Sylvester, Kathy M - DNR

From:

Ken Ebbott <kebbott@fehr-graham.com>

Sent:

Tuesday, April 07, 2015 5:14 PM

To:

Sylvester, Kathy M - DNR

Cc:

Gallo, Donald P. DPG (5395); Williams, Michelle L. MLW (5397)

Subject:

Imogene's Cleaning Center Full Scale RA Plan

Kathy,

A link was sent a few minutes ago for the report on the Imogenes site. A hard copy has also been sent in the mail of the "Pilot Test and the Plan for Full Scale Remediation". Roger has been sent a hard copy of the report as well, I don't have his email address.

As you'll read, the Pilot test was successful, we injected oxidizer in the groundwater under the active drycleaning machine, and watched levels of contaminants increase in places and decrease in others. The increase was due to flushing when displaced by the injected solution. The decreases were due to oxidation, in the deeper groundwater at PZ-9, where it dropped two orders of magnitude.

The plan for full scale injection remains the same, but I'd like to go with a low and slow injection method (3 to 5 gpm, low pressures) as opposed to the pilot test method of fast and furious. I'm also proposing we reassess after the full scale injection is complete, and not proceed with outdoor excavation, instead opting for a second phase of oxidizer injection, if needed.

I've redistributed the dollars from the previous approval to reflect all injection and no dig - no more money has been requested, just shifting of existing dollars. Change Order # 6 is in the submittal to show the revised budget distribution.

Look over the information and let me know what you think. If it seems fine, I'll get you a signed copy of Change Order # 6 indicating Roger and I approve, and then you can send your OK letter. As always, call with questions.

Thanks,

Ken

KENDRICK EBBOTT I P.G. Branch Manager Fehr Graham - Engineering & Environmental

1237 Pilgrim Road Plymouth, WI 53073 P: 920.892.2444 C: 920-980-4231 F: 920.892.2620 www.fehr-graham.com

CHANGE ORDER # 6

PREPARED April 6, 2015 BRRTS # 02-60-552193, DERF SITE

Imogene's Cleaning Center, 1502 Saemann Avenue, Sheboygan, WI Facility FG PROJECT #14-1125

This change order is submitted to shift budget amounts among previously approved tasks. No new funds are being requested.

		Additional		Revised Total
	Prior Approved	Requested		Project Budget
TOTALS SUMMARY				
PREVIOUSLY APPROVED BUDGET Vapor Mitigation Syste	\$7,900.00	0		\$7,900.00
PREVIOUSLY APPROVED BUDGET Site Investigation	\$17,190.50	0		\$17,190.50
PREVIOUSLY APPROVED BUDGET Site Remediation	\$183,105.00	\$0		\$183,105.00
TOTAL PROJECT				

Change Order Details: Shifted Funds

	Prior Approved	Shifted Funds	Revised Budget	REASON
Professional Services				
Task 5: Pilot Test Report and Full Scale Method	\$3,700	\$1,495	\$5,195	RA shift in approach Water Removal
Task 6: Full Scale Injection : Water Handling	\$0	\$2,000	\$2,000	Advantageous
Task 6: Full Scale Injection	\$8,490	\$5,000	\$13,490	Potential two phases
Task 7: Post Inj Monitoring	\$2,522	\$1,000	\$3,522	Potential two phases
Task 8: Inj Doc Reporting	\$2,315	\$2,000	\$4,315	Potential two phases
Task 9 Excvn Exterior Contam Soil	\$4,815	-\$4,815	\$0	RA shift in approach
Task 10 ZVI Addition to Backfill	\$9,680	-\$9,680	\$0	RA shift in approach Potential two phases
Task 11; GW Monitoring - Four Events	\$4,264	\$1,000	\$5,264	
Task 12; RA Doc Report	\$3,030	\$1,000	\$4,030	RA shift in approach
Task 13: GW Monitor Reports	\$4,110	\$1,000	\$5,110	RA shift in approach
Commodity Services				
•			-	Water Removal
Task 6: Full Scale Injection : Water Handling	\$0	\$6,000	\$6,000	Advantageous
Task 6: Full Scale Injection	\$73,700	\$21,764	\$95,464	Potential two phases
•	i i i			Inside Geoprobe Addl
Task 7: Post Inj Monitoring	\$2,321	\$650	\$2,971	Needed
Task 9 Excyn Exterior Contam Soil Contractor	\$17,300	-\$17,300	\$0	RA shift in approach
Task 9 Excyn Exterior Contam Soll Landfill	\$11,010	-\$11,010	\$0	RA shift in approach
Task 9 Excvn Exterior Contam Soil Lab	\$104	-\$104	\$0	RA shift in approach
NET AMOUNT OF CHANGE ORDER		\$0		

Prepared By:		4/6/2015
	Kendrick Ebbott Fehr Graham	Date
Approved By:		
	Ms. Kathy Sylvester WDNR	Date
Authorized By:		4/6/2015
,	Mr. Roger Dulmes Imogene's Cleaning Center	Date
The terms and condition	ns of the original contact dated January 12, 20 apply to these additional services.	009 for this project