From: Mark Fryman <mfryman@consulttruenorth.com>
Sent: Tuesday, October 3, 2023 1:47 PM
To: Koepke, Cynthia L - DNR
Subject: Frei Oil
Attachments: B.2.b.-ResidualSoilCont-Clarification.pdf

Follow Up Flag: Follow up
Flag Status: Flagged

Cindy,

I looked through the file information to try to figure out the surface cover at the old boring GP-9 where shallow soil exceeding the industrial direct contact RCLs was identified during the WDOT assessment in 2006. I did figure out a few things from the file.

> There was not much change to the ground surface elevation in that area during the roadway reconstruction because of the adjacent RR tracks.
>
> I could not find any information regarding whether the impacted soil at GP-9 may have been removed during the road reconstruction. The was a statement in the BT2 assessment report mentioning material management and building demolition for the road work but I did not find anything documenting soil removal. Therefore, I believe that we need to assume it is still there.
>
> The boring with the bad soil, GP-9, was located right along the edge of the line of the proposed new WDOT right-of-way. Because of this, I am confident that the boring is located "beneath" the existing sidewalk since that sidewalk runs along the edge of the new ROW. I have attached a PDF that shows this. I created the PDF so that 4 layers are maintained. Those layers are; the figure border, the residual contamination details (from B.2.b.), the original map from the DOT work created by BT2, and a current county aerial photo. Because I maintained the layers in the PDF, you can turn each of those 4 elements on/off independently. I think the comparison of the BT2 map, and the current aerial photo clearly shows that GP-9 is covered by the sidewalk.

Sorry, that this is the best I can do with the information. I guess there will have to be a statement that the sidewalk needs to be maintained as a cover in the closure letter.

If you have any other questions, give me a call (608-220-4847).

Thank you,

TRUE NORTH CONSULTANTS
15th 2008 2023
Trusted Partner. Leading Environmental Solutions.

Mark Fryman
Staff Consultant

525 Junction Road | Suite 5800 | Madison, WI 53717
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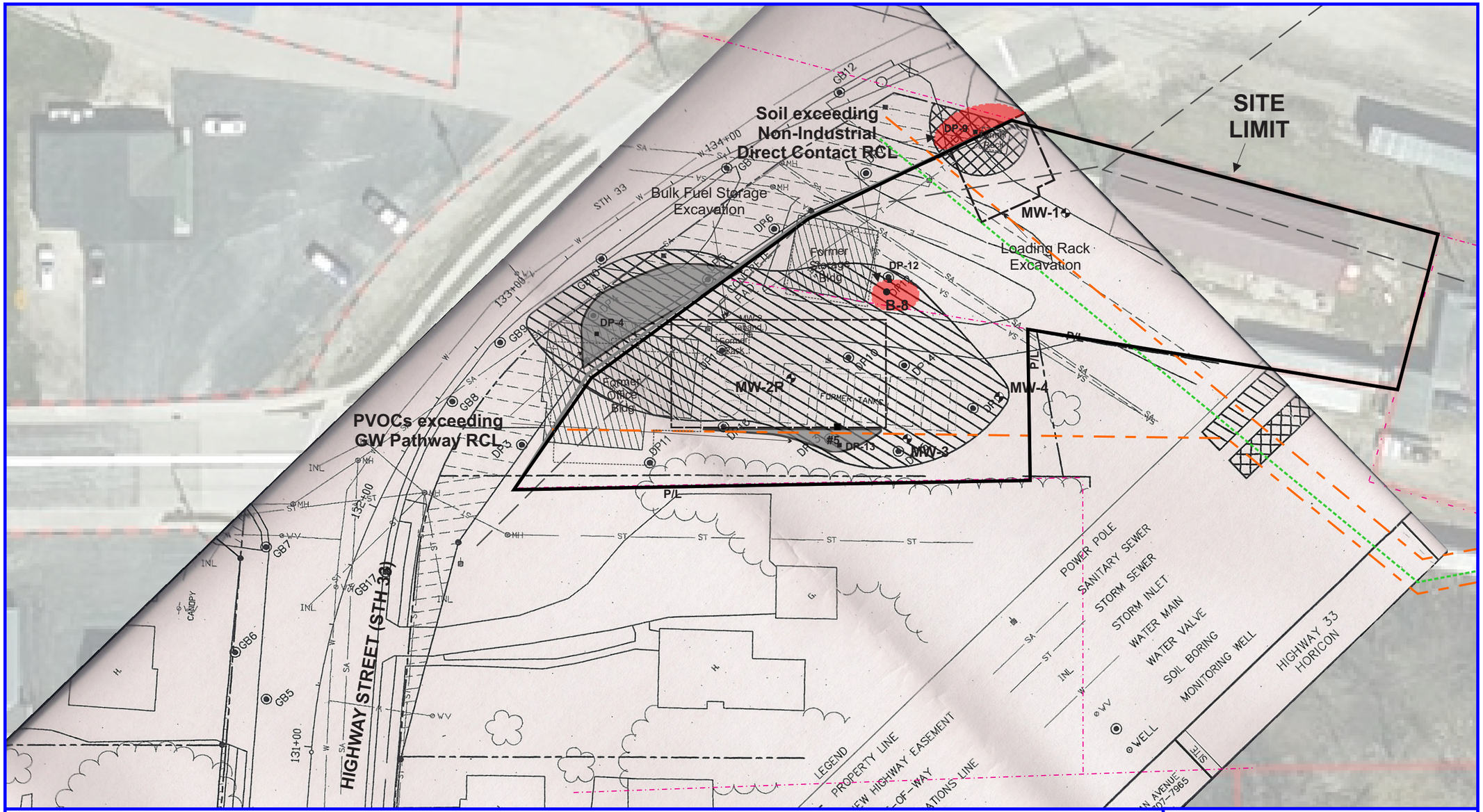

LEGEND

GB-8 ♦ - DOT Corridor Assessment Boring (2005)

DP-7 ■ - Phase II Boring (2006)

B-10 ● - Supplemental Assessment Boring (2014)

MW-4 ⊕ - Monitoring Well Location

#4 ■ - Remedial Excavation Sample

- Overhead Electric
- Stormwater Sewer
- Sanitary Sewer

0 40’

1 INCH = 40 FEET
SCALE IS APPROXIMATE

ATTACHMENT **B.2.b.**

RESIDUAL SOIL CONTAMINATION

525 JUNCTION ROAD
SUITE 5800
MADISON, WI

TRUENORTH CONSULTANTS

CLIENT

MARK FRANZ, JR.
421 BARSTOW STREET
HORICON, WI 53032

SITE LOCATION

FREI OIL COMPANY (Former)
207 HIGHWAY STREET
HORICON, WI 53032

PROJECT NUMBER T222-045

DATE 05/10/2023

SOURCE Dodge County Public Mapping
Field Measurements

From: Mark Fryman <mfryman@consulttruenorth.com>
Sent: Wednesday, September 27, 2023 10:02 AM
To: Koepke, Cynthia L - DNR
Subject: Frei Oil
Attachments: A.3.-ResidualSoil-ROW.pdf

Cindy,

I checked on the direct contact exceedances in the street ROW as we discussed.

Unfortunately, there are soils exceeding the industrial direct contact hazard RCL near the northwest corner of the site by the RR tracks and former loading rack. Two compounds, benzo(a) pyrene and arsenic, were present above the industrial standard. I have attached a table of the data from the 2 borings where contamination was identified in the ROW.

Thank you,

15th TRUE NORTH 2008 2023
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Trusted Partner. Leading Environmental Solutions.

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RESIDUAL SOIL CONTAMINATION TABLE (IN PUBLIC RIGHT OF WAY)
Frei Oil Company (former) - 207 Highway Street - Horicon, WI

Date	WDOT Property Aquisition Investigation - January 2007		WDNR Standards		
SAMPLE	DP4	DP9	GW RCL	DC (non-Ind) RCL	DC (Ind) RCL
Depth (ft)	6-8	2-4			
DRO (mg/kg)	600	160	ne	ne	ne
GRO (mg/kg)	na	na	ne	ne	ne
VOCs (ug/kg)					
Benzene	**1300**	<25	5.1	1600	7,070
1,2 Dichloroethane	nd	nd	ne	652	2,870
Ethylbenzene	1500	<25	1570	8020	35,400
Methyl-tert-butyl ether	<100	<25	27	63,800	282,000
Toluene	<100	94	1107	818,000	818,000
1,3,5 Trimethylbenzenes	3500	<25	ne	182,000	182,000
1,2,4 Trimethylbenzenes	11000	51	ne	219,000	219,000
Total Trimethylbenzenes	**14500**	51	1379	ne	ns
Total Xylenes	**6000**	186	3940	260,000	260,000
Naphthalene	**5400**	80	658.7	5520	24,100
n-Butylbenzene	2200	<25	ne	108,000	108,000
s-Butylbenzene	5200	<25	ne	145,000	145,000
Isopropylbenzene	410	<25	ne	268,000	268,000
p-Isopropyltoluene	1400	<25	ne	162,000	162,000
n-Propylbenzene	1000	<25	ne	264,000	264,000
PAHS (ug/kg)					
Acenaphthene	140	<13	ne	3,590,000	45,200,000
Acenaphthylene	45	<12	ne	ne	ne
Anthracene	82	22	196,744	17,900,000	100,000,000
Benzo(a)anthracene	<55	1300	ne	1,140	20,800
Benzo(a)pyrene	<30	**940**	470	115	2,110
Benzo(b)fluoranthene	<29	**2000**	480	1,150	21,100
Benzo(g,h,i)perylene	<37	790	ne	ne	ne
Benzo(k)fluoranthene	<32	1000	ne	11,500	211,000
Dibenzo(a,h)anthracene	<28	280	ne	115	2,110
Chrysene	<45	**1700**	145.1	115,000	2,110,000
Fluoranthene	<30	1100	88,818	2,390,000	30,100,000
Fluorene	230	<15	14,815	2,390,000	30,100,000
Indeno(1,2,3-cd)pyrene	<26	720	ne	1,150	21,100
1-Methylnaphthalene	1900	15	ne	17,600	72,700
2-Methylnaphthalene	3200	18	ne	239,000	3,010,000
Naphthalene	600	<17	658.7	5,520	24,100
Phenanthrene	710	100	ne	ne	ne
Pyrene	<25	1200	54,772	1,790,000	22,600,000
METALS (mg/kg)					
Arsenic	na	**120**	0.584	0.614	2.39

- GW RCL = Groudwater Pathway Residual Contaminant Level - (exceedances **Bold**)
- DC RCL = Direct Contact Residual Contaminant Level - non-Industrial - (Exceedances Underlined)
- Boxed values exceed Industrial Direct Contact RCL
- BTV = Background Threshold Value

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