

August 3, 2010

Ms. Vickie Taddy Wisconsin Department of Natural Resources 2984 Shawano Avenue Green Bay, WI 54313-6727

Subject: USH 141 - CTH N to Menomonee River, Niagara, Wisconsin - Special Provisions,

WisDOT Project ID #9560-02-01/72

Dear Ms. Taddy:

The purpose of this letter is to provide the Wisconsin Department of Natural Resources (WDNR) with the Special Provisions for the management of contaminated soil for the USH 141 project in Niagara, Wisconsin. Attached to this letter are background information (Attachment 1) and Special Provisions (Attachment 2).

Background

The Wisconsin Department of Transportation (WisDOT) is planning to reconstruct USH 141 in Niagara, Wisconsin (see attached highway plans in the background information). The construction of USH 141 includes curb and gutter, pavement, and new underground utilities (including storm sewer).

Information reported by JT Engineering, Inc., in a Phase 1 investigation report, indicated that there were sites within the construction limits that may have impacted the soil and/or groundwater. One property was identified in the Phase 1 report and within the revised construction limits as being potential hazardous materials site within the construction corridor:

■ Jerry's 76 Automotive (1200 Roosevelt Road) Station 253+75 to 255+00 from 15 feet right of reference line to construction limits right.

A Phase 2 investigation was completed by Coleman Engineering Company at Jerry's 76 Automotive. Various PVOCs and PAHs exceeded NR 720 and suggested RCLs in soil. This report has not yet been submitted to the WDNR and summary information is attached to this letter in Attachment 1. We ask that the WDNR review the report information.

Information from previous investigations for CITGO Quik Food Mart (408 Roosevelt Road) site indicated contamination is beyond limits at Station 252+00 to 253+00 from reference line right to construction limits.

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Ms. Vickie Taddy Wisconsin Department of Natural Resources August 3, 2010 Page 2

Soil Management Plan

On the basis of the results of previous investigations petroleum-impacted soil is likely present at the following location within the USH 141 construction limits:

 Jerry's 76 Automotive (1200 Roosevelt Road) Station 253+75 to 255+00 from 15 feet right of reference line to construction limits right.

RMT recommends that the soil excavated for construction of the utilities at the above locations be field-screened by an environmental consultant during excavation to determine appropriate reuse or disposal. Most of the soil excavated from these locations is expected to have low-level impacts and to be suitable for reuse as backfill in the excavation from which it came. Excess low-level impacted soil that cannot be reused as backfill and soil identified by the environmental consultant as having petroleum contamination will require disposal at a WDNR-approved treatment and disposal facility. Petroleum contamination will be determined based on field-screening, and all soil with significant staining and elevated PID readings (for example, PID readings greater than 10 ppm) will be considered significantly impacted and managed as contaminated soil for off-site treatment and disposal.

RMT estimates approximately 100 tons of petroleum-contaminated soil will require off-site treatment and disposal, at a unit cost of approximately \$70 per ton. This quantity is based on the assumption that some of the sandy soils containing low-level contamination can be reused as backfill. The WisDOT project engineer will determine if excavated material is suitable geotechnically for reuse as backfill.

Groundwater Monitoring Wells

It is anticipated that active groundwater monitoring wells will be located within construction limits at the intersection of USH 141(Roosevelt Road) and Washington Avenue as indicated on the plans. Such monitoring wells should be protected during construction. If active groundwater monitoring wells are encountered during construction that conflict with planned construction, notify the engineer. The environmental consultant will determine if monitoring wells need to be maintained.

WDNR Concurrence Request

We ask that this report and the attached Special Provisions (Attachment 2) be reviewed by the WDNR as the Excavation Management Plan. We would appreciate the WDNR's concurrence with the Special Provisions by August 31, so that comments can be incorporated into the final Plans, Specifications, and Estimates (PS&E).

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Ms. Vickie Taddy Wisconsin Department of Natural Resources August 3, 2010 Page 3

If you have any questions, please feel free to contact me at 608-662-5274.

Sincerely,

RMT, Inc.

Daniel Haak

Project Engineer

Danil Haak

Attachments: Attachment 1 – Background Information

Attachment 2 – Special Provisions

cc: Kathie VanPrice – WisDOT (hard copy and pdf on CD)

Shar TeBeest – WisDOT (hard copy and pdf on CD)

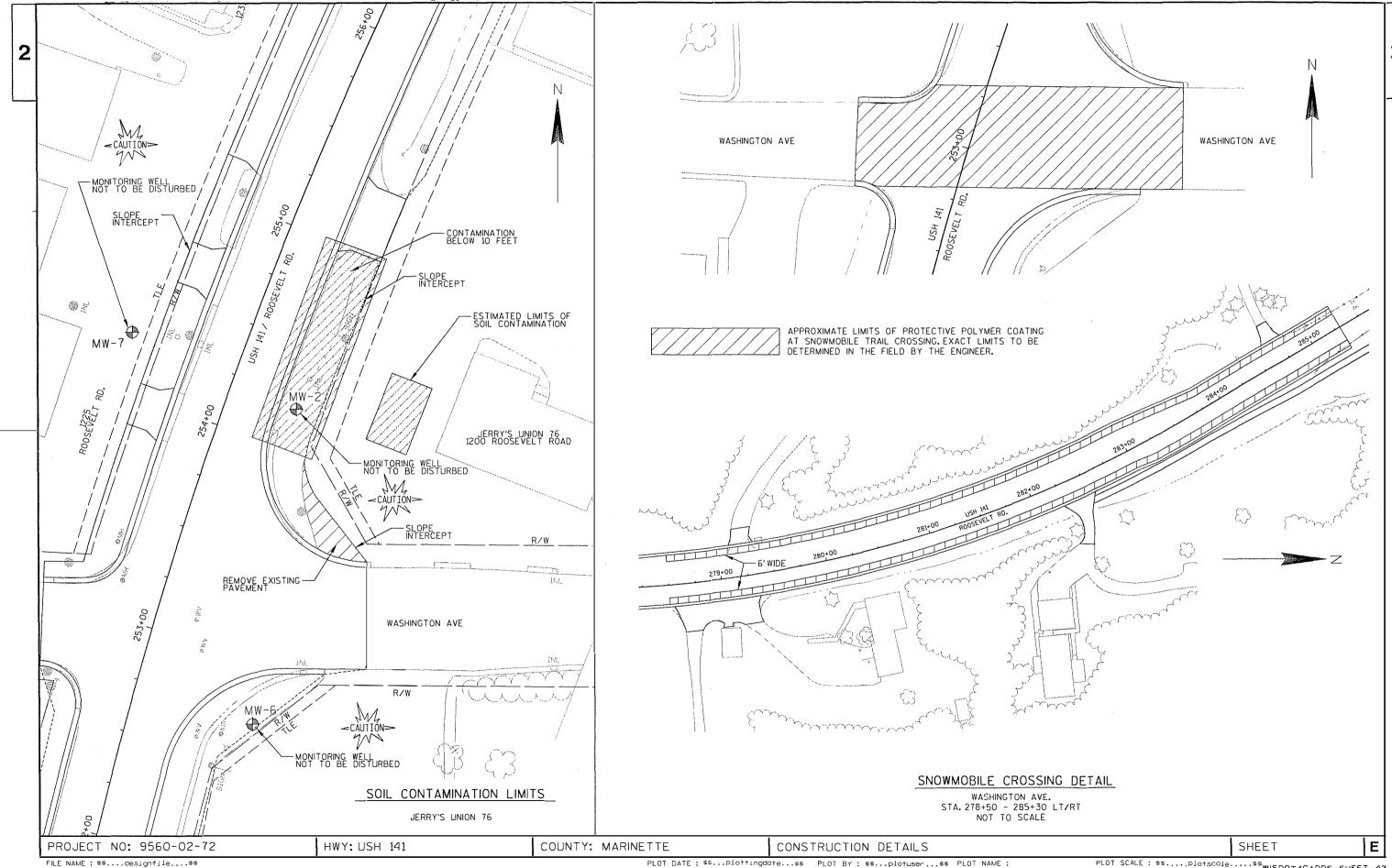
Dick Fish – RMT (pdf on CD)

Attachment 1 Background Information

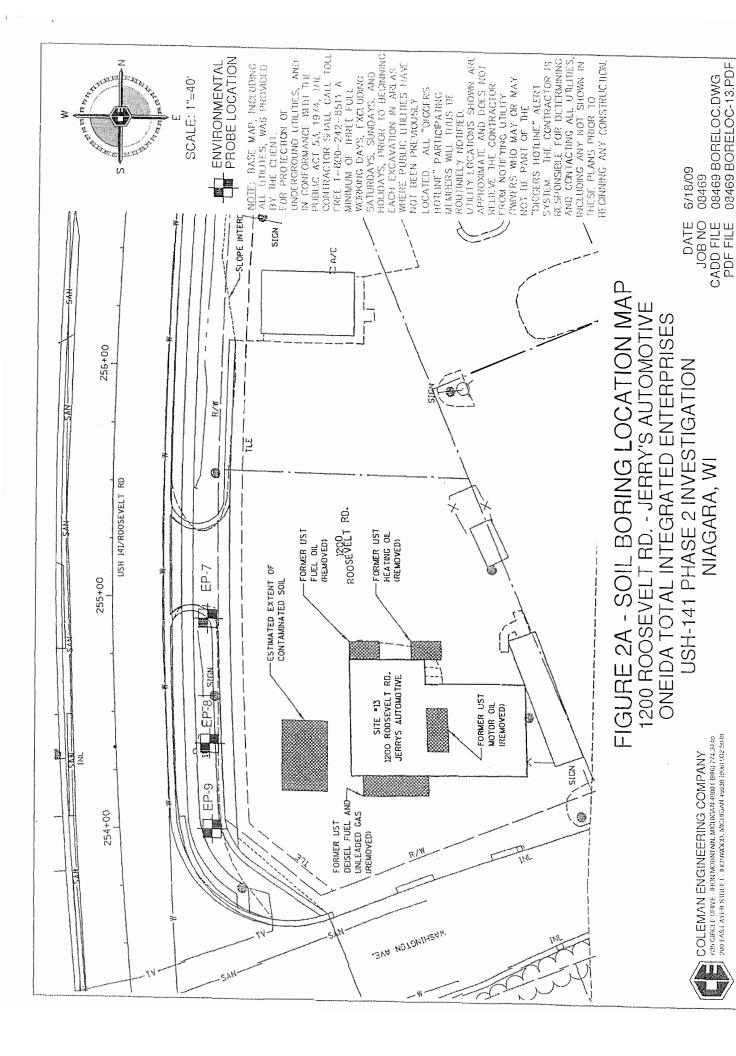
Highway Plans

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Jerry's 76 Automotive





COLEMAN ENGINEERING COMPANY
635 CIRCLE DRIVE
IRON MOUNTAIN, MICHIGAN 49801
Telephone: (906)-774-3440 Fax: (906)-774-7776

PROJE	ECT: USH	I-141 P	has	se II In	vestigation, Niagara, Wi			·		JOB NO.				-
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					oring location drawing									
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COLEMAN ENGINEERING COMPANY
635 CIRCLE DRIVE
IRON MOUNTAIN, MICHIGAN 49801
Telephone: (906)-774-3440, Fay: (906)-774-7776

					1 elephone: (906)-7	74-34-10 [ax. (300 <u> -114</u>	-1170	JOB NO	.: _08	469.	GPJ	
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NUMBER	SPT VALUES BLOWS/6"(N)	RECOVERY	LEGEND	ļ	SOIL DESCRIPTION		WATER TABLE	ELEV. (FT)	COMMENTS	+4 -4 -200	MOISTURE CONTENT (%)	LL PL	T (tsf)	q _a (tsf)
1	(-)	-	Π	- 0 -	TOPSOIL	0.257			PID = 0.0 ppm					
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				- 6										
	-			- 7				-	PID = 0.0 ppm					
				- 8						-				
				- 9				-	PID = 0.0 ppm	-				
3	(-)	-	-	- 10-	trace gravel			-	-	ŀ				
			The second	- 11	1			-	PID = 0.0 ppm					
				- 12	1			-		-				
				- 13				-		-				
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COLEMAN ENGINEERING COMPANY

635 CIRCLE DRIVE IRON MOUNTAIN, MICHIGAN 49801 Telephone: (906)-774-3440 Fax: (906)-774-7776

JOB NO.: 08469.GPJ BORING NO .: EP-9 PROJECT: <u>USH-141 Phase II Investigation, Niagara, WI</u> CLIENT: Oneida Total Integrated Enterprises 1 OF 1 BORING LOCATION: Refer to boring location drawing ELEV .: RIG TYPE: Geoprobe 66 DT DRILL CREW: J. Lantagne / C. Saari BORING DEPTH: 19.0 DRILLING METHOD: 2" Macrocore DATE STARTED: May 7, 09 DATE COMPLETED: May 7, 09 REVIEWED BY: S. Trebilcock DATE: 5/15/09 HOLE CLOSURE: Bentonite Chips TEST RESULTS SAMPLE WATER TABLE (FT) E SPT VALUES BLOWS/6"(N) RECOVERY MOISTURE CONTENT (%) NUMBER LEGEND DEPTH ELEV. SOIL DESCRIPTION COMMENTS q_a LL PL -4 Т (tsf) -200 0 TOPSOIL (-) SAND, brown, fine to medium, some organics, moist PID = 0.0 ppm2 3 5 2 ...fine PID = 0.0 ppm(-) 6 7 PID = 0.0 ppm8 9 PID = 0.0 ppm 3 (-) 11 12 13 PID = 0.0 ppm14 15 4 (-) 16 $PID \approx 0.0 ppm$ 17 18 PID = 0.0 ppm19.0 19 End of Boring AS-Auger Sample
B-BS-Bag Sample G -GS-Grab Sample P -PS-Piston Tube ☐ -3\$\$-3" Split Spoon
☐ -2\$T-2" Shelby Tube BORING NO .: after <u>7</u> hours EP-9 RC-Rock-Core Z-2SS-2" Split Speon -3ST-3" Shelby Tube ▼ after drilling

TABLE I SUMMARY OF DETECTED SOIL ANALYTICAL RESULTS

Jerry's Automotive 1200 Roosevelt Road 141 USH - Niagara Site Niagara, Wisconsin

	Volatile Organic Com	oounds (VOCs)							VOCs Microgra	ms per Kilogram (ug/Kg)				
Sample Location	Sample ID	Sample Depth	Sample Date	Benzene	Ethylbenzene	Toluene	Total Xylenes	2-butanone (MEK)	Methylene Chloride	Naphthalene	p-Isopropyltoluene	n-Butylbenzene	sec-Butylbenzene	1,1,1-TrichJoroethane	1,2,3-Trimethylbenzene
Jerry's Automotive	EP-7 (13-15)	13-15 feet	5/7/2009	<21.0	<15.0	<79 <u>.</u> 0	<30.0	180**	53**	<26	<11	<16	<13	<34	<13
Jerry's Automotive	EP-8 (15-17)	15-17 feet	5/7/2009	<18.0	19,000	12,000	140,000	<150	<33	NA	10,000	9,200	4,000	140	30,000
Jerry's Automotive	EP-9 (15-17)	15-17 feet	5/7/2009	<18.0	<13.0	<68.0	<26.0	260**	<34	<23	<9.9	<14	<11	<29	<11
RCLs - Protection of G	roundwater (Non-Indus	trial)		5.5	2,900	1,500	4,100	NS	NS	700	NS	NS	NS	NS	NS

Po	olynuclear Aromatic Hyd	drocarbons (PAHs)							PA	AHs (ug/kg)					
Sample Location	Sample ID	Sample Depth	Sample Date	Acenaphthene	Acenaphthylene	Anthracene	Benzo(a) anthracene	Benzo(a) pyrene	Benzo(b) Nuoranthene	Benzo(ghi) perylene	Benzo(k) fluoranthene	Chrysene	Dibenz(a,h) anthracene	Fluoranthene	Fluorene
Jerry's Automotive	EP-7 (13-15)	13-15 feet	5/7/2009	<10	<10	<8	<8.6	<9.2	<13	<8.9	<11	<11	<9.3	<7.6	<11
Jerry's Automotive	EP-8 (15-17)	15-17 feet	5/7/2009	80	<10	44	<8.6	<9.2	<13	<8.9	<11	<11	<9.3	<7.6	100
Jerry's Automotive	EP-9 (15-17)	15-17 feet	5/7/2009	<10	<10	<8	<8.6	<9.2	<13	<8.9	<11	<11	<9.3	<7.6	<11
RCLs - Groundwater I	Pathway			38,800	700	3,000,000	17,000	48,000	360,000	6,800,000	870,000	37,000	38,000	500,000	100,000
RCLs - Direct Contact	Pathway (Non-Industria	al)		900,000	18,000	5,000,000	88	8.8	8.8	1,800	880	8,800	8.8	600,000	600,000

Notes:

RCL = Residual Contaminant Level

< = Results are less than the LOD.

Bolded results exceed Chapter NR 720 Soil Cleanup Standards

NS = No Chapter NR720 Soil Cleanup Standard

* = Not analyzed or no data available.

**= Likely laboratory artifacts

GRO - Gasoline Range Organics DRO - Diesel Range Organics

Laboratory Footnotes:

LOD = Limit of Detection

LOQ = Limit of Quantification

J = Analyte detected between LOD and LOQ.

Q = The analyte has been detected between the limit of detection (LOD) and the limit of quantification (LOQ). The results are qualified due to the uncertainty of the analyte concentrations within this range.

TABLE 1 SUMMARY OF DETECTED SOIL ANALYTICAL RESULTS

Jerry's Automotive 1200 Roosevelt Road 141 USH - Niagara Site Niagara, Wisconsin

	Volatile Organic Com	pounds (VOCs)		VOCs	(ug/kg)	GRO
Sample Location	Sample ID	Sample Depth	Sample Date	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	GRO
Јепу's Automotive	EP-7 (13-15)	13-15 feet	5/7/2009	<11	<14	<2,100
Jerry's Automotive	EP-8 (15-17)	15-17 feet	5/7/2009	170,000	49,000	950,000
Jerry's Automotive	EP-9 (15-17)	15-17 feet	5/7/2009	<9.7	<11	<1,900
RCLs - Protection of G	roundwater (Non-Indu	strial)		NS	NS	100,000

										2000
Poly	ynuclear Aromatic Hyc	lrocarbons (PAHs)				PAHs (ug/kg)				DRO
Sample Location	Sample ID	Sample Depth	Sample Date	Indeno(1,2,3-cd) pyrene	1-Methylnapthalene	2-Methylnaphthalene	Naphthalene	Phenanthrene	Pyrene	DRO
Jerry's Automotive	EP-7 (13-15)	13-15 feet	5/7/2009	<9.9	*	*	<8.1	<8.7	<10	1,300
Jerry's Automotive	EP-8 (15-17)	15-17 feet	5/7/2009	<9.9	*	*	3,700	110	40	1,400,000
Jerry's Automotive	EP-9 (15-17)	15-17 feet	5/7/2009	<9.9	*	*	<8.1	<8.7	<10	3,100
RCLs - Groundwater Pa	thway			680,000	23,000	20,000	400	1,800	8,700,000	100,000
RCLs - Direct Contact P	CLs - Direct Contact Pathway (Non-Industrial)				1,100,000	600,000	20,000	18,000	500,000	NS

RCL = Residual Contaminant Level

< = Results are less than the LOD.

Bolded results exceed Chapter NR 720 Soil Cleanup Standards

NS = No Chapter NR720 Soil Cleanup Standard

* = Not analyzed or no data available.

**=Likely laboratory artifacts
GRO - Gasoline Range Organics
DRO - Diesel Range Organics

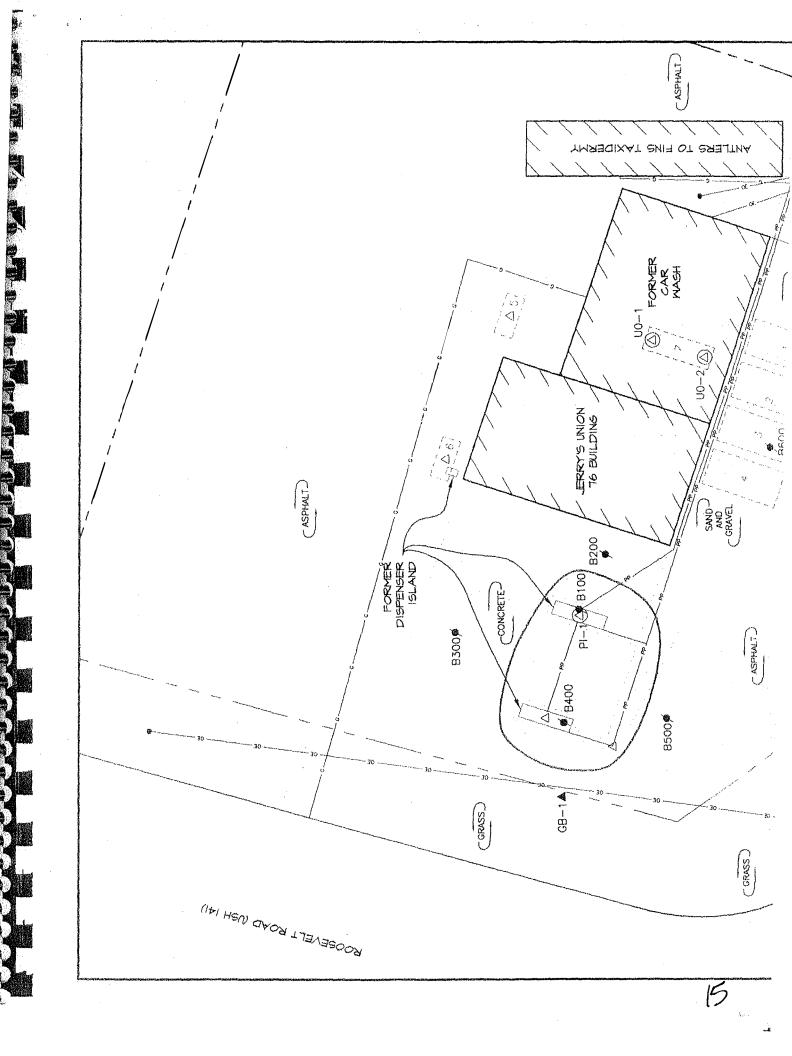
Laboratory Footnotes:

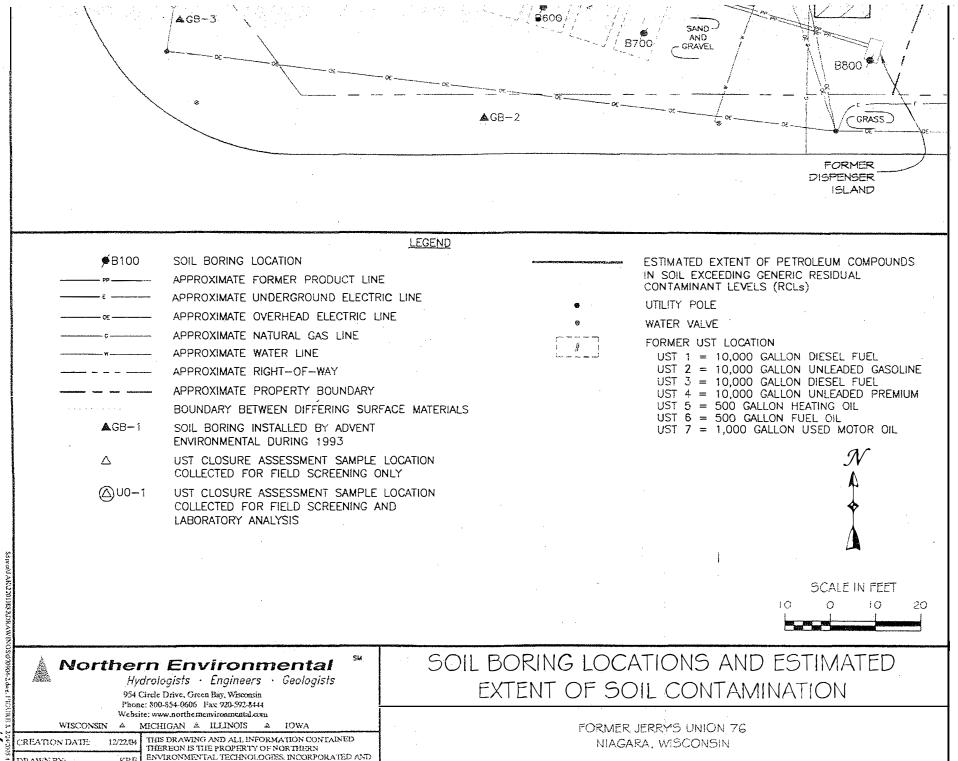
LOD = Limit of Detection

LOQ = Limit of Quantification

J = Analyte detected between LOD and LOQ.

Q = The analyte has been detected between the limit of detection (LOD) and the limit of quai





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Table 1 Soil Field Screening Results, Former Jerry's Union 76, Niagara, Wisconsin

			of particular devices			PID H	eadspace Ar	ralysis
Boring Number	Sample Number	Sample Depth (feet)	Sample Petroleum Odor	Sample Description	Date Collected	Time Collecteti	Time Analyzed	PID Response (IUI)
B100	*\$101	2.5-4.5	Gasoline	Sand, fine to medium grained	8/2/2004	915	950	471
	\$102	5-7	Gasoline	Sand, fine to medium grained	8/2/2004	919	1002	47()
	*S103	7.5-9.5	Gasoline	Sand, fine to medium grained	8/2/2004	923	1015	471
	\$104	19-12	Gasoline	Sand, fine to medium grained	8/2/2004	928	1047	434
	S105	12.5-14.5	Weathered gasoline	Sand, fine to medium grained	8/2/2004	940	1049	296
	\$196	15-17	Slight gasoline	Sand, fine to medium grained	8/2/2004	945	1051	193
	\$107	17.5-19.5	Slight gasoline	Sand, medium to coarse grained; some gravel	8/2/2004	949	1052	(0)
Mary have 17	\$108	20-22	Slight gaseline	Sand, medium to coarse grained; some gravel	8/2/2004	953	1052	5
	\$109	22.5-24.5	None	Sand, medium to coarse grained: some gravel	8/2/2004	958	1053	2
	\$110	25-27	None	Sand, medium to coarse grained; some gravel	8/2/2004	1002	1053	ı
	SHI	27.5-29.5	None	Sand, medium to coarse grained; some gravel	8/2/2004	1010	1054	2
***	SUIZ	30-32	None	Sand, medium to coarse grained; some gravel	8/2/2004	1016	1129	4
	\$113	32.5-34.5	None	Sand, medium to coarse grained: some gravel	8/2/2004	1022	1121	3
	\$114	35-37	None.	Sand, medium to coarse grained; some grave!	8/2/2004	1026	1121	2
1	\$115	37.5-39.5	None	Sand, medium to coarse grained; some gravel	8/2/2004	1038	1122	2
	Si16	40-42	None	Sand, coarse grained; some grave!	8/2/2004	1045	1122	Ú.
	\$117	42.5-44.5	None	Sand, coarse grained; some grave!	8/2/2004	1052	1123	0
	S118	45-47	None	Sand, coarse grained; some gravel	8/2/2004	1058	1123	2
B200	S201	25-4.5	None	Sand, fine grained	8/2/2004	1141	1241	0
	S202	5-7	None	Sand, fine grained; trace gravel	8/2/2004	1148	1241	0
	*S203	7.5-9.5	None	Sand, fine grained	8/2/2004	1154	1242	9
	S204	10-12	None	Sand, fine grained	8/2/2004	1159	1242	1 6
	\$205	12 5-14.5	None	Sand, fine grained	8/2/2004	1204	1243	ŋ
0.0	S206	15-17	None	Sand, fine grained	8/2/2004	1210	1243	0
	S297	17.5-19.5	None	Sand, fine grained; trace gravel	8/2/2004	1215	1244	6
	S208	20-22	None	Sand, fine grained; trace gravel	8/2/2004	1220	1244	()
B300	S301	2.5-4.5	None	No Recovery	8/2/2004			
	5302	5-7	None	Sand, fine to medium grained	8/2/2004	1258	1400	0
	\$303	7.5-9.5	None	Sand, fine to medium grained	8/2/2004	1304	1401	0
,	\$304	10-12	None	Sand, fine to medium grained	8/2/2004	1309	1401	0
-	S305	12,5-14.5	None	Sand, fine to medium grained	8/2/2004	1314	1402	()
•	*5306	15-17	None	Sand, fine to medium grained	8/2/2004	1319	1492	10

Report of 3

Table I Soil Field Screening Results, Former Jerry's Union 76, Niagara, Wisconsin

			and the state of t			PID H	leadspace Ai	naly sis
Boring Number	Sample Number	Sample Depth (feet)	Sample Petroleum Odor	Sample Description	Date Collected	Time Collected	Time Analyzed	PH) Response (IUI)
B300	S307	17.5-19.5	None	Sand, fine to medium grained	8/2/2004	1333	1403	11
	S308	20-22	None	Sand, medium grained	8/2/2004	1345	1403	-
B400	S401	2.5-4.5	None	Sand, fine to medium grained	8/2/2004	1355	1504	fi
	S402	5-7	None	Sand, fine to medium grained	8/2/2004	1400	1504	(1
	*S403	7.5-9.5	Sweet/Diesel	Sand, fine to medium grained	8/2/2004	1405	1595	17
	\$404	10-12	None	Sand, fine to medium grained	8/2/2004	1410	1533	,
	\$405	12.5-14.5	None	Sand, fine to medium grained	8/2/2004	1415	1534	3
	* \$406	15-17	Burnt/Chemical	Sand, fine to medium grained	8/2/2004	1420	1540	230
	\$407	17.5-19.5	Burnt/Chemical	Sand, fine to medium grained	8/2/2004	1425	1545	95
	S408 -	20-22	None	Sand, fine to medium grained	8/2/2004	1435	1546	6
	S409	22.5-24.5	None	Sand, fine to medium grained	8/2/2004	1440	1547	2
B500	* S501	2.5-4.5	None	Sand, fine to medium grained	8/2/2004	1502	1601	(1
	S502	5-7	None	Sand, fine to medium grained	8/2/2004	1507	1602	1 :
	\$503	7.5-9.5	None	Sand, fine to medium grained	8/2/2004	1511	1603	
	S504	10-12	None	Sand, fine to medium grained	8/2/2004	15,14	16(14	2
	S505	12.5-14.5	None	Sand, fine to medium grained	8/2/2004	1519	1604	
	S506	15-17	None	Sand, fine to medium grained	8/2/2004	1524	1605	1 2
	*S507	17.5-19.5	None	Sand, medium to coarse grained	8/2/2004	1530	1606	;
	S508	20-22	None	Sand, medium to coarse grained	8/2/2004	1545	1607	2
B600	S601	2.5-4.5	None	Sand Fill	8/2/2004	1620	1717	1
	\$602	5-7	None	Sand Fill	8/2/2004	1627	1717	2
	\$603	7.5-9.5	None	Sand Fill	8/2/2004	1633	1718	4
	\$604	10-12	None	Sand Fill	8/2/2004	1637	1718	1 3
	8605	12.5-14.5	None	Sand Fill to 14 feet; Sand, fine to medium grained	8/2/2004	1640	1719	3
	\$606	15-17	None	Sand, fine to medium grained	8/2/2004	1644	1719	3
	\$607	17.5-19.5	None	Sand, fine to medium grained	8/2/2004	1648	1720	1
	*8608	20-22	None	Sand, fine to medium grained	8/2/2004	1651	1720	1
B700	\$701	2 5-4 5	None	Sand Fill	8/3/2004	835	927	6
	\$702	5-7	None	Sand Fill	8/3/2004	838	928	Ú)
	5703	7.5-9 5	None	Sand Fill	8/3/2004	842	928	f)
	5704	10-12	None	Sand Fill	\$/3/2004	845	929	7
	\$795	12.4-14.5	None	Sand Fill to 14 feet; Sand, fine to medium grained	8/3/2004	849	930	1 7

Table 1 Soil Field Screening Results, Former Jerry's Union 76, Niagara, Wisconsin

						PID H	leadspace Ar	ralysis
Boring Number	Sample Number	Sample Depth (feet)	Sample Petroleum Odor	Sample Description	Date Collected	Time Collected	Time Analyzed	PID Response (IUI)
B700	S706	15-17	None	Sand, medium to coarse grained	8/3/2004	854	930	-
	S70?	17.5-19.5	None	Sand, medium to coarse grained	8/3/2004	858	931	fs.
	*\$708	20-22	None	Sand, medium to coarse grained	8/3/2004	904	931	Q
B800	S801	0-0-5	None	Sand, fine grained, some gravel	10/15/2004	1052	i 11 2	a
	5802	1.5-2	None	Sand, fine grained, some gravel	. 10/15/2004	1055	1112	0
	*\$803	3.5-4	None	Sand, fine grained, some gravel	10/15/2004	1058	1113 .	0
	5804	5.5-6	None	Sand, coarse grained	10/15/2004	1105	1113	11

Fage 1013

200

PID * Photoionization Detector

un 🕝 instruments unus us idobutylene

Submitted for laboratory analysis

. . . :-ot Analyzed

Table 2 Soil Analytical Results, Jerry's Automotive, Niagara, Wisconsin

								Relevant at	d Significa	nt VOC Ana	ivtical Kesul	ts (pg/kg)	7					and the same that the p
Boring	S#mple Number	Sample Depth (feet)	PID Response (ini)	Date Sampled	URO (mg/kg)	(ikt) (mg/kg)	t.ead (mg/kg)	Benzene	же-Виуфеагене	1,2-Dichloroethane	E the Bentene	p-koprapylialuene	MTBE	Naphthalene	J ołnone	1,2,4-Trimethy (denzeny	1.3.5. Trimethylbeazene	Xybner
NR 720 09 1			<u>evel</u>		190	100	Str	5.5	NE .	49	2,9/03	NE.	1			The Property of		
NR 746,06			-		ŅΕ	NE	NE	5,500	NE	600	4,661	NE NE	NE NE	NE.	3,590	SE	NF NF	4,1:41
NR. 746.06	Table 2 Valu	ies			NE	NE	NE.	1,100	NE	540	NE.	NE NE	NE	2,700	38,000	\$3,660	11,(49)	42,(Ky)
							4	· · · · · · · · · · · · · · · · · · ·		1 270	1 171.	-NE.	NE	NE	NE	NH.	N.F	NE
GB-I	GB-1*	12-14	**************************************	12/2 1993	91	9.4	**-	ND	ND	ND	Nb	ND	NO	ND	tep:	W)	ND	ND
GB-2	GB-2*	2.7	,	1212 11997	4.5	ND	**	ND	ND	NU	ND	ND	ND	NĐ	70	ND.	* No	ND
68.3	- GB.3*	2-4	f	ועטן בני	ND	M	•••	•••	100	***		New	•••					
B100	Sini	2 5-4 5	471	® ७३ ख	2,440	1,810	15	< 531	1,060	< 531	o 531	2.980	< 531	1.5%	. 531			
	S103	7 5.0 5	471	08.0264	911	773	- 42	< 530	2,129	< 536	< 530	1,060	< 530	12,700	1 2 H 4 5 W	69.1(P)	91.5-Kr	44,5,8
B200	\$203	7 5-9 5	9	98-92aj4	< 5,3	453	+42	< 2 6	≤ 26	< 26	< 26	< 26	< 26	× 26	e 26	91,1co - 26	25,400	96,166
8390	\$306	15-17	\$41	05 02.04	12	~54	<.42	4.27	< 37	< 27	× 27	< 27	427	e 27	+ 27	. 27	< 27	- 1x
8409	S403	7 5-9 5	357	04/02,94	176	119	4 4 4	< 27	< 27	4.27								
	\$406	15-17	210	08/02/94	92	6.5	e. 4.3	< 27	< 27	4.27 < 27	4.27	s 2?	e 27	< 27	4.27	. 27	< 27	× 38
								* ***	~ 4	4.27	< 27	< 27	< 27	50	< 27	45	- 27	- 38
B5081	\$501	2.5.4.5	6	98 02 04	< 5.4	< 5,4	<43	< 2?	< 27									
	8567	17.5-19.5	3	08.02 74	r 5.1	5 1	- 40	< 25	<25	< 27	* 27	~ 27	< 27	< 27	5.27	+ 27	· 2"	- 35
								122	74.3	< 25	< 25	< 25	~ 25	~ 25	< 25	< 25	~ 25	< 38
B699	5608	20-22	4	98527 4	9.1	< 5.2	< 4 }	< 26	< 26	< 26	r 26	< 26	< 26	r. 26	4. Ž6	· 26	-, 26	*
B700	\$708	20-22	9	avertga	4.5.1	< 5.1	< ₫ .[< 26	< 26	< 26	+. 26	× 26	· < 2ti	* 26	- 24.	. 26	~ 26	r 36
8800	\$803	3 5-4	G	10 क्ष श्रम	78	4.00	This .	< 27	***		- 27	***	< 27	< 27	. 27	e 27	. 27	5. J.T

DRO 680 MTRE

 $m_i g + g$

Diesel Range Organics

- Gasoline Range Organics * Methyl-Tentucy-Butyl-Ether

 miligrams per kilogram micrograms per kwagiam - Not Analyzed

ND:

NA

Sest

* Not Applicable ...

* Analyte detected between the Limit of Detection and the Limit of Quantitation

" Volatile Organic Compound * Not Litablished by Wir. Adm. Code

= Residual Contamunam Level 100 = Exceeds Chapter NR 730 WAC Residual Contaminant Level

GB-1*

Advent Phase II ESA soil sample



- Cadmium and lead were detected in the sample at a concentration of 41 and 300 ppb, respectively. These concentrations exceed the respective ES for these compounds.
- Various VOCs were detected at concentrations above the ES.

Table 2-8 contains the results of the chemical analyses of the soil samples. Copies of laboratory data reports are provided in Appendix E. See Table 2-9 for results of chemical analyses of groundwater samples.

	ULTS OF CHEMICAL AN JERRY'S UN	LE 2-8 NALYSES OF SOIL SAM NON 76 SITE DECEMBER 2, 1993	
		Sample Number	
Parameter	GB-1	GB-2	GB-3
Depth (feet)	12-14	4-6	2-4
GROs (ppm)	3.4	ND	ND
DROs (ppm)	9.1	4.8	ND
VOCs	D	ND	NA
PID (instrument units)	700	6	0

ND Not Detected

	TABLE 2-9		
	NALYSES OF GROUNDWA RY'S UNION 76 SITE ECTED: DECEMBER 2, 199		S
	Sample Number	PAL	ES
Parameter	GB-1		
GROs (ppb)	69,000	en weing	to set and
DROs (pp ≥)	3,000	en de en gran en de de gran de grande en de grande de grande grande grande grande grande grande grande grande g En de grande de grande	and the first
Lead (ppb)	300	5	50
Cadmium	41.000000000000000000000000000000000000	. 1	10
	VOCs (ppb)		
Benzene	ND	0.067	5
Toluene	25,000	68.6	343
Ethylbenzene	3,100	272	1,360
xylenes	13,100	124	620
1,1,1 trichloroethane	630	40	200
sec-butylbenzene	ND	Princes	\$4 60
1,2,4 trimethylbenzene	2,100	ha vig tre	or. 40 Vr
1,3,5 trimethylbenzene	540		
naphthalene	- ND	8	40
n-isopropyltoluene	ND	And any de	* * * * * * * * * * * * * * * * * * *
n-propylbenzene	ND	we go sag	jo vić pr
iso-propylbenzene	ND	ton ships	Bon this rid

Not Applicable

ND Net Detected

Shading indicates concentrations above the ES.

CITGO Quik Food Mart

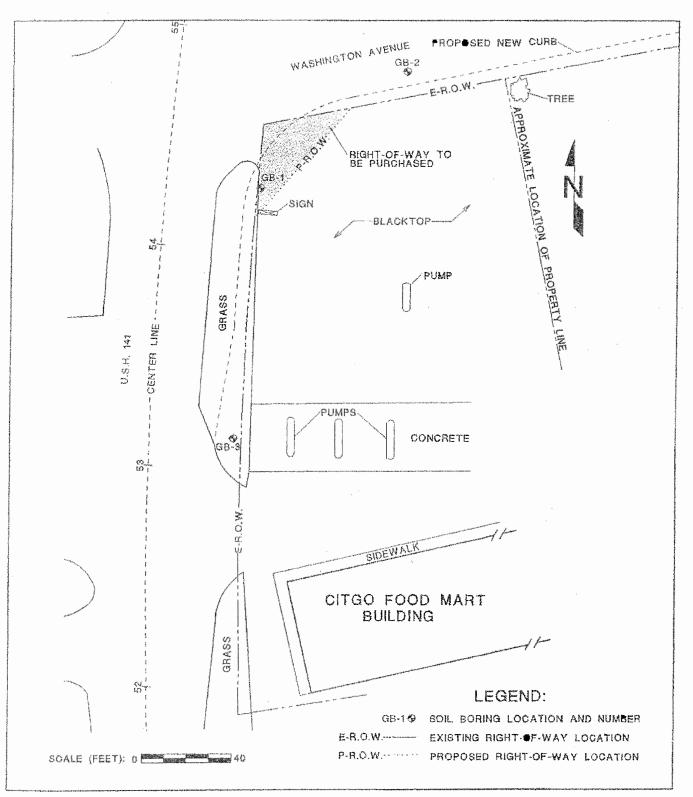


FIGURE 2-3 SOIL BORING LOCATIONS
CITGO FOOD MART
NIAGARA, WISCONSIN

ADVENT

ENVIRONMENTAL SERVICES, INC. DATE: 1/10/54

DAJE: 1/18/54 DRAWING # 97083D

Analytical Methods Utilized for Chemical Analyses of Samples

En Chem, Green Bay, Wisconsin, analyzed the soil samples collected at the Citgo Quik Food Mart site. Soil samples were chemically analyzed using the analytical methods listed on the laboratory data sheets in Appendix E. Each analytical method follows specific quality control (QC) criteria listed in the reference manual describing the method. This includes the selection and calibration of appropriate instruments and the use of QC samples. Daily performance tests and the demonstration of precision and accuracy in the laboratory are required.

Results of Chemical Analyses of Samples

Soil Samples

Chemical analyses of three soil samples yielded the following results:

No GROs of PROs were identified in any of the soil samples at concentrations above the laboratory detection limit.

Table 2-8 contains the results of the chemical analyses of the soil and groundwater samples. Copies of laboratory data reports are provided in Appendix E.

TABLE 2-8 RESULTS OF CHEMICAL ANALYSES OF SOIL SAMPLES CITGO QUIK FOOD MART SITE DATES COLLECTED: DECEMBER 2 AND 3, 1993			
	Sample Number		
Parameter	GB-1	GB-2	GB-3
Depth (feet)	2-4	2-4	2-4
GROs (ppm)	ND ·	ND	ND
DROs (pprn)	ND	ДИ	ND

ND Not detected at levels above laboratory detection limits.

Attachment 2

Special Provisions

9. Notice to Contractor – Contamination Beyond Construction Limits.

The department completed testing for soil and ground water contamination for locations within this project where excavation is required. Testing indicated that petroleum-contaminated soil is present at the following site(s):

1. Station 252+00 to 253+00 from centerline RT to construction limits.

The contaminated soils at the above site are expected to be beyond the excavation limits necessary to complete the work under this project. Control construction operations at these locations to ensure that they do not extend beyond the excavation limits indicated in the plans. If contaminated soils are encountered at these sites or elsewhere on the project during excavation, terminate excavation in the area and notify the engineer.

The Hazardous Materials Report is available from the regional office by contacting Paul Zoellner at (920) 492-0132. 107-100 (20050901)

1/6

1. Excavation, Hauling, and Disposal of Petroleum Contaminated Soil, Item 205.0501.S.

A Description

A.1 General

This special provision describes excavating, segregating, loading, hauling, and disposing of petroleum contaminated soil at a WDNR approved bioremediation facility. The closest WDNR approved bioremediation facilities are: Waste Management – Ridgeview, 6207 Hempton Lake Road, Whitelaw, WI 54247 and Veolia Hickory Meadows, W3105 Schneider Road, Chilton Tn, WI 54129.

Perform this work in accordance to section 205 of the standard specifications and with pertinent parts of Chapters NR 700-754 of the Wisconsin Administrative Code, as supplemented herein. Per NR 718.07, a solid waste collection and transportation service-operating license is required under NR 502.06 for each vehicle used to transport contaminated soil.

A.2 Notice to the Contractor – Contaminated Soil Location(s)

The department completed testing for soil and groundwater contamination for locations within this project where excavation is required. Testing indicated that petroleum-contaminated soil is present at the following location(s) as shown on the plans:

1. Station 253+75 to 255+00 from 15 feet RT of reference line to construction limits RT.

Contaminated soil and/or underground storage tanks (USTs) may be encountered at other locations within the construction limits. If contaminated soil and/or USTs are encountered at other locations, terminate excavations in that area and notify the engineer. Contaminated soil at other locations shall be managed by the contractor under this contract and USTs will be removed by others.

It is anticipated that active groundwater monitoring wells will be encountered during construction. If active groundwater monitoring wells are encountered during construction, notify the engineer and protect the wells to maintain their integrity. The environmental consultant will determine if monitoring wells need to be maintained. Adjust monitoring wells that need to be maintained and do not conflict with structures or curb and gutter to be flush with the final grade. Coordinate with the environmental consultant the abandonment or adjustment of wells that conflict with the previously mentioned items and wells that are not required to be maintained.

The excavation management plan for this project has been designed to minimize the offsite disposal of contaminated material. The excavation management plan, including these special provisions, has been developed in cooperation with the WDNR. The WDNR concurrence letter is on file at the Wisconsin Department of Transportation. For further information regarding previous investigation and remediation activities at these sites contact: Name: Dan Haak, RMT

Address: 744 Heartland Trail, Madison, WI 53717

Phone: (608) 662-5274 Fax: (608) 831-3334

e-mail: dan.haak@rmtinc.com

A.3 Coordination

Coordinate work under this contract with the environment consultant:

Consultant: RMT, Inc.

Address: 744 Heartland Trail, Madison, WI 53717

Contact: Dan Haak Phone: (608) 662-5274 Fax: (608) 831-3334

e-mail: dan.haak@rmtinc.com

The role of the environmental consultant will be limited to:

- 1. Determining the location and limits of contaminated soil to be excavated based on soil analytical results from previous investigations, visual observations, and field screening of soil that is excavated;
- 2. Identifying contaminated soils to be hauled to the bioremediation facility;
- 3. Documenting that activities associated with management of contaminated soil are in conformance with the contaminated soil management methods for this project as specified herein; and
- 4. Obtaining the necessary approvals for disposal of contaminated soil from the bioremediation facility.

Provide at least a 14-calendar day notice of the preconstruction conference date to the environmental consultant. At the preconstruction conference, provide a schedule for all excavation activities in the areas of contamination to the environmental consultant. Also notify the environmental consultant at least three calendar days prior to commencement of excavation activities in each of the contaminated areas.

Coordinate with the environmental consultant to ensure that the environmental consultant is present during excavation activities in the contaminated areas. Perform excavation work in each of the contaminated areas on a continuous basis until excavation work is completed.

Identify the DNR approved bioremediation facility that will be used for disposal of contaminated soils, and provide this information to the environmental consultant no later than 30 calendar days prior to commencement of excavation activities in the contaminated areas or at the preconstruction conference, whichever comes first. The environmental consultant will be responsible for obtaining the necessary approvals for disposal of contaminated soils from the bioremediation facility. Do not transport contaminated soil offsite without prior approval from the environmental consultant.

A.4 Health and Safety Requirements

Supplement subsection 107.1 of the standard specifications with the following:

During excavation activities, expect to encounter soil contaminated with gasoline, diesel fuel, fuel oil, or other petroleum related products. Site workers taking part in activities that will result in the reasonable probability of exposure to safety and health hazards associated with hazardous materials shall have completed health and safety training that meets the Occupational Safety and Health Administration (OSHA) requirements for Hazardous Waste Operations and Emergency Response (HAZWOPER), as provided in 29 CFR 1910.120.

Prepare a site-specific Health and Safety Plan, and develop, delineate and enforce the health and safety exclusion zones for each contaminated site location as required by 29 CFR 1910.120. Submit the site-specific health and safety plan and written documentation of up-to-date OSHA training to the engineer prior to the start of work.

B (Vacant)

C Construction

Supplement subsection 205.3 of the standard specification with the following:

Control operations in the contaminated areas to minimize the quantity of contaminated soil excavated.

The environmental consultant will periodically evaluate soil excavated from the contaminated areas to determine if the soil will require offsite bioremediation. The environmental consultant will evaluate excavated soil based on field screening results, visual observations, and soil analytical results from previous environmental investigations. Assist the environmental consultant in collecting soil samples for evaluation using excavation equipment. The sampling frequency shall be a maximum of one sample for every 20 cubic yards excavated.

On the basis of the results of such field-screening, the material will be designated for disposal as follows:

- Excavation Common consisting of clean soil and/or clean construction and demolition fill (such as clean soil, boulders, concrete, reinforced concrete, bituminous pavement, bricks, building stone, and unpainted or untreated wood), which under NR 500.08 are exempt materials, or
- Low-level contaminated material for reuse as fill within the construction limits, or
- Contaminated soil for off-site treatment and disposal at the WDNR-licensed bioremediation facility, or
- Potentially contaminated for temporary stockpiling and additional characterization prior to disposal

5

Some material may require additional characterization prior to disposal. Provide for the temporary stockpiling of up to 100 cubic yards of contaminated soil on-site that require additional characterization. Construct and maintain a temporary stockpile of the material in accordance with NR 718.05(3), including, but not limited to, placement of the contaminated soil/fill material on an impervious surface and covering the stockpile with impervious material to prevent infiltration of precipitation. The Department's environmental consultant will collect representative samples of the stockpiled material, laboratory-analyze the samples, and advise the contractor, within 10 business days of the construction of the stockpile, of disposal requirements. The stockpiled material shall be disposed either at the WDNR-licensed disposal facility by the contractor or, if characterized as hazardous waste, by the Department. As an alternative to temporarily stockpiling contaminated soil/fill material that requires additional characterization, the contractor has the option of suspending excavation in those areas where such soil is encountered until such time as characterization is completed.

Directly load and haul soils designated by the environmental consultant for offsite bioremediation to the DNR approved bioremediation facility. Use loading and hauling practices that are appropriate to prevent any spills or releases of petroleum-contaminated soils or residues. Prior to transport, sufficiently dewater soils designated for off-site bioremediation so as not to contain free liquids.

D Measurement

The department will measure Excavation, Hauling, and Disposal of Petroleum Contaminated Soil in tons of contaminated soil accepted by the bioremediation facility as documented by weight tickets generated by the bioremediation facility.

E Payment

The department will pay for measured quantities at the contract unit price under the following bid item:

ITEM NUMBER DESCRIPTION UNIT 205.0501.S Excavation, Hauling, and Disposal of Petroleum Contaminated Soil

Payment is full compensation for excavating, segregating, loading, hauling, and treatment via bioremediation of contaminated soil; obtaining solid waste collection and transportation service operating licenses; assisting in the collection soil samples for field evaluation; dewatering of soils prior to transport, if necessary; and for furnishing all

labor, tools, equipment, and incidentals necessary to complete the work.

4 of 4