		2019		2020		H1
							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 Report	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																			
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																			

GAINESVILLE REMEDIAL DESIGN

ID	WBS	Task Name	Duration	Predecessors	Start	Finish	2012		2013		2014		2015		2016		2017		2018		2019		2020		H1
							H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	
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	139.9 wks		Wed 12/17/14	Tue 8/22/17																			
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																			
107	5.10	Pre-Final Design	23 wks	106	Tue 12/20/16	Tue 5/30/17																			
108	5.11	Review and Comment	5 wks	107	Tue 5/30/17	Tue 7/4/17																			
109	5.12	Final Design	4 wks	108	Tue 7/4/17	Tue 8/1/17																			
110	5.13	Review	3 wks	109	Tue 8/1/17	Tue 8/22/17																			
111	5.14	EPA Approval of Final Design	0 wks	110	Tue 8/22/17	Tue 8/22/17																			
112	5.15	Prepare RAWP	4 wks	111FS-4 wks	Tue 7/25/17	Tue 8/22/17																			
113	5.16	Submit RAWP	0 wks	112	Tue 8/22/17	Tue 8/22/17																			
114																									
115		6 In-Situ Geochemical Stabilization (ISGS): DESIGN TRACK #3	227.3 wks		Thu 2/7/13	Fri 6/16/17																			
116	6.1	Process Area	189.6 wks		Thu 2/7/13	Mon 9/26/16																			
117	6.1.1	EPA Approval of ISGS Demonstration Work Plan (2012)	0 wks		Thu 2/7/13	Thu 2/7/13																			
118	6.1.2	Preliminary Design (included in Demonstration Work Plan)	0 wks		Thu 2/7/13	Thu 2/7/13																			
119	6.1.3	Characterization and DNAPL Recovery (began 2012)	32 wks		Thu 2/7/13	Wed 9/18/13																			
120	6.1.4	Characterization Report and Pilot Test Plan	11.8 wks	119	Thu 9/19/13	Tue 12/10/13																			
121	6.1.5	Submit Characterization Report and Pilot Test Plan	0 wks	120	Tue 12/10/13	Tue 12/10/13																			
122	6.1.6	Review and Approval of Pilot Test Plan	10 wks	121	Wed 12/11/13	Tue 2/18/14																			
123	6.1.7	Technical Working Group Meeting	0 wks		Wed 12/18/13	Wed 12/18/13																			
124	6.1.8	Pilot Injection Testing	15 wks	122	Mon 3/17/14	Fri 6/27/14																			

GAINESVILLE REMEDIAL DESIGN

ID	WBS	Task Name	Duration	Predecessors	Start	Finish	2012		2013		2014		2015		2016		2017		2018		2019		2020	
							H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2			
125	5.1.8.1	Pre-Pilot Testing & Chemical Delivery	1 wk		Mon 3/17/14	Fri 3/21/14																		
126	5.1.8.2	Pilot Injections	3 wks	125	Mon 3/24/14	Fri 4/11/14																		
127	5.1.8.3	Borings in Injection Area	1 wk	126FS+10 wk	Mon 6/23/14	Fri 6/27/14																		
128	6.1.9	Technical Working Group Meeting	0 wks		Thu 7/10/14	Thu 7/10/14																		
129	6.1.10	Pre-Final Design	44 wks	126	Mon 4/14/14	Fri 2/13/15																		
130	6.1.11	Submit Pre-Final Design	0 wks	129	Fri 2/13/15	Fri 2/13/15																		
131	6.1.12	Review and Comment	6 wks	130	Mon 2/16/15	Fri 3/27/15																		
132	6.1.13	Final Design and RAWP	3.2 wks	131	Mon 3/30/15	Mon 4/20/15																		
133	6.1.14	Submit Final Design and RAWP	0 wks	132	Mon 4/20/15	Mon 4/20/15																		
134	6.1.15	Review	0.4 wks	133	Tue 4/21/15	Wed 4/22/15																		
135	6.1.16	EPA Approval of Final Design and RAWP	0 wks	134	Wed 4/22/15	Wed 4/22/15																		
136	6.1.17	Implementation of Process-Area ISGS Injections	12 wks	135FS+7 wks	Tue 7/7/15	Mon 9/28/15																		
137	6.1.18	Prepare Implementation Report	26.1 wks	136	Tue 9/29/15	Tue 3/29/16																		
138	6.1.19	Submit Implementation Report	0 wks	137	Tue 3/29/16	Tue 3/29/16																		
139	6.1.20	Post-Injection Effectiveness Monitoring	52 wks	136	Tue 9/29/15	Mon 9/26/16																		
140	6.1.21	Submit Phase II Performance Monitoring Report	0 wks		Mon 8/1/16	Mon 8/1/16																		
141	6.2	South Lagoon	144.9 wks		Mon 9/8/14	Fri 6/16/17																		
142	6.2.1	Preliminary Design & Design Investigation Work Plan	32.2 wks		Mon 9/8/14	Mon 4/20/15																		
143	6.2.2	Submit Preliminary Design & Design Investigation Work Plan	0 wks	142	Mon 4/20/15	Mon 4/20/15																		
144	6.2.3	Review of Preliminary Design & Design Investigation Work Plan	45 wks	143	Tue 4/21/15	Mon 2/29/16																		
145	6.2.4	Prepare Revised Preliminary Design & Design Investigation Work Plan	3.1 wks	144	Tue 3/1/16	Tue 3/22/16																		
146	6.2.5	Review and Approval of Work Plan	24.6 wks	145	Tue 3/22/16	Fri 9/9/16																		
147	6.2.6	Installation of Borings and DNAPL Recovery Wells	24 wks	146	Fri 9/9/16	Fri 2/24/17																		
148	6.2.7	Collection of Baseline Data	13 wks	147	Fri 2/24/17	Fri 5/26/17																		
149	6.2.8	Pre-Final Design	6 wks	147	Fri 2/24/17	Fri 4/7/17																		
150	6.2.9	Submit Pre-Final Design	0 wks	149	Fri 4/7/17	Fri 4/7/17																		
151	6.2.10	Review and Comment	3 wks	150	Fri 4/7/17	Fri 4/28/17																		
152	6.2.11	Final Design and RAWP	4 wks	151	Fri 4/28/17	Fri 5/26/17																		
153	6.2.12	Submit Final Design and RAWP	0 wks	152	Fri 5/26/17	Fri 5/26/17																		
154	6.2.13	Review	3 wks	153	Fri 5/26/17	Fri 6/16/17																		
155	6.2.14	EPA Approval of Final Design and RAWP	0 wks	154	Fri 6/16/17	Fri 6/16/17																		
156																								
157	7	In-Situ Solidification/Stabilization (ISS/S): DESIGN TRACK #4	147 wks		Mon 2/27/17	Fri 12/20/19																		
158	7.1	Pre-Design Investigation & Treatability Test Workplan	8 wks	15	Mon 2/27/17	Fri 4/21/17																		
159	7.2	Beazer Submit Pre-Design Investigation & Treatability Test Workplan	0 wks	158	Fri 4/21/17	Fri 4/21/17																		
160	7.3	Review and Approval	8 wks	159	Mon 4/24/17	Fri 6/16/17																		
161	7.4	Conduct Pre-Design Investigation & Treatability Test	34 wks	160	Mon 6/19/17	Fri 2/9/18																		
162	7.5	Pilot Test Workplan	12 wks	161	Mon 2/12/18	Fri 5/4/18																		
163	7.6	Beazer Submit Pilot Test Workplan	0 wks	162	Fri 5/4/18	Fri 5/4/18																		
164	7.7	Review and Approval	8 wks	163	Mon 5/7/18	Fri 6/29/18																		
165	7.8	Conduct Pilot Test	13 wks	164	Mon 7/2/18	Fri 9/28/18																		
166	7.9	Preliminary Design	13 wks	165	Mon 10/1/18	Fri 12/28/18																		
167	7.10	Submit Preliminary Design	0 wks	166	Fri 12/28/18	Fri 12/28/18																		
168	7.11	Review and Comment	10 wks	167	Mon 12/31/18	Fri 3/8/19																		
169	7.12	Pre-Final Design	13 wks	168	Mon 3/11/19	Fri 6/7/19																		
170	7.13	Review and Comment	10 wks	169	Mon 6/10/19	Fri 8/16/19																		
171	7.14	Final Design	6 wks	170	Mon 8/19/19	Fri 9/27/19																		
172	7.15	Review and Approval	4 wks	171	Mon 9/30/19	Fri 10/25/19																		
173	7.16	EPA Approval of Final Design	0 wks	172	Fri 10/25/19	Fri 10/25/19																		
174	7.17	Prepare RAWP	8 wks	173	Mon 10/28/19	Fri 12/20/19																		
175	7.18	Submit RAWP	0 wks	174	Fri 12/20/19	Fri 12/20/19																		
176																								
177	8	Other Engineered Components: DESIGN TRACK #5	87 wks		Mon 2/27/17	Fri 10/26/18																		
178	8.1	Pre-Design Work Plan	6 wks		Mon 2/27/17	Fri 4/7/17																		
179	8.2	Submit Pre-Design Work Plan	0 wks	178	Fri 4/7/17	Fri 4/7/17																		
180	8.3	Review and Approval	6 wks	179	Mon 4/10/17	Fri 5/19/17																		
181	8.4	EPA Approval of Pre-Design Work Plan	0 wks	180	Fri 5/19/17	Fri 5/19/17																		
182	8.5	Pre-Design Investigation	26 wks	181	Mon 5/22/17	Fri 11/17/17																		
183	8.6	Preliminary Design	6 wks	182	Mon 11/20/17	Fri 12/29/17																		
184	8.7	Submit Preliminary Design	0 wks	183	Fri 12/29/17	Fri 12/29/17																		
185	8.8	Review and Comment	6 wks	184	Mon 1/1/18	Fri 2/9/18																		

GAINESVILLE REMEDIAL DESIGN

ID	WBS	Task Name	Duration	Predecessors	Start	Finish	2012		2013		2014		2015		2016		2017		2018		2019		2020	
							H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2
186	8.9	Pre-Final Design	13 wks	185	Mon 2/12/18	Fri 5/11/18																		
187	8.10	Review and Comment	6 wks	186	Mon 5/14/18	Fri 6/22/18																		
188	8.11	Final Design	6 wks	187	Mon 6/25/18	Fri 8/3/18																		
189	8.12	Review	4 wks	188	Mon 8/6/18	Fri 8/31/18																		
190	8.13	EPA Approval of Final Design	0 wks	189	Fri 8/31/18	Fri 8/31/18																		
191	8.14	Prepare RAWP	8 wks	190	Mon 9/3/18	Fri 10/26/18																		
192	8.15	Submit RAWP	0 wks	191	Fri 10/26/18	Fri 10/26/18																		
193																								
194	9	Institutional Control	237.8 wks		Tue 7/9/13	Fri 1/26/18																		
195	9.1	Prepare Institutional Control Implementation and Assurance Plan (ICIAP)	6.8 wks	5	Tue 7/9/13	Fri 8/23/13																		
196	9.2	Submit ICIAP	0 wks	195	Fri 8/23/13	Fri 8/23/13																		
197	9.3	Review	12.5 wks	196	Mon 8/26/13	Wed 11/20/13																		
198	9.4	Beazer Respond to Comments	97 wks	197	Mon 4/6/15	Fri 2/10/17																		
199	9.5	Beazer Submit Responses & ICIAP Version 2	0 wks	198	Fri 2/10/17	Fri 2/10/17																		
200	9.6	Review	3 wks	199	Mon 2/13/17	Fri 3/3/17																		
201	9.7	EPA and FDEP Approval of ICIAP	0 wks	200	Fri 3/3/17	Fri 3/3/17																		
202	9.8	Implement Beazer-Property Restrictive Covenant	47 wks		Mon 3/6/17	Fri 1/26/18																		
203	9.8.1	Draft Proprietary Controls Package	13 wks	201	Mon 3/6/17	Fri 6/2/17																		
204	9.8.2	Submit Draft Proprietary Controls Package	0 wks	203	Fri 6/2/17	Fri 6/2/17																		
205	9.8.3	Review and Updating	8 wks	204	Mon 6/5/17	Fri 7/28/17																		
206	9.8.4	Update Title Search and Prepare Public Notice	8 wks	205	Mon 7/31/17	Fri 9/22/17																		
207	9.8.5	Beazer Publish Public Notice	0 wks	206	Fri 9/22/17	Fri 9/22/17																		
208	9.8.6	Public Comment Period	4.4 wks	207	Mon 9/25/17	Tue 10/24/17																		
209	9.8.7	Address Comments and Execute Restrictive Covenant	5 wks	208	Wed 10/25/17	Tue 11/28/17																		
210	9.8.8	Record Restrictive Covenant at Alacha County Clerk of C	0 wks	209	Tue 11/28/17	Tue 11/28/17																		
211	9.8.9	Prepare Final Proprietary Controls Package	8.6 wks	210	Wed 11/29/17	Fri 1/26/18																		
212	9.8.10	Submit Final Proprietary Controls Package	0 wks	211	Fri 1/26/18	Fri 1/26/18																		