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Brown & Root Environmental

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TO: DISTRIBUTION

Reference: CLEAN Contract No. N62467-94-D-0088
Contract Task Order No. 0003
Naval Industrial Reserve Ordnance Plant, Fridley, Minnesota
OU3 Remedial Investigation, Feasibility Study,
Proposed Plan, and Record of Decision

Subject: Response to Fridley-MPCA July 29, 1997 Comments

Enclosed are the responses to the Fridley-MPCA comments letter dated July 29, 1997. This letter and following responses are to be included as an integral part of the Work Plans (QAPP) as these comments are not directly addressable through change pages.

Please contact me at (412) 921-8216 if you have any questions.

Very truly yours,

Mark Sladic, P.E.
Task Order Manager

TS/lcj

Enclosure

Distribution:

Mr. Scott Glass, SOUTHNAVFACENGCOM (2 copies)
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c: Ms. Debra Evans-Ripley, SOUTHDIV (w/o enclosure)
Project File 6966

General Modification:

Since groundwater samples are collected the same day as soil samples from any direct-push location, it is impossible to know whether COCs are present in the soil at the time the groundwater sample is collected. As COC concentrations in soil are not known, the field crew cannot determine whether the corresponding groundwater sample should then be labeled for low-level or standard analysis. Therefore, Navy previously proposed continuing phase I by collecting groundwater samples to be analyzed for standard detection limits, and for all phase II permanent wells to be sampled for low-level analyses. Navy believes that MPCA has previously agreed to this compromise.

Laucks Laboratory Volatiles Standard Operating Procedures:

1. Appendix II of Laucks' SOP LTL-8260 and Section 9.3.2 of the QAPP both state that the information noted in the comment will be included in the data packages.

2. It is not reasonable to state that the CCVS may only be rerun once if the criteria for a CCVS analysis is not met. A failed CCVS does not necessarily indicate that a new initial calibration is required. Several causes for failed CCVSs could exist. Some possible examples are as follows: the CCVS standard may need to be remade; a power fluctuation could have occurred causing the purge to be incomplete; a line could be plugged causing ineffective purging; an incorrect standard may have been used. It may take more than one run to determine what the problem is and what corrective action is required. If no other problems are apparent, then a new initial calibration is run.

3. Data reporting will be based on CLP requirements. Flagging of analytical results by the laboratory is only required for blank contaminants and for values reported at concentrations below the quantitation limit. The laboratory will note failed blank spike recoveries in the case narrative.

4. Laboratory data package summaries are not typically provided with RI reports since the result will be hundreds of additional pages of text. However, if regulators desire, copies of any submittals received by the Navy can be provided. The RI report already typically does have data validation letters included, and this may be suitable.

5. Data reporting will be based on CLP requirements. Flagging of analytical results by the laboratory is only required for blank contaminants and for values reported at concentrations below the quantitation limit. The laboratory will note failed surrogate recoveries in the case narrative.

Brown and Root Mobile Laboratory Standard Operating Procedures:

1. The compounds noted in this comment are not site-specific chemicals of concern and are not included in the target compound list (Table 1 of SOP SF-1.6 and Table 1-3 of the QAPP). Therefore, it is not necessary for them to be included in the calibration mixture.

2. A new initial calibration sequence has been prepared. A copy of the table displaying the new sequence is attached.

3. Reported results for compounds which exceed the 25 percent criterion will be flagged as estimated, "J".

4. Limits of 50 to 150 percent are reasonable based on a soil matrix. These limits are similar in range to limits provided in SW-846 and CLP methods.

5. A separate table will be prepared for blank results. All sample results reported at concentrations less than or equal to five times the maximum respective concentrations detected in all blanks analyzed during the 10-day shift will be qualified with a "U".

6. Limits of 50 to 150 percent are reasonable based on a soil matrix. These limits are similar in range to limits provided in SW-846 and CLP methods. In addition, the requirements of SOP SF-1.6 (Section 5.9.4) exceed typical method requirements by specifying that re-analysis be performed when poor matrix spike recoveries occur.

7. Limits of 50 to 150 percent are reasonable based on a soil matrix.

8. Preservation in methanol is not consistent with the mobile lab GC method in use. Fixed base laboratory samples are not required to be preserved in methanol, either. Current US EPA guidance does not require sample preservation by methanol addition.

CALIBRATION CONCENTRATONS
BEGINNING AUGUST 4, 1997

MIX IN STOCK CONC	COMPOUND	INTERMEDIATE SOLUTION		INITCAL 1			INITCAL 2			INITCAL 3			INITCAL 4			INITCAL 5			CONTCAL		
		uL. Ing. in 10 mL	INTER. CONC.	E/P	uL. Ing. in 50 mL	FINAL CONC	E/P	uL. Ing. in 50 mL	FINAL CONC	E/P	uL. Ing. in 50 mL	FINAL CONC	E/P	uL. Ing. in 50 mL	FINAL CONC	E/P	uL. Ing. in 50 mL	FINAL CONC	E/P	uL. Ing. in 50 mL	FINAL CONC
1	tetrachloroethylene	500	5	E/P	5	0.5	E/P	10	1	E/P	20	2	E/P	40	4	E/P	80	8	E/P	20	2
100	trichloroethylene		ug/mL	E/P		0.5	E/P		1	E/P		2	E/P		4	E/P		8	E/P		2
ug/mL	chlorobenzene			E/P		0.5	E/P		1	E/P		2	E/P		4	E/P		8	E/P		2
	chloroform			E		0.5	E		1	E		2	E		4	E		8	E		2
	1,1,1-trichloroethene			E		0.5	E		1	E		2	E		4	E		8	E		2
	bromoform			E		0.5	E		1	E		2	E		4	E		8	E		2
	1,1,2-trichloroethane			E		0.5	E		1	E		2	E		4	E		8	E		2
	1,1,2,2-tetrachloroethane			E		0.5	E		1	E		2	E		4	E		8	E		2
	carbon tetrachloride			E		0.05	E		0.1	E		0.2	E		0.4	E		0.8	E		0.2
2	1,1-dichloroethylene	500	25	E	5	2.5	E	10	5	E	30	15	E	90	45	E	180	90	E	30	15
500	cis-1,2-dichloroethylene		ug/mL	P		2.5	P		5	P		15	P		45	P		90	P		15
ug/mL	trans-1,2-dichloroethylene			P		2.5	P		5	P		15	P		45	P		90	P		15
3	1,2-dichloroehtene	500	25	E	5	2.5	E	20	10	E	40	20	E	100	50	E	200	100	E	40	20
500	1,1-dichloroethane		ug/mL	E		2.5	E		10	E		20	E		50	E		100	E		20
ug/mL	methylene chloride			E		2.5	E		10	E		20	E		50	E		100	E		20
4	acetone	100	100	P	2.5	5	P	5	10	P	20	40	P	40	80	P	50	100	P	20	40
10,000	2-butanone		ug/mL	P		5	P		10	P		40	P		80	P		100	P		40
ug/mL	2-hexanone			P		5	P		10	P		40	P		80	P		100	P		40
	4-methyl-2-pentanone			P		5	P		10	P		40	P		80	P		100	P		40
	carbon disulfide			P		5	P		10	P		40	P		80	P		100	P		40
5	benzene	500	50	P	1	1	P	5	5	P	10	10	P	15	15	P	25	25	P	10	10
1,000	toluene		ug/mL	P		1	P		5	P		10	P		15	P		25	P		10
ug/mL	ethyl benzene			P		1	P		5	P		10	P		15	P		25	P		10
	o-xylene#			P		1	P		5	P		10	P		15	P		25	P		10
	m-xylene#			P		1	P		5	P		10	P		15	P		25	P		10
	p-xylene#			P		1	P		5	P		10	P		15	P		25	P		10
	styrene#			P		1	P		5	P		10	P		15	P		25	P		10
6	bromomethane	500	50	E	25	25	E	50	50	E	75	75	E	100	100	E	150	150	E	75	75
1,000	chloromethane		ug/mL	E		25	E		50	E		75	E		100	E		150	E		75
ug/mL	chloroethene			E		25	E		50	E		75	E		100	E		150	E		75
	vinyl chloride			E		25	E		50	E		75	E		100	E		150	E		75

^ ALL INTERMEDIATE SOLUTIONS ARE PREPARED IN PURGE-AND-TRAP GRADE METHANOL TO A TOTAL VOLUME OF 10mL.
ALL WORKING STANDARDS ARE PREPARED IN HPLC GRADE WATER FOR A FINAL VOLUMEOF 50 mL. FINAL CONCENTRATIONS ARE IN ug/L.
E ELECTRON CAPTURE DETECTOR
P PHOTOIONIZATION DETECTOR
M&P-XYLENES AND O-ZYLENE & STRYENE COELUTE