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February 2, 2007

Mr. Jerry Wickham, PG Hazardous Materials Specialist Alameda County Health Care Services Environmental Health Services 1131 Harbor Bay Parkway, Suite 250 Alameda, CA 94502-6577

Subject:

Fuel Leak Case No. RO0000212,

Holland Oil, 16301 East 14th Street, San Leandro, CA

Dear Mr. Wickham;

Please find attached Clearwater Group's (Clearwater) proposed soil and groundwater sample analytical plan, which has been prepared according to Clearwater's June 5, 2006, Workplan Addendum and December 5, 2006, Proposed Workplan Modification for the above site.

We are submitting two versions of this plan:

- The first version follows the scope of the Workplan Addendum and the Proposed Workplan Modification, which you have approved. It includes eighteen (18) soil sample locations. Each location will be sampled at 2.0 feet below ground surface (ft bgs), 5.0 ft bgs, the capillary fringe and the bottom of the borehole. Each of these samples will be analyzed by EPA Method 8015M for TPH as stoddard solvent, diesel and kerosene; by EPA Method 8260B for TPH-g, BTEX and MTBE; by EPA Method 1664 for TOG; by EPA Method 8270 for SVOCs and by EPA Method 8082 for PCBs. The sample from each borehole with the highest TPH-g concentration will be analyzed by EPA Method 6010 for Lead and by EPA 8260B for 1,2 DCE and EDB.
- The second version splits the same table into two phases. This proposed splitting of the work into phases follows from two issues: the prospective future uses of the site and the cost of the sample analyses (estimated to be around \$67,000 for the suite of samples requested in the first version).

Both the School District (adjacent down-gradient property) and the Hayward Area Recreation District (adjacent cross-gradient property) have approached the owner/trustees of the property regarding the future recreational and educational uses of the property. This would involve potential daily exposures of the highest risk segment of the population.

Clearwater is concerned that the financial resources required to remediate this site are limited and should be taken into consideration in planning this event. The interior of the property has been identified as substantially impacted. Spending limited resources on further characterization of the close subsurface would not be cost effective. Clearwater recommends spending the limited resources on defining the vertical and lateral extent of contamination in need of remediation. The first phase of investigation would be comprised of perimeter sampling to determine the extent of contamination.

In the event that the future use of the property includes recreational use by children, the second phase of investigation should reflect the probable need to excavate the source areas. For purposes of economy, the sampling plan should be modified to pre-profile the known contaminated soil for disposal at a permitted landfill. The sample collection frequency and analyses of the disposal characterization samples will be determined by the accepting landfill.

We think this would be a good juncture at which to initiate this discussion and we look forward to your response.

Sincerely,

Robert L. Nelson, PG, CEG Senior Geologist

Cc: Ms. Ann Marie Holland

Mr. Edward Martins, Attorney

Attached: Table 1; Version 1, Soil and Groundwater Sample Plan

Table 2; Version 2, Phased Soil and Groundwater Sample Plan

	Tab	le 1;	Version 1, Soi	and G	rou	ndwa	ater S	Samp	ling	Plan			e.		
	1		th,					An	alytical	Metho	d į				
	o		de l	6010	El	PA 801	15M		E	PA 8260)B		1664	8270	8082
Boring #	Reason	Media	Sample Depth, bgs	Lead	TPH -SS	b-H4T	TPH-k	1,2 DCE	EDB	TPH-g	ВТЕХ	MTBE	T0G	SVOCs	PCBs
		S	2.0		Х	Х	Х			Х	Х	Х	Х	Х	х
		S	5.0		Х	X	х			Х	Х	Х	х	Х	X
	Find ND line to east near	S	Capillary Fringe		Х	Х	х			Х	X.	Х			
SC45	tanks T7 and T8	GW	WaterTable		х	Х	x			х	Х	Х	×	Х	
		s	TPH-g Highest Value	x				х	x						
		S	End (12 ft)		Х	Х	х			Х	Х	Х	Х	Х	х
		S	2.0		Х	χ	х			χ.	Х	Х	Х	Х	Х
		Ş	5.0		Χ	Х	х			Х	Х	Х	х	Х	х
	Find ND line to east of Bldg. C	S	Capillary Fringe		Х	χ	х			Х	X	X			
SC46		GW	WaterTable		Х	Х	х			Х	Х	Х	х	х	
		s	TPH-g Highest Value	х				х	х						
		S	End (12 ft)		Х	Х	х	-		Х	Х	Х	Х	Х	Х
		Ş	2.0		Х	Х	х			х	Х	Х	×	Х	Х
		S	5.0		Х	X.	Х			Х	Х	Х	х	х	Х
	Find ND line southeast of	S	Capillary Fringe		Х	Х	Х			Х	Х	Х			
SC47	monitoring well MW3	GW	WaterTable		Х	Х	х			Х	Х	Х	Х	Х	
	Thomasing war wive	s	TPH-g Highest Value	×				х	х		:				
		S	End (12 ft)		х	Х	×	1	1	х	Х	х	×	х	×
		S	2.0		х	Х	Х			х	х	х	х	х	х
		S	5.0		х	х	х			х	Х	Х	×	×	Х
	Find ND line southeast of	S	Capillary Fringe		х	х	х			х	Х	х			
SC48	MW2	GW	WaterTable		Х	Х	·x			Х	Х	X	_ X	х	
	101002	s	TPH-g Highest Value	×				х	х					:	
		S	End (12 ft)		Х	Х	Х			х	Х	х	Х	Х	Х
		S	2.0		Х	Х	х			х	Х	х	Х	х	х

	Tab	le 1;	Version 1, Soil	and G	rou	ndwa	ater S	Samp	ling	Plan					
			ith,					An	alytical	Method	d				
	on		Depth,	6010	E	PA 801	I5M		Ε	PA 8260	В		1664	8270	8082
Boring #	Reason	Media	Sample I bgs	Lead	TPH -SS	b-H4T	TPH-k	1,2 DCE	EDB	TPH-g	втех	MTBE	T0G	SVOCs	PCBs
		S	5.0		Х	Х	Х			х	х	Х	Х	Х	Х
	Find ND line north of	S	Capillary Fringe		Х	Χ	Х			Х	х	Х	}		
SC49	SC14; Dan's Auto Repair	GW	WaterTable		Х	Х	x			х	Х	Х	Х	х	
	Bldg.	s	TPH-g Highest Value	x				х	x						
		S	End (12 ft)		Х	Χ	х			х	Х	Х	Х	Х	х
		S	2.0		Х	Х	х			х	X	Х	Х	х	Х
	Cind ND IIn allen	S	5.0		Х	Х	х			Х	х	Х	Х	Х	Х
	Find ND line along property boundary; 15ft.	S	Capillary Fringe		Х	Х	X			Х	Х	Х			
SC50	West of MW1; 35ft north	GW	WaterTable		х	Х	х			х	Х	Х	х	х	
	of MW4	S	TPH-g Highest Value	х				х	х						
		S	End (12 ft)		Х	Х	Х			Х	Х	Х	Х	Х	Х
		S	2.0		Х	Х	X			Х	Х	Х	Х	Х	х
	Characterize contained	S	5.0		Х	Х	х			Х	Х	Х	Х	Х	х
SC51	soil north of Bldg. A	GW	WaterTable		Х	Х	х			х	×	Х	х	х	ŀ
5031	(warehouse), southeast of MW4	s	TPH-g Highest Value	х				х	х						
		S	End (6-8 ft)		х	Х	х			х	х	х	х	х	х
		Ş	2.0		Х	Х	Х			х	Х	Х	Х	х	х
		S	5.0		Х	Х	х			х	Х	Х	Х	Х	Х
	Characterize contained	S	Capillary Fringe		Х	Х	х			х	Х	Х			
SC52	soil north of Bldg. A	GW	WaterTable		Х	Х	Х			х	Х	Х	Х	Х	
5502	(warehouse), southeast	S	Other		х	Х	Х			Х	Х	Х	х	Х	Х
	of MW4	s	TPH-g Highest Value	x				х	х						
		S	End (40 ft)		х	Х	Х			х	Х	Х	х	х	Х
		S	2.0		Х	Х	х			Х	Х	Х	х	Х	х
		S	5.0		Х	Х	Х			Х	Х	Х	χ	Х	х

	Tab	le 1;	Version 1, Soil	and G	rou	ndw	ater S	Samp	ling	Plan					
		•	Ť.					An	alytical	Metho	d				-
	l o		Ge	6010	E	PA 801	15M		E	PA 8260)B		1664	8270	8082
Boring #	Reason	Media	Sample Depth, bgs	Lead	TPH -SS	р-ндт	TPH⊀	1,2 DCE	EDB	TPH-g	втех	MTBE	T0G	SVOCs	PCBs
	Characterize the soil and	S	Capillary Fringe		Х	Х	Х			Х	X	Х			
SC53	groundwater in the	GW	WaterTable		х	Х	х			Х	Х	Х	Х	Х	
	corner, north of MW5	s	TPH-g Highest Value	x				х	х	:					
		S	End (12 ft)		Х	Х	Х			х	х	Х	х	х	х
		S	2.0		Х	Х	Х			Х	Х	Х	Х	Х	Х
		Ş	5.0		Х	X	х			х	Х	Х	Х	Х	Х
	Find ND line northwest of	S	Capillary Fringe		Х	Х	х			Х	Х	Х			
SC54	MW4	GW	WaterTable		Х	Х	Х			Х	Х	Х	Х	Х	
	MVV4	s	TPH-g Highest Value	х				х	х						
		S	End (12 ft)		х	Х	Х			х	х	Х	Х	X	Х
		S	2.0		Х	Х	X			Х	X	Х	Х	Х	Х
		S	5.0		х	Х	х			Х	Х	Х	Х	х	Х
	Find ND line northwest of	S	Capillary Fringe		Х	Х	х			х	Х	Х			
SC55	MW5	GW	WaterTable		Х	Х	Х			х	Х	Х	Х	Х	
	MWO	s	TPH-g Highest Value	х				х	х						
		S	End (12 ft)		х	Х	Х			х	х	х	х	х	Х
		S	2.0		Х	Х	х			х	х	х	Х	Х	Х
		S	5.0		х	Х	х			х	х	х	Х	Х	Х
		S	Capillary Fringe	,	Х	Х	х			х	х	Х			
SC56	Characterize contaminant concentration in middle of	GW	WaterTable		Х	Х	х			х	х	Х	х	х	
3030	plume	S	Other		Х	Х	Х			х	х	X	Х	Х	X
	pianie	s	TPH-g Highest Value	х				×	х						
		S	End (15 ft)		х	х	х	,		х	Х	х	х	х	Х
		S	2.0		Х	Х	Х			Х	Х	Х	Х	х	Х
		S	5.0		Х	Х	×			х	х	Х	х	х	х

	Tab	le 1;	Version 1, Soil	and G	rou	ndwa	ater S	Samp	ling	Plan					
			ith,					An	alytical	Metho	d				
	l 6		jeg j	6010	E	PA 801	15M		E	PA 8260)B		1664	8270	8082
Boring #	Reason	Media		Lead	TPH -SS	TPH-d	TPH-k	1,2 DCE	EDB	TPH-9	втех	MTBE	TOG	SVOCs	PCBs
	Chara-ta-i-a anatai-a-at	S	Capillary Fringe		Х	Х	Х			Х	Х	Х			
SC57	Characterize contaminant concentration in middle of	GW	WaterTable		Х	Х	Х			Х	X	Х	х	X	
3 037	plume	S	Other		Х	Х	х			х	Х	Х	Х	Х	Х
	pionio	S	TPH-g Highest Value	×				X	×						
		S	End (15 ft)		х	X	Х			Х	Х	Х	Х	Х	Х
		S	2.0		х	Х	х			х	х	х	Х	х	Х
	Find ND downgradient	S	5.0		х	Х	х			Х	Х	Х	х	x	Х
	line; Characterize water	S	Capillary Fringe		Х	Х	х			х	х	X			
SC58	concentration in downgradient direction	G₩	WaterTable		Х	Χ.	х			х	Х	Х	Х	Х	
		s	TPH-g Highest Value	х				х	х						
		S	End (15 ft)		х	Х	Х			х	Х	х	х	Х	Х
		S	2.0		х	Х	х			Х	Х	Х	Х	х	Х
	Find ND downgradient	S	5.0		Х	Х	х			Х	Х	Х	Х	Х	Х
	line; Characterize	S	Capillary Fringe		Х	Х	х			х	X	Х		j	
SC59	contaminant	GW	WaterTable		х	Х	х			х	Х	Х	Х	х	
	concentration on western edge of property	S	TPH-g Highest Value	х				х	х						
		S	End (15 ft)		х	Х	Х			х	Х	Х	х	Х	х
		S	2.0		Х	Х	х			Х	Х	. Х	Х	х	Х
	Find ND downgradient	S	5.0		х	Χ	Х			х	Х	Х	Х	х	Х
	line; Characterize	S	Capillary Fringe		х	Х	Х			х	х	Х			
SC60	contaminant	GW	WaterTable		x	х	х			х	Х	х	×	X	<u> </u>
	concentration south of SC 55	S	TPH-g Highest Value	x				х	х						
		S	End (15 ft)		Х	Х	Х			X	Х	Х	Х	Х	Х
		S	2.0		х	Х	Х			Х	Х	Х	Х	Х	Х
		S	5.0		Х	Х	×			X	Х	Х	×	х	X

		Table 1;	Version 1, Soil	and G	rou	ndwa	ater S	Samp	ling	Plan					
			ith,					An	alytical	Metho	d				
	5		j j	6010	EPA 8015M			EPA 8260B						8270	8082
Boring #	Reason	Media	Sample Depth, bgs	Lead	TPH -SS	Р-Н-Д	тРН-к	1,2 DCE	EDB	TPH-g	ВТЕХ	MTBE	T0G	SVOCs	PCBs
		S	Capillary Fringe		Х	Х	Х			Х	Х	Х			
SC61		GW	WaterTable		Х	Х	X		Ţ	Х	Х	Х	Х	х	
5551		S	Other		Х	Х	х			х	Х	Х	Х	х	Х
		s	TPH-g Highest Value	x				X	х						
		S	End (40 ft)		х	Х	Χ,			х	х	Х	Х	х	х
		S	2.0		Х	Х	Х			х	Х	Х	Х	×	Х
		S	5.0		Х	Χ	Х			Х	Х	Х	Х	Х	х
		S	Capillary Fringe		Х	Х	Х			х	х	Х			
SC62		GW	WaterTable		Х	Х	X			Х	Х	Х	х	Х	
300E		S	Other	• "	Х	Х	Х			х	Х	Х	Х	Х	Х
			TPH-g Highest Value	х				х	х						
1		S	End (40 ft)		Х	Х	Х			х	Х	Х	х		Х

	Table 2	2; Ve	ersion 2, Phase	d Soil a	and (Grou	ındw	ater	Samp	ole Pl	an				
			th,					An	alytical	Metho	d				
	0		Jep	6010	E	PA 801	5M		E	PA 8260)B		1664	8270	8082
Boring #	Reason	Media	Sample Depth, bgs	Lead	TPH -SS	TPH-d	TPH-k	1,2 DCE	EDB	TPH-g	ВТЕХ	MTBE	106	SVOCs	PCBs
Perimeter	Samples Phase 1														
		S	2.0		Х	Х	Х			х	Х	Х	Х	Х	Х
		S	5.0		Х	Х	х			Х	Х	Х	Х	Χ	х
	Find ND line to east near	S	Capillary Fringe		Х	X	X			Х	Х	Х			
SC45	tanks T7 and T8	GW	WaterTable		Х	χ	х			Х	Х	Х	х	Х	
		S	TPH-g Highest Value	x				х	х						
		S	End (12 ft)		Х	Х	х			Х	Х	Х	Х	Х	Х
		S	2.0		Х	Х	Х			х	Х	Х	×	Х	Х
		S	5.0		Х	Х	Х			Х	Х	Х	Х	Х	х
	Find ND line to east of	S	Capillary Fringe		Х	Х	Х			Х	х	Х			
SC46	Find ND line to east of Bidg. C	GW	WaterTable		Х	Χ	Х			Х	Х	Х	Х	Х	
	Diag. 0	s	TPH-g Highest Value	x				х	х						
		S	End (12 ft)		Х	Х	Х			Х	Х	Х	Х	Х	х
		S	2.0		х	Х	х			Х	Х	Х	×	Х	х
		S	5.0		Х	Х	Х			х	Х	X.	х	Х	х
	Find ND line southeast of	S	Capillary Fringe		Х	Х	Х			х	Х	Х			
SC47		GW	WaterTable	-	Х	Х	Х			Х	Х	Х	х	Х	
	monitoring well MW3	s	TPH-g Highest Value	х				х	х						
		S	End (12 ft)		х	Х	Х			×	х	Х	Х	Х	х
		S	2.0		Х	Х	Х			х	Х	Х	Х	Х	х
		S	5.0		Х	Х	Х			Х	Х	Х	Х	Х	×
	Find ND line southeast of	S	Capillary Fringe		х	Х	Х			X	Х	Х			
SC48	MW2	GW	WaterTable		Х	Х	Х			х	Х	Х	Х	Х	
	2	s	TPH-g Highest Value	x				×	х						
		S	End (12 ft)		Х	Х	х			х	Х	Х	Х	Х	×

	Table 2	2; V e	ersion 2, Phase	d Soil a	and	Grou	ındw	ater	Samp	ole Pl	an				
			ţħ,					An	alytical	Metho	d				
	l o] eb	6010	E	PA 801	5M		Е	PA 8260)B		1664	8270	8082
Boring #	Reason	Media	Sample Depth, bgs	Lead	TPH -SS	TPH⊸d	TPH-k	1,2 DCE	EDB	TPH-g	втех	MTBE	T0G	SVOCs	PCBs
		S	2.0		Х	Х	Х			х	Х	Х	Х	Х	х
		S	5.0		Х	Х	Х			Х	Х	Х	Х	Χ	Х
	Find ND line north of	S	Capillary Fringe		Х	Х	х			Х	Х	Х			
SC49	SC14; Dan's Auto Repair	GW	WaterTable		X	Х	X			х	Х	Х	Х	×	
	Bldg.	s	TPH-g Highest Value	x				х	х						
		\$	End (12 ft)		Х	Х	×			х	х	Х	Х	Х	х
		S	2.0		Х	Х	х			Х	х	Х	х	Х	х
		S	5.0		Х	Х	х			Х	Х	Х	х	Х	х
	Characterize the soil and	S	Capillary Fringe		Х	Х	х			Х	Х	Х			
SC53	groundwater in the corner, north of MW5	GW	WaterTable		Х	Х	х			х	Х	Х	х	Х	
		s	TPH-g Highest Value	х				х	х					i	
		S	End (12 ft)		Х	Х	Х			Х	Х	Х	Х	Х	×
		S	2.0		Х	Х	х			Х	х	Х	×	χ	Х
		S	5.0		Х	Х	х			Х	Х	Х	х	Х	х
	Find ND line northwest of	S	Capillary Fringe		Х	Х	х			х	Х	Х			
SC54	MW4	GW	WaterTable		х	Х	х			Х	Х	Х	х	Х	:
	IVIYY	s	TPH-g Highest Value	х				x	х						
		S	End (12 ft)		Х	Х	х			х	х	Х	х	Х	х
		S	2.0		х	х	Х			х	Х	х	Х	Х	х
		S	5.0		х	Х	Х			х	Х	Х	Х	Х	×
	Find ND IIn a made of	S	Capillary Fringe		х	Х	Х			х	Х	Х	 		
SC55	Find ND line northwest of	GW	WaterTable		х	х	Х			Х	Х	х	х	Х	
	MW5	S	TPH-g Highest Value	x				×	×						
		S	End (12 ft)	-	х	х	Х			х	Х	х	х	Х	×

	Table 2	2; V e	ersion 2, Phase	d Soil a	and (Grou	ındw	ater	Samı	ole Pl	an				
			íth,					An	alytical	Metho	d	•			
	e e			6010	El	PA 801	5M	·	E	PA 8260)B		1664	8270	8082
Boring #	Reason	Media		Lead	TPH -SS	TPH-d	TPH-k	1,2 DCE	EDB	TPH-g	втех	MTBE	T0G	SVOCs	PCBs
		S	2.0		Х	Х	Х			Х	Х	Х	Х	Х	Х
	Find ND downgradient	S	5.0		Х	Х	х			Х	х	Х	Х	Х	х
SC59	line; Characterize	S	Capillary Fringe		Х	Х	Х			х	Х	Х			
	contaminant concentration on western edge of property	GW	WaterTable		Х	Х	х			Х	Х	X	х	х	
		S	TPH-g Highest Value	x				х	x						
		S	End (15 ft)		Х	Х	Х			х	х	Х	Х	Х	х
	'	S	2.0		Х	Х	Х			Х	Х	X	Х	Х	Х
	Find ND downgradient	S	5.0		Х	X	Х			Х	Х	Х	х	Х	Х
	line; Characterize	S	Capillary Fringe		. Х	Х	Х			Х	Х	Х			
SC60	contaminant	GW	WaterTable		Х	Х	Х			х	х	Х	Х	Х	
	concentration south of SC 55	S	TPH-g Highest Value	х				х	х						
		S	End (15 ft)		Х	Х	Х			Х	Х	Х	Х	х	Х