

December 16, 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: November 2014 Monthly Progress Report

Dear Mr. Miller:

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

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 Brourman, TRMI

Mike Slenska, TRMI Donna Kopach, TRMI

Jim Erickson, Tetra Tech

November 2014 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:
 1.8 gallons of NAPL were removed from Upper Hawthorn wells during the past month (2 recovery events). A total of 580 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 26 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. One new location was added to the list, 507N 260E. Two NAPL recovery events were conducted during the month, resulting in a total of 114.1 gallons removed.
- NAPL was removed from five 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 28.8 gallons removed.
- A total of 3,848,854 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 89.0 gallons per minute (gpm). The recovery for each component is listed below.
 - Surficial Aquifer
 - Perimeter Extraction Wells: 612,354 gallons
 - Former North Lagoon Drain: 399.510 gallons
 - Former Drip Track Drain: 451,930 gallons
 - Former Process Area Drain: 417,740 gallons
 - Former South Lagoon Drain: 453,450 gallons
 - Upper Floridan Extraction Wells
 - FW-6: 40,115 gallons
 - FW-21B: 106,153 gallons
 - FW-31BE: 896,860 gallons
 - FW-32BE: 470,742 gallons

Approximately 346.98 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 3,610,500 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 6 hours to pump and clean clarifiers and to treat backwash water.

3. Plans, Reports, Deliverables and Procedures Completed:

- Completion of Off-Property soil replacement at Blocks A-K of the Stephen Foster Neighborhood.
- Pre-final inspection of Off-Property soil replacement on Nov 18, 2014.
- Remedial Design/Remedial Action Status Update Meeting (EPA/Beazer) Nov 18, 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, bag filter vessel).
- Replaced plant sump pump.
- Cleaned EW-16 three times.
- Irrigation Breakthrough sampling on Nov 3, 2014.
- TSE (As, Cr, Cu) sampling event Nov 20, 2014.
- 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.
- 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 based on recent discussions.

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) (3 events)	DNAPL Volume (gal)	DNAPL Volume (gal)	Total This Month (gal)	
	October 2014	11/13/2014	11/26/2014	November 2014	
HG-9S	0	Stain	Stain	0	
HG-10S	0	Stain	Stain	0	
HG-10D	0	Stain	Stain	0	
HG-11S	0.9	0.35	0.4	0.75	
HG-12S	0.95	0.3	0.3	0.6	
HG-12D	0	ND	ND	0	
HG-15S	0.7	0.25	0.2	0.45	
HG-16S	0.25	Stain	Stain	0	
HG-16D	0	Stain	Stain	0	
MW-22B	0	Stain	Stain	0	
Total	2.8	0.9	0.9	1.8	
Cumulative Total	578.66			580.46	

ND - No DNAPL Detected

Table 2. DNAPL Recovery Temporary Injection Points (TIPs)

Well ID	Total Last Month (gal) (2 events)	DNAPL Volume (gal)	DNAPL Volume (gal)	Total This Month (gal)	
October 2014		11/5/2014	11/19/2014	November 2014	
220N 180E	4.8	2.3	2.2	4.5	
280N 380E	6.4	3.1	3.2	6.3	
300N 180E	9.9	4.6	4.9	9.5	
300N 420E	7	3.4	3.6	7	
320N 220E	6.1	4.1	3	7.1	
320N 300E	5.8	3.2	3.3	6.5	
340N 340E	11.1	5.8	5.7	11.5	
360N 280E	7	3.6	3.7	7.3	
380N 340E	11.1	5.5	5.5	11	
400N 380E	2.6	1.4	1.3	2.7	
460N 340E	2.9	1.4	1.5	2.9	
420N 340E *	8.4	4.9	3.5	8.4	
220N 340E	2.2	1.0	1	2	
240N 380E	2.9	1.5	1.5	3	
340N 180E	3.3	0.8	0.9	1.7	
320N 140E	1.3	0.7	0.5	1.2	
300N 260E	2	1.0	1	2	
360N 140E	0.55	0.3	0.25	0.55	
400N 140E	0.4	0.2	0.2	0.4	
200N 220E	1.55	0.8	0.75	1.55	
280N 220E	2	1.1	1.1	2.2	
360N 220E	2.7	1.4	1.5	2.9	
280N 300E	2.8	1.4	1.5	2.9	
360N 380E	6.8	3.4	3.3	6.7	
507N 260E	NP	0.5	0.5	1	
Drip Track	0.8	0.7	0.6	1.3	
Total	110.2			114.1	

NP - Not Pumped

^{*} Inside ISGS Pilot Test Area

Table 3. DNAPL ISGS Recovery Data - DNAPL Recovery Wells

Well ID	Total Last Month (gal) (3 events)	DNAPL Volume (gal)	DNAPL Volume (gal)	Total This Month (gal)	
	October 2014	11/12/2014	11/26/2014	November 2014	
M-38BE	NR	NR	NR	0	
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 *	3.3	1.2	1.3	2.5	
HG-37SE	7.3	2.5	2.4	4.9	
HG-38SE	14.5	5.0	5.1	10.1	
HG-39SE	8.4	2.8	2.9	5.7	
HG-40SE	7.9	2.7	2.9	5.6	
Total	41.4			28.8	

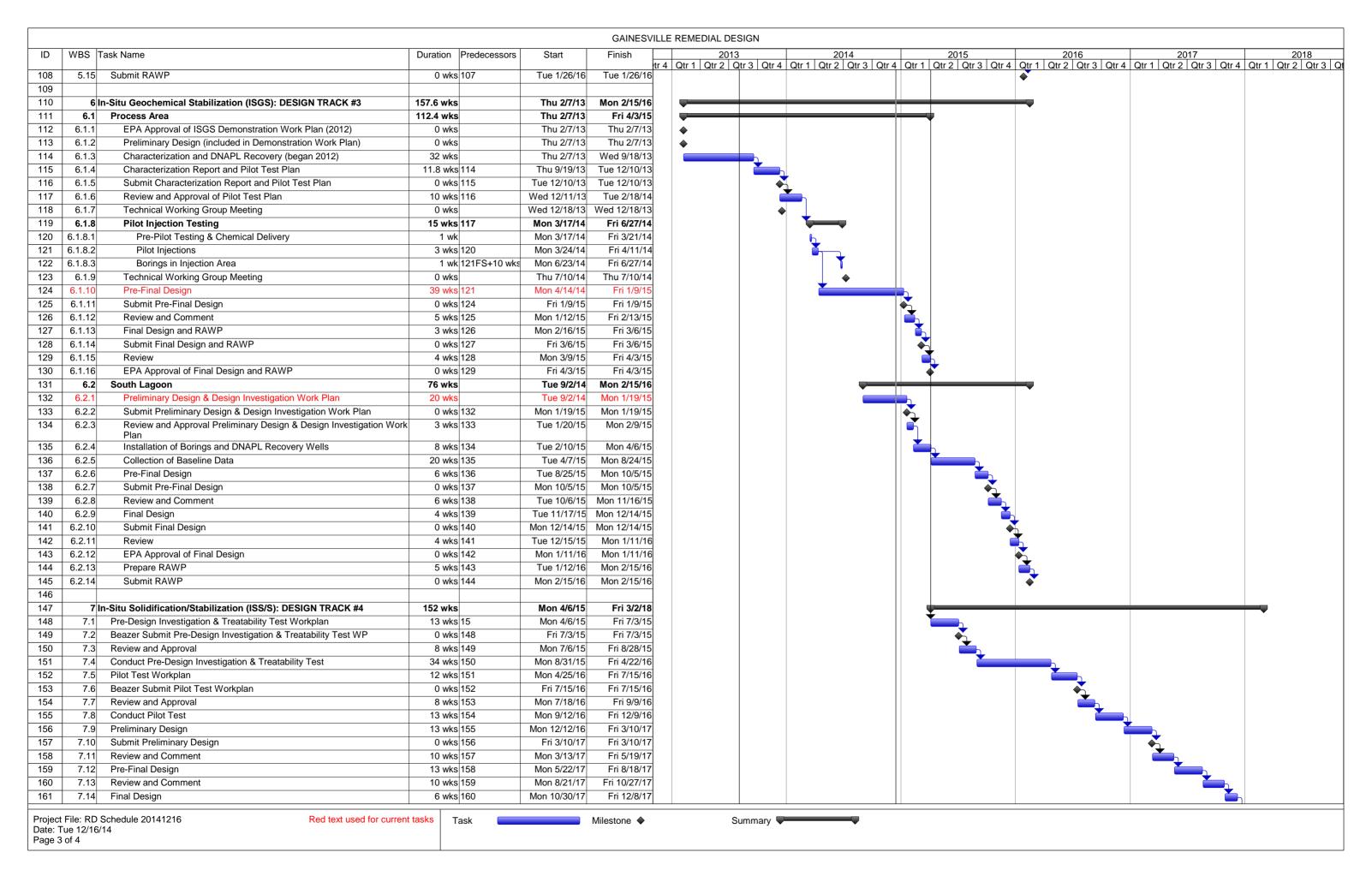
NR - No Recovery

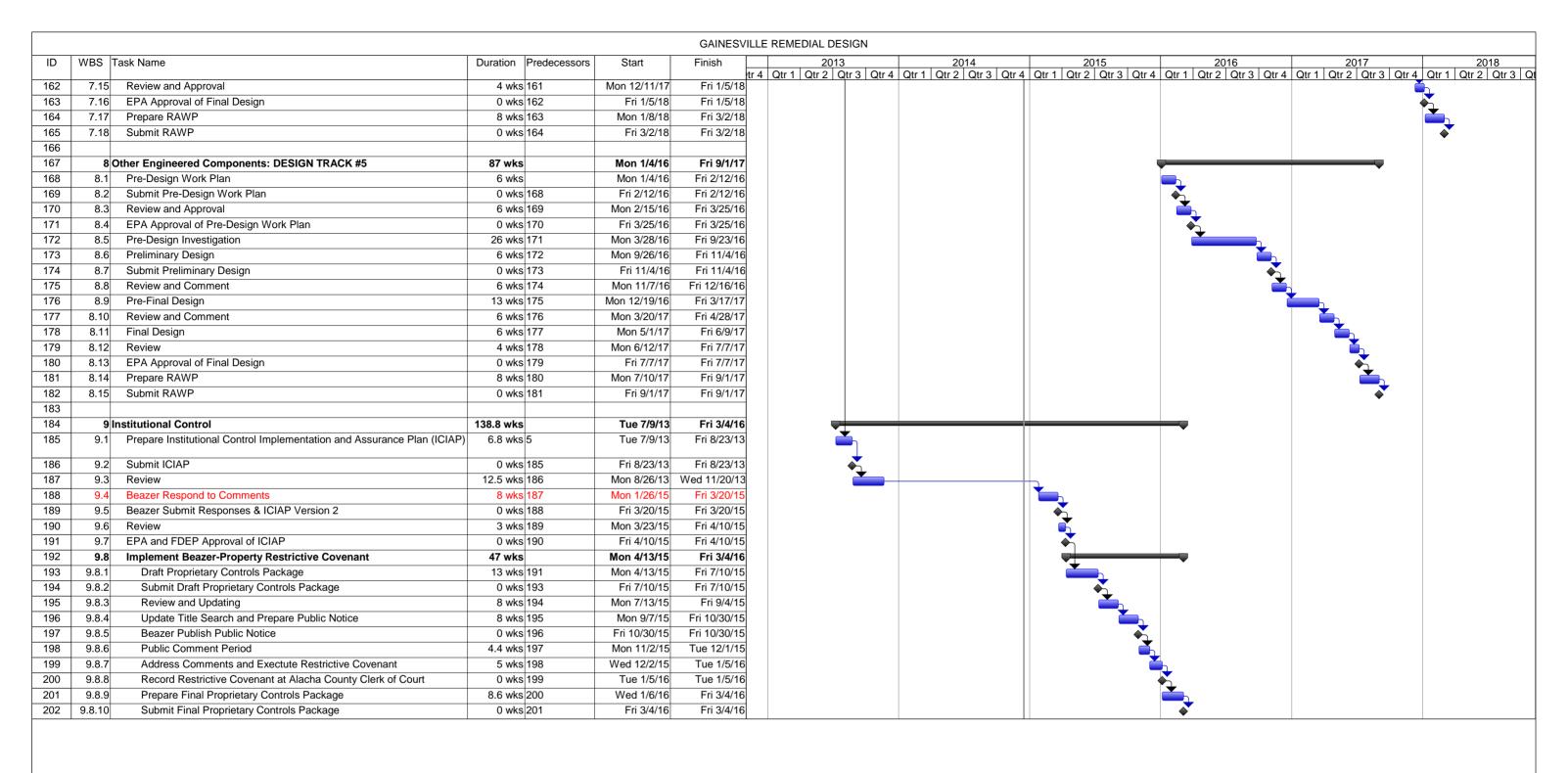
^{*} Inside ISGS Pilot Test Area

GAINESVILLE REMEDIAL DESIGN									
WB	S Task Name	Duration Predecessors	Start	Finish	2013 2014 4 Qtr 1 Qtr 2 Qtr 3 Qtr 4 Qtr 1 Qtr 2 Qtr 3 Qtr 4	2015	2016	2017	201
	1 Consent Decree for RD/RA	23.8 wks	Thu 2/7/13	Wed 7/24/13	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	Qtr 1 Qtr 2 Qtr 3 Qtr 4 Qtr	1 Qtr 2
	1.1 US DOJ Lodges Donsent Decree with Court	0 days	Thu 2/7/13	Thu 2/7/13	· ·				
_	1.2 Public Comment on Consent Decree	4.6 wks	Wed 2/13/13						
	1.3 Beazer Submittal: Project Coordinators, Supervising Contractor, Quality	0 days	Fri 2/15/13		•				
	Management Plan	-			•				
	1.4 Court Enters Consent Decree Final	0 days	Tue 7/9/13		♦ 1				
	1.5 EPA Issues Authorization to Proceed with Remedial Design	0 days	Wed 7/24/13	Wed 7/24/13	♦				
	2 Remedial Design Work Plan (RDWP)	22.3 wks	Wed 7/24/13						
	2.1 Prepare RDWP	43 days 6	Wed 7/24/13						
	2.2 Beazer Submit RDWP	0 wks 9	Fri 9/20/13						
	2.3 EPA Review and Comment RDWP	6.8 wks 10	Mon 9/23/13						
	2.4 Beazer Respond to Comments	4.3 wks 11	Fri 11/8/13						
	2.5 Beazer Submit Responses and RDWP Version 2	0 wks 12	Mon 12/9/13						
	2.6 EPA Assessed BRWR	2.6 wks 13	Mon 12/9/13						
	2.7 EPA Approval RDWP	0 wks 14	Thu 12/26/13	Thu 12/26/13					
	2 Supporting Plans for PD/DA	22.2 m/s	E-: 0/00/40	Man ElEl4 4					
3	3 Supporting Plans for RD/RA 3.5 Beazer Submit Health & Safety Plan	32.2 wks 0 wks 10	Fri 9/20/13 Fri 9/20/13		\ \ \				
	3.2 Materials Management Plan	5 wks 10	Tue 4/1/14		• •				
	3.6 Stormwater Management Plan	5 wks 19FF	Tue 4/1/14 Tue 4/1/14						
	3.7 Noise and Dust Control Plan	5 wks 19FF	Tue 4/1/14						
	3.5 Equipment Decontamination Plan	5 wks 19FF	Tue 4/1/14 Tue 4/1/14						
	3.6 Quality Assurance Project Plan (update)	4 wks	Mon 2/24/14	Fri 3/21/14					
	3.7 Data Management Plan	3 wks 23	Mon 3/24/14	Fri 4/11/14					
5	5.7 Data Management Flan	3 WK5 23	101011 3/24/14	1711 4/ 11/ 14					
6	4 Off-Property Soil Replacement (OU-5): DESIGN TRACK #1	90.8 wks	Tue 4/30/13	Fri 1/23/15					
	4.1 Initial Identification of Remediation & Evaluation Parcels	0 wks	Tue 4/30/13		X				
	4.2 Obtain Access Agreements for Surveys & Sampling	23 wks	Thu 5/2/13	I I					
_	4.3 Community Information Session	0 wks	Thu 5/30/13						
	4.4 Sampling for Refinement of Remediation Parcels (July 2013)	18.8 wks	Fri 7/19/13		*				
	Sumpling for Remember of Remodulation Furces (Suly 2010)	10.0 1110	1117713713	1100 11/2//10	Y				
1 4.	4.1 Proposal for Sampling (July 2013)	0 wks	Fri 7/19/13	Fri 7/19/13	♦				
2 4.	4.2 EPA Approval of Sampling	0 wks	Mon 7/22/13	Mon 7/22/13	•				
3 4.	4.3 Sample Collection	2 days	Tue 7/30/13	Wed 7/31/13	<u>L</u>				
4.	4.4 Analysis and Validation	6.2 wks 33	Thu 8/1/13	Thu 9/12/13	<u> </u>				
4.	4.5 Data Summary Report	10.8 wks 34	Fri 9/13/13	Wed 11/27/13					
4.	4.6 Beazer Submit Data Summary and Fingerprinting Report	0 wks 35		Wed 11/27/13					
	4.5 Pilot Home Soil Replacement	10.3 wks	Thu 9/26/13	I I					
3 4.	-	1.8 wks	Thu 9/26/13						
4.		3 wks 38	Wed 10/9/13						
	5.3 Borrow Sampling	2 wks		Wed 10/23/13					
4.		2 wks 40	Thu 10/24/13	I I					
	5.5 Pilot Plan	6 wks	Thu 9/26/13						
	5.6 Submit Pilot Plan	0 wks 42,41	Wed 11/6/13						
4.		1 wk 43	Thu 11/7/13						
4.		0 wks 44		Wed 11/13/13	•				
	5.9 Permitting	2 wks 45FF		Wed 11/13/13					
4.5	· · · · · · · · · · · · · · · · · · ·	3.3 wks 46,45	Thu 11/14/13						
	4.6 Blocks A-I Remediation Design	42.4 wks	Mon 9/16/13						
4.		12.4 wks 35	Thu 11/28/13						
4.		0 wks 49	Fri 2/21/14	I I					
	Review and Comment	0.8 wks 50	Mon 2/24/14						
	Surveying & Interviews	34 wks	Mon 9/16/13	I I					
3 4.	6.5 Parcel Designs & Remediation Agreements	28 wks	Mon 12/2/13	Fri 6/13/14				,	

				GAINESV	ILLE REMEDIAL DESIGN
ID WBS	Task Name	Duration Predecessors	Start	Finish	2013 2014 2015 2016 2017 2018
54 4.6.6	Final Design and RAWP	19.6 wks	Fri 2/21/14	Tue 7/8/14	tr 4 Qtr 1 Qtr 2 Qtr 3 Qtr 4 Qtr 3
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		
62 4.6.6.8	Final Design and RAWP Approval: Block C	0 wks 61	Wed 4/30/14		
63 4.6.6.9	Submit Pre-Final Designs & RAWP: Block B	0 wks 61FF+3.1 wks		Thu 5/22/14	
64 4.6.6.10	Final Design and RAWP Approval: Block B	0.6 wks 63 0 wks 63FF+3 wks	Thu 5/22/14	Tue 5/27/14	
65 4.6.6.11 66 4.6.6.12	Submit Pre-Final Designs & RAWP: Block A Final Design and RAWP Approval: Block A	0.6 wks 65	Thu 6/12/14 Thu 6/12/14	Thu 6/12/14 Tue 6/17/14	
67 4.6.6.13	Submit Pre-Final Designs & RAWP: Block I	0.6 wks 65FF+3.5 wks	Mon 7/7/14	Mon 7/7/14	
68 4.6.6.14	Final Design and RAWP Approval: Block I	0.2 wks 67	Tue 7/8/14	Tue 7/8/14	
69 4.7	Sampling for Refinement of Remediation Parcels (Feb 2014)	24.8 wks	Wed 2/19/14		
	camping to the month of the mon				
70 4.7.1	Beazer & EPA Sampling	0.2 wks	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		
73 4.7.4	Beazer Submit Report Addendum	0 wks 72	Thu 7/31/14	Thu 7/31/14	
74 4.7.5	<u>·</u>	0 wks 73	Tue 8/12/14	Tue 8/12/14	
75 4.8 76 4.8.1	Blocks J & K Remediation Design Access Agreements for Design	12.2 wks 2 wks	Mon 6/2/14 Mon 6/2/14	Mon 8/25/14 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 26)	2 days	Fri 10/25/13		
86 4.9.2	Community Meeting (Jan 18 2014)	2 days	Fri 1/17/14		
87 4.9.3	, ,	0 wks	Tue 2/18/14		
88 4.10	· · · · · · · · · · · · · · · · · · ·	39 wks	Mon 2/17/14	Fri 11/14/14	
89 4.11	Pre-Final Inspection	0 wks 88	Tue 11/18/14		
90 4.12	Prepare Implementation Report Submit Implementation Report	10 wks 88 0 wks 90	Mon 11/17/14 Fri 1/23/15	Fri 1/23/15 Fri 1/23/15	
91 4.13	Submit implementation Report	0 WKS 90	FII 1/23/13	FII 1/23/13	
93 5	Cutoff Wall and Stormwater Controls: DESIGN TRACK #2	58 wks	Wed 12/17/14	Tue 1/26/16	
94 5.1	Pre-Design Work Plan	7 wks 15	Wed 12/17/14	Tue 2/3/15	
95 5.2		0 wks 94	Tue 2/3/15		
96 5.3		3 wks 95	Wed 2/4/15		
97 5.4	EPA Approval of Pre-Design Work Plan	0 wks 96	Tue 2/24/15		
98 5.5		13 wks 97	Wed 2/25/15		
99 5.6		5 wks 98	Wed 5/27/15		
100 5.7	, <u> </u>	0 wks 99	Tue 6/30/15		
101 5.8 102 5.9		4 wks 100 5 wks 101	Wed 7/1/15 Wed 7/29/15		
102 5.9 103 5.10	<u>~</u>	5 wks 101	Wed 7/29/15 Wed 9/2/15		
103 5.10		5 wks 102	Wed 9/2/15 Wed 10/7/15		
105 5.12		3 wks 103	Wed 10/7/15		
106 5.13		0 wks 105	Tue 12/1/15		
107 5.14		8 wks 106	Wed 12/2/15		
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Project File: RD Date: Tue 12/16	Schedule 20141216 Red text used for currer 1/14	nt tasks Task		Milestone •	Summary ————————————————————————————————————

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Project File: RD Schedule 20141216 Date: Tue 12/16/14

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