



September 15, 2014

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: **August 2014 Monthly Progress Report**

Dear Mr. Miller:

On behalf of Beazer East, Inc. (Beazer), attached is the August 2014 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: Rusty Kestle, EPA  
Kelsey Helton, FDEP  
John Mousa, 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

**August 2014**  
**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: 1.85 gallons of NAPL were removed from Upper Hawthorn wells during the past month (2 recovery events). A total of 574 gallons have been removed since the start of the NAPL recovery program on June 19, 2004. Table 1 provides details of the NAPL recovery volumes by well and date.
- In addition, NAPL was removed from 25 temporary injection points (TIPs) installed in the Former Process Area as part of the In-Situ Geochemical Stabilization (ISGS) program (Table 2). This is a pilot demonstration for full scale design. Two NAPL recovery events were conducted during the month, resulting in a total of 110.3 gallons removed.
- NAPL was removed from four Upper Hawthorn recovery wells installed in the Former Process Area as part of the ISGS program (Table 3). Two NAPL recovery events were conducted during the month, resulting in 31.7 gallons removed.
- A total of 4,474,515 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 735 hours). The average recovery rate for the month was approximately 101.5 gallons per minute (gpm). The recovery for each component is listed below.
  - Surficial Aquifer
    - Perimeter Extraction Wells: 678,362 gallons
    - Former North Lagoon Drain: 473,620 gallons
    - Former Drip Track Drain: 466,650 gallons
    - Former Process Area Drain: 729,720 gallons
    - Former South Lagoon Drain: 447,430 gallons
  - Upper Floridan Extraction Wells
    - FW-6: 38,723 gallons
    - FW-21B: 150,798 gallons
    - FW-31BE: 959,420 gallons
    - FW-32BE: 529,792 gallons

Approximately 340 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 2,875,700 gallons. The remaining portion of the water, from Upper Floridan Aquifer wells, was treated and used for on-Property irrigation.

The Former South Lagoon and Former Process groundwater drain pumps were turned off for approximately 7 hours to pump and clean clarifiers and to treat backwash water.

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

- *Remedial Action Work Plan (RAWP) Off-Property Soil Replacement Block K* was submitted on August 20, 2014.
- Off-Property soil replacement at Blocks A-K of the Stephen Foster Neighborhood.
- Remedial Design/Remedial Action Status Update Meeting (EPA/Beazer) August 19, 2014.
- Periodic maintenance checks and inspections.
- Treatment-plant component maintenance and repair as needed (caustic pump, carbon vessel gaskets and gauges, sludge pump diverter valve).
- Pulled and rebuilt EW-8 pump.
- At FW-6 repaired piping, installed new jet pump, replaced flow meter, repaired thermal switch, performed QED pump troubleshooting.
- Repaired and replaced polymer chemical lines after flushing tank and lines.
- Performed plant compressor troubleshooting.
- Shipped 5 drums spent PPE, 11 drums spent carbon, 18 drums drilling mud/soil, 21 drums treatment sludge, 9 drums DNAPL and 10 empty drums on August 12, 2014.
- Replaced well locks and caps (HG-29S, HG-29D, HG-21S, HG-21D, HG-20S, and HG-20D).
- Irrigation Breakthrough sampling on Aug 4, 2014.
- Third quarter and annual groundwater sampling Aug 12-21, 2014.
- ISGS Pilot Test sampling Aug 15-20, 2014.
- On-property irrigation using treated groundwater from FW-6, FW-21B, FW-31BE, and FW-32BE.
- Surveying in Block J

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

- Off-Property Remedial Action at Blocks J and K.
- 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.
- Fourth quarter sampling event: Dec 1 - 5, 2014.

### **5. Schedule Status:**

- The current remedial design schedule is attached.
- No significant delays were encountered during the reporting period.

### **6. Plan/Schedule Modifications:**

- The schedule has been updated to reflect minor adjustments.

**7. Community Involvement:**

- Tetra Tech's Community Coordinator has been in touch with many residents and property owners in the Stephen Foster neighborhood, and has been working closely with the city's community coordinators for the Stephen Foster soil replacement work.
- Future community involvement activities will be coordinated with EPA.

**Table 1. DNAPL Recovery - Hawthorn Group Monitoring Wells**

Well ID	Total Last Month (gal) (2 event) July 2014	DNAPL Volume (gal) 8/7/2014	DNAPL Volume (gal) 8/21/2014	Total This Month (gal) August 2014
HG-9S	0	Stain	Stain	0
HG-10S	0	Stain	Stain	0
HG-10D	0	Stain	Stain	0
HG-11S	0.7	0.3	0.4	0.7
HG-12S	0.75	0.3	0.35	0.65
HG-12D	0	ND	ND	0
HG-15S	0.65	0.25	0.25	0.5
HG-16S	0.2	Stain	Stain	0
HG-16D	0	Stain	Stain	0
MW-22B	0	Stain	Stain	0
Total	2.3	0.85	1	1.85
Cumulative Total	571.96			573.81

ND - No DNAPL Detected

**Table 2. DNAPL Recovery Temporary Injection Points (TIPs)**

Well ID	Total Last Month (gal) (3 events) July 2014	DNAPL Volume (gal) 8/13/2014	DNAPL Volume (gal) 8/27/2014	Total This Month (gal) August 2014
220N 180E	6.8	2.8	2.4	5.2
280N 380E	9.8	3.5	3.2	6.7
300N 180E	14.8	4.7	4.6	9.3
300N 420E	10	3.3	3.5	6.8
320N 220E	9.8	3.2	3.1	6.3
320N 300E	9.5	2.9	3.2	6.1
340N 340E	17.3	6.1	5.7	11.8
360N 280E	11.1	3.75	4	7.75
380N 340E	19.2	6.4	5.3	11.7
400N 380E	3	1.1	1.1	2.2
460N 340E	4.5	1.4	1.4	2.8
420N 340E *	11.4	3.7	4.1	7.8
220N 340E	2.7	0.9	1	1.9
240N 380E	4.7	1.5	1.6	3.1
340N 180E	1.9	1	0.3	1.3
320N 140E	1.8	0.6	0.6	1.2
300N 260E	3.1	1	1	2
360N 140E	0.6	0.2	0.2	0.4
400N 140E	0.2	0.25	0.1	0.35
200N 220E	2.8	0.8	0.8	1.6
280N 220E	3.4	1	1	2
360N 220E	3.9	1.3	1.6	2.9
280N 300E	3.6	1.1	1.2	2.3
360N 380E	12.25	5.1	1	6.1
Drip Track	2.1	0.4	0.3	0.7
<b>Total</b>	<b>170.25</b>	<b>58</b>	<b>52.3</b>	<b>110.3</b>

NP - Not Pumped

\* Inside ISGS Pilot Test Area

**Table 3. DNAPL ISGS Recovery Data - DNAPL Recovery Wells**

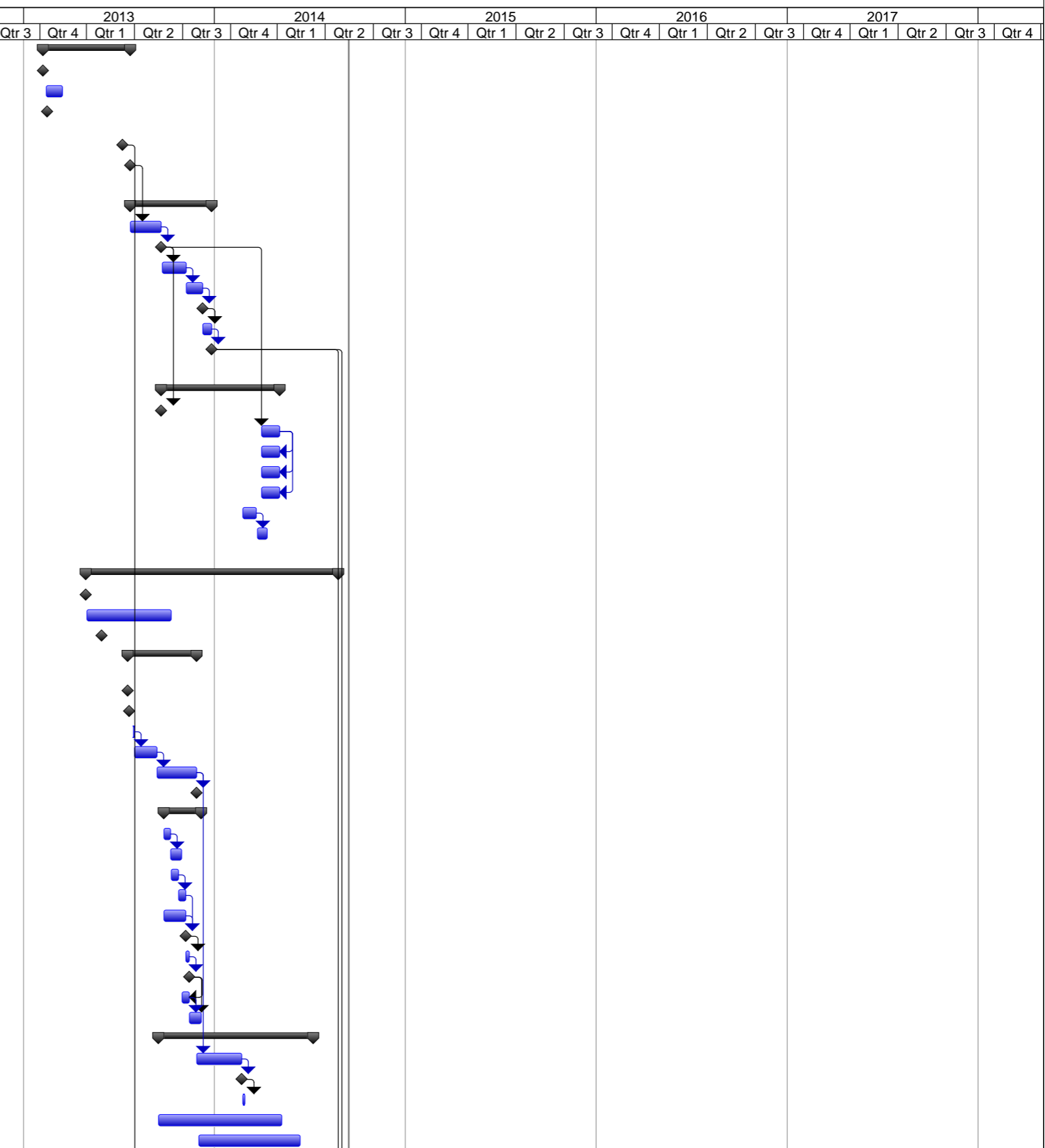
Well ID	Total Last Month (gal) (2 events) July 2014	DNAPL Volume (gal) 8/6/2014	DNAPL Volume (gal) 8/20/2014	Total This Month (gal) August 2014
M-38BE	0	NR	NR	NR
M-39BE	NR	NR	NR	NR
M-40BE	NR	NR	NR	NR
M-41BE	NR	NR	NR	NR
M-42BE	NR	NR	NR	NR
HG-36SE *	0.3	3.4	2.1	5.5
HG-37SE	5.5	2.6	2.6	5.2
HG-38SE	10.6	4.8	4.7	9.5
HG-39SE	6	3.0	2.9	5.9
HG-40SE	6.1	2.8	2.8	5.6
Total	28.5	16.6	15.1	31.7

NR - No Recovery

\* Inside ISGS Pilot Test Area

GAINESVILLE REMEDIAL DESIGN

ID	WBS	Task Name	Duration	Predecessors	Start	Finish	2013				2014				2015				2016				2017											
							Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 4										
1		<b>1 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		<b>2 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		<b>3 Supporting Plans for RD/RA</b>	<b>32.2 wks</b>		<b>Fri 9/20/13</b>	<b>Mon 5/5/14</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	Quality Assurance Project Plan (update)	4 wks		Mon 2/24/14	Fri 3/21/14																												
24	3.7	Data Management Plan	3 wks	23	Mon 3/24/14	Fri 4/11/14																												
25																																		
26		<b>4 Off-Property Soil Replacement (OU-5): DESIGN TRACK #1</b>	<b>69 wks</b>		<b>Tue 4/30/13</b>	<b>Mon 8/25/14</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>4.4 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>4.5 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>4.6 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	2013				2014				2015				2016				2017			
							Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 4		
108	6.1.1	EPA Approval of ISGS Demonstration Work Plan (2012)	0 wks		Thu 2/7/13	Thu 2/7/13																				
109	6.1.2	Preliminary Design (included in Demonstration Work Plan)	0 wks		Thu 2/7/13	Thu 2/7/13																				
110	6.1.3	Characterization and DNAPL Recovery (began 2012)	32 wks		Thu 2/7/13	Wed 9/18/13																				
111	6.1.4	Characterization Report and Pilot Test Plan	11.8 wks	110	Thu 9/19/13	Tue 12/10/13																				
112	6.1.5	Submit Characterization Report and Pilot Test Plan	0 wks	111	Tue 12/10/13	Tue 12/10/13																				
113	6.1.6	Review and Approval of Pilot Test Plan	10 wks	112	Wed 12/11/13	Tue 2/18/14																				
114	6.1.7	Technical Working Group Meeting	0 wks		Wed 12/18/13	Wed 12/18/13																				
115	6.1.8	<b>Pilot Injection Testing</b>	<b>15 wks</b>	<b>113</b>	<b>Mon 3/17/14</b>	<b>Fri 6/27/14</b>																				
116	6.1.8.1	Pre-Pilot Testing & Chemical Delivery	1 wk		Mon 3/17/14	Fri 3/21/14																				
117	6.1.8.2	Pilot Injections	3 wks	116	Mon 3/24/14	Fri 4/11/14																				
118	6.1.8.3	Borings in Injection Area	1 wk	117FS+10 wks	Mon 6/23/14	Fri 6/27/14																				
119	6.1.9	Technical Working Group Meeting	0 wks		Thu 7/10/14	Thu 7/10/14																				
120	6.1.10	<b>Pre-Final Design</b>	<b>26 wks</b>	<b>117</b>	<b>Mon 4/14/14</b>	<b>Fri 10/10/14</b>																				
121	6.1.11	Submit Pre-Final Design	0 wks	120	Fri 10/10/14	Fri 10/10/14																				
122	6.1.12	Review and Comment	6 wks	121	Mon 10/13/14	Fri 11/21/14																				
123	6.1.13	Final Design and RAWP	4 wks	122	Mon 11/24/14	Fri 12/19/14																				
124	6.1.14	Submit Final Design and RAWP	0 wks	123	Fri 12/19/14	Fri 12/19/14																				
125	6.1.15	Review	6 wks	124	Mon 12/22/14	Fri 1/30/15																				
126	6.1.16	EPA Approval of Final Design and RAWP	0 wks	125	Fri 1/30/15	Fri 1/30/15																				
127	6.2	<b>South Lagoon</b>	<b>68 wks</b>		<b>Tue 9/2/14</b>	<b>Mon 12/21/15</b>																				
128	6.2.1	<b>Preliminary Design &amp; Design Investigation Work Plan</b>	<b>12 wks</b>		<b>Tue 9/2/14</b>	<b>Mon 11/24/14</b>																				
129	6.2.2	Submit Preliminary Design & Design Investigation Work Plan	0 wks	128	Mon 11/24/14	Mon 11/24/14																				
130	6.2.3	Review and Approval Preliminary Design & Design Investigation Work Plan	3 wks	129	Tue 11/25/14	Mon 12/15/14																				
131	6.2.4	Installation of Borings and DNAPL Recovery Wells	8 wks	130	Tue 12/16/14	Mon 2/9/15																				
132	6.2.5	Collection of Baseline Data	20 wks	131	Tue 2/10/15	Mon 6/29/15																				
133	6.2.6	Pre-Final Design	6 wks	132	Tue 6/30/15	Mon 8/10/15																				
134	6.2.7	Submit Pre-Final Design	0 wks	133	Mon 8/10/15	Mon 8/10/15																				
135	6.2.8	Review and Comment	6 wks	134	Tue 8/11/15	Mon 9/21/15																				
136	6.2.9	Final Design	4 wks	135	Tue 9/22/15	Mon 10/19/15																				
137	6.2.10	Submit Final Design	0 wks	136	Mon 10/19/15	Mon 10/19/15																				
138	6.2.11	Review	4 wks	137	Tue 10/20/15	Mon 11/16/15																				
139	6.2.12	EPA Approval of Final Design	0 wks	138	Mon 11/16/15	Mon 11/16/15																				
140	6.2.13	Prepare RAWP	5 wks	139	Tue 11/17/15	Mon 12/21/15																				
141	6.2.14	Submit RAWP	0 wks	140	Mon 12/21/15	Mon 12/21/15																				
142																										
143	7	<b>In-Situ Solidification/Stabilization (ISS/S): DESIGN TRACK #4</b>	<b>166 wks</b>		<b>Tue 9/2/14</b>	<b>Mon 11/6/17</b>																				
144	7.1	<b>Pre-Design Investigation &amp; Treatability Test Workplan</b>	<b>20 wks</b>	<b>15</b>	<b>Tue 9/2/14</b>	<b>Mon 1/19/15</b>																				
145	7.2	Beazer Submit Pre-Design Investigation & Treatability Test WP	0 wks	144	Mon 1/19/15	Mon 1/19/15																				
146	7.3	Review and Approval	8 wks	145	Tue 1/20/15	Mon 3/16/15																				
147	7.4	Conduct Pre-Design Investigation & Treatability Test	40 wks	146	Tue 3/17/15	Mon 12/21/15																				
148	7.5	Pilot Test Workplan	13 wks	147	Tue 12/22/15	Mon 3/21/16																				
149	7.6	Beazer Submit Pilot Test Workplan	0 wks	148	Mon 3/21/16	Mon 3/21/16																				
150	7.7	Review and Approval	8 wks	149	Tue 3/22/16	Mon 5/16/16																				
151	7.8	Conduct Pilot Test	13 wks	150	Tue 5/17/16	Mon 8/15/16																				
152	7.9	Preliminary Design	13 wks	151	Tue 8/16/16	Mon 11/14/16																				
153	7.10	Submit Preliminary Design	0 wks	152	Mon 11/14/16	Mon 11/14/16																				
154	7.11	Review and Comment	10 wks	153	Tue 11/15/16	Mon 1/23/17																				
155	7.12	Pre-Final Design	13 wks	154	Tue 1/24/17	Mon 4/24/17																				
156	7.13	Review and Comment	10 wks	155	Tue 4/25/17	Mon 7/3/17																				
157	7.14	Final Design	6 wks	156	Tue 7/4/17	Mon 8/14/17																				
158	7.15	Review and Approval	4 wks	157	Tue 8/15/17	Mon 9/11/17																				
159	7.16	EPA Approval of Final Design	0 wks	158	Mon 9/11/17	Mon 9/11/17																				
160	7.17	Prepare RAWP	8 wks	159	Tue 9/12/17	Mon 11/6/17																				
161	7.18	Submit RAWP	0 wks	160	Mon 11/6/17	Mon 11/6/17																				

