

April 27, 2018

City of Detroit Department of Public Works
City Engineering & Street Maintenance Divisions
Coleman A. Young Municipal Center
2 Woodward Avenue, Suite 611
Detroit, Michigan 48226

Re: Notice of Migration of Contamination

From an unplatted parcel adjoining S. Waterman St., east of S. Post St., Detroit, MI, no Tax ID (MDOT Parcel 5715)

Potentially toward S. Waterman Street right-of-way to the east and/or railroad right-of-way to the south

Notification No. 5715-ROW

To whom it may concern:

The Mannik Smith Group, Inc. ("MSG"), on behalf of the Michigan Department of Transportation ("MDOT"), has directed or conducted underground environmental testing at an approximately 50-foot wide strip of land between South Post Street and South Waterman Street, Detroit, Michigan ("the Site") in relation to the Gordie Howe International Bridge project underway in the vicinity of the rights-of-ways referenced above ("the subject properties").

The Michigan Department of Environmental Quality ("MDEQ") requires distribution of the enclosed a Notice of Migration of Contamination form when there is evidence that environmental contamination at one property has or may have affected nearby properties. Hazardous substance(s) were identified in soil and/or groundwater sample(s) collected at the Site at concentration(s) that exceed Generic Residential Cleanup Criteria and Screening Levels established by the MDEQ.

At this time, it is not known if the subject properties have been affected by the environmental contamination at the Site. Also, the identification of hazardous substance(s) at the Site does not necessarily mean a hazardous situation or immediate danger currently exists. MSG, on behalf of the MDOT, is providing this notice to you as a precautionary measure and for your general awareness of environmental conditions at the Site.

Please review the enclosed document and if you have any questions regarding the Notice of Migration of Contamination please contact Karen Williams of the MDEQ at 586-753-3884. If you have general questions regarding the contents of this letter please contact Walter Bolt of MSG at 734-397-3100, extension 6025 or Jim Woodruff of the MDOT at 517-241-9115.

Sincerely

Walter J. Bolt, CPG Project Manager

Environmental Owners Representative Consultant Gordie Howe International Bridge Project

CC: Jim Woodruff - MDOT

Karen Williams – MDEQ RRD Project Manager

Paul Max – General Manager, Environmental Affairs, City of Detroit BSEED Anita Harrington – Environmental Specialist II, City of Detroit BSEED

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TECHNICAL SKILL. CREATIVE SPIRIT.

5715.Notice Cover Letter.DetroitDPW.docx

2365 Haggerty Road South, Canton, Michigan 48188 Tel: 734.397.3100 Fax: 734.397.3131 www.MannikSmithGroup.com



MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY REMEDIATION AND REDEVELOPMENT DIVISION

For DEQ Use Only	
ITS#	
Site ID #	
Category Code:	

NOTICE OF MIGRATION OF CONTAMINATION (FORM EQP4482 REV. 4/16)

(Under the authority of Part 201, Natural Resources and Environmental Protection Act, 1994 Act 451, as amended, (NREPA) and the Rules promulgated thereunder)

An owner or operator of property that is a facility, and/or who is subject to MCL324.20107a, and who has reason to believe that a hazardous substance is emanating from, has emanated from, or is likely to be emanating from the property and migrating beyond the boundaries of the property that he or she owns or operates is required under R 299.51017(1) and MCL 324.20114(1)(b)(ii) & (iii) to notify the Michigan Department of Environmental Quality (DEQ) and affected property owners. Submission of this notice does not fulfill the notification requirements of MCL 324.21309a.

The notice must be provided within 45 days (MCL 324.20107a) or within 30 days (MCL 324.20114) after the owner or operator has reason to believe that hazardous substances have migrated, or are likely to have migrated, to or beyond the boundary of his or her property (see R 299.51017 for exceptions that apply to parties subject to MCL 324.20107a).

Use of this form is mandatory for the notice required by R 299.51017(1) and may also be used by parties subject to MCL 324.20114(1)(b)(ii) & (iii). This form may also be used to provide notice to affected property owners as required by those rules.

If a person holds a permit for an oil and gas well under Part 615, Supervisor of Wells, of the NREPA and there is a release from the oil and gas exploration or production activities, that person shall give notice to the DEQ and to the owner of the surface rights of the property.

If a person holds an easement and there is a release from the easement holder's activities, that person shall provide notice to the DEQ and to the grantor of the easement, or the grantor's successor in interest, if any.

Completing this notice in no way relieves a person who is subject to MCL 324.20114 from the responsibility to undertake required response activities.

This notice must be sent to the DEQ office that serves the county in which the property is located. A list of DEQ offices is available at www.michigan.gov/deqduecare, or by calling the Remediation and Redevelopment Division's Lansing office at 517-284-5187. The DEQ will not prepare acknowledgement of receipt of these notices. The sender is responsible for sending the report using a method that provides proof of delivery if such proof is desired. Please label the outside of the envelope "Migration Notice." Additional guidelines for the compliance with the requirements of R 299.51017(1) or MCL 324.20114(1)(b)(ii) & (iii) are available at www.michigan.gov/deqduecare.

THIS NOTICE IS PROVIDED PURSUANT TO: (check both, if applicable)		R 299.51017	MCL 3	324.20114(1)			
Ple	Please provide the following information as completely as possible.						
1.	Name and location of the property that hazardous substances are emanating from:	:		e to the property both, as applicable.)			
	Name: MI Dept. of Transportation (MDOT) Pa Address: Unknown – an approximately 50-foc north of 201 S. Post St., 276 & 274 S. Watern south of active Norfolk Southern railroad track Location: Michigan City/County: Property Tax Identification Number, or if appli * MDOT is future owner; physical possession	ot wide strip of land nan St.; ks Detroit/Wayne cable, the ward an	d item number:	⊠ □ Unavailable			
	Latitude (decimal degrees): 42.301660 °N	Longitude ((decimal degree	s): -83.107875	°W		
	Reference Point for Latitude and Longitude: Center of Site: Main/front door: Collection Method: Survey:		main entrance: GPS: ⊠	Other:			

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2.	Provide any additional ID numbers associated with the property (e.g., EPA ID No., BEA No., Part 213 facility ID No.,
	etc.):
	CLUB MDOT Barrel 5745, MEDA 64- ID# 02002000, ONTO DDD 46 604

GHIB MDOT Parcel 5715; MERA Site ID# 82002800; CNTS-RRD-16-001

3. Name, address, and telephone number of the property owner, operator, or other party submitting the notice:

Name: MDOT Bureau of Development, Environmental Services Section

Address: 425 W. Ottawa Street, P.O. Box 30050

City/State: Lansing, MI, 48909 Telephone Number: 517-241-9115

4. Name, address and telephone number of a contact person familiar with the content of the notice:

Name: Walter Bolt of The Mannik & Smith Group, Inc. Environmental Owner's Rep Consultant to MDOT

Address: 2365 Haggerty Road South

City/State: Canton, MI 48188

Telephone Number: 734-397-3100 x. 6025

5. If this Notice is provided pursuant to R 299.51017, provide the address and other location information for the *adjacent* property(s) onto which contamination is migrating, has migrated, or is likely to migrate.

If this Notice is provided pursuant to MCL Section 324.20114(1), provide the address and other location information for *each* property onto which contamination has migrated. Notice should be sent to the property owner of record. If the impacted property is owned by the State of Michigan, notice should be sent to the department managing the property (e.g., a prison, state park, etc.). Notices to the Michigan Department of Transportation (MDOT) for state owned roadways should be sent to Contaminated Site Specialist, Environmental Services Section, MDOT-Bureau of Development, 425 W. Ottawa Street, P.O. Box 30050, Lansing, MI 48909. If the impacted property is owned by the State of Michigan, notice should be sent to the department managing the property (i.e. a prison, state park, etc.).

Address: Unknown - an approximately 50-foot wide strip	Notified? No 🗌	Yes 🛛	Date: April 27, 2018
of land north of 201 S. Post St., 276 & 274 S. Waterman St.; south of active Norfolk Southern railroad tracks (subject property) City/State: Detroit, MI Property Tax ID number: Unavailable Other: Honeywell International Inc.			
Address: 274 S. Waterman St.	Notified? No	Yes 🔯	Date: April 27, 2018
City/State: Detroit, MI		Amort .	
Property Tax ID number: 1800023600			
Other: Lafayette Properties, LLC			
Address: 6952 W. Jefferson Ave.	Notified? No 🔲	Yes 🛛	Date: April 27, 2018
City/State: Detroit, MI			
Property Tax ID number: 18000107 Other: DTE Electric Company			
Culot. Die Electric Germann			
Address: 6952 W. Jefferson Ave.	Notified? No 🗌	Yes 🛛	Date: <u>April 27, 2018</u>
City/State: Detroit, MI Property Tax ID number: 18000107			
Other: Potential easement holder: International			
Transmission Company (ITC)			
Address: 6952 W. Jefferson Ave.	Notified? No □	Yes 🕅	Date: April 27, 2018
City/State: Detroit MI	Hotillod: NO	100 23	Date. 110111 21, 2010

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Other: MDOT Parcel 5714

Property Tax ID number: 18000107



MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY REMEDIATION AND REDEVELOPMENT DIVISION

Address: 276 S. Waterman St. City/State: Detroit, MI Property Tax ID number: 18000236-0 Other: MDOT Parcel 5322	Notified? No ☐ Yes ☒	Date: April 27, 2018
Address: 201 S. Post St. City/State: Detroit, MI Property Tax ID number: 18008644.001 Other: MDOT Parcel 5409	Notified? No ☐ Yes ☒	Date: <u>April 27, 2018</u>
Address: 157 S. Post St. City/State: Detroit, MI Property Tax ID number: 18008645-68 Other: MDOT Parcel 5445	Notified? No ☐ Yes ☒	Date: April 27, 2018
Address: 221 S. Post St. City/State: Detroit, MI Property Tax ID number: 18008644.002L Other: MDOT Parcel 5446	Notified? No ☐ Yes ☒	Date: April 27, 2018
Address: Unknown – an approximately 60' wide strip of land approximately 50' north of 201 S. Post St. / 18008644.001, 246 S. Waterman St. / 18000236-0, & 274 S. Waterman St. / 1800023600, occupied by active Norfolk Southern railroad tracks City/State: Detroit, MI Property Tax ID number: Unavailable Other: Norfolk Southern Corp.	Notified? No ☐ Yes ☒	Date: <u>April 27, 2018</u>
Address: 27700 Donald Court City/State: Warren, MI, 48092-2793 Property Tax ID number: NA Other: MDEQ, Southeast Michigan District Office Office of Drinking Water & Municipal Assistance Division	Notified? No ☐ Yes ☒	Date: <u>April 27, 2018</u>
Address: 2 Woodward Avenue, Ste. 611 City/State: Detroit, MI, 48226 Property Tax ID number: NA Other: City of Detroit (S. Waterman Street adjacent to the subject property)	Notified? No ☐ Yes ☒	Date: April 27, 2018
Address: 27175 Energy Way City/State: Novi, MI, 48377 Property Tax ID number: NA Other: International Transmission Company (ITC) (utility holder)	Notified? No ☐ Yes ☒	Date: <u>April 27, 2018</u>
Address: 735 Randolph Street, Ste. 1900 City/State: Detroit, MI, 48226 Property Tax ID number: NA Other: Great Lakes Water Authority (utility holder)	Notified? No ☐ Yes ☒	Date: <u>April 27, 2018</u>

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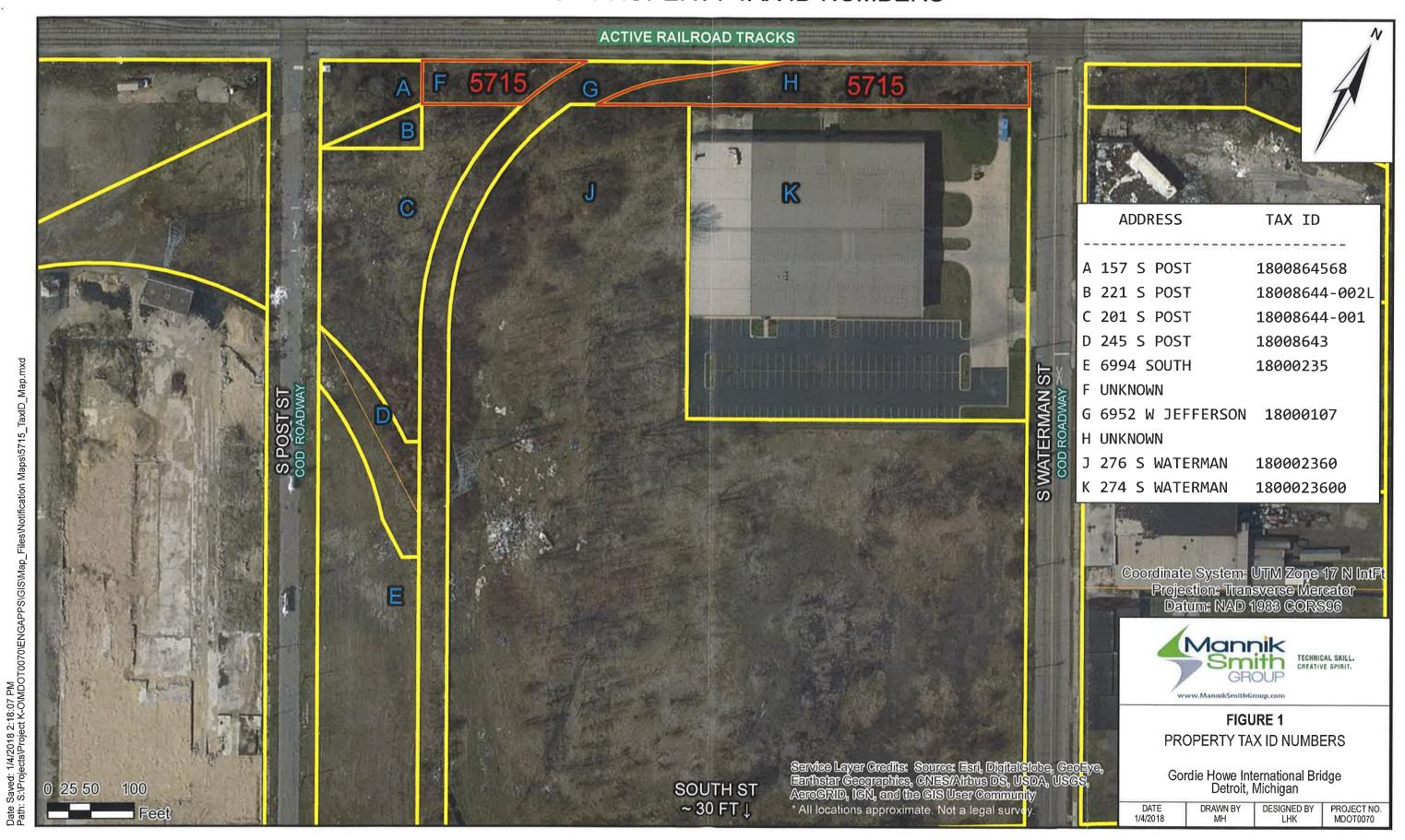


Address: 12775 Lydon Street City/State: Detroit, MI, 48227 Property Tax ID number: NA Other: Comcast/Xfinity (utility holder)	Notified? No ☐ Yes ⊠	Date: <u>April 27, 2018</u>
Address: 208 S. Akard Street City/State: Dallas, TX, 75202 Property Tax ID number: NA Other: AT&T Headquarters (utility holder)	Notified? No ☐ Yes ⊠	Date: <u>April 27, 2018</u>
Address: One Energy Plaza, Ste. 1935 City/State: Detroit, MI, 48226 Property Tax ID number: NA Other: Detroit Edison, DTE (utility holder)	Notified? No ☐ Yes ☒	Date: April 27, 2018
Address: 6425 Huber Street City/State: Detroit, MI, 48211 Property Tax ID number: NA Other: Detroit Water & Sewerage Department (utility holder) – via email	Notified? No ☐ Yes ⊠	Date: <u>April 27, 2018</u>
Address: 3245 E. Jefferson Avenue, Ste. 100 City/State: Detroit, MI, 48207 Property Tax ID number: NA Other: Detroit Health Department – via email	Notified? No ☐ Yes ⊠	Date: <u>April 27, 2018</u>

(Attach additional pages as needed) PLEASE SEE ATTACHED MAP OF PROPERTY TAX ID NUMBERS.

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MAP OF PROPERTY TAX ID NUMBERS



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MDOT PARCELS

PARCEL BOUNDARIES



- 6. Complete the Table on Page 7 of this Form for each hazardous substance which has migrated, or is likely to have migrated, beyond the property boundary at a concentration that exceeds a Generic Residential Cleanup Criterion developed by the DEQ pursuant to MCL 324.20120a(1). Complete and attach additional copies of Page 7, if necessary, to list all hazardous substances that must be reported. Include a scaled map or drawing that shows the location of sampling points identified on the Table on Page 7, the property boundaries, and the adjacent property owners if providing notice pursuant to R 299.1017(1) or all impacted property owners if providing notice pursuant to MCL 324.20114(1).
- 7. Provide a summary of the information which shows that contamination is emanating from, or has emanated from, and is present beyond the boundary of the source property at a concentration which exceeds the generic residential criteria developed by the DEQ pursuant to MCL 324.20120a(1)(a). This summary shall identify the environmental media affected, specific hazardous substances, and the concentrations of those hazardous substances in all affected environmental media at the property boundary and in any sample locations beyond the property boundary. The summary shall also describe the basis for the conclusion that the contamination is emanating, has emanated, or is present beyond the boundary of the source property, including whether the conclusion is based on groundwater analytical data or fate and transport modeling, both, or neither.

8.	3. If the person making this notice has reason to believe that a migrating hazardous substance has affected, or is likely to affect, a private or public water supply, then that water supply must be identified here:				
	NA	V.E.O.			
9.	Is this notice being submitted within the timeframes established under R 299.51017 and/or MCL 324.20114(1), as applicable?	YES	NO		
10.	Is this notice in addition to a notice that was submitted prior to <code>December 21</code> , <code>2002?</code> (R <code>299.51017(4)(c))</code>	[11]	\boxtimes		
11.	Is this notice related to an oil and gas well permit (R 299.51017(2))? Permit #:		\boxtimes		
12.	Is this notice related to an easement (R 299.51017(3))? (NOTE: All easement grantors <i>must</i> receive this notice.)		\boxtimes		
13.	Has surface water been affected (R 299.51017(1)? (If yes, please identify the affected surface water body.)				
CE	RTIFICATION:				
With my signature below, I certify that I am the owner of the facility or that I am legally authorized to execute this notice on behalf of the owner or operator named on this form, and that to the best of my knowledge and belief the above representations are complete and accurate. I understand that intentionally submitting false information to the DEQ is a felony and may result in fines up to \$25,000 for each violation. Signature Date April 27, 2018					
_	(Owner or person legally althorized to bind the person making this report)				
Na	Name (Typed or Printed) Walter & Bolt				
Titl	Title (Typed or Printed) Project Manager, Environmental Owners Representative Consultant, Gordie Howe International Bridge Project				

Title (Typed or Printed)	Project Manager, Environmental Owners Representative Consultant, Gordie Howe International Bridge Project	-	
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MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY REMEDIATION AND REDEVELOPMENT DIVISION

See Item 6 on Page 6 of this Form for instructions to be used in completing this table. Attach additional pages if necessary. The information to be included in each column of the table is:

Column A Column B Column C

Column E Column E Column F

Name of hazardous substance.
Chemical Abstract Service (CAS) Number for the hazardous substance.
Chemical Abstract Service (CAS) Number for the hazardous substance.
Maximum hazardous substance concentration measured on the property, expressed in parts per billion (e.g., ug/L or ug/Kg). Report maximum concentration separately for each environmental medium.
Sample location for Column C (relate to label on map).
Environmental medium in which concentration reported in Column D) to property boundary, in direction of contaminant migration, if known.
Distance from point of maximum measured concentration (Column D) to property boundary, in direction of contaminant migration, if known.
Direction of contaminant migration, if known. If a concentration lower than the maximum concentration reported in Column C has been measured at a point closer to the property boundary in the direction of contaminant migration, use Column I to list the concentration that was measured closest to the property boundary in the direction of contaminant migration.
Sample location for Column H (relate to label on map).
Environmental medium for measurement reported in Column H, if applicable. Column G Column H

Column 1 Column J

PIFASE

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	7	Environmental					
		Sample Location	ם זמו				
	I	Direction of Boundary	Concentiation				
	9	Direction of	INITALIATION				
	ш	Distance to	rioperly boundary				
	Ш	Environmental	Medialii ioi				
	۵	Sample Location	2				
ED LABLE I	O	CAS Maximum	COLICEITUALION				
L ACL	В	CAS	MUIIDE				
PLEASE SEE ALLACHED LABLE I	A	Hazardous Substance					

Total Number Samples Collected:

Total Number of Samples Exceeding Criteria:

A scaled map or drawing showing these locations and the property boundaries must be submitted with this Notice PLEASE SEE ATTACHED FIGURE 2

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TABLE 1

DEQ NOTICE OF MIGRATION ATTACHMENT

Fance CAS Number Marinum Sample Location for CC Environmental bitter Distance to Direction of Concentration Sample Location for CC Environmental bitter Distance to Concentration Sample Location for CC Environmental bitter Distance to Concentration Sample Location for CC Environmental bitter Sample Location for CC Print State CC Apple Location for CC Print State CC Apple Location for CC <th>A</th> <th>മ</th> <th>ပ</th> <th>٥</th> <th>Ц</th> <th>ш</th> <th>G</th> <th>=</th> <th></th> <th>-</th>	A	മ	ပ	٥	Ц	ш	G	=		-
Triangle	Hazardous Substance	CAS Number	Maximum Concentration	Sample Location for "C"	Environmental Medium for "C"	Distance to Property Boundary	Direction of Migration	Boundary Concentration	Sample Location for "H"	Environmental Medium for "H"
Trinselly/benzene 59-63-9 740 5775_SB-05_1-2_S_SME_2017116 Soil 15 feet Unknown ss (104a) 1302_CZ-7 3,100 5775_SB-05_1-2_S_SME_2017116 Soil 15 feet Unknown ss (104a) 5775_SB-05_1-2_S_SME_2017116 Soil 15 feet Unknown inflame 20-24-0 5,300 5775_DU-02_S_SME_2017116 Soil 20 feet Unknown inflame 28-01-8 5,300 5775_DU-02_S_SME_2017116 Soil 20 feet Unknown inflame 28-01-8 5,300 5775_SS-01_S_SME_2017116 Soil 20 feet Unknown inflame 7440-83-8 340,000 5775_SS-01_S_SME_2017116 Soil 20 feet Unknown inflame 7440-83-8 340,000 5775_SS-01_S_SME_2017116 Soil 20 feet Unknown inflame 7440-83-8 1,800 5775_SS-01_S_SME_2017116 Soil 20 feet Unknown inflame 7440-83-8 1,200 5775_SS-01_S_SME_2017116 Soil 20 feet Unknown	Benzene	71-43-2	930	5715_SB-07_1-2_S_SME_20171116	Soil	10 feet	Unknown	ŧ	•	*
Sty (Dula) 5176_SB-05_1-2_S.SME_20171116 Soil 156 etc Unknown (Alphrene 55.22-8 4,800 5775_SB-06_L-1_S.SME_20171116 Soil 101 etc Unknown (Alphrene 256.42-8 3,000 5775_SD-02_S.SME_20171116 Soil 20 feet Unknown Intellene 31.20-3 2,200 5775_SD-02_S.SME_20171116 Soil 20 feet Unknown Intellene 340.080 5775_SD-01_S.SME_20171116 Soil 20 feet Unknown Intellene 7440.58-8 340,000 5775_SS-01_S.SME_20171116 Soil 20 feet Unknown Intellene 7440.58-8 3500 5775_SS-01_S.SME_20171116 Soil 20 feet Unknown <td>1,2,4-Trimethylbenzene</td> <td>95-63-6</td> <td>740</td> <td>5715_SB-05_1-2_S_SME_20171116</td> <td>Soil</td> <td>15 feet</td> <td>Unknown</td> <td>٠</td> <td>ĩ</td> <td>*</td>	1,2,4-Trimethylbenzene	95-63-6	740	5715_SB-05_1-2_S_SME_20171116	Soil	15 feet	Unknown	٠	ĩ	*
(a) pyrene 56-32-8 4,800 \$715_SB-06_0-1_S_SME_2017116 Soil 10 feet Unknown Inflame 206-44-0 9,330 5715_DUP-02_S_SME_2017116 Soil 20 feet Unknown Inflame 85-01-3 2,200 5715_DUP-02_S_SME_2017116 Soil 20 feet Unknown Inflame 7440-38-2 350,000 5715_DUP-02_S_SME_2017116 Soil 20 feet Unknown ium 7440-38-2 350,000 5715_SS-01_S_SME_2017116 Soil 20 feet Unknown ium 7440-38-2 340,000 5715_SS-01_S_SME_2017116 Soil 20 feet Unknown rolat (calculated) 7438-92-1 440,000 5715_SS-01_S_SME_2017116 Soil 20 feet Unknown rolat (calculated) 7438-92-1 440,000 5715_SS-01_S_SME_2017116 Soil 20 feet Unknown rolat (calculated) 7440-28-4 1,200 5715_DUP-02_S_SME_2017116 Soil 20 feet Unknown rolat (calculated) 7440-28-4 1,200 5715_DUP-02_S_SME_201711	Xylenes (Total)	1330-20-7	3,100	5715_SB-05_1-2_S_SME_20171116	Soil	15 feet	Unknown	٠	*	18
Part	Benzo(a)pyrene	50-32-8	4,800	5715_SB-06_0-1_S_SME_20171116	Soil	10 feet	Unknown	×	í	90
Inflinence 81-20-3 2715_DU-02_S_SME_20171116* Soil 20 feet Unknown Inflinence 85-501-8 5,500 5715_DU-02_S_SME_20171116* Soil 20 feet Unknown inc 7440-38-2 13,000 5715_SC01_S_SME_20171116* Soil 20 feet Unknown st 7440-38-2 13,000 5715_SC01_S_SME_2017116* Soil 20 feet Unknown st 7440-50-8 340,000 5715_SC01_S_SME_2017116* Soil 20 feet Unknown r_Cabl (calculated) 7430-50-1 5715_SC01_S_SME_2017116* Soil 20 feet Unknown r_Cabl (calculated) 7430-50-2 1,200 5715_SC01_S_SME_2017116* Soil 20 feet Unknown r_Cabl (calculated) 7732-92-2 1,200 5715_DU-02_S_SME_20171116* Soil 20 feet Unknown um 7440-26-6 1,200 5715_DU-02_S_SME_20171116* Soil 20 feet Unknown um 7440-26-6 1,200 5715_DU-02_S_SME_20171116* Soil 20 feet Unk	Fluoranthene	206-44-0	9,300	5715_DUP-02_S_SME_20171116*	Soil	20 feet	Unknown	Ü	Ě	×
rich Fraction 88-01-8 5,300 5775_DUP-02_SIME_2017116* Soil 20 feet Unknown rich Mondard 7440-38-2 380,000 5775_SS-01_SIME_2017116 Soil 20 feet Unknown rich Mondard 7440-48-8 340,000 5775_SS-01_SIME_2017116 Soil 20 feet Unknown Frie Sactor SIME_2017116 Soil 20 feet Unknown Frie Sactor SIME_2017116 Soil 20 feet Unknown Fine Fraction 7439-92-1 480,000 5775_SS-01_SIME_2017116 Soil 20 feet Unknown ry 7782-49-2 1,200 5775_DUP-02_SIME_2017116 Soil 20 feet Unknown ry 7782-49-7 1,200 5775_DUP-02_SIME_2017116 Soil 20 feet Unknown d(Available) 57-12-5 220 5775_DUP-02_SIME_2017116 Soil 10 feet Unknown d(Available) 57-12-5 220 5775_DP-02_SIME_2017116 Soil 10 feet Unknown d(Available) 57-12-5	Naphthalene	91-20-3	2,200		Soil	20 feet	Unknown	X	î	20
time T440-38-2 350,000 5715_SS-01_S_SME_2017116 Soil 20 feet Unknown T440-43-9 13,000 5715_SS-01_S_SME_2017116 Soil 20 feet Unknown T440-43-9 13,000 5715_SS-01_S_SME_2017116 Soil 20 feet Unknown T640-50-8 340,000 5715_SS-01_S_SME_2017116 Soil 20 feet Unknown T782-49-2 1,800 5715_SS-01_S_SME_2017116 Soil 20 feet Unknown T782-49-2 1,800 5715_SS-01_S_SME_2017116 Soil 20 feet Unknown T782-49-2 1,800 5715_SS-01_S_SME_2017116 Soil 20 feet Unknown T740-22-4 1,200,000 5715_SS-01_S_SME_2017116 Soil 20 feet Unknown T640-80-8 1,200,000 5715_SS-01_S_SME_2017116 Soil 20 feet Unknown T640-80-8 1,200,000 5715_SS-01_S_SME_2017116 Soil 10 feet Unknown T640-80-8 1,200,000 5715_DP-02_S_SME_2017116 Soil 10 feet Unknown T640-80-8 1,200,000 5715_DP-02_S_SME_2017116 Debris Pile 10 feet Unknown T640-80-8 1,200,000 5715_DP-03_S_SME_2017116 Debris Pile 10 feet Unknown T783-92-1 550,000 5715_DP-03_S_SME_2017116 Debris Pile 10 feet Unknown T782-92-1 1,200 5715_DP-02_S_SME_2017116 Debris Pile 10 feet Unknown T782-92-1 1,200 5715_DP-02_S_SME_20171116 Debris Pile 10 feet Unknown T782-92-1 1,200 5715_DP-02_S_SME_20171116 Debris Pile 10 feet Unknow	Phenanthrene	85-01-8	5,300		Soil	20 feet	Unknown	*	30	20
Lim 7440-43-9 13,000 5715_SS-01_S_SME_20171116 Soil 20 feet Unknown Frobal Calculated) 7440-50-8 340,000 5715_SS-01_S_SME_2017116 Soil 20 feet Unknown Frie Fraction 7439-92-1 480,000 5715_SS-01_S_SME_2017116 Soil 20 feet Unknown r. Fine Fraction 7439-92-1 480,000 5715_SS-01_S_SME_2017116 Soil 20 feet Unknown r. Fine Fraction 7439-97-6 1,800 5715_SS-01_S_SME_2017116 Soil 20 feet Unknown r. A40-22-4 1,200 5715_SD-0-2_S_SME_2017116 Soil 20 feet Unknown r. A40-22-4 1,200 5715_SD-0-2_S_SME_2017116 Soil 10 feet Unknown de/wailable) 57-12-5 2,300 5715_SD-0-2_S_SME_2017116 Soil 10 feet Unknown dalyprene 85-01-8 2,400 5715_SD-0-2_S_SME_2017116 Debris Pile 0 feet Unknown inm 7440-38-2 14,000 5715_DP-0-2_S_SME_2017116 Debris Pile 0	Arsenic	7440-38-2	350,000		Soil	20 feet	Unknown		*	*
strice Fraction 7440-50-8 340,000 5715_SS-01_S_SME_2017116 Soil 20 feet Unknown Total (calculated) 7439-92-1 410,000 5715_SS-01_S_SME_2017116 Soil 20 feet Unknown Fine Fraction 7439-92-1 1,800 5715_SS-01_S_SME_2017116* Soil 20 feet Unknown ry 7782-92-2 5,300 5715_DD-02_S_SME_2017116* Soil 20 feet Unknown um 7782-92-2 5,300 5715_DD-02_S_SME_2017116* Soil 20 feet Unknown dk-vailable) 57-12-5 220 5715_DD-02_S_SME_2017116* Soil 20 feet Unknown dk-vailable) 57-12-5 220 5715_DD-02_S_SME_2017116* Soil 10 feet Unknown dk-vailable) 57-12-5 2300 5715_DP-03_S_SME_2017116* Soil 10 feet Unknown dk-vailable) 57-12-5 85,000 5715_DP-03_S_SME_2017116* Debris Pile 10 feet Unknown dclasser 7440-3-9 14,000,000 5715_DP-03_S_SME_2017116*	Cadmium	7440-43-9	13,000	(S)	Soil	20 feet	Unknown	Х	3	x
Total (calculated) 7439-92-1 410,000 5715_SS-01_S_SME_20171116 Soil 20 feet Unknown Fine Fraction 7439-92-1 480,000 5715_SS-01_S_SME_20171116 Soil 20 feet Unknown Image: Fraction of the fraction	Copper	7440-50-8	340,000	S	Soil	20 feet	Unknown	3	*	
Fine Fraction 7439-92-1 480,000 5715_SS-01_S_SME_2017116* Soil 20 feet Unknown Indextraction 7782-99-5 1,800 5715_DIP-02_S_SME_2017116* Soil 20 feet Unknown Indextraction 7782-49-2 5,300 5715_DIP-02_S_SME_2017116* Soil 20 feet Unknown A40-22-4 1,200 5715_DIP-02_S_SME_2017116* Soil 20 feet Unknown A40-86-6 1,200,000 5715_DIP-02_S_SME_2017116* Soil 20 feet Unknown A40-86-6 1,200,000 5715_DIP-02_S_SME_2017116* Soil 10 feet Unknown A40-Asilable) 57-12-5 2,300 5715_DIP-02_S_SME_2017116* Debris Pile Unknown A40-Asilable 7440-38-2 2,400 5715_DIP-03_S_SME_2017116* Debris Pile Unknown Infine Fraction 7440-38-2 1,400,000 5715_DIP-03_S_SME_2017116* Debris Pile Unknown Coarse Fraction 7439-92-1 560,000 5715_DIP-03_S_SME_2017116* Debris Pile Unknown Type	Lead - Total (calculated)	7439-92-1	410,000	S	Soil	20 feet	Unknown	×	ř	
ry 7439-97-6 1,800 5715_SS-01_S_SME_20171116* Soil 20 feet Unknown um 7782-49-2 5,300 5715_SS-01_S_SME_20171116* Soil 20 feet Unknown 7440-22-4 1,200 5715_DUP-02_S_SME_20171116* Soil 20 feet Unknown 1 440-22-4 1,200 5715_DUP-02_S_SME_20171116* Soil 10 feet Unknown 1 440-22-4 1,200,000 5715_DUP-02_S_SME_20171116 Debris Pile 10 feet Unknown 1 (Aa)Pyrene 55-32-8 2,300 5715_DP-03_S_SME_20171116 Debris Pile 10 feet Unknown 1 (Aa)Pyrene 55-32-8 1,1,000 5715_DP-03_S_SME_20171116 Debris Pile 10 feet Unknown 1 (Cala (calculated) 7440-39-9 1,1,000 5715_DP-03_S_SME_20171116 Debris Pile 10 feet Unknown 1 (Cala (calculated) 7439-92-1 560,000 5715_DP-03_S_SME_20171116 Debris Pile 10 feet Unknown 1 (Cala (calculated) 7439-92-1 560,000 5715_DP-03_S_SME_20171116 Debris P	Lead - Fine Fraction	7439-92-1	480,000		Soil	20 feet	Unknown	×	8	
lum 7782-49-2 5,300 5715_SS-01_S_SME_2017116* Soil 20 feet Unknown J40-22-4 1,200 5715_DUP-02_S_SME_2017116* Soil 20 feet Unknown Jeek (Available) 57-12-5 220 5715_DUP-02_S_SME_2017116 Soil 20 feet Unknown Jeek (Available) 57-12-5 220 5715_DUP-02_S_SME_2017116 Debris Pile 10 feet Unknown Jeek (Available) 57-12-5 2300 5715_DD-03_S_SME_2017116 Debris Pile 10 feet Unknown Jeek (Available) 7440-38-2 85,000 5715_DP-03_S_SME_2017116 Debris Pile 10 feet Unknown Jeek (Available) 7440-38-2 14,00,000 5715_DP-03_S_SME_2017116 Debris Pile 10 feet Unknown Jeek (Available) 7439-92-1 560,000 5715_DP-03_S_SME_2017116 Debris Pile 0 feet Unknown Jeek (Available) 7439-92-1 560,000 5715_DP-03_S_SME_2017116 Debris Pile 0 feet Unknown Jeek (Available) 7782-49-2 1,900	Mercury	7439-97-6	1,800		Soil	20 feet	Unknown	3	Ž.	18
de (Available) 7440-224 1,200 5715_DIP-02_SSME_20171116* Soil 20 feet Unknown de (Available) 7740-66-6 1,200,000 5715_DIP-02_SSME_20171116* Soil 20 feet Unknown de (Available) 5771-25 220 5715_DIP-02_SSME_2017116 Soil 10 feet Unknown (a) pyrene 50-32-8 2,300 5715_DIP-03_SSME_2017116 Debris Pile 10 feet Unknown ic 7440-38-2 85,000 5715_DIP-03_SSME_2017116 Debris Pile 10 feet Unknown ic 7440-43-9 14,000 5715_DIP-03_SSME_2017116 Debris Pile 10 feet Unknown ic 7440-43-9 14,00,000 5715_DIP-03_SSME_2017116 Debris Pile 10 feet Unknown ic 7440-43-9 14,00,000 5715_DIP-03_SSME_2017116 Debris Pile 10 feet Unknown ic 7439-92-1 560,000 5715_DIP-03_SSME_2017116 Debris Pile 10 feet Unknown iv 7440-27-2 1,400 5715_DIP-03_SSME_2017116 <td>Selenium</td> <td>7782-49-2</td> <td>5,300</td> <td>ဟ</td> <td>Soil</td> <td>20 feet</td> <td>Unknown</td> <td>()</td> <td>î</td> <td>29.</td>	Selenium	7782-49-2	5,300	ဟ	Soil	20 feet	Unknown	()	î	29.
de (Available) 7740-66-6 1,200,000 5715_DP-02_SIME_20171116 Soil 20 feet Unknown de (Available) 57-12-5 220 5715_SB-07_1-2_SIME_20171116 Soil 10 feet Unknown (a)pyrene 50-32-8 2,300 5715_DP-03_SIME_20171116 Debris Pile 10 feet Unknown ic 7440-38-2 85,000 5715_DP-02_SIME_20171116 Debris Pile 10 feet Unknown ic 7440-38-2 85,000 5715_DP-02_SIME_20171116 Debris Pile 10 feet Unknown ic 7440-38-2 14,000 5715_DP-03_SIME_20171116 Debris Pile 10 feet Unknown ic 7440-38-2 560,000 5715_DP-03_SIME_20171116 Debris Pile 10 feet Unknown ic 7439-92-1 560,000 5715_DP-03_SIME_20171116 Debris Pile 10 feet Unknown ic 7440-92-8 1,900 5715_DP-03_SIME_20171116 Debris Pile 10 feet Unknown roarse Fraction 7440-92-8 1,900 5715_DP-02_SIME_20171116	Silver	7440-22-4	1,200	S	Soil	20 feet	Unknown	()	3	23.
de (Available) 57-12-5 220 5715_SB-07_1-2_SME_2017116 Soil 10 feet Unknown (a) Dyrene 50-32-8 2,300 5715_DP-03_SME_2017116 Debris Pile 10 feet Unknown inflored 7440-38-2 85,000 5715_DP-03_SME_2017116 Debris Pile 0 feet Unknown inflored 7440-38-2 85,000 5715_DP-03_SME_2017116 Debris Pile 10 feet Unknown inflored 7440-43-9 11,000 5715_DP-03_SME_2017116 Debris Pile 10 feet Unknown inflored 7440-43-9 14,00000 5715_DP-03_SME_2017116 Debris Pile 10 feet Unknown Fine Fraction 7439-92-1 560,000 5715_DP-03_SME_2017116 Debris Pile 10 feet Unknown coarse Fraction 7439-92-1 560,000 5715_DP-03_SME_2017116 Debris Pile 10 feet Unknown inflored 1,300 5715_DP-02_SME_2017116 Debris Pile 0 feet Unknown inflored 1,400 5715_DP-02_SME_2017116 Debris Pile	Zinc	7440-66-6	1,200,000		Soil	20 feet	Unknown	(*)	3	38
(a)pyrene 50-32-8 2,300 5715_DP-03_S_SME_2017116 Debris Pile 10 feet anthrene 85-01-8 2,400 5715_DP-03_S_SME_2017116 Debris Pile 10 feet ic 7440-43-9 11,000 5715_DP-03_S_SME_2017116 Debris Pile 10 feet sr 7440-43-9 1,400,000 5715_DP-03_S_SME_2017116 Debris Pile 10 feet sr 7439-92-1 560,000 5715_DP-03_S_SME_2017116 Debris Pile 10 feet Fine Fraction 7439-92-1 560,000 5715_DP-03_S_SME_2017116 Debris Pile 10 feet c. Coarse Fraction 7439-92-1 560,000 5715_DP-03_S_SME_2017116 Debris Pile 0 feet inp 7782-49-2 1,900 5715_DP-03_S_SME_2017116 Debris Pile 0 feet inm 7782-49-2 1,400 5715_DP-02_S_SME_2017116 Debris Pile 0 feet inm 7440-22-4 1,400 5715_DP-02_S_SME_2017116 Debris Pile 0 feet fol 7440-66-6 1,900,000 5715_DP-03_S_SME_20171116 Debris Pi	Cyanide (Available)	57-12-5	220	5715_SB-07_1-2_S_SME_20171116	Soil	10 feet	Unknown	7.	3	.9.
ium 7440-38-2 2,400 5715 DP-02_S SME_2017116 Debris Pile 10 feet ic 7440-38-2 85,000 5715 DP-02_S SME_2017116 Debris Pile 0 feet ium 7440-43-9 11,000 5715 DP-03_S SME_2017116 Debris Pile 10 feet Frotal (calculated) 7430-92-1 560,000 5715 DP-03_S SME_2017116 Debris Pile 10 feet Fine Fraction 7439-92-1 560,000 5715 DP-03_S SME_2017116 Debris Pile 10 feet coarse Fraction 7439-92-1 550,000 5715 DP-03_S SME_2017116 Debris Pile 10 feet iny 7439-92-1 550,000 5715 DP-03_S SME_2017116 Debris Pile 0 feet iny 7782-49-2 1,900 5715 DP-03_S SME_2017116 Debris Pile 0 feet inm 7782-49-2 1,1,000 5715 DP-02_S SME_2017116 Debris Pile 0 feet inm 7440-56-6 1,900,000 5715 DP-02_S SME_2017116 Debris Pile 0 feet folder 7440-66-6 1,900,000 5715 DP-03_S SME_2017116	Benzo(a)pyrene	50-32-8	2,300	5715_DP-03_S_SME_20171116	Debris Pile	10 feet	Unknown	Ú.	*	38
ic 7440-38-2 85,000 5715_DP-02_S_SME_2017116 Debris Pile 0 feet lum 7440-43-9 11,000 5715_DP-03_S_SME_2017116 Debris Pile 10 feet sr 7440-50-8 1,400,000 5715_DP-03_S_SME_2017116 Debris Pile 10 feet Froal (calculated) 7439-92-1 560,000 5715_DP-03_S_SME_2017116 Debris Pile 10 feet Coarse Fraction 7439-92-1 560,000 5715_DP-03_S_SME_2017116 Debris Pile 10 feet ry 7439-97-6 1,900 5715_DP-03_S_SME_2017116 Debris Pile 0 feet ry 7782-49-2 1,1,000 5715_DP-03_S_SME_20171116 Debris Pile 0 feet ry 7440-22-4 1,400 5715_DP-02_S_SME_20171116 Debris Pile 0 feet ra 7440-66-6 1,900,000 5715_DP-03_S_SME_20171116 Debris Pile 0 feet ra 7440-66-6 1,900,000 5715_DP-03_S_SME_20171116 Debris Pile 0 feet	Phenanthrene	85-01-8	2,400		Debris Pile	10 feet	Unknown	3	%	178
lum 7440-43-9 11,000 5715_DP-03_S_SME_2017116 Debris Pile 10 feet Fr 7440-50-8 1,400,000 5715_DP-03_S_SME_2017116 Debris Pile 10 feet Fine Fraction 7439-92-1 560,000 5715_DP-03_S_SME_2017116 Debris Pile 10 feet Coarse Fraction 7439-92-1 560,000 5715_DP-03_S_SME_2017116 Debris Pile 10 feet Iny 7439-97-6 1,900 5715_DP-03_S_SME_2017116 Debris Pile 0 feet Iny 7782-49-2 1,1,000 5715_DP-02_S_SME_2017116 Debris Pile 0 feet In 7440-22-4 1,400 5715_DP-02_S_SME_2017116 Debris Pile 0 feet Abotis Pile 1,900,000 5715_DP-02_S_SME_2017116 Debris Pile 0 feet Abotis Pile 1,900,000 5715_DP-03_S_SME_2017116 Debris Pile 0 feet	Arsenic	7440-38-2	85,000		Debris Pile	0 feet	Unknown	38	18	
er 7440-50-8 1,400,000 5715_DP-03_S_SME_2017116 Debris Pile 10 feet Fine Fraction 7439-92-1 560,000 5715_DP-03_S_SME_2017116 Debris Pile 10 feet Fine Fraction 7439-92-1 560,000 5715_DP-03_S_SME_2017116 Debris Pile 10 feet Coarse Fraction 7439-97-6 1,900 5715_DP-03_S_SME_2017116 Debris Pile 10 feet Iny 7782-49-2 1,900 5715_DP-02_S_SME_2017116 Debris Pile 0 feet Inm 7782-49-2 11,000 5715_DP-02_S_SME_2017116 Debris Pile 0 feet 7440-22-4 1,400 5715_DP-02_S_SME_2017116 Debris Pile 0 feet 7440-66-6 1,900,000 5715_DP-02_S_SME_2017116 Debris Pile 0 feet 7440-66-6 1,900,000 5715_DP-02_S_SME_2017116 Debris Pile 0 feet	Cadmium	7440-43-9	11,000		Debris Pile	10 feet	Unknown	*	Ne.	3
Fine Fraction 7439-92-1 560,000 5715_DP-03_S_SME_2017116 Debris Pile 10 feet Fine Fraction 7439-92-1 560,000 5715_DP-03_S_SME_2017116 Debris Pile 10 feet r. Coarse Fraction 7439-97-6 1,900 5715_DP-03_S_SME_2017116 Debris Pile 10 feet ry 7782-49-2 11,000 5715_DP-02_S_SME_2017116 Debris Pile 0 feet lum 7782-49-2 11,000 5715_DP-02_S_SME_2017116 Debris Pile 0 feet 7440-22-4 1,400 5715_DP-02_S_SME_2017116 Debris Pile 0 feet 7440-66-6 1,900,000 5715_DP-02_S_SME_2017116 Debris Pile 0 feet 7440-66-6 1,900,000 5715_DP-02_S_SME_2017116 Debris Pile 0 feet	Copper	7440-50-8	1,400,000	5715_DP-03_S_SME_20171116	Debris Pile	10 feet	Unknown		(47)	134
Fine Fraction 7439-92-1 560,000 5715_DP-03_S_SME_2017116 Debris Pile 10 feet Coarse Fraction 7439-92-1 550,000 5715_DP-02_S_SME_2017116 Debris Pile 10 feet Iny 7439-97-6 1,900 5715_DP-02_S_SME_2017116 Debris Pile 0 feet Inm 7782-49-2 11,000 5715_DP-02_S_SME_2017116 Debris Pile 0 feet 7440-22-4 1,400 5715_DP-02_S_SME_2017116 Debris Pile 0 feet 7440-66-6 1,900,000 5715_DP-02_S_SME_2017116 Debris Pile 10 feet 7440-66-6 1,900,000 5715_DP-02_S_SME_2017116 Debris Pile 0 feet	Lead - Total (calculated)	7439-92-1	260,000		Debris Pile	10 feet	Unknown	*	ĵi.	13 1 (5)
Coarse Fraction 7439-92-1 550,000 5715_DP-03_S_SME_2017116 Debris Pile 10 feet ry 7439-97-6 1,900 5715_DP-02_S_SME_2017116 Debris Pile 0 feet lum 7782-49-2 11,000 5715_DP-02_S_SME_2017116 Debris Pile 0 feet 7440-22-4 1,400 5715_DP-02_S_SME_2017116 Debris Pile 0 feet 7440-66-6 1,900,000 5715_DP-03_S_SME_2017116 Debris Pile 10 feet 66-40-40-31 5715_DP-03_S_SME_2017116 Debris Pile 0 feet 0 feet	Lead - Fine Fraction	7439-92-1	260,000		Debris Pile	10 feet	Unknown		S. C.	5. 0 .5
Iry 7439-97-6 1,900 5715_DP-02_S_SME_2017116 Debris Pile 0 feet lum 7782-49-2 11,000 5715_DP-02_S_SME_2017116 Debris Pile 0 feet 7440-22-4 1,400 5715_DP-02_S_SME_2017116 Debris Pile 0 feet 7440-66-6 1,900,000 5715_DP-03_S_SME_2017116 Debris Pile 10 feet 75-10-5 150 5715_DP-03_S_SME_2017116 Debris Pile 0 feet	Lead - Coarse Fraction	7439-92-1	550,000	S	Debris Pile	10 feet	Unknown	100	70	10 * 31
ium 7782-49-2 11,000 5715_DP-02_S_SME_2017116 Debris Pile 0 feet 7440-22-4 1,400 5715_DP-02_S_SME_2017116 Debris Pile 0 feet 7440-66-6 1,900,000 5715_DP-03_S_SME_2017116 Debris Pile 10 feet 75-10-5 150 5715_DP-03_S_SME_2017116 Debris Pile 0 feet	Mercury	7439-97-6	1,900	S	Debris Pile	0 feet	Unknown	100	500	16 0 (c
7440-22-4 1,400 5715_DP-02_S_SME_20171116 Debris Pile 0 feet	Selenium	7782-49-2	11,000		Debris Pile	0 feet	Unknown	3	% ·	198.5
7440-66-6 1,900,000 5715_DP-03_S_SME_20171116 Debris Pile 10 feet	Silver	7440-22-4	1,400		Debris Pile	0 feet	Unknown			15801
57-12-5 150 5715 DP-02 S SMF 20171116 Dehris Dija O faat	Zinc	7440-66-6	1,900,000	5715_DP-03_S_SME_20171116	Debris Pile	10 feet	Unknown	(*)		080
37-12-0	Cyanide (Available)	57-12-5	150	5715_DP-02_S_SME_20171116	Debris Pile	0 feet	Unknown	(*)	**	29%

Total Number of Samples Collected: 24 soil, 3 debris pile, 1 groundwater

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^{*} Duplicate sample corresponding to 5715_SS-01_S_SME_20171116



MDOT Parcel 5715 SME Project No. 073213.04 Soil Residential and Nonresidential Contamination Estimation Diagram Figure No. 2

Shaded area indicates estimated horizontal extent of impact. Refer to PSI report for area/quantity estimate assumptions and qualifications.

	5715	
	DP-03	
Analyte	NA	
	11/16/17	
	TPSUSAND	
PAHS	2370	
Benzo(a)pyrene	2,300	
Phenanthrene	2,400	
Metals		
Arsenic	30,000	
Cadmium	11,000	
Copper	1,400,000	
Lead coarse fraction	550,000	
Lead, fine fraction	560,000	
Lead, total (calculated)	560,000	
Mercury	360	
Selenium	6,800	
Zinc	1,900,000	

	5715
	DP-02
Anatyte	NA.
	11/16/17
	TPSL/SAND
Metals	
Arsenic	85,000
Cadmium	6,000
Copper	220,000
Lead, fine fraction	430,000
Lead, total (calculated)	410,000
Mercury	1,900
Selenium	11,000
Silver	1,400
Zinc	990,000
Other	t the
Cyanide, Available	150

	57	15	
	\$B-04	Duplicate	
Analyte		5-3	
	11/1	6/17	
		ND	
Metals	بالقديسة الأرا		
krsenic	57,000	28.000	
Selenium	1,300	<2.600	
	5715		
Analyte	SB-04		5715
	4-5	1 1	SB-03
	11/16/17	Analyte	1-2
	SAND	1	11/16/17
Metals:			SAND
elenium	940	Metals	JAND
	5715	Sejenium	830
	SB-04		5715
Analyte	8-9	1 1	SB-03
	11/16/17	Analyte	10-11
	SAND	',	11/16/17
letals			CLAY
Selenium	1,600	Metals	
		Selenium	1,400
		Scienalii	1,400

	5715
	SB-01
Analyte	0-1
	11/16/1
	TPSUSA
PAHs	
Senzo(a)pyrene	3,100
Metals	
Arsenic	53,000
Cadmium	3,200
Copper	110,00
Selenium	2,600
Zinc	290.00
	5715
	88-01
Analyte	2-3
	11/16/1
	SAND
Metals	
Selenium	1,300
	5715
	SB-01
Analyte	7-8
	11/16/1
	SAND
Metals	
Selenium	690



	5715
	SB-07
Analyte	1-2
	11/16/17
	SAND
VOC5	
Benzene	930
Xylenes, Total	1,700
Metals	- 10c
Selenium	1,100
Other	
Cyanide, Available	220
THUSING CO.	5715
	SB-07
Analyte	4-5
	11/16/17
	SAND
Metals	
Selenium	760
	5715
	SB-07
Analyte	9-10
	11/16/17
	CLAY
Metals	0
Selenium	1,500

	1
	5715
	SB-06
Analyte	0-1
	11/16/17
	TPSL/SAND
VOCs	
Xylenes, Total	840
PAHs	W E
Benzo(a)pyrene	4,800
Metals	
Arsenic	75,000
Cadmium	4,000
Copper	81,000
Mercury	280
Selenium	3,000
Zinc	190,000
	5715
	SB-06
Analyte	2-3
	11/16/17
	SAND
Metals	
Selenium	780
	5715
	SB-06
Analyte	9-10
	11/16/17
	CLAY
Motals	
Selenium	1,300

	5715
	SB-05
Analyte	1-2
	11/16/17
	SAND
/0Cs	
.2,4-Trimethylbenzene	740
Benzene	140
(ylenes, Total	3,100
detals.	
elenium	2,000
Analyte	5715
	SB-05
	7-8
- 1	11/16/17
	SAND
Metals	
Selenium	680
	5715
	SB-05
Analyte	9-10
	11/16/17
	CLAY
Aetals	
elenium	1.500

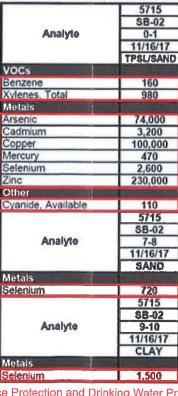
	5715		
	SS-01	Duplicate	
Analyte	0-0.5 11/16/17 SAND		
PAHs		WEST TO SERVICE STATES	
Benzo(a)pyrene	1,100	4,600	
Fluoranthene	5,400	9,300	
Naphthalene	1,700	2,200	
Phenanthrene	2,500	5,300	
Metals		1 - 1 - 1 - 1	
Arsenic	350,000	84,000	
Cadmium	13,000	7,100	
Copper	340,000	180,000	
Lead, fine fraction	480,000	440,000	
Lead, total (calculated)	410,000	400,000	
Mercury	200	1,800	
Selenium	5,300	5,000	
Silver	950	1,200	
Zinc	810,000	1,200,000	

Historical feature locations are

of available Sanborn® maps

provided by MSG.

approximate and based on review



Analyte	5715
	DP-01
	NA
	11/16/17
	TPSL/SAND
Metals	
Arsenic	44,000
Cadmium	4,800
Copper	120,000
Mercury	220
Selenium	4,100
Zinc	500,000
Other	
Cyanide, Available	140

Historical Rail Spur Location

PSI Soil Boring Location

Debris Pile Location

Concentrations are µg/kg (ppb)

1

Railroad Tie Sample Location

Surface Sample Location

Concentration Exceeds Residential and Nonresidential Criteria

30 60 120 Feet

Groundwater Surface Water Interface Protection and Drinking Water Protection Criteria do not represent exposure concerns, but are relevant for Due Care for preconstruction and construction activities.

Refer to the geophysical report appended to the PSI report for information about and figures depicting inferred buried utilities and other features, as applicable.

**Sample RRT01 is a composite sample of railroad ties in the area shown on the Figure, collected for analysis of waste characterization parameters. Results did not exceed applicable criteria, as discussed in the PSI report.

Debris pile analytical results were not included in the area of impact estimations.

Duplicate sample analytical results were listed for each analyte where a residential or nonresidential Part 201 Criteria exceedance was noted in either of the duplicate pair samples.

^{*} Basemap provided by MSG.