



October 6, 2017

Mr. Lee Delcore
Wisconsin Department of Natural Resources
1155 Pilgrim Road
Plymouth, WI 53073

RE: Non-Petroleum Compound Discovery and PECFA Cost Segregation
Suggar Property
3301 – 60th Street
Kenosha, WI 53144
BRRTS#: 03-30-0-04964 & 03-30-556490
PECFA#: 53144-4143-05

Mr. Delcore:

Site investigation activities conducted by Midwest Environmental Consulting (MEC) have revealed the presence of a non-petroleum contaminant at the above-referenced site. Specifically, tetrachloroethene (PCE) was present in soil sample DP-6 (3'-4') at a concentration of 50.5 ug/kg, exceeding the residual contaminant level (RCL) for the protection of groundwater.

Costs for activities associated with the investigation and cleanup of non-petroleum related contamination, such as PCE are not eligible for reimbursement by the Petroleum Environmental Cleanup Fund (PECFA) and often require the establishment of a cost segregation method approved by PECFA. However, it is MEC's opinion that development of a cost segregation method is not warranted at this time as discussed below.

To date, a total of 20 soil samples from 12 onsite soil borings have been analyzed for full volatile organic compounds (VOCs), including soil sample DP-6 (11'-12'), collected below the sample exhibiting the presence of PCE. None of the other samples have exhibited the presence of PCE or any other chlorinated/non-petroleum VOCs. The sampling locations are illustrated on Figure 1. The soil sample analytical results are summarized on Tables 1 and 2.

Twelve groundwater samples collected onsite were analyzed for VOCs. In addition, monitoring well MW-8, likely located downgradient from the Suggar Property site and associated with the Mueller's Auto site to the north, was also sampled for VOCs. None of these groundwater samples, including that from boring DP-6, exhibited the presence of PCE or any other chlorinated/non-petroleum VOC. The groundwater sample analytical results are summarized on Tables 3 and 4.

The exception to the above with respect to groundwater is the presence of chloromethane in samples DP-1W and DP-2W at concentrations exceeding the preventive action limit (PAL). Unlike the other groundwater samples associated with the site, these were the only groundwater samples collected and analyzed together during a 2010 Phase II Environmental Site



Assessment of the site. Chloromethane is not a degradation daughter product of PCE and the soil boring DP1 is not located in proximity to DP-6. Furthermore, chloromethane is a common laboratory contaminant and is also known to form when chlorine, such as that in municipal water supplies, combines with decomposing organic material. Consequently, the presence of chloromethane is not related to the PCE identified in sample DP-6 (3'-4') and its actual presence in the subsurface is suspect.

In light of the site data discussed above, the presence of PCE appears to be an isolated outlier, confined to one sample at the site. Furthermore, although it's concentration exceeded the RCL for protection of groundwater, PCE was not detected in the groundwater sample from DP-6 or any other samples collected at the site. As a consequence, the presence of chloromethane has not had a material impact at the site or on the activities necessary to move the petroleum investigation forward at this time, which will involve the installation and sampling of an NR141 compliant groundwater monitoring well network to complete definition of the downgradient petroleum soil and groundwater contamination. Therefore, it is the opinion of MEC that establishment of a cost segregation methodology is also not necessary at this time and may in fact be premature.

Based on the acquisition of additional site investigation data, activities may be required in the future to specifically address the presence of the identified PCE, which may not be needed to address the petroleum contamination or may be needed to address a combination of both. Such activities may include the performance of additional sampling activities related to the PCE or the analysis of VOCs when petroleum VOCs (PVOCs) would otherwise only be necessary. At such time, development of a cost segregation method may be necessary. MEC would then notify the responsible party of the requirement for cost segregation and need for approval by the Wisconsin Department of Natural Resources (WDNR) PECFA Program staff. The Responsible Party would then incur the costs, or portion thereof, for any non-petroleum related activities performed in accordance with the approved cost segregation method.

I look forward to a response from the Department regarding MEC's opinion that establishment of a cost segregation method is warranted at this time so that investigation activities can continue. Please let me know if you have any questions.

Sincerely,
MIDWEST ENVIRONMENTAL CONSULTING



Sean Cranley, P.G.
Principal Hydrogeologist
(262) 237-4351

CC: Jose Ochoa – A1 Auto Repair

N

BUILDING AT 3305 – 60th STREET

60th STREET

FORMER FUEL
DISPENSER ISLAND

B-2

DP-11

GP-12

MW-8

B-1

DP-10

OFFICE

DP-7

SHOP AREA

GARAGE

CARPORT

ALLEY

33rd AVENUE

USED OIL
TANK
EXCAVATION

DP-6

DP-2

DP-3

DP-5

DP-4

DP-8

SS-1

LEGEND

- = SOIL AND GROUNDWATER SAMPLING LOCATIONS 2016 & 17
- ◆ = TANK CLOSURE SAMPLE 2010
- = SOIL BORING LOCATION 2010
- = SOIL BORING LOCATION 2006
- = SOIL BORING LOCATION 1995
- ◇ = MONITORING WELL

SCALE AND LOCATIONS
ARE APPROXIMATE

0' 20'

Approved By:	Figure:
Sean Cranley	1
Date Approved:	
2/9/17	
Date Drawn:	
2/9/17	1 of: 1
Drawn By:	
Sean Cranley	

FIGURE 1
SAMPLING LOCATIONS
SUGAR PROPERTY
3301–60th STREET
KENOSHA, WI



Table 1 (Page 1 of 2)
Historical Soil Analytical Summary
Suggar Property
3100 60th Street
Kenosha, WI

Parameters	Sample Information / Results				Residual Contaminant Levels	
	B-1	B-2	GP-12	GP-12	Groundwater Protection	Not to Exceed Non-Industrial Direct Contact
Sample ID	B-1	B-2	GP-12	GP-12		
Sample Depth (ft/bls)	9-11	11-13	7-8	11-12		
Saturation Depth (ft/bls)	14	14	11.5	11.5		
Saturated / Unsaturated	Unsaturated	Unsaturated	Unsaturated	Unsaturated		
Sample Date	04/13/95	04/13/95	04/25/06	04/25/06		
VOCs (ug/kg)					ug/kg	ug/kg
Benzene	NA	NA	<25.0	<25.0	5.1	1,490
Ethylbenzene	NA	NA	114	33.8	1,570	7,470
Naphthalene	NA	NA	NA	NA	658.2	5,150
Toluene	NA	NA	29.7	<25.0	1,107.20	818,000
1,2,4-Trimethylbenzene	NA	NA	145	<25.0	1,382.1 (1)	89,800
1,3,5-Trimethylbenzene	NA	NA	58.4	<25.0	1,382.1 (1)	182,000
Xylenes	NA	NA	229	49.1	3,960	260,000
n-Butylbenzene	NA	NA	NA	NA	NS	108,000
n-Propylbenzene	NA	NA	NA	NA	NS	264,000
sec-Butylbenzene	NA	NA	NA	NA	NS	145,000
Isopropylbenzene	NA	NA	NA	NA	NS	268,000
p-Isopropyltoluene	NA	NA	NA	NA	NS	162,000
GRO/DRO (mg/kg)						
GRO	3.5	22	43.4		NS	NS
DRO	NA	NA	NA		NS	NS

Notes:

Table includes detected analytes only, which are right justified in the columns.

Bold type indicates concentration within the upper 4 feet of the subsurface exceeds the non-industrial direct contact RCL and, if applicable, the background level, thus constituting a soil standard exceedance.

Italic type indicates a concentration exceeds the groundwater protection RCL and, if applicable the background level, thus constituting a soil standard exceedance.

RCL - Residual Contaminant Level

VOCs - Volatile Organic Compounds

GRO = Gasoline Range Organics

DRO = Diesel Range Organics

NA = Not Analyzed

NS = No Standard

(1) The groundwater protection RCL applies to combined trimethylbenzenes.

Table 1 (Page 2 of 2)
Historical Soil Analytical Summary
Suggar Property
3100 60th Street
Kenosha, WI

Parameters	Sample Information / Results					Residual Contaminant Levels	
	MW-8	MW-8	DP-1	DP-2	SS-1	Groundwater Protection	Not to Exceed Non-Industrial Direct Contact
Sample ID	MW-8	MW-8	DP-1	DP-2	SS-1		
Sample Depth (ft/bls)	8.5-10	16-17.5	14-15	13-14	4		
Saturation Depth (ft/bls)	11	11	12.5	12.5	14.5		
Saturated / Unsaturated	Unsaturated	Saturated	Saturated	Saturated	Unsaturated		
Sample Date	04/03/08	04/03/08	08/05/10	08/05/10	11/09/10		
VOCs (ug/kg)						ug/kg	ug/kg
Benzene	<29	<30	<500	<1,000	<u>743</u>	5.1	1,490
Ethylbenzene	<29	<30	<500	<1,000	<u>3,860</u>	1,570	7,470
Naphthalene	190	<61	<500	<1,000	<u>7,370</u>	658.2	5,150
Toluene	<29	<30	<500	<1,000	<u>7,860</u>	1,107.20	818,000
1,2,4-Trimethylbenzene	<29	42	<500	<1,000	<u>16,300</u>	1,382.1 (1)	89,800
1,3,5-Trimethylbenzene	<29	<30	<500	<u>59,600</u>	<u>5,210</u>	1,382.1 (1)	182,000
Xylenes	120	<91	<500	<u>12,300</u>	<u>20,780</u>	3,960	260,000
n-Butylbenzene	NA	NA	3,700	<1,620	NA	NS	108,000
n-Propylbenzene	NA	NA	2,040	28,000	NA	NS	264,000
sec-Butylbenzene	NA	NA	3,150	7,690	NA	NS	145,000
Isopropylbenzene	NA	NA	<500	4,310	NA	NS	268,000
p-Isopropyltoluene	NA	NA	<500	4,560	NA	NS	162,000
GRO/DRO (mg/kg)							
GRO	120	<6.1	NA	NA	188	NS	NS
DRO	9.0	<4.6	NA	NA	2,130	NS	NS

Notes:

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NS = No Standard

(1) The groundwater protection RCL applies to combined trimethylbenzenes.

Table 2 (Page 1 of 3)
Soil Analytical Summary
Suggar Property
3100 60th Street
Kenosha, WI

Parameters	Sample Information / Results						Residual Contaminant Levels		
	DP-3	DP-3	DP-4	DP-4	DP-5	DP-5	Groundwater Protection	Not to Exceed Non-Industrial Direct Contact	Not to Exceed Industrial Direct Contact Protection
Sample ID	DP-3	DP-3	DP-4	DP-4	DP-5	DP-5			
Sample Depth (ft/bis)	1.5-2	11.5-12	3-4	11.5-12	3-4	7-8			
Saturation Depth (ft/bis)	11.5	11.5	12	12	14.5	14.5			
Saturated / Unsaturated	Unsaturated	Unsaturated	Unsaturated	Unsaturated	Unsaturated	Unsaturated			
Sample Date	12/12/16	12/12/16	12/12/16	12/12/16	01/10/17	01/10/17			
VOCs (ug/kg)							ug/kg	ug/kg	ug/kg
1,2,4-Trimethylbenzene	105	<25.0	<25.0	14,900	<25.0	21,500	1,382.1*	89,800	219,000
1,3,5-Trimethylbenzene	50.1	<25.0	<25.0	<125.0	<25.0	6,060	1,382.1*	182,000	182,000
Ethylbenzene	<25.0	<25.0	<25.0	521	<25.0	290	1,570	7,470	37,000
Isopropylbenzene (Cumene)	<25.0	<25.0	<25.0	1,940	<25.0	514	NS	268,000	268,000
Naphthalene	<40.0	<40.0	<40.0	<200.0	<40.0	8,520	658.2	5,150	26,000
Tetrachloroethene	<25.0	<25.0	<25.0	<125.0	<25.0	<100	4.5	30,700	153,000
Toluene	<25.0	<25.0	<25.0	<125.0	<25.0	<100	1,107.2	818,000	818,000
Xylenes	260.3	<75.0	<75.0	513	<75.0	17,820	3,940	260,000	260,000
n-Butylbenzene	<25.0	<25.0	<25.0	7,040	<25.0	<100	NS	108,000	108,000
n-Propylbenzene	<25.0	<25.0	<25.0	11,600	<25.0	2,270	NS	264,000	264,000
p-Isopropyltoluene	<25.0	<25.0	<25.0	1,340	<25.0	230	NS	162,000	162,000
sec-Butylbenzene	<25.0	<25.0	<25.0	2,210	<25.0	402	NS	145,000	145,000
tert-Butylbenzene	<25.0	<25.0	<25.0	<125.0	<25.0	<100	NS	183,000	183,000
PAHs (ug/kg)							ug/kg	ug/kg	ug/kg
Acenaphthene	<4.8	<4.4	<4.5	<36.2	<4.8	18.1	NS	3,440,000	33,000,000
Acenaphthylene	<4.1	<3.7	<3.8	<30.7	<4.0	<14.7	NS	NS	NS
Anthracene	<7.1	<6.5	<6.6	<53.2	<7.0	<25.5	196,949.2	17,200,000	100,000,000
Benz(a)anthracene	<4.0	<3.6	<3.7	<29.6	<3.9	34.6	NS	147	2,100
Benz(a)pyrene	<3.1	<2.9	<2.9	<23.4	<3.1	<11.2	470	15	211
Benz(b)fluoranthene	5.3	<3.2	<3.3	<26.3	<3.5	13.1	479.3	148	2,110
Benz(g,h,i)perylene	<2.5	<2.3	<2.4	<18.9	<2.5	11.5	NS	NS	NS
Chrysene	<4.2	<3.8	<3.9	<31.4	<4.1	22.4	144.6	14,800	211,000
Dibenz(a,h)anthracene	<2.8	<2.5	<2.6	<20.8	<2.7	<10	NS	15	211
Fluoranthene	<6.5	<5.9	<6.1	<48.6	<6.4	<23.3	88,877.8	2,290,000	22,000,000
Fluorene	<5.2	<4.7	<4.8	<38.6	<5.1	22.4	14,802.7	2,290,000	22,000,000
Indeno(1,2,3-cd)pyrene	<2.7	<2.5	<2.6	<20.5	<2.7	<9.8	NS	148	2,110
1-Methylnaphthalene	<5.0	<4.6	<4.7	3,020	<4.9	675	NS	15,600	53,100
2-Methylnaphthalene	<6.2	<5.7	<5.8	<46.6	<6.1	1,310	NS	229,000	2,200,000
Naphthalene	<10.5	<9.6	<9.8	462	<10.3	1,100	658.2	5,150	26,000
Phenanthrene	<14.5	<13.2	<13.5	<109	<14.3	58.0	NS	NS	NS
Pyrene	<5.6	<5.1	<5.2	<42.1	<5.5	41.1	54,545.5	1,720,000	16,500,000
RCRA Metals (mg/kg)							mg/kg	mg/kg	Background
Cadmium	<0.15	<0.15	<0.14	<0.28	<0.15	<0.15	0.752	70	799
Lead	28.3	7.5	8.3	3.8	13.8	21.9	27	400	800
									1
									52

Notes:

Table includes detected analytes only.

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Italic type indicates a concentration exceeds the groundwater protection RCL and, if applicable the background level, thus constituting a soil standard exceedance.

RCL - Residual Contaminant Level

VOCs - Volatile Organic Compounds

PAHs - Polynuclear Aromatic Hydrocarbons

RCRA - Resource Conservation & Recovery Act

NS - No Standard

NA - Not Applicable/Not Analyzed

(1) The groundwater protection RCL applies to combined trimethylbenzenes.

Table 2 (Page 2 of 3)
Soil Analytical Summary
Suggar Property
3100 60th Street
Kenosha, WI

Parameters	Sample Information / Results								Residual Contaminant Levels		
	DP-6	DP-6	DP-7	DP-7	DP-7	DP-8	DP-8	Groundwater Protection	Not to Exceed Non-Industrial Direct Contact	Not to Exceed Industrial Direct Contact Protection	
Sample ID	DP-6	DP-6	DP-7	DP-7	DP-7	DP-8	DP-8				
Sample Depth (ft/bls)	3-4	11-12	3-4	7-8	8-9	3-4	7-8				
Saturation Depth (ft/bls)	14.5	14.5	12	12	11.5	11.5	11.5				
Saturated / Unsaturated	Unsaturated	Unsaturated	Unsaturated	Unsaturated	Unsaturated	Unsaturated	Unsaturated				
Sample Date	01/10/17	01/10/17	12/12/16 & 01/10/17*	01/10/17*	12/12/16*	01/10/17	01/10/17				
VOCs (ug/kg)											
1,2,4-Trimethylbenzene	<25.0	49.0	52.0	62,600	NA	<25.0	399	1,382.1*	89,800	219,000	
1,3,5-Trimethylbenzene	<25.0	47.7	<25.0	17,500	NA	<25.0	44.2	1,382.1*	182,000	182,000	
Ethylbenzene	<25.0	<25.0	<25.0	11,800	NA	<25.0	<25.0	1,570	7,470	37,000	
Isopropylbenzene (Cumene)	<25.0	<25.0	<25.0	3,260	NA	<25.0	443	NS	268,000	268,000	
Naphthalene	<40.0	<40.0	<40.0	17,200	NA	<40.0	<40.0	658.2	5,150	26,000	
Tetrachloroethene	50.5	<25.0	<25.0	<312	NA	<25.0	<25.0	4.5	30,700	153,000	
Toluene	<25.0	<25.0	<25.0	1,140	NA	<25.0	<25.0	1,107.2	818,000	818,000	
Xylenes	<75.0	<75.0	64.5	45,400	NA	<75.0	<75.0	3,960	260,000	260,000	
n-Butylbenzene	<25.0	56.6	<25.0	10,100	NA	<25.0	438	NS	108,000	108,000	
n-Propylbenzene	<25.0	<25.0	<25.0	12,300	NA	<25.0	403	NS	264,000	264,000	
p-Isopropyltoluene	<25.0	<25.0	<25.0	1,480	NA	<25.0	<25.0	NS	162,000	162,000	
sec-Butylbenzene	<25.0	<25.0	<25.0	2,050	NA	<25.0	533	NS	145,000	145,000	
tert-Butylbenzene	<25.0	<25.0	<25.0	<312	NA	<25.0	39.6	NS	183,000	183,000	
PAHs (ug/kg)											
Acenaphthene	<5.2	<4.1	<4.7	NA	<23.3	NA	NA	NS	3,440,000	33,000,000	
Acenaphthylene	5.3	<3.5	<4.0	NA	<19.8	NA	NA	NS	NS	NS	
Anthracene	57.8	<6.0	<6.9	NA	<34.2	NA	NA	196,949.2	17,200,000	100,000,000	
Benzo(a)anthracene	23.1	<3.3	<3.8	NA	<19.0	NA	NA	NS	147	2,100	
Benzo(a)pyrene	4.7	<2.7	<3.0	NA	<15.1	NA	NA	470	15	211	
Benzo(b)fluoranthene	11.4	<3.0	<3.4	NA	<16.9	NA	NA	479.3	148	2,110	
Benzo(g,h,i)perylene	4.8	4.1	<2.5	NA	<12.2	NA	NA	NS	NS	NS	
Chrysene	25.5	5.8	<4.1	NA	<20.2	NA	NA	144.6	14,800	211,000	
Dibenz(a,h)anthracene	3.0	<2.4	<2.7	NA	<13.4	NA	NA	NS	15	211	
Fluoranthene	26.1	<5.5	<6.3	NA	<31.2	NA	NA	88,877.8	2,290,000	22,000,000	
Fluorene	<5.5	<4.4	<5.0	NA	<24.8	NA	NA	14,802.7	2,290,000	22,000,000	
Indeno(1,2,3-cd)pyrene	3.1	<2.3	<2.7	NA	<13.2	NA	NA	NS	148	2,110	
1-Methylnaphthalene	221	<4.2	7.7	NA	613	NA	NA	NS	15,600	53,100	
2-Methylnaphthalene	278	<5.3	10.8	NA	1,360	NA	NA	NS	229,000	2,200,000	
Naphthalene	54.2	<8.9	17.7	NA	2,040	NA	NA	658.2	5,150	26,000	
Phenanthrene	68.7	<12.3	<14.1	NA	<69.8	NA	NA	NS	NS	NS	
Pyrene	50.8	<4.8	<5.5	NA	<27.0	NA	NA	54,545.5	1,720,000	16,500,000	
RCRA Metals (mg/kg)											
Cadmium	<0.17	0.64	<0.13	NA	<0.16	NA	NA	0.752	70	799	1
Lead	19.4	7.4	23.8	NA	2.9	28.5	17.7	27	400	800	52

Notes:

Table includes detected analytes only, which are right justified in the columns.

Bold type indicates concentration within the upper 4 feet of the subsurface exceeds the non-industrial direct contact RCL and, if applicable, the background level, thus constituting a soil standard exceedance.

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(1) The groundwater protection RCL applies to combined trimethylbenzenes.

* The VOC aliquotes for DP-7 collected on 12/12/16 broke and additional samples were collected on 01/10/17

Table 2 (Page 3 of 3)
Soil Analytical Summary
Suggar Property
3100 60th Street
Kenosha, WI

Parameters	Sample Information / Results						Residual Contaminant Levels		
	DP-9	DP-9	DP-10	DP-10	DP-11	DP-11	Groundwater Protection	Not to Exceed Non-Industrial Direct Contact	Not to Exceed Industrial Direct Contact Protection
Sample ID	DP-9	DP-9	DP-10	DP-10	DP-11	DP-11			
Sample Depth (ft/bls)	3-4	12-13	3-4	11.5-12	3-4	7-8			
Saturation Depth (ft/bls)	15	15	11.5	11.5	11.5	11.5			
Saturated / Unsaturated	Unsaturated	Unsaturated	Unsaturated	Saturated	Unsaturated	Unsaturated			
Sample Date	12/12/16	12/12/16	12/12/16	12/12/16	01/10/17	01/10/17			
VOCs (ug/kg)						ug/kg	ug/kg	ug/kg	
1,2,4-Trimethylbenzene	<25.0	<25.0	<25.0	<25.0	<25.0	1,382.1*	89,800	219,000	
1,3,5-Trimethylbenzene	<25.0	<25.0	<25.0	<25.0	<25.0	1,382.1*	182,000	182,000	
Ethylbenzene	<25.0	<25.0	<25.0	<25.0	<25.0	1,570	7,470	37,000	
Isopropylbenzene (Cumene)	<25.0	<25.0	<25.0	<25.0	<25.0	NS	268,000	268,000	
Naphthalene	<40.0	<40.0	<40.0	<40.0	<40.0	658.2	5,150	26,000	
Tetrachloroethene	<25.0	<25.0	<25.0	<25.0	<25.0	4.5	30,700	153,000	
Toluene	<25.0	<25.0	<25.0	<25.0	<25.0	1,107.2	818,000	818,000	
Xylenes	<75.0	<75.0	<75.0	<75.0	<75.0	3,940	260,000	260,000	
n-Butylbenzene	<25.0	<25.0	<25.0	<25.0	<25.0	NS	108,000	108,000	
n-Propylbenzene	<25.0	<25.0	<25.0	<25.0	<25.0	NS	264,000	264,000	
p-Isopropyltoluene	<25.0	<25.0	<25.0	<25.0	<25.0	NS	162,000	162,000	
sec-Butylbenzene	<25.0	<25.0	<25.0	39.7	<25.0	NS	145,000	145,000	
tert-Butylbenzene	<25.0	<25.0	<25.0	<25.0	<25.0	NS	183,000	183,000	
PAHs (ug/kg)						ug/kg	ug/kg	ug/kg	
Acenaphthene	NA	NA	NA	NA	NA	NA	3,440,000	33,000,000	
Acenaphthylene	NA	NA	NA	NA	NA	NA	NS	NS	
Anthracene	NA	NA	NA	NA	NA	NA	196,949.2	17,200,000	100,000,000
Benzo(a)anthracene	NA	NA	NA	NA	NA	NA	147	2,100	
Benzo(a)pyrene	NA	NA	NA	NA	NA	NA	470	15	211
Benzo(b)fluoranthene	NA	NA	NA	NA	NA	NA	479.3	148	2,110
Benzo(g,h,i)perylene	NA	NA	NA	NA	NA	NA	NS	NS	NS
Chrysene	NA	NA	NA	NA	NA	NA	144.6	14,800	211,000
Dibenz(a,h)anthracene	NA	NA	NA	NA	NA	NA	NS	15	211
Fluoranthene	NA	NA	NA	NA	NA	NA	88,877.8	2,290,000	22,000,000
Fluorene	NA	NA	NA	NA	NA	NA	14,802.7	2,290,000	22,000,000
Indeno(1,2,3-cd)pyrene	NA	NA	NA	NA	NA	NA	NS	148	2,110
1-Methylnaphthalene	NA	NA	NA	NA	NA	NA	NS	15,600	53,100
2-Methylnaphthalene	NA	NA	NA	NA	NA	NA	NS	229,000	2,200,000
Naphthalene	NA	NA	NA	NA	NA	NA	658.2	5,150	26,000
Phenanthrene	NA	NA	NA	NA	NA	NA	NS	NS	NS
Pyrene	NA	NA	NA	NA	NA	NA	54,545.5	1,720,000	16,500,000
RCRA Metals (mg/kg)						mg/kg	mg/kg	mg/kg	Background
Cadmium	NA	NA	NA	NA	NA	NA	0.752	70	799
Lead	6.8	8.0	10.7	5.0	3.1	7.7	27	400	800
									1
									52

Notes:

Table includes detected analytes only, which are right justified in the columns.

Bold type indicates concentration within the upper 4 feet of the subsurface exceeds the non-industrial direct contact RCL and, if applicable, the background level, thus constituting a soil standard exceedance.

Italic type indicates a concentration exceeds the groundwater protection RCL and, if applicable the background level, thus constituting a soil standard exceedance.

RCL - Residual Contaminant Level

VOCs - Volatile Organic Compounds

PAHs - Polynuclear Aromatic Hydrocarbons

RCRA - Resource Conservation & Recovery Act

NS - No Standard

NA - Not Applicable/Not Analyzed

(1) The groundwater protection RCL applies to combined trimethylbenzenes.

Table 3 (Page 1 of 1)
Historical Groundwater Sample Analytical Results Summary
Suggar Property
Kenosha, WI
ChemReport, Inc.
April 2006 to July 2010

Parameters		Sample Information / Results				Groundwater Quality Standards	
Sample ID	GP-12W	DP-1W	DP-2W	MW-8	PAL	ES	
Sample Date	4/25/06	8/5/10	8/5/10	7/14/10			
VOCs (ug/l)							
n-Butylbenzene	NA	3.5	1.4	42.4	NS	NS	
sec-Butylbenzene	NA	7.1	1.0	17.2	NS	NS	
tert-Butylbenzene	NA	<0.97	<0.97	<9.7	NS	NS	
Chloromethane	NA	0.37	0.54	<2.4	0.3	3	
Ethylbenzene	<5.00	<0.54	<0.54	774	140	700	
Isopropyltoluene (Cumene)	NA	4.5	1.1	149	NS	NS	
p-Isopropyltoluene	NA	<0.67	<0.67	8.8	NS	NS	
n-Propylbenzene	NA	4.9	4.7	480	NS	NS	
1,2,4-Trimethylbenzene	<5.00	1.7	15.4	1,140	96 (1)	480 (1)	
1,3,5-Trimethylbenzene	<5.00	<0.83	1.4	<8.3	96 (1)	480 (1)	
Xylenes	<5.00	<1.63	<1.63	473.5	400	2000	

Notes:

Table includes detected analytes only, which are right justified in the columns.

Italic type indicates concentration exceeds PAL.

Bold type indicates concentration exceeds ES.

VOCs - Volatile Organic Compounds

PAL - NR 140 Preventive Action Limit

ES - NR 140 Enforcement Standard

NA - Not analyzed or not applicable

(1) - The groundwater quality stanards are applied to the combined concentrations of 1,2,4-Trimethylbenzene and 1,3,5-Trimethylbenzene.

Table 4 (Page 1 of 2)
Groundwater Sample Analytical Results Summary
Suggar Property
Kenosha, WI
Midwest Environmental Consulting
December 2016 & January 2017

Parameters		Sample Information / Results					Groundwater Quality Standards	
Sample ID	DP-3W	DP-4W	DP-5W	DP-6W	DP-7W	PAL	ES	
Sample Date	6/16/16	6/16/16	6/16/16	6/17/16	6/17/16			
VOCs (ug/l)						ug/l	ug/l	
n-Butylbenzene	<0.50	183	387	<0.50	57.2	NS	NS	
sec-Butylbenzene	<2.2	<273	<219	<2.2	<43.7	NS	NS	
tert-Butylbenzene	<0.18	<22.5	<18.0	<0.18	<3.6	NS	NS	
Chloromethane	<0.50	<62.5	<0.50	<0.50	<10.0	0.3	3	
Ethylbenzene	<0.50	5,000	1,130	<0.50	23.5	140	700	
Isopropyltoluene (Cumene)	<0.14	219	326	<0.14	75.5	NS	NS	
p-Isopropyltoluene	<0.50	102	63.4	<0.50	24.7	NS	NS	
n-Propylbenzene	<0.50	785	1,350	<0.50	282	NS	NS	
1,2,4-Trimethylbenzene	<0.50	5,110	6,860	<0.50	1,310	96 (1)	480 (1)	
1,3,5-Trimethylbenzene	<0.50	<62.5	65.4	<0.50	<10.0	96 (1)	480 (1)	
Xylenes	<1.50	4,062.5	1,250	<1.50	27.4	400	2000	

Notes:

Table includes detected analytes only, which are right justified in the columns.

Italic type indicates concentration exceeds PAL.

Bold type indicates concentration exceeds ES.

VOCs - Volatile Organic Compounds

PAL - NR 140 Preventive Action Limit

ES - NR 140 Enforcement Standard

NA - Not analyzed or not applicable

(1) - The groundwater quality standards are applied to the combined concentrations of 1,2,4-Trimethylbenzene and 1,3,5-Trimethylbenzene.

Table 4 (Page 2 of 2)
Groundwater Sample Analytical Results Summary
Suggar Property
Kenosha, WI
Midwest Environmental Consulting
December 2016 & January 2017

Parameters	Sample Information / Results				Groundwater Quality Standards	
	Sample ID DP-8W	DP-9W 6/16/16	DP-10W 6/16/16	DP-11W 6/17/16	PAL	ES
VOCs (ug/l)					ug/l	ug/l
n-Butylbenzene	42.1	183	<0.50	<0.50	NS	NS
sec-Butylbenzene	22.7	<2.2	<2.2	<2.2	NS	NS
tert-Butylbenzene	3.1	<0.18	<0.18	<0.18	NS	NS
Chloromethane	<5.0	<0.50	<0.50	<0.50	0.3	3
Ethylbenzene	16.4	5.000	<0.50	<0.50	140	700
Isopropyltoluene (Cumene)	62.1	219	<0.14	<0.14	NS	NS
p-Isopropyltoluene	9.0	102	<0.50	<0.50	NS	NS
n-Propylbenzene	182	785	<0.50	<0.50	NS	NS
1,2,4-Trimethylbenzene	520	5,110	<0.50	<0.50	96 (1)	480 (1)
1,3,5-Trimethylbenzene	21.2	<0.42	<0.50	<0.50	96 (1)	480 (1)
Xylenes	20.6	4,062.5	<1.50	<1.50	400	2000

Notes:

Table includes detected analytes only, which are right justified in the columns.

Italic type indicates concentration exceeds PAL.

Bold type indicates concentration exceeds ES.

VOCs - Volatile Organic Compounds

PAL - NR 140 Preventive Action Limit

ES - NR 140 Enforcement Standard

NA - Not analyzed or not applicable

(1) - The groundwater quality stanadards are applied to the combined concentrations of 1,2,4-Trimethylbenzene and 1,3,5-Trimethylbenzene.