FID 2682650

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709 Gillette St., Ste #3♦ La Crosse, WI 54603 ♦ 1-800-552-2932 ♦ Fax (608) 781-8893 Email: rona@metcohq.com ♦www.metcohq.com

December 19, 2013

Shawn Wenzel
Wisconsin Department of Natural Resources
2514 Morse Street
Janesville, WI 53545

Subject: Chapman Oil Bulk Plant – Site Investigation cost cap exceedence request (>$20K).
BRRTS #: 02-68-215749, PECFA #: 53119-9998-14

Dear Mr. Wenzel,

On behalf of the Responsible Party, a cost estimate (using Usual & Customary schedule of charges) is being submitted for additional site investigation work being required by WDNR at the subject property located at 314 Wisconsin Street in Eagle, Wisconsin. This is required due to COMM 47 rule changes (Comm 47.337(2)) which requires state approval to exceed the cap, meaning any costs incurred above $20,000 after April 30, 2006, will not be eligible for reimbursement unless previously approved.

As of today's date, $12,265.05 has been spent of the $20,000 Site Investigation Cap, which included workplan and Geoprobe Project (10 borings ranging from 20 to 32 feet below ground surface (bgs) with 60 soil samples and 5 groundwater samples collected) with field and/or laboratory analysis (GRO, DRO, VOC, PAH, PVOC's, Naphthalene, and Lead). The cost estimate to complete the site investigation includes: Drilling Project with three soil borings to approximately 37 feet bgs and convert to three monitoring wells (to approximately 37 feet bgs with water table estimated at 30 feet bgs) with soils screened for geologic description and field analysis only, during the drilling project conduct five hand samples in the five areas of known direct contact exceedences for laboratory analysis (PAH's), two rounds of groundwater monitoring from all three site wells for laboratory analysis (VOC/PVOC, PAH, Dissolved Lead, Nitrate/Nitrite, Sulfate, Dissolved Iron and Manganese), hydraulic conductivity testing, surveying, waste disposal, and completion of the Soil and Groundwater Investigation Report. The cost estimate for the above work scope is as follows:

Drilling Project (w/installation of 3 MW's)		$ 7,671.30
Hand Sampling (5 borings to 1.5 feet bgs)		$ 428.50
Groundwater Monitoring (two events)		$ 1,571.90
Laboratory Analysis		$ 1,489.90
Surveying		$ 1,227.50
Hydraulic Conductivity Testing		$ 789.10
Waste Disposal		$ 1,514.80
Soil and Groundwater Investigation Report		$ 4,728.90
Change Order Request		$ 363.60
	Total	$19,785.50

METCO is requesting a cost cap exceedence in the amount of **$12,050.55** (proposed additional

investigation costs ($19,785.50) minus the remaining investigation budget ($7,734.95)). This will bring the total site investigation costs to $32,050.55.

Upon state approval of the proposed workscope and budget, METCO will proceed with the site investigation.

Attached is a updated site layout map with proposed monitoring well and hand auger boring locations, data tables, and draft standardized invoice form for the above workscope as required.

Should you have any questions, comments, or recommendations please contact me at our La Crosse office (608) 781-8879 or email at jasonp@metcohq.com.

Sincerely,

Jason T. Powell
Staff Scientist

Attachements

c: Rob Chapman – Client
Gregory Moll - WDNR

SITE LAYOUT MAP

CHAPMAN OIL BULK PLANT

METCO
709 GILLETTE ST, STE 3
LA CROSSE, WI 54603
Tel: (608) 781-8879
Fax: (608) 781-8893

EAGLE, WISCONSIN

DRAWN BY: ED
DATE: 03/06/2013

NOTE: INFORMATION BASED ON AVAILABLE DATA, ACTUAL CONDITIONS MAY DIFFER

SCALE:
1 INCH = 25 FEET
0 25

- ● = GEOPROBE BORING LOCATION
- X = PROPOSED HAND AUGER BORING LOCATION
- ⊕ = PROPOSED MONITORING WELL LOCATION
- = PROPERTY BOUNDARY
- = WATER LINE
- = STORM SEWER
- = BURIED PHONE/FIBER OPTIC
- = OVERHEAD ELECTRIC

RESIDENTIAL
111 E WAUKESHA ROAD

RESIDENTIAL
105 E WAUKESHA ROAD

RESIDENTIAL
316 WISCONSIN STREET

CHAPMAN OIL
314 WISCONSIN STREET
BRRTS # 03-68-215749

FORMER SHED

FORMER AST SYSTEMS

FORMER LOADING RACK

BUILDING FOUNDATION

TREES & BRUSH

EARTHERN BERM

GRASS

GRAVEL

ASPHALT DRIVEWAY

CENTURY LINK

G-1 G-2 G-3 G-4 G-5 G-6 G-7 G-8 G-9 G-10

PARTRIDGE STREET

WISCONSIN STREET

WISCONSIN & SOUTHERN RAILROAD

A.2. Pre-remedial Soil Analytical Table
Chapman Oil BRRTS# 02-68-215749

Sample ID	Depth (feet)	Date	PID	Lead (ppm)	DRO (ppm)	GRO (ppm)	Benzene (ppm)	Ethyl Benzene (ppm)	MTBE (ppm)	Naph-thalene (ppm)	Toluene (ppm)	1,2,4-Trime-thylbenzene (ppm)	1,3,5-Trime-thylbenzene (ppm)	Xylene (Total) (ppm)	Other VOC's (ppm)	PVOC & PAH COMBINED: Individual Exceedance Count	PVOC & PAH COMBINED: Hazard Index	PVOC & PAH COMBINED: Cumulative Cancer Risk
G-1-1	3.5	08/12/13	0	<1.5	<10	<10	<0.025	<0.025	<0.025	<0.0221	15.6	0.080	<0.025	0.17	NS	0	3.93E-03	
G-1-2	8.0	08/12/13	0	NOT SAMPLED											NS			
G-1-3	12.0	08/12/13	0	NOT SAMPLED											NS			
G-1-4	16.0	08/12/13	0	<1.5	339	<10	<0.092	<0.010	<0.030	<0.114	<0.020	<0.026	<0.026	<0.099	SEE VOC SPREAD-SHEET			
G-1-5	20.0	08/12/13	0	NOT SAMPLED											NS			
G-1-6	24.0	08/12/13	0	NS	<10	<10	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.075	NS			
G-1-7	28.0	08/12/13	0	NOT SAMPLED											NS			
G-1-8	32.0	08/12/13	0	NS	<10	<10	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.075	NS			
G-2-1	3.5	08/12/13	0	11.3	<10	<10	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.075	NS	1	2.63E-002	2.90E-006
G-2-2	8.0	08/12/13	0	NOT SAMPLED											NS			
G-2-3	12.0	08/12/13	0	NOT SAMPLED											NS			
G-2-4	16.0	08/12/13	0	NS	<10	<10	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.075	NS			
G-2-5	20.0	08/12/13	0	NOT SAMPLED											NS			
G-2-6	24.0	08/12/13	0	NS	<10	<10	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.075	NS			
G-3-1	3.5	08/12/13	0	31.6	<10	<10	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.075	NS	0	7.90E-002	
G-3-2	8.0	08/12/13	0	NOT SAMPLED											NS			
G-3-3	12.0	08/12/13	0	NOT SAMPLED											NS			
G-3-4	16.0	08/12/13	0	NS	<10	<10	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.075	NS			
G-3-5	20.0	08/12/13	0	NOT SAMPLED											NS			
G-3-6	24.0	08/12/13	0	NS	<10	<10	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.075	NS			
G-3-7	28.0	08/12/13	0	NOT SAMPLED											NS			
G-4-1	3.5	08/12/13	0	88.2	<10	<10	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.075	NS	0	2.21E-01	
G-4-2	8.0	08/12/13	0	NOT SAMPLED											NS			
G-4-3	12.0	08/12/13	0	NOT SAMPLED											NS			
G-4-4	16.0	08/12/13	0	NS	<10	<10	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.075	NS			
G-4-5	20.0	08/12/13	0	NOT SAMPLED											NS			
G-4-6	24.0	08/12/13	0	NS	<10	<10	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.075	NS			
G-4-7	28.0	08/12/13	0	NOT SAMPLED											NS			
G-5-1	3.5	08/13/13	0	32.2	<10	<10	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.075	NS	1	8.05E-002	1.50E-006
G-5-2	8.0	08/13/13	0	NOT SAMPLED											NS			
G-5-3	12.0	08/13/13	0	NOT SAMPLED											NS			
G-5-4	16.0	08/13/13	0	NS	11	<10	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.075	NS			
G-5-5	20.0	08/13/13	0	NOT SAMPLED											NS			
G-5-6	24.0	08/13/13	0	NS	<10	<10	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.075	NS			
G-5-7	28.0	08/13/13	0	NOT SAMPLED											NS			
G-6-1	3.5	08/13/13	0	145	<10	<10	0.050	0.115	<0.025	<22.1	0.370	0.760	0.400	14.4	NS	2	3.85E-01	1.25-05
G-6-2	8.0	08/13/13	0	NOT SAMPLED											NS			
G-6-3	12.0	08/13/13	0	NS	<10	<10	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.075	NS			
G-6-4	16.0	08/13/13	0	NOT SAMPLED											NS			
G-6-5	20.0	08/13/13	0	NS	<10	<10	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.075	NS			
G-7-1	3.5	08/13/13	0	196	<10	<10	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.075	NS	1	4.90E-001	1.80E-006
G-7-2	8.0	08/13/13	0	NOT SAMPLED											NS			
G-7-3	12.0	08/13/13	0	NS	<10	<10	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.075	NS			
G-7-4	16.0	08/13/13	0	NOT SAMPLED											NS			
G-7-5	20.0	08/13/13	0	NS	<10	<10	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.075	NS			
G-8-1	3.5	08/13/13	0	66.2	<10	<10	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.075	NS	0	1.66E-001	
G-8-2	8.0	08/13/13	0	NOT SAMPLED											NS			
G-8-3	12.0	08/13/13	0	NS	<10	<10	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.075	NS			
G-8-4	16.0	08/13/13	0	NOT SAMPLED											NS			
G-8-5	20.0	08/13/13	0	NS	<10	<10	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.075	NS			
G-9-1	3.5	08/13/13	0	2.9	<10	<10	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.075	NS	0	7.25E-003	0.00E+000
G-9-2	8.0	08/13/13	0	NOT SAMPLED											NS			
G-9-3	12.0	08/13/13	0	NS	<10	<10	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.075	NS			
G-9-4	16.0	08/13/13	0	NOT SAMPLED											NS			
G-9-5	20.0	08/13/13	0	NS	<10	<10	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.075	NS			
G-10-1	3.5	08/13/13	0	26.0	<10	<10	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.075	NS	1	6.51E-002	2.50E-006
G-10-2	8.0	08/13/13	0	NOT SAMPLED											NS			
G-10-3	12.0	08/13/13	0	NS	<10	<10	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.075	NS			
G-10-4	16.0	08/13/13	0	NOT SAMPLED											NS			
G-10-5	20.0	08/13/13	0	NS	<10	<10	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.075	NS			
Groundwater RCL				27	-	-	0.00512	1.57	0.027	0.659	1.11	1.38		3.94	-			
Direct Contact RCL				400	-	-	1.46	7.47	59.4	5.16	818	89.8	182	258	-		1.00E+03	1.00E-05
Soil Saturation Concentration (C-sat) *				-	-	-	1820*	480*	8870*	-	818*	219*	182*	258*	-		-	-

Bold = Groundwater RCL Exceedance
Bold & Underline =Direct Contact RCL Exceedance
Bold & Asterix * = C-sat Exceedance
NS = Not Sampled
(ppm) = parts per million
DRO = Diesel Range Organics
GRO = Gasoline Range Organics
PID = Photoionization Detector
VOC's = Volatile Organic Compounds

A.2. Pre-remedial Soil Analytical Table
(PAH)
Chapman Oil BRRTS# 02-68-215749

Sample	Depth (feet)	Date	Acenaph-thene (ppm)	Acenaph-thylene (ppm)	Anthracene (ppm)	Benzo(a) anthracene (ppm)	Benzo(a) pyrene (ppm)	Benzo(b) fluoranthene (ppm)	Benzo(g,h,i) perylene (ppm)	Benzo(k) fluoranthene (ppm)	Chrysene (ppm)	Dibenzo(a,h) anthracene (ppm)	Fluoranthene (ppm)	Fluorene (ppm)	Indeno(1,2,3-cd) pyrene (ppm)	1-Methyl-naphthalene (ppm)	2-Methyl-naphthalene (ppm)	Naph-thalene (ppm)	Phenan-threne (ppm)	Pyrene (ppm)	PVOC & PAH COMBINED Individual Exceedance Count	Hazard Index	Cumulative Cancer Risk
G-1-1	3.5	08/12/13	<0.0218	<0.0192	<0.0195	<0.0229	<0.0174	<0.0196	<0.0227	<0.0216	<0.0181	<0.0223	<0.0211	<0.0222	<0.0239	<0.0207	0.0206	<0.0221	<0.0224	<0.0231	0	3.93E-03	
G-1-2	8.0	08/12/13	NOT SAMPLED																				
G-1-3	12.0	08/12/13	NOT SAMPLED																				
G-1-4	16.0	08/12/13	NOT SAMPLED																				
G-1-5	20.0	08/12/13	NOT SAMPLED																				
G-1-6	24.0	08/12/13	NOT SAMPLED																				
G-1-7	28.0	08/12/13	NOT SAMPLED																				
G-1-8	32.0	08/12/13	NOT SAMPLED																				
G-2-1	3.5	08/12/13	<0.0218	<0.0192	<0.0195	0.032	0.0311	0.057	0.0298	<0.0216	0.041	<0.0223	0.035	<0.0222	0.0245	<0.0207	<0.0206	<0.0221	<0.0224	0.047	1	2.83E-002	2.99E-006
G-2-2	8.0	08/12/13	NOT SAMPLED																				
G-2-3	12.0	08/12/13	NOT SAMPLED																				
G-2-4	16.0	08/12/13	NOT SAMPLED																				
G-2-5	20.0	08/12/13	NOT SAMPLED																				
G-2-6	24.0	08/12/13	NOT SAMPLED																				
G-3-1	3.5	08/12/13	<21.8	<19.2	0.0294	<0.0229	<0.0174	<0.0196	<0.0227	<0.0216	<0.0181	<0.0223	<0.0211	<0.0222	<0.0239	<0.0207	<0.0206	<0.0221	<0.0224	<0.0231	0	7.90E-002	
G-3-2	8.0	08/12/13	NOT SAMPLED																				
G-3-3	12.0	08/12/13	NOT SAMPLED																				
G-3-4	16.0	08/12/13	NOT SAMPLED																				
G-3-5	20.0	08/12/13	NOT SAMPLED																				
G-3-6	24.0	08/12/13	NOT SAMPLED																				
G-3-7	28.0	08/12/13	NOT SAMPLED																				
G-4-1	3.5	08/12/13	<0.0218	<0.0192	<0.0195	<0.0229	<0.0174	<0.0196	<0.0227	<0.0216	<0.0181	<0.0223	<0.0211	<0.0222	<0.0239	<0.0207	<0.0206	<0.0221	<0.0224	<0.0231	0	2.21E-01	
G-4-2	8.0	08/12/13	NOT SAMPLED																				
G-4-3	12.0	08/12/13	NOT SAMPLED																				
G-4-4	16.0	08/12/13	NOT SAMPLED																				
G-4-5	20.0	08/12/13	NOT SAMPLED																				
G-4-6	24.0	08/12/13	NOT SAMPLED																				
G-4-7	28.0	08/12/13	NOT SAMPLED																				
G-5-1	3.5	08/13/13	<0.0218	<0.0192	<0.0195	<0.0229	0.0188	0.033	0.0284	<0.0216	0.0242	<0.0223	0.0293	<0.0222	<0.0239	<0.0207	<0.0206	<0.0221	<0.0224	0.0282	1	8.05E-002	1.50E-006
G-5-2	8.0	08/13/13	NOT SAMPLED																				
G-5-3	12.0	08/13/13	NOT SAMPLED																				
G-5-4	16.0	08/13/13	NOT SAMPLED																				
G-5-5	20.0	08/13/13	NOT SAMPLED																				
G-5-6	24.0	08/13/13	NOT SAMPLED																				
G-5-7	28.0	08/13/13	NOT SAMPLED																				
G-6-1	3.5	08/13/13	<0.0218	<0.0192	<0.0195	0.105	0.138	0.225	0.086	0.079	0.129	<0.0223	0.129	<0.0222	0.073	<0.0207	0.0289	<0.0221	0.047	0.131	2	3.88E-01	1.2E-05
G-6-2	8.0	08/13/13	NOT SAMPLED																				
G-6-3	12.0	08/13/13	NOT SAMPLED																				
G-6-4	16.0	08/13/13	NOT SAMPLED																				
G-6-5	20.0	08/13/13	NOT SAMPLED																				
G-7-1	3.5	08/13/13	<0.0218	<0.0192	<0.0195	<0.0229	0.0237	0.0247	0.033	<0.0216	0.0206	<0.0223	<0.0211	<0.0222	<0.0239	<0.0207	<0.0206	<0.0221	<0.0224	<0.0231	1	4.90E-001	1.60E-005
G-7-2	8.0	08/13/13	NOT SAMPLED																				
G-7-3	12.0	08/13/13	NOT SAMPLED																				
G-7-4	16.0	08/13/13	NOT SAMPLED																				
G-7-5	20.0	08/13/13	NOT SAMPLED																				
G-8-1	3.5	08/13/13	<0.0218	<0.0192	<0.0195	<0.0229	<0.0174	<0.0196	<0.0227	<0.0216	<0.0181	<0.0223	<0.0211	<0.0222	<0.0239	<0.0207	<0.0206	<0.0221	<0.0224	<0.0231	0	1.66E-001	
G-8-2	8.0	08/13/13	NOT SAMPLED																				
G-8-3	12.0	08/13/13	NOT SAMPLED																				
G-8-4	16.0	08/13/13	NOT SAMPLED																				
G-8-5	20.0	08/13/13	NOT SAMPLED																				
G-9-1	3.5	08/13/13	<0.0218	<0.0192	<0.0195	<0.0229	<0.0174	<0.0196	<0.0227	<0.0216	<0.0181	<0.0223	<0.0211	<0.0222	<0.0239	<0.0207	<0.0206	<0.0221	<0.0224	<0.0231	0	7.25E-003	
G-9-2	8.0	08/13/13	NOT SAMPLED																				
G-9-3	12.0	08/13/13	NOT SAMPLED																				
G-9-4	16.0	08/13/13	NOT SAMPLED																				
G-9-5	20.0	08/13/13	NOT SAMPLED																				
G-10-1	3.5	08/13/13	<0.0218	<0.0192	<0.0195	0.0284	0.0285	0.049	0.0269	0.0248	0.036	<0.0223	0.058	<0.0222	<0.0239	<0.0207	<0.0206	<0.0221	<0.0224	0.049	1	6.51E-002	2.93E-006
G-10-2	8.0	08/13/13	NOT SAMPLED																				
G-10-3	12.0	08/13/13	NOT SAMPLED																				
G-10-4	16.0	08/13/13	NOT SAMPLED																				
G-10-5	20.0	08/13/13	NOT SAMPLED																				
Groundwater RCL			---	---	197	---	0.47	0.48	---	---	0.145	---	68.8	14.8	---	---	---	0.559	---	94.5			
Direct Contact RCL			3449	---	17200	0.15	0.01	0.15	---	1.48	15.6	0.01	2293	2293	0.15	15.6	229	5.15	---	1720		1.00E+00	1.00E-05
Soil Saturation Concentration (C-sat)*					---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---			

Bold = Groundwater RCL Exceedance
Bold & Underline =Direct Contact RCL Exceedance
Bold & Asterisc * = C-sat Exceedance
NS = Not Sampled
(ppm) = parts per million
DRO = Diesel Range Organics
GRO = Gasoline Range Organics
PID = Photoionization Detector
VOC's = Volatile Organic Compounds

A.2. Pre-remedial Soil Analytical Table
Chapman Oil BRRTS# 02-68-215749

Sampling Conducted on August 12, 2013

VOC's		Bold = Groundwater RCL	Underline & Bold = Direct Contact RCL	Asteric * & Bold =Soil Saturation (C-sat) RCL
Sample ID#	G-1-4			
Sample Depth/ft.	16			
Solids Percent	83.8			
Lead/ppm	<1.5	27	400	= =
Diesel Range Organics/ppm	339	= =	= =	= =
Gasoline Range Organics/ppm	< 10	= =	= =	= =
Benzene/ppm	<0.0092	0.00512	1.49	1820
Bromobenzene/ppm	<0.013	= =	354	= =
Bromodichloromethane/ppm	<0.027	0.000326	0.39	= =
Bromoform/ppm	<0.030	0.00233	61.6	= =
tert-Butylbenzene/ppm	<0.020	= =	183	183
sec-Butylbenzene/ppm	<0.041	= =	145	145
n-Butylbenzene/ppm	<0.026	= =	108	108
Carbon Tetrachloride/ppm	<0.025	0.00388	0.85	= =
Chlorobenzene/ppm	<0.016	= =	392	= =
Chloroethane/ppm	<0.042	0.227	= =	= =
Chloroform/ppm	<0.049	0.0033	0.42	= =
Chloromethane/ppm	<0.181	0.0155	171	= =
2-Chlorotoluene/ppm	<0.016	= =	= =	= =
4-Chlorotoluene/ppm	<0.014	= =	= =	= =
1,2-Dibromo-3-chloropropane/ppm	<0.048	0.000173	0.01	= =
Dibromochloromethane/ppm	<0.014	0.032	0.93	= =
1,4-Dichlorobenzene/ppm	<0.033	0.144	3.48	= =
1,3-Dichlorobenzene/ppm	<0.030	1.15	297	297
1,2-Dichlorobenzene/ppm	<0.038	1.17	376	376
Dichlorodifluoromethane/ppm	<0.057	3.08	135	= =
1,2-Dichloroethane/ppm	<0.036	0.00284	0.61	540
1,1-Dichloroethane/ppm	<0.019	0.484	4.72	= =
1,1-Dichloroethene/ppm	<0.021	0.00502	342	= =
cis-1,2-Dichloroethene/ppm	<0.024	0.0412	156	= =
trans-1,2-Dichloroethene/ppm	<0.029	0.0588	211	= =
1,2-Dichloropropane/ppm	<0.0095	0.00332	1.33	= =
2,2-Dichloropropane/ppm	<0.046	= =	527	527
1,3-Dichloropropane/ppm	<0.021	= =	1490	1490
Di-Isopropyl ether/ppm	<0.011	= =	2260	2260
EDB (1,2-Dibromoethane)/ppm	<0.020	0.0000282	0.05	= =
Ethylbenzene/ppm	<0.010	1.57	7.47	480
Hexachlorobutadiene/ppm	<0.095	= =	6.23	= =
Isopropylbenzene/ppm	<0.025	= =	= =	= =
p-Isopropyltoluene/ppm	<0.031	= =	162	162
Methylene chloride/ppm	<0.057	0.00256	60.7	= =
Methyl tert-butyl ether (MTBE)/ppm	<0.030	0.027	59.4	8870
Naphthalene/ppm	<0.114	0.659	5.15	= =
n-Propylbenzene/ppm	<0.024	= =	= =	= =
1,1,2,2-Tetrachloroethane/ppm	<0.012	0.000156	0.75	= =
1,1,1,2-Tetrachloroethane/ppm	<0.023	0.0533	2.59	= =
Tetrachloroethene (PCE)/ppm	<0.049	0.00454	30.7	= =
Toluene/ppm	<0.020	1.11	818	818
1,2,4-Trichlorobenzene/ppm	<0.079	0.408	22.1	= =
1,2,3-Trichlorobenzene/ppm	<0.129	= =	48.9	= =
1,1,1-Trichloroethane/ppm	<0.038	0.14	= =	= =
1,1,2-Trichloroethane/ppm	<0.023	0.00324	1.48	= =
Trichloroethene (TCE)/ppm	<0.028	0.00358	0.64	= =
Trichlorofluoromethane/ppm	<0.086	= =	1120	= =
1,2,4-Trimethylbenzene/ppm	<0.026	1.38	89.8	219
1,3,5-Trimethylbenzene/ppm	<0.026		182	182
Vinyl Chloride/ppm	<0.021	0.000138	0.07	= =
m&p-Xylene/ppm	<0.068	3.94	258	258
o-Xylene/ppm	<0.031			

NS = not sampled
(ppm) = parts per billion
DRO = Diesel Range Organics
GRO = Gasoline Range Organics
= = No Exceedences

NM = Not Measured
(ppm) = parts per million

Geoprobe Groundwater Analytical Results Summary
Chapman Oil BRRTS# 02-68-215749

Sample ID	Date	Benzene (ppb)	Ethyl Benzene (ppb)	MTBE (ppb)	Naph-thalene (ppb)	Toluene (ppb)	Trimethyl-benzenes (ppb)	Xylene (Total) (ppb)
G-1-W	08/12/13	*0.68*	1.02	<0.37	<1.2	2.17	1.12-1.98	<2.41
G-2-W	08/12/13	0.43	<0.82	<0.37	<1.2	1.39	<1.69	<2.41
G-3-W	08/12/13	*0.58*	<0.82	<0.37	<1.2	1.69	0.93-3.77	<2.41
G-4-W	08/12/13	*0.71*	<0.82	<0.37	<1.2	1.78	<1.69	<2.41
G-5-W	08/12/13	0.49	<0.82	<0.37	<1.2	1.27	<1.69	<2.41
ENFORCE MENT STANDARD ES = Bold		**5**	**700**	**60**	**100**	**800**	**480**	**2000**
PREVENTIVE ACTION LIMIT PAL = Italics		*0.5*	*140*	*12*	*10*	*160*	*96*	*400*

NS = Not Sampled

(ppb) = parts per billion (ppm) = parts per million

DRO = Diesel Range Organics

GRO = Gasoline Range Organics

Usual and Customary Standardized Invoice #14
July 2013 - December 2013

RR-952A

PECFA #: 53119-9998-14
BRRT's #: 02-68-215749
Site Name: Chapman Oil Bulk Plant
Site Address:

Vendor Name:
Invoice #:
Invoice Date:
Check #:

U&C Total $19,785.50
Variance to U&C Total $-
Grand Total $19,785.50

TASK	TASK DESCRIPTION	SERVICES	ACTIVITY CODE	ACTIVITY REFERENCE CODE DESCRIPTION	UNIT	MAX UNIT COST	UNITS	TOTAL MAX
1	GW Sampling		GS05	Sample Collection	Well	$69.00	6	$414.00
1	GW Sampling		GS10	Incremental Sample Collection (natural attenuation)	Well	$45.40	3	$136.20
1	GW Sampling		GS15	Incremental Sample Collection (cadmium & lead)	Well	$25.00	6	$150.00
1	GW Sampling		GS25	Primary Mob/Demob	Site	$598.20	1	$598.20
4	Waste Disposal	Consultant	WD05	Consultant Coordination	Site	$130.60	1	$130.60
4	Waste Disposal	Commodity	WD10	GW Sample and/or Purge	Drum	$40.10	2	$80.20
4	Waste Disposal	Commodity	WD15	Drill Cuttings	Drum	$103.00	10	$1,030.00
4	Waste Disposal	Commodity	WD25	Primary Mob/Demob	Site	$274.00	1	$274.00
10	Initial Site Survey	Consultant	IS05	Coordination of Initial Site Survey (features + well elevations)	Survey	$111.60	1	$111.60
10	Initial Site Survey	Commodity	IS15	Initial Survey	Survey	$1,115.90	1	$1,115.90
13.a	Drilling In Unconsolidated Soils - With Soil Sampling	Consultant	DR05	0 - 25 ft bgs	Ft	$5.10	75	$382.50
13.a	Drilling In Unconsolidated Soils - With Soil Sampling	Consultant	DR10	26 - 50 ft bgs	Ft	$5.40	36	$194.40
13.a	Drilling In Unconsolidated Soils - With Soil Sampling	Consultant	DR15	51 - 75 ft bgs	Ft	$6.90		$-
13.a	Drilling In Unconsolidated Soils - With Soil Sampling	Consultant	DR20	Primary Mob/Demob	Site	$564.80	1	$564.80
13.d	Drilling In Unconsolidated Soils - With Soil Sampling	Commodity	DR45	0 - 25 ft bgs	Ft	$15.90	75	$1,192.50
13.d	Drilling In Unconsolidated Soils - With Soil Sampling	Commodity	DR50	26 - 50 ft bgs	Ft	$17.50	36	$630.00
14	Monitoring Well Installation	Consultant	MWI05	0 - 25 ft bgs	Ft	$3.70	75	$277.50
14	Monitoring Well Installation	Consultant	MWI10	26 - 75 ft bgs	Ft	$2.60	36	$93.60
14	Monitoring Well Installation	Commodity	MWI15	2 inch PVC Casing	Ft	$15.90	111	$1,764.90
14	Monitoring Well Installation	Commodity	MWI20	Well Development	Well	$140.60	3	$421.80
15	Misc. Drilling Activities & Supplies		MDT05	Drill Rig Mob/Demob	Mob/Demob	$917.50	1	$917.50
15	Misc. Drilling Activities & Supplies		MDT10	Well Cover/flushmount	Each	$193.00	3	$579.00
15	Misc. Drilling Activities & Supplies		MDT21	Drum, 55 gal. DOT steel	Each	$52.50	12	$630.00
15	Misc. Drilling Activities & Supplies		MDT45	Padlocks	Each	$7.60	3	$22.80
16	Hand Auger Boring		HA05	Hand Augering	Boring	$85.70	5	$428.50
19	Hydraulic Conductivity Testing		HCT05	Hydraulic Conductivity Testing	Well	$55.80	3	$167.40
19	Hydraulic Conductivity Testing		HCT10	Primary Mob/Demob	Site	$621.70	1	$621.70
23	Soil And GW Investigation Report		SGIR05	Soil and GW Investigation Report	Report	$4,728.90	1	$4,728.90
33	Schedule Of Laboratory Maximums	Commodity		Laboratory (see task 33 total on Lab Schedule)	Lab Schedule	Lab Schedule	39	$1,489.90
34	Consultant Incremental Mob/Demob		IMD05	Incremental Mob/Demob	Site	$273.50	1	$273.50
36	Change Order Request		COR05	Change Order Request (cost cap exceedance requests)	Change Order	$363.60	1	$363.60
Variance								
Variance								

Usual and Customary Standardized Invoice #14
July 2013 - December 2013

RR-952A

TOTAL LAB CHARGES	### TASK 33	39	### TASK 24	0	$-

MATRIX	REF CODE	REIMBURSABLE ANALYTE	UNITS	MAX COST	SAMPLES	TOTAL
AIR	A1	Benzene	SAMPLE	$42.80		$-
AIR	A2	BETX	SAMPLE	$47.10		$-
AIR	A3	GRO	SAMPLE	$43.90		$-
AIR	A4	VOC's	SAMPLE	$68.50		$-
WATER	W1	GRO/PVOC	SAMPLE	$27.80		$-
WATER	W2	PVOC	SAMPLE	$25.70	4	$102.80
WATER	W3	PVOC + 1,2 DCA	SAMPLE	$41.70		$-
WATER	W4	PVOC + Naphthalene	SAMPLE	$28.90		$-
WATER	W5	VOC	SAMPLE	$68.50	4	$274.00
WATER	W6	PAH	SAMPLE	$69.50	6	$417.00
WATER	W7	Lead	SAMPLE	$11.80	6	$70.80
WATER	W8	Cadmium	SAMPLE	$12.90		$-
WATER	W9	Hardness	SAMPLE	$11.80		$-
WATER	W10	BOD, Total	SAMPLE	$22.50		$-
WATER	W11	Nitrate	SAMPLE	$10.70	3	$32.10
WATER	W12	Total Kjeldahl	SAMPLE	$19.30		$-
WATER	W13	Ammonia	SAMPLE	$16.10		$-
WATER	W14	Sulfate	SAMPLE	$9.70	3	$29.10
WATER	W15	Iron	SAMPLE	$9.70	3	$29.10
WATER	W16	Manganese	SAMPLE	$9.70	3	$29.10
WATER	W17	Alkalinity	SAMPLE	$9.70		$-
WATER	W18	methane	SAMPLE	$43.90		$-
WATER	W19	Phosphorous	SAMPLE	$17.20		$-
WATER	W20	VOC Method 524.2	SAMPLE	$167.90		$-
WATER	W21	EDB Method 504	SAMPLE	$90.90		$-
SOILS	S1	GRO	SAMPLE	$23.60		$-
SOILS	S2	DRO	SAMPLE	$28.90		$-
SOILS	S3	GRO/PVOC	SAMPLE	$26.80		$-
SOILS	S4	PVOC	SAMPLE	$24.60		$-
SOILS	S5	PVOC + 1,2 DCA + Naphthalene	SAMPLE	$47.10		$-
SOILS	S6	PVOC + Naphthalene	SAMPLE	$34.30		$-
SOILS	S7	VOC	SAMPLE	$68.50		$-
SOILS	S8	SPLP Extraction VOC only	SAMPLE	$48.20		$-
SOILS	S9	PAH	SAMPLE	$69.50	5	$347.50
SOILS	S10	Lead	SAMPLE	$11.80		$-
SOILS	S11	Cadmium	SAMPLE	$13.90		$-
SOILS	S12	Free Liquid	SAMPLE	$10.70		$-
SOILS	S13	Flash Point	SAMPLE	$24.60		$-
SOILS	S14	Grain Size - dry	SAMPLE	$40.70		$-
SOILS	S15	Grain Size - wet	SAMPLE	$54.60		$-
SOILS	S16	Bulk Density	SAMPLE	$12.90		$-
SOILS	S17	Permeability	SAMPLE	$39.60		$-
SOILS	S18	Nitrogen as Total Kjeldahl	SAMPLE	$19.30		$-
SOILS	S19	Nitrogen as Ammonia	SAMPLE	$16.10		$-
SOILS	S20	% Organic Matter	SAMPLE	$27.80		$-
SOILS	S21	TOC as NPOC	SAMPLE	$54.60		$-
SOILS	S22	Soil Moisture Content	SAMPLE	$6.50		$-
SOILS	S23	Air Filled Porosity	SAMPLE	$24.60		$-
SOILS	S24	% Total Solids	SAMPLE	$6.50		$-
SOILS	S25	Field Capacity	SAMPLE	$26.80		$-
SOILS	S26	TCLP Lead	SAMPLE	$79.20	1	$79.20
SOILS	S27	Cation Exchange (Ca, MG, & K)	SAMPLE	$25.70		$-
SOILS	S28	TCLP Cadmium	SAMPLE	$79.20		$-
SOILS	S29	TCLP Benzene	SAMPLE	$79.20	1	$79.20
LNAPL	LFPS01	Viscosity + Density	SAMPLE	$534.60		$-
		Interfacial tension I (LNAPL/water [dyne/cm])				
		Interfacial tension II (LNAPL/air [dyne/cm])				
		Interfacial tension III (water/air) [dyne/cm])				
				TASK 33 TOTAL		$1,489.90

MAX COST	SAMPLES	TOTAL
$23.60		$-
$28.90		$-
$26.80		$-
$24.60		$-
$47.10		$-
$34.30		$-
$68.50		$-
$48.20		$-
$69.50		$-
$11.80		$-
TASK 24 TOTAL		$-