Electronic Filing: Received File of The State of Illinois

S & S INFINITE GROUP, INC.,)	
)	
Petitioner,)	
	j	
v.	j	PCB 2020-033
	ĺ	(LUST Appeal)
ILLINOIS ENVIRONMENTAL	ĺ	
PROTECTION AGENCY,	Ĵ	
Respondent.	j	

NOTICE

Don Brown, Clerk
Illinois Pollution Control Board
James R. Thompson Center
100 West Randolph, Suite 11-500
Chicago, IL 60601
don.brown@illinois.gov

Carol Webb, Hearing Officer Illinois Pollution Control Board 1021 North Grand Avenue East P.O. Box 19274 Springfield, IL 62794-9274 carol.webb@illinois.gov

Patrick D. Shaw Law Office of Patrick D. Shaw 80 Bellerive Road Springfield, IL 62704 pdshaw1law@gmail.com

PLEASE TAKE NOTICE that I have today filed with the office of the Clerk of the Pollution Control Board an APPEARANCE, the ADMINISTRATIVE RECORD, and a CERTIFICATE OF RECORD ON APPEAL, copies of which are herewith served upon you.

Respectfully submitted,

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY,

Respondent

Rich Kim

Assistant Counsel - Division of Legal Counsel Special Assistant Attorney General 1021 North Grand Avenue, East P.O. Box 19276 Springfield, Illinois 62794-9276 217/782-5544 866/273-5488 (TDD)

Dated: December 19, 2024

Electronic Filing: Received, Clerk's Office 12/19/2024

BEFORE THE POLLUTION CONTROL BOARD OF THE STATE OF ILLINOIS

S & S INFINITE GROUP, INC.,	j	
Petitioner,	j	
)	6
v.)	PCB 2020-033
	j	(LUST Appeal)
ILLINOIS ENVIRONMENTAL)	
PROTECTION AGENCY,	ý	
Respondent.)	

APPEARANCE

The undersigned, as one of its attorneys, hereby enters his Appearance on behalf of the Respondent, the Illinois Environmental Protection Agency.

Respectfully submitted,

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY,

Respondent

Rich Kim

Assistant Counsel - Division of Legal Counsel

Special Assistant Attorney General

1021 North Grand Avenue, East

P.O. Box 19276

Springfield, Illinois 62794-9276

217/782-5544

866/273-5488 (TDD)

richard.kim@illinois.gov

Dated: December 19, 2024

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Petitioner,	Ì
v.) PCB 2020-033) (LUST Appeal
ILLINOIS ENVIRONMENTAL) (Losi Appear
PROTECTION AGENCY,)
Respondent.)

CERTIFICATE OF RECORD ON APPEAL

Pursuant to 35 Ill. Adm. Code 105.116(b) and 105.410, the following constitutes an index of documents comprising the record:

PAGES	DOCUMENT(S)	DATE
AR000001-AR000002	IEMA HazMat Report (2014-0963)	August 19, 2014
AR000003	IEPA Notice of Release Letter	August 22, 2014
AR000004-AR000079	CAP/Budget (2014-0963)	July 2, 2015
AR000080-AR000081	IEPA Technical Review Notes	July 15, 2015
AR000082-AR000085	CAP/Budget Response Letter	July 21, 2015
AR000086-AR000087	IEMA HazMat Report (2016-1089)	November 21, 2016
AR000088	IEPA Notice of Release Letter	December 9, 2016
AR000089-AR000199	CAP/Budget (2016-1089)	March 19, 2018
AR000200- AR000205	IEPA Technical Review Notes	June 4, 2018
AR000206-AR000214	CAP/Budget Response Letter	June 20, 2018
AR000215-AR000368	Amended CAP/Budget	November 12, 2018
AR000369- AR000370	IEPA Technical Review Notes	January 31, 2019
AR000371-AR000380	Budget Costs Email	February 7, 2019
AR000381- AR000384	Amended CAP/Budget Response Letter	February 11, 2019
AR000385-AR000390	CAP Budget Amendment	August 13, 2019
AR000391-AR000400	CAP Budget Amendment	September 10, 2019
AR000401- AR000403	CAP Budget Response Letter	October 22, 2019
AR000404-AR000408	CAP Budget Response Letter	October 22, 2019

I, Stephanie A. Sample, certify on information and belief that the entire record of the Respondent's decision, as defined in 35 Ill. Adm. Code 105.410(b), is hereby enclosed.

Bv:

Stephanie A. Sample

Leaking Underground Storage Tank Section Illinois Environmental Protection Agency

Date: 12/12/2024

Electronic Filing: Received, Clerk's Office 12/19/2024

I, the undersigned attorney at law, hereby certify that on **December 19, 2024**, I served true and correct copies of an **APPEARANCE**, the **ADMINISTRATIVE RECORD**, and a **CERTIFICATE OF RECORD ON APPEAL**, via the Board's COOL system and email, upon the following named persons:

Don Brown, Clerk
Illinois Pollution Control Board
James R. Thompson Center
100 West Randolph, Suite 11-500
Chicago, IL 60601
don.brown@illinois.gov

Patrick D. Shaw Law Office of Patrick D. Shaw 80 Bellerive Road Springfield, IL 62704 pdshaw1law@gmail.com Carol Webb, Hearing Officer Illinois Pollution Control Board 1021 North Grand Avenue East P.O. Box 19274 Springfield, IL 62794-9274 carol.webb@illinois.gov

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY, Respondent

Rich Kim

Assistant Counsel - Division of Legal Counsel Special Assistant Attorney General 1021 North Grand Avenue, East P.O. Box 19276 Springfield, Illinois 62794-9276 217/782-5544 866/273-5488 (TDD) richard.kim@illinois.gov



Hazardous Materials Incident Report

Incident #: H-2014-0963

Entered By: Kirgan, Ken (IEMA)

on 2014-08-19 11:23:33

Data Input Status: Closed

Leaking Underground Storage Tank (LUST): Yes

1430650114-Peoria S+S Infinite Group, Inc -08-1911:23:33 Leaking USTTechfile

Caller:	Jeff Wienhoff		••	
Call Back #:	217/899-5486	(EPA-D	Wision of Records	
Caller Represents:	Marlin Environmental		RELEASABLE	
Hazmat Incident Type: Leak or spill SEP 2 2 20				
	INCIDENT	LOCATION		
Incident Location:	400 NE Adams St		REVIEWER: JKS	
County:	Peoria 6/603	City:	Peoria	
Primary IEMA Region:	6	- Secondary IEMA Region:	Not Applicable	
Full Address:	400 NE Adams St. Peoria, IL			
Latitude:	40.694236	Longitude:	-89.585712	
Milepost:	n/a	Sec:	n/a	
Twp.:	n/a	Range:	n√a	
Area Involved:	Fixed Facility			
Media or medium into which the release occurred:	Ground			

WEATHER INFORMATION					
Temp (deg F):	11/8	Wind Dir/Speed m.p.h: n/a			

	MATERIALS IN	VOLVED				
Material Name:	Material Type:	Liquid				
CHRIS Code:	unknown	unknown CAS #:				
UN/NA #:	unknown					
ls this a 302(a) Extremely Hazardous Substance?	No					
Is this a RCRA Hazardous Waste?	No .					
ls this a RCRA regulated facility?	No					
Container Type:	Under ground storage tank	Container Size:	1-10,000 gallons (gasoline). 1 6,000 gallons (diesel)			
Amount Released:	unknown	Rate of Release/min:	unknown			
Duration of Release:	unknown					
Cause of Release:	unknown					
Estimated Spill Extent:	unknown	Spill Extent Units:				

Date/Time Occured:	(Date/Time	Unknown)		
Date/Time Discovered:	2014-08-191	0:00		
Number Injured:	0		Where Take	n: none
Number Killed:	0		# Evacuate	d: 0
On Scene Contact:	Jeff Wicnhol	ĩ	On Scene Phone	#: 217/899-5486
Proper safety precautions to take none	as a result of t	he release, in	cluding evacuation:	
Assistance needed from State Agnone	encies:			
Containment/Cleanup actions and caller is with the hired contractor	l plans:			
Responsible Party:	S&S Infinite	Group, Incor	porated	
Contact Person:	Syed Muneel			<u> </u>
Callback Phone Number:	309/673-1060	5		
Facility Manager:	Syed Muncel)		
Facility Manager Phone #:	309/673-1060			
Street Address:	400 NE Adai	ns St		
City:	Peoria Sta	te: IL Zip	Code: 61603	
Emergency Units Contacted	Contacted	On Scene	Agencies C	ontacted
ESDA			none	•
Fire			none	
Police			none	
Sheriff			none	
Other			none	
		GENCIES (OR PERSONS NOTIFIED	
Agency		ate/Time	Name of Person	Notification Action
IEPA, NRTP, OSFM	2014	08-19 11:25	emailed	Report Sent
IEMA Region 6		08-19 11:25	emailed	Report Sent
	<u> </u>			
Narrative:				
follow-Up Information:				
•				



ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

1021 NORTH GRAND AVENUE EAST, P.O. BOX 19276, SPRINGFIELD, ILLINOIS 62794-9276 • (217) 782-2829

PAT QUINN, GOVERNOR

LISA BONNETT, DIRECTOR

217/524-3300

August 22, 2014

S&S Infinite Group, Inc. Attn: Syed Muneeb 400 NE Adams Street Peoria, IL 61603 EPA - DMISION OF 7500 TOS MA TAGEMEN RELITAD I SLE

SEP 2 2 2014

REVIEWER RDH

Re:

LPC #1430650114 -- Peoria County Peoria/S&S Infinite Group, Inc.

400 NE Adams Street

Leaking UST Incident No. 20140963

Leaking UST Technical File

Dear Owner/Operator:

The Illinois Environmental Protection Agency (Illinois EPA) received notification from the Illinois Emergency Management Agency that a release from an underground storage tank system(s) has occurred at the above-referenced site. As a result of this release, the owner or operator of the underground storage tank(s) is required to comply with the Leaking Underground Storage Tank (Leaking UST) Program requirements, including the submittal of applicable documentation on forms prescribed and provided by the Illinois EPA.

To obtain copies of the forms, as well as additional information regarding the Illinois EPA's Leaking UST Program, please visit our Web page at http://www.epa.state.il.us/land/lust/index.html.

- 1. The direct link to the technical forms page is http://www.epa.state.il.us/land/lust/forms/technical-forms/index.html.
- 2. If you intend to seek reimbursement from the Illinois Underground Storage Tank Fund for costs incurred, the direct link to the budget and reimbursement forms page is: http://www.epa.state.il.us/land/lust/forms/budget-forms/index.html.

If you do not have access to the Internet and/or have questions about the Leaking UST Program requirements, please contact the Leaking UST Program project manager on call at 217/524-3300.

Sincerely, Lewanto A Alburain

Hernando A. Albarracin, Manager

Leaking Underground Storage Tank Section
Division of Remediation Management
Bureau of Land

HAA: jw\

cc: BOL File

4302 N. Main St., Rockford, IL 61103 (815) 987-7760 595 S. State, Elgin, IL 60123 (847) 608-3131 2125 S. First St., Champaign, IL 61820 (217) 278-5800 2009 Mail St., Collinsville, IL 62234 (618) 346-5120 9511 Harrison St., Des Plaines, IL 60016 (847) 294-4000 5407 N. University St., Arbor 113, Peoria, IL 61614 (309) 693-5462 2309 W. Main St., Suite 116, Marion, IL 62959 (618) 993-7200 100 W. Randolph, Suite 10-300, Chicago, IL 60601 (312) 814-6026



1430650114 – Peoria County S & S Infinite Group, Inc. Incident # 20140963 Leaking UST Technical File

CORRECTIVE ACTION PLAN TACO CLOSURE

DOWNTOWN 66 - PEORIA 400 NE ADAMS STREET PEORIA, PEORIA COUNTY ILLINOIS 61603 LUST INCIDENT # 20140963 LPC# 1430650114

EPA - DIVISION OF RECORDS MANAGEMENT
RELEASABLE

JUL 3 0 2015

Prepared for:

S & S INFINITE GROUP, INC. 400 NE ADAMS STREET PEORIA, Illinois 61603

REVIEWER JRM

Prepared by:

MARLIN ENVIRONMENTAL, INC. RECEIVED

3900 Wood Duck Drive, Suite F Springfield, Illinois 62711

JUL 0 2 2015

IEPA/BOL

July 2, 2015

Jeff R. Wienhoff, P.E.

Senior Professional Engineer

Joe Buhlig

Project Manager

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2. Site Area Features Map (IDOT HAA)

TABLES

1. Soil Analytical - Comparison to Applicable Tier 2 Objectives

- ATTACHMENTS
 1. TACO Tier 2 Calculations
 2. CAP Budget Forms and OSFM Eligibility Letter

IEPA/BOL

The Agency is authorized to require this information under Section 4 and Title XVI of the Environmental Protection Act (415 ILCS 5/4, 5/57 - 57.17). Politime to disclose this information may reach in a civil penalty of not to exceed \$10,000.00 for each day during which the violation and an additional civil penalty of not to exceed \$10,000.00 for each day during which the violation continues (415 ILCS 5/47).

Any person who knowlegly makes a false material statement or representation in any label, manifest, record, report, permit, or Bosons, or other document filed, maintained or used for the purpose of compliance with Title XVI commits a Class 4 felony. Any second or subsequent offense after conviction hereunder is a Class 3 felony (415 ILCS 5/57.17). This form has been approved by the Numer Indiana.

Illinois Environmental Protection Agency Leaking Underground Storage Tank Program Corrective Action Plan

A.	Si	ite I	dentification				
	IE	MA :	Incident # (6- or 8-digit):	20140963	IEPA LPC # (1	10-digit):	1430650114
	Sit	e Na	ume: S &S Infinite Group	Inc. (Downtoy	vn 66)		·
	Sit	e Ad	idress (Not a P.O. Box):	400 NE Adan	ıs St.		
	Cit	t y:	Peonia	_ County:	Peoria	_ ZIP Code	:61603
	Le	akin	g UST Technical File				
B.	Sit	te Ir	nformation				
	1.	Wi	ill the owner or operator seel	c reimbursemen	t from the		
			derground Storage Tank Fur				Yes 🛛 No 🗌
	2.	Ify	yes, is the budget attached?				Yes 🔯 No 🗌
	3.	Is t	this an amended plan?				Yes 🗌 No 🛛
	4.	Ide	entify the material(s) released	i: <u>Unleaded</u>	Gasoline, Diesel I	Fuel	
	5.	Th	is Corrective Action Plan is	being submitte	d pursuant to:		RECEIVED
		a.	35 Ill. Adm. Code Section	731.166:			JUL 0 <u>12</u> 2015
			The material released was: - petroleum				IEPA/BOL
				stance (see Envir ion Act Section 3			
		b.	35 Ill. Adm. Code Section	732.404			
		c.	35 Ill. Adm. Code Section	734.335 (Purs	uant to PA 96-090)8)	⊠
C.	Pr	opo	sed Methods of Remedia	tion			

1. Soil The soil contamination that exists at the site will be addressed institutionally. The required institutional controls to address the soil contamination that exists are the usage of Tier 2 objectives, an on-site potable well restriction, an Industrial/Commercial Land Use Restriction, an ELUC and an IDOT Highway Authority Agreement for Spalding Aye.

2. Groundwater

Site investigation activities have determined that groundwater was not encountered on this property. The remaining soil contaminants that Equation S28 demonstrates as posing a potential future leaching threat were modeled for potential future groundwater extent using the IEPA sanctioned Risk Based Corrective Action (RBCA) Equation R26. An on-site groundwater use restriction, an Industrial/Commercial Land Use Restriction, an ELUC and an IDOT HAA will be relied upon to mitigate any potential threats.

D. Soil and Groundwater Investigation Results (for incidents subject to 35 Ill. Adm. Code 731 only or 732 that were classified using Method One or Two, if not previously provided)

Provide the following:

1. Description of investigation activities performed to define the extent of soil and/or groundwater contamination;

Please refer to the Site Investigation Completion Report (SICR) approved on April 7, 2015, which details the soil and groundwater investigation activities performed to define the extent of contamination at the subject LUST site. The pertinent site area features are illustrated in Figure 1.

Soil Gas Indoor Inhalation Exposure Pathway

Tier 1 Residential and Industrial/Commercial Indoor Inhalation Exposure Routes: Utilizing the IEPA Petroleum Vapor Intrusion (PVI) flowchart, Marlin Environmental, Inc. completed a preliminary evaluation to assess the need for PVI investigation. Free product has not been encountered at this site and no exceedances of the IEPA TACO Tier 1 Soil Saturation Limits exist from LUST Incident No. 20140963. In addition, there have been no reports of petroleum vapors present within buildings at the site or adjacent properties. Furthermore, there is no groundwater contamination associated with LUST Incident No. 20140963. Given the above, Marlin Environmental, Inc. requests that the IEPA conduct their site-specific Tier 3 PVI evaluation to conclusively exclude the Indoor Inhalation exposure route from further consideration for LUST Incident No. 20140963.

Analytical results, chain-of-custody forms, and laboratory certifications;

Please refer to the 45-Day Report and the SICR.

3. Tables comparing analytical results to applicable remediation objectives;

Please refer to the 45-Day Report and the SICR.

4. Boring logs;

Please refer to the SICR.

5. Monitoring well logs; and

Please refer to the SICR.

- 6. Site maps meeting the requirements of 35 Ill. Adm. Code 732.110(a) or 734.440 and showing:
 - a. Soil sample locations; Please refer to Figure 1.
 - b. Monitoring well locations; Please refer to Figure 1.
 - c. The plume of soil contamination based on analytical results; Please refer to Figure 1.

E. Technical Information - Corrective Action Plan

Provide the following:

- 1. Executive summary identifying the objectives of the corrective action plan and the technical approach to be utilized to meet such objectives;
 - a. The major components (e.g., treatment, containment, removal) of the corrective action plan;
 - b. The scope of the problems to be addressed by the proposed corrective action; and

Soil contamination above TACO Tier 1 Objectives exists at the Downtown 66 Property. The calculation of Tier 2 Objectives along with the reliance upon an on-site potable well restriction and an IDOT Highway Authority Agreement will be used to addresses the soil contamination that exists at the site. Soil sample SB-4 (2'-4'), SB-5 (2'-4'), SB-8 (2'-4'), SB-8 (6'-8'), SB-9 (2'-4') and SB-14 (2'-4') returned a concentration of benzo(a)pyrene and or Dibenzo(a,h)anthracene above the IEPA TACO Tier 1 SRO for the Residential Soil Ingestion Exposure Route. Pursuant to 35 IAC 742.415(b)(2), for those PNA compounds whose background concentrations (for populated areas within any county in a Metropolitan Statistical Area) exceed the most stringent IEPA TACO Tier 1 SROs, the background concentration shall be used as the Tier 1 SRO as promulgated in 35 IAC 742 Appendix A. Table H. The City of Peoria, located in Peoria County, had a population of more than 50,000 people as of the 2010 Census. Therefore, the subject site is located in a populated area, as defined by 35 IAC 742.200, within a county in a Metropolitan Statistical Area. The reported concentrations of benzo(a)pyrene and Dibenzo(a,h)anthracene are below the PNA background concentration for populated areas within Metropolitan Statistical Areas. Table 1 compares the results above Tier 1 Objectives to appropriate Tier 2 Objectives to demonstrate compliance with TACO. Figure 2 demonstrates the area to be addressed by the Highway Authority Agreement.

Groundwater modeling was performed on each of the affected elevated soil samples to determine the potential long-term impaction of the contaminants that currently exist at the site. Due to the fact that groundwater was not encountered during site investigation, groundwater flow direction could not be established. However, because of the visible topography of the site and the location of the river in relation to the site, it is apparent groundwater flows to the south towards the river. The modeled distances for soil exceedances of the groundwater objective are demonstrated in this Corrective Action Plan and the calculations are included in Attachment 1. A map showing the horizontal extents the modeled contamination is included in Figure 1. The HAA will address the potential migration of soils into the groundwater in the Right-of-way.

Following the approval of this Corrective Action Plan; a highway authority agreement will be sought from IDOT. A Corrective Action Completion Report will be submitted to the Illinois EPA requesting issuance of a No Further Remediation letter for the incident. Upon issuance of the NFR designation from the Agency, Marlin Environmental, Inc. shall record the NFR document to the title of the site with the County Recorder of Peoria County. The

groundwater monitoring wells shall be properly abandoned, in accordance with 77 IAC 920.120, following the receipt of the NFR designation from the Agency.

The budget for the work associated with this CAP proposal is included as Attachment 2.

c. A schedule for implementation and completion of the plan;

The Corrective Action Completion Report will be prepared and submitted following the approval of the Highway Authority Agreement for Spalding Ave. Following issuance of the No Further Remediation letter, the monitoring wells at the site will be abandoned and proper notifications required through the use an on-site potable well restriction.

2. Identification of the remediation objectives proposed for this site;

The indicator contaminants for the unleaded gasoline and diesel fuel associated with this facility are BTEX/MTBE and PNA constituents. Soil cleanup objectives have been based upon the calculated Tier 2 SROs on-site and the Tier 1 SROs off-site. Groundwater remediation objectives are based upon the IEPA TACO Tier 1 GROs for Class I Groundwater

3. A description of the remedial technologies selected:

- a. The feasibility of implementing the remedial technologies;
- b. Whether the remedial technologies will perform satisfactorily and reliably until the remediation objectives are achieved; and
- c. A schedule of when the technologies are expected to achieve the applicable remediation objectives;

Not applicable for this CAP.

4. A confirmation sampling plan that describes how the effectiveness of the corrective action activities will be monitored during their implementation and after their completion;

Not applicable for this CAP.

5. A description of the current and projected future uses of the site;

The remediation site is currently a convenience store. The planned post remediation usage of the site is expected to remain the same, at least as of the time of this report.

6. A description of engineered barriers or institutional controls that will be relied upon to achieve remediation objectives;

- a. An assessment of their long-term reliability:
- b. Operating and maintenance plans; and
- c. Maps showing area covered by barriers and institutional controls;

The institutional controls that will be required following implementation of the plan are an onsite groundwater use restriction and an IDOT HAA for Spalding Ave. The area over which the Highway Authority Agreement is required is demonstrated in Figure 2.

7. The water supply well survey:

- a. Map(s) showing the locations of community water supply wells and other potable wells and the setback zone for each well;
- b. Map(s) showing regulated recharge areas and wellhead protection areas;
- c. Map(s) showing the current extent of groundwater contamination exceeding the most stringent Tier 1 remediation objectives;
- d. Map(s) showing the modeled extent of groundwater contamination exceeding the most stringent Tier 1 remediation objectives;
- e. Tables listing the setback zone for each community water supply well and other potable water supply wells;
- f. A narrative identifying each entity contacted to identify potable water supply wells, the name and title of each person contacted, and any other field observations associated with any wells identified; and
- g. A certification from a licensed Professional Engineer or Licensed Professional Geologist that the survey was conducted in accordance with the requirements and that documentation submitted includes information obtained as a result of the survey (certification of this plan satisfies this requirement);

Please refer to the SICR for the results of the water supply well survey conducted for the site.

8. Appendices;

a. References and data sources report that are organized; and

Not applicable for this CAP.

b. Field logs, well logs, and reports of laboratory analyses;

Please refer to the IEPA approved SICR.

9. Site map(s) meeting the requirements of 35 Ill. Adm. Code 732.110(a) or 734.440;

Please refer to Figure 1 and Figure 2.

10. Engineering design specifications, diagrams, schematics, calculations, manufacturer's specifications, etc.;

Not applicable for this CAP.

11. A description of bench/pilot studies;

Not applicable for this LUST facility.

12. Cost comparison between proposed method of remediation and other methods of remediation;

Not applicable for this LUST facility.

13. For the proposed Tier 2 or 3 remediation objectives, provide the following:

- a. The equations used:
- b. A discussion of how input variables were determined;
- c. Map(s) depicting distances used in equations; and
- d. Calculations;

The site-specific data collected during the Site Investigation activities was utilized to determine Tier 2 SROs for the Soil Component of the Groundwater Ingestion Exposure Pathway (using Equations S18 and S28) and Soil Inhalation Exposure Pathway for Residential properties (using Equations S4, S6 and S26 as appropriate) and Construction Worker populations (using Equations S5 and S26/S27 as appropriate). The data calculations sheet along with SSL IEPA forms are included in **Attachment 1**.

14. Provide documentation to demonstrate the following for alternative technologies:

- a. The proposed alternative technology has a substantial likelihood of successfully achieving compliance with all applicable regulations and remediation objectives;
- b. The proposed alternative technology will not adversely affect human health and safety or the environment;
- c. The owner or operator will obtain all Illinois EPA permits necessary to legally authorize use of alternative technology;
- d. The owner or operator will implement a program to monitor whether the requirements of subsection (14)(a) have been met;
- e. Within one year from the date of Illinois EPA approval, the owner or operator will provide to the Illinois EPA monitoring program results establishing whether the proposed alternative technology will successfully achieve compliance with the requirements of subsection (14)(a); and
- f. Demonstration that the cost of alternative technology will not exceed the cost of conventional technology and is not substantially higher than at least two other alternative technologies, if available and technically feasible.

Not applicable for this LUST facility.

15. Property Owner Summary Form

This will be provided within the Corrective Action Completion Report (CACR) for this facility.

F. Exposure Pathway Exclusion

Provide the following:

1. A description of the tests to be performed in determining whether the following requirements will be met:

- a. Attenuation capacity of the soil will not be exceeded for any of the organic contaminants;
- b. Soil saturation limit will not be exceeded for any of the organic contaminants;
- Contaminated soils do not exhibit any of the reactivity characteristics of hazardous waste per 35 Ill. Adm. Code 721.123;
- d. Contaminated soils do not exhibit a pH <2.0 or >12.5; and
- e. Contaminated soils which contain arsenic, barium, cadmium, chromium, lead, mercury, or selenium (or their associated salts) do not exhibit any of the toxicity characteristics of hazardous waste per 35 Ill. Adm. Code 721.124.

Not applicable for this LUST facility.

2. A discussion of how any exposure pathways are to be excluded.

Not applicable for this LUST facility.

G. Signatures

All plans, budgets, and reports must be signed by the owner or operator and list the owner's or operator's full name, address, and telephone number.

UST Owner or Operator

Name: S&S Infinite Group, Inc. Contact: Syed Muneeb Address: 400 NE Adams Street City: Peoria State: Illinois ZIP Code: 61603 Phone: (309) 673-1066 Signature: Date: 1300/5

Consultant

Company:	Marlin Environmental, Inc.
Contact:	Joe Buhlig
Address:	3900 Wood Duck Dr., Suite F
City:	Springfield
State:	Illinois
ZIP Code:	62711
Phone:	217-726-7569 Ext. 300
Signature:	Soc Soc Buhlie
Date:	Tlalic

I certify under penalty of law that all activities that are the subject of this plan were conducted under my supervision or were conducted under the supervision of another Licensed Professional Engineer or Licensed Professional Geologist and reviewed by me; that this plan and all attachments were prepared under my supervision; that, to the best of my knowledge and belief, the work described in this plan has been completed in accordance with the Environmental Protection Act [415 ILCS 5], 35 Ill. Adm. Code 731, 732, or 734, and generally accepted standards and practices of my profession; and that the information presented is accurate and complete. I am aware there are significant penalties for submitting false statements or representations to the Illinois EPA, including but not limited to fines, imprisonment, or both as provided in Sections 44 and 57.17 of the Environmental Protection Act [415 ILCS 5/44 and 57.17].

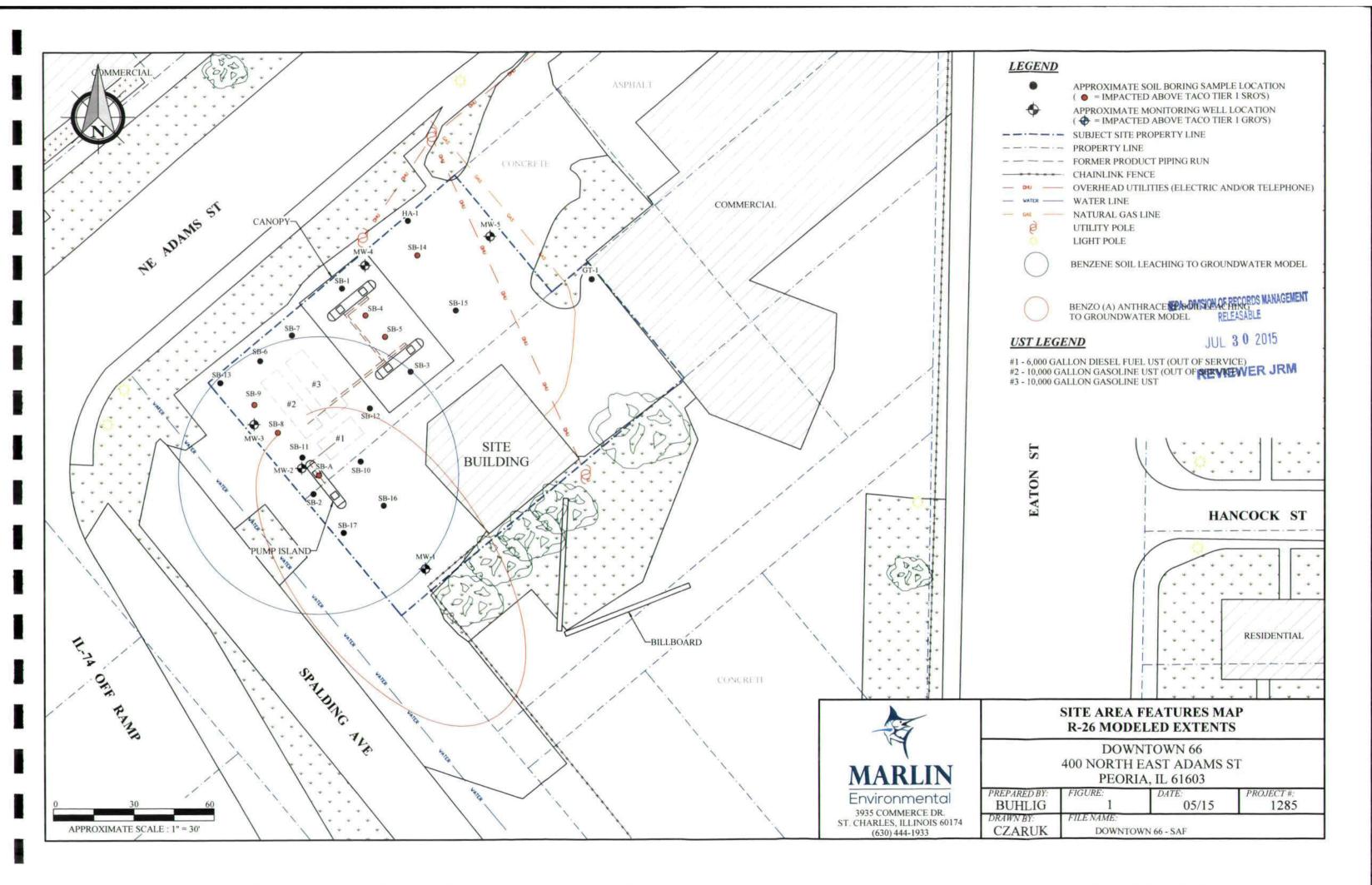
Licensed Professional Engineer

L.P.E. Seal RECEIVED

JUL 0 2 2015

IEPA/BOL





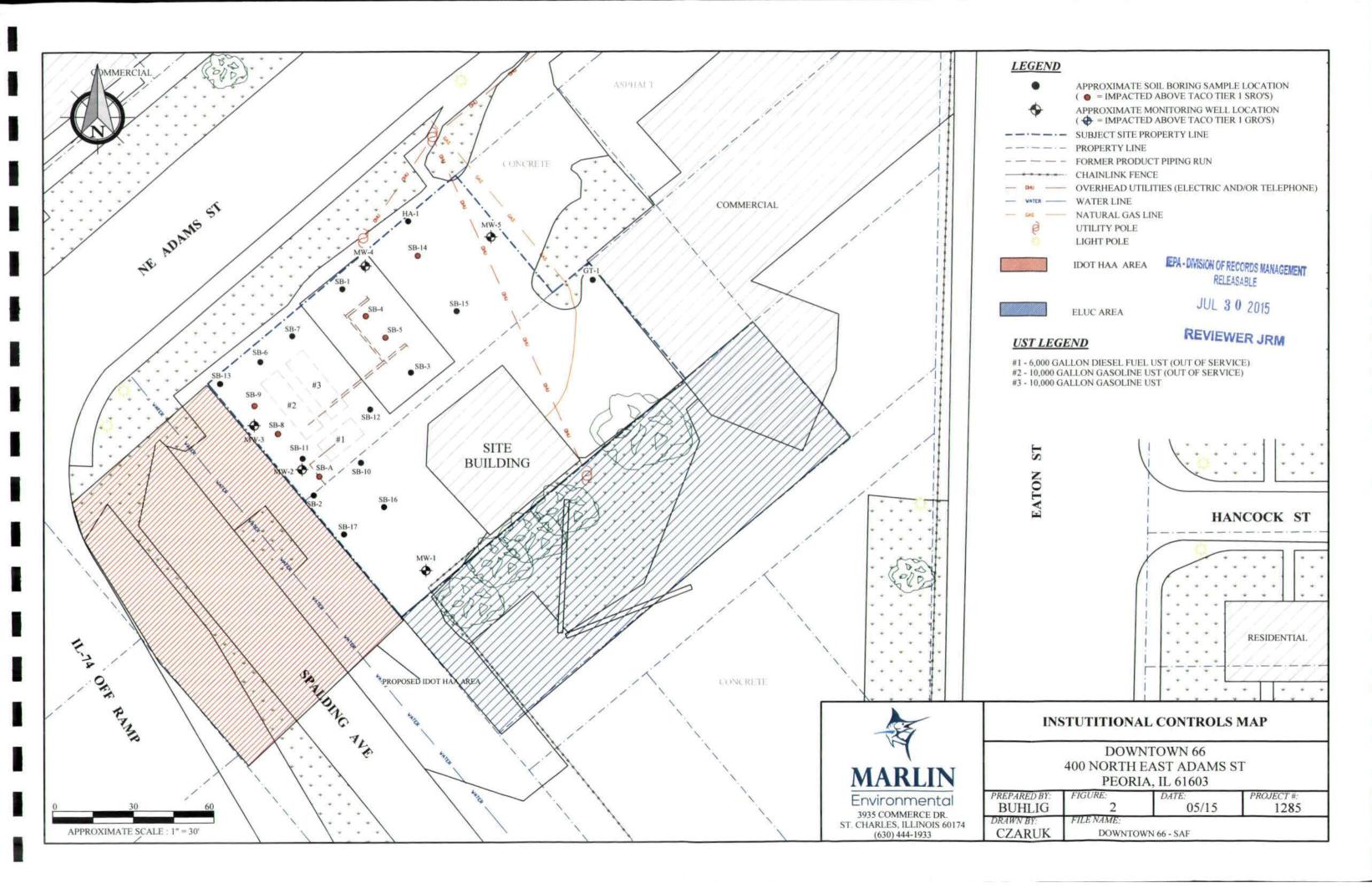


TABLE I

Comparison of Tier 1 SRO Exceedences On-Site to Applicable Tier 2 SROs

Sample ID	Depth	Date	Benzene	Toluene	Ethylbenzene	Total Xylenes	Benzo (a) anthracen
TACO Tier 2 Soil Component of Groundwater Ingestion SROs for Class I Groundwater			140	27,500	19,200	275,000	2,000
	ACO Tier .	TAXABLE IN	3,100	N/E	N/E	607,000	N/E
TACO Tier 2 Residential Ingestion SROs		The second second	N/E	N/E	N/E	N/E	900
TACO Tier 2 Commercial Ingestion SROs			N/E	N/E	N/E	N/E	800
TACO Tier 2 Industrial / Commercial Inhalation SROs			N/E	N/E	N/E	607,000	N/E
TACO Tier 2 Construction Worker Inhalation SROs			N/E	580,000	N/E	554,000	N/E
TACO Tier 2 Soil Saturation Limit		開発 1-1	N/E	N/E	N/E	607,000	N/E
SB-A		08/12/2014	1,460	104,000	51,300	450,000	197,000
SB-8	2'-4'	09/25/2014				*	5,300

Notes:

Only samples above Tier 1 objectives collected on-site listed in the table.

Analytical testing results for BTEX and PNAs are expressed in parts-per-billion (ppb) concentrations.

Key:

Bold Indicates Exceeds TACO Tier 2 Soil Comp. of Groundwater Ingestion SRO for Class I GW.

Red Indicates Exceeds TACO Tier 2 Residential Soil Inhalation SRO.

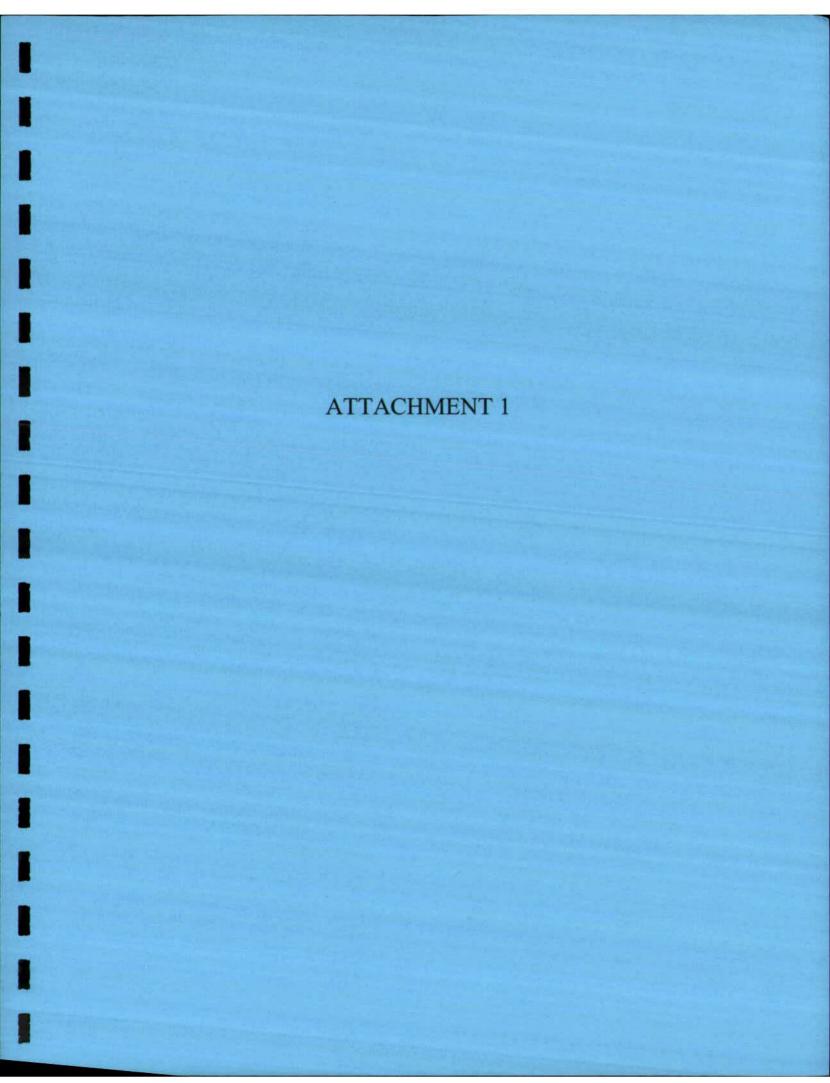
Underlined Indicates Exceeds TACO Tier 2 Industrial / Commercial Soil Inhalation SRO.

Shaded Indicates Exceeds TACO Tier 2 Construction Worker Soil Inhalation SRO.

Sample below Tier 1 SROs for specified contaminant

^ Calculated Tier 2 Objective was more restrictive than Tier 1, therefore Tier 1 objective was utilized
Calculated Tier 2 Objective exceeded soil saturation limit (SSL), therefore appropriate SSL was utilized

N/E Specified Exposure Route SRO not exceeded at Tier 1 for on-site samples.



The Agency is authorized to require this information under Section 4 and Title XVI of the Environmental Protection Act (415 ILCS 5/4, 5/67 - 57.17). Failure to disclose this information may result in a civil penalty of not to exceed \$50,000.00 for the violation and an additional civil penalty of not to exceed \$10,000.00 for each day during which the violation continues (415 ILCS 5/42). Any person who knowingly makes a false material statement or representation in any label, manifest, record, report, permit, or license, or other document filed, maintained or used for the purpose of compliance with Title XVI commits a Class 4 felony. Any second or subsequent offense after conviction hereunder is a Class 3 felony (415 ILCS 5/57.17). This form has been approved by the Forms Management Center.

Illinois Environmental Protection Agency Leaking Underground Storage Tank Program RBCA Input Parameters for Use with Tier 2 Calculations

	0.4		
Α.	SITO	Identifica	tion
~ .	Site	lucillilla	LIUII

Site Add	dress (not a P.O. Box)	400 NE Adam	s Street		
City: _	Peoria	County:	Peoria	Zip Code:	61603
Leaking	UST Technical File				
Tier 2 C	Calculation Informa	tion			
Equation	n(s) Used (ex: R12, R1	4, R26): R26: B	Benzene		
	Information for Individu	al Who Perform	ed Calculations:	Joe Buhlig - Pro	ject Manager
Contact	information for individu	adi Tino i Onionii			
	nvironmental, Inc. Pho		569 x30		
Marlin E		one: (217) 726-7		:S	and
Marlin E	invironmental, Inc. Pho	one: (217) 726-7 plicable		s:S	and

- Mass Limit Acreage other than defaults must always be rounded up.
- Failure to use site-specific parameters where allowed could affect payment from the Underground Storage Tank Fund.
- Maps depicting source width, plume dimensions, distance, etc. must also be submitted.

Combal

- Inputs must be submitted in the designated unit.

Symbol			Unit	Symbol		Unit
ATc	1=1	70	yr	d	=	cm
AT_{η}	=		yr	Dair	=	cm²/s
BW	=	70	kg	Dwater	=	cm²/s
C_{source}	=	see page 3	mg/L	D _s eff	=	cm²/s
C _(x)	=		mg/L	ED	=	yr
C _(x) /C _{source}	=		unitless	EF	=	d/yr

IL 532-2861 LPC 646 8/07 RBCA Input Parameters 1 of 3 11-14

Incident #:	2014	0963	Chemical:	Benzene	La	nd Use: _	Not Applicable
Symbol			Unit	Symbol			Unit
erf	=		unitless	RAF _d (PNAs)	=	0.05	unitless
f _{oc}	=		g/g	RAF _d (inorganics)	=	0	unitless
GW_comp	=		mg/L	RAF ₀	=	1.0	unitless
GW _{source}	=		mg/L	RBSL _{air} (carcinogenic)	=		µg/m³
H'	=		cm³ _{water} /cm³ _{air}	RBSL _{air} (noncarcinogenic)	=		μg/m³
į.	=	0.02	cm/cm	RfDi	=		mg/kg-d
I)	=	30	cm/yr	RfD _o	=		mg/kg-d
IR _{air}	=:	20	m³/d	SA	=	3,160	cm²/d
IR _{soil}	=		mg/d	S _d	=	200	cm
IR _w	=		L/d	S _w	=	3,444.24	cm
К	=	8.64	cm/d for R15, R19, R26; cm/yr for R24	SF _i	=		(mg/kg-d) ⁻¹
K _{oc}	=		cm ³ /g or L/kg	SF _o	=		(mg/kg-d)-1
k _s (non-ionizing organics)	=		cm ³ _{water} /g _{soil}	THQ	=	1	unitless
k _s (ionizing organics)	=		cm³ _{water} /g _{soil}	TR	=		unitless
k _s (inorganics)	=		cm ³ _{water} /g _{soil}	U	=		cm/d
L _s		100	cm	U _{air}	=	225	cm/s
LF _{sw}			(mg/L _{water}) /(mg/kg _{soil})	U _{gw}	#		cm/yr
М	=	0.5	mg/cm ²	VFp	=		kg/m³
Pe	11=1	6.9 ·10 ⁻¹⁴	g/cm²-s	VF _{samb}	=		(mg/m³ _{air})/mg/kg _{soil}) or kg/m³
RAF _d	=	0.5	unitless	VF _{ss}	=		kg/m³

Symbol			Unit	Symbol			Unit
W	=		cm	θ_{as}	=		cm³ _{air} /cm³ _{soi}
w	=		gwater/gsoil	θ_{ws}	=		cm ³ _{water} /cm ³ _s
X	=	see below	cm	θ_{T}	Ħ		cm ³ /cm ³ _{soil}
α_{x}	=	_	cm	λ	=	0.0009	d-1
α_{y}	=		cm	п	=	3.1416	
α_{z}	=		cm	ρ _b	=		g/cm ³
δ_{air}	=	200	cm	ρw	=	1	g/cm ³
$\delta_{\rm gw}$	=	200	cm	τ	量	9.46 •108	s
				_ (Source	Values: (mg/	L)
Equation		Result	Unit(s)				
R1	Ξ		mg/kg				
R2	=		mg/kg				
R7	=		mg/kg		SE	3- A: 0.0532	
R8	=		mg/kg				
R12	Ξ		mg/kg				
R25	=		mg/L				
		Maximum	Predicted Exter	nt of Groundwater	Impact	(X):	
	<u></u>		(feet from	point source)			
		SB- A: 50'					

RBCA Input Parameters 3 of 3

DISSOLVED HYDROCARBON CONCENTRATION ALONG CENTERLINE MAXIMUM PREDICTED EXTENT OF GROUNDWATER IMPACT MODELING RBCA EQUATION R26

	Site Details			Sample Deta	ils
Site Name & Location:	Downtown 66		Sa	mple Location:	SB-A
	Peoria, Illinois		Samp	ole Depth (feet):	0
LUST Incident Number(s):	20140963		15		
Exposure Pathway:	Soil Componen	t of Groundwater Ingestion			
Groundwater Classification:	Class I	or creation and ingention		Analyte:	Benzene
Concentration at the source (C _{sou}	rce)=	0.0532 mg/L			
Distance along centerline of the					
plume coming from the source	(X)=	50.00 ft =	1,524.00 cm		
First order degradation constant (λ)=		0.0009 /day	if benzene, lambda=0.0009/	day	
Aquifer hydraulic conductivity (K)=		1.000E-04 cm/sec =	8.640 cm/day		
lydraulic gradient (i)=		0.0200 m/m			Porosity Gravel=0.25
Total soil porosity (θ_1) =		0.32 cm ³ /cm ³ soil			Sand=0.32 Silt=0.40
Source width perpendicular to GW flow direction in horizontal plane (S_{ψ}) =		113 ft =	3,444.24 cm		Clay=0.36 Default=0.43
flow direction in vertical plane (S _d)=		6.56 ft =	200 cm	(assuming compl	ete mixing)
Calculated Parameters		DO NOT ENTER VALUES HER	RE!		
ongitudinal dispersivity	Ax=	152.4 cm			
ransverse dispersivity	Ay=	50.8 cm			
/ertical dispersivity	Az=	7.62 cm			
Specific discharge	U=	0.54 cm/day			
sw/(4*SQRT(Ay*X))	B=	3.09463245			
sd/(2*SQRT(Az*X))	C=	0.927724097			
Error function	erf(B)=	0.999987929 To determine e	error function values.		
Error function	erf(C)=		in the linear interpolation section	n.	
Actual B value		3.09463245	Actual C value=	0.927724097	1
Automatic calculations : Actual erf(B)		0.999987929	Actual erf(C)=	0.810479731	1
Solutions					
Solutions	C _(x)				
	0.005	mg/l			
	C _{source}				
	0.00	mg/l			
Computation of erf(x)		1 (1)			
Source: Abramowitz, M. and I. A. Stegun,	1972 Handbook of N	Mathematical Functions Dover Public	cations. New York, page 200, for	mula 7.1.26	
Maximum error in computation = 1.5 x 10		announcer renounces, Dover rubin	1018, page 277, 1011	TO A SHALL	
= 3.09463245		7			
0.3275911					
1- 0.254829592					
2= -0.284496736					
1.421413741					

-1.453152027

1.061405429

0.496580041

0.999987929

a5=

erf(x)-

-1.453152027

1.061405429 0.766921652

0.810479731

The Agency is authorized to require this information under Section 4 and Title XVI of the Environmental Protection Act (415 ILCS 5/4, 5/57 - 57.17). Failure to disclose this information may result in a civil penalty of not to exceed \$50,000.00 for the violation and an additional civil penalty of not to exceed \$10,000.00 for each day during which the violation continues (415 ILCS 5/42). Any person who knowingly makes a false material statement or representation in any label, manifest, record, report, permit, or license, or other document filed, maintained or used for the purpose of compliance with Title XVI commits a Class 4 felony. Any second or subsequent offense after conviction hereunder is a Class 3 felony (415 ILCS 5/57.17). This form has been approved by the Forms Management Center.

Illinois Environmental Protection Agency Leaking Underground Storage Tank Program RBCA Input Parameters for Use with Tier 2 Calculations

Α.	Sito	ldentification
Α.	Site	lucillillication

	IEMA Incide	nt # (6- or 8-digit):	2014	0963	IEPA LPC # (10-digit	1430650114
	Site Name:	S & S Infinite Grou	p, Inc.			
	Site Address	(not a P.O. Box):	400 NE Adam	ns Street		
	City:	Peoria	County:	Peoria	Zip Code:	61603
	Leaking UST	Technical File				
B.	Tier 2 Calc	ulation Informati	on			
	Equation(s)	Used (ex: R12, R14	, R26): <u>R26:</u>	Toluene		
	Contact Infor	mation for Individua	al Who Perforn	ned Calculation	s: Joe Buhlig - Proj	ect Manager
	Marlin Enviro	onmental, Inc. Pho	ne: (217) 726-	7569 x30		
	Land Use:	Not App	licable	Soil Typ	oe: Sa	and
	Groundwater	r: Class I	Class II			
	Mass Limit:	┌ Yes ⋉ No I	f Yes, then Sp	ecify Acreage:	□0.5 □1 □2	☐ 5 ☐ 10 ☐ 30
	Result from S	S18/S28 used in R2	26?	No Specify	C _{source} from S18/S28	see page 3 mg/L

- Mass Limit Acreage other than defaults must always be rounded up.
- Failure to use site-specific parameters where allowed could affect payment from the Underground Storage Tank Fund.
- Maps depicting source width, plume dimensions, distance, etc. must also be submitted.
- Inputs must be submitted in the designated unit.

		Unit	Symbol		Unit
=	70	yr	d	=	cm
=	*	yr	Dair	=	cm²/s
=	70	kg	Dwater	<u>=</u>	cm²/s
=	see page 3	mg/L	D _s eff	=	cm²/s
=		mg/L	ED	=	yr
=		unitless	EF	=	d/yr
	= = =	= 70 = see page 3	= 70 yr = 70 kg = 8ee page 3 mg/L = mg/L	= 70 yr d = yr Dair = 70 kg Dwater = see page 3 mg/L D _s eff = mg/L ED	= 70 yr d = = yr Dair = = 70 kg Dwater = = see page 3 mg/L D _s eff = = mg/L ED =

IL 532-2861 LPC 646 8/07 RBCA Input Parameters 1 of 3

Incident #:	2014	0963	Chemical:	Toluene	Lar	nd Use: _	Not Applicable
Symbol			Unit	Symbol			Unit
erf	=		unitless	RAF _d (PNAs)	=	0.05	unitless
f _{oc}	=		g/g	RAF _d (inorganics)	=	0	unitless
GW _{comp}	=		mg/L	RAF ₀	=	1.0	unitless
GW _{source}	=		mg/L	RBSL _{air} (carcinogenic)	=		μg/m³
H	=	¥	cm³ _{water} /cm³ _{air}	RBSL _{air} (noncarcinogenic)	=		µg/m³
1	=	0.02	cm/cm	RfDi	=		mg/kg-d
T	(E)	30	cm/yr	RfD _o	=		mg/kg-d
IR _{air}	=	20	m³/d	SA	=	3,160	cm²/d
IR _{soil}	=		mg/d	S _d	=	200	cm
IR _w	=		L/d	S _w	=	3,444.24	4 cm
К	=	8.64	cm/d for R15, R19, R26; cm/yr for R24	SFi	=		(mg/kg-d) ⁻¹
K _{oc}	=		cm³/g or L/kg	SF _o	=		(mg/kg-d)-1
k _s (non-ionizing organics)	=		cm³ _{water} /g _{soil}	THQ	=	1	unitless
k _s (ionizing organics)	=		cm³ _{water} /g _{soil}	TR	=		unitless
k _s (inorganics)	=		cm ³ _{water} /g _{soil}	U	=		cm/d
Ls	=	100	cm	U _{air}	=	225	cm/s
LF _{sw}	13±15		(mg/L _{water}) /(mg/kg _{soil})	U _{gw}	=		cm/yr
М	=	0.5	mg/cm²	VFp	Ξ		kg/m³
Pe	F = 2	6.9 •10-14	g/cm²-s	VF _{samb}	=		(mg/m³ _{air})/mg/kg _{soil}) or kg/m³
RAF _d	=	0.5	unitless	VF _{ss}	=		kg/m³

w	=		cm				
w				θ_{as}	=		cm³ _{air} /cm³ _{soi}
	=		g _{water} /g _{soil}	θ_{ws}	=		cm ³ _{water} /cm ³ _s
Х	=	see below	cm	θτ	=		cm ³ /cm ³ _{soil}
$a_{\mathbf{x}}$	=		cm	λ	=	0.011	d ⁻¹
a_{y}	=		cm	π	=	3.1416	
α_{z}	=		cm	$\rho_{\rm b}$	=		g/cm ³
δ_{air}	=	200	cm	$\rho_{\rm w}$	=	1	g/cm ³
$\delta_{\rm gw}$	=	200	cm	τ	=	9.46 ·108	S
					Source	Values: (mg	/L)
Equation		Result	Unit(s)				
R1	=		mg/kg				
R2	=		mg/kg				
R7	=		mg/kg		SE	3- A: 3.7863	
R8	=		mg/kg				
R12	=		mg/kg				
R25	=		mg/L				
		Maximum	Predicted Exter	nt of Groundwater	Impact	(X):	

RBCA Input Parameters 3 of 3

DISSOLVED HYDROCARBON CONCENTRATION ALONG CENTERLINE MAXIMUM PREDICTED EXTENT OF GROUNDWATER IMPACT MODELING RBCA EQUATION R26

	Site Details			Sample Details
Site Name & Location:	Downtown 66		Sai	mple Location: SB-A
por en esta de la composition de la co	Peoria, Illinois		The state of the s	le Depth (feet): 0
LUST Incident Number(s):	20140963		**************************************	930 N T 10 3 (A) 1883 3 (B) 18 (B) 10 (C) 10 (B) 10 (A) 4 (B) 18
STANDARD CONTROL OF THE STANDA				
Exposure Pathway:		t of Groundwater Ingestion		A - A - A - T - A
Groundwater Classification:	Class I			Analyte: Toluene
Concentration at the source (C _{sou}	urce)=	3.7863 mg/L		
Distance along centerline of the				
plume coming from the source	(X)=	2.400 ft =	73.15 cm	
First order degradation constant (λ)=		0.011/day	if toluene, lambda=0.011/day	1
Aquifer hydraulic conductivity (K)=		1.000E-04 cm/sec =	8,640 cm/day	Porosity
Hydraulic gradient (i)=		0.0200 m/m		Gravel=0.25 Sand=0.32
Total soil potosity (θ_T) =		0.32 cm ³ /cm ³ totl		Silt=0.40 Clay=0.36
Source width perpendicular to GW flow direction in horizontal plane (S_w) =		113 ft -	3,444.24 cm	Default=0.43
Source width perpendicular to GW flow direction in vertical plane (S_d) -		6.56 ft	200 cm	(assuming complete mixing)
Calculated Parameters		DO NOT ENTER VALUES HER	RE!	
Longitudinal dispersivity	Ax=	7.3152 cm		
Transverse dispersivity	Ay=	2.4384 cm		
Vertical dispersivity	Az=	0.36576 cm		
Specific discharge	U=	0.54 cm/day		
Sw/(4*SQRT(Ay*X))	B=	64.47150937		
Sd/(2*SQRT(Az*X))	C=	19.32758535		
Error function	erf(B)=	1 To determine e	error function values,	
Error function	erf(C)=	1 see F46 & K46	in the linear interpolation section	
Actual B value=		64.47150937	Actual C value=	19.32758535
Automatic calculations : Actual erf(B)		1	Actual erf(C)=	1
Solutions				
	$C_{(x)}$			
	1.0	mg/l		
	C _{source}			
	0.00	mg/l		
	0.00			
Computation of erf(x)				
source: Abramowitz, M. and I. A. Stegun,		Mathematical Functions, Dover Public	cations, New York, page 299, form	nula 7.1.26
Maximum error in computation = 1.5 x 10				
64.4715093				
0.327591				
1= 0.254829592				
2= -0.284496736				
3= 1.421413741 4= 1.453152022				
4= -1.45315202° i5= 1.061405429				
= 0.045207359				

0.045207358

erf(x)=

0.1363969

1

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Illinois Environmental Protection Agency Leaking Underground Storage Tank Program RBCA Input Parameters for Use with Tier 2 Calculations

	0:4	1-1416141	
Α.	SITA	Identification	

	100	400 NE Adam	is Street		
City:	Peoria	County:	Peoria	Zip Code:	61603
Leaking UST T	echnical File				
Tier 2 Calcul	ation Informati	on			
Contact Inform	ed (ex: R12, R14 ation for Individua mental, Inc. Phor	al Who Perform	ned Calculations:	Joe Buhlig - Pro	oject Manager
*	Not Appl	1 / /			Sand
Groundwater:	Class I	Class II			

- Mass Limit Acreage other than defaults must always be rounded up.
- Failure to use site-specific parameters where allowed could affect payment from the Underground Storage Tank Fund.
- Maps depicting source width, plume dimensions, distance, etc. must also be submitted.
- Inputs must be submitted in the designated unit.

Symbol			Unit	Symbol		Unit
ATc	=	70	yr	d	=	cm
AT_{η}	=		yr	Dair	=1:	cm²/s
BW	=	70	kg	Dwater	=	cm²/s
C _{source}	7=	see page 3	mg/L	D _s eff	=	cm ² /s
C _(x)	=		mg/L	ED	=	yr
C _(x) /C _{source}	=		unitless	EF	=	d/yr

IL 532-2861 LPC 646 8/07

C b = 1

RBCA Input Parameters 1 of 3

Incident #:	Incident #:20140963		Chemical:	Ethylbenzene	Lai	nd Use:	Not Applicable	
Symbol			Unit	Symbol			Unit	
erf	=		unitless	RAF _d (PNAs)	=	0.05	unitless	
f _{oc}	:=:		g/g	RAF _d (inorganics)	=	0	unitless	
GW _{comp}	=		mg/L	RAF ₀	=	1.0	unitless	
GW _{source}	(H)		mg/L	RBSL _{air} (carcinogenic)	#		μg/m³	
H'	=		cm ³ _{water} /cm ³ _{air}	RBSL _{air} (noncarcinogenic)			μg/m³	
- E	=	0.02	cm/cm	RfDi	=		mg/kg-d	
Ţ	E	30	cm/yr	RfD₀	=		mg/kg-d	
IR _{air}	=	20	m³/d	SA	=	3,160	cm²/d	
IR _{soil}	=		mg/d	S _d	=	200	cm	
IR _w	=		L/d	S _w	=	3,444.24	cm	
К	=	8.64	cm/d for R15, R19, R26; cm/yr for R24	SFi	a =		(mg/kg-d) ⁻¹	
K _{oc}	=		cm³/g or L/kg	SF _o	=		(mg/kg-d) ⁻¹	
k _s (non-ionizing organics)	=		cm ³ water/g _{soil}	THQ	=	1	unitless	
k _s (ionizing organics)			cm ³ water/g _{soil}	TR	=		unitless	
k _s (inorganics)	=		cm ³ _{water} /g _{soil}	U	=		cm/d	
Ls	=	100	cm	U _{air}		225	cm/s	
LF _{sw}	=		(mg/L _{water}) /(mg/kg _{soil})	U _{gw}	=		cm/yr	
М	=	0.5	mg/cm²	VFp	=		kg/m³	
Pe	=	6.9 •10-14	g/cm²-s	VF _{samb}			(mg/m³ _{air})/mg/kg _{soil}) or kg/m³	
RAF _d		0.5	unitless	VF _{ss}	=		kg/m³	

Symbol			Unit	Symbol			Unit
, W			cm	θ_{as}	=		cm³ _{air} /cm³ _{sc}
w	=		gwater/gsoil	θ _{ws}	=		cm ³ _{water} /cm ³
Х	=	see below	cm	θτ	=		cm ³ /cm ³ _{soil}
α_{x}			cm	λ	=	0.003	d-1
α_{y}	= 1		cm	π	=	3.1416	
α_{z}	=		cm	ρ _b	=		g/cm ³
δ_{air}	==	200	cm	$\rho_{\rm w}$	=	1	g/cm ³
$\delta_{\rm gw}$	=	200	cm	τ	=	9.46 •108	s
				(Csource	Values: (mg	/L)
Equation		Result	Unit(s)				
R1	=		mg/kg				
R2	#		mg/kg				
R7	=		mg/kg		SE	3- A: 1.8677	
R8	=		mg/kg				
R12	=		mg/kg				
R25	=		mg/L				
		Mayday	Dradiated E.	ant of Groundwater	Impost	. (٧).	
		waxiiiium	(feet fro	ent of Groundwater m point source)	impact	(^).	
		SB- A: 6'					

DISSOLVED HYDROCARBON CONCENTRATION ALONG CENTERLINE MAXIMUM PREDICTED EXTENT OF GROUNDWATER IMPACT MODELING RBCA EQUATION R26

	Site Details			Sam	ple Details	
Site Name & Location:	Downtown 66			Sample Le	ocation: SB-A	
	Peoria, Illinois			Sample Dept	h (feet): 0	
LUST Incident Number(s):	20140963					
Exposure Pathway:	Soil Componen	t of Groundwater Ingesti	on			
Groundwater Classification:	Class I			· A	analyte: Ethylbenzene	
Concentration at the source (C _{sour}	rce)=	1.8677 mg/L				
Distance along centerline of the						
plume coming from the source	(X)=	6.00 ft	=	182.88 cm		
2 C 2 C 2 C 2 C 2 C 2 C 2 C 2 C 2 C 2 C				(
irst order degradation constant (λ)=		0.003 /day		if ethylbenzene, lambda=0.003/day		
equifer hydraulic conductivity (K)=		1.000E-04 cm/sec	20	8.640 cm/day		
Control of					Poros	-
lydraulic gradient (i)=		0.0200 m/m			Gravel= Sand=	
'otal soil porosity (θ _T)=		0.32 cm ³ /cm ³ ,			Silt=0	
otal soil polosity (o _T)=		0.32 cm /cm ,	otl		Clay	
ource width perpendicular to GW					Default	distribution and the same of t
flow direction in horizontal plane (S_w)=		113 ft	Ξ	3,444.24 cm		
ource width perpendicular to GW						
flow direction in vertical plane (S _d)=		6.56 ft	=	200 cm (assum	ning complete mixing)	
		Telephone State of the Control of th				
Calculated Parameters		DO NOT ENTER VALUES	HERE			
ongitudinal dispersivity	Ax=	18.288 cm				
ransverse dispersivity	Ay=	6.096 cm				
ertical dispersivity	Az=	0.9144 cm				
pecific discharge	U=	0.54 cm/day				
w/(4*SQRT(Ay*X))	B=	25.78860375 7.731034141				
d/(2*SQRT(Az*X))	C= erf(B)=		nine erro	or function values,		
Error function	erf(C)=	1 see F46 a	k K46 in	the linear interpolation section.		
actual B value=		25.78860375		Actual C value= 7.	731034141	
Actual D value-		23.76800373		Actual C value 7.	51034141	
Automatic calculations : Actual erf(B)		1		Actual erf(C)=	1	
Calastiana						
Solutions	C					
	C _(x)	7mg/I				
		mg/l				
	C _{source}	mg/l				
	0.00	Jing/i				
Computation of erf(x)						

Maximum error in computation = 1.5 x 10^-7

a2=

a3=

a4=

erf(x)=

25.78860375

-0.284496736

1.421413741

-1.453152027

1.061405429

0.105841195

1

0.3275911 0.254829592 7.731034141 0.3275911

0.254829592

-0.284496736

1.421413741

-1.453152027

1.061405429

0.283076179

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Illinois Environmental Protection Agency Leaking Underground Storage Tank Program RBCA Input Parameters for Use with Tier 2 Calculations

			with Tier 2 Calculations	
Α.	Site Identification			
	IEMA Incident # (6- or 8-digit):	20140963	IEPA LPC # (10-digit):	1430650114

Site Address (not a P.O. Box): 400 NE Adams Street

City: Peoria County: Peoria Zip Code: 61603

Leaking UST Technical File

Site Name: S & S Infinite Group, Inc.

B. Tier 2 Calculation Information

Equation(s) Used (ex: R12, R14, R26): R26: Total Xylenes

Contact Information for Individual Who Performed Calculations: Joe Buhlig - Project Manager

Marlin Environmental, Inc. Phone: (217) 726-7569 x30

Land Use: Not Applicable Soil Type: Sand

Groundwater: Class I Class II

Result from S18/S28 used in R26? ☐ Yes ☐ No Specify C_{source} from S18/S28 see page 3 mg/L

Combal

- Mass Limit Acreage other than defaults must always be rounded up.
- Failure to use site-specific parameters where allowed could affect payment from the Underground Storage Tank Fund.
- Maps depicting source width, plume dimensions, distance, etc. must also be submitted.
- Inputs must be submitted in the designated unit.

		Unit	Symbol		Unit
=	70	yr	d	=	cm
Ē		yr	Dair		cm²/s
=	70	kg	Dwater	: = 80	cm ² /s
=	see page 3	mg/L	D _s eff	=	cm ² /s
=		mg/L	ED	=	yr
=		unitless	EF		d/yr
	= = =	= 70 = see page 3	= 70 yr = 70 kg = 8ee page 3 mg/L = mg/L	= 70 yr d = yr Dair = 70 kg Dwater = see page 3 mg/L D _s eff = mg/L ED	= 70 yr d = = yr Dair = = 70 kg Dwater = = see page 3 mg/L D _s eff = = mg/L ED =

IL 532-2861 LPC 646 8/07

Cumbal

RBCA Input Parameters 1 of 3 11-14

Incident #:	2014	0963	Chemical:	al: Total Xylenes Land Use:		nd Use:	Not Applicable
Symbol			Unit	Symbol			Unit
erf	=		unitless	RAF _d (PNAs)	=	0.05	unitless
f _{oc}	=		g/g	RAF _d (inorganics)		0	unitless
GW _{comp}	=		mg/L	RAF ₀	=	1.0	unitless
GW _{source}	=		mg/L	RBSL _{air} (carcinogenic)	=		µg/m³
H'	=		cm³ _{water} /cm³ _{air}	RBSL _{air} (noncarcinogenic)	=		µg/m³
į.	\equiv	0.02	cm/cm	RfD _i	=		mg/kg-d
U	==	30	cm/yr	RfD _o	=		mg/kg-d
IR _{air}	=	20	m³/d	SA	=	3,160	cm²/d
IR _{soil}	=		mg/d	S _d	=	200	cm
IR _w	=		L/d	S _w	=	3,444.24	cm
К	=	8.64	cm/d for R15, R19, R26; cm/yr for R24	SF,	=		(mg/kg-d) ⁻¹
K _{oc}	=		cm ³ /g or L/kg	SF _o	=		(mg/kg-d)-1
k _s (non-ionizing organics)	=		cm ³ water/g _{soil}	THQ	=	1	unitless
k _s (ionizing organics)	=		cm ³ _{water} /g _{soil}	TR	=		unitless
k _s (inorganics)	=		cm ³ _{water} /g _{soil}	U	=		cm/d
Ls	=	100	cm	U _{air}	=	225	cm/s
LF _{sw}	=		(mg/L _{water}) /(mg/kg _{soil})	U _{gw}	=		cm/yr
М	z=z	0.5	mg/cm ²	VFp	=		kg/m³
Pe	==	6.9 · 10 ⁻¹⁴	g/cm ² -s	VF _{samb}	=		(mg/m³ _{air})/mg/kg _{soil}) or kg/m³
RAF _d	=	0.5	unitless	VF _{ss}	=		kg/m³

Symbol			Unit	Symbol			Unit
W	=		cm	θ_{as}	=		cm ³ air/cm ³ soi
w	=		gwater/gsoil	θ_{ws}	=		cm ³ water/cm ³ s
Х	=	see below	cm	θτ	=		cm ³ /cm ³ _{soil}
a_{x}	=		cm	λ	=	0.0019	d-1
α_{y}	=		cm	π	=	3.1416	
α_{z}	=		cm	ρ _b	=		g/cm ³
$\delta_{\rm atr}$	=	200	cm	$\rho_{\rm w}$	=	1	g/cm ³
$\delta_{\rm gw}$	=	200	cm	т	=-	9.46 •108	s
					Source	Values: (mg	/L)
Equation		Result	Unit(s)				
R1	=		mg/kg				
R2	=		mg/kg				
R7	Ξ		mg/kg		SB	- A: 16.3830	
R8	=		mg/kg				
R12	=		mg/kg				
R25	=		mg/L				
		Maximum		ent of Groundwater	Impact	(X):	
		SB- A: 4.8'					

RBCA Input Parameters 3 of 3

DISSOLVED HYDROCARBON CONCENTRATION ALONG CENTERLINE MAXIMUM PREDICTED EXTENT OF GROUNDWATER IMPACT MODELING RBCA EQUATION R26

	Site Detai	ls	San	nple Details
Site Name & Location:	Downtown	66	Sample I	ocation: SB-A
	Peoria, Illin	nois	Sample Dep	
LUST Incident Number(s)	20140963			
Exposure Pathway:	Soil Comp	onent of Groundwater Ingestic	20	
Groundwater Classification	E 700 C	onem or Ground water ingeom		Analyte: Total Xylenes
Concentration at the source	(C _{source})=	16.3830 mg/L		
Distance along centerline of	f the			
plume coming from the so	ource (X)=	4.80 ft	= 146.30 cm	
First order degradation constant (λ)		0.0019 /day	if total xylenes, lambda=0.0019/day	
Aquifer hydraulic conductivity (K)=	=	1.000E-04 cm/sec	= 8.640 cm/day	Powerite
Hydraulic gradient (i)=		0.0200 m/m		Porosity Gravel=0.25 Sand=0.32
Total soil porosity (θ_T) =		0.32 cm ³ /cm ³ son	al a	Silt=0.40 Clay=0.36
Source width perpendicular to GW				Default=0.43
flow direction in horizontal plane		113 ft	= 3,444.24 cm	•
Source width perpendicular to GW				
flow direction in vertical plane (S	i _u)=	6.56 ft	= 200 cm (assu	ming complete mixing)
Calculated Parameters		DO NOT ENTER VALUES	HERE!	
Longitudinal dispersivity	Ax=	14.6304 cm		
Transverse dispersivity	Ay=	4.8768 cm		
Vertical dispersivity	Az=	0.73152 cm		
Specific discharge	U=	0.54 cm/day		
Sw/(4*SQRT(Ay*X))	B=	32.23575469		
Sd/(2*SQRT(Az*X))	C=	9.663792676	Name of the Control o	
Error function	erf(B)=		ine error function values,	
Error function	erf(C)=	1 see F46 &	K46 in the linear interpolation section.	
Actual B value=		32.23575469	Actual C value= 9	.663792676
Automatic calculations : Actual erf	f(B)	1	Actual erf(C)=	1
Solutions				
	$C_{(x)}$			
	10.0	mg/l		
	C_{source}			
	0.00	mg/l		
Computation of erf(x)				
Source: Abramowitz M and I A S	Stemm 1972 Handbor	ok of Mathematical Functions Dover P	Publications, New York, page 299, formula 7.1.	26
		I unemono, porter i	Page 277, Termina 1111	

Maximum error in computation = 1.5 x 10^-7

Tridosimilarii ettor i	decompanion 1.5 a 10	
x=	32.23575469	9,663792676
p=	0.3275911	0.3275911
al=	0.254829592	0.254829592
a2=	-0.284496736	-0.284496736
a3=	1.421413741	1.421413741
a4=	-1.453152027	-1.453152027
a5=	1.061405429	1.061405429
t=	0.086504095	0.240051517
erf(x)=	1	1

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Illinois Environmental Protection Agency Leaking Underground Storage Tank Program RBCA Input Parameters for Use with Tier 2 Calculations

	RBCA Input Parameters for Use with Tier 2 Calcula
Α.	Site Identification

	IEMA Incident	# (6- or 8-digit):	2014	0963	IEPA LPC # (10-d	igit):1430650114
	Site Name: S	& S Infinite Grou	p, Inc.			
	Site Address (not a P.O. Box):	400 NE Adam	s Street		
	City:	Peoria	County:	Peoria	Zip Code: _	61603
	Leaking UST T	echnical File				
В.	Tier 2 Calcula	ation Informati	on			
	Equation(s) Us	ed (ex: R12, R14	1, R26): R26: I	Benzo (a) anth	racene	
	Contact Informa	ation for Individua	al Who Perform	ned Calculation	ns: Joe Buhlig - P	Project Manager
	Marlin Environ	mental, Inc. Pho	ne: (217) 726-7	7569 x30		
	Land Use:	Not App	licable	Soil Ty	ре:	Sand
	Groundwater:	Class I	Class II			
	Mass Limit:	Yes ⊠ No I	f Yes, then Spe	ecify Acreage:	□0.5 □1 □2	2 5 10 30
	Result from S1	8/S28 used in R2	26?	No Specif	y C _{source} from S18/S2	28 see page 3 mg/L
	- Mass Limit A	creage other th	an defaults m	ust always be	rounded up.	
		e site-specific p ound Storage Ta		ere allowed c	ould affect paymen	it from
	To be desired to the second se	the second secon		nsions, distar	nce, etc. must also	be submitted.

Symbol			Unit	Symbol		Unit
AT_c	=	70	yr	d	=	cm
$AT_{\mathfrak{q}}$	=		yr	Dair	F	cm²/s
BW	=	70	kg	Dwater	=	cm²/s
C_{source}	=	see page 3	mg/L	D _s eff	=	cm²/s
C _(x)	=		mg/L	ED	=	yr
C _(x) /C _{source}	=		unitless	EF	=	d/yr

- Inputs must be submitted in the designated unit.

IL 532-2861 LPC 646 8/07 RBCA Input Parameters 1 of 3

Incident #:	ncident #: 20140963		Chemical: Benz	o (a) anthrace	Land Use:		Not Applicable
Symbol			Unit	Symbol			Unit
erf			unitless	RAF _d (PNAs)	=	0.05	unitless
f _{oc}	(=)		g/g	RAF _d (inorganics)	, =	0	unitless
GW _{comp}	=		mg/L	RAF ₀	=	1.0	unitless
GW _{source}	=		mg/L	RBSL _{air} (carcinogenic)	=		μg/m³
H'	=		cm ³ water/cm ³ air	RBSL _{air} (noncarcinogenic)	=		μg/m³
1	=	0.02	cm/cm	RfDi	=		mg/kg-d
1	=	30	cm/yr	RfD _o	=		mg/kg-d
IR _{air}	=	20	m³/d	SA	=	3,160	cm²/d
IR _{soil}	=		mg/d	S _d	=	200	cm
IR _w	Ξ		L/d	S _w	=	3,444.24	cm
К	=	8.64	cm/d for R15, R19, R26; cm/yr for R24	SFi	=		(mg/kg-d) ⁻¹
K _{oc}	=		cm ³ /g or L/kg	SF _o	=		(mg/kg-d) ⁻¹
k _s (non-ionizing organics)	=		cm³ _{water} /g _{soil}	THQ	=	1	unitless
k _s (ionizing organics)	#		cm ³ _{water} /g _{soil}	TR	=		unitless
k _s (inorganics)	=		cm ³ water/g _{soil}	U	=		cm/d
Ls	=	100	cm	U _{air}	=	225	cm/s
LF _{sw}	=		(mg/L _{water}) /(mg/kg _{soil})	U _{gw}	=		cm/yr
М	i=	0.5	mg/cm ²	VFp	=		kg/m³
Pe	=	6.9 •10 ⁻¹⁴	g/cm²-s	VF _{samb}	=		(mg/m³ _{air})/mg/kg _{soil}) or kg/m³
RAF _d	=	0.5	unitless	VF _{ss}	=		kg/m³

see below	cm g _{water} /g _{soil} cm	θ_{as} θ_{ws}	=		cm³ _{air} /cm³ _{soi} cm³ _{water} /cm³ _s
see below	#3.342301%-1999.000		=		cm ³ _{water} /cm ³ s
see below	cm	θ_{T}			
			=		cm ³ /cm ³ soil
	cm	λ	=	0.00051	d-1
	cm	п	=	3.1416	
	cm	$\rho_{\rm b}$	=		g/cm ³
200	cm	ρw	=:	1	g/cm ³
200	cm	τ	=	9.46 •108	s
		(Source	Values: (mg/	L)
Result	Unit(s)				
	mg/kg				
	mg/kg				
	mg/kg		SB- 8	3 (2'-4'): 0.0689	
	mg/kg				
	mg/kg				
	mg/L				
Maximum	Predicted Extent	of Groundwater	Impact	(X):	
	200 Result	200 cm Result Unit(s) mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg	200 cm τ 200 cm τ Result Unit(s) mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg	200 cm ρ _w = 200 cm τ = Csource Result Unit(s) mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg	200 cm

DISSOLVED HYDROCARBON CONCENTRATION ALONG CENTERLINE MAXIMUM PREDICTED EXTENT OF GROUNDWATER IMPACT MODELING RBCA EQUATION R26

	Site Details				Sample Deta	ils
Site Name & Location:	Downtown 66	6		San	ple Location:	SB-8
	Peoria, Illinoi	is		Sample	Depth (feet):	2'-4'
LUST Incident Number(s):	20140963					
Exposure Pathway:	Soil Compone	ent of Groundwater Ingestion				
Groundwater Classification	: Class I				Analyte:	Benzo(a)anthracene
Concentration at the source (C	source)=	0.0689 mg/L				
Distance along centerline of the	ne					
plume coming from the sour		135.00 ft	. [4,114.80 cm		
(N) N/ 1 STATE OF THE STATE OF	26 20 M - 1 M 1		2000	COURT NO 201995		
First order degradation constant (λ)=		0.00051 /day	if	benzo(a)anthracene, lambda	=0.00051/day	
Aquifer hydraulic conductivity (K)=		1.000E-04 cm/sec =		8.640 cm/day		
iquite nyutuune conductivity (is)		1.0002 01	_			Porosity
Hydraulic gradient (i)-		0.0200 m/m				Gravel=0.25
						Sand=0.32
Total soil porosity (θ_T) =		0.43 cm ³ /cm ³ _{soil}				Silt=0.40
Source width perpendicular to GW						Clay=0.36 Default=0.43
flow direction in horizontal plane (S	_)=	20 ft =		609.60 cm		Delum V. V
Source width perpendicular to GW						
flow direction in vertical plane (S _d)=	Ē.	6.56 ft =		200 cm	(assuming compl	ete mixing)
Calculated Parameters		DO NOT ENTER VALUES HE	RE!			
Longitudinal dispersivity	Ax=	411.48 cm				
Transverse dispersivity	Ay=	137.16 cm				
Vertical dispersivity	Az=	20.574 cm				
Specific discharge	U=	0.401860465 cm/day				
Sw/(4*SQRT(Ay*X))	B=	0.202860206				
Sd/(2*SQRT(Az*X))	C=	0.343601517 0.225801524 To determine	C	nation calums		
Error function Error function	erf(B)= erf(C)=	0.225801524 To determine 0.372980302 see F46 & K46				
and a series of the series of		0.001.000.000		Decree-10 killereszer (Aleccenie) és		•
Actual B value=		0.202860206	Ac	tual C value=	0.343601517	
Automatic calculations : Actual erf(B	v.	0.225801524	Δ	tual erf(C)=	0.372980302	
Automatic calculations . Actual CITED	<i>I</i> :	0.223801324	2.30	tual crite	0.572700502	b.
Solutions						
	$C_{(x)}$					
	0.00013	mg/l				
	C _{source}					
	0.00	mg/l				

Computation of erf(x)

Source: Abramowitz, M. and I. A. Stegun, 1972, Handbook of Mathematical Functions, Dover Publications, New York, page 299, formula 7.1.26 Maximum error in computation = 1.5 x 10^-7

maximum circi i	i companion 1.2 × 10	
=	0.202860206	0.343601517
y =	0.3275911	0.3275911
1=	0.254829592	0.254829592
2=	-0.284496736	-0.284496736
3=	1.421413741	1.421413741
4=	-1.453152027	-1.453152027
5=	1.061405429	1.061405429
	0.937685898	0.898827283
erf(x)=	0.225801524	0.372980302

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Illinois Environmental Protection Agency Leaking Underground Storage Tank Program SSL Input Parameters for Use with Tier 2 Calculations

Α.	Site	Identif	ication
· · ·	Oile	I COLLET	Ication

Site Addre	ess (not a P.O. Box):	400 NE Adam	s Street		
City:	Peoria	County:	Peoria	Zip Code:	61603
Leaking III	ST Technical File				
Leaking O					
	Iculation Informat	tion			
Tier 2 Ca Equation(Contact In	s) Used (ex: S12, S1 formation for Individu	7, S28): <u>S28/S</u> ral Who Perform	ned Calculations:	A	

- Mass Limit Acreage other than defaults must always be rounded up.
- Failure to use site-specific parameters where allowed could affect payment from the Underground Storage Tank Fund.
- Maps depicting source width, plume dimensions, distance, etc. must also be submitted.
- Inputs must be submitted in the designated unit.

Symbol			Unit	Symbol			Unit
AT (ingestion)	=		yr	d _a	=		m
AT (inhalation)	=		yr	ds	=	4.2672	m
AT _c	=	70	yr	D _A	=		cm²/s
BW	4 = 3		kg	Di	=		cm²/s
C _{sat}	=		mg/kg	D _w	=		cm²/s
C _w	=		mg/L	DF	=	20	unitless
d	=	2	m	ED (ingestion of carcinogens)	of =		yr

IL 532-2860 LPC 645 8/07 SSL Input Parameters 1 of 3

Incident #:	2014	10963	Chemical: _ E	BTEX, Benzo (a)	Lan	d Use:	not applicable
Symbol			Unit	Symbol			Unit
ED (inhalation of carcinogens)	æ		yr	K _{oc}	=		cm ³ /g or L/kg
ED (ingestion of noncarcinogens)	=		yr	Ks	=		m/yr
ED (inhalation of noncarcinogens)	=		уг	L	=	39.624	m
ED (ingestion of groundwater)	=		yr	PEF	=		m³/kg
ED _{M-L}	=	70	<mark>уг</mark>	PEF'	=		m³/kg
EF	=		d/yr	Q/C (VF equations)	=		(g/m²-s)/ (kg/m³)
F(x)	=	0.194	unitless	Q/C (PEF equations)	=		(g/m²-s)/ (kg/m³)
f _{oc}	=		g/g	RfC	=		mg/m³
GW _{obj}	=		mg/L	RfD _o	=		mg/(kg-d)
H'	=		unitless	S	=		mg/L
i	*	0.0131	m/m	SF _o	=		(mg/kg-d) ⁻¹
1	#	0.3	m/yr	Т	Ξ		s
I _{M-L}	=	0.18	m/yr	T _{M-L}	=	30	yr
IF _{soil-adj}	=	114	(mg-yr)/(kg-d)	THQ	=	1	unitless
IR _{soil}	=		mg/d	TR	=		unitless
IR _w	=		L/d	U _m	=	4.69	m/s
к	=	0.46	m/yr	URF	=		(µg/m³)-1
K _d (non-ionizing organics)	=		cm ³ /g or L/kg	Ut	=	11.32	kg/m³
K _d (ionizing organics)	=		cm ³ /g or L/kg	V	=		unitless
K _d (inorganics)	=		cm ³ /g or L/kg	VF	忌		m³/kg

Incident #:	20140963	Chemical:	BTEX, Benzo (a)	Land	d Use: _	not applicable
Symbol		Unit	Symbol			Unit
VF'	=	m³/kg	θ_{w}	=		L _{water} /L _{soil}
VF _{M-L}	=	m³/kg	ρ _b		1.5	kg/L or g/cm ³
VF' _{M-L}	=	m³/kg	ρ_{s}			g/cm ³
n	=	L _{pore} /L _{soil}	ρ _w	=	1	g/cm ³

 ρ_{w}

1/(2b+3)

Lpore/Lsoil

Lair/Lsoil

Equation	Result	Unit(s)
S1	=	mg/kg
S2	=	mg/kg
S3	i i	mg/kg
S4	=	mg/kg
S 5	ŧ	mg/kg
S6	=	mg/L
S 7	=	mg/kg
S17	=	mg/kg
S28	=	mg/kg
S29	=	mg/L

Source Area Concentration Values: (mg/Kg)

=

g/cm³

unitless

SB-A Benzene: 1.460 SB-A Toluene: 104 SB-A Ethylbenzene: 51.3 SB-A Total Xylenes: 450 SB-8 (2'-4') Benzo (a) anthracene: 5.30

Soil to Groundwater Leachate Potential (GWobj): (mg/L)

SB-A Benzene: 0.0532 SB-A Toluene: 3.7863 SB-A Ethylbenzene: 1.8677 SB-A Total Xylenes: 16.3830

η

 θ_a

=

SB-8(2'-4')Benzo(a)anthracene: 0.0689

SSL Input Parameters 3 of 3

Downtown 66 SB-A: BENZENE

Remediation Objective = (milligrams per kilogram, mg/kg)

 $\frac{\left(C_{w} \bullet I_{M-L} \bullet ED_{M-L}\right)}{\left(\rho_{b} \bullet d_{s}\right)}$

Target Soil Leachate Concentration Cw = (milligrams per kilogram, mg/kg)

 $DF \bullet GW_{obj}$

Dilution Factor DF= (unitless)

20

MODEL PARAMETERS INPUT:

Symbol	Unit	Pa	rameter		Values
I _{M-L}	m/yr	Infilt	ration Ra	te	0.18
GW _{obi}	mg/L	Soil to Groundwater Pot	ential Le	achate Concentration	0.0532
			Class I	Class II	1
		Benzene	0.005	0.025	1
		Toluene	1	2.5	
		Ethylbenzene	0.7	1	4
		Xylenes	10	10	
d_s	m	Dept	h of Sour	ce	4.2672
ED_{M-L}	year	Exposure D	70		
ρb	Kg/L	Dry Soi	Bulk De	nsity	2.15

1.4600

MODEL CALCULATED OUTPUTS:

DF= 20
Cw= 1.063075

Soil Concentration in mg/Kg:

REFERE	FERENCE FOR INPUT PARAMETERS			
	ρb			
	Gravel	2		
Site-Specific,	Sand	1.8		
or:	Silt	1.6		
	Clay	1.7		

Downtown 66 SB-A: Toluene

Remediation Objective = (milligrams per kilogram, mg/kg)

 $\frac{\left(C_{w} \bullet I_{M-L} \bullet ED_{M-L}\right)}{\left(\rho_{b} \bullet d_{s}\right)}$

Target Soil Leachate Concentration Cw = (milligrams per kilogram, mg/kg)

 $DF \bullet GW_{obj}$

Dilution Factor DF= (unitless)

20

MODEL PARAMETERS INPUT:

Symbol	Unit	Parameter		Values
I _{M-L}	m/yr	Infiltration Rate		0.18
GW _{obj}	mg/L	Soil to Groundwater Potential Leach	ate Concentration	3.7863
500		Class I	Class II	
		Benzene 0.005	0.025	
- 1		Toluene 1	2.5	1
- 1		Ethylbenzene 0.7	1	.1
		Xylenes 10	10	
d_s	m	Depth of Source	4.2672	
ED _{M-L}	year	Exposure Duration for Ec	70	
ρb	Kg/L	Dry Soil Bulk Densit	y	2.15

104.0000

MODEL CALCULATED OUTPUTS:

DF= 20
Cw= 75.725867

Soil Concentration in mg/Kg:

REFERE	ERENCE FOR INPUT PARAMETERS				
	ρb				
	Gravel	2			
Site-Specific,	Sand	1.8			
or:	Silt	1.6			
	Clay	1.7			

Downtown 66

SB-A: Ethylbenzene

Remediation Objective = (milligrams per kilogram, mg/kg)

 $\frac{\left(C_{w} \bullet I_{M-L} \bullet ED_{M-L}\right)}{\left(\rho_{b} \bullet d_{s}\right)}$

Target Soil Leachate Concentration Cw = (milligrams per kilogram, mg/kg)

 $DF \bullet GW_{obj}$

Dilution Factor DF=

20

(unitless)

MODEL PARAMETERS INPUT:

Symbol	Unit		Parameter			
I _{M-L}	m/yr	In	filtration Rat	te	0.18	
GW _{obj}	mg/L	Soil to Groundwater I	otential Le	achate Concentration	1.8677	
===			Class I	Class II		
		Benzene	0.005	0.025		
- 1		Toluene	1	2.5		
		Ethylbenzene	0.7	1		
		Xylenes	10	10		
d _s	m	De	ce	4.2672		
ED_{M-L}	year	Exposure	70			
ρb	Kg/L	Dry S	oil Bulk Der	nsity	2.15	

51.3000

MODEL CALCULATED OUTPUTS:

DF= 20 Cw= 37.353240

Soil Concentration in mg/Kg:

REFERE	REFERENCE FOR INPUT PARAMETERS			
	ρb			
	Gravel	2		
Site-Specific,	Sand	1.8		
or:	Silt	1.6		
	Clay	1.7		

Downtown 66

SB-A: Total Xylenes

Remediation Objective = (milligrams per kilogram, mg/kg)

$$\frac{\left(C_{w} \bullet I_{M-L} \bullet ED_{M-L}\right)}{\left(\rho_{b} \bullet d_{s}\right)}$$

Target Soil Leachate Concentration Cw = (milligrams per kilogram, mg/kg)

$$DF \bullet GW_{obj}$$

Dilution Factor DF= (unitless)

20

MODEL PARAMETERS INPUT:

Symbol	Unit	P		Values	
I _{M-L}	m/yr	Infi	Itration Rat	te	0.18
GW _{obj}	mg/L	Soil to Groundwater Po	tential Le	achate Concentration	16.3830
247			Class I	Class II	
		Benzene	0.005	0.025	
		Toluene	1	2.5	
		Ethylbenzene	0.7	1	
		Xylenes	10	10	
d_s	m	Dep	th of Source	ce	4.2672
ED _{M-L}	year	Exposure I	70		
ρb	Kg/L	Dry Sc	il Bulk De	nsity	2.15

450.0000

MODEL CALCULATED OUTPUTS:

DF= 20 Cw= 327.660000 Soil Concentration in mg/Kg:

REFERE	ENCE FOR INPUT PARAMETERS		
	ρb		
	Gravel	2	
Site-Specific,	Sand	1.8	
or:	Silt	1.6	
	Clay	1.7	

Downtown 66

SB-8 (2'-4'): Benzo (a) anthracene

Remediation Objective = (milligrams per kilogram, mg/kg)

 $\frac{\left(C_{w} \bullet I_{M-L} \bullet ED_{M-L}\right)}{\left(\rho_{b} \bullet d_{s}\right)}$

Target Soil Leachate Concentration Cw = (milligrams per kilogram, mg/kg)

 $DF \bullet GW_{obj}$

Dilution Factor DF= (unitless)

20

MODEL PARAMETERS INPUT:

Symbol	Unit	Parameter	Values
I _{M-L}	m/yr	Infiltration Rate	0.18
GW _{obj}	mg/L	Soil to Groundwater Potential Leachate Con-	centration 0.0689
200	1.00	Class I Class II	
		Benzene 0.005 0.025	
		Toluene 1 2.5	
		Ethylbenzene 0.7 1	1
		Xylenes 10 10	
d _s	m	Depth of Source	1.524
ED_{M-L}	year	Exposure Duration for Eq S28	70
ρb	Kg/L	Dry Soil Bulk Density	2.15

MODEL CALCULATED OUTPUTS:

DF= 20 Cw= 1.378252 Soil Concentration in mg/Kg: 5.3000

REFERE	NCE FOR IN	PUT PARAMETERS
		ρb
	Gravel	2
Site-Specific,	Sand	1.8
or:	Silt	1.6
	Clay	1.7

The Agency is authorized to require this information under Section 4 and Title XVI of the Environmental Protection Act (415 ILCS 5/4, 5/57 - 57.17). Failure to disclose this information may result in a civil penalty of not to exceed \$50,000.00 for the violation and an additional civil penalty of not to exceed \$10,000.00 for each day during which the violation continues (415 ILCS 5/42). Any person who knowingly makes a false material statement or representation in any label, manifest, record, report, permit, or license, or other document filed, maintained or used for the purpose of compliance with Title XVI commits a Class 4 felony. Any second or subsequent offense after conviction hereunder is a Class 3 felony (415 ILCS 5/57.17). This form has been approved by the Forms Management Center.

Illinois Environmental Protection Agency Leaking Underground Storage Tank Program SSL Input Parameters for Use with Tier 2 Calculations

Α.	Site	Identification

Site Address (not a P.O.	Box): 400 NE Adams Street	
City: Peoria	County: Peoria	Zip Code: 61603
Leaking UST Technical Fi	le	
Tier 2 Calculation Info	rmation	
Equation(s) Used (ex: S12	2, S17, S28): S29: Soil Saturation	on Limit
	(1)	
Contact Information for Inc	dividual Who Performed Calculati	ons: Joe Buhlig Project Manager, Marlin
Contact Information for Inc. Environmental, Inc. (217)		ons: Joe Buhlig Project Manager, Marlin
	726-7569 x30	Ons: Joe Buhlig Project Manager, Marlin Type: Sand
Environmental, Inc. (217)	726-7569 x30 e Soil 1	

- the Underground Storage Tank Fund.
- Maps depicting source width, plume dimensions, distance, etc. must also be submitted.

- Inputs must be submitted in the designated unit.

Symbol			Unit	Symbol		Unit
AT (ingestion)	=		yr	d _a) 	m
AT (inhalation)			yr	d _s	=	m
AT _c	a=a	70	yr	D _A	=	cm²/s
BW	8 = 8		kg	Di	=	cm²/s
C _{sat}	=		mg/kg	D _w	=	cm²/s
C _w	=		mg/L	DF	=	unitless
d			m	ED (ingestion of carcinogens)	=	yr

IL 532-2860 LPC 645 8/07 SSL Input Parameters 1 of 3

Incident #:	2014	0963	Chemical:	Tota	al Xylenes	Lar	nd Use:N	Not Applicable
Symbol			Unit		Symbol			Unit
ED (inhalation of carcinogens)	=		yr		K _{oc}	=	see page 3	cm ³ /g or L/kg
ED (ingestion of noncarcinogens)			yr		Ks	=		m/yr
ED (inhalation of noncarcinogens)			yr		Ĺ	=		m
ED (ingestion of groundwater)			yr		PEF	=		m³/kg
ED _{M-L}	=	70	yr		PEF'	=		m³/kg
EF	=		d/yr		Q/C (VF equations)	=		(g/m²-s)/ (kg/m³)
F(x)	=	0.194	unitless		Q/C (PEF equations)	=		(g/m²-s)/ (kg/m³)
f _{oc}	=	0.0136	g/g		RfC	=		mg/m³
GW _{obj}	=		mg/L		RfD_{o}	=		mg/(kg-d)
H'	=	see page 3	unitless		S	=	see page 3	mg/L
i	=		m/m		SF _o	=		(mg/kg-d) ⁻¹
Ш		0.3	m/yr		Т	=		s
I _{M-L}	=	0.18	m/yr		T _{M-L}	=	30	yr
IF _{soil-adj}	=	114	(mg-yr)/(kg-d)		THQ	=	1	unitless
IR _{soil}	=		mg/d		TR	=		unitless
IR _w	=	= = =	L/d		U _m	=	4.69	m/s
к	=		m/yr		URF	=		(µg/m³)-1
K _d (non-ionizing organics)	=	see page 3	cm ³ /g or L/kg		Ut	=	11.32	kg/m³
K _d (ionizing organics)	=		cm ³ /g or L/kg		V	=		unitless
K _d (inorganics)	=		cm ³ /g or L/kg		VF	=		m³/kg

Symbol			Unit	Symbol			Unit
VF'	=		m³/kg	θ_{w}	=	0.18	L _{water} /L _s
VF _{M-L}	=		m³/kg	ρ _b	=	2.15	kg/L or g/
VF' _{M-L}	=		m³/kg	ρ _s	=		g/cm ³
η	=		L _{pore} /L _{soil}	ρ _w	=	1	g/cm ³
θ_{a}	=	0.14	L _{air} /L _{soil}	1/(2b+3)	=		unitles
Equation	- -	Result	Unit(s)	Н		aw Constant ensionless)	
S1	=		mg/kg		Total X	(ylenes = 0.2	25
S2	=		mg/kg			ty in Water ((mg/L)	(S):
S3	=		mg/kg			(mg/L)	
S4	=		mg/kg		Total >	(ylenes = 18	6
S5	=		mg/kg	Organic 0		artition Coe (cm ³ /g)	fficient (K _{oc}):
S6	=		mg/L				
S7	=		mg/kg		Total)	(ylenes = 26	0
S17	=		mg/kg	Soil-W		tition Coefficien S19 (cm ³	COLUMN TO SERVICE AND ADDRESS OF THE PERSON
S28	=		mg/kg				
S29	=	See Box Below	mg/L	Total Xylenes = 2.55		55	

Solution to Equation S29:
(mg/kg)

Total Xylenes = 607

SSL Input Parameters 3 of 3

DERIVATION OF THE SOIL SATURATION LIMIT, Csat SSL Equations S19 and S29

Downtown 66

$$C_{sat} = \frac{S}{\rho_b} \bullet \left[\left(K_d \bullet \rho_b \right) + \theta_w + \left(H' \bullet \theta_a \right) \right]$$

SYMBOL	PARAMETER	UNITS	PARAMETE	R VALUES
S	Solubility in Water	mg/l	Total Xylenes	110
			Gravel	2.0
			Sand	1.8
ρ_b	Bulk Soil Density	g/cm ³	Silt	1.6
		15	Clay	1.7
			or Site-Specific	
K_{d}	Soil-Water Partition Coefficient	cm ³ /g	$K_d = K_o$	oc • foc
K_{oc}	Organic Carbon Partition Coefficient	cm ³ /g	Total Xylenes	398
f_{oc}	Fractional Organic Carbon	g/g	Site spo	ecific
	CALCULATION CO.		Gravel	0.20
	Water Filled Soil	Dimensionless	Sand	0.18
$\theta_{\rm w}$			Silt	0.16
	Porosity		Clay	0.17
			or Site-Specific	Equation S20
H	Henry's Law Constant	Dimensionless	Total Xylenes	0.271
			Gravel	0.05
	A SECULAR OF THE		Sand	0.14
θ_a	Air Filled Soil	Dimensionless	Silt	0.24
D-13TG	Porosity		Clay	0.19
			or Site-Specific	Equation S2

INPUT PARAMETER VALUES/INTERMEDIATE VALUES

S=	110 mg/l	$K_d =$	5.41E+00 cm ³ /g
$\rho_b =$	2.15 g/cm ³	$\theta_{w} =$	0.18 dimensionless
K _{oc} =	398 L/kg	H'=	0.271 dimensionless
f _{oc} =	13,600 mg/kg	$\theta_{a}=$	0.14 dimensionless
f _{ee} =	0.0136 g/g		

C_{sat} = 606.56 mg/kg

Calculated Tier 2 C_{sat} = 607 mg/kg

Tier 1 Non-Exceedence Check (value of C_{sat} will change if Tier 2 C_{sat} is less than Tier 1 C_{sat}):

C _{sat} (Soil Comp of GW Ingestion) =	607 mg/kg
C _{sat} (Soil Outdoor Inhalation) =	607 mg/kg

TOTAL XYLENES

The Agency is authorized to require this information under Section 4 and Title XVI of the Environmental Protection Act (415 ILCS 5/4, 5/57 - 57.17). Failure to disclose this information may result in a civil penalty of not to exceed \$50,000.00 for the violation and an additional civil penalty of not to exceed \$10,000.00 for each day during which the violation continues (415 ILCS 5/42). Any person who knowingly makes a false material statement or representation in any label, manifest, record, report, permit, or license, or other document filed, maintained or used for the purpose of compliance with Title XVI commits a Class 4 felony. Any second or subsequent offense after conviction hereunder is a Class 3 felony (415 ILCS 5/57.17). This form has been approved by the Forms Management Center.

Illinois Environmental Protection Agency Leaking Underground Storage Tank Program SSL Input Parameters for Use with Tier 2 Calculations

A.	Site	Identificatio	n
Α.	Oile	lucillillualio	

IEMA Incident # (6- or 8-digit):	20140963	IEP	A LPC# (10-	digit): 1430650114
Site Name: S & S Infinite Grou	ıp, Inc.			
Site Address (not a P.O. Box):	400 NE Adams	Street		
City: Peoria	County: Peo	oria	Zip Code:	61603
Leaking UST Technical File				
. Tier 2 Calculation Informat	ion			
Equation(s) Used (ex: S12, S17	7, S28): S18 and	d S28: Soil Com	ponent of GW	Ingestion SROs
Contact Information for Individu	al Who Performe	d Calculations:	Joe Buhlig,	Project Manager
Marlin Environmental, Inc. (217	7) 726-7569 x30	1		
		O-11 T	Canal	
Land Use: not applicable		Soil Type:	Sand	
Land Use: not applicable Groundwater:	Class II	_ Soil Type:	Sand	

- Mass Limit Acreage other than defaults must always be rounded up.
- Failure to use site-specific parameters where allowed could affect payment from the Underground Storage Tank Fund.
- Maps depicting source width, plume dimensions, distance, etc. must also be submitted.
- Inputs must be submitted in the designated unit.

Symbol			Unit	Symbol			Unit
AT (ingestion)	=		yr	da	=		m
AT (inhalation)	#		yr	ds	=	4.2672	m
AT _c		70	yr	D _A	=		cm ² /s
BW	=		kg	D _i	=		cm ² /s
C _{sat}	=		mg/kg	D _w	=		cm ² /s
C _w	=	see page 3	mg/L	DF	=	20	unitless
d	=		m	ED (ingestion of carcinogens)	=		yr

IL 532-2860 LPC 645 8/07 SSL Input Parameters 1 of 3

Incident #:	2014	0963	Chemical: BTEX/Benzo (a) Anth		Land L	lse:	Not Applicable	
Symbol			Unit	Symbol			Unit	
ED (inhalation of carcinogens)	\$ = \$		yr	K _{oc}	=		cm³/g or L/kg	
ED (ingestion of noncarcinogens)			yr	Ks	=		m/yr	
ED (inhalation of noncarcinogens)			yr	L	=		m	
ED (ingestion of groundwater)	=		yr	PEF	=		m³/kg	
ED _{M-L}	=	70	yr	PEF'	=		m³/kg	
EF	=		d/yr	Q/C (VF equations)	Ξ		(g/m²-s)/ (kg/m³)	
F(x)	=	0.194	unitless	Q/C (PEF equations)	=		(g/m²-s)/ (kg/m³)	
foc			g/g	RfC	=		mg/m³	
GW _{obj}	=	see page 3	mg/L	RfD _o	=		mg/(kg-d)	
H'	=		unitless	S	¥		mg/L	
i	=		m/m	SF _o	=		(mg/kg-d) ⁻¹	
1	=	0.3	m/yr	Т	=		s	
I _{M-L}		0.18	m/yr	T _{M-L}	=	30	yr	
IF _{soil-adj}	=	114	(mg-yr)/(kg-d)	THQ	=	1	unitless	
IR _{soil}	=		mg/d	TR	=		unitless	
IR _w	*		L/d	U _m	=	4.69	m/s	
к			m/yr	URF	=		(µg/m³) ⁻¹	
K _d (non-ionizing organics)	=		cm ³ /g or L/kg	Ut	=	11.32	kg/m³	
K _d (ionizing organics)	=		cm³/g or L/kg	V	=		unitless	
K _d (inorganics)	=		cm ³ /g or L/kg	VF	=		m³/kg	

Incident #: 20140963 Chemical: BTEX/Benzo (a) Anth Land Use: Not Applicable

Symbol		Unit
VF'	=	m³/kg
VF _{M-L}	(=)	m³/kg
VF' _{M-L}	=	m³/kg
η	=	L _{pore} /L _{soil}
θ_{a}	=	L _{air} /L _{soil}

Symbol			Unit
θ_{w}	=		L _{water} /L _{soil}
ρ_{b}	=	2.15	kg/L or g/cm ³
ρs	=		g/cm ³
Pw	=	1	g/cm ³
1/(2b+3)	=		unitless

Equation	Result	Unit(s)
S1	=	mg/kg
S2	=	mg/kg
S3	=	mg/kg
S4	=	mg/kg
S5	=	mg/kg
S6	=	mg/L
S7	=	mg/kg
S17	=	mg/kg
S28	= See Box to Right	mg/kg
S29	=	mg/L

Groundwater Cleanup Objectives (GWobj): (mg/L)

Benzene: 0.005 Toluene: 1.0 Ethylbenzene: 0.7 Total Xylenes: 10.0

Target Soil Leachate Concentrations (C_W): (mg/L)

Benzene: 0.1 Toluene: 20.0 Ethylbenzene: 14.0 Total Xylenes: 200.0

Solution to Equation S28: (mg/kg)

Benzene = 0.14 Toluene = 27.5 Ethylbenzene = 19.2 Total Xylenes = 275 Benzo (a) anthracene = 2.0

* = Tier 2 Soil Saturation Limit

SSL Input Parameters 3 of 3

Downtown 66 - Peoria

Remediation Objective =

 $(C_w \times I_{M-L} \times ED_{M-L}) / (\rho_b \times d_s)$

(milligrams per kilogram, mg/kg)

Target Soil Leachate Concentration C_w = (milligrams per kilogram, mg/kg)

DF x GWobi

Dilution Factor DF=

20

(unitless)

MODEL PARAMETERS INPUT:

Symbol	Unit	Parameter			Values
I _{M-L}	m/yr	Infiltration Rate for Eq S28		8	0.18
I	m/yr	Infiltration Rate			0.3
GW _{obj}	mg/L	Ground Water Remdediation Objective		pjective	0.005
			Class 1	Class II	
		Benzene	0.005	0.025	
d _s	m		Depth of Source		4.2672
ED _{M-L}	year	Exposure Duration for Eq S28		70	
ρ_b	kg/L		Dry Soil Bulk Density		2.15

MODEL CALCULATED OUTPUTS:

C _w =	0.1
- W	

REFERENCE FOR INPUT PARAMETERS			
	ρb		
Gravel	2		
Sand	1.8		
Silt	1.6		
Clay	1.7		
or	site-specific		

Calculated Soil Remediation Objective:

Soil Remediation Objective = 0.13734 mg/kg

Soil Saturation Limit Exceedence Check (value of SRO will change if soil saturation limit is exceeded for chemical):

Soil Remediation Objective = Soil Remediation Objective =	0.14 mg/kg
Soil Remediation Objective =	140 μg/kg

Downtown 66 - Peoria

Remediation Objective = (milligrams per kilogram, mg/kg)

 $(C_w \times I_{M-L} \times ED_{M-L}) / (\rho_b \times d_s)$

Target Soil Leachate Concentration C_w = (milligrams per kilogram, mg/kg)

DF x GW_{obj}

Dilution Factor DF=

20

(unitless)

MODEL PARAMETERS INPUT:

Symbol	Unit	Parameter			Values
I _{M-L}	m/yr	Infiltration Rate for Eq S28			0.18
I	m/yr	Infiltration Rate			0.3
GW _{obj}	mg/L	(Ground Water Remdiation Obje	ctive	1
- 1			Class I	Class II	
		Toluene	11	2.5	
d _s	m		Depth of Source		4.2672
ED _{M-L}	year	Exposure Duration for Eq S28		8	70
Рь	kg/L		Dry Soil Bulk Density		2.15

MODEL CALCULATED OUTPUTS:

90ei	
C _w =	20

	REFERENCE FOR INPUT PARAMETERS ρb				
	Gravel	2			
	Sand	1.8			
	Silt	1.6			
	Clay	1.7			
	or	site-specific			

Calculated Soil Remediation Objective:

Soil Remediation Objective =	27.46750 mg/kg

Soil Saturation Limit Exceedence Check (value of SRO will change if soil saturation limit is exceeded for chemical):

Soil Remediation Objective =	27.5 mg/kg
Soil Remediation Objective =	27,500 μg/kg

Toluene

Downtown 66 - Peoria

Remediation Objective = (milligrams per kilogram, mg/kg)

 $(C_w \times I_{M-L} \times ED_{M-L}) / (\rho_b \times d_s)$

Target Soil Leachate Concentration Cw = (milligrams per kilogram, mg/kg)

DF x GWobi

Dilution Factor DF= (unitless)

20

MODEL PARAMETERS INPUT:

Symbol	Unit		Parameter		Values
l_{M-L}	m/yr		Infiltration Rate for Eq S28	3	0.18
1	m/yr	Infiltration Rate		0.3	
GW _{obj}	mg/L	Gr	ound Water Remdiation Obje	ective	0.7
			Class I	Class II	
		Ethylbenzene	0.7	1	
d _x	m		Depth of Source		4.2672
ED _{M-L}	year		Exposure Duration for Eq S	28	70
ρ_b	Kg/L		Dry Soil Bulk Density		2.15

MODEL CALCULATED OUTPUTS:

C _w = 14
(2) (2) (2) (3) (3) (4) (4) (4) (4) (4) (4) (4) (4) (4) (4

REFERENCI	REFERENCE FOR INPUT PARAMETERS	
	ρb	
Gravel	2	
Sand	1.8	
Silt	1.6	
Clay	1.7	
	or site-specific	

Calculated Soil Remediation Objective:

Soil Remediation Ob	jective =	19.22725	mg/kg

Soil Saturation Limit Exceedence Check (value of SRO will change if soil saturation limit is exceeded for chemical):

Soil Remediation Objective =	19.2 mg/kg
Soil Remediation Objective =	19,200 μg/kg

Ethylbenzene

Downtown 66 - Peoria

Remediation Objective = (milligrams per kilogram, mg/kg)

 $(C_w \times I_{M-L} \times ED_{M-L}) / (\rho_b \times d_s)$

Target Soil Leachate Concentration C_w =

DF x GWobi

(milligrams per kilogram, mg/kg)

20

Dilution Factor DF= (unitless)

MODEL PARAMETERS INPUT:

Symbol	Unit	Parameter			Values
I _{M-L}	m/yr		Infiltration Rate for Eq S2	8	0.18
1	m/yr	Infiltration Rate			0.3
GW _{obj}	mg/L		Ground Water Remdiation Objective		10
120-22	20		Class I	Class II	
		Total Xylenes	10	10	
d _s	m	Depth of Source		4.2672	
ED _{M-L}	year		Exposure Duration for Eq S	28	70
Ρь	kg/L		Dry Soil Bulk Density		2.15

MODEL CALCULATED OUTPUTS:

C _w =	200

REFERENCE FOR	REFERENCE FOR INPUT PARAMETERS	
	рb	
Gravel	2	
Sand	1.8	
Silt	1.6	
Clay	1.7	
or si	ite-specific	

Calculated Soil Remediation Objective:

Soil Remediation Objective = 274.67497 mg/kg

Soil Saturation Limit Exceedence Check (value of SRO will change if soil saturation limit is exceeded for chemical):

Soil Remediation Objective = 275 mg/kg

Tier 1 Non-Exceedence Check (value of SRO will change if Tier 2 SRO is more stringent than Tier 1 SRO):

Soil Remediation Objective = Soil Remediation Objective =	275 mg/kg
Soil Remediation Objective =	275,000 μg/kg

Total Xylenes

Downtown 66 - Peoria

Remediation Objective =

 $(C_w \times I_{M-L} \times ED_{M-L}) / (\rho_b \times d_s)$

(milligrams per kilogram, mg/kg)

Target Soil Leachate Concentration $C_w =$

DF x GWobi

(milligrams per kilogram, mg/kg)

Dilution Factor DF=

20

(unitless)

MODEL PARAMETERS INPUT:

Symbol	Unit	Parameter		Parameter	Values
I _{M-L}	т/ут		Infiltration Rate for Eq S2	8	0.18
1	m/yr	Infiltration Rate		0.3	
GW _{obj}	mg/L	Ground Water Remediation Objective		0.00013	
E514-951			Class I	Class II	
		Benzo(a)anthracene	0.00013	0.00065	
d_s	m	Depth of Source		4.2672	
ED_{M-L}	year	I	Exposure Duration for Eq S	28	70
Pb	kg/L		Dry Soil Bulk Density		2.15

MODEL CALCULATED OUTPUTS:

0.0026

REFERENCE FOR I	REFERENCE FOR INPUT PARAMETERS			
	ρb			
Gravel	2			
Sand	1.8			
Silt	1.6			
Clay	1.7			
or site	-specific			

Calculated Soil Remediation Objective:

Soil Remediation Objective = 0.00357 mg/kg

Tier 1 Non-Exceedence Check (value of SRO will change if Tier 2 SRO is less than Tier 1 SRO):

Soil Remediation Objective =	2.0 mg/kg	Class I Groundwater
Soil Remediation Objective =	2,000 µg/kg	

Soil Remediation Objective =	8.0 mg/kg	Class II Groundwater
Soil Remediation Objective =	8,000 μg/kg	

Benzo(a)anthracene

The Agency is authorized to require this information under Section 4 and Title XVI of the Environmental Protection Act (415 ILCS 5/4, 5/57 - 57.17). Failure to disclose this information may result in a civil penalty of not to exceed \$50,000.00 for the violation and an additional civil penalty of not to exceed \$10,000.00 for each day during which the violation continues (415 ILCS 5/42). Any person who knowingly makes a false material statement or representation in any label, manifest, record, report, permit, or license, or other document filed, maintained or used for the purpose of compliance with Title XVI commits a Class 4 felony. Any second or subsequent offense after conviction hereunder is a Class 3 felony (415 ILCS 5/57.17). This form has been approved by the Forms Management Center.

Illinois Environmental Protection Agency Leaking Underground Storage Tank Program SSL Input Parameters for Use with Tier 2 Calculations

Λ	Sito	Identification	m

	EMA Incident # (6- or 8-digit): Site Name: S & S Infinite Grou	20140963 p, Inc.		_ IEPA LPC # (10-	digit): 1430650114
5	Site Address (not a P.O. Box):	400 NE Ad	ams Street		
(City: Peoria	County:	Peoria	Zip Code:	61603
L	eaking UST Technical File				
Т	ier 2 Calculation Informati	on			
E	Equation(s) Used (ex: S12, S17	, S28): <u>S6</u> ,	S7 and S26/3	S27: Inhalation of Ca	rcinogens SROs
	Equation(s) Used (ex: S12, S17 Contact Information for Individua	y n n eedd	- FORCE: MISSING BX	200	rcinogens SROs Project Manager,
C		al Who Perfo	ormed Calcula	200	
<u>N</u>	Contact Information for Individua	al Who Perfo	ormed Calcula x30	200	

- Mass Limit Acreage other than defaults must always be rounded up.
- Failure to use site-specific parameters where allowed could affect payment from the Underground Storage Tank Fund.
- Maps depicting source width, plume dimensions, distance, etc. must also be submitted.
- Inputs must be submitted in the designated unit.

Symbol			Unit	Symbol			Unit
AT (ingestion)	=		yr	da	=		m
AT (inhalation)	=		yr	ds	=	4.2672	m
AT_c	=	70	yr	D _A	Ħ		cm²/s
BW	=		kg	Di	=		cm²/s
C _{sat}	=		mg/kg	D _w	=		cm²/s
C_{w}	=		mg/L	DF	1=1		unitless
d	=		m	ED (ingestion carcinogens	of =		yr

IL 532-2860 LPC 645 8/07 SSL Input Parameters 1 of 3

Incident #:	2014	0963	Chemical:	Benzene	La	nd Use: Res	., Ind./Com., CW
Symbol			Unit	Symbol			Unit
ED (inhalation of carcinogens)	=	see page 3	yr	K _{oc}	=		cm ³ /g or L/kg
ED (ingestion of noncarcinogens)	=		yr	Ks	=		m/yr
ED (inhalation of noncarcinogens)	=		yr	L	=		m
ED (ingestion of groundwater)	=		yr	PEF	=		m³/kg
ED _{M-L}	=	70	yr	PEF'	=		m³/kg
EF	=	see page 3	d/yr	Q/C (VF equations)	=	97.78	(g/m ² -s)/ (kg/m ³)
F(x)	=	0.194	unitless	Q/C (PEF equations)	=		(g/m²-s)/ (kg/m³)
f _{oc}	=		g/g	RfC	=		mg/m ³
GW _{obj}	=		mg/L	RfD _o			mg/(kg-d)
H	=		unitless	S	=		mg/L
i	=		m/m	SF _o	=		(mg/kg-d) ⁻¹
1	=	0.3	m/yr	Т	=		s
I _{M-L}	=	0.18	m/yr	T _{M-L}	=	30	yr
IF _{soil-adj}	=	114	(mg-yr)/(kg-d)	THQ	=	1	unitless
IR _{soil}	=		mg/d	TR	=	0.000001	unitless
IR _w	=		L/d	U _m	=	4.69	m/s
К	=		m/yr	URF	=	see page 3	(µg/m³) ⁻¹
K _d (non-ionizing organics)	=		cm ³ /g or L/kg	Ut	=	11.32	kg/m³
K _d (ionizing organics)	=		cm³/g or L/kg	V	=		unitless
K _d (inorganics)	=		cm³/g or L/kg	VF	=		m³/kg

Symbol			Unit	Symbol			Unit
VF'	=		m³/kg	θ_{w}	=		L _{water} /L _{soil}
VF_{M-L}	=	9,569.33	m³/kg	ρ _b	=	2.15	kg/L or g/cm
VF' _{M-L}	=	956.93	m³/kg	ρ _s	=		g/cm ³
η	=		L _{pore} /L _{soil}	ρ _w	=	1	g/cm ³
θa	=		L _{air} /L _{soil}	1/(2b+3)	=		unitless
Equation		Result	Unit(s)	E		Frequency ays/year)	(EF):
S1	=		mg/kg	Residential = 350 Industrial/Commercial = 250 Construction Worker = 30			= 250
S2	=		mg/kg	Exposure Duration (ED): (years)			ED):
S3	=		mg/kg	Residential = 30 Industrial/Commercial = 25			
S4	=		mg/kg	Construction Worker = 1 Inhalation Unit Risk Factor (URF):			Depend one on
S5	=		mg/kg		[(u	g/m ³)-1]	
S6	=	See Boxes Belo	ow mg/L				272
S7	=	See Box Belov	w mg/kg		Benzen	e = 0.000007	78
S17	=		mg/kg				
S28	=		mg/kg				
S29	=		mg/L				
	Equa ng/kg) identia		(mg	Equation S6: /kg) Commercial		(mg	Equation S7: g/kg) ion Worker

SSL Input Parameters 3 of 3

Benzene = 5.3

Benzene = 3.1

Benzene = 110

EQUATIONS S6 AND S7 FOR INHALATION OF VOLATILE CONTAMINANTS IN SOIL (CARCINOGENS)

Downtown 66 Peoria, Illinois

Residential, Industrial Commercial
Remediation Objectives for Carcinogenic
Contaminants (mg/kg)

U

al genic
$$\frac{TR \bullet AT \cdot 365}{URF \bullet 1000} \frac{d}{mg} \bullet EF \bullet ED \bullet \frac{1}{VF}$$

Construction Worker Remediation Objectives for Carcinogenic Contaminants (mg/kg)

$$\frac{TR \cdot AT_{i} \cdot 365}{URF \cdot 1000} \frac{d}{mg} \cdot EF \cdot ED \cdot \frac{1}{VF}$$

SYMBOL	PARAMETER	UNITS	PARAMETER VALUES
AT,	AVERAGING TIME FOR CARCINOGENS	year	70
ED	EXPOSURE DURATION FOR INHALATION OF CARCINOGEN	year	RESIDENTIAL 30 INDUS-COMM 25 CONST WRKR 1
EF	EXPOSURE FREQUENCY	d yr	RESIDENTIAL 350 INDUS.COMM 250 CONST WRKR 30
TR	TARGET CANCER RISK	unitiess	RESIDENTIAL 10 ⁴ INDUS-COMM 10 ⁶ CONST WRKR 10 ⁴
URF	INHALATION UNIT RISK FACTOR	$({}^{148}/{}_{m^7})^{-1}$	7.8x10° benzene
VF _{M-L}	VOLATILIZATION FACTOR	m³/kg	REFER TO BQ. \$26& \$27 WITHIN TACO

S26 - Mass-Limit Volatilization Factor for the Inhalation Exposure Route - Residential, $VF_{M-L} = \frac{Q}{C}$

$$VF_{M-L} = \frac{Q}{C} \bullet \frac{\left[T_{M-L} \bullet \left(3.15 \bullet 10^7 \frac{s}{yr}\right)\right]}{\rho_b \bullet d_s \bullet 10^6 \frac{cm^3}{m^3}}$$

S27 - Mass-Limit Volatilization Factor for the Inhalation Exposure Route - Construction Worker (m³/kg)

$$VF'_{M-L} = \frac{VF_{M-L}}{10}$$

	SYMBOL	PARAMETER	UNITS	PARAMETER VALUES
	ds	DEPTH OF SOURCE	m	SITE SPECIFIC
- -	Pb	DRY BULK DENSITY	g cm	1.5, OR GRAVEL=2.0 SAND=1.8 SILT=1.6 CLAY=1.7, OR SITE SPECIFIC
	Q/C	INVERSE OF THE MEAN CONCENTRATION AT THE CENTER OF A SQUARE SOURCE	(g/m ² -s)/(kg/m ²)	RESIDENTIAL 68.81 INDUS-COMM 85.81 CONST WRKR 85.81 OR 742.Appendix C, Table H Q/C by Source Area
20	T _{M-L}	EXPOSURE INTERVAL	уг	30

INPUT PARAMETERS FOR VF_{M4}, RES/INDUS/COM PROP

INPUT PARAMTERS FOR VF'M4. CONSTRUCTION WORKER

Source Area	0.5 Acre	Source Area	0.5 Acre
ds=	4.2672 m	ds=	4.2672 m
Pb=	2.15 kg/L	Pb=	2.15 kg/L
Q/C=	97.78 (g/m ² -s)/(kg/m ²) (Residential)	Q/C=	97.78 (g/m ² -s)/(kg/m ³)
Q/C=	97.78 (g/m ² -s)/(kg/m ³) (Industrial/Commercial)	T _{M-L} =	30 yr.
T _{M-L} =	30 ут		
VF _{M1} =	10071.64 m ³ /kg (Residential)	VF _{M-L} =	1007.16 m ³ /kg
VF _{M-L} =	10071.64 m ³ /kg (Industrial/Commercial)		

INPUT PARAMETER VALUES RES/INDUS/COM PROP

INPUT PARAMETER VALUES FOR CONSTRUCTION WORKERS

AT _C	70	year	AT _C	70 year
ED-	.30	year (Residential)	ED=	I year
ED=	25	year (Industrial/Commercial)	EF=	30 d/yr
EF=	350	d/yr (Residential)	TR=	1.00E-06 unitless
EF=	250	d/yr (Industrial/Commercial)	URF=	7.80E-06 (**/m³) 1
TR-	1.00E-06	unitless	VF _{M-L} =	1007.16 m ³ /kg
URF=	7.80E-06	(PW / m 2) -1		
VF _{M-L} =	10071.64	m³/kg (Residential)		
$VF_{M-L} =$	10071.64	m ³ /kg (Industrial/Commercial)		

Residential Inhalation Remediation Objective (S6) = 3.14 mg/kg		Construction Worker Inhalation Remediation Objective (S7) =	109.97 mg/kg

Industrial/Commercial Inhalation
Remediation Objective (S6) = 5.28 mg/kg

Soil Saturation Limit Exceedence Check (value of SRO will change if soil saturation limit is exceeded for chemical):

Soil Remediation Objective (Residential Inhalation) =	3.1 mg/kg	3,100 µg/kg
Soil Remediation Objective (Industrial/Commercial Inhalation) =	5.3 mg/kg	5,300 µg/kg
Soil Remediation Objective (Construction Worker Inhalation) =	110 mg/kg	110,000 μg/kg

Parts-Per-Million Parts-Per-Billion

The Agency is authorized to require this information under Section 4 and Title XVI of the Environmental Protection Act (415 ILCS 5/4, 5/57 - 57.17). Failure to disclose this information may result in a civil penalty of not to exceed \$50,000.00 for the violation and an additional civil penalty of not to exceed \$10,000.00 for each day during which the violation continues (415 ILCS 5/42). Any person who knowingly makes a false material statement or representation in any label, manifest, record, report, permit, or license, or other document filed, maintained or used for the purpose of compliance with Title XVI commits a Class 4 felony. Any second or subsequent offense after conviction hereunder is a Class 3 felony (415 ILCS 5/57.17). This form has been approved by the Forms Management Center.

Illinois Environmental Protection Agency Leaking Underground Storage Tank Program SSL Input Parameters for Use with Tier 2 Calculations

A. Site	Identification
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Site Name: S & S Infinite Grou	p, Inc.					
Site Address (not a P.O. Box):	400 NE Ad	lams Street				
City: Peoria	County:	Peoria	Z	ip Code:	61603	3
I - Lie - LIGT T b-i I Fil-						
Leaking UST Technical File						
Tier 2 Calculation Informati	on					
		, S5, S26 & S	627: Inhalatio	n of Non-	-Carcin	nogens SRO
Tier 2 Calculation Informati	, S28): <u>S4</u>	5 5 5 5 135 B	t 120			nogens SRO
Tier 2 Calculation Information Equation(s) Used (ex: S12, S17	, S28): <u>S4</u> al Who Perf	ormed Calcul	t 120			
Tier 2 Calculation Information Equation(s) Used (ex: S12, S17 Contact Information for Individual	7, S28): <u>S4</u> al Who Perfo	ormed Calcul x30	t 120	e Buhlig		

- Mass Limit Acreage other than defaults must always be rounded up.
- Failure to use site-specific parameters where allowed could affect payment from the Underground Storage Tank Fund.
- Maps depicting source width, plume dimensions, distance, etc. must also be submitted.
- Inputs must be submitted in the designated unit.

Symbol			Unit	Symbol			Unit
AT (ingestion)	=		yr	da	=		m
AT (inhalation)	=	see page 3	yr	ds	=	4.2672	m
ΑT _c	=	70	yr	D _A	=		cm ² /s
BW	=		kg	Di	=	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	cm ² /s
C _{sat}	=		mg/kg	D _w	= 1		cm ² /s
C _w	=		mg/L	DF	=		unitless
d	=		m	ED (ingestion o carcinogens)	f =		yr

IL 532-2860 LPC 645 8/07 SSL Input Parameters 1 of 3

Incident #:	2014	10963	Chemical:	TEX	La	nd Use:	R, I/C & CW
Symbol			Unit	Symbol			Unit
ED (inhalation of carcinogens)			yr	K _{oc}	=		cm ³ /g or L/kg
ED (ingestion of noncarcinogens)	=		yr	Ks	=		m/yr
ED (inhalation of noncarcinogens)	F	see page 3	yr	L	=		m
ED (ingestion of groundwater)	=		yr	PEF	Ę		m³/kg
ED _{M-L}	=	70	yr	PEF'	=		m³/kg
EF	=	see page 3	d/yr	Q/C (VF equations)	=	97.78	(g/m²-s)/ (kg/m³)
F(x)	=	0.194	unitless	Q/C (PEF equations)	=		(g/m²-s)/ (kg/m³)
f_{oc}	=		g/g	RfC	=	see page 3	mg/m³
GW_{obj}	=		mg/L	RfDo	=		mg/(kg-d)
H'	=		unitless	S	=		mg/L
i	=		m/m	SF _o	=		(mg/kg-d) ⁻¹
Ī	=	0.3	m/yr	Т	=		S
I _{M-L}	=	0.18	m/yr	T _{M-L}	=	30	yr
IF _{soil-adj}	=	114	(mg-yr)/(kg-d)	THQ	=	1	unitless
IR _{soil}	=		mg/d	TR	=		unitless
IR _w	=		L/d	Um	=	4.69	m/s
к	=		m/yr	URF	=		(µg/m³)-1
K _d (non-ionizing organics)	=		cm³/g or L/kg	Ut	=	11.32	kg/m³
K _d (ionizing organics)	=		cm³/g or L/kg	V	=		unitless
K _d (inorganics)	=		cm³/g or L/kg	VF	=		m³/kg

Incident #:	20140963	Chemical:	TEX	Land Use:	R, I/C & CW
		· · · · · · · · · · · · · · · · · · ·			

-	Symbol			Unit
	VF'	=		m³/kg
	VF _{M-L}	=	9,569.33	m³/kg
	VF' _{M-L}	=	956.93	m³/kg
	η	=	= =	L _{pore} /L _{soil}
	θ_{a}	=		L _{air} /L _{soil}

Symbol			Unit
θ_{w}	=		L _{water} /L _{soil}
ρ_{b}	(=)	2.15	kg/L or g/cm ³
ρ_s	=		g/cm ³
ρ_{w}	=	1	g/cm ³
1/(2b+3)	=		unitless

Equation	Result	Unit(s)
S1	=	mg/kg
S2	=	mg/kg
S3	=	mg/kg
S4	= See Boxes Below	mg/kg
S5	= See Box Below	mg/kg
S6	Ħ.	mg/L
S 7	=	mg/kg
S17	=	mg/kg
S28	=	mg/kg
S29	=	mg/L

Averaging Time (AT): (years)

Residential = 30 Industrial/Commercial = 25 Construction Worker = 0.115

Exposure Frequency (EF): (days/year)

Residential = 350 Industrial/Commercial = 250 Construction Worker = 30

Exposure Duration (ED): (years)

Residential = 30 Industrial/Commercial = 25 Construction Worker = 1

Inhalation Reference Concentration (RfC): (mg/m³)

Toluene - chronic = 5.0
Toluene - subchronic = 5.0
Ethylbenzene - chronic = 1.0
Ethylbenzene - subchronic = 1.0
Total Xylenes - chronic = 0.1
Total Xylenes - subchronic = 0.4

Solution to Equation S4:	Solution to Equation S4:	Solution to Equation S5:	
(mg/kg)	(mg/kg)	(mg/kg)	
Residential	Industrial/Commercial	Construction Worker	
Toluene = 580*	Toluene = 580*	Toluene = 580*	
Ethylbenzene = 350*	Ethylbenzene = 350*	Ethylbenzene = 350*	
Total Xylenes = 607**	Total Xylenes = 607**	Total Xylenes = 564	
* = Soil Saturation Limit ** = Tier 2 Soil Saturation Limit	* = Soil Saturation Limit ** = Tier 1 SRO	* = Soil Saturation Limit	

SSL Input Parameters 3 of 3

EQUATIONS S4 AND S5 FOR INHALATION OF VOLATILE CONTAMINANTS IN SOIL (NONCARCINOGENS)

Downtown 66 Peoria, Illinois

Residential, Industrial/Commercial Remediation Objectives for Noncarcinogenic Contaminants
$$\frac{THQ \bullet AT \bullet 365}{EF \bullet ED \bullet \left(\frac{1}{RfC} \bullet \frac{1}{VF}\right)}$$

Construction Worker Remediation Objectives for Noncarcinogenic Contaminants (mg/kg)

$$\frac{THQ \bullet AT \bullet 365 \frac{d}{yr}}{EF \bullet ED \bullet \left(\frac{1}{RfC} \bullet \frac{1}{VF'}\right)}$$

SYMBOL	PARAMETER	UNITS	PARAMETER VALUES
AT	AVERAGING TIME FOR NONCARCINOGENS	year	RESIDENTIAL 30 INDUS/COMM 25 CONST WRKR 0.115
ED	EXPOSURE DURATION FOR INHALATION OF NONCARCINOGEN	year	RESIDENTIAL 30 INDUS/COMM 25 CONST WRKR 1
EF	EXPOSURE FREQUENCY	d/yr	RESIDENTIAL 350 INDUS/COMM. 250 CONST WRKR 30
RfC	INHALATION REFERENCE CONCENTRATION	mg/m"	RESIDENTIAL 5.0 INDUS-COMM 5.0 CONST WRKR 5.0
THQ	TARGET HAZARD QUOTIENT	unitless	1
VF_{M-L}	VOLATILIZATION FACTOR	m³/kg	REFER TO EQ. \$26& \$27 WITHIN TACO

S26 - Mass-Limit Volatilization Factor for the Inhalation Exposure Route - Residential, Industrial/Commercial (m³/kg)

$$VF_{M-L} = \frac{Q}{C} \bullet \left[T_{M-L} \bullet \left(3.15 \bullet 10^7 \frac{s}{yr} \right) \right]$$

$$\rho_L \bullet d_s \bullet 10^6 \frac{cm^3}{m^3}$$

S27 - Mass-Limit Volatilization Factor for the Inhalation Exposure Route - Construction Worker (m³/kg)

$$VF'_{M-L} = \frac{VF_{M-L}}{10}$$

	SYMBOL	PARAMETER	UNITS	PARAMETER VALUES
-	ds	DEPTH OF SOURCE	m	SITE SPECIFIC
	Pb	DRY BULK DENSITY	kg/L	1.5, OR GRAVEL=2.0 SAND=1.8 SILT=1.6 CLAY=1.7, OR SITE SPECIFIC
	Q/C	INVERSE OF THE MEAN CONCENTRATION AT THE CENTER OF A SQUARE SOURCE	(g/m²-sy(kg/m²)	RESIDENTIAL 68.81 INDUS/COMM 85.81 CONST WRKR 85.81 OR 742.Appendix C, Table H Q/C by Source Area
	T_{M-L}	EXPOSURE INTERVAL	yr	30

INPUT PARAMETERS FOR VFM-L RES/INDUS/COM PROP

INPUT PARAMTERS VF ML CONSTRUCTION WORKER

Source Area	0.5 Acre	Source Area	0.5 Acre
ds**	4.2672 m	ds=	4.2672 m
Pb=	2.15 kg/L	Pb=	2.15 kg/L
Q/C=	97-78 (g/m ² -s)/(kg/m ³) (Residential)	Q/C=	97.78 (g/m ² -s)/(kg/m ³)
Q/C=	97.78 (g/m ² -s)/(kg/m ³) (Industrial/Commercial)	T _{M-L} =	30.00 ут
T _{M-L} =	30.00 уг		
VF _{M-L} =	10071.64 m ³ /kg (Residential)	$\nabla \mathbf{F}^*_{\mathbf{M}-\mathbf{L}} =$	1007.16 m ³ /kg
VF _{M-L} =	10071.64 m ³ /kg (Industrial/Commercial)		

INPUT PARAMETER VALUES RES/INDUS/COM PROP

INPUT PARAMETER VALUES FOR CONSTRUCTION WORKERS

AT-	30 year	AT-	0.115 year
ED=	30 year (Residential)	ED=	1 year
ED=	25 year (Industrial/Commercial)	EF=	30 d/yr
EF=	350 d/yr (Residential)	RfC=	5.0 mg/m
EF=	250 d/yr (Industrial/Commercial)	THQ	1 unitless
RfC=	5.0 mg/m ³	VF _{M-L} =	1007.16 m ³ /kg
THQ	1 unitless		
VF _{M-L} =	10071.64 m ³ /kg (Residential)		
VF _{M-L} =	10071.64 m ³ /kg (Industrial/Commercial)		

Residential Inhalation Remediation Objective (S4) =	52,516.4 mg/kg	Construction Worker Inhalation Remediation Objective (S5) =	7,046.0 mg/kg
Objective (34)	54,510.4 mg/kg	Joujetine (33) -	7,040.0 mg/kg
Industrial/Commercial Inhalation			

Remediation Objective (\$4) = 73,523.0 mg/kg

Soil Saturation Limit Exceedence Check (value of SRO will change if soil saturation limit is exceeded for chemical):

Soil Remediation Objective (Residential Inhalation) =	580 mg/kg	580,000 μg/kg
Soil Remediation Objective (Industrial/Commercial Inhalation) =	580 mg/kg	580,000 μg/kg
Soil Remediation Objective (Construction Worker Inhalation) =	580 mg/kg	580,000 μg/kg

Parts-Per-Million Parts-Per-Billion

EQUATIONS S4 AND S5 FOR INHALATION OF VOLATILE CONTAMINANTS IN SOIL (NONCARCINOGENS)

Downtown 66 Peoria, Illinois

Residential, Industrial/Commercial Remediation Objectives for Noncarcinogenic Contaminants (mg/kg)
$$\frac{THQ}{EF} \bullet ED \bullet \left(\frac{1}{RfC} \bullet \frac{1}{VF}\right)$$

Construction Worker Remediation Objectives for Noncarcinogenic Contaminants (mg/kg)
$$\frac{THQ - AT - 365}{EF} \frac{d}{yr}$$

$$EF - ED - \left(\frac{1}{RfC} - \frac{1}{VF}\right)$$

SYMBOL	PARAMETER	UNITS	PARAMETER VALUES
AT	AVERAGING TIME FOR NONCARCINOGENS	YEAR	RESIDENTIAL 30 INDUS-COMM 25 CONST WREE 0.115
ED	EXPOSURE DURATION FOR INHALATION OF CARCINOGEN	YEAR	RESIDENTIAL 30 INDUS/COMM 25 CONST WRKR 1
EF	EXPOSURE FREQUENCY	DYR	RESIDENTIAL 350 INDUS-COMM 250 CONST-WRER 30
RfC	INHALATION REFERENCE CONCENTRATION	MG/M ³	RESIDENTIAL 1 INDUS/COMM CONST WRKR
THQ	TARGET HAZARD QUOTIENT	UNITLESS	ij.
VF _{M-L}	VOLATILIZATION FACTOR.	M³/KG	REFER TO BQ \$26& \$27 WITHIN TACO
	ED EF RFC THQ	AT AVERAGING TIME FOR NONCARCINOGENS EXPOSURE DURATION FOR INHALATION OF CARCINOGEN EF EXPOSURE FREQUENCY RFC INHALATION REFERENCE CONCENTRATION THQ TARGET HAZARD QUOTIENT	AT. AVERAGING TIME FOR NONCARCINOGENS YEAR EXPOSURE DURATION FOR INHALATION OF CARCINOGEN EF EXPOSURE FREQUENCY DAYR RFC INHALATION REFERENCE CONCENTRATION MG M' THQ TARGET HAZARD UNITLESS

S26 - Mass-Limit Volatilization Factor for the 26 - Mass-Limit Volatilization Factor for the Inhalation Exposure Route - Residential, $VF_{M-L} = \frac{Q}{C}$ • Industrial/Commercial (m3/kg)

$$VF_{M-L} = \frac{Q}{C} \bullet \left[\frac{T_{M-L} \bullet \left(3.15 \bullet 10^7 \frac{s}{yr} \right)}{\rho_h \bullet d_s \bullet 10^6 \frac{cm^3}{m^3}} \right]$$

S27 - Mass-Limit Volatilization Factor for the Inhalation

$$VF'_{M-L} = \frac{VF_{M-L}}{10}$$

SYMBOL	PARAMETER UNITS	PARAMETER VALUES	
ds	DEPTH OF SOURCE	m	SITE SPECIFIC
РЬ	DRY BULK DENSITY	kg/L	1.5, OR GRAVEL=2.0 SAND=1.8 SILT=1.6 CLAY=1.7, OR SITE SPECIFIC
Q/C	INVERSE OF THE MEAN CONCENTRATION AT THE CENTER OF A SQUARE SOURCE	(g/m²-44(kg/m²)	RESIDENTIAL 68-81 INDUS-COMM 85-81 CONST-WRKR 85-81 OR 742.Appendix C, Table H. Q/C by Source Area
T _{M-L}	EXPOSURE INTERVAL	уг	30

INPUT PARAMETERS FOR VFM-L RES/INDUS/COM PROP

INPUT PARAMTERS FOR CONSTRUCTION WORKER

Source Area	0.5 Acre	Source Area	0.5 Acre
ds=	4.2672 m	ds=	4.2672 m
Pb=	2.15 kg/L	Pb-	2.15 kg/L
Q/C=	97.78 (g/m ² -s)/(kg/m ³) (Residential)	Q/C=	97.78 (g/m ² -1)(kg/m ³
Q/C=	97.78 (g/m ² -s)/(kg/m ³) (Industrial/Commercial)	T _{M-L} -	30.00 ут
T _{M-L} =	30.00 уг.		
VF _{M-L} =	10071.64 m ³ /kg (Residential)	VF* _{M-L} =	1007.16 m ³ /kg
VF _{M-L} =	10071.64 m3/kg (Industrial/Commercial)		

INPUT PARAMETER VALUES RES/INDUS/COM PROP

INPUT PARAMETER VALUES FOR CONSTRUCTION WORKERS

AT-	30	year	AT-	0.115 year
ED-	30	year (Residential)	ED-	1 year
ED-	25	year (Industrial/Commercial)	EF=	30 d/yr
EF=	350	d/yr (Residential)	RfC=	1.0 mg/m ³
EF=	250	d/yr (Industrial/Commercial)	THQ	l unitless
RfC-	1.0	mg/m³	VF _{M-1} =	1007_164 m ³ /kg
THQ	1	unitless		
VF _{M-L} =	10071.64	m³/kg (Residential)		
/F=	10071.64	m3/kg (Industrial/Commercial)		

Residential Inhalation Remediation		Construction Worker Inhalation Remediation	
Objective (S4) =	10,503.3 mg/kg	Objective (S5) =	1,409.2 mg/kg

Industrial/Commercial Inhalation Remediation Objective (S4) = 14,704.6 mg/kg

Soil Saturation Limit Exceedence Check (value of SRO will change if soil saturation limit is exceeded for chemical):

Soil Remediation Objective (Residential Inhalation) =	350 mg/kg	350,000 µg/kg
Soil Remediation Objective (Industrial/Commercial Inhalation) =	350 mg/kg	350,000 µg/kg
Soil Remediation Objective (Construction Worker Inhalation) =	350 mg/kg	350,000 µg/kg

Parts-Per-Million Parts-Per-Billion

ETHYLBENZENE

EQUATIONS S4 AND S5 FOR INHALATION OF VOLATILE CONTAMINANTS IN SOIL (NONCARCINOGENS)

Downtown 66 Peoria, Illinois

Residential, Industrial/Commercial Remediation Objectives for Noncarcinogenic Contaminants (mg/kg)
$$\frac{THQ - AT - 365}{EF - ED} = \left(\frac{1}{RfC} - \frac{1}{VF} \right)$$

Construction Worker Remediation Objectives for Noncarcinogenic Contaminants (mg/kg)
$$\frac{THQ - AT - 365}{EF - ED} \cdot \left(\frac{1}{RfC} - \frac{1}{VF}\right)$$

SYMBOL	PARAMETER	UNITS	PARAMETER VALUES
AT	AVERAGING TIME FOR NONCARCINOGENS	YEAR	RESIDENTIAL 30 INDUS/COMM 25 CONST WRKR 0.115
ED	EXPOSURE DURATION FOR INHALATION OF NONCARCINOGENS	YEAR	RESIDENTIAL 30 INDUS-COMM. 25 CONST-WIKER 1
EF	EXPOSURE FREQUENCY	DYR	RESIDENTIAL 350 INDUS/COMM, 250 CONST WRKR 30
RfC	INHALATION REFERENCE CONCENTRATION	MG·M ¹	RESIDENTIAL 0.1 INDUSCOMM 0.1 CONST WRKE 0.4
THQ	TARGET HAZARD QUOTIENT	UNITLESS	1
VF_{M-L}	VOLATILIZATION FACTOR	M³/KG	REFER TO EQ. \$26& \$27 WITHIN TACO

S26 - Mass-Limit Volatilization Factor for the 26 - Mass-Limit Volatilization Factor for the Inhalation Exposure Route - Residential, $VF_{M-L} = \frac{Q}{C}$ Industrial/Commercial (m3/kg)

$$VF_{M-L} = \frac{Q}{C} \bullet \left[\frac{T_{M-L} \bullet \left(3.15 \bullet 10^7 \frac{S}{VT} \right) \right]}{\rho_b \bullet d_a \bullet 10^6 \frac{cm^3}{m^3}}$$

S27 - Mass-Limit Volatilization Factor for the Inhalation Exposure Route - Construction Worker (m³/kg)

$$VF'_{M-L} = \frac{VF_{M-L}}{10}$$

SYMBOL	PARAMETER	UNITS	PARAMETER VALUES
ds	DEPTH OF SOURCE	m	SITE SPECIFIC
Pb	DRY BULK DENSITY	kgl	1.5, OR GRAVEL=2.0 SAND=1 # SILT=1.6 CLAY=1.7, OR SITE SPECIFIC
Q/C	INVERSE OF THE MEAN CONCENTRATION AT THE CENTER OF A SQUARE SOURCE	(g/m²-s)(kg/m²)	RESIDENTIAL 68.81 INDUS-COMM 85.81 CONST WRKR 85.81 OR 742 Appendix C, Table H Q/C by Source Area
T _{M-L}	EXPOSURE INTERVAL	уг	30.

INPUT PARAMETERS FOR VFM-L RES/INDUS/COM PROP

INPUT PARAMTERS FOR CONSTRUCTION WORKER

Source Area	0.5 Acre	Source Area	0.5 Acre
ds=	4.2672 m	ds=	4.2672 m
Pb=	2.15 kg/L	Pb=	2.15 kg/L
Q/C=	97,78 (g/m ² -s)/(kg/m ³) (Residential)	Q/C=	97.78 (g/m ² -s)/(kg/m ³)
Q/C-	97.78 (g/m ² -s)/(kg/m ³) (Industrial/Commercial)	T _{M-L} =	30.00 yr
T _{NEL} =	30.00 ут		
VF _{M-1} =	10071.64 m ³ /kg (Residential)	VF _{M-l} =	1007.16 m ³ /kg
VF=	10071 64 m ³ Aut (Industrial/Commercial)		

INPUT PARAMETER VALUES RES/INDUS/COM PROP

INPUT PARAMETER VALUES FOR CONSTRUCTION WORKERS

AT-	30	year (Residential)	AT-	0.115	year
AT=	25	year (Industrial/Commercial)	ED=	1	year
ED=	30	year (Residential)	EF=	30	d/yr
ED-	25	year (Industrial/Commercial)	RfC=	0.4	mg/m³
EF=	350	d/yr (Residential)	THQ	1	unitless
EF-	250	d/yr (Industrial/Commercial)	VF' _{M-L} =	1007.16	m'/kg
RfC=	0.1	mg/m ³			
THQ	1	unitless			
VF _{M-1} =	10071.64	m3/kg (Residential)			
VF _{M-1}	10071.64	m3/kg (Industrial/Commercial)			

Residential Inhalation Remediation		Construction Worker Inhalation Remediation	Construction Worker Inhalation Remediation	
Objective (S4) =	1,050.3 mg/kg	Objective (S5) =	563.7 mg/kg	
Contract (01)	1,000	Top seems (out)		

Industrial/Commercial Inhalation Remediation Objective (S4) = 1,470.5 mg/kg

Soil Saturation Limit Exceedence Check (value of SRO will change if soil saturation limit is exceeded for chemical):

Soil Remediation Objective (Residential Inhalation) =	607 mg/kg	607,000 µg/kg
Soil Remediation Objective (Industrial/Commercial Inhalation) =	607 mg/kg	607,000 µg/kg
Soil Remediation Objective (Construction Worker Inhalation) =	564 mg/kg	564,000 μg/kg

Parts-Per-Million Parts-Per-Billion

ATTACHMENT 2

General Information for the Budget and Billing Forms

LPC#:	1430650114	County:	Peoria	
City: Pe	orla	Site Name:	S & S Infinite Group, I	nc. (Downtown 66)
Site Addı	ress: 400 NE Adams Street			- <u></u> .
IEMA Inc	cident No.: 20140963	_	_ ,	_
IEMA No	otification Date: 08/19/2014		- 12	
Date this	form was prepared: 7/2/2015			
This for	m is being submitted as a (check one	, if applicable	o):	
	Budget Proposal			·
	Budget Amendment (Budget amendme	ents must incl	ude only the costs over	the previous budget.)
_	Billing Package	,	,	.
L	•	-> -#		
	Please provide the name(s) and date(s) of report(s)	documenting the costs	RECEIVED
	Name(s):			
	Date(s):			JUL 0 2 2015
This pac	Date(s): ckage is being submitted for the site a			IEPA/BOL
	ckage is being submitted for the site a			
	ckage is being submitted for the site a	activities indi		
	ckage is being submitted for the site a dm. Code 734: Early Action	activities indi		
36 III. Ac	ckage is being submitted for the site at dm. Code 734: Early Action Free Product Removal after Early Action Site Investigation	activities indi	cated below:	IEPA/BOL
35 III. Ac	ckage is being submitted for the site at dm. Code 734: Early Action Free Product Removal after Early Action Site Investigation	activities indi	cated below:	IEPA/BOL
35 III. Ac	ckage is being submitted for the site at dm. Code 734: Early Action Free Product Removal after Early Action Site Investigation	activities indi	cated below:	IEPA/BOL
35 III. Ac	ckage is being submitted for the site and the Code 734: Early Action Free Product Removal after Early Action Site Investigation	on Stage 1: ctual Costs	cated below:	IEPA/BOL
35 III. Ac	ckage is being submitted for the site and the code 734: Early Action Free Product Removal after Early Action Site Investigation	on Stage 1: ctual Costs	cated below:	IEPA/BOL
35 III. Ac	ckage is being submitted for the site and the code 734: Early Action Free Product Removal after Early Action Site Investigation	on Stage 1: ctual Costs	cated below:	IEPA/BOL
35 III. Ac	ckage is being submitted for the site and the code 734: Early Action Free Product Removal after Early Action Site Investigation	on Stage 1: ctual Costs	cated below:	IEPA/BOL
35 III. Ac	ckage is being submitted for the site and the code 734: Early Action Free Product Removal after Early Action Site Investigation	on Stage 1: ctual Costs	cated below:	IEPA/BOL
35 III. Ac	ckage is being submitted for the site and the code 734: Early Action Free Product Removal after Early Action Site Investigation	on Stage 1: ctual Costs	cated below:	IEPA/BOL

IL 532 -2825 LPC 630 Rev. 1/2007

General Information for the Budget and Billing Forms

The following address will be used as the mailing address for checks and any final determination letters regarding payment from the Fund. Pay to the order of: S & S Infinite Group, Inc. Send in care of: Martin Environmental, inc. Address: 3935 Commerce Drive City: St. Charles State: Illinois **Zip:** 60174 The payee is the: Owner 53 Operator 🖂 (Check one or both.) If you have a change of address. click here to print off a W-9 Form. Signature of the owner or operator of the UST(s) (required) Number of petroleum USTs in Illinois presently owned or operated by the owner or operator; any subsidiary. parent or joint stock company of the owner or operator; and any company owned by any parent, subsidiary or joint stock company of the owner or operator. Fewer than 101: 101 or more: (Number of USTs includes USTs presently at the site and USTs that Number of USTs at the site: 3 have been removed.) Number of incidents reported to IEMA for this site: 1 Incident Numbers assigned to the site due to releases from USTs: 20140983 Please list all tanks that have ever been located at the site and tanks that are presently located at the site. **Product Stored in UST** Size Did UST have Incident No. Type of Release (gallons) a release? Tank Leak / Overfill / Piping Leak Yes 🖂 No 🔲 Tank Leak Diesel Fuel 6,000 20140963 Yes 🔯 No 🗌 Tank Leak 10,000 Unleaded Gasoline 20140963 No 🔯 Yes \square 10,000 Unleaded Gasoline No 🔯 Yes \square No 🔯 Yes 🗍

Add More Rows

Yes \square

Yes 🗍

Yes 🔲

Yes 🔲

Undo Last Add

No 🔯

No 🔯

No 🔯

No 🔯

Budget Summary

Choose the applicable regulation:

734 732

734	Free Product	Stage 1 Site Investigation	Stage 2 Site Investigation	Stage 3 Site Investigation	Corrective Action		
Orilling and Monitoring Well Costs Form	\$	\$	\$	\$	\$.00		
Analytical Costs Form	\$	\$	\$	\$	\$.00		
Remediation and Disposal Costs Form	\$	\$	\$	\$	\$.00		
UST Removal and Abandonment Costs Form	\$	\$	\$	\$	\$.00		
Paving, Demolition, and Well Abandonment Costs Form	\$	\$	\$	\$	\$ 1,215.00		
Consulting Personnel Costs Form	\$	\$	\$	\$	\$ 15,889.04		
Consultant's Materials Costs Form	\$	\$	\$	\$	\$.00		
Handling Charges Form	Handling charges will be determined at the time a billing package is submitted to the Illinois EPA. The amount of allowable handling charges will be determined in accordance with the Handling Charges Form.						
Total	\$	*	\$	\$	\$ 17,104.04		

Paving, Demolition, and Well Abandonment Costs Form

A. Concrete and Asphalt Placement/Replacement

Number of Square Feet	Asphalt or Concrete	Thickness (inches)	Cost (\$) per Square Foot	Replacement or Placement for an Engineered Barrier	Total Cost
···					
		-	· · · · · · · · · · · · · · · · · · ·		
	·				•

Total Concrete and Asphalt
Placement/Replacement Costs:

B. Building Destruction or Dismantling and Canopy Removal

Item to Be Destroyed, Dismantied, or Removed	Unit Cost (\$)	Total Cost (\$)	
	<u></u> .		
		····	
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	1		

Total Building Destruction or Dismantling and	
Canopy Removal Costs:	

Paving, Demolition, and Well Abandonment Costs Form

C. Well Abandonment

Monitoring Well ID #	Type of Well (HSA / PUSH / Recovery)	Depth of Well (feet)	Cost (\$) per Foot	Total Cost
MW-1	HSA	20.00	12.15	\$243.00
MW-2	HSA	20.00	12.15	\$243.00
MW-3	HSA	20.00	12.15	\$243.00
MW-4	HSA	20.00	12.15	\$243.00
MW-5	HSA	20.00	12.15	\$243.00
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Total Monitoring Well Abandonment Costs:	\$1,215.00
	1 , , , ,

	8
Total Paving, Demolition, and Well Abandonment Costs:	\$1,216.00

Consulting Personnel Costs Form

Employee Nam	0	Personnel Titte	Hours	Rate* (\$)	Total Cost	
Remediation Category		Task				
•		 	 _	r 		
		Project Manager	12.00	109.34	\$1,312.08	
TACO 2 or 3	TACO Prep: Ti	er 2 Calculations, Soil Analysis			· ·	
		Project Manager	15.00	109.34	\$1,640.10	
CCAP	CA Ptan: Prepa	ration and Budget		<u> </u>		
		Senior Project Manager	5.00	121.49	\$607.45	
CCAP	CA Ptan: Prepa	ration and Budget				
	 	Senior Prof. Engineer	9.00	157.94	\$1,421.46	
CCAP	CA Technical D	Design, Data Interpretation, Evaluat	don/CAP Plan an	d Budget Review	& Certification	
		Senior Admin. Assistant	6.00	54.67	\$437.38	
CCAP	CAP Plan and I	Budget Production and submittel	· · ·			
		Senior Draftperson/CAD	6.00	72.88	\$437.28	
CCAP	CAP Plan Figur	re, Drafting and Printing				
· · · · · · · · · · · · · · · · · · ·		Engineer III	10.00	121.49	\$1,214.90	
TACO 2 or 3	TACO Prep: Co	entaminant Fate and Transport Mo	deling	,		
		Project Manager	9.00	109.34	\$984.06	
HAA	Obtain IDOT H	M				
		Senior Project Manager	2.00	121.49	\$242.98	
CA-Pay	CA Pay: Billing	Package (CAP) - Management				

Employee Nam	9	Personnel Title	Hours	Rate* (\$)	Total Cost	
Remediation Category	Task					
<u>-</u>	· · · · · · · · · · · · · · · · · · ·	Senior Acct. Technician	18.00	66.81	\$1,202.5	
CCAP	CA Pay: Billing	Package (CAP) - Production	•			
····	 -	Senior Prof. Geologist	3.00	133.64	\$400.9	
CA-Pay	CA Pay: Billing	Package (CAP) - Review & Certify		-		
,·		Project Manager	19.00	109.34	\$2,077.4	
CACR	CACR Prepare	ntion, Attachments				
·		Senior Project Manager	5.00	121,49	\$607.4	
CACR	CACR Design,	Technical Plan and Review				
		Senior Prof. Engineer	5.00	147.94	\$739,1	
CACR	CACR Plan an	d Budget Review & Certification	-			
		Senior Admin. Assistant	6.00	54,67	\$328.0	
CACR	CACR Plan	Production & Assembly	·	···		
		Senior Draftperson/CAD	3,00	72.88	\$218.6	
CACR	CACR Plan Fig	gure, Changes and Printing		, , , , , ,	<u> </u>	
· · · · · · · · · · · · · · · · · · ·	_	Project Manager	4.00	109.34	\$437.:	
CCA-Field	Coordination N	IFR Recording, Well Abandonment,	<u> </u>	108.34	\$437	
			<u> </u>	1		
		Senior Project Manager	2.00	121.49	\$242.	
CA-Pay	CACR & NFR	Billing Package - Management				

Employee Name		Personnel Title	Hours	Rate* (\$)	Total Cost
Remediation Category		Task			
		<u> </u>		r	
		Senior Acct. Technician	14.00	66.81	\$935.34
CA-Pay	CACR & NFR B	Illing Package - Production			
	· · · · · · · · · · · · · · · · · · ·				
		Senior Prof. Geologist	3.00	133,64	\$400.92
CA-Pay	CACR & NFR B	illing Package - Review and Certific	ation		
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*Refer to the applicable Maximum	<u>l</u>			 -	

Total of Consulting Personnel Costs	\$15,889.04

Owner/Operator and Licensed Professional Engineer/Geologist Budget

Certification Form I hereby certify that I intend to seek payment from the UST Fund for costs incurred while performing corrective action activities for Leaking UST incident 20140963 . I further certify that the costs set forth in this budget are for necessary activities and are reasonable and accurate to the best of my knowledge and belief. I also certify that the costs included in this budget are not for corrective action in excess of the minimum requirements of 415 ILCS 5/57, no costs are included in this budget that are not described in the corrective action plan, and no costs exceed Subpart H: Maximum Payment Amounts, Appendix D Sample Handling and Analysis amounts, and Appendix E Personnel Titles and Rates of 35 III. Adm. Code 732 or 734. I further certify that costs ineligible for payment from the Fund pursuant to 35 Ill. Adm. Code 732.606 or 734.630 are not included in the budget proposal or amendment. Such ineligible costs include but are not limited to: Costs associated with ineligible tanks. Costs associated with site restoration (e.g., pump islands, canopies). Costs associated with utility replacement (e.g., sewers, electrical, telephone, etc.). Costs incurred prior to IEMA notification. Costs associated with planned tank pulls. Legal fees or costs. JUL 0 2 2015 Costs incurred prior to July 28, 1989. Costs associated with Installation of new USTs or the repair of existing USTs.

RECEIVED

IEPA/BOL

Owner/Operator: 5 & 5 Infinite Group, Inc. (Downtown 66)	
Authorized Representative: Syed Muneeb	Title: Owner
Signature:	Date: 4/30/15
Subscribed and sworn to before me the 30 day of	one, 2015.
(Notary Public)	D. EQUILATION OFFICIAL SEAL Noticy Public - State of Dinois
In addition, I certify under penalty of law that all activities that are the conducted under my supervision or were conducted under the super	My Commission Explain December 08, 2017 e subject of this plan, budget, or report were
or Licensed Professional Geologist and reviewed by me; that this planter prepared under my supervision; that, to the best of my knowledge are or report has been completed in accordance with the Environmental	an, budget, or report and all attachments were nd belief, the work described in the plan, budget,
732 or 734, and generally accepted standards and practices of my paccurate and complete. I am aware there are significant penalties for	profession; and that the information presented is or submitting false cate ments of capresentations
to the Illinois EPA, including but not limited to fines, imprisonment, o Environmental Protection Act [415 ILCS 5/44 and 57.17].	LLP.G. Seal:
L.P.E./L.P.G.: Jeff Wienhoff L.P.E	E./L.P.G. Seal:
L.P.E./L.P.G. Signature:	Date: PROFESSIONEER PROFESSION
Subscribed and sworn to before me the	ily , 2015
Se	D. EGGLESTOM OFFICIAL SEAL Notery Public - State of Egrols
(Notery Sublic)	My Commission Explase December 08, 2017

The Illinois EPA is authorized to require this information under 415 ILCS 5/1. Disclosure of this information is required. Failure to do so may result in the delay or denial of any budget or payment requested hereunder.

OF THE MINES

Office of the Illinois

State Fire Marshal

"Partnering With the Fire Service to Protect Illinois"

CERTIFIED MAIL - RECEIPT REQUESTED #7014 1820 0001 3147 8483

December 5, 2014

S and S Infinite Group, Inc. 400 North East Adams Street Peoria, IL 61603

In Re:

Facility No. 3-010480

IEMA Incident No. 14-0963

Downtown 66

400 North East Adams Street

Peoria, Peoria Co., IL

Dear Applicant:

The Reimbursement Eligibility and Deductible Application received on October 17, 2014 for the above referenced occurrence has been reviewed. The following determinations have been made based upon this review.

It has been determined that you are eligible to seek payment of costs in excess of \$5,000. The costs must be in response to the occurrence referenced above and associated with the following tanks:

Eligible Tanks

Tank 1 6,000 gallon Diesel Fuel Tank 2 10,000 gallon Gasoline

You must contact the Illinois Environmental Protection Agency to receive a packet of Agency billing forms for submitting your request for payment.

An owner or operator is eligible to access the Underground Storage Tank Fund if the eligibility requirements are satisfied:

- 1. Neither the owner nor the operator is the United States Government,
- 2. The tank does not contain fuel which is exempt from the Motor Fuel Tax Law,
- 3. The costs were incurred as a result of a confirmed release of any of the following substances:

"Fuel", as defined in Section 1.19 of the Motor Fuel Tax Law

Aviation fuel

Heating oil

Kerosene

Used oil, which has been refined from crude oil used in a motor vehicle, as defined in Section 1.3 of the Motor Fuel Tax Law.

- 4. The owner or operator registered the tank and paid all fees in accordance with the statutory and regulatory requirements of the Gasoline Storage Act.
- 5. The owner or operator notified the Illinois Emergency Management Agency of a confirmed release, the costs were incurred after the notification and the costs were a result of a release of a substance listed in this Section. Costs of corrective action or indemnification incurred before providing that notification shall not be eligible for payment.
- The costs have not already been paid to the owner or operator under a private insurance policy, other written agreement, or court order.
- The costs were associated with "corrective action".

This constitutes the final decision as it relates to your eligibility and deductibility. We reserve the right to change the deductible determination should additional information that would change the determination become available. An underground storage tank owner or operator may appeal the decision to the Illinois Pollution Control Board (Board), pursuant to Section 57.9 (c) (2). An owner or operator who seeks to appeal the decision shall file a petition for a hearing before the Board within 35 days of the date of mailing of the final decision, (35 Illinois Administrative Code 105.504(b)).

For information regarding the filing of an appeal, please contact:

Clerk
Illinois Pollution Control Board
State of Illinois Center
100 West Randolph, Suite 11-500
Chicago, Illinois 60601
(312) 814-3620

The following tanks are also listed for this site:

Tank 3 10,000 gallon Gasoline

Your application indicates that there has not been a release from these tanks under this incident number. You may be eligible to seek payment of corrective action costs associated with these tanks if it is determined that there has been a release from one or more of these tanks. Once it is determined that there has been a release from one or more of these tanks you may submit a separate application for an eligibility determination to seek corrective action costs associated with this/these tanks.

If you have any questions, please contact our Office at (217) 785-1020 or (217) 785-5878.

Sincerely.

Deanne Lock

Administrative Assistant

Division of Petroleum and Chemical Safety

cc: IE

Marlin Environmental

LEAKING UST TECHNICAL REVIEW NOTES

Reviewed by: Scott McGill Date Reviewed: July 15, 2015 Re: LPC #1430650114 -- Peoria County Peoria/S & S Infinite Group, Inc.

400 NE Adams Street

EN MISTROFFEDERS MANAGEET Leaking UST Incident No. 20140963

Leaking UST Technical File

Document(s) Reviewed:

A,

This document consists of a corrective action plan and budget dated July 2, 2015 and received by Martin Francisco and prepared by Martin Francisco the Agency on July 2, 2015 and prepared by Marlin Environmental, Inc. This plan and budget were prepared in accordance with the 734 requirements and summarized as follows:

General Site Information:

Site subject to: 734

REELSABLE

JUL 3 0 2015

IEMA date(s): August 19, 2014	Payment from the Fund? (Y/N/unknown): yes
UST system removed? (Y/N): yes	OSFM Fac. ID #: 20140963
Encountered groundwater? (Y/N/unknown): no	SWAP mapping and evaluation completion date: July 15, 2015
Free product? (Y/N/unknown): no	Site placement correct in SWAP? (Y/N): yes
Current/past land use: gas station	MTBE > 40 ppb in groundwater?
Size & product of USTs: 1-6,000 gallon diesel	(Y/N/unknown): no fuel and 1-10 000 gallon gasoline tank.
Is site located in EJ area? no	Is investigation of indoor inhalation exposure
IS SHE located in E3 area! no	route required? No

Corrective Action Plan/Budget Review Notes:

The owner and operator submitted a corrective action plan consisting of a Tier 2 evaluation and institutional controls. The owner and operator propose a highway authority agreement for Spaulding Avenue, ELUC agreement, on-site groundwater use restriction and an industrial/commercial land use restriction. The proposed institutional controls are depicted in Figure 2. It should be noted that groundwater was not encountered at this site during early action activities and a groundwater investigation was not completed at the site. However, a Tier 2 modeling evaluation was completed to determine a leaching threat in the groundwater using equation S28. The modeled extent of contamination is depicted in Figure 1. The model calculations are included in Attachment 1.

The corrective action plan budget is included in Attachment 2. The budget is in the amount of \$17,104.04. This amount includes costs for abandonment of 5 existing monitoring wells, personnel costs for preparing the corrective action plan and budget, corrective action completion report and billing package.

Page 2

Illinois EPA Decision:

The proposed corrective action plan and budget consisting of a Tier 2 evaluation and institutional controls should be approved. The owner and operator should submit a corrective action completion report summarizing the results of the plan and request closure.

Response Due:

The owner and operator should submit a corrective action completion report.



ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

1021 North Grand Avenue East, P.O. Box 19276, Springfield, Illinois 62794-9276 • (217) 782-2829

BRUCE RAUNER, GOVERNOR

LISA BONNETT, DIRECTOR

217/524-3300

CERTIFIED MAIL

-JUL 2.1.2015

7013 2630 0001 4705 7907

S & S Infinite Group, Inc. Attn: Syed Muneeb 400 NE Adams Street Peoria, IL 61603

Re:

LPC #1430650114 -- Peoria County

Peoria/S & S Infinite Group, Inc.

400 NE Adams Street

Leaking UST Incident No. 20140963

Leaking UST Technical File

IEFA-DIVISION OF RECORDS MANAGEMENTRELEASABLE

SEP 16 2015

REVIEWER: JKS

Dear Syed Muneeb:

The Illinois Environmental Protection Agency (Illinois EPA) has reviewed the Corrective Action Plan (plan) submitted for the above-referenced incident. This plan, dated July 2, 2015, was received by the Illinois EPA on July 2, 2015. Citations in this letter are from the Environmental Protection Act (415 ILCS 5) (Act) and Title 35 of the Illinois Administrative Code (35 Ill. Adm. Code).

Pursuant to Sections 57.7(b)(2) and 57.7(c) of the Act and 35 Ill. Adm. Code 734.505(b) and 734.510(a), the plan is approved. The activities proposed in the plan are appropriate to demonstrate compliance with Title XVI of the Act. Please note that all activities associated with the remediation of this release proposed in the plan must be executed in accordance with all applicable regulatory and statutory requirements, including compliance with the proper permits.

In addition, the total budget is approved for the amounts listed in Attachment A. Please note that the costs must be incurred in accordance with the approved plan. Be aware that the amount of payment from the Fund may be limited by Sections 57.7(c), 57.8(d), 57.8(e), and 57.8(g) of the Act, as well as 35 Ill. Adm. Code 734.630 and 734.655.

Pursuant to Sections 57.7(b)(5) and 57.12(c) and (d) of the Act and 35 III. Adm. Code 734.100 and 734.125, the Illinois EPA requires that a Corrective Action Completion Report that achieves compliance with applicable remediation objectives be submitted within 30 days after completion of the plan to:

Illinois Environmental Protection Agency Bureau of Land - #24 Leaking Underground Storage Tank Section 1021 North Grand Avenue East Post Office Box 19276 Springfield, IL 62794-9276

Please submit all correspondence in duplicate and include the Re: block shown at the beginning of this letter.

If within four years after the approval of this plan, compliance with the applicable remediation objectives has not been achieved and a Corrective Action Completion Report has not been submitted, the Illinois EPA requires the submission of a status report pursuant to Section 57.7(b)(6) of the Act.

If you have any questions or need further assistance, please contact Scott McGill at (217) 524-5137.

Sincerely

Michael T. Lowder

Unit Manager

Leaking Underground Storage Tank Section

Division of Remediation Management

Bureau of Land

Attachment: Attachment A

cc:

Marlin Environmental, Inc.

BOL File

Attachment A

Re: LPC #1430650114 -- Peoria County Peoria/S & S Infinite Group, Inc.

400 NE Adams Street

Leaking UST Incident No. 20140963

Leaking UST Technical File

SECTION 1

The following amounts are approved:

\$0.00	Drilling and Monitoring Well Costs	
\$0.00	Analytical Costs	
\$0.00	Remediation and Disposal-Costs	
\$0.00	UST Removal and Abandonment Costs	
\$1,215.00	Paving, Demolition, and Well Abandonment Costs	
\$15,889.04	Consulting Personnel Costs	
\$0.00	Consultant's Materials Costs	

Handling charges will be determined at the time a billing package is reviewed by the Illinois EPA. The amount of allowable handling charges will be determined in accordance with Section 57.1(a) of the Environmental Protection Act and 35 Illinois Administrative Code 734.635.

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

1021 North Grand Avenue East, P.O. Box 19276 SPRINGFIELD, ILLINOIS 62794-9276



4705-7907 MAILED FROM ZIPCODE

NIXIE

DE 1009

0008/11/15

RETURN TO SENDER UNCLAIMED UNABLE TO FORWARD



Hazardous Materials Incident

Incident #: H-2016-1089

Entered By: Kirgan, Ken (IEMA)

Data Input Status: Closed

Leaking Underground Yes Storage Tank (LUST):

Report 1430650114-l'eorta Sas Infinite Group Inc on 2016-11-21 14:51:49 Leaking UST Techtile

Caller:	Matt Rives			EPA-DWISION OF RECORDS L'ANAGE	
Call Back #:	217/851-1404			RESEARE	
Caller Represents:	CW3M Comp	any		NFC 19 2016	
Hazmat Incident Type:	Leak or spill			0- 0	
		INCIDENT	LOCATION	REVIEWER RD	
Incident Location:	400 NE Adam	s St			
County:	Peoria (01603	City:	Peoria	
Primary IEMA Region:	6		Secondary IEMA Region:	Not Applicable	
Full Address:	400 NE Adam	400 NE Adams St, Peoria, IL			
Latitude:	40.694349		Longitude:	-89.585542	
Milepost:	N/A		Sec:	N/A	
Twp.:	N/A		Range:	N/A	
Area Involved:	Fixed Facility				
Media or medium into which the release occurred:	Ground				
		WEATHER IN	FORMATION		
Temp (deg F):	n/a		Wind Dir/Speed m.p.h: n/a		

	MATERIALS I	NVOLVED				
Material Name:	gasoline, diesel and used oil	Material Type:	Liquid			
CHRIS Code:	Unknown	CAS #:	Unknown			
UN/NA #:	Unknown					
Is this a 302(a) Extremely Hazardous Substance?	Unknown	Unknown				
Is this a RCRA Hazardous Waste?	Unknown					
Is this a RCRA regulated facility?	Unknown					
Container Type:	Under ground storage tank	Container Size:	see narrative			
Amount Released: unknown Rate of Release		Rate of Release/min:	unknown			
Duration of Release:	unknown	unknown				
Cause of Release:	unknown					
Estimated Spill Extent:	Unknown	Spill Extent Units:				

Date/Time Occured:	(Date/Time Unknown)			
Date/Time Discovered:	2016-11-21 14:30	2016-11-21 14:30		
Number Injured:	0	Where Taken:	none	
Number Killed:	0	# Evacuated:	0	
On Scene Contact:	Matt Rives	On Scene Phone #:	217/851-1404	
Proper safety precautions to none	take as a result of the release, inclu	ding evacuation:		
Assistance needed from State	te Agencies:			
Containment/Cleanup action caller is with the hired contra	s and plans: octor, tanks will probably be remove	ed		

Responsible Party:	S&S Infiniti Group Inc
Contact Person:	Syed Munbed
Callback Phone Number:	309/453-2280
Facility Manager:	Syed Munbed
Facility Manager Phone #:	309/453-2280
Street Address:	400 NE Adams St
City:	Peoria State: IL Zip Code: 61603

Emergency Units Contacted	Contacted	On Scene	Agencies Contacted
ESDA			none
Fire			none
Police	7.1.2.2		none
Sheriff			none
Other			none

Agency	Date/Time	Name of Person	Notification Action
IEPA, NRTP, OSFM	2016-11-21 14:55	emailed	Report Sent
IEMA Region 6	2016-11-21 14:55	emailed	Report Sent

Narrative:

Container sizes: gasoline: 1-10,000 gallons, 2-2,000 gallons diesel: 1-2,000 gallons used oil: 1-2,000 gallons

Follow-Up Information:		
	100	

Attachments:	···	



ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

1021 NORTH GRAND AVENUE EAST, P.O. BOX 19276, SPRINGFIELD, ILLINOIS 62794-9276 • (217) 782-3397 **BRUCE RAUNER, GOVERNOR ALEC MESSINA, ACTING DIRECTOR**

EPA - ONDHON OF PECONOS HANAGENENT

RELEASABLE

DEC 1 3 2016

REVIEWER JRM

217/524-3300

December 9, 2016

S & S Infinite Group, Inc. Attn: Syed Munbed 400 NE Adams Street Peoria, IL 61603

Re: LPC #1430650114 -- Peoria County

Peoria/S & S Infinite Group, Inc.

400 NE Adams Street

Leaking UST Incident No. 20161089

Leaking UST Technical File

Dear UST Owner or Operator:

The Illinois Environmental Protection Agency (Illinois EPA) received notification from the Illinois Emergency Management Agency that a release from an underground storage tank system(s) has occurred at the above-referenced site. As a result of this release, the owner or operator of the underground storage tank(s) is required to comply with the Leaking Underground Storage Tank (Leaking UST) Program requirements, including the submittal of applicable documentation on forms prescribed and provided by the Illinois EPA.

To obtain copies of the forms, as well as additional information regarding the Illinois EPA's Leaking UST Program, please visit our Web page at http://www.epa.state.il.us/land/lust/index.html.

- The direct link to the technical forms page is 1. http://www.epa.state.il.us/land/lust/forms/technical-forms/index.html.
- 2. If you intend to seek reimbursement from the Illinois Underground Storage Tank Fund for costs incurred, the direct link to the budget and reimbursement forms page is: http://www.epa.state.il.us/land/lust/forms/budget-forms/index.html.

If you do not have access to the Internet and/or have questions about the Leaking UST Program requirements, please contact the Leaking UST Program project manager on call at 217/524-3300. Sincerely,

Gregory W. Dunn, Manager

Leaking Underground Storage Tank Section

Division of Remediation Management

Bureau of Land

GWD: JW\

BOL File c:

4302 N. Main St., Rockford, IL 61103 (815) 987-7760 595 S. State, Elgin, IL 60123 (847) 608-3131 2125 S. First St., Champaign, IL 61820 (217) 278-5800 2009 Mall St., Callinsville, IL 62234 (618) 346-5120 9511 Harrison St., Das Plaines, IL 60016 (847) 294-4000 412 SW Washington St., Suire D, Peoria, IL 61 602 (309) 671-3022 2309 W. Main St., Suite 116, Marlon, IL 62959 (618) 993-7200 100 W. Randolph, Suite 10-300, Chicago, IL 60601

000088

1 Company Environmental Consulting Services

701 W. South Grand Avenue Springfield, IL 62704

1430650114 - Peoria County S & S Infinite Group, Inc.

Leaking UST Technical File

Incident # 20161089

Phone: (217) 522-8001

Fax: (217) 522-8009

March 19, 2018

RE:

Mr. Scott McGill, Project Manager LUST Section, Bureau of Land Illinois Environmental Protection Agency 1021 North Grand Avenue East Springfield, IL 62794-9276

LPC #1430650114—Peoria County

S & S Infinite Group, Inc. - Peoria

400 North East Adams Street Incident Number: 2016-1089

LUST Technical Reports—Corrective Action Plan

Dear Mr. McGill:

Enclosed, please find the Corrective Action Plan (CAP) for the above-referenced site for Incident Number 2016-1089. This CAP includes the actions necessary to address the contamination from the 2016-1089 incident that were not included in the CAP previously approved for the 2014-0963 incident. Once the activities required to address the contamination over Tier 2 Clean-up Objectives found in the 2016-1089 incident are completed, a Corrective Action Completion Report combining the incidents will be prepared and submitted.

If you have any questions or require additional information, please contact Mr. Vince Smith or me at (217) 522-8001.

Sincerely

Carol Rowe, P.G.

Senior Environmental Geologist

RECEIVED

MAR 2 0 2018

IEPA/BOL

CORRECTIVE ACTION PLAN & BUDGET

S&S INFINITE GROUP, INC./ DBA-DOWNTOWN 66

PEORIA, ILLINOIS
LPC #1430560114 — Peoria County
Incident Number 2016-1089

RECEIVED

MAR 2 0 2018

IEPA/BOL

Submitted to:

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

Leaking Underground Storage Tank Section, Bureau of Land 1021 North Grand Avenue East Springfield, Illinois 62794-9276

Prepared by: CW³M COMPANY, INC.

701 South Grand Avenue West Springfield, Illinois (217) 522-8001 400 West Jackson, Suite C Marion, Illinois (618) 997-2238

March 2018

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		MAR 2 0 2018
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Table 3-1.	Water Supply Well Information	, . ŏ

ACRONYMS AND ABBREVIATIONS

BETX	Benzene, ethylbenzene, toluene, total xylenes
CACR	Corrective Action Completion Report
CAP	Corrective Action Plan
Csat	Soil saturation limit
CUO	Clean-up Objective
CW^3M	CW ³ M Company, Inc.
CWS	Community Water Supply
IEMA	Illinois Emergency Management Agency
IEPA	Illinois Environmental Protection Agency
Ill. Adm. Code	Illinois Administrative Code
ISGS	Illinois State Geological Survey
ISWS	Illinois State Water Survey
LUST	Leaking Underground Storage Tank
MTBE	Methyl tert-butyl ether
OSFM	Illinois Office of the State Fire Marshal
PNA	Polynuclear Aromatic Hydrocarbon
SICR	Site Investigation Completion Report
SWAP	Source Water Assessment Program
TACO	Tiered Approach to Corrective Action Objectives
UST	Underground Storage Tank

1. SITE HISTORY/EXECUTIVE SUMMARY

1.1 GENERAL

This proposed Corrective Action Plan (CAP) and Budget has been prepared in accordance with the requirements of the 35 Illinois Administrative Code (Ill. Adm. Code) 734. The Illinois Environmental Protection Agency (IEPA) Corrective Action Plan Form is included in this document as Appendix A.

Mr. Syed Muneeb, owner of the underground storage tanks (USTs) at the site, known as S&S Infinite Group, in Peoria, Illinois reported a release to the Illinois Emergency Management Agency (IEMA). Incident Number 2016-1089 was assigned to the notification on November 21, 2016. Mr. Syed Muneeb ultimately requested CW³M Company, Inc. (CW³M) to proceed with the reporting and early action requirements in accordance with 35 Ill. Adm. Code § 734.

The 20-Day Certification was submitted to the IEPA on December 2, 2016 (CW³M, 2016). A 45-Day Extension Request was submitted to the IEPA on December 20, 2016 (CW³M, 2016a) and was approved on December 28, 2016 (IEPA, 2016). A 45-Day Report was submitted to the IEPA on January 19, 2017 (CW³M, 2017) and was approved on January 26, 2017 (IEPA, 2017). A 45-Day Report Addendum was then submitted to the IEPA on February 10, 2017 (CW³M, 2017a) and was approved on May 17, 2017 (IEPA, 2017a). A Site Investigation Completion Report (SICR) was submitted to the IEPA on October 10, 2017 (CW³M, 2017b) and was approved February 2, 2018 (IEPA, 2018). A previous incident had occurred on site, 2014-0963, and had a CAP to address the contamination from its incident was submitted July 2, 2015 (Marlin, 2015), and approved on July 21, 2015 (IEPA, 2015). The CAP proposed to use a groundwater use restriction, a Highway Authority Agreement to address potential contamination beneath Spaulding Avenue, and to place a Tier 2 Industrial/Commercial restriction on site.

This report is certified by an Illinois Licensed Professional Engineer. The geological investigation and site investigation was performed under the direction of an Illinois Licensed Professional Geologist and completed in accordance with the Professional Geologist Licensing Act and its Rules for Administration.

1.2 SITE LOCATION

The site, known as S & S Infinite Group, Inc. / DBA – Downtown 66 is located at 400 North East Adams Street, Peoria, Peoria County, Illinois 61603. The site is located in the NE ¼ of the NE ¼ of Section 9, Township 8 North of the Centralia Baseline and Range 8 East of the Fourth Principal Meridian.

1.3 UNDERGROUND STORAGE TANK INFORMATION

A permit for the removal of seven USTs was approved by the Office of the State Fire Marshal (OSFM) on December 12, 2016 (OSFM, 2016). Tank removal activities were conducted by CW³M personnel on January 3, 2017 through January 5, 2017. OSFM Tank Specialist Jim Coffey was on site to oversee the removal of the USTs.

CW³M personnel were on site from January 4, 2017 through January 6, 2017, and January 9, 2017 through January 12, 2017 to complete early action activities, including removal of contaminated backfill material and replacement of clean fill to the UST excavation area. As the OSFM Field Specialists have been instructed not to make the official determination of the release in the field, the source of release has been determined in consult with the OSFM Field Specialist using the best professional judgment of the condition of tank, piping, and soil conditions.

- Tank 1: This fiberglass UST was abandoned in place in 2014 as part of a separate incident. Its details are listed on the next page in Table 1-1.
- Tank 2: This fiberglass UST was abandoned in place in 2014 as part of a separate incident. Its details are listed on the next page in Table 1-1.
- Tank 3: OSFM Tank Specialist Jim Coffey in conjunction with CW³M personnel determined the release from this fiberglass UST was a result of piping leaks and overfilling.
- Tank 4: OSFM Tank Specialist Jim Coffey in conjunction with CW³M personnel determined the release from this steel UST was a result of tank leaks as this tank had visual holes.
- Tank 5: OSFM Tank Specialist Jim Coffey in conjunction with CW³M personnel determined the release from this steel UST was a result of tank leaks as this tank had visual holes.
- Tank 6: OSFM Tank Specialist Jim Coffey in conjunction with CW³M personnel determined the release from this steel UST was a result of tank leaks as this tank showed signs of pitting.
- Tank 7: OSFM Tank Specialist Jim Coffey in conjunction with CW³M personnel determined the release from this steel UST was a result of tank leaks as this tank showed signs of pitting.

Table 1-1. Underground Storage Tank Summary

Tank Number	Tank Volume (gallons)	Tank Contents	Incident Number	Release Information	Current Status
1	6,000	Diesel	2014-0963	Unknown	Removed 1/5/17
2	10,000	Gasoline	2014-0963	Unknown	Removed 1/5/17
3	10,000	Gasoline	2016-1089	Overfilling/Piping Leaks	Removed 1/4/17
4	350	Gasoline	2016-1089	Tank Leaks	Removed . 1/3/17
5	350	Gasoline	2016-1089	Tank Leaks	Removed 1/3/17
6	560	Diesel	2016-1089	Tank Leaks	Removed 1/3/17
7	560	Used Oil	2016-1089	Tank Leaks	Removed 1/3/17

1.4 EARLY ACTION SUMMARY

Samples were collected for every 20 feet of the excavation walls. Floor samples were obtained at the base of the tanks at a depth of around 12 feet. Samples for the piping trench of tank 3 were also taken every 20 feet at a depth of approximately 3 feet. Because tanks 1 and 2 were previously associated with Incident Number 2014-0963, the soil in the tank pit containing tanks 1, 2, and 3 was known to be contaminated. For this reason, the only samples taken from this pit were at the floor of tank 3 as well as the surrounding walls. The soil removed during the excavation of these three tanks was returned to the excavation after sampling had been completed.

All early action soil samples were collected and analyzed for benzene, ethylbenzene, toluene and total xylenes (BETX) and methyl tert-butyl ether (MTBE) contaminants. The wall samples and floor samples associated with tanks 4 through 7 were additionally analyzed for Polynuclear Aromatic Hydrocarbon (PNA) contaminants, due to the contents of the tanks. The floor of the used oil tank 7 was also sampled for used oil parameters. As previously stated, all tanks and product piping were removed. A total of 365.72 tons (243.81 cubic yards) of contaminated backfill was removed and taken to Indian Creek Landfill in Hopedale, Illinois for disposal. Analytical results and a map of the contaminants can be found in

CW³M Company, Inc. Corrective Action Plan S&S Infinite Group, Inc. LPC #1430560114 Incident Number 2016-1089

Appendix F and Appendix B, respectively. These activities were documented in the 45-Day Report (CW³M, 2017) and the 45-Day Report Addendum (CW³M, 2017a).

1.5 SITE INVESTIGATION SUMMARY

On July 26, 2017 CW³M personnel were on site to conduct Stage 1 investigation activities. Two soil borings (24 and 25) were drilled and sampled, with boring 24 to a depth of 25 feet and boring 25 to a depth of 20 feet. Soil boring 24 was intended to be converted to a monitoring well to determine if contaminants from sample 11 had been in contact with groundwater. When no water was reached by 25 feet only soil samples were obtained. Since a groundwater investigation could not be performed, SB-24 was advanced to define the vertical extent of soil contamination. Once the groundwater level was determined to be lower than 25 feet, no more wells were attempted. Soil boring 25 was drilled to determine the horizontal extent of contamination from sample 11. Benzo(a) pyrene was exceeded at sample 24 but below Clean-up Objectives (CUOs) at sample 25A and B.

One reason for the large change in groundwater level elevation from this incident, below 25 feet, and the previous incident, at around 13 feet, could be due to the site's location and unusually dry summer. The site is very near the Illinois River which could have huge changes in the groundwater level from changes in the river. Soil samples were analyzed for BETX, MTBE, and PNA indicator parameters. Laboratory analytical results and a table summarizing the results are included in Appendix F, while soil boring logs are included in Appendix E. At the end of Stage 1 investigation, the soil plume was fully defined on site and groundwater was not encountered. The site investigation activities were documented in the SICR (CW³M, 2017b).

2. REMEDIATION OBJECTIVES

2.1 DETERMINATION OF CLEAN-UP OBJECTIVES

In accordance with 35 III. Adm. Code 734.410, remediation objectives will be determined in accordance with 35 III. Adm. Code § 742. During the previous incident on this site #2014-0963 a Tiered Approach to Corrective Action Objectives (TACO) sample was taken as part of the CAP for that incident. For this incident the site specific physical parameters that were presented in the CAP for incident 2014-0963 (Marlin, 2015) are being used for incident 2016-1089.

The parameters that have been determined are:

Soil bulk density (r_b), 2.15 g/cm³

CW³M Company, Inc. Corrective Action Plan S&S Infinite Group, Inc. LPC #1430560114 Incident Number 2016-1089

Soil particle density (r_s) 2.69 g/cm³
Moisture content (w), 9.4%
Organic carbon content (f_{oc}) .0136 g/g
Hydraulic Conductivity 8.64 cm/day = 1.00 X 10⁴ cm/sec

For the previous incident groundwater was encountered during drilling but never encountered after drilling. For the 2016-1089 incident, groundwater was not encountered. Since no groundwater was found, the assumed hydraulic gradient is 0.02.

2.2 SOIL AND GROUNDWATER OBJECTIVES

The soil objectives are listed for the site below in tabular format. With the TACO Tier 2 CUOs calculated, a groundwater use restriction and an industrial / commercial use restriction will be placed on the property. The calculations and the modeling of the existing contamination from incident 2016-1089 are included in Appendix G. The TACO inputs for plume width and length are shown on Drawing 0007 in Appendix B.

Table 2-1. Soil Remediation Objectives

Parameter	TACO	TACO
	Residential	Industrial /
	Tier 1	Commercial
	Clean-up	Tier 2
	Objective	Clean-up
	(mg/kg)	Objective
		(mg/kg)
Benzene	0.03	3.70
Ethylbenzene	13.0	749.91
Toluene	12.0	535.89
Total Xylenes	5.6	73.45
Methyl tert-butyl ether	0.32	249.86
Acenaphthene	570	•
Acenphthylene	30	<u> </u>
Anthracene	12,000	:
Benzo(a)anthracene	0.9	
Benzo(a)pyrene	0.09	0.784
Benzo(b)flouranthene	0.9	-
Benzo(g,h,i)perylene	160	-
Benzo(k)flouranthene	9	•
Chrysene	88	-
Dibenzo(a,h)anthracene	0.09	

Parameter	TACO	TACO
	Residential	Industrial /
,	Tier 1	Commercial
. •	Clean-up	Tier 2
	Objective	Clean-up
	(mg/kg)	Objective
		(mg/kg)
Flouranthene	3,100	•
Fluorene	560	-
Indeno(1,2,3-c,d)pyrene	0.9	•
Naphthalene	1.8	2.54
Phenanthrene	280	-
Pyrene	2,300	-

3. CORRECTIVE ACTION PLAN

The following CAP and Budget has been prepared by CW³M Company, Inc., as their recommendation for the most appropriate and economical approach to the remediation of the contamination at the S & S Infinite Group, Inc. / DBA – Downtown 66 in Peoria, Illinois.

Based upon the analytical data from the soil samples collected on-site, it is apparent that soil contamination above the TACO Tier 2 calculated CUOs was found on site for the current incident at sample locations 11, WC-1, WC-3, and backfill sample 3. The WC-1 and WC-3 samples are included because soil was not removed during early action from the tank pit from which these samples were taken. Soil contamination is confined to the site, and no groundwater contamination was found. All site investigation details were presented in the SICR (CW³M, 2017b).

Soil sample WC-1 exceeds the TACO Tier 2 soil saturation limit for total xylenes, so remediation must occur at that location. Sample WC-3 also has exceedances for industrial / commercial inhalation and construction worker inhalation CUOs. Due to the proximity of these two sample locations, an excavation in that area will be proposed to address the contamination. Since the limits of the area requiring remediation is not well defined, this CAP proposes additional soil borings to define the limits of the needed excavation. The location of the proposed borings is shown on Drawing 0004A in Appendix B.

Soil sample 11 exceeds the construction worker inhalation CUO, and this is proposed to be addressed with a construction worker caution imposed on the affected area.

While a potable well was found in the research, the well is not believed to be in service, and likely no longer exists. The existence of the well will be further researched, including a site

CW^aM Company, Inc. Corrective Action Plan S&S Infinite Group, Inc. LPC #1430560114 Incident Number 2016-1089

visit to attempt to locate the well during the trip to the site to advance the proposed additional soil borings. If the well is located, the abandonment of it will be proposed to the current property owner, and the costs for the abandonment will be included in the proposed CAP Amendment.

The results of the proposed soil sampling and the potable well inspection will be presented in a CAP Amendment. The intent is to accept a groundwater use restriction and an industrial / commercial land use restriction as proposed in the CAP for the previous incident (Marlin, 2015). With the removal of the highly contaminated soil in the area of Tank 1, the remaining contamination found at the site would not model off-site beyond the right-of-way proposed to require a Highway Authority Agreement in the previous CAP. The only additional restriction required would be a construction worker caution in the area of early action sample 11.

3.1 ON-SITE CONTAMINATION

While no groundwater was encountered during this incident, groundwater was encountered during drilling of the previous incident but never encountered after the first round of drilling. Since no groundwater was encountered during site investigation groundwater, flow direction could not be established so for modeling groundwater flow was established in all directions. The soil-to-groundwater modeling dictates the maximum potential distance contamination can travel through the groundwater pathway, which was determined to be fifty-seven feet reaching outside the property line.

The soil contamination was defined to stay within the property boundaries. With the imposition of a groundwater use restriction and a Tier 2 Industrial / Commercial use restriction, the sample results which exceed the CUOs are WC-1, WC-2, WC-3, RC-1, and early action sample 11. WC-2 and RC-1 were from areas which were excavated and disposed of.

3.2 CURRENT AND PROJECTED USES OF THE SITE

The site is located near downtown Peoria and is surrounded by both commercial properties and townhomes; the site lies a few blocks north of Peoria Lake/Illinois River. Currently, the site is closed and there are no known plans on it for the future until such time as environmental issues are resolved. The likely usage would be commercial or industrial.

3.3 WATER SUPPLY WELL SURVEY

A survey of water supply wells for the purpose of identifying and locating all community water supply (CWS) wells within 2,500 feet of the UST system and all potable water supply wells within 200 feet of the UST system has been completed. The Illinois State Water Survey (ISWS), the Illinois State Geological Survey (ISGS) and the IEPA Division of Public Water Supplies were contacted via the Source Water Assessment Program (SWAP) online.

The ISGS, ISWS, and IEPA Division of Public Water Supplies were accessed online on September 19, 2017 (EPA.STATE.IL.US, 2016). The response indicated that twenty ISGS wells are located within 2,500 feet of the site. The site is within the setback of 2 of the potable wells listed on Table 3-1. Well 43700 is described as an engineering well in the listing. Well 74200 was described as a water well installed by a dairy. CW³M has contacted the current user of the former dairy site, who stated that only city provided water was used at the facility, and they did not believe that the well still existed. The existence of the well will be investigated during corrective action.

Table 3-1. Water Supply Well Information

Well ID	Туре	Distance From USTs	Depth (feet)	Setback Zone (feet)
		(feet)	V =	V
73600	ISGS	2,300	98	200
74900	ISGS	2,250	70	200
74600	ISGS	1,929	90	200
73800	ISGS	1,623	67	200
73100	ISGS	1,477	62	200
74100	ISGS	823	87	200
75000	ISGS	854	877	200
48100	ISGS	746	29	200
75200	ISGS	731	47	200
41600	ISGS	1,710	36	200
44600	ISGS	1,240	37	200
44100	ISGS	1,240	37	200
44700	ISGS	855	44	200
43700	ISGS	140	36	200
45100	ISGS	253	51	200
74200	ISGS	185	73	, 200
43500	ISGS	463	42	200

40500	ISGS	2,283	34	200
99700	ISGS	2,070	71	200
44300	ISGS	900	36	200

3.4 PROPOSED CORRECTIVE ACTION

The activities proposed in the prior approved CAP for the facility (Marlin, 2015) have been evaluated with regard to the contamination found for the 2016-1089 incident. Soil contamination in the area of tank 1 will required additional remediation, and sample 11 from early action exceeds the construction worker inhalation CUO, so a construction worker caution will be needed in that area. The largest potential difference was the discovery of a potential potable well which the site is within the setback of.

The activities proposed in this CAP are to further investigated the limits of the contamination which would require remediation in the area of tank 1, the further investigation of the potential potable well identified in the water supply well survey as the site being within the setback of, and the drafting of a construction worker caution area for the area around sample 11 from early action as depicted on Drawing 0006 in Appendix B.

The further soil investigation around tank 1 is described on Drawing 0004A in Appendix B and consists of three borings which will be advanced to a depth of 20 feet, with samples taken from each five-foot interval and analyzed for BETX, MTBE, and PNAs. One additional boring will be advanced to a depth of 20 feet adjacent to WC-1, and sampled from the 10 to 15 and 15 to 20 foot intervals for BETX, MTBE, and PNAs in order to determine the vertical extent of the contamination. Those sample results will be used to determine the limits of an excavation in that area to remove soil contamination which exceeds the TACO Tier 2 Industrial / Commercial CUOs as shown in Table 2-1. The excavation will be proposed in a CAP Amendment.

On the trip to the site to obtain the samples described above, a visit to the site where the potable well is supposed to be located will also be conducted. If the well is found to still exist, the abandonment of the well will be offered to the property owner, and the cost for the abandonment will be included in a CAP Amendment. If the owner does not want to abandon the well, then a CAP Amendment will be prepared to address the contamination which would threaten the potable well.

With the soil contamination in the area of Tank 1 removed, the remaining soil contamination associated with incident 2016-1089 does not model beyond the right-of-way area identified as needing a Highway Authority Agreement in the 2014-0963 CAP.

Following the June 2013 IEPA Leaking Underground Storage Tank (LUST) flowchart for vapor intrusion assessment, no free product was found. Only soil sample WC-1 from site investigation sampling exceeds the Soil Saturation Limits (Csat) for any of the contaminants of concern. The area where that sample is located will be proposed to be removed in a CAP amendment. Groundwater has not been encountered. Once the area around WC-1 has been excavated, based on the flowchart, vapor intrusion investigation would be required only if the Agency determines that a site-specific evaluation is necessary. For these reasons, it is not proposed to conduct a vapor intrusion investigation for this incident.

3.5 CLOSURE

The property will subject to a groundwater use restriction and an Industrial / Commercial land use restriction, as proposed in the previous CAP (Marlin, 2015). A construction worker caution will be imposed in the area of early action sample 11, as depicted on Drawing 0006 in Appendix B.

The existence of potable well which the site is within the setback of will be investigated during the activities proposed in this CAP. If the well does exist, the preferred option will be to abandon the well, and those costs would be proposed in the next CAP amendment. If the well is not found to exist, then no additional remediation efforts would be needed. Should the well exist and the owner of the well be unwilling to have the well abandoned, then additional remediation efforts on site would be needed, and these would be proposed in the next CAP amendment.

Once the limits of the soil contamination in the area of WC-1 and WC-3 which exceed Tier 2 CUOs are defined, a CAP amendment to excavate the identified area will be submitted. When the excavation is conducted, wall and floor samples will be used to verify the levels of contamination remaining, and that the area no longer has soil contamination over Tier 2 CUOs.

Modeling of the remaining contamination will then be conducted, and a Highway Authority Agreement will be used to address the potential off-site groundwater contamination. If the contamination models onto other off-site properties, then the CAP may need revised to either include Environmental Land Use Controls (ELUCs), or use a limited groundwater ordinance to address the potential off-site groundwater contamination instead of the approved Highway Authority Agreement.

Once all CAP activities conclude, a Corrective Action Completion Report (CACR) addressing both incidents at the site will be submitted to the IEPA. The closure report will be accompanied by a certification from an Illinois Registered Professional Engineer.

4.0 REFERENCES

City-Data.com, 2016. Peoria, Illinois, www.city-data.com, accessed December 28, 2016.

CW³M, 2016. CW³M Company, Inc., 20-Day Certification, S&S Infinite Group, Peoria, Illinois, December 2, 2016.

CW³M, 2016a. CW³M Company, Inc., Early Action Extension Request, S&S Infinite Group, Peoria, Illinois, December 20, 2016.

CW³M, 2017. CW³M Company, Inc., 45 Day Report, S&S Infinite Group, Peoria, Illinois, January 19, 2017.

CW³M, 2017a. CW³M Company, Inc., 45 Day Report Addendum, S&S Infinite Group, Peoria, Illinois, February 10, 2017.

CW³M, 2017b. CW³M Company, Inc., Site Investigation Completion Report, S&S Infinite Group, Peoria, Illinois, October, 10, 2017.

EPA.STATE.IL.US, 2016. Source Water Assessment Program, Water Well Survey Map www.maps.epa.state.il.us, accessed October 6, 2016.

IEPA, 2015. Illinois Environmental Protection Agency, Corrective Action Plan Correspondence (2014-0963), S&S Infinite Group, Peoria, Illinois, July 21, 2015.

IEPA, 2016. Illinois Environmental Protection Agency, Early Action Extension Report Correspondence, S&S Infinite Group, Peoria, Illinois, December 28, 2016.

IEPA 2017. Illinois Environmental Protection Agency, 45 Day Report Correspondence, S&S Infinite Group, January 26, 2017.

IEPA 2017a. Illinois Environmental Protection Agency, 45 Day Correspondence, May 17, 2017.

IEPA, 2018. Illinois Environmental Protection Agency, Site Investigation Completion Report Correspondence. S&S Infinite Group. February 2, 2018.

Marlin, 2015. Marlin Environmental, *Corrective Action Plan (2014-0963)*, S&S Infinite Group, Peoria, Illinois, July 2, 2015.

CW⁸M Company, Inc. Corrective Action Plan S&S Infinite Group, Inc. LPC #1430560114 Incident Number 2016-1089

OSFM, 2016. Illinois Office of the State Fire Marshal, Permit for Removal of Underground Storage Tanks(s), S&S Infinite Group, Peoria, Illinois, December 12, 2016.

APPENDIX A CORRECTIVE ACTION PLAN FORM

CORRECTIVE ACTION PLAN S&S Infinite Group Peoria, Illinois



Illinois Environmental Protection Agency

Bureau of Land • 1021 N. Grand Avenue E. • P.O. Box 19276 • Springfield • Illinois • 62794-9276

The Agency is authorized to require this information under Section 4 and Title XVI of the Environmental Protection Act (415 ILCS 5/4, 5/57 – 57.17). Failure to disclose this information may result in a civil penalty of not to exceed \$50,000.00 for the violation and an additional civil penalty of not to exceed \$10,000.00 for each day during which the violation continues (415 ILCS 5/42). Any person who knowingly makes a false material statement or representation, orally or in writing, in any label, manifest, record, report, permit, or license, or other document filed, maintained or used for the purpose of compliance with Title XVI commits a Class 4 felony. Any second or subsequent offense after conviction hereunder is a Class 3 felony (415 ILCS 5/44 and 57.17). This form has been approved by the Forms Management Center.

Leaking Underground Storage Tank Program Corrective Action Plan

A.	Site Identification		IEPA LPC# (10-digit): 1430560114				
	IEMA Incident # (6- or 8-digit):	20161089					
	Site Name: S&S Infinite Group	, Inc./ DBA- Downtown 66					
	Site Address (Not a P.O. Box):	400 North East Adams Street		· .			
	City: Peoria	County: Peoria		ZIP Code: 61603			
В.	Site Information			:			
	1. Will the owner or operator	seek reimbursement from the U	nderground Storage	Tank Fund?			
	2. If yes, is the budget attache	ed? ✓ Yes 🗌 No					
	3. Is this an amended plan?	☐ Yes 🗸 No					
	4. Identify the material(s) rele	ased: Gasoline, Diesel Fuel, U	Jsed Oil				
	5. This Corrective Action Plan	is submitted pursuant to:					
	a. 35 III. Adm. Code 731	.166		RECEIVED			
	The material releas	ed was:		MAR 2 0 2018			
	-petroleum						
		ubstance (see Environmental n Act Section 3.215)		IEPA/BOL			
	b. 35 III. Adm. Code 732	.404		:			
	c. 35 III. Adm. Code 734	.335	V	•			
c.	Proposed Methods of Re	mediation		,			
	1. Soil Tier 2 Industrial/Commercial CUOs, Construction Worker Caution, future excavation						
		r use restriction, Highway Autho					
D.	Soil and Groundwater Inv (for incidents subject to 35 III. Adm		assified using Method	One or Two, if not previously provided)			
	Provide the following:						
	1. Description of investigation activities performed to define the extents of soil and/or groundwater contamination;						
_	2. Analytical results, chain-of-	custody forms, and laboratory o	ertifications;				
	3. Tables comparing analytic	al results to applicable remediat	ion objectives;	:			
				,			

Corrective Action Plan
Page 1 of 4

IL 532 2287 LPC 513 Rev. July 2007

- Boring logs;
- Monitoring well logs; and
- 6. Site maps meeting the requirements of 35 III. Adm. Code 732.110(a) or 734.440 and showing:
 - a. Soil sample locations;
 - b. Monitoring well locations; and
 - c. Plumes of soil and groundwater contamination.

E. Technical Information - Corrective Action Plan

Provide the following:

- 1. Executive summary identifying the objectives of the corrective action plan and the technical approach to be utilized to meet such objectives;
 - a. The major components (e.g., treatment, containment, removal) of the corrective action plan;
 - b. The scope of the problems to be addressed by the proposed corrective action; and
 - c. A schedule for implementation and completion of the plan;
 - Identification of the remediation objectives proposed for the site;
- 3. A description of the remedial technologies selected:
 - a. The feasibility of implementing the remedial technologies;
 - b. Whether the remedial technologies will perform satisfactorily and reliably until the remediation objectives are achieved; and
 - c. A schedule of when the technologies are expected to achieve the applicable remediation objectives;
- A confirmation sampling plan that describes how the effectiveness of the corrective action activities will be monitored during their implementation and after their completion;
- 5. A description of the current and projected future uses of the site;
- 6. A description of engineered barriers or institutional controls that will be relied upon to achieve remediation objectives:
 - a. an assessment of their long-term reliability;
 - b. operating and maintenance plans; and
 - c. maps showing area covered by barriers and institutional controls;
- 7. The water supply well survey:
 - a. Map(s) showing locations of community water supply wells and other potable wells and the setback zone for each well;
 - b. Map(s) showing regulated recharge areas and wellhead protection areas;
 - Map(s) showing the current extent of groundwater contamination exceeding the most stringent Tier 1 remediation objectives;
 - d. Map(s) showing the modeled extent of groundwater contamination exceeding the most stringent Tier 1 remediation objectives;
 - e. Tables listing the setback zone for each community water supply well and other potable water supply wells;
 - f. A narrative identifying each entity contacted to identify potable water supply wells, the name and title of each person contacted, and any field observations associated with any wells identified; and
 - g. A certification from a Licensed Professional Engineer or Licensed Professional Geologist that the survey was conducted in accordance with the requirements and that documentation submitted includes information obtained as a result of the survey (certification of this plan satisfies this requirement);

8. Appendices:

- a. References and data sources report that are organized; and
- b. Field logs, well logs, and reports of laboratory analyses;
- 9. Site map(s) meeting the requirements of 35 III. Adm. Code 732.110(a) or 734.440;
- 10. Engineering design specifications, diagrams, schematics, calculations, manufacturer's specifications, etc.;
- 11. A description of bench/pilot studies;
- 12. Cost comparison between proposed method of remediation and other methods of remediation;
- 13. For the proposed Tier 2 or 3 remediation objectives, provide the following:
 - a. The equations used;
 - b. A discussion of how input variables were determined;
 - c. Map(s) depicting distances used in equations; and
 - d. Calculations; and
- 14. Provide documentation to demonstrate the following for alternative technologies:
 - a. The proposed alternative technology has a substantial likelihood of successfully achieving compliance with all applicable regulations and remediation objectives;
 - b. The proposed alternative technology will not adversely affect human health and safety or the environment;
 - c. The owner or operator will obtain all Illinois EPA permits necessary to legally authorize use of the alternative technology;
 - d. The owner or operator will implement a program to monitor whether the requirements of subsection (14)(a) have been met:
 - e. Within one year from the date of Illinois EPA approval, the owner or operator will provide to the Illinois EPA monitoring program results establishing whether the proposed alternative technology will successfully achieve compliance with the requirements of subsection (14)(a); and
 - f. Demonstration that the cost of alternative technology will not exceed the cost of conventional technology and is not substantially higher than at least two other alternative technologies, if available and technically feasible.

F. Exposure Pathway Exclusion

Provide the following:

- 1. A description of the tests to be performed in determining whether the following requirements will be met:
 - a. Attenuation capacity of the soil will not be exceeded for any of the organic contaminants;
 - b. Soil saturation limit will not be exceeded for any of the organic contaminants;
 - c. Contaminated soils do not exhibit any of the reactivity characteristics of hazardous waste per 35 III. Adm. Code 721,123;
 - d. Contaminated soils do not exhibit a pH ≤ 2.0 or ≥ 12.5; and
 - e. Contaminated soils which contain arsenic, barium, cadmium, chromium, lead, mercury, or selenium (or their associated salts) do not exhibit any of the toxicity characteristics of hazardous waste per 35 III. Adm. Code 721.124.
- 2. A discussion of how any exposure pathways are to be excluded.

G. Signatures

All plans, budgets, and reports must be signed by the owner or operator and list the owner's or operator's full name, address, and telephone number.

UST Owner or Operator

Name S & S Infinite Group, Inc.				
Contact Syed Muneeb				
Address 400 North East Adams Street				
City Peoria				
State Illinois				
Zip Code 61603				
Phone (309) 453-2280 /ე				
Signature				
Date				

Consultant

Company CWM Company, Inc.
Contact Carol L. Rowe, P.G.
Address 701 W. South Grand Avenue
City Springfield
State Illinois
Zip Code 62704
Phone (217) 522-8001
Signature
Date 3 19 2018

I certify under penalty of law that all activities that are the subject of this plan were conducted under my supervision or were conducted under the supervision of another Licensed Professional Engineer or Licensed Professional Geologist and reviewed by me; that this plan and all attachments were prepared under my supervision; that, to the best of my knowledge and belief, the work described in this plan has been completed in accordance with the Environmental Protection Act [415 ILCS 5], 35 III. Adm. Code 731, 732 or 734, and generally accepted standards and practices of my profession; and that the information presented is accurate and complete. I am aware there are significant penalties for submitting false statements or representations to the Illinois EPA, including but not limited to fines, imprisonment, or both as provided in Sections 44 and 57.17 of the Environmental Protection Act [415 ILCS 5/44 and 57.17].

Licensed Professional Engineer or Geologist

Name Vince E. Smith, P.E.			
Company CWM Comapny, Inc.			
Address 701 W. South Grand Avenue			
City Springfield			
State Illinois			
Zip Code 62704			
Phone (217) 522-8001			
III. Registration No. 062 - 646/18			
License Expiration Date			
Signature E Smith			
Date 3/19/18			

L.P.E. or L.P.G. Seal CEIVED

MAR 2 0 2018



APPENDIX B SITE MAPS AND ILLUSTRATIONS

CORRECTIVE ACTION PLAN S&S Infinite Group Peoria, Illinois

INDEX OF DRAWINGS

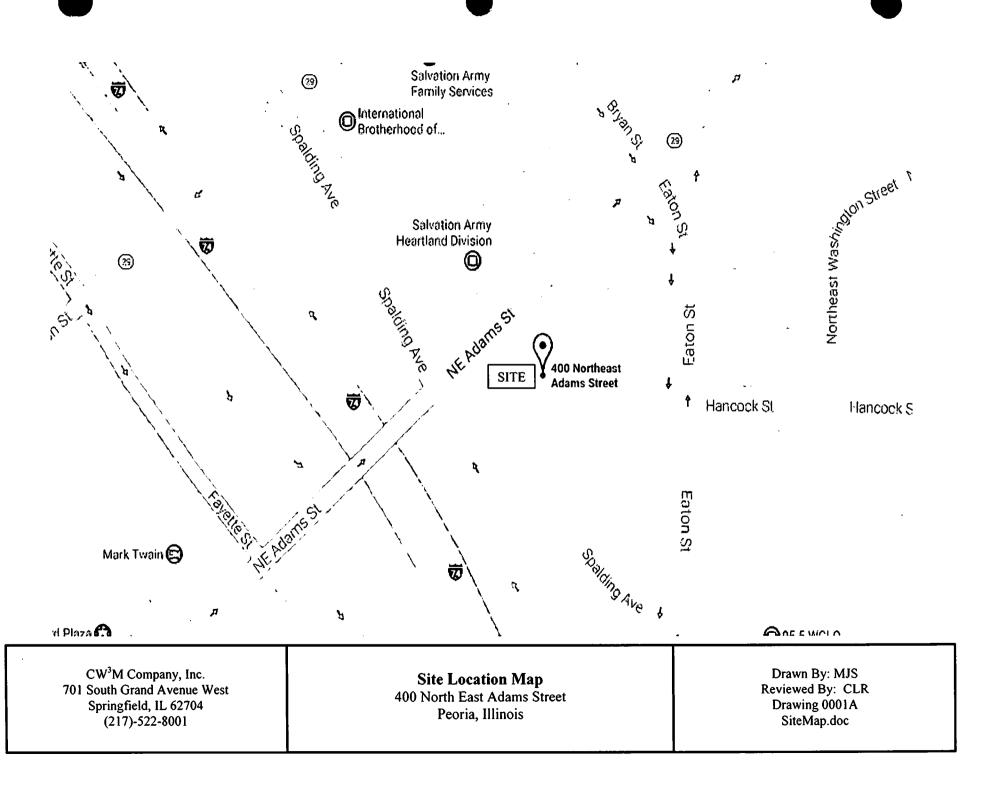
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Number					
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0001B	Surrounding Populations Map				
0001C	Water Supply Well Map	•			
0002	Site Map	•			
0003	Early Action Value Map				
0004 $\hat{\ }$	Soil Boring Location Map	;			
0004A	Proposed Soil Boring Location Map				
0005A	Soil Contamination Values Map (0-5 feet)	·			
0005B	Soil Contamination Values Map (5-10 feet)	•			
0006	Construction Worker Caution Area				
0007	TACO Parameters Map				

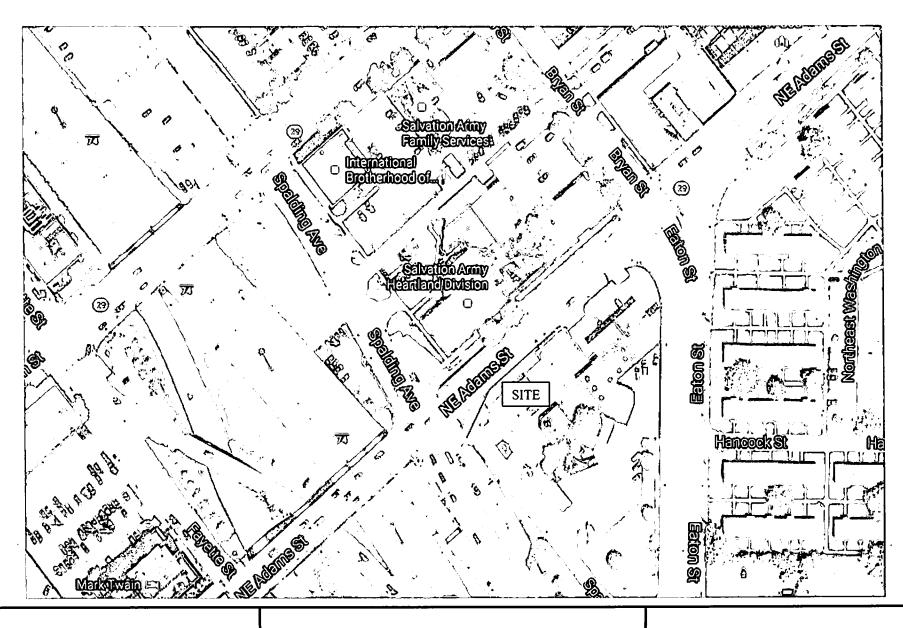
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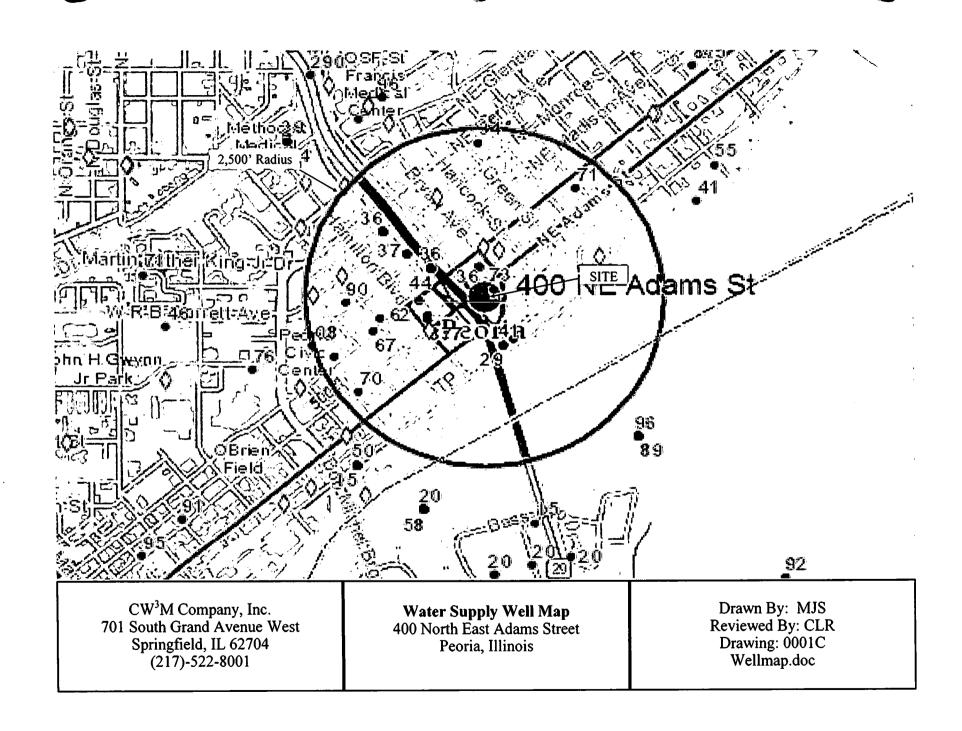
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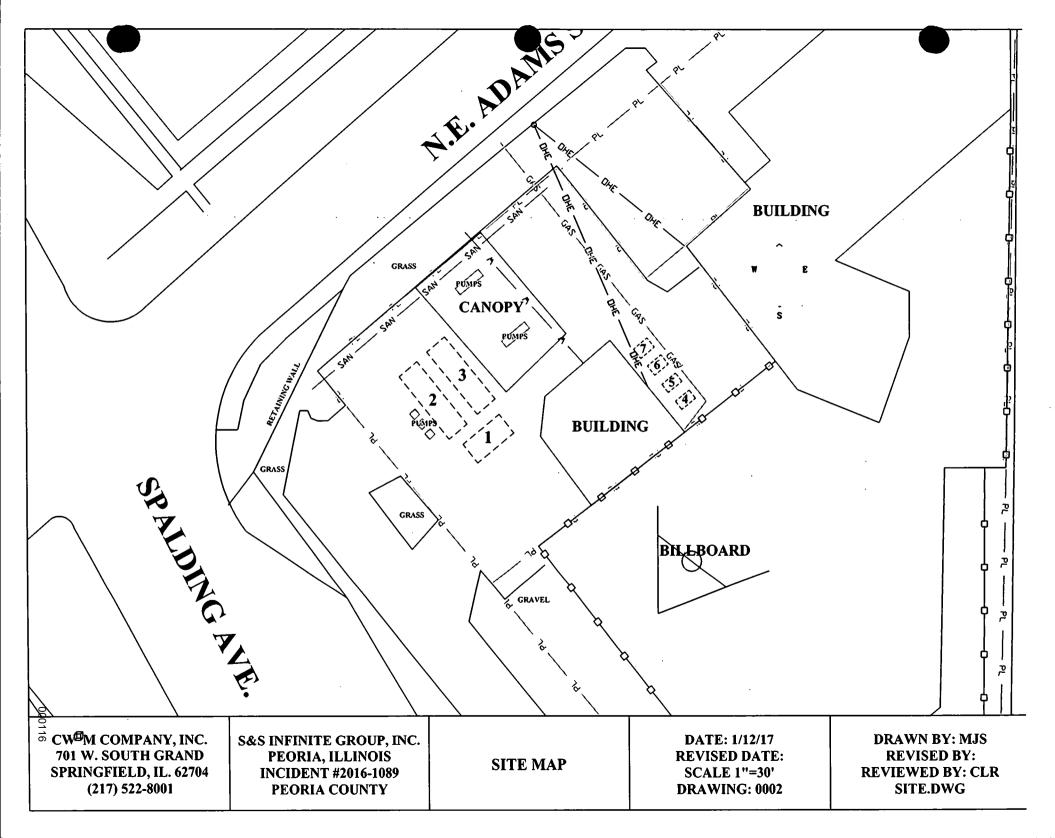


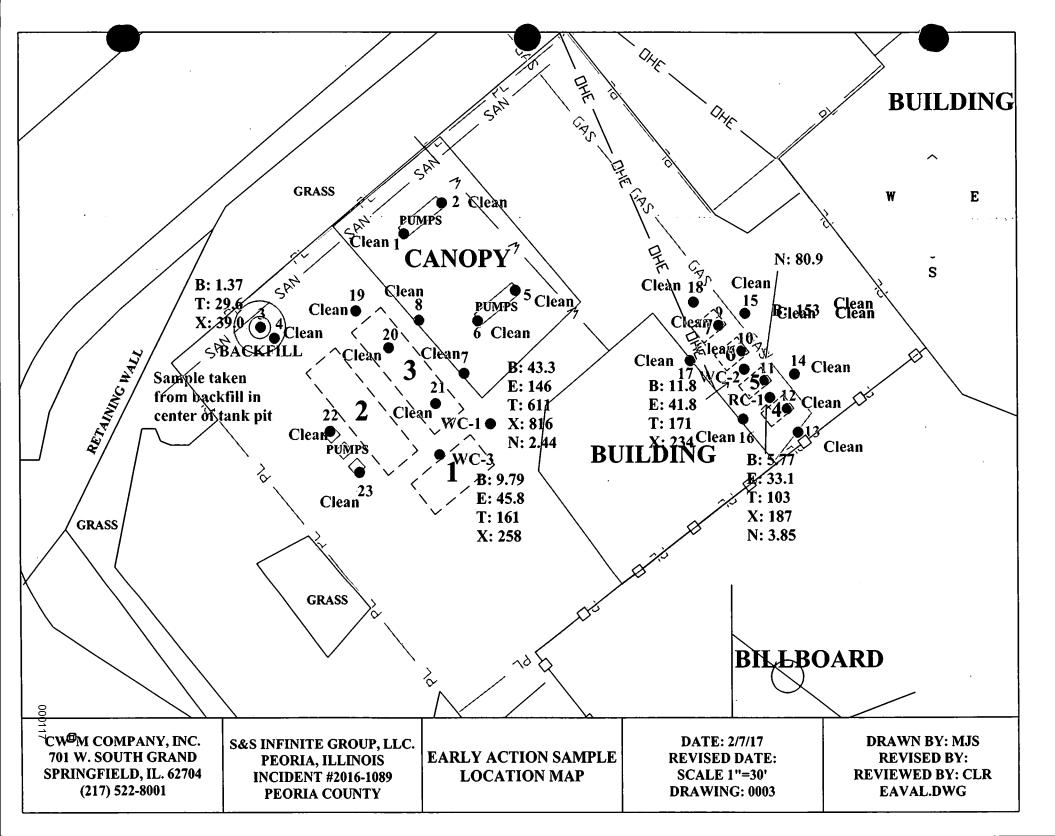


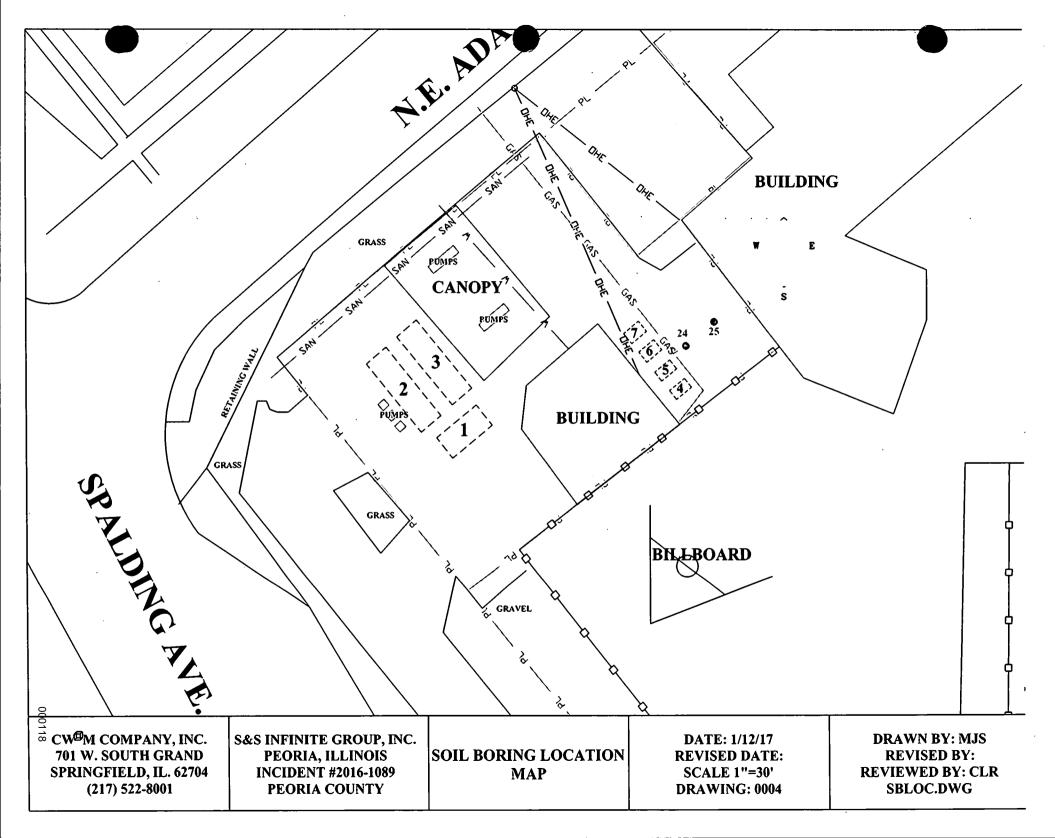
CW³M Company, Inc. 701 South Grand Avenue West Springfield, IL 62704 (217)-522-8001

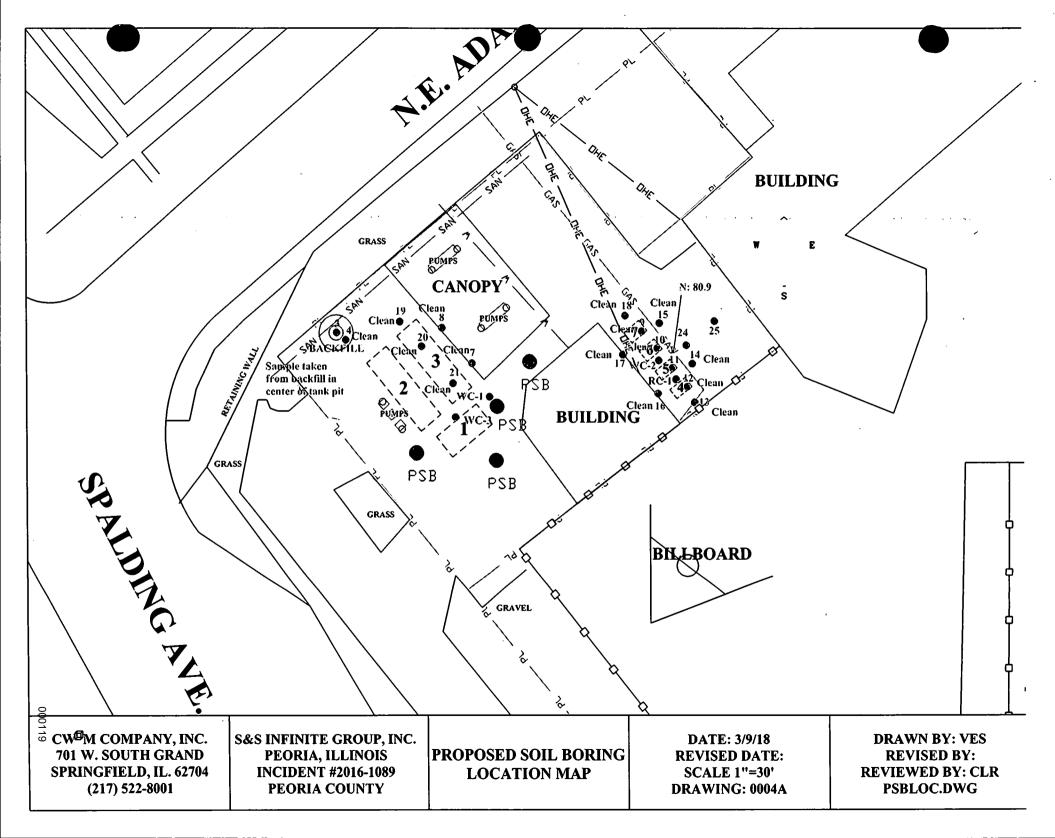
Surrounding Populations Map 400 North East Adams Street Peoria, Illinois Drawn By: MJS Reviewed By: CLR Drawing 0001B SP.doc

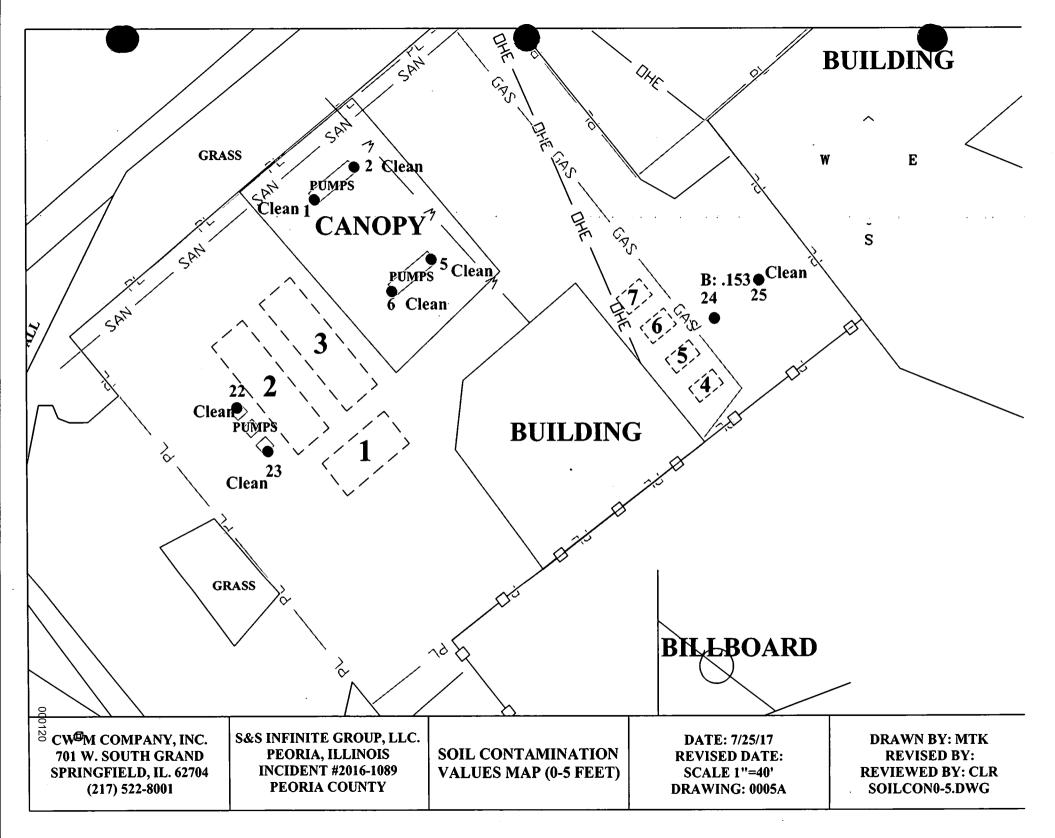


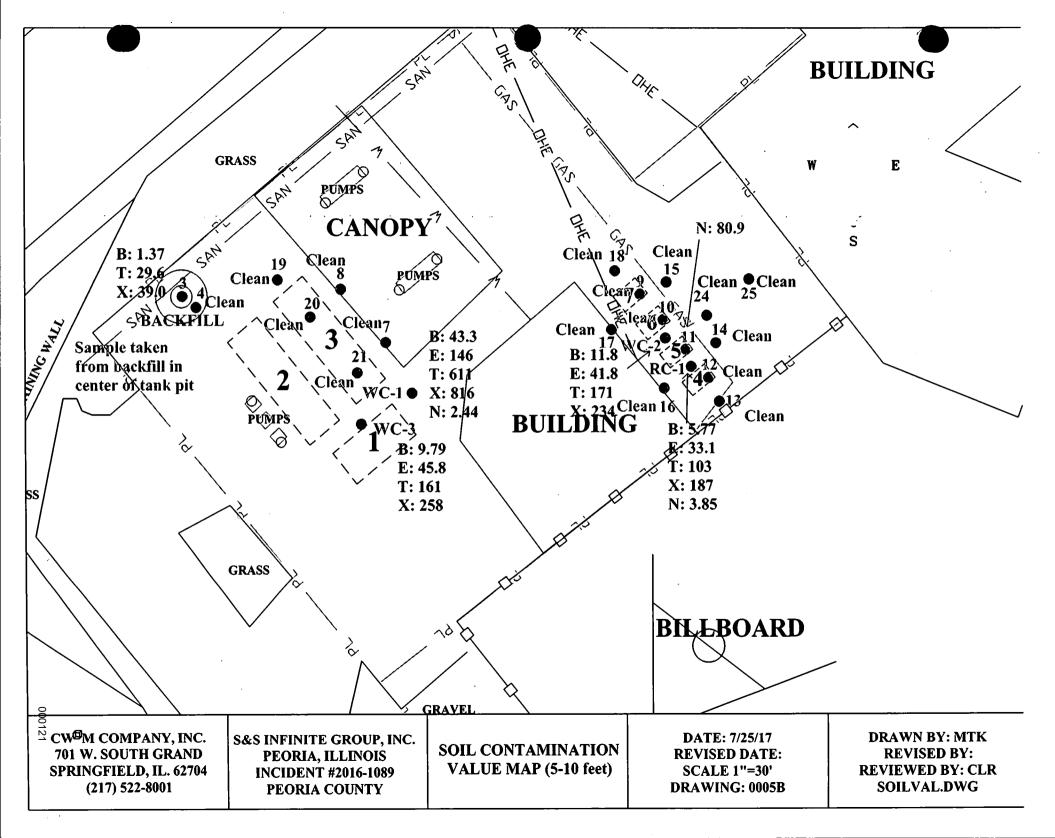


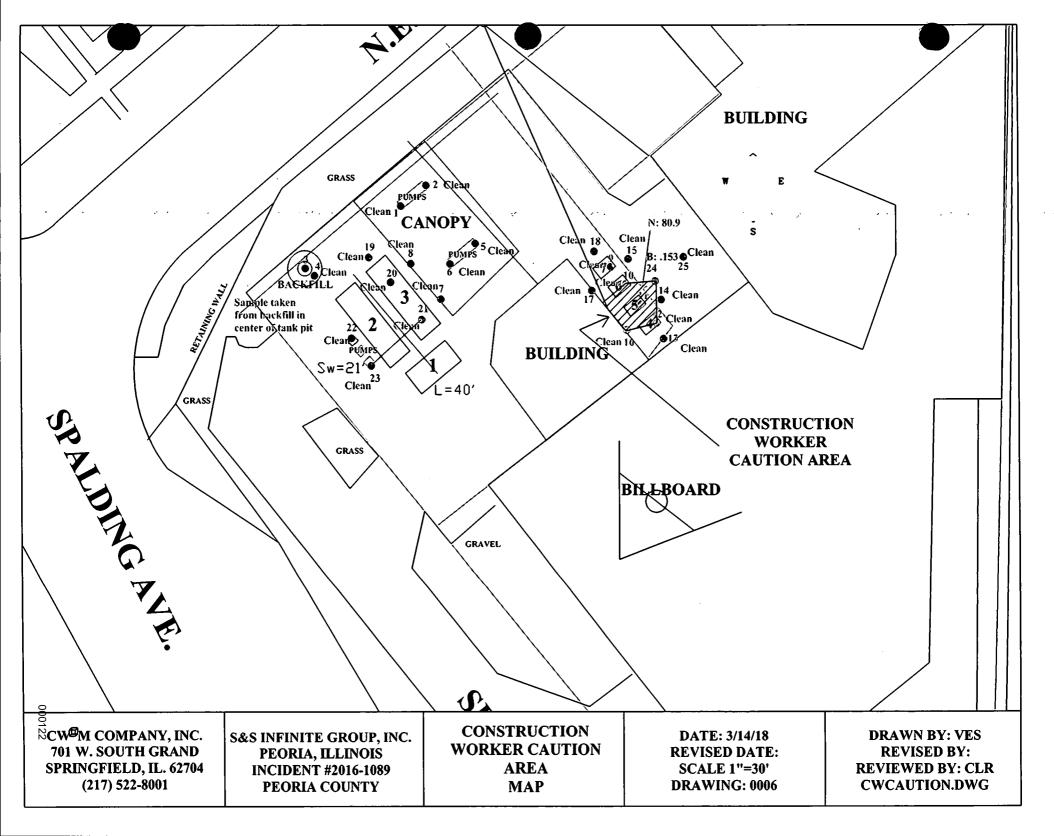


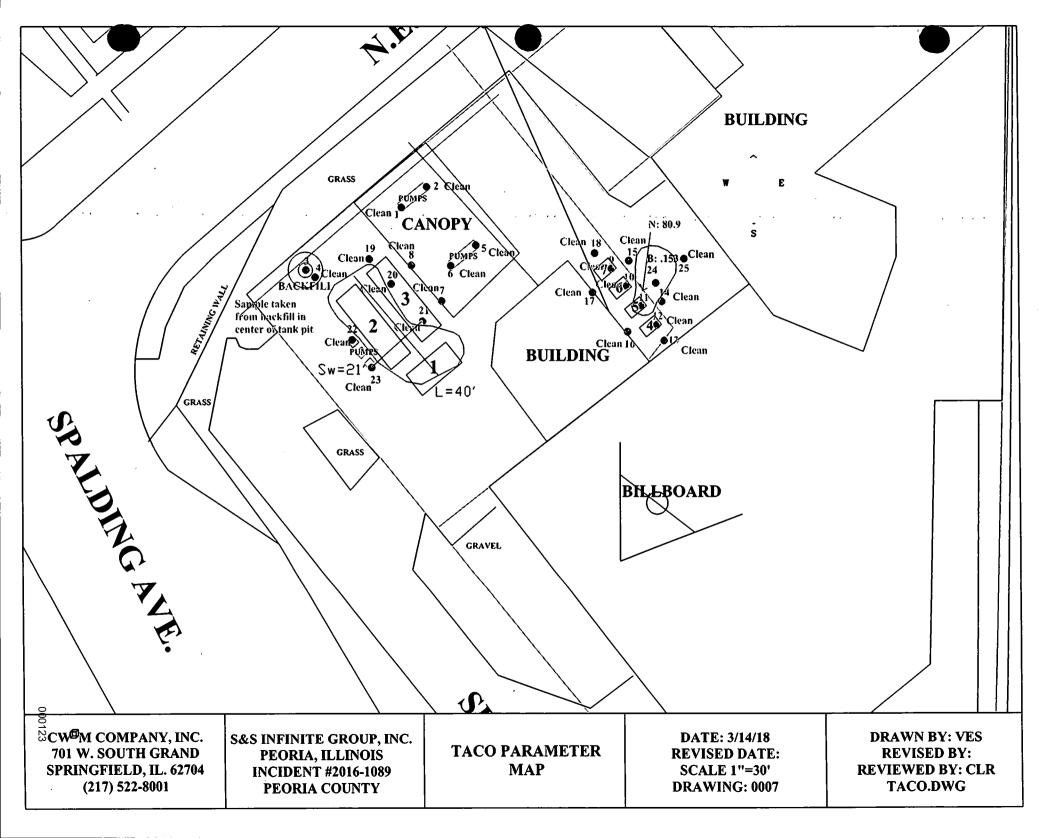












APPENDIX C OSFM ELIGIBILITY DETERMINATION

CORRECTIVE ACTION PLAN S&S Infinite Group Peoria, Illinois



Office of the Illinois State Fire Marshal

2/15/2017

S and S Infinite Group Incorporated 400 North East Adams Street Peoria, IL 616034202

In Re: Facility No. 3010480

IEMA Incident No. 20161089

Downtown 66

400 North East Adams Street Peoria, Peoria, IL 616034202

Dear Applicant:

The Reimbursement Eligibility and Deductible Application received on February 15, 2017 for the above referenced occurrence has been reviewed. The following determinations have been made based upon this review.

It has been determined that you are eligible to seek payment of costs in excess of \$5,000. The costs must be in response to the occurrence referenced above and associated with the following tanks:

Eligible Tanks

Tank 3 10000 gallon Gasoline

Tank 4 350 gallon Gasoline

Tank 5 350 gallon Gasoline Tank 6 560 gallon Diesel Fuel

Tank 7 560 gallon Used Oil

You must contact the Illinois Environmental Protection Agency to receive a packet of Agency billing forms for submitting your request for payment.

An owner or operator is eligible to access the Underground Storage Tank Fund if the eligibility requirements are satisfied:

- 1. Neither the owner nor the operator is the United States Government,
- 2. The tank does not contain fuel which is exempt from the Motor Fuel Tax Law,
- 3. The costs were incurred as a result of a confirmed release of any of the following substances:

"Fuel", as defined in Section 1.19 of the Motor Fuel Tax Law

Aviation fuel

Heating oil

Kerosene

Used oil, which has been refined from crude oil used in a motor vehicle, as defined in Section 1.3 of the Motor Fuel Tax Law.

- 4. The owner or operator registered the tank and paid all fees in accordance with the statutory and regulatory requirements of the Gasoline Storage Act.
- 5. The owner or operator notified the Illinois Emergency Management Agency of a confirmed release, the costs were incurred after the notification and the costs were a result of a release of a substance listed in this Section. Costs of corrective action or indemnification incurred before providing that notification shall not be eligible for payment.
- 6. The costs have not already been paid to the owner or operator under a private insurance policy, other written agreement, or court order.

7. The costs were associated with "corrective action".

This constitutes the final decision as it relates to your eligibility and the set deductible. We reserve the right to change the deductible determination should additional information that would change the determination become available. An underground storage tank owner or operator may appeal the decision to the Illinois Pollution Control Board (Board), pursuant to Section 57.9 (c) (2). An owner or operator who seeks to appeal the decision shall file a petition for a hearing before the Board within 35 days of the date of issuance of the final decision, (35 Illinois Administrative Code 105.504(b)).

For information regarding the filing of an appeal, please contact:

Clerk Illinois Pollution Control Board State of Illinois Center 100 West Randolph, Suite 11-500 Chicago, Illinois 60601 (312) 814-3620

The following tanks are also listed for this site:

Tank 1 6000 gallon Diesel Fuel Tank 2 10000 gallon Gasoline

Your application indicates that there has not been a release from these tanks under this incident number. You may be eligible to seek payment of corrective action costs associated with these tanks if it is determined that there has been a release from one or more of these tanks. Once it is determined that there has been a release from one or more of these tanks you may submit a separate application for an eligibility determination to seek corrective action costs associated with this/these tanks.

If you have any questions, please contact our Office at (217) 785-1020.

Sincerely,

Deanne Lock

Division of Petroleum and Chemical Safety

APPENDIX D

CORRECTIVE ACTION PLAN BUDGET AND CERTIFICATION

CORRECTIVE ACTION PLAN
S&S Infinite Group
Peoria, Illinois

Owner/Operator and Licensed Professional Engineer/Geologist Budget Certification Form

I hereby certify that I intend to seek payment from the UST Fund for costs incurred while performing corrective action activities for Leaking UST incident 2016–1089. I further certify that the costs set forth in this budget are for necessary activities and are reasonable and accurate to the best of my knowledge and belief. I also certify that the costs included in this budget are not for corrective action in excess of the minimum requirements of 415 ILCS 5/57, no costs are included in this budget that are not described in the corrective action plan, and no costs exceed Subpart H: Maximum Payment Amounts, Appendix D Sample Handling and Analysis amounts, and Appendix E Personnel Titles and Rates of 35 III. Adm. Code 732 or 734. I further certify that costs ineligible for payment from the Fund pursuant to 35 III. Adm. Code 732.606 or 734.630 are not included in the budget proposal or amendment. Such ineligible costs include but are not limited to:

Costs associated with ineligible tanks.

Costs associated with site restoration (e.g., pump islands, canopies).

Costs associated with utility replacement (e.g., sewers, electrical, telephone, etc.).

Costs incurred prior to IEMA notification.

Costs associated with planned tank pulls.

Legal fees or costs.

Costs incurred prior to July 28, 1989.

Owner/Operator: S&S Infinite Group, Inc.

Costs associated with installation of new USTs or the repair of existing USTs.

Authorized Representative: Syled Muneeb	Title: Agent
Signature	Date: 3//0/18
Subscribed and sworn to before me the day of	March 2018 March 2018 MAR 2 0 2018
$(,)_{0}$	CAROL L ROWE Seal: Official Seal
(Notary Public)	Notary Public - State of Illinois My Commission Expires Mar 18, 2021
In addition, I certify under penalty of law that all activities the conducted under my supervision or were conducted under or Licensed Professional Geologist and reviewed by me; the prepared under my supervision; that, to the best of my known or report has been completed in accordance with the Environce 732 or 734, and generally accepted standards and practice accurate and complete. I am aware there are significant per to the Illinois EPA, including but not limited to fines, imprison Environmental Protection Act [415 ILCS 5/44 and 57.17].	the supervision of another Licensed Professional Engineer at this plan, budget, or report and all attachments were wledge and belief, the work described in the plan, budget, onmental Protection Act [415 ILCS 5], 35 III. Adm. Code s of my profession; and that the information presented is
L.P.E./L.P.G.: Vince E. Smith	L.P.E./L.P.G. Seal:
L.P.E./L.P.G. Signature:	Date: 3//9//
Subscribed and sworp to before me theday of	March 2018
	SABOL L ROWE Official Seal
(Notary Public)	Notary Public - State of Illinois
The Illinois EPA is authorized to require this information un required. Failure to do so may result in the delay or denial	of any budget or payment requested hereunder.



Illinois Environmental Protection Agency

Bureau of Land • 1021 N. Grand Avenue E. • P.O. Box 19276 • Springfield • Illinois • 62794-9276

General Information for the Budget and Billing Forms

LPC #: 1	1430650114	County:	Peoria	
City: Pe	oria	Site Name:	S & S Infinite Group,	Inc.
Site Addr	ress: 400 NE Adams Street		`	
IEMA Inc	cident No.: 2016-1089			
IEMA No	otification Date: 11/21/2016			
Date this	form was prepared: Mar 9, 2018			RECEIVE
This for	m is being submitted as a (check o	ne, if applicable	e):	MAR 2 0 2018
\boxtimes	Budget Proposal			IEPA/BO
	Budget Amendment (Budget amend	ments must incl	ude only the costs ove	
	Billing Package			
	Please provide the name(s) and da	te(s) of report(s)	documenting the cost	: s requested:
	Name(s):	 		
٠	Date(s):-		<u> </u>	·
This pac	ckage is being submitted for the sit	e activities indi	cated below:	
·35 III. Ad	dm. Code 734:			
	Early Action			
	Free Product Removal after Early A	ction		
	Site Investigation	Stage 1:	Stage 2:	Stage 3:
\boxtimes	Corrective Action	Actual Costs		
35 III. Ac	dm. Code 732:			·
	Early Action			
	Free Product Removal after Early A	ction		.•
	Site Classification	,		•
	Low Priority Corrective Action	· ·		
	High Priority Corrective Action			
35 III. Ad	im. Code 731:			
	Site Investigation			
	Corrective Action			

IL 532 -2825 LPC 630 Rev. 1/ 2007

General Information for the Budget and Billing Forms

The following address will be used as the mailing address for checks and any final determination letters regarding payment from the Fund.

Pay to the order of: S&S	Infinite G	roup		
Send in care of: CWM Compa	ny, Inc.			
Address: P.O. Box 571				
City: Carlinville		State: IL	Zip: <u>62</u>	626
The payee is the: Owner	er 🗹 Ope	erator [] (Check o	one or both.)	
Signature of the owner or operat	or of the UST(s)	(required)	W-9 must be Click here to	e submitted. print off a W-9 Form.
Number of petroleum USTs in II parent or joint stock company of or joint stock company of the ow	the owner or o	perator; and any compa	he owner or operato any owned by any p	or; any subsidiary, arent, subsidiary
Fewer than 101:	⊠ 101 or	more:		
Number of USTs at the site:	7 (Nu	umber of USTs includes	USTs presently at	the site and USTs that
have been removed.)				
Number of incidents reported to	IEMA for this s	ite:2		
Incident Numbers assigned to the	ne site due to re	eleases from USTs:	20140963	20161089
Please list all tanks that have ev	er been located	d at the site and tanks th	hat are presently loo	cated at the site.
Product Stored in UST	Size (gallons)	Did UST have a release?	Incident No.	Type of Release Tank Leak / Overfill / Piping Leak

Product Stored in UST	Size (gallons)	Did UST have a release?	Incident No.	Type of Release Tank Leak / Overfill / Piping Leak
Diesel	6,000	Yes 🗓 No 🗌	20140963	Overfill
Gasoline	10,000	Yes 🗓 No 🗌	20140963	Overfill
Gasoline	10,000	Yes 🗓 No 🗌	20161089	0verfill
Gasoline	350	Yes 🗓 No 🗌	20161089	Tank Leak
Gasoline	350	Yes 🛛 No 🗌	20161089	Tank Leak
Used Oil	560	Yes 🗓 No 🗌	20161089	Tank Leak
Used Oil	560	Yes 🗓 No 🗌	20161089	Tank Leak
		Yes No No		
		Yes No No		





Budget Summary

734	Free Product	Stage 1 Site Investigation	Stage 2 Site Investigation	Stage 3 Site Investigation	Corrective Action
		•			Proposed
Drilling and Monitoring Well Costs Form	\$	\$	\$	\$	\$ 1,820.00
Analytical Costs Form	\$	\$	\$	\$	\$ 4,434.28
Remediation and Disposal Costs Form	\$	\$	\$	\$	\$
UST Removal and Abandonment Costs Form	\$	\$	\$	\$	\$
Paving, Demolition, and Well Abandonment Costs Form	\$	\$	\$	\$	\$
Consulting Personnel Costs Form	\$	\$	\$	\$	\$ 21,921.44
Consultant's Materials Costs Form	\$	\$	\$	\$	\$ 467.50
Handling Charges Form	Handling charges will be determined at the time a billing package is submitted to the Illinois EPA. The amount of allowable handling charges will be determined in accordance with the Handling Charges Form.				
Total	\$	\$	\$	\$	\$ 28,643.22

Drilling and Monitoring Well Costs Form

1. Drilling

Number of Borings to Be Drilled	Type HSA/PUSH/ Injection	Depth (feet) of Each Boring	Total Feet Drilled	Reason for Drilling
4	PUSH	20.00	80.00	Soil Plume Delineation
and the second second	新兴	Section 1		· · · · · · · · · · · · · · · · · · ·
	The state of the s	The spirit		
The specific of the specific o	e and the second			STATE OF THE BEST OF THE SECOND
			,	

Subpart H
minimum payment
amount applies.

	Total Feet	Rate per Foot (\$)	Total Cost (\$)
Total Feet via HSA:		29.07	
Total Feet via PUSH:	80.00	22.75	1,820.00
Total Feet for Injection via PUSH:		18.96	
		Total Drilling Costs:	1,820.00

2. Monitoring / Recovery Wells

Number of Wells	Type of Well HSA / PUSH / 4" or 6" Recovery / 8" Recovery	Diameter of Well (inches)	Depth of Well (feet)	Total Feet of Wells to Be Installed (\$)
Fig. Sec. 1995			A STATE OF THE STA	
	Yang variable			Mark the state of the

Well Installation	Total Feet	Rate per Foot (\$)	Total Cost (\$)
Total Feet via HSA:			
Total Feet via PUSH:			
Total Feet of 4" or 6" Recovery:			:
Total Feet of 8" or Greater Recovery:			:
		Total Well Costs:	

Total Drilling and Monitoring Well Costs:	\$1,820.00

Analytical Costs Form

Laboratory Analysis	Number of Samples		Cost (\$) per Analysis	:	Total per Parameter
Chemical Analysis				_	
BETX Soil with MTBE EPA 8260	14	Х	107.44	=	\$1,504.16
BETX Water with MTBE EPA 8260		Х		=	
COD (Chemical Oxygen Demand)		Х		=	
Corrosivity		Х		11	
Flash Point or Ignitability Analysis EPA 1010		Х		=	
Fraction Organic Carbon Content (foc) ASTM-D 2974-00		Х	·		
Fat, Oil, & Grease (FOG)		Х		ıı	
LUST Pollutants Soil - analysis must include volatile, base/ neutral, polynuclear aromatics and metals list in Section 732. Appendix B and 734.Appendix B		х		11	
Dissolved Oxygen (DO)		X		=	
Paint Filter (Free Liquids)		Х		=	
PCB / Pesticides (combination)		Х		=	
PCBs	<u></u>	X		=	
Pesticides		Х		= 1	
pH		X		=	
Phenol	<u>.</u>	Х	,	=	
Polynuclear Aromatics PNA, or PAH SOIL EPA 8270	14	X	192.14	=	\$2,689.96
Polynuclear Aromatics PNA, or PAH WATER EPA 8270		X		=	
Reactivity		X		=	
SVOC - Soil (Semi-Volatile Organic Compounds)		X		=	
SVOC - Water (Semi-Volatile Organic Compounds)		X		=	
TKN (Total Kjeldahl) "nitrogen"		X		=	
TPH (Total Petroleum Hydrocarbons)		X		=	
VOC (Volatile Organic Compounds) - Soil (Non-Aqueous)		X		=	
VOC (Volatile Organic Compounds) - Water		X		=	
		X		=	
		Х		=	
		X		=	
		X		=	
		X	:	=	
Geo-Technical Analysis					
Soil Bulk Density (pb) ASTM D2937-94		Х		=	
Ex-situ Hydraulic Conductivity / Permeability		X	·	=	
Moisture Content (w) ASTM D2216-92 / D4643-93		X	, ,	=	
Porosity		X	<u> </u>	=	
Rock Hydraulic Conductivity Ex-situ		Х		=	
Sieve / Particle Size Analysis ASTM D422-63 / D1140-54		X		=	
Soil Classification ASTM D2488-90 / D2487-90		X		=_	
Soil Particle Density (p _s) ASTM D854-92		X		=	
		X	ļ	=	
·		X		_=	
		X		=	

Analytical Costs Form

Metals Analysis			· ·		
TO DO DO TO	···	Х		=	<u> </u>
Soil preparation fee for Metals TCLP Soil (one fee per soil sample)		X			
Soil preparation fee for Metals Total Soil (one fee per soil sample)		<u></u>		=	
Water preparation fee for Metals Water (one fee per water sample)					
Arsenic TCLP Soil		<u>x</u>		=	
Arsenic Total Soil				=	
Arsenic Voter Arsenic Water		Х		=	
Barium TCLP Soil		Х		=	
Barium Total Soil	-	Х		=	
Barium Water		Х		=	
Cadmium TCLP Soil		Х		=	
Cadmium Total Soil		Х		=	
Cadmium Water		Х		=	
Chromium TCLP Soil		Х		=	
Chromium Total Soil	_	Х		=	
Chromium Water		Х		=	
Cyanide TCLP Soil		Х		=	
Cyanide Total Soil		Х		=	
Cyanide Water		Х	•	=	
Iron TCLP Soil		Х		=	
Iron Total Soil	_	Х		=	
Iron Water		Х		=	
Lead TCLP Soil		Х			
Lead Total Soil		х		=	
Lead Water		Х		=	
Mercury TCLP Soil		Х		=	
Mercury Total Soil	_	Х	•	=	
Mercury Water		Х		=	
Selenium TCLP Soil		Х	-	=	
Selenium Total Soil		Х		=	
Selenium Water		Х		=	
Silver TCLP Soil		Х	:	·=	
Silver Total Soil		Х		=	
Silver Water		Х		=	
Metals TCLP Soil (a combination of all metals) RCRA		Х		=	
Metals Total Soil (a combination of all metals) RCRA		Х		=	
Metals Water (a combination of all metals) RCRA		X	•	=	
No. of the control of		Х		=	
		X		=	
		Х		=	
		Х		=	
Other					
EnCore® Sampler, purge-and-trap sampler, or equivalent sampling device .	14,	X	12.64	=	\$176.96
Sample Shipping per sampling event ¹	1	Х	63.20	=	\$63.20

¹A sampling event, at a minimum, is all samples (soil and groundwater) collected in a calendar day.

Total Analytical Costs: \$ 4,434.28

Consulting Personnel Costs Form

Employee Nar	ne	Personnel Title	Hours	Rate* (\$)	Total Cost
Remediation Category		Tas	k		
					
		Senior Project Manager	40.00	126.40	\$5,056.00
CCAP	Corrective Ac	tion Design / Report Development	/ IEPA Correspond	dence	
		Senior Prof. Engineer	3.00	164.33	\$492.99
CCAP	Report Revie	w and Certification		:	
				<u> </u>	
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		<u> </u>			<u> </u>
•		Senior Draftperson/CAD	6.00	75.83	\$454.98
CCAP	Drafting and	Editing Maps for Report			
				<u> </u>	
·					
			····		· · · · · · · · · · · · · · · · · · ·
	<u> </u>	•			
·	*	Senior Admin. Assistant	3.00	56.88	\$170.64
CCAP	Report Comp	ilation, Assembly, and Distribution		·	
	· .	<u> </u>			 -
•	<u> </u>				
		Senior Project Manager	16.00	126.40	\$2,022.40
TACO 2 or 3	TACO Tier 2	Calculations / Development of CUC	Os / GW Modeling		
	T	1		:	<u> </u>

Employee Nam	e	Personnel Title	Hours	Rate* (\$)	Total Cost
Remediation Category		Task	<u> </u>		
		T			
	· · · · · · · · · · · · · · · · · · ·	Senior Project Manager	24.00	126.40	\$3,033.60
CCAP-Budget	Budget Prepara	tion / Data Evaluation			
		1		<u> </u>	
		<u> </u>		<u> </u>	
		Senior Prof. Engineer		404.00	\$492.9
CCAP-Budget	T		3.00	164.33	\$492.9
	Budget Review	& Certification			
			! -		
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			T.	<u> </u>	
	<u> </u>				<u> </u>

Employee Nam	e	Personnel Title	Hours	Rate* (\$)	Total Cost
Remediation Category		Tasi	C		
		т		· 1	
•		Senior Project Manager	4.00	126.40	\$505.6
CCA-Field	Field Preparation	on, Scheduling, Arrangements/Co	ordination for Inve	estigation Activitie	s / Well Owner
	:	Engineer II	8.00	107.44	\$859.5
CCA-Field	Drilling / Soil Sa	ampling / Potable Well Survey			
		Engineer III	10.00	126.40	\$1,264.0
CCA-Field	Field Prep/Drillin	ng / Soil Sampling / Potable Well	Survey		
		Senior Project Manager	3.00	126.40	\$379.2
CCA-Field	Documentation	/ Field Reports / Data			
		Senior Admin. Assistant	2.00	56.88	\$113.7
CCA-Field	Arrangements f	or Investigation, Utilities/JULIE, a	nd Scheduling		
		Senior Project Manager	8.00	126.40	\$1,011.2
CCA-Field	Review Analytic	al Results, Borelogs?Tabulation	of Analytical	;	
-	<u> </u>	Engineer III	6.00	126.40	\$758.4
CCA-Field	Record Borelog	s, Tabulation of Analytical Result	s	3*	
	· · · · · · · · · · · · · · · · · · ·				
	· · · · · · · · · · · · · · · · · · ·				
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Employee Name		Personnel Title	Hours	Rate* (\$)	Total Cost
Remediation Category		Task	· · · · · · · · · · · · · · · · · · ·		
		<u> </u>	T	· · · · · · · · · · · · · · · · · · ·	
	`	Senior Prof. Engineer	6.00	164.33	\$985.98
CA-Pay	Reimbursement	Review and Certification	-		
		Senior Acct. Technician	30.00	69.51	\$2,085.3
CA-Pay	Reimbursement	Preparation Forms			
		Senior Admin. Assistant	8.00	56.88	\$455.0
CA-Pay	Reimbursement	Compilation, Assembly, and Distr	ribution	·	
		Geologist III	16.00	111.24	\$1,779.8
CA-Pay	Reimbursement	Development / Inputs / Contracto	r Invoicing / Evalu	uation with Budge	et
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^{*}Refer to the applicable Maximum Payment Amounts document.

Total of Consulting Personnel Costs	\$21,921.44
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Consultant's Materials Costs Form

Materials, Equipment,	or Field Purchase	Time or Amount Used	Rate (\$)	Unit	Total Cost	
Remediation Category		Description/	Justification	:		
Copies		300.00	.15	/each	\$45.00	
CCAP	Copies of Plan and Repo	rt				
Postage		3.00	7.50	/each	\$22.50	
CCAP	Report/ Forms/ Distribution	on 		· · · · · · · · · · · · · · · · · · ·		
Copies	,	100.00	.15	/each	\$15.00	
CCAP-Budget	Copies of Budget					
l				:	(
			 	· .	<u> </u>	
Copies		600.00	.15	/each	\$90.00	
CA-Pay	Copies of Reimbursemen	nt Claim				
Postage		4.00	7.50	/each	\$30.00	
CA-Pay	Reimbursement Distributi	ion / Forms		:		
				f.		
Copies		100.00	.15	/each	\$15.00	
CCA-Field	Field Preparation/Maps/B	Field Preparation/Maps/Borelogs/Analytical Reports/Field Reports				
Mileage		150.00	.54	/mile	\$81.00	
CCA-Field	One Round Trip from Spr	ringfield Office to Site	e (Drilling, Potab	le Well Inve	stigation)	

Materials, Equipment	or Field Purchase	Time or Amount Used	Rate (\$)	Unit	Total Cost
Remediation Category		Description/Justification			
PID Rental		1.00	129.00	/day	\$129.00
CCA-Field	Detect VOC Levels in Soil	Samples			
Measuring Wheel		1.00	24.00	/day	\$24.00
CCA-Field	Mapping Sampling Location	<u> </u>			
		T T			
Disposable Gloves		1.00	16.00	/box	\$16.00
CCA-Field	Disposable Latex Gloves	for Soil Sampling			
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Total of Consultant Materials Costs \$467.50

APPENDIX E BORE LOGS

CORRECTIVE ACTION PLAN S&S Infinite Group Peoria, Illinois

	Illinois Environmental Protection Agency		•			CW⇔M	COMPANY, INC.			
						DRILLIN	NG BOREHOLE LOG			
_							Page 1 of 1			
<u> </u>	CARDINE # 2017 1000		BOREHOI	E MILIM	IDED.	WC-1	rage rorr			
	NCIDENT #: 2016-1089		BORING I			15' N of the NW corner of building				
	ME: S & S Infinite Group DRESS: 400 North East Adams Street		BUKINGI	OCAII	OIN.	13 Not the NW corner of building				
SHEAL	Peoria, IL 61603		RIG TYPE	•	Truck mo	ounted drill rig				
DATE/I	IME STARTED: 11/21/16 3:00 PM		DRILLING/							
	IME FINISHED: 11/21/16 3:10 PM		BACKFIL		Grout / Co					
DEPTH		USCS	Sample	PID	Sample		REMARKS: (Odor, Color,			
(FEET)	DESCRIPTION	CLASS	_	(ppm)	Туре		Moisture, Penetrometer, etc.)			
0	Concrete									
~		011								
_	Top soil	ОН		0	i					
1							·			
	Backfill		ļ							
2 -	1									
_			95%	0	Grab	WC-1				
	1		3370	ľ	Giao	2.5'				
3						2.5				
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4				0			·			
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5 -	1						•			
) -		1			-					
_		ļ					Odor and Discoloration			
6				132						
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8	ļ•]	100%	1178	Grab	WC-1	BETX, MTBE, PNAs			
					ŀ	7.5'	WC Parameters			
9 -										
—				1178			 			
			ļ	11/6			1			
10							Y			
	End of Boring 10'				·					
11			1							
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12										
_	·						1			
13		Ì								
	1									
14										
_		[
15			<u> </u>				<u> </u>			
	Stratification lines are approximate, in-situ transition between			l			· —			
NOTES	: Sampled at location of highest PID reading above	water tal	ole							
							•			
							•			
	Manway / Surface Elevation:									
	Groundwater Depth While Drilling:	N/A	Auger De	pth:	10'	Driller:	AEDC			
abla	Groundwater Depth After Drilling:		Rotary Do	enth:		Geologist:	MDR			
•	Civanumater Depth Atter Dilling.		1	£		- condition				

	Illinois Environmental Protection Agency					CW□M	COMPANY, INC.				
						DRILLIN	DRILLING BOREHOLE LOG				
							Page 1 of 1				
T IN	CIDENT #: 2016-1089		BOREHOI	E NUM	BER:	WC-2	1				
	ME: S & S Infinite Group		BORING I			20' S & 5' E	of the NE comer of building				
	DRESS: 400 North East Adams Street					<u> </u>					
	Peoria, IL 61603 .		RIG TYPE			unted drill rig					
	IME STARTED: 11/21/16 3:10 PM		DRILLING/								
	IME FINISHED: 11/21/16 3:20 PM	*10.00	BACKFIL		Grout / Co						
DEPTH	SOIL AND ROCK DESCRIPTION	USCS CLASS	Sample Recovery	PID (ppm)	Sample Type		Moisture, Penetrometer, etc.)				
(FEET)		CLASS	Recovery	(ppiii)	Турс	NONE	intersture, 1 energements, etc.)				
,	Concrete										
_	Top soil	ОН		0							
1											
	Backfill						;				
2											
			90%	0	Grab	WC-2					
						2.5'					
´—						_,,	,				
· , —											
4		l									
_				22			·				
5											
	-						Odor and Discoloration				
6				560		,					
· —	•						·,				
U							i l				
· -											
8			95%	1178	Grab	WC-2	BETX, MTBE, PNAs				
						7.5'	WC Parameters				
9							<u> </u>				
				992			·				
10							↓				
··~	Full of Davis and 101						·				
	End of Boring 10'										
11							· .				
	•										
12							·				
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14	<i>'</i>										
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15				<u> </u>			<u> </u>				
	Stratification lines are approximate, in-situ transition between			l							
NOTES:	Sampled at location of highest PID reading above	water tal	ole								
	•						·				
	Manuar / Surface Florestian										
	Manway / Surface Elevation:		<u> </u>				1700				
<u> </u>	Groundwater Depth While Drilling:	N/A	Auger De	pth:	10'	Driller:	AEDC				
\searrow	Groundwater Depth After Drilling:		Rotary Do	epth:		Geologist:	. MDR				

	Illinois Environmental Protection Agency		٠.			CW [□] M	COMPANY, INC.			
	Ç V					DRILLIN	NG BOREHOLE LOG			
							Page 1 of 1			
TIN	NCIDENT #: 2016-1089		BOREHOL	E NUM	BER:	WC-3				
	AME: S & S Infinite Group		BORING L	OCATI	ON:	15' N & 12' V	W of the NW corner of building			
SITE AI	DDRESS: 400 North East Adams Street									
	Peoria, IL 61603		RIG TYPE DRILLING/			unted drill rig				
	IME STARTED: 12/16/16 8:55 PM IME FINISHED: 12/16/16 9:10 PM		BACKFILI		Grout / Co					
DEPTH		USCS	Sample	PID	Sample		REMARKS: (Odor, Color,			
(FEET)	DESCRIPTION	CLASS			Туре		Moisture, Penetrometer, etc.)			
0	Concrete									
'-	Top soil	ОН		0						
l , -	100 3011	011								
1 —	D 160	ł								
	Backfill	1		:						
2_										
_			90%	0	Grab	WC-3				
3						2.5'				
4			1				į.			
5										
_		1					Odor and Discoloration			
6 -				125						
°—			1	123						
_										
U _										
-										
8			95%	1178	Grab	WC-3	BETX, MTBE, WC Parameters			
	· .					5-10'				
9										
		ļ		806						
10	,			i			∤			
	End of Boring 10'	İ				•				
11 -										
`` -	•	1								
- ۱.,							·			
12										
_										
13							·			
							·			
14							,			
					İ					
·15										
_	Stratification lines are approximate, in-situ transition between	soil types n	nay be gradual							
NOTES	Composite of 5' section with highest degree of con				, and PIC)				
	EOB 20' Dry Sand									

Auger Depth:

Rotary Depth:

N/A

Manway / Surface Elevation:

Groundwater Depth While Drilling:

Groundwater Depth After Drilling:

AEDC

MDR

Driller:

Geologist:

10'

Illinois Environmental Protection Agency

CW[□]M COMPANY, INC. **DRILLING BOREHOLE LOG**

Page 1 of 2 SB-24 FINCIDENT #: 2016-1089 **BOREHOLE NUMBER:** 15' E and 25' N of the NW corner of the building SITE NAME: S & S Infinite Group BORING LOCATION: SITE ADDRESS: 400 North East Adams Street RIG TYPE: Truck mounted drill rig Peoria, IL 61603 DRILLING/SAMPLE METHOD: Push DATE/TIME STARTED: 7/26/17 8:00 AM Grout / Concrete BACKFILL: DATE/TIME FINISHED: 7/26/17 8:30 AM REMARKS: (Odor, Color, USCS SAMPLE DEPTH SOIL AND ROCK Sample PID Sample NUMBER Moisture, Penetrometer, etc.) **CLASS** Recovery (ppm) Type (FEET) DESCRIPTION Concrete No odor or discoloration Gravel/Sand Backfill OH 0 Brown/Black Silty Clay CL 90% 0 SB-24A BETX, MTBE, PNA Grab 2.5' 0 BETX, MTBE, PNA SB-24B SP Sand: Med-Large Grained 11 5.0' Slight Odor and Discoloration 2 80% 0 Grab SB-24C BETX, MTBE, PNA 7.5' 0 12 90% SB-24D BETX, MTBE, PNA 0 Grab 12.5' 13 0 Brown fine-grained and coarse-grained sand Stratification lines are approximate, in-situ transition between soil types may be gradual. NOTES: Composite of 5' section were sampled at the highest PID reading or in the center of the sample

The soil boring log continues on page 2

Manway / Surface Elevation:

Groundwater Depth While Drilling:	. none	Auger Depth:	25'	Driller:	AEDC	
Groundwater Depth After Drilling:		Rotary Depth:		Geologist:	GTR/MTK	

CW[□]M COMPANY, INC. Illinois Environmental Protection Agency **DRILLING BOREHOLE LOG** Page 2 of 2 SB-24 ΓINCIDENT #: 2016-1089 **BOREHOLE NUMBER:** 15' E and 25' N of the NW corner of the building SITE NAME: S & S Infinite Group **BORING LOCATION:** SITE ADDRESS: 400 North East Adams Street Truck mounted drill rig Peoria, IL 61603 **RIG TYPE:** DATE/TIME STARTED: 7/26/17 8:00 AM DRILLING/SAMPLE METHOD: Push Grout / Concrete BACKFILL: DATE/TIME FINISHED: 7/26/17 8:30 AM **SAMPLE** REMARKS: (Odor, Color, DEPTH **USCS** Sample PID Sample **SOIL AND ROCK** NUMBER | Moisture, Penetrometer, etc.) **CLASS** Recovery Type (FEET) DESCRIPTION (ppm) 15 SP Sand: Med-Large Grained 0 16 17 90% 0 SB-24E BETX, MTBE, PNA Grab 17.5' 0 0 BETX, MTBE, PNA 90% 0 Grab SB-24F 23 22.5' End of Boring 26 28 29 Stratification lines are approximate, in-situ transition between soil types may be gradual. NOTES: Composite of 5' section were sampled at the highest PID reading or in the center of the sample

None

Auger Depth:

Rotary Depth:

EOB 25' Dry Sand

Manway / Surface Elevation:

Groundwater Depth While Drilling:

Groundwater Depth After Drilling:

GTR/MTK____

AEDC

Driller:

Geologist:

25'



Illinois Environmental Protection Agency

Groundwater Depth While Drilling:

Groundwater Depth After Drilling:

CW[□]M COMPANY, INC. DRILLING BOREHOLE LOG

Page 1 of 2 **BOREHOLE NUMBER:** SB-25 Γ INCIDENT #: 2016-1089 **BORING LOCATION:** 15' E and 5' N of the NW corner of the Building SITE NAME: S & S Infinite Group SITE ADDRESS: 400 North East Adams Street Truck mounted drill rig **RIG TYPE:** Peoria, IL 61603 DRILLING/SAMPLE METHOD: Push DATE/TIME STARTED: 7/26/17 8:30 AM **BACKFILL:** Grout / Concrete DATE/TIME FINISHED: 7/26/17 8:50 AM REMARKS: (Odor, Color, USCS Sample PID Sample SAMPLE **DEPTH** SOIL AND ROCK **CLASS** NUMBER Moisture, Penetrometer, etc.) (FEET) **DESCRIPTION** Recovery (ppm) Type Concrete Gravel/Sand Backfill No odor or discoloration OH 0 Brown/Black Silty Clay CL 80% 0 Grab 0 0 80% 0 Grab 0 10 Sand: Med-Large Grained SP 11 12 80% SB-25A BETX, MTBE, PNA 0 Grab 12.5' 0 15 Stratification lines are approximate, in-situ transition between soil types may be gradual. NOTES: Composite of 5' section were sampled at the highest PID reading or in the center of the sample The soil boring log continues on page 2 Manway / Surface Elevation:. **AEDC**

None Auger Depth:

Rotary Depth:

20'

Driller:

Geologist:

GTR/MTK

	Illinois Environmental Protection Agency				•	CW⊔M	COMPANY, INC.				
						DRILLI	NG BOREHOLE LOG				
							Page 2 of 2				
L 18	ICIDENT #: 2016-1089		BOREHOI	LE NUM	IBER:	SB-25	18-				
	ME: S & S Infinite Group		BORING LOCATION: 15' E and 5' N of the NW corner of the Bui								
	DRESS: 400 North East Adams Street										
	Peoria, IL 61603	_	RIG TYPE: Truck mounted drill rig								
DATE/T	IME STARTED: 7/26/17 8:30 AM		DRILLING/SAMPLE METHOD: Push								
DATE/T	IME FINISHED: 7/26/17 8:50 AM		BACKFIL		Grout / Co						
DEPTH		USCS	Sample	PID	Sample	SAMPLE	REMARKS: (Odor, Color,				
(FEET)	DESCRIPTION	CLASS	Recovery	(ppm)	Type	NUMBER	Moisture, Penetrometer, etc.)				
15											
	Sand: Med-Large Grained	SP	i								
16				0							
· • —											
							l `				
17							l				
			90%	0	Grab	SB-25B	BETX, MTBE, PNA				
18						17.5'					
							· .				
19				0							
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20 _							<u>`</u>				
_	End of Boring 20'										
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29											
30]								
	Stratification lines are approximate, in-situ transition between:	soil types n	nav be gradual	 .		·					
NOTES:	Composite of 5' section were sampled at the higher	st PID re	ading or in	the cen	ter of the	sample					
						•					
	EOB 20' Dry Sand	٠									
	Manway / Surface Elevation:										
57	Groundwater Depth While Drilling:	None	Auger De	nth:	20'	Driller:	AEDC				
$\overline{\Box}$		140116									
\vee	Groundwater Depth After Drilling:		Rotary Do	epth:		Geologist:	GTR/MTK				

APPENDIX F ANALYTICAL RESULTS

CORRECTIVE ACTION PLAN S&S Infinite Group Peoria, Illinois

Release Confirmation/Waste Characterization

	Location	WC-1	WC-2	WC-3	RC-1
	Date	11/21/2016	11/21/2016	12/16/2016	1/3/2017
	Depth				
Parameter	Tier I CUO				
Benzene	0.03	43.3	11.8	9.79	5.77
Ethylbenzene	13.0	146.0	41.8	45.8	33.1
Toluene	12.0	611.	171.	161.	103.
Total Xylenes	5.6	816.	234.	258.	187.
MTBE	0.32	ND	ND	ND	ND
Acenaphthene	570	ND	ND		ND
Acenaphthylene	30	ND	ND		ND
Anthracene	12,000	ND	ND		ND
Benzo(a)anthracene	0.9	ND	ND	·	ND
Benzo(a)pyrene	0.09	ND	ND		ND
Benzo(b)flouranthene	0.9	ND	ND		ND
Benzo(g,h,i)perylene	160	ND	ND		ND
Benzo(k)flouranthene	9	ND	NĐ		ND
Chrysene	88	ND	ND		ND
Dibenzo(a,h)anthracene	0.09	ND	ND		ND
Flouranthene	3,100	0.061	ND		ND
Fluorene	560	ND	ND		ND
Indeno(1,2,3-c,d)pyrene	0.9	ND	ND		ND
Napthalene	1.8	2.44	0.343		3.85
Phenanthrene	280	0.09	ND		0.09
Pyrene	2,300	0.066	ND		ND

Numbers not bold indicate actual quantities, but are below the TACO Tier 1 Most Stringent Soil Cle

BOLD & SHADING -- Exceeds the TACO Tier 1 Most Stringent Soil Clean-up Objective.

ND -- Not Detected

Early Action - Soil

e 1/5/2017 th 3' CUO B ND D ND ND ND ND ND ND O ND O ND O ND O	ND ND ND ND ND	1/5/2017 Backfill 1.37 7.18 29.6 39. ND	ND ND ND ND ND	1/6/2017 3' ND ND ND ND ND	1/6/2017 3' ND ND ND ND ND	1/6/2017 7' ND ND ND ND ND
B ND ND ND ND ND ND ND ND ND ND ND ND ND	ND ND ND	1.37 7.18 29.6 39.	ND ND ND ND	ND ND ND	ND ND ND ND	ND ND ND
3 ND ND ND ND ND ND ND ND ND ND ND ND ND	ND ND ND	7.18 29.6 39.	ND ND ND	ND ND ND	ND ND ND	ND ND ND
0 ND ND ND ND ND ND ND ND ND ND ND ND ND	ND ND ND	7.18 29.6 39.	ND ND ND	ND ND ND	ND ND ND	ND ND ND
ND ND ND ND ND ND ND ND ND ND ND ND ND N	ND ND	29.6 39.	ND ND	ND ND	ND ND	ND ND
ND 2 ND 00 00 00 00 00 00 00 00 00 00 00 00 00	ND	39.	ND	ND	ND	ND
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	0 0 ities, but are below	0 0 ities, but are below the TACO T	0 ities, but are below the TACO Tier 1 Most St		0 cities, but are below the TACO Tier 1 Most Stringent Soil Clean-up Ob	0 ities, but are below the TACO Tier 1 Most Stringent Soil Clean-up Objective.

BOLD & SHADING -- Exceeds the TACO Tier 1 Most Stringent Soil Clean-up Objective.

ND -- Not Detected

Early Action - Soil

	Location	8	9	10	11	12	13	14	15	16	17
	Date	1/6/2017	1/9/2017	1/9/2017	1/9/2017	1/9/2017	1/9/2017	1/9/2017	1/9/2017	1/9/2017	1/9/2017
	Depth	7'	11'	11'	11'	11'	7'	7'	7'	7'	7'
Parameter	Tier I CUO								_		
Benzene	0.03	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	13.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	12.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total Xylenes	5.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MTBE	0.32	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acenaphthene	570		ND	ND	0.121	ND	ND	ND	ND	ND	ND
Acenaphthylene	30		ND	ND	0.165	ND	ND	ND	ND	ND	ND
Anthracene	12,000		ND	ND	0.063	ND	ND	ND	ND	ND	ND
Benzo(a)anthracene	0.9		ND								
Benzo(a)pyrene	0.09		ND								
Benzo(b)flouranthene	0.9		ND	ND _							
Benzo(g,h,i)perylene	160		ND								
Benzo(k)flouranthene	9		ND								
Chrysene	88		ND								
Dibenzo(a,h)anthracene	0.09		ND								
Flouranthene	3,100		ND	ND	0.131	ND	ND	ND	ND	ND	ND
Fluorene	560		ND	ND	0.237	ND	ND	ND	ND	ND	ND_
Indeno(1,2,3-c,d)pyrene	0.9		ND								
Napthalene	1.8		ND	ND	80.9	0.146	ND	ND	ND	ND	ND
Phenanthrene	280		ND	ND	0.657	ND	ND	ND	ND	ND	ND
Pyrene	2,300		ND	ND	0.167	ND	ND	ND	ND	ND	ND ND
Numbers not bold indicate BOLD & SHADING E	actual quantities, bucceeds the TACO T	1 = -							•		
ND Not Detected		1		1]	<u> </u>				

Early Action - Soil

	Location	18	19	20	21	22	23
	Date	1/9/2017	1/10/2017	1/10/2017	1/10/2017	1/10/2017	1/10/2017
	Depth	7'	7'	13'	13'	3'	3'
Parameter	Tier I CUO						
Benzene	0.03	ND	ND	0.0263	ND	ND	ND
Ethylbenzene	13.0	ND	ND	ND	ND	ND	ND ·
Toluene	12.0	ND	ND	0.132	ND	ND_	ND
Total Xylenes	5.6	ND	ND	0.133	ND	ND	ND
MTBE	0.32	ND	ND	ND	ND	ND	ND
Acenaphthene	570	ND					
Acenaphthylene	30	ND					
Anthracene	12,000	ND					
Benzo(a)anthracene	0.9	ND				_	
Benzo(a)pyrene	0.09	ND					
Benzo(b)flouranthene	0.9	ND					
Benzo(g,h,i)perylene	160	ND			-		
Benzo(k)flouranthene	9	ND					
Chrysene	88	ND					
Dibenzo(a,h)anthracene	0.09	ND					
Flouranthene	3,100	ND					
Fluorene	560	ND					
Indeno(1,2,3-c,d)pyrene	0.9	ND			l		
Napthalene	1.8	ND					
Phenanthrene	280	ND				Ĭ	
Pyrene	2,300	ND					
Numbers not bold indicate	actual quantities, bi	1					
BOLD & SHADING EX	ceeds the TACO T	i					
ND Not Detected			T				

Group, Inc. Site Assessment Data

Stage 1 - Soil

	Location	24A	24B	24C	24D	24E	24F	25A	25B
	Date	7/26/2017	7/26/2017	7/26/2017	7/26/2017	7/26/2017	7/26/2017	7/26/2017	7/26/2017
	Depth	2.5	5	7.5	12.5	17.5	22.5	12.5	17.5
Parameter	TEIR I CUO								
Benzene	0.03	ND							
Ethylbenzene	13.0	ND							
Toluene	12.0	ND							
Total Xylenes	5.6	ND							
MTBE	0.32	ND							
Acenaphthene	570	ND	D						
Acenaphthylene	30	ND							
Anthracene	12,000	ND							
Benzo(a)anthracene	0.9	0.125	ND						
Benzo(a)рутепе	0.09	0.153	ND						
Benzo(b)flouranthene	0.9	0.228	ND						
Benzo(g,h,i)perylene	160	0.115	ND						
Benzo(k)flouranthene	9	0.0771	ND						
Chrysene	88	0.199	ND						
Dibenzo(a,h)anthracene	0.09	ND							
Flouranthene	3,100	0.307	ND	ND	ND ·	ND	ND	ND	0.0506
Fluorene	560	ND							
Indeno(1,2,3-c,d)pyrene	0.9	0.102	ND						
Napthalene	1.8	ND	ND	ND	ND	ND	0.333	ND	ND
Phenanthrene	280	0.162	' ND	ND	ND	ND	ND	ND	ND
Pyrene	2,300	0.285	ND	ND	ND	ND	ND	ND	0.043

Numbers not bold indicate actual quantities, but are below the TACO Tier 1 Most Stringent Soil Clean-up Objective.

BOLD & SHADING -- Exceeds the TACO Tier 1 Most Stringent Soil Clean-up Objective.

ND -- Not Detected

APPENDIX G TACO CALCULATIONS

CORRECTIVE ACTION PLAN S&S Infinite Group Peoria, Illinois

Summary of Tier 2 Calculations S & S Infinite Group, Inc. - DBA Downtown 66 2016-1089 02/20/18

Table 3

Tier 1 Objectives

		Benzei	ne		Toluene		Ethylbenzen	е	Total Xylenes	;	Naphthalen	e	MTBE	
Residential	Ingestion	12	$\neg \iota$	mg/kg	16,000	mg/kg	· 7,800	mg/kg	16,000	mg/kg	1,600	mg/kg	780	mg/kg
	Inhalation	0.8	+ 1	mg/kg	650	mg/kg	400	mg/kg	320 I	mg/kg	170	mg/kg	8,800	mg/kg
Migr	ation Class 1	0.03	ı	mg/kg	12	ng/kg	13	l mg/kg	150 ≀	mg/kg	12	ı mg/kg	0.32	mg/kg
	ation Class 2	0.17	- (mg/kg	29	i mg/kg	19	f mg/kg	150 1	mg/kg	18	ı mg/kg	0.32	mg/kg
ndustrial/Commercial	Ingestion	100		mg/kg	410,000	mg/kg	200,000	mg/kg	410,000	mg/kg	41,000	mg/kg	20,000	mg/kg
	Inhalation	1.60	- (mg/kg	650	mg/kg	400	mg/kg	320 1	mg/kg	270	mg/kg	8,800	mg/kg
Construction Worker	Ingestion	2,300		mg/kg	410,000	mg/kg	20,000	mg/kg	41,000	mg/kg	4,100	mg/kg	2,000	mg/kg
TOTION COLOUR TYONG	Inhalation	2.20	- (mg/kg	42	i mg/kg	58 .	I mg/kg	5.6	mg/kg	1.80	i mg/kg	140	mg/kg
Soil Saturation		580		mg/kg	290	mg/kg	150	mg/kg	110 i	mg/kg	212.16	mg/kg	8,400	mg/kg

Tier 2 SSL Objectives

					116	TOOL OF	CCUVCS							
		Benzene		Equation	Toluene	Equation	Ethylbenzene	Equation	Total Xylenes	Equation	Naphthalene	Equation	MTBE	
Residential Inge	stion	11.64	(S-2	6,257	S-1	7,821	S-1	15,643	S-1 _	1,564	S-1	782.1	S-1
Inhal	ation	1.94	J	S-6	[[25455484]].	S-4	111888888111	S-4	1118/2003/88/11.	S-4	246.63	S-4	[[20144782]]].	S-4
Migration Mass-Limit Cla	ass 1	0.19	Ţ	S-28	38.45 1	S-28	26.92 /	S-28	384.54	S-28	5.38	S-28	2.69	S-28
Migration Cla	ass 1	0.073	+	S-17	44.11	S-17	61.76	S-17	111486888111	S-17	19.16 1	S-17	0.28	S-17
Industrial-Commercial Inge	stion	104.06		S-2	1,635,200	S-1	204,400	S-1	408,800	S-1	40,880	S-1	20,440	S-1
Inhal	ation	3.70	Τ,	S-6	11898888811.	S-4	1188/888/8811	Ş-4	[[]\$\###\#\$][].	S-4	392.66	S-4		S-4
Migration Mass-Limit Cla	ass 1	0.19	_	S-28	38.45 i	S-28	26.92 +	S-28	384.54	S-28	5.38 I	S-28	2.69	S-28
Migration Cla	ass 1	0.073	1	S-17	44.11 1	S-17	61.76	S-17	111485584111	S-17	19.16 I	S-17	0.28	S-17
Construction Worker Inge	stion	2,258.21		S-3	163,236	S-1	10,202	S-1	81,618	S-1	122,427	S-1	20,405	S-1
Inhal	ation	5.21 -	ī	S-7	535.89	S-5	111888888111	S-5	73.45 I	S-5	2.54 1_	S-5	249.86	S-5
Soil Saturation		1,322.01		S-29	1,168.82	S-29	749.91	S-29	601.63 1	S-29	212.16	S-29	10,221.04	S-29

all values are in mg/kg

Groundwater Contaminate Concentration Exceedances at Surface Water or Set Back Zone (mg/L)

	Giouituwate	ı conamı	ate concentration	Exceedan	ces at suriace ma	ter or set L	ack Lone (mg/s)					
	Benzene	Equation	Toluene	Equation	Ethylbenzene	Equation	Total Xylenes	Equation	Naphthalene	Equation	MTBE	
Result	#DIV/0!	R-26	#DIV/0!	R-26	#DIV/0I	R-26	#DIV/0!	R-26			#DIV/0!	R-26
Surface Water Objective	0.86		0.6		0.014		0.36					

Version: 4/25/2016

Illinois Enviromental Protection Agency Leaking Underground Storage Tank Program SSL Input Parameters for Use with Tier 2 Calculations

Α.	Site Identification		
,	IEMA Incident # (6- or 8-digit):	2016-1089	IEPA LPC # (10-digit):
	Site Name: S & S Infinite Group. In	nc DBA Downtown 66	

400 North East Adams

City: Peoria County: Peoria Zip Code: 61603

Leaking UST Technical File

Site Address (not a P.O. Box):

B. Tier 2 Calculation Information

Equation(s) Used (ex: S12,S17,S28): S5,6,7,8,9,10,17,18,19,20,21,22,24

Contact Information for Individual Who Performed Calculations:

CWM Company, Inc.,

Land Use: Residential		Soil Type:	Sand	
Groundwater: X Class I		Class II	•	•
Mass Limit: Yes X	No	If Yes, then Specify	Acreage:	<u> </u>

- Mass Limit Acreage other than defaults must always be rounded up.
- Failure to use site-specific parameters where allowed could affect payment from the UST Fund
- Maps depicting source width, plume dimensions, distance, etc. must also be submitted.
- Inputs must be submitted in the designated unit.

AT (ingestion)	= Residential = 6		уг
	Con. Worker = 0.115		yr
AT (inhalation)	=	Residential = 30	yr
		Con. Worker = 0.115	yr
AT _c	· AT _c =		yr
BW	=	Res. (NonCarcinogen) = 15	. kg
		Res. (Carcinogen) = 70	kg
		Con. Worker = 70	kg
C _{sat} =		Benzene = 1322.012	mg/kg
		Toluene = 1168.824	mg/kg
		Ethylbenzene = 749.906	mg/kg
		Total Xylenes = 601.626	mg/kg
		MTBE = 10221.038	mg/kg
		Naphthalene = 212,157	mg/kg
			mg/kg

	= 3.048	m
	= 3.048	m
= Be	nzene = 0.0001977751261419	
	Toluene = 7.67193169192489E	
E	thylbenzene = 3.95299980402237E	₋₀₅ cm ² /s
	Xylenes = 2.61358477517448E	:-05 cm²/s
	MTBE = 8.822579788567068	-05 cm²/s
	Naphthalene = 1.22914273421043E	
	•	cm²/s
		cm²/s
	•	cm²/s
		cm ² /s
	E	= Benzene = 0.0001977751261419 Toluene = 7.67193169192489E Ethylbenzene = 3.9529980402237E Xylenes = 2.61358477517448E

1430560114

Incident	#	201	16-1	089

Incident # 2016-108	<u> </u>		
Cw	=	Benzene = 0.1	mg/L
•		Toluene = 20	mg/L
		Ethylbenzene = 61.757	mg/L
		Total Xylenes = 1093.865	mg/L
		MTBE = 0.28	
		Naphthalene = 19.162	
		repliataione = 10.102	mg/L
			mg/L
			mg/L
			_
· · · · · · · · · · · · · · · · · · ·		0.000	mg/L
đ	=	3.883	m
ED (inhalation of	=	Residential = 30	yr
carcinogens)		Con. Worker = 1	yr
ED (ingestion of	=	Residential = 6	yr
noncarcinogens)		Con. Worker = 1	yr
ED (inhalation of	=	Residential = 30	yr
noncarcinogens)		Con. Worker = 1	yr
ED (ingestion of	=	Residential = 30	yr
groundwater)		Con. Worker = 1	yr _
ED _{M-L}	=	70	yr
EF	=	Residential = 350	d/yr
- 1		Con. Worker = 30	d/yr
F(x)	=	0.194	unitless
f _{oc}	=	0.0136	g/g
GW _{obj}	_	Benzene = 0.005	
GVV _{obj}	_	=	_
		Toluene = 1 Ethylbenzene = 0.7	mg/L mg/L
		Total Xylenes = 10	
		MTBE = 0.07	mg/L
		Naphthalene = 0.14	mg/L
		Naphilialene – 0.14	mg/L
			mg/L
,			mg/L
10		Denzene = 0.00	mg/L
H	=	Benzene = 0.23	unitless
		Toluene = 0.271	unitless
		Ethylbenzene = 0.324	unitless
		Total Xylenes = 0.271	unitless
		MTBE = 0.0241	unitless
		Naphthalene = 0.0198	unitless
			unitless
<u>i</u>	=	0.02	m/m
<u></u>	=	0.3	m/yr
I _{M-L}	=	0.18	m/yr
IF _{soil-adj}	=	114	(mg-yr)/(kg-d)
IR _{soil}	=	Residential = 200	mg/d
3011		Con. Worker = 480	mg/d

Di	=	Benzene = 0.088	cm ² /s
		Toluene = 0.087	cm²/s
		Ethylbenzene = 0.075	cm²/s
		Total Xylenes = 0.0735	cm²/s
		MTBE = 0.102	cm²/s
•		Naphthalene = 0.0000075	cm²/s
			cm²/s
		•	cm²/s
		•	cm²/s
			cm²/s
D _w	=	Benzene = 0.0000102	cm ² /s
		Toluene = 0.0000086	cm²/s
		Ethylbenzene = 0.0000078	cm²/s
		Total Xylenes = 0.00000923	
		MTBE = 0.000011	cm²/s
		Naphthalene = 0.0000075	cm²/s
			cm²/s
DF	=	1.669686986	unitless
ED (ingestion of	=	· ·	yr
carcinogens		Con. Worker = 1	yr
K _{oc}	=	Benzene = 50	cm³/g or L/kg
		Toluene = 158	cm³/g or L/kg
		Ethylbenzene = 320	
		Total Xylenes = 398	
		MTBE = 11.5	
		Naphthalene = 500	cm³/g or L/kg
		•	cm³/g or L/kg
			cm³/g or L/kg
		ŧ	cm ³ /g or L/kg
		· · · · · · · · · · · · · · · · · · ·	cm ³ /g or L/kg
K _s	=	1830	m/yr
Ĺ	=	12.192	m
PEF	=	•	m³/kg
PEF'	=		m³/kg
Q/C (VF equations)	=	Residential = 68.81	(g/m ² -s)/(kg/m ³)
210 (055		Con. Worker = 85.81	(g/m ² -s)/(kg/m ³)
Q/C (PEF equations)	=		(g/m²-s)/(kg/m³)
RfC (mg/m³)			chronic
Benzene	=		0.08 '
Toluene	=	5	.5 9
Ethylbenzene	=	1 :	0.4
Total Xylenes MTBE	=	0.1 · · · · · · · · · · · · · · · · · · ·	2.5
Naphthalene	<i>-</i>).003
марпилалене		0.003	
•	=	:	NA
	=		NA
	=	•	NA
	=	<u> </u>	NA

Incident # 2016-1089

IR _w K K _d (non-ionizing	= Residential = 2 = 31.536	L/d m/yr
		111/VI
	= Benzene = 0.68	cm²/g or L/kg
organcis)	Toluene = 2.1488	cm²/g or L/kg
organolo,	Ethylbenzene = 4.352	cm²/g or L/kg
	Total Xylenes = 5.4128	cm²/g or L/kg
	MTBE = 0.1564	cm²/g or L/kg
	Naphthalene = 6.8	cm²/g or L/kg
	·	cm²/g or L/kg
		cm²/g or L/kg
	,	cm²/g or L/kg
		cm²/g or L/kg
K _d (ionizing organics)	=	cm ² /g or L/kg
K _d (inorganics)	=	cm ² /g or L/kg
VF' =	Benzene = 477.089	m ³ /kg
	Toluene = 766.007	m ³ /kg
	Ethylbenzene = 1067.141	m³/kg
	Total Xylenes = 1312.403	m³/kg
'	MTBE = 714.311	m ³ /kg
Nonh	thalene = 6051.797	m³/kg
і парії	malene - 6051.797	m³/kg
		-
		m³/kg
	·	m³/kg
		m ³ /kg
VM _{M-L} =	#VALUE!	m³/kg
	#VALUE!	m³/kg
	#VALUE!	m ³ /kg
	#VALUE!	m³/kg
		m³/kg
		m³/kg
		-
		m ³ /kg
=	#VALUE!	m³/kg
	#VALUEI	m³/kg
	#VALUE!	m ³ /kg
	#VALUE!	m³/kg
		m³/kg m³/kg
		m³/kg
		m³/kg
<u>η</u>	= 0.201	L _{pore} /L _{soil}
θ _a	= 0.109	L _{air} /L _{soil} _

		<u> </u>		_
RfD _o mg/(kg-d)		Chronic	Subchronic	
Benzene	=	0.004	0.012	ı
Toluene	=	0.08	8.0	١
Ethylbenzene	=	0.1	0.05	ı
Total Xylenes	=	0.2	0.4	١
MTBE	=	0.01	0.1	١
Naphthalene	=	0.02	0.6	١
	=		0.6	1
	=		NA	
	=		NA NA	
	=	Benzene =	NA	괵
S	=	Benzene = Toluene		
		Ethylbenzene		ı
		Total Xylenes	-	ı
		-		
		MTBE =	_	
,		Naphthalen	_	
•			mg/L	
		•	mg/L	١
,			mg/L	
		· ·	mg/L	_
SF _o	=	Benzene =	0.055 (mg/kg-d) ⁻¹	
		Toluene	= NA (mg/kg-d) ⁻¹	
		Ethylbenzene =	0.011 (mg/kg-d) ⁻¹	
		•	$s = NA (mg/kg-d)^{-1}$	
		•	E = NA (mg/kg-d) ⁻¹	١
			= NA (mg/kg-d) ⁻¹	
		Napridialent	(mg/kg-d) ⁻¹	
			(mg/kg-d) ⁻¹	
•		:	(mg/kg-d) ⁻¹	
		1		
		Desidential 0	(mg/kg-d) ⁻¹	\dashv
Т	=	Residential = 9.		-
		Con. Worker = 3.6		\dashv
T _{M-L}	=	30	yr	_
THQ	=	1	unitless	_
TR	=	1.00E-06	unitless	
U _m	=	4.69	m/s	
URF	=	Benzene = 7.8	x 10 ⁻⁶ (μg/m ³) ⁻¹	\neg
Ut	=	11.32	m/s	\neg
	_	0.5	unitless	\dashv
VF =		Benzene = 6		\dashv
VI* -		Toluene = 9	a	
		Ethylbenzene = 13	• -	
		Total Xylenes = 17	^ -	
`		MTBE = 9	2.	
		Naphthalene = 78		
		:	m³/kg	
		•	m³/kg	
			m³/kg	
		<u> </u>	m³/kg	

Incident # 2016-1089

θ _w	=	0.092	L _{water} /L _{soil}
Рь	=	2.15	kg/l or g/cm ³
ρ _s	=	2.69	g/cm ³
ρ _w	=	1	g/cm ³
1/(2b+3)	=	0.09	unitless

Illinois Enviromental Protection Agency Leaking Underground Storage Tank Program RBCA Input Parameters for Use with Tier 2 Calculations

Α .	Site Ide	ntification

В.

IEMA Incident # (6- or 8-digit):	2016-1	089	IEPA LPC # (10-d	ligit): 1430560114
Site Name: S&S Infinite Group	, Inc DBA Dowr	ntown 66		
Site Address (not a P.O. Box):	400 North East /	Adams		
City: Peoria	County:	Peoria		Zip Code: <u>61603</u>
Leaking UST Technical File				
Tier 2 Calculation Information				
Equation(s) Used (ex: R12,R14,F	(26): <u>R16, R17</u>	, R18,R19, R21	, R22, R23, R24,R26	
Contact Information for Individual	Who Performed	Calculations:		
CWM Company, Inc.,				
Land Use: Residential		Soil	Type: Sand	
Groundwater: X Class I		Class II		
Mass Limit: Yes X		If Yes, then Sp	ecify Acreage:	
Objective from S17 used in R267	Yes	X No		
If Yes, then	Specify C _{source} from	m S17 _	See Attached	mg/L.
Mass Limit Acreage other than Failure to use site-specific para Maps depicting source width, ple Inputs must be submitted in the	neters where allo ume dimensions, (wed could affect	payment from the UST	Fund

ΑΤ _c	=	70	yr
AT _n	=	Residential = 30 Con. Worker = 0.115	yr yr
BW	=	70	٧٢

See Attached See Attached 100

	yr	Dan	=	See Attached	cm²/s
	yr	D ^{water}	=	See Attached	cm²/s
5	yr	D _s eff	=	See Attached	cm²/s
	yr	ED		Residential = 30	yr
	mg/L	=0	-	Con. Worker = 1	yr
	mg/L	EF	=	Residential = 350	d/yr
	cm			Con. Worker = 30	dΝr

erf	=	See Attached	unitless
f _{oc}	=	0.0136	9/9
GW _{comp}	=	See Attached	mg/L
GW _{source}	=	See Attached	mg/L
H'	=	See Attached	cm3 _{water} /cm ³ ar
i	=	0.02	cm/cm
- 1	=	30	cm/yr
IR _{etr}	=	20	m³/d
(R _{soil}		Residential = 100	mg/d
(I ^C soil	-	Con. Worker = 480	mg/d
IR _w	=	Residential = 2	L/d
К	_	8.640	cm/d
		3153.600	cm/yr
K _{ec}	=	See Attached	cm³/g or L/kg
K _e (non-ionizing organics)	2	See Attached	cm ³ _{water} /g _{soil}
k _e (ionlzing organics)	=	Not Applicable	cm ³ water/g _{soil}
K _a (inorganics)	=	Not Applicable	cm³ _{water} /g _{soil}
L,	•	100	cm
LF _{ew}	=	See Attached	(mg/L _{water})/(mg/kg _{tot})
M	=	0.5	mg/cm ²
Pe	=	6.9 · 10 ⁻¹⁴	g/cm²-s
RAF₀	=	0.5	unitless
a,	=	See Attached	cm
a,	=	See Attached	cm
a,	=	See Attached	cm
λ	=	See Attached	d ⁻¹
π	= 3.1416		
T	=	9.46 · 10 ⁸	s

RAF _d (PNAs)	=	0.05	unitless
RAF _d (inorganics)	=	0	unitless
RAF.	=	1	unitless
RBSL _{air} (cardinogínic)	=	See Attached	µg/m³
RBSL _{air} (nancaralnoginic)	=	See Attached	µg/m³
RíDi	=	See Attached	mg/kg-d
SA	=	3,160	cm ² /d
S₀	=	200.0	cm
S.,	=	640.1	cm
SF,	=	See Attached	(mg/kg-d) ⁻¹
SF.	=	See Attached	(mg/kg-d) ⁻¹
THQ	=	1	unitless
TR	=	1.00E-06	unitless
U	=	0.6912	cm/d
U _{air}	=	225	cm/s
U _{gre}	=	3153.620	cm/y
VFp	=	3.97133E-12	kg/m ³
VF _{samb}	=	See Attached	(mg/m³ _{er})/mg/kg _{es} or kg/m
VF ₆₈	=	See Attached	kg/m3
w	=		cm
w	=	0.094	gwater/geoil
δ _{αίτ}	=	200	cm
δ _{gw}	=	200	cm
θ,,	=	0.0479	cm ³ _{sir} /cm ³ _{sod}
θ _{ws}	=	0.2021	cm³ _{voter} /cm³ _{sot}
θτ	=	0.25	cm ³ /cm ³ _{soil}
Рь	=	2.15	g/cm ³
ρ,,	=	1	g/cm ³

H.	λ	Koc
0.23	0.0009	50
0.271	0.011	158
0.324	0.003	320
0.271	0.0019	398
0.0241	0	11.5
0.0198	0.0027	500
<u> </u>		
	0.23 0.271 0.324 0.271 0.0241	0.23 0.0009 0.271 0.011 0.324 0.003 0.271 0.0019 0.0241 0

		Benzene R26	Modeled G	roundwater to	om vertical n	nodeled Soll	<u> </u>	
	C _{source} from						erf: S, / (4 ·	erf: S _w /(2
Location	S17 (mg/L)	C(x) (mg/L)	X (cm)	a _x (cm)	a _y (cm)	a, (cm)	√[a,·X])	√[a² · X])
SB-A	0.099	0.005	1981.2	198.12	66.04	9.906	0.46844613	0.8760641
backfill 3	0.093	0.005	1950.72	195.072	65.024	9.7536	0.47483982	0.8818297
WC-1	2.948	0.005	4541.52	454.152	151.384	22.7076	0.21509171	
WC-3	0.666	0.005	3322.32	332.232	110.744	16.6116	0.29091523	0.6410832
							<u> </u>	
				 				

Location $C(x)$ (mg/L) X (cm) a_x (cm) a_y (cm) a_z (cm) erf: $\frac{1}{\sqrt{a_y}}$ $\frac{1}{\sqrt{a_y}}$				Benzene R	26 Modeled C	<u> 3roundwater</u>		
	ocation	C(x) (mg/L)	X (cm)	a _x (cm)	a _y (cm)	a _z (cm)	erf: S _w / (4 · √[a _y · X])	enf: S., / (2 √[α, · X])
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Toluene R26 Modeled Groundwater from Vertical Modeled Soils										
C _{eource} from						erf: S ₄ /(4 ·	erf: S _w /(2			
S17 (mg/L)	C(x) (mg/L)						√[a, · X])			
2.3579	0.9675	60.96	6.096	2.032	0.3048	1	1			
0.6711										
13.8528	0.9515	213.36					1			
3.6502	0.6916	121.92	12.192	4.064	0.6096	1	1			
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	S17 (mg/L) 2.3579 0.6711 13.8528	Coource from S17 (mg/L) C(x) (mg/L) 2.3579 0.9675 0.6711 13.8528 0.9515	Course from S17 (mg/L) C(x) (mg/L) X (cm) 2.357 0.9675 60.98 0.6711 13.8528 0.9515 213.36	Course from S17 (mg/L) C(x) (mg/L) X (cm) a, (cm) 2.3579 0.9675 60.96 6.096 0.6711 13.8528 0.9515 213.36 21.336	Course from S17 (mg/L) C(x) (mg/L) X (cm) a _x (cm) a _y (cm) 2.3579 0.9675 60.96 6.096 2.032 0.6711 13.8528 0.9515 213.36 21.336 7.112	Course from S17 (mg/L) C(x) (mg/L) X (cm) a₂ (cm) a₂ (cm) a₂ (cm) 2.3579 0.9675 60.98 6.096 2.032 0.3048 0.6711 13.8528 0.9515 213.36 21.336 7.112 1.0668	Cource from S17 (mg/L) C(x) (mg/L) X (cm) a₂ (

			Toluene R	26 Modeled G	roundwater		
Location	C(x) (mg/L)	X (cm)	a _x (cm)	a _y (cm)	a² (cw)	erf: S _w /(4· √[a _y ·X])	erf: S _w / (2 · √[a₂ · X])
							
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	E	hylbenzene F	R26 Modeled	Groundwate	r from Vertice	al Modeled S	olls	
Location	C _{source} from S17 (mg/L)	C(x) (mg/L)	X (cm)	a* (cw)	a _y (cm)	a, (cm)	erf: S ₊ / (4 · √[a _y · X])	erf; S _{**} / (2 · √(a₂ · X))
SB-A	0.5815	,,,,						
WC-1	1.6549	0.6304	243.84	24.384	8.128	1.2192	0.99999963	. 1
WC-3	0.5191							
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Ethylbenzene R26 Modeled Groundwater											
Location	C(x) (mg/L)	X (cm)	a _x (cm)	a _y (cm)	az (cm)	√[a _y · X])	√[a₂ · X])				
	 										
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	To	otal Xylenes F	26 Modeled	Groundwate	r from Vertica	I Modeled S	oils	
	C _{source} from						erf: S.,/(4 ·	erf: S_/(2·
Location	S17 (mg/L)	C(x) (mg/L)	X (cm)	a _x (cm)	a _y (cm)	a _z (cm)	√[a,·X])	√[o² · X])
SB-A	4.1138						<u> </u>	
backfill 3	0.3565						ļ	ļ
WC-1	7.4598							
WC-3	2.3586							
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			Total Xylenes	R26 Modele	d Groundwat	er	
Location	C(x) (mg/L)	X (cm)	a _x (cm)	a, (cm)	az (cm)	erf: S ₊ / (4 · √[α, · X])	erf: S ₊ / (2 · √[a₂ · X])
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	N	aphthalene R	26 Modeled	Groundwate	from Vertica	I Modeled Se	oils	
Location	C _{eource} from S17 (mg/L)	C(x) (mg/L)	X (cm)	a _x (cm)	a _y (cm)	a, (cm)	erf: S _w / (4 ⋅ √[α _y ⋅ X])	erf: S _w / (2 · √[a₂ · X])
11	0.5910	0.1374	426.72	42.672	14.224	2.1336	0.99632439	1
	0.0178	0.1374	720.12	42.072	17.227	2.1000	0.00002.00	
WC-1_	0.0178						 	
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			Naphthalene	R26 Modele	d Groundwat	er	
Location	C(x) (mg/L)	X (cm)	a _x (cm)	α _y (cm)	a _z (cm)	erf: S ₊ /(4 · √[a _y · X])	erf: S _e / (2 · √(a _t · X))
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Location	C _{source} from S17 (mg/L)	C(x) (mg/L)	X (cm)	a _x (cm)	a, (cm)	a _z (cm)	erf: S _w / (4 · √[α _v · X])	erf: Sೄ/ (2 √[a₂ · X])
SB-8(2-4')	0.0000	<u> </u>						
30-0(2-4)	0.0000							
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Location	C(x) (mg/L)	X (cm)	a _x (cm)	a, (cm)	a _z (cm)	erf: S _w / (4 ⋅ √[a _y ⋅ X])	erf: S _* / (2 · √[a, · X])
Location	J(x) (g/L)	7. (4)	-2 ()	-7,		 	
	 						
	 						
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	C from						erf: S,/(4 ·	erf: S,,/(2
	C _{source} from	ایم بینما			- ()			
Location	S17 (mg/L)	C(x) (mg/L)	X (cm)	a _x (cm)	a _y (cm)	a _z (cm)	√[a,·X])	√[a₂ · X])
SB-4 (2-4')	0.0000							
SB-5(2-4')	0.0000				ļ			
SB-14(2-4')	0.0000							
24	0.0000							
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Location	C(x) (mg/L)	X (cm)	a ^x (cw)	a, (cm)	az (cm)	erf: S _w / (4 · √[α _y · X])	erf: S _* / (2 √[a ₂ · X])
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Location	C _{source} from S17 (mg/L)	C(x) (mg/L)	X (cm)	a _x (cm)	a _y (cm)	a ₂ (cm)	erf: S _{**} / (4 · √[α _y · X])	erf: S ₊ / (2 √[a₂ · X])
SB-5(2-4')	0.0000							
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Location	C(x) (mg/L)	X (cm)	a _x (cm)	a, (cm)	a _z (cm)	erf: S _→ / (4 · √(a _y · X)	erf; S _a / (2 √[a₂ · X])
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S & S Infinite Group, Inc. - DBA Downtown 66 2016-1089

	(Attachment A)	
	CAL MODELED SOIL IS	
	MODELING OF VERTICA	
	AC AND R-28	
	ERTICAL SOIL MODELJ	
	ZEKE MATH FOR V	
5	8	

Semple	ان	ľ	1 foot = 30 48 cm	R-18: Q = 0.10 · X	R-17: q. q. 13	R-18: 9-9	2/	Tem1' - [K/G'a,]	Tem T = (1.50RT) + (4.4.4)/(U)]	and the state of t
į	ľ	1		ALL Y		1	200			100 to 10
1	T	3	1881	01 19812 0 19812	199.17 / 3	188.12	908.6	2 2 18012	50000	19075 1 000100 10 00100
Š	411 / 674 + 6964	CA 950 / 20000 - 200778	2157	200000000000000000000000000000000000000	452 153 7 151 154	2000	22.7076 4541.52	25175	SORTI 1 4 - 00009	2 454 152)/ 059170 0.8345
3	ľ				, at an	2 / 444	18 6110 1277	9 9 9 9	SORT! 1 +/ 4 . 0.0009	332,232 1/ 069170 10 - 40,6524
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Samole					ERF(B.)	ERF(B,)	97.0	(m)		
Location		F = 5./(4 * 508Tla. 33)	_	B. • S. / G · SORTIA. • XD	a calend	C ADDITION C	•			
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	1	W	3			1000	ı		ľ	
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E P	•	(65 074 = 1950.77)) * 0.44950	949	x 50RT (9.7538	x 1950.72 No 9,10483	0.881830	47 10		2000	
Š	WC-1 640.08 // 4 . SORT	(15) 384 x 4541.52 0,19729	ã	x \$087 (22.7076	x 4541.52 11 0.47457 0.215092	0 497899			0,000.07	
	ŀ	MINE A . W. CT CTT MAT ALL A	// ena	811881 / TOUS .	CHANG OU STORY	FR01541	ı	e cantage . Administ .	0.00478	
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Semple GWY	90	Semple Correction:	R-16: 0, • 0.10 • X	R:17: Q. Q/3	R-18: q. • q. / 20	Tem 1. • [K.G. 4.7]	(°.		Term # - (1 - SORTI) - (4 - 3 - 2) (O))
	Ч	X (ft) X (cm)	0.1 s X (cm) Q, (cm)	a, (cm) / 3	a, (cm) a, (cm) / 20 ·	a, (cm) X / 2 1	o, Termit	1 · SORTI	1 ·(4 : 1 : 0,)/ U - Tom?
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S & S Infinite Group, Inc. - DBA Downtown 66 2016-1089 Musting R-35 Carcustons Tolulpeir Matt For Vetrical, Soil Modeling and R-35 Modeling of Vertical Modeled Soil (Attachment A)

Sample	C (soil co	retamination (Equation		uð bopur)		GW C./	/ DF		Conve			R-16: a.	• 0.10 ° X			R-17;	0,00/3		$\neg \vdash$	R-	8: a, • a,	20		7	em 1° • [(/(2°a,))		!			Tem	- (1-5	QRT 1 • (4	. v . e) \ (A)[\Box
				-	٠.	/ DF	• ¢w	/ (mp/L)	X (ft)	X (cm)					o. (cm)				m -				T X		2 1	۵.	• Tem 1	1 1 .	SORTI	1	• (4	-	- A		٦/ ر	<u> 1•</u>	Term I
SB-A	104	/ 2.20	5 .	47,158	47.158	/ 20,000	• 2	15792	1	60.96	0.1	60	96	6.096	6 096		3	• 20	2 6	098 /	20	• 0,3048	60 96	7	2 1	6,096	. 8	1 .	SORT	1	• • •		0 011	r 6096	1/ 069	120 I·	-0,1782
boctd 3	29.6	/ 2.20	•	13.472	13.422	/ 20 000	•	67110															1														
WC-1	611	/ 220	• •	277.058	277.058	/ 20,000	• 1	3.65280		213.38	0.1	. 213	38 •	21,310	21.338	-	3	• 7.1	2 2	1.338 /	20	· 1.0558	213.38	$\overline{}$	2 .	21.336	• 6	1 .	SORTI	1	•(0 011	21.338)/ 0.69	1120 -	0.5150
WCJ	161	/ 2.20	•	73.005	73,005	/ 20 000	•	.65025	4	121.92	0,1	- 121	.97 •	12,192	12,192		. 3	• 4.0	4_ 1	2 392 /	20_	0.6098	121.92		2 >	12.192	• 6	1 .	SORT		Ė		0 011	a 12,192)/ 0.69	1120 1-	40.3327
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	đ	7(4		SORT	_	٩	×	X))	٠	ß	8,	/(2		SQRT	4	٩.		X	_))+	B		Tot	Meg G	Cyana	10	14551	•	4		ERF(Bı)	z ERF(B)	•	mg/L
S9-A	849 68	- /(4		SORT		2.033	_	60 6	Š	٠	4.37772	304 8	11	۲	•	SORT	_	0 3048	•	60.96))•	15.15	534	1 000000	1.000000	2.35792	10.		_	41743		1.000000	1 00000	0 •	0.96753
bockfill 3															 									_4			0.67110									
																										1.000000	13.85280		<u>.</u>	,	4122	_	1.0000000	x 1.00000	<u> </u>	0.85150
WC-3	640.08	- /1	_4_		SORT		4.064	_,	121.	9 2_))	•	7.16888	3048		 		SORT	٠.	0 6096	_*_	121.97	<u></u>	17.57	707	1,00000	1,000000	3 65025	× 0	•		43327	<u> </u>	1.000000	1 1.00000	×.	0.69160_
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(tued Outpo	(Equation 8-17) (13872-04) - 0		11	Н	П	П	П	H		H	:				• "											
1 8	J 8 8	SB-147_4 0379 / 13672.043 = 0.000 24 0,153 / 13672.043 = 0.000	\parallel	\parallel			 					+		6.9.7(4	sart (
8, 50	C. / DF CMM-(mg/l) 0.000 / 70.000 0.00000													6, 9, /4 · 50RTp, · XD	9 1 X))• B											
Comeration:	1 x (m x (cm)), °			-			\downarrow					
9.46	R-18: Q = 0.10 · X													B. • S. / G · SORTIA. 'X)	- TPG											
6.15	R.17: 0, 00 (1)														* * *									<u></u>		
	• q,(cm) q, (cm)		 						+					ERF(B.) ERF(B.)	Tette O						1	1	 -		1	
0:19: 0.00 130	R-18: q. e.g. / 20 / 20 e.g. (cm)													٦,	4	000000	000000	+							-	1
Tem 1. • [K/G.4.)]	X / 2 x Q, • Termi'											+	 	Con Cours a of continuo a cet(B.) a cet(B.)	(Year Year) : ERF(B,) x ERF(B,)											
Tem T. 6. (1. 6) (1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1	1														• mg/L			T					T			1

Tier 2 Industrial/Commercial Calculations for Benzene S & S Infinite Group, Inc. - DBA Downtown 66 2016-1089

SSL SSL & RBCA IRIS/HEAST

Date Compiled: 02/20/18

Version: 4/25/2016

Input Values													Ver	zion: 4/25/	7016	
	s Bulk Density -> 0	Converted	Value to be used in	calculat	ion sheet _>			119	DA Soil Clas	elfication: S	hne					
	nic Matter (%)> 0	FOC % (0.58 conversion			anic Matter (m		 -		mg/kg (0.58 c		0.000	1	foc conversion	0.0/0	0.000	
	p Dry Soil Bulk Density								= 1.7; or Site		0.000				0.000	
	ps - Soil Particle Density				r. Site Speci		- 1.0, Oilt	1.0, 010	1.7, 01 0110	Opcome						
	⊕ - Air Filled Soil Porosity	0.109	Value from S-21				1 meter = f	13. Grave	l = 0.05: San	d = 0 14: Si	h =0 24: Clav	= 0.19	or Calculated	/alue (S2	11	
	Ow - Water Filled Soil Porosity		Value from S-20										or Calculated			
	n - SSL: Total Soil Porosity	0.201	Value from S-24								Value (S24)		Or Calculated	7 8 10 C 10 Z	<u> </u>	
	I - Hydraulic Gradient	*****	Value Helli C 24	Site S		20, Qui	.u - 0.uz, u	III - 0.40, 1	Jilly - 0.00, 0	· Calculated	7 Value (024)					
	foc - Total Organic Carbon (g/g	a)				06: Subs	surface Soi	= 0.002; 6	r Site Specifi	c						
	DF - Dilution Factor	1.670	Value from S-22								culated value	is use	d			
3.884	d - Mixing Zone (m)	3.884	Value from S-25		alculated va					•						
3.048	d Depth of source (m)		feet = 10	Depth	of Source (\	/ertical t	lhickness o	f contamin	ation)							
31.54	K - Hydraulic Conductivity (m/y	vr) cm/sec =	1.00E-04	Site S	pecific	8.6	4E+00	cm/d	3.15E+0	3) cm/vr l	Jse cm/d for F	R15, R1	9, & R26, cm/y	r for R24		
12.192	L - Source Length Parallel to G	Proundwater Flow (m)	feet = 40	Site S	pecific (m)											
3.048	d _a - Aquifer Thickness (m)		, feet = 10	Site S	pecific (m)										-	
	I - Infiltration Rate (m/yr)				r Illinois				• • • •							
1830	K Saturated Hydraulic Condi	uctivity		See T	able K for In	put Valu	ies									
	GW _{obi} - Groundwater Remedia							er Remedi	ation Objectiv	e Class 2						
0.090	1/(2b+3) - Exponent for S20			See T	able K for In											
	BW - Body Weight							on-carcino	genic); Indus	trial/Comme	rclat = 70; Co	nstruct	ion Worker = 70	: RBCA	- 70	
	IF - Age Adjusted Soil Inge	estion Factor for Carcinogens		114						•						
	IR _{sol} -Soil Ingestion Rate	<u>_</u>		Resid	ential = 200°	Industri	ial/Commer	clat = 50° 0	onstruction \	Norker ≈ 48	0					
	SF _o -Oral Slope Factor				ene = 0.055			****			<u> </u>					
1	IRDaily Water Ingestion Rat	-			ential = 2; In	d	(Camman)	1-1								
	S - Solubility in Water	.8				ousmav	Commercia	1=1								
					ene = 1750	1-44	1-1/0	-1-1 - 404	0	141-4 4	0 ⁻⁶ at point of					
	TR - Target Cancer Risk			170	ential = 10	inaustr	iavCommei	cial = 10 "	Construction	worker = 1	u · at point of	numan	exposure			
70	AT _c -Average Time for Carcino															
	URF - Inhalation Unit Risk Fac	tor			ene =7.8 x 10				<u> </u>							
	EF - Exposure Frequency ED - Exposure Duration for Inf	halation to Comingano	· · · ·						Construction on truction		0					
		ncentration at the center of a squ	are source								= 85.81; or T	able H				
	T - Exposure Interval	centration at the center of a squ	are source								63.61, 01 1 /orker = 3.6 x					
30		all Limit Volatilization Factor Equ	Mina C26	30	enuai → 9.5 A	io, mu	JustilarColl	illiercial -	7.9 X 10 , CU	IISHIUCHOH VI	VOIKE1 - 3.0 A	10				
	W-1	ration to Groundwater Mass-Limit Eq		70												
		tion to Groundwater Mass-Limit Eq		0.18												
		ion to Groundwater Mass-Limit I	Equation S28													
	D _i - Diffusivity in Air				ene = 0.088											
	H' - Henry's Law Constant				ene = 0.228											
	D _w - Diffusivity in Water				ene = 9.8 x 1	<u>0~</u>										
50	K _∞ - Organic Carbon Partition	Coefficient		Benze	ene = 58.9											
Industrial/C	commercial Ingestion Tier II B															
S-3 =		x BW x AT _e x 365	_ =1.0E-06	x	70	X	70	X	365			_ =	1.8E+00	=	104.058	mg/kg
	Sf ₆ x 1	0 ⁶ x EF x ED x IRsoil	0.055	×	1.00E-06	x	250	×	25	×	50		1.72E-02	_		99
Construction	on Worker Ingestion Tier II Be	nzene Oblective														
		x BW x AT _e x 365	1.0E-06		70		70	x	365				1 85400			
S-3 =		x 10 ⁸ x EF x IRsoil	- = -1.02-00	-						_		=	7.02700	=	2258.21	mg/kg
1	, Si ₀ :	A IU A CP X IKSOII	0.055	х.	1.00E-06	×	30	×	480				7.92E-04			

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Tier 2 Industrial/Commercial Calculations for Benzene S & S Infinite Group, Inc. - DBA Downtown 66 2016-1089

3.704

mg/kg

Construction Worker	r Inhalation Tier II Benzene Objective									 				-
9.6 =	TR x ATc x 365	_ = .	1.0E-06	x	70	x	365						0.02555	
12-0-	LIRE x 1000 x FF x FD x 1/VF		7 80F-06		1000	×	250	¥	25	 (1/	7 07E+03	$\overline{}$	6.90E-03	

RESIDENTIAL OR COMMERCIAL

S-8 = VF =
$$\frac{Q}{C} \times \frac{(3.14 \times D_A \times T)^{1/2} \times 10^4}{(2 \times \rho_b \times D_A)}$$
 = 85.81 $\times \frac{(3.14 \times 1.98E-04 \times 7.90E+08)^{1/2} \times 0.0001}{(2 \times 2.15 \times 1.98E-04)}$ = $\frac{6.0104}{0.0009}$ = 7067.4376

Construction Worker
$$S-8 = VF = \frac{Q}{C} \times \frac{(3.14 \times D_A \times T)^{1/2} \times 10^4}{(2 \times \rho_b \times D_A)} = 85.81 \times \frac{(3.14 \times 1.98E-04 \times 3.60E+06)^{1/2} \times 0.0001}{(2 \times 2.15 \times 1.98E-04)} = \frac{0.4057}{0.0009} = 477.0893$$

Equation for Derivation of Apparent Diffusivity
$$S-10 = D_A = \frac{(\theta_0^{3.33} \times D_1 \times H) + (\theta_0^{3.33} \times D_m)}{\eta^2} \times \frac{1}{(\rho_0 \times K_0) + \theta_m + (\theta_0 \times H)} = \frac{\left(6.23E \cdot 0.4 \times 0.088 \times 0.230\right) + \left(0.0004 \times 1.02E \cdot 0.05\right)}{0.0404} \times \frac{1}{0.0404} \times \frac{1$$

Soil Component of the Migration to Groundwater Cleanup Objective (Class 1)
$$S-17 = C_w \times \left[K_d + \frac{(\theta_w + \theta_0 \times H)}{pb} \right] = 0.1 \times \left[0.68 + \frac{(0.092 + 0.109 \times 0.230)}{2.15} \right] = 0.073 \text{ mg/kg}$$

Tier 2 Industrial/Commercial Calculations for Benzene S & S Infinite Group, Inc. - DBA Downtown 66 2016-1089

Target Soil	Leachate (Concentration (Class 1)															
S-18 =		DF x GW _{obj}	=	20.00	x	0.005									=	0.1	
ioil-Water	Partition C	oefficient											-				
S-19 =		K _{oc} x f _{oc}	=	50.00	×	0.014									=	0.68	
Water-Fille S-20 =	d Porosity Θ _w =	η χ ι/(25-3)	=	0.20	×[-	0.300 1830,000	70.090								-	0.0917	
						1830.000											
Air-Filled F S-21 =		η - Θ"	=	0.20	•	0.09								•	=	0.1090	
Dilution Fa	ictor																
S-22 =	DF =	1 + Kxixd IxL	- = .	31.54 0.300	x	0.0200 12.192	x	3.884	• •	1 .					=	1.6697	
GW Ingesti S-23 =	ion	TR x BW x At, x 365 SF _o x IR _w x EF x ED	_ = .	1.0E-06 0.055	x	70 1.000	x	70 250	x x	365 25	-		=	1.8E+00 343,75	=	0.0052	. mg/L
Total Soil (S-24 =	Porosity η =	1 ·	=	1		2,15 2.69	•								=	0.2007	
Estimation		Zone Depth															
S-25 =	d =	(0.0112 x L ²) ^{0.5} + d _a 1 -exp (-L) (K x t	x l) x d _a)							•							•
			= (0.0112	x	12.192	²) ⁰⁵ +										
						3.048	×C	1 - exp	{-	-12,192 31.536	X X	0,3 0.0200) ×	3.048	<u>]</u> =	3.884	m
Soil Satura	ation Limit					<u> </u>											
S-29 =	C _{set} =	$\frac{S}{\rho_b} \times \left[(K_d \times \rho b) + \Theta w + (H' \times \Theta a) \right]$	= .	1800 2.15	× ((0.68	x	2.15	, +	0.092	+ (0.230	,	0.109)) =	1,322.01	mg/kg
Sall Gas C	outdoor Inh	alation						•									
	ROs g		_ = .	3,704 2.300E-01	x	0.230 0.109	*	2.150 0.092	*	1000 0.680	X	2.150	_	•	=	1,159.96	mg/m

Tier 2 Industrial/Commercial Calculations for Toluene S & S Infinite Group, Inc. - DBA Downtown 66 2016-1089

SSL SSL 8 RBCA

Date Compiled: 02/20/18

	_	RBCA	IRISHEAST												rrsion: 4/25	2016	
Input Value	9																
	's Bulk Density ->	0			to be used in						ÚSDA Soil Classi						
	anic Matter (%)>	0	FOC % (0.58 convers	ion)>	0.000		ic Matter (r		0		OC mg/kg (0,58 cor		0.000	foc conversion	to g/g:	0.000	
	pb - Dry Soil Bulk Den								= 1.8; Silt =	1.6; Cla	y = 1.7; or Site Sp	pecific					
2.69	ps - Soil Particle Dens						Site Spec										
0.109	O Air Filled Soil Por		0.10		a from S-21									0.19; or Calculated			
0.092	Ow - Water Filled Soil		0.09		e from S-20									0.17; or Calculated	Value (S2	20)	
0.201	η - SSL: Total Soil Por		0.20	1 Value	e from S-24			0.25; San	d = 0.32; Sit	t = 0.40	; Clay = 0.36; or C	Calculate	d Value (\$24 or	R23)			
0.02	I - Hydraulic Gradient					Site Sp											
20,000	foc - Total Organic Ca DF - Dilution Factor	irbon (g/g)	1.67	A Malue	e from S-22						or Site Specific 20 default is user	4 4144 44	alautatad uatua is				
3.884	d - Mixing Zone (m)		3.88		e from S-25		iculated v		3 less man 2	o, men	20 delaun is user	u, eise ca	alculated value is	suseu			
3.048	d. Depth of source (m)	0.00	i feet					hickness of	contam	ination)						
31.54	K - Hydraulic Conduct	-	cm/sec			Site Sp			4E+00			cmA/r	lise cm/d for P1	5, R19, & R26, cm	vr for R2		
12,192	L - Source Length Par				= 40		ecific (m)	0.0	12,00	CHUC I	3.13E-93	Çileyi I	036 01100 101 171	10,1(10, d 1020, che	yi 101 102	·	
3.048	d _a - Aquifer Thickness		The water is new ting	feet			ecific (m)										
0.3	I - Infiltration Rate (m/					0.3 for											
1830	K Saturated Hydrau		livity				ble K for I	nout Valu	AS PA							-	
1,000	GWood - Groundwater						2.5			r Remo	diation Objective	Class 2					
0.090	1/(2b+3) - Exponent for		Objective oldss r				ble K for I				Objective	-1033 Z					
15	BW - Body Weight		• .							n-carci	nogenic); Industris	eVComm	ercial = 70: Cons	struction Worker = 7	0: RBCA	= 70	
114		Soil Inges	tion Factor for Carcinogens			114		<u></u>								-	
50	IR _{soll} -Soil Ingestion R						ntial = 200	r Industri	al/Commerci	al = 50	Construction Wo	rker = 45	RO				
1	IRDaily Water Inge								Commercial		, 400	40	··				
530	S - Solubility in Water					Toluen		neustrial/	Commercial	- 1							
1.0E-06	TR - Target Cancer R							3. Inducti	ol/Commo	ial = 40	6; Construction W	locker =	10 ^d at paint of b	IIMON AVNOSTICO			-
250	EF - Exposure Freque			,		Reside	ntial = 350	· Industri	al/Commerci	ial = 25	0; Construction W	Orker = 1	30 at point of h	uman exposure			
25			lation for Non-Carcinogens		-						Construction Wor		· · · · · · · ·				-
68.81			entration at the center of a		urce						5.81; Constructio		r = 85.81; or Tab	le H			
7.90E+08	T - Exposure Interval					Reside	ntial = 9.5	x10 ⁸ ; Ind	ustrial/Comr	nercial	= 7.9 x 10 ⁸ ; Cons	truction \	Norker = 3.6 x 10	O ⁶			
30	TML - Exposure Interv	al for Mall	Limit Volatilization Factor E	quation S	26	30											
70	ED Exposure Duretic	on for Migrati	ion to Groundwater Mass-Limi	Equation S	S28	70											
0.18	IMA - Infiltration Rate I	or Migratio	n to Groundwater Mass-Lin	nit Equatio	on S28	0.18											
0.087	D _i - Diffusivity in Air			· · · · ·		Toluen	= 0.087										
0.271	H' - Henry's Law Cons	stant				Toluen	= 0.272										
8.60E-06	D Diffusivity in Wal					Toluen	= 8.6 x 1	10-6									
25			inogens in Ingestion Equa	ion					Commercial	= 25; C	onstruction Work	er = 0.11	5				
25			inogens in inhalation Equa	tion	_	Reside	ntial = 30;	Industrial	VCommercia	1 = 25;	Construction Wor	ker = 0.1	15				
1	THQ - Target Hazard					1											
- 5	RfC - Inhalation Refe		entration				: = 5; Sub			,	**						
0.8	RfD _o · Oral Reference						: = 0.08; S	ubchroni	¢ = 0.8 °				• •			4	
158.00	K _∞ • Organic Carbon	Partition C	oefficient			Totuen	e = 182										
Industriavo	commercial ingestion		on Objectives for Non-Ca	rcinogeni	ic Contamina	nts	70		25		365			000750			
S-1 =			(BW x AT x 365 ID.) x EF x ED x IR	_ =	- 1	X		x		x				= 638750 0.390625	=	1635200	mg/kg
1 .	_	10° x (1/R)	D) x EF x ED x IR _{sol}		0.000001	x 1/	0.8	×	250	×	25	×	50	0.390625			
		_															
Constructi	on Worker Ingestion F		n Objectives for Non-Car	cinogenic	Contaminan	ts											
S-1 =			BW x AT x 365		1	x	70	x	0.115	x	365				_	163236	malka
-,۱-دا		10 ⁻⁶ x (1/R)	D _o) x EF x ED x IR _{col}		0.000001	x 1/	0.8	x	30	x	. 1	×	480	0.018	_	103230	mg/kg
			٠ .							· .						·	
	an Madana Inhabati	71a - 11 D : :	Oblastica														
	on Worker Inhalation		żene Objective IQ x AT x 365		_		25		205					0406			
S-4 =			D x (1/RfC x 1/VF)	=	1 250	x	25 25	x x 1/	365 5	x 1/	11347,37618			= 9125 0,110158	=	82835.846	mg/kg
		Cr x Cl	- A THING A HAT!		250	^	29	^ "	•	^ "			tion Objective	e cannot exceed	Soil Se	ituration Lim	it
Ь—											1161 2	iaid	on Objective	- Jannot Exceed		uuvii Eiiii	
Inhalation	Non-Carcinogenic Co	nstruction	Worker														
1	va. vogcino 00		IQ x AT x 365	_	1	×	0.115	x	365	•				_ 41.975	_	EAE 000	
S-5 =			D x (1/RfC x 1/VF)	=	30	x	1	x 1/	5	x 1/	76.60077386			0.078328	=	535.886	mg/kg
			•						-								
RESIDENT	TAL OR COMMERCIA																
	Q	(3.	.14 x D _A x T) ^{1/2} x 10 ⁻¹	_	05.01	(3.14	x	7.67E-05	x	7.90E+08) 1/2 ×	0.0001	_ 3.7434	_	44047 0700	
S-8 =	VF = x-		14 x D _A x T) ^{1/2} x 10 ⁻⁴ (2 x ρ _b x D _A)	=	85.81	× /	2	v	2.15	v	7.67E-05	$\overline{}$		3.30E-04	=	11347,3762	
1	U		/~ ~ PD ~ CA)			,	4		2.19	^	1.01E+03	,		J.JVE-04			

Tier 2 Industrial/Commercial Calculations for Toluene S & S Infinite Group, Inc. - DBA Downtown 66 2016-1089

Construction Worker
$$S-8 = VF = \frac{Q}{C} \times \frac{(3.14 \times D_A \times T)^{1/2} \times 10^{-4}}{(2 \times \rho_A \times D_A)} = 85.81 \times \frac{(3.14 \times 7.67E-05 \times 3.60E+06)^{1/2} \times 0.0001}{(2 \times 2.15 \times 7.67E-05)} = \frac{0.2527}{3.30E-04} = 766.0077$$

Equation for Derivation of Apparent Diffusivity
$$S-10 = D_A = \frac{(0_s^{3.33} \times D_s \times H^s) + (0_s^{3.33} \times D_w)}{\eta^2} \times \frac{1}{(o_b \times K_0) + \theta_w + (\theta_b \times H^s)}$$

$$= \frac{(6.23E-04 \times 0.087 \times 0.271) + (0.0004 \times 8.60E-06)}{0.0404} \times \frac{1}{(2.15 \times 2.1488) + 0.09 + (0.109 \times 0.271)} = 7.67E-05$$

Soli Component of the Migration to Groundwater Cleanup Objective (Class 1)
$$S-17 = C_w \times \left[K_d + \frac{(\theta_w + \theta_e \times H)}{\rho b} \right] = 20 \times \left[2.1488 + \frac{(0.092 + 0.109 \times 0.271)}{2.15} \right] = 44.107 \text{ mg/kg}$$

Soil-Water Partition Coefficient
$$S-19 = K_d = K_{\infty} \times I_{\infty} = 158.00 \times 0.014 = 2.1488$$

Water-Filled Porosity
$$S-20 = \Theta_{W} = \eta \times \frac{1}{K_{\bullet}} = 0.20 \times \left[\frac{0.300}{1830.000} \right]^{0.990} = 0.0917$$



Air-Filled Porosity						
S-21 = $\Theta_a = \eta - \Theta_w$	=	0.20	•	0.09	=	0.1090

GW Ingestion													
S-23 =	TR x BW x At, x 365	_ =	1.0E-06	×	15	x	0	X	365	_ <u>0.0E+00</u>	. =	#DIV/0!	mg/L
3-23 -	SF _o x IR _w x EF x ED		0.000	x	1.000	×	250	×	25	0			

Total Soil Porosity
$$S-24 = \eta = 1 \cdot \frac{\rho_0}{\rho_1} = 1 \cdot \frac{2.15}{2.69} = 0.2007$$

Estimation of Mixing Zone Depth
$$S-25 = d = (0.0112 \times L^{2})^{65} + d_{0} \left[1 \cdot exp \quad \frac{(-L \times I)}{(K \times i \times d_{0})} \right]$$

$$= (0.0112 \times 12.192 \quad ^{2})^{65} + \frac{1}{3.048 \times \left[1 \cdot exp \quad \left\{ \frac{-12.192}{31.536} \times \frac{x}{0.0200} \times \frac{3.048}{3.048} \right\} \right] = 3.884 \quad m$$

Soll Satu	ration Limit												
S-29 =	$C_{sat} = \frac{S}{A} \times$	$((K_d \times \rho b) + \Theta w + (H' \times \theta a))$	$= \frac{530}{2.15} \times \{ \{ 2.1488 \}$	×	2.15 } +	0.092	+ (0.271	×	0.109)] =	1,168.82	mg/kg
	Рь		2.13										- 1

000184

Tier 2 Industrial/Commercial Calculations for Ethylbenzene S & S Infinite Group, Inc. - DBA Downtown 66 2016-1089

		SSL RBCA	SSL & RBCA IRIS/HEAST												Date Comp	iled: ion: 4/25/20	02/20/18 218	
Input Value:																		
	s Bulk Density ->	0	*** FOO % (0 F0 convenied								USDA Soil Clas						0.000	7
	nic Matter (%)> Pb - Dry Soil Bulk		FOC % (0.58 conversion	<u>y - 3 * 1 * 1 * 1 * 1 * 1 * 1 * 1 * 1 * 1 *</u>	0,000 4						y = 1.7; or Site:		ACH 0.000 43 1	100	conversion to	<u> </u>	0.000	*******
	ps - Soil Particle						Site Spec		- 1.0, 311 -	1.0, Cla	y - 1.7. 01 Site .	Specific						
	O Air Filled Soi		0,109	Value from					1 meter = 0.	13: Gra	vel = 0.05: San	1 = 0.14: Si	n =0.24; Clay = 0).19: or	Calculated Va	lue (S21)	
	Ow - Water Filled		0.092	Value from									It =0.16; Clay = 0					
	η · SSL: Total Soi		0.201	Value from							Clay = 0.36; or							
	i - Hydraulic Grad					Site Sp												
0.014	foc - Total Organi										or Site Specific							
	DF - Dilution Fact		1,670	Value from					is less than 2	<u>0, then</u>	20 default is us	ed, else ca	lculated value is	used				
	d - Mixing Zone (3.884	Value from			culated ve		thickness of		la adla al			<u> </u>				
	d. Depth of sour			feet = 10					thickness of			I	to a sould fee DAS		0.0000	(a. Data		
31.54	K - Hydraulic Cor			1.00E-04 : feet = 40		Site Sp		8.6	4E+00 >	cm/d	3.15E+U	з э споут	Use cm/d for R15	<u>, R19. </u>	& PC26. CITE YE	101 PC24 1		
12.192 3.048	d Aquifer Thick		roundwater Flow (m)	feet = 10			ecific (m) ecific (m)										_	
0.3	I - Infiltration Rate			1661 - 10		0.3 for l												
1830	K Saturated Hy		clivity				ole K for Ir	nut Vali	ies.									
0.700			ion Objective Class 1			1				r Reme	diation Objectiv	e Class 2						
0.090	1/(2b+3) - Expon		on objective class :				ble K for Ir			, , , , , , ,	alation objects	0 0,030 2						
	BW - Body Welgi									n-carcii	nogenic); Indust	dal/Comme	ercial = 70; Const	truction	Worker = 70;	RBCA =	70	
114	IF and Age Adju	sted Soil Inger	stion Factor for Carcinogens			114												
50	IRSoil Ingesti					Resider	ntial = 200	: Industri	ial/Commerci	al = 50	Construction V	Vorker = 48	0					
1	IRDaily Water								Commercial	_								
170	S - Solubility in V						nzene = 1											
1.0E-06	TR - Target Cano								iaVCommerci	ial = 10	6; Construction	Worker = 1	0 ^e at point of hu	man ex	posure			
250	EF - Exposure Fr					∢Reside	ntial = 350	; Industr	laVCommerci	al = 25	0; Construction	Worker = 3						
25			station for Non-Carcinogens								Construction We							
68,81			entration at the center of a squ	are source									= 85.81; or Tabl					
	T - Exposure Inte						ntial = 9.5	x10°; Inc	fustrial/Comr	nercial	= 7.9 x 10°; Cor	struction V	/orker = 3.6 x 10					
30			Limit Volatilization Factor Equ			30												
70			rtion to Groundwater Mass-Limit Ed			70												
0.18			on to Groundwater Mass-Limit	Equation S2	28	0.18												
0.075	D _i - Diffusivity in						nzene = 0											
0.324	H' - Henry's Law						nzene = 0											
	D _w - Diffusivity in						nzene = 7		(0 1-1	- 06. 0		4	•					
25 25			cinogens in Ingestion Equation cinogens in Inhalation Equatio								construction Wo Construction W							
1 1	THQ - Target Ha		Cinogens III IIII alation Equatio	"		1	11101 - 30,	maastiic	10 COMMICICIO	1 - 25,	CONSTIUCTION VV	91KG1 - 0.1						
	RfC - Inhalation I		centration			iChronic	= 1; Sub	chronic =	9				^		سستت			
0.1	RfD Oral Refe		• • • • • • • • • • • • • • • • • • • •						= 0.05		2. 7			_				
320.00	K _{oc} - Organic Ca	bon Partition (Coefficient			Ethylbe	nzene = 3	63										
Industrial/C	ommercial Inges		tion Objectives for Non-Carci	inogenic Co	ontaminar	nts												
S-1 =			x BW x AT x 365	_ = _	1	X	70	х	25	X	365			= -	3.125	=	204400	mg/kg
'		10° x (1/R	RfD _a) x EF x ED x IR _{coll}	'	0.000001	x 1/	0.1	×	250	×	25	×	50		3.125			
							-											-
Construction	on Worker Ingest		on Objectives for Non-Carcin	rogenic Cor	ntaminant	is.												
S-1 =		THQ	x BW x AT x 365	- = -	1	х	70	x	0.115	X	365			= -	2938.25	=	10202	mg/kg
5		10 ⁻⁶ x (1/P	R(D _a) x EF x ED x IR _{col} · ·	- · .	0.000001	x 1/	0.05	×	30	X	1	×	480		0.288			
L																		
Construction	on Worker Inhala	ion Tier II Rec	nzene Oblective									-						
	on morner minara		HQ x AT x 365	_	1	¥	25	×	365					_	9125	_	22000	
\$-4 =			ED x (1/RfC x 1/VF)	=	250	×	25	x 1/	1	x 1/	15808,2727	2		=	0.395363	=	23080	mg/kg
1											Tier	2 Inhalat	ion Objective	cann	ot exceed S	oil Sat	uration Lir	nit
Inhalation	Non-Carcinogeni	Construction	n Worker															
S-5 =			HQ x AT x 365	_ = _	11	x	0.115	x	365					_ = -	41.975	=	1343.798	mg/kg
		EF x E	ED x (1/RfC x 1/VF)		30	×	1	x 1/	9	x 1/	106.7141782		Ob!4!		0.031236			
											lier	2 Innaia	tion Objective) cann	ot exceed S	on Sat	uration Lir	nit
DECIDENT	IAL OR COMMER	CIAL																
KESIDENT			3.44 D T318 404			,	244	_	2.055.05		7 005+00) ^{1/2} x	0.0001		2 6074			
S-8 =	VF = 0		3.14 x D _A x T) ^{1/2} x 10 ⁻⁴	- =	85.81	Ļ×	3.14	×	3.95E-05	X	7.90E+08	<u>, x</u>	0.0001	_ = .	2.6871	=	15808.2727	
1	_		(2 x x x D.)			- (2		2 15		3 95F-05	1			1 70F-04			

(2 x ρ_b x D_A)

3.95E-05)

1.70E-04

2.15



Construction Worker
$$S-8 = VF = \frac{Q}{C} \times \frac{(3.14 \times D_A \times T)^{1/2} \times 10^4}{(2 \times \rho_b \times D_A)} = 85.81 \times \frac{(3.14 \times 3.95E-05 \times 3.60E+06)^{1/2} \times 0.0001}{(2 \times 2.15 \times 3.95E-05)} = \frac{0.1814}{1.70E-04} = 1067.1418$$

Equation for Derivation of Apparent Diffusivity $S-10 = D_A = \frac{(0_0^{353} \times D_1 \times H) + (0_0^{353} \times D_m)}{\eta^2} \times \frac{1}{(p_0 \times K_0) + \theta_m + (0_0 \times H)}$ $= \frac{(6.23E-04 \times 0.075 \times 0.324) + (0.0004 \times 7.80E-06)}{0.0404} \times \frac{1}{(2.15 \times 4.352) + 0.09 + (0.109 \times 0.324)} = 3.95E-05$

Soil Component of the Migration to Groundwater Cleanup Objective (Class 1)
$$S-17 = C_{w} \times \left[K_{y} + \frac{(\theta_{w} + \theta_{0} \times H')}{\rho b} \right] = 14 \times \left[4.352 + \frac{(0.092 + 0.109 \times 0.324)}{2.15} \right] = 61.757 \text{ mg/kg}$$

Target Soil Leachate Concentration (Class 1) $S-18 = C_w = DF \times GW_{cel} = 20.00 \times 0.700 = 14$

| Soil-Water Partition Coefficient | S-19 = K_d = K_{cc} x f_{cc} | = 320.00 x 0.014 | = 4.352

Water-Filled Porosity $S-20 = \Theta_w = \eta \times \frac{1}{K_s}$ $= 0.20 \times \left[\frac{0.300}{1830.000} \right]^{0.090}$ = 0.0917

Tier 2 Industrial/Commercial Calculations for Ethylbenzene S & S Infinite Group, Inc. - DBA Downtown 66 2016-1089

Air-Filled Porosity $S-21 = \Theta_{q} = \eta \cdot \Theta_{w} = 0.20 \cdot 0.09 = 0.1090$

Dilution Factor

S-22 = DF = 1 + Kx1xd = 31.54 x 0.0200 x 3.884 + 1 = 1.6697

GW Ingestion
S-23 = TR x BW x AL; x 365
SF, x IR, x EF x ED = 1.0E-06 x 70 x 0 x 365
SF, x IR, x EF x ED = 1.0E-06 x 70 x 0 x 365

= 0.0E+00
0 = #DIV/01 mg/L

Total Soil Porosity $S-24 = \eta = 1 \cdot \frac{\rho_b}{\rho_s} = 1 \cdot \frac{2.15}{2.69} = 0.2007$

Estimation of Mixing Zone Depth $S-25 = d = (0.0112 \times L^{2})^{0.5} + d_{o} \left[1 - \exp \left(\frac{(L \times I)}{(K \times I \times d_{o})} \right) \right]$ $= (0.0112 \times 12.192 \times 12.192 \times 0.3 \times 1.000$

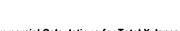
Soil Saturation Limit S-29 = $C_{sat} = \frac{S}{\rho_b} \times \left[(K_d \times \rho b) + \Theta w + (H' \times \theta a) \right] = \frac{170}{2.15} \times \left[(4.352 \times 2.15) + 0.092 + (0.324 \times 0.109) \right] = 749.91 \text{ mg/kg}$

Soil Gas Outdoor Inhalation
S-30 = ROs g = ROs g = ROs H X PD X 1000
H X PD X 1000
H X PD X 1000

= 749.907 x 0.324 x 2.150 x 1000
3.240 E-01 x 0.109 + 0.092 + 4.352 X 2.150

= 55,080.00 mg/m³





Tier 2 Industrial/Commercial Calculations for Total Xylenes S & S Infinite Group, Inc. - DBA Downtown 66 2016-1089

SSL & RBCA Date Compiled: 02/20/18 Version: 4/25/2016 Input Values Converted Value to be used in calculation sheet -> USDA Soil Classification: Sand Hotcomb's Bulk Density --> FOC % (0.58 conversion) → 0.000 Organic Matter (mg/kg) Organic Matter (%) -> 0.000 FOC mg/kg (0.58 conversion) fac conversion to a/a: 2.150 | Pb - Dry Soil Bulk Density 1.5 or, Gravel = 2.0; Sand = 1.8; Silt = 1.6; Clay = 1.7; or Site Specific ps - Soil Particle Density 2.69 12.65 or, Site Specific 0.109 O. - Air Filled Soil Porosity 0.109 Value from S-21 Top 1 meter = 0.28; below 1 meter = 0.13; Gravel = 0.05; Sand = 0.14; Silt = 0.24; Clay = 0.19; or Calculated Value (S21) 0.092 Ow - Water Filled Soil Porosity 0.092 Value from S-20 Top 1 meter = 0.15; below 1 meter = 0.30; Gravel = 0.20; Sand = 0.18; Silt = 0.16; Clay = 0.17; or Calculated Value (S20) 0.201 Value from S-24 0.43 or, Gravel - 0.25; Sand = 0.32; Silt = 0.40; Clay = 0.36; or Calculated Value (S24) 0.201 η - SSL: Total Soil Porosity 0.02 I - Hydraulic Gradlent Site Specific Surface Soil = 0.006; Subsurface Soil = 0.002; or Site Specific 0.014 foc - Total Organic Carbon (g/g) 20.000 DF - Dilution Factor 1.670 Value from S-22 If calculated value for DF is less than 20, then 20 default is used, else calculated value is used 3.884 d - Mixing Zone (m) 3.884 Value from S-25 2; or calculated value Depth of Source (Vertical thickness of contamination) 3.048 d. Depth of source (m) feet = 10 31.54 K - Hydraulic Conductivity (m/yr) cm/sec = 1.00E-04 Site Specific 8.64E+00 , cm/d 3.15E+03 ; cm/yr Use cm/d for R15, R19, & R26, cm/yr for R24 12.192 L - Source Length Parallel to Groundwater Flow (m) feet = 40 Site Specific (m) 3.048 d. Aquifer Thickness (m) feet = 10 Site Specific (m) I - Infiltration Rate (m/yr) 0.3 for Illinols K. - Saturated Hydraulic Conductivity See Table K for Input Values 10.000 GWood - Groundwater Remediation Objective Class 1 10 GWood - Groundwater Remediation Objective Class 2 0.090 1/(2b+3) - Exponent for S20 See Table K for Input Values Residential = 70 (carcinogenic); 15 (non-carcinogenic); Industrial/Commercial = 70; Construction Worker = 70; RBCA = 70 70 BW - Body Weight IF -Age Adjusted Soil Ingestion Factor for Carcinogens 114 IR_{soil} -Soil Ingestion Rate Residential = 200; Industrial/Commercial = 50; Construction Worker = 480 IR., -Daily Water Ingestion Rate ! Residential = 2: Industrial/Commercial = 1 110 S - Solubility in Water Total Xylenes = 186 Residential = 10⁻⁶; Industrial/Commercial = 10⁻⁶; Construction Worker = 10⁻⁶ at point of human exposure | Residential = 350; Industrial/Commercial = 250; Construction Worker = 30 1.0E-06 TR - Target Cancer Risk 250 EF - Exposure Frequency ED - Exposure Duration for Inhalation for Non-Carcinogens Residential = 30; Industrial/Commercial = 25; Construction Worker = 1 Q/C - Inverse of the mean concentration at the center of a square source Residential = 68.81; Industrial/Commercial = 85.81; Construction Worker = 85.81; or Table H 7.90E+08 T - Exposure Interval Residential = 9.5 x 108; Industrial/Commercial = 7.9 x 108; Construction Worker = 3.6 x 108 30 T_{M4} - Exposure Interval for Mall Limit Volatilization Factor Equation S26 30 ED_{MA} - Exposure Duration for Migration to Groundwater Mass-Limit Equation S28 70 IM - Infiltration Rate for Migration to Groundwater Mass-Limit Equation S28 0.18 Total Xylenes = 0.072 0.074 D_i - Diffusivity in Alr 0.271 H' - Henry's Law Constant Total Xylenes = 0.25 Total Xylenes = 9.34 x 10-6 9.23E-06 D. Diffusivity in Water Residential = 6; Industrial/Commercial = 25; Construction Worker = 0.115 AT - Average Time for Non-Carcinogens in Ingestion Equation Residential = 30; Industrial/Commercial = 25; Construction Worker = 0.115 AT - Average Time for Non-Carcinogens In Inhalation Equation 25 1 THQ - Target Hazard Quotlent |Chronic = 0.1; Subchronic = 0.4 RfC - Inhalation Reference Concentration Chronic = 0.2; Subchronic = 0.4 0.2 RfD_o - Oral Reference Dose 398.00 K_m - Organic Carbon Partition Coefficient Total Xylenes = 260 Industrial/Commercial Ingestion Remediation Objectives for Non-Carcinogenic Contaminant THO x BW x AT x 365 638750 365 S-1 = 408800 mg/kg = 0.000001 X (1/RIDA) X EJF X ED X IRCOR Construction Worker Ingestion Remediation Objectives for Non-Carcinogenic Contaminants 0.115 2938.25 – = - 0.0000001 81618 mg/kg |S-1 = IU X (1/RIU) X EF X EU X IK. Construction Worker Inhalation Tier II Benzene Objective THQ x AT x 365 |S-4 = = 2838.457 3.214774369 EF x ED x (1/R/C x 1/VF) x 1/ x 1/ 19441,48884 Tier 2 Inhalation Objective cannot exceed Soil Saturation Limit Inhalation Non-Carcinogenic Construction Worker THQ x AT x 365 x 0.115 41.975 73.451 mg/kg S-5 = 0.571470792 x 1/ 131.2403032 EF x ED x (1/RIC x 1/VF) 30 x 1/ 0.4 RESIDENTIAL OR COMMERCIAL 1 1/2 x (3.14 x D_A x T)^{1/2} x 10⁻⁴ 3.14 2.61E-05 7 90F+08 0.0001 2 1849

85.81

 $(2 \times \rho_b \times D_A)$

VF =

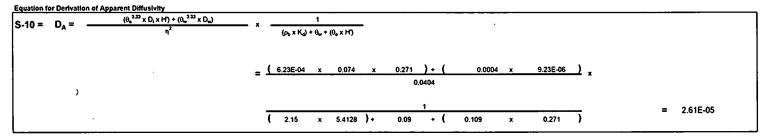
S-8 =

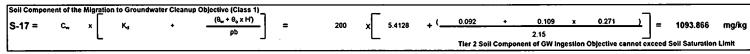
2.61E-05

19441.4888

1.12E-04







Target Soil	Leachate Concentration (Cla	ss 1)						
S-18 =	C _w =	DF x GW _{obj}	=	20.00	x	10.000	=	200

Water-Filled Porosity
$$S-20 = \Theta_{w} = \eta \times \frac{1}{K_{s}} \qquad = 0.20 \times \left[\frac{0.300}{1830.000} \right]^{0.000} = 0.0917$$

Tier 2 Industrial/Commercial Calculations for Total Xylenes S & S Infinite Group, Inc. - DBA Downtown 66 2016-1089

Air-Filled P	orosity						
S-21 =	$\Theta_{a} = \eta \cdot \Theta_{w}$	=	0.20	- 0.09		=	0.1090
					•		

GW Ingestion S-23 =	TR x BW x At _e x 365	 1.0E-06	x	70	x	0	x	365		=	#DIV/0!	mg/L
3-23	SF _o x IR _w x EF x ED	0.000	x	1.000	×	250	x	25	0			5.0

Total Soil Porosity
$$S-24 = \eta = 1 \cdot \frac{\rho_b}{\rho_s} = 1 \cdot \frac{2.15}{2.59} = 0.2007$$

			-											
- 1	Soll Saturatio S-29 =	on Limit $C_{sat} = \frac{S}{\rho_b} x$	[(K _d x pb) + 9w + (H' x 9a)}	= 110 x [(5.4128	×	2.15) +	0.092	+ (0.271	×	0,109)] =	601.63	mg/kg

Tier 2 Industrial/Commercial Calculations for Naphthalene S & S Infinite Group, Inc. - DBA Downtown 66 2016-1089

								2016-10	89								
		SSL	SSL & RBCA											Date Comp		02/20/18	
nput Value:		RBCA	[IRIS/HEAST]											Versi	ion: 4/25/	2016	
	's Bulk Density	-> 0	Convert	ed Value I	lo be used in	calculati	on cheet			- 1	JSDA Soil Class	ification: IS	and	Ε.			
	anic Matter (%)		FOC % (0.58 convers		0.000		nic Matter (r				OC mg/kg (0.58 co		• 0.000	foc conversion to	ofo:	0.000	
	pb - Dry Soil B		1 00 10 (0.00 00.00.00	0117 =-	0.000						Clay = 1.7; or Sit		0.000	100 00111013101110	99.	0.000	
	ps - Soil Partie		.,				Site Spe		2 - 1.0, OM	1,0, 0	21dy - 1.1, 01 OK	о орссии					
0.109	O - Air Filled		0.109	Value	from S-21				v 1 meter = i	0 13· G	ravel = 0.05: Sa	and = 0 14	Silt =0 24: Cla	ay = 0.19; or Calculated	Value	(S21)	
0.092		led Soil Porosity			from S-20									ay = 0.17; or Calculated			
0,201	n - SSL Total		0.201		from S-24						40; Clay = 0.36;					020/	
0.02	i - Hydraulic G					Site Sp		0.00, 00			, 0.0., 0.00,	0, 02,00,0					
0.014	foc - Total Org	anic Carbon (g/	9)_					006; Sut	surface Soi	1 = 0.00	02; or Site Speci	ifi¢					
20.000	DF - Dilution F	actor				If calcu	ilated valu	e for DF	is less than	20, the	en 20 default is	used, else	calculated val	ue is used			
	d - Mixing Zon						iculated v										
	d Depth of s			(feet =					thickness o								
31.54		Conductivity (m/				Site Sp			4E+00 i	cm/d	3.15E+03	i cm/yr U	lse cm/d for R	15, R19, & R26, cm/yr	for R24		
12.192			Groundwater Flow (m)	feet =			ecific (m)										
	d Aquifer Th			feet =	: 10		ecific (m)										
0.3	I - Infiltration F					0.3 for											
1830		Hydraulic Cond				See Ta	ble K for l	Input Val	lues								
0.140			tion Objective Class 1			_	0.22			r Rem	ediation Objecti	ve Class 2					
0.090	1/(2b+3) - Exp				ح		ble K for										
70	BW - Body W			<u> </u>			ntial = 70	(carcino	genic); 15 (r	ion-car	cinogenic); Indu	strial/Com	mercla1 = 70; (Construction Worker = 7	0; RBC	CA = 70	
114			estion Factor for Carcinogens			114											
50	IR _{sor} -Soil inge	estion Rate				Reside	ntial = 20	0; Indust	rial/Commer	rcial = 5	50; Construction	Worker =	480				
1	IR., -Daily Wa	ter Ingestion Ra	te			Reside	ntial = 2; t	industria	V Commercia	a1 = 1							
31	S - Solubility i	n Water					alene = 3										
1.0E-06	TR - Target C					Reside	ntial = 10	⁶ ; indust	rial/Commer	rcial = 1	10 ⁻⁶ ; Constructio	n Worker =	10 ⁻⁶ at point	of human exposure			
250	EF - Exposure										250; Constructio						
25			halation for Non-Carcinogens								5; Construction \						
68.81			centration at the center of a s	quare sour	rce						= 85.81; Constru						
7.90E+08	T - Exposure						ntial = 9.5	x10", In	idustrial/Con	nmercia	al = 7.9 x 10 ⁶ ; C	onstruction	Worker = 3.6	x 10°			
30			all Limit Volatilization Factor E			30											
70			ration to Groundwater Mass-Limit			70											
0.18			tion to Groundwater Mass-Lim	π Equation	n S28	0.18											
0.059	D _i - Diffusivity						nalene = 0										
0.0198	H - Henry's L						nalene = 0							 		*	
7.50E-06	D _w - Diffusivity						alene = 7										
25 25			arcinogens in ingestion Equati arcinogens in inhalation Equat								Construction W						
1		Hazard Quotien		ion		1	muai = 30	ingusin	avcommerc	121 = 23	o, Construction	worker = U	.115				
0.003		on Reference Co				Chmoi	c = 0.003·	Subche	onic = 0.003			· · .					
0.020		eference Dose	nicentation .				c = 0.00;					.					
500.00	<u> </u>	Carbon Partition	Coefficient				nalene = 2		NC - 0,0					•			
300.00	Noc - Organic	Carbon Partition	Coemcient			марни	ialelle - 2	,000									
Industrial/C	ommercial Inc	estion Remedi	ation Objectives for Non-Car	cinogenic	: Contamina	nts					·						
S-1 =	•	TH	2 x BW x AT x 365	-	1	×	70	×	25	×	365			_ 638750	_	*****	
3·1 =	_	10 ⁶ x (1	(RfD _a) x EF x ED x IR _{ani}	_ =	0.000001	x 1/	0.02	×	250	×	25	×	50	15.625	=	40880	mg/kg
Capetarati	n Wadar Isa	etlan Damadia	tion Objectives for Non-Card	lnage-1-	Cantamia												
	on Horker inge		uon Objectives for Non-Card 2 x BW x AT x 365				70	×	0,115	v	365			2938.25			
S-1 =			/RIDa) x EF x ED x IR	— =	0.000001	x 1/	0.6	X	30	<u> </u>	1		480	- = 2938.25 0.024	=	122427	mg/kg
	•	10 X(1	11/10 V EL Y EN Y 11/10) .	•	0.000001	Α "	0.0	^	30	•		x	400	0.024			
Construction	on Worker Inha	alation Tier II Be	enzene Objective													•	
S-4 =	_		THQ x AT x 365	_ = .	1	x	25	×	365					9125	=	392.664	mg/kg
		EF x	ED x (1/R/C x 1/VF)		250	X	25	x 1/	0.003	x 1/	89649.24924			23.23871		JJ2.004	g, ky
	Non-Carcinoge	nic Constructi					0.445		200					44.036			
S-5 =	_		THQ x AT x 365 ED x (1/R(C x 1/VF)	·= ·	30	<u> </u>	0.115	X	365 0.003	41	COE 1707400			$=\frac{41.975}{16.52402}$	=	2.540	mg/kg
		EF X	ED X (IIRIC X IIVF)		30	x	1	x 1/	0.003	X 1/	605.1797139			10,52402			
																	-
RESIDENT	IAL OR COMM	ERCIAL						-				-					
			(3.14 x D ₄ x T) 1/2 x 10 ⁻⁴			1	3.14	×	1.23E-06	×	7.90E+08) 1/2 x	0.0001	_ 0.4738			
S-8 =	VF =		(3.14 x D _A x T) ^{1/2} x 10 ⁻⁴ (2 x p _b x D _A)	=	85.81	×÷	2		2,15	-		' ^	0.0007	5,29E-06	=	89849.2492	
i	(•	(2 X ρ _b X U _A)			(2	×	2.15	X	1,23E-06	,		5.29E-06			

Tier 2 Industrial/Commercial Calculations for Naphthalene

S & S Infinite Group, Inc. - DBA Downtown 66

Co	nstructi	on Worker					-		2010-1									
s-	Ω =	VF =	<u> </u>	(3.14 x D _A x T) ^{1/2} x 10 ⁻⁴	. -	85.81	٦,	3.14	x	1.23E-06	×	3.60E+06) ^{1/2} x	0.0001	_ =	0.0320	_	6051.7971
7	0 –	*1 -	c	(2 x p ₀ x D _A)		05.01	7	2	×	2.15	×	1.23E-06)			5.29E-06	_	0031.7371

Equation for Derivation of Volatilization Factor - Construction Worker

S-9 = VF' = VF = 6051.7971

10 = 6051.7971

= 6051.7971

Equation for Derivation of Apparent Diffusivity $S-10 = D_A = \frac{(\theta_a^{3.33} \times D_1 \times H) + (\theta_a^{3.23} \times D_a)}{\eta^2} \times \frac{1}{(\rho_b \times K_a) + \theta_a + (\theta_b \times H)}$ $= \frac{\left(6.23E-04 \times 0.059 \times 0.020\right) + \left(0.0004 \times 7.50E-06\right)}{0.0404} \times \frac{1}{(0.0004 \times 7.50E-06)} \times \frac{$

Soil Component of the Migration to Groundwater Cleanup Objective (Class 1) $S-17 = C_w \times \left[K_d + \frac{(\theta_w + \theta_b \times H)}{\rho b} \right] = 2.8 \times \left[6.8 + \frac{(0.092 + 0.109 \times 0.020)}{2.15} \right] = 19.163 \text{ mg/kg}$

Soli-Water Partition Coefficient $S-19 = K_d = K_{\infty} \times f_{\infty} = 500.00 \times 0.014 = 6.8$

Water-Filled Porosity $S-20 = \Theta_{w} = \eta \times \frac{1}{K_{o}} \times \frac{1}{K_{o}} = 0.20 \times \left[\frac{0.300}{1830.000} \right]^{0.000} = 0.0917$

Tier 2 Industrial/Commercial Calculations for Naphthalene S & S Infinite Group, Inc. - DBA Downtown 66 2016-1089

Air-Fitted Porosity			 		
$S-21 = \Theta_a = \eta \cdot \Theta_w$	=	0.20	0.09	=	0.1090

GW Ingestion												
S-23 =	TR x BW x At, x 365	1.08	-08	x	70	X	0	×	365	 =	#DIV/0!	mg/L
3-23	SF _o x IR _m x EF x ED	0.0	00	×	1.000	x	250	×	25	 _	#B1410.	g.L

Total Soil Poresity
$$S-24 = \eta = 1 \cdot \frac{\rho_b}{\rho_b} = 1 \cdot \frac{2.15}{2.69} = 0.2007$$

Estimation of Mixing Zone Depth
$$S-25 = d = (0.0112 \times L^{2})^{0.5} + d_{a} \left[1 - \exp \left(\frac{(-L \times I)}{(K \times I \times d_{a})} \right) \right]$$

$$= (0.0112 \times 12.192^{-2})^{0.5} + \frac{(-12.192 \times 0.3)}{31.536 \times 0.0200 \times 3.048} \right] = 3.884 \text{ m}$$

Soll Satural	ion Limit														
S-29 =	$C_{sat} = \frac{S}{\rho_b} x$	[(K _d x pb) + Ow + (H' x 0 a)]	$= \frac{31}{2.15} \times [($	6.8	×	2.15) +	0.092	+ (0.020	×	0.109)] =	212.16	mg/kg

000193

Tier 2 Industrial/Commercial Calculations for MTBE S & S Infinite Group, Inc. - DBA Downtown 66 2016-1089

SSL & RBCA RBCA IRIS/HEAST Date Compiled: 02/20/18 Version: 4/25/2016

		RBCA	IRIS/HEAST									Versi	on: 4/25/20	716	
Input Values															
	's Bulk Density ->			Value to be used in c					USDA Soil Classification				-4-1		
-	nic Matter (%) -		FOC % (0.58 conversion) -> 0.000		c Matter (mg/)			OC mg/kg (0.58 conversion		1 10	oc conversion to	9/9:	0.000	
	ρ _b · Dry Soil Bull							t = 1,6; C	ay = 1.7; or Site Specific						-
	ps - Soil Particle					Site Specific				. 0'# -0 04: 01-:	- 0.40		-1 (00		
	Θ. · Air Filled So		0.109	Value from S-21					avel = 0.05; Sand = 0.14						
	Ow - Water Filler		0.092	Value from S-20					avel = 0.20; Sand = 0.18		= 0.17;	or Calculated V	alue (SZI	D)	
	ղ - SSL & Թլ - Ri		Porosity 0.201	Value from S-24			5; Sand = 0.32;	Silt = 0.4	0; Clay = 0.36; or Calcul	ated Value (S24)					
	i - Hydraulic Gra				Site Sp						_				
	foc - Total Organ DF - Dilution Fac		1,670	Value from S-22					2; or Site Specific n 20 default is used, else	anlessado en la colum	in mond				
	d - Mixing Zone		3,884	Value from S-22		ated value to Iculated valu		an 20, the	n 20 gelaun 15 useg, eist	calculated value	is used				-
	d Depth of sou		3.004	feet = 10			rtical thickness	of contac	mination)						$\overline{}$
	• •			1.00E-04						100000000000000000000000000000000000000	45 040	A DOC	· 004		-
31.54	K - Hydraulic Co				Site Sp		8.64E+00	I CUNO	3.15E+03 cm/yr	Tose cuna ioi k	15, 1419	, a rezo. chuyi i	101 FQ24		
12.192			roundwater Flow (m)	feet = 40		ecific (m)									
3.048	d Aquifer Thic			feet = 10		ecific (m)									
0.3	1 - Infiltration Rai				0.3 for 1										
	K Saturated H					ole K for Inpu			atata a Abbasit a Ab						
0.070			ion Objective Class 1					ner Reme	diation Objective Class	<u> </u>					
0.090	1/(2b+3) - Expor					ole K for Inpu							0001	- 70	
70	BW - Body Weig			!		mai = 70 (ca	rcinogenic); 15	(non-carc	inogenic); Industrial/Con	nmercial = 70; Co	nstructi	on worker = 70;	KBCA =	. 10	
			stion Factor for Carcinogens		114										
50	IR _{coll} -Soil Ingest	tion Rate			Resider	rtial = 200; Ir	ndustrial/Comm	ercial = 5	0; Construction Worker =	480					
1	tR., -Daily Water	r Ingestion Rate	,		Reside	itial = 2; Indi	ustrial/Commen	cial = 1							
51000	S - Solubility in \	Water			MTBE :	51,000									
1.0E-06	TR - Target Can	cer Risk		1	Reside	ntial = 10 ⁻⁶ ; la	ndustrlal/Comm	erclat = 1	0 ⁻⁶ ; Construction Worker	= 10 ⁻⁶ at point of	human	exposure			
250	EF - Exposure F				Reside	ntial = 350; Ir	ndustria//Comm	ercla1 = 2	50; Construction Worker	= 30					
25			alation for Non-Carcinogens						Construction Worker =						
68.81	Q/C - Inverse of	the mean cond	entration at the center of a squi	are source					85.81; Construction Wo						
7.90E+08	T - Exposure Int	erval			Reside	ntial = 9.5 x1	08; Industrial/Co	ommercia	1 = 7.9 x 108; Constructio	n Worker = 3.6 x	10 ⁶				
30	T _{ML} - Exposure	Interval for Mal	l Limit Volatilization Factor Equa	ation S26	30										
70	EDwy - Exposure (Duration for Migra	ation to Groundwater Mass-Limit Eq	uation S28	70										
0.18	I _{ML} - Infiltration I	Rate for Migrati	ion to Groundwater Mass-Limit E	Equation S28	0.18										
0.102	D _i - Diffusivity in	n Air			MTBE 4	0.102									
0.0241	H' - Henry's Law					0.0241									
	D Diffusivity is					1.1 x 10 ⁻⁵			••						
25			rcinogens In Ingestion Equation				ıstdal/Commen	riel = 25.	Construction Worker = 0	115					
25			rcinogens in Inhalation Equation						Construction Worker =						
1	THQ - Target Ha				1										
3	RfC - Inhalation				Chronic	= 3; Subchr	onic = 2.5								
0.01	RfD Oral Refe						chronic = 0.1		•		•				
11.50	K _m - Organic Ca		Coefficient		MTBE										
11.50	1.00 - Olamin Of														
Residential	Ingestion Remo	diation Object	ives for Non-Carcinogenic Co	intaminants											
	yesuvii Neme		x BW x AT x 365	mianinanis 1	×	70	x 25	¥	365			638750			
S-1 =	_		RIDA) x EF x ED x IR.	- = 0.000001	x 1/		x 250	- î	25 x	50	- =	31.25	=	20440	mg/kg
1		10 X (1/F	NOW A E.F. A E.D. A IT 400	0.00001	× 1/	0.01	. 250	•	20 X	30		VV]
Construction	on Worker Inges	tion Remediati	ion Objectives for Non-Carcin	onenic Contaminant											
	roiner myes		x BW x AT x 365	ogeme comaminant	×	70	x 0.115	x	365			2938.25			
S-1 = ` ^	· · · · 		R(D _a) x EF x ED x IR _{ent}	0.000001	x 1/		x 30		1 x	480	- =	0.144	=	20405	mg/kg
		(111	HEN VEL VERVIAM	0.00001	^ "	4.1	_ ••	•				•			
Construction	on Worker Inhala	ation Tier II Be	nzene Objective												
S-4 =			HQ x AT x 365	_ 1	×	25	x 365					9125	_	46347.267	mg/kg
3-4 =		EF x E	ED x (1/R/C x 1/VF)	250	×	25	x 1/ 3	x 1/	10581.56779			0.196883	-	-33 -1 1.201	g, kg
1			•						Tier 2 Inha	ation Objectiv	e can	not exceed S	oil Sate	uration Limi	it
Inhalation	Non-Carcinogen	ic Constructio	n Worker												
S-5 =	-		HQ x AT x 365	1	x	0.115	x 365			-	_ =	41.975	=	249.860	mg/kg
3.3 =		EF x E	ED x (1/RIC x 1/VF)	30	×	1 >	1/ 2.5	x 1/	71.43116339			0.167994	-	243.000	g/xy

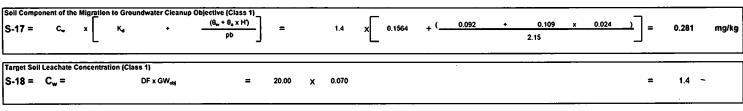
Tier 2 Industrial/Commercial Calculations for MTBE

	S & S Infinite Group, Inc DBA Downtown 6
	 2016-1089
ESIDENTIAL OR COMMERCIAL	

R	RESIDENT	1AL OR CO	MMERC	IAL														
١	S-8 =	VF =	Q	' (3.14 x D _A x T) ^{1/2} x 10 ⁻⁴	. =	85.81	<u>, (</u>	3.14	x	8.82E-05	x	7.90E+08) ^{1/2} ×	0.0001	4.0143	=	10581,5678	
ľ	-	V -	c	(2 x Pb x DA)	_	00.01	<u> </u>	2	×	2.15	×	8.82E-05)		3.79E-04	_		

Construction Worker $S-8 = VF = \frac{Q}{C} \times \frac{(3.14 \times D_A \times T)^{1/2} \times 10^4}{(2 \times \rho_b \times D_b)} = 85.81 \times \frac{(3.14 \times 8.82E-05 \times 3.60E+06)^{1/2} \times 0.0001}{(2 \times 2.15 \times 8.82E-05)} = \frac{0.2710}{3.79E-04} = 714.3116$

Equation for Derivation of Apparent Diffusivity $S-10 = D_A = \frac{(\theta_o^{3.33} \times D_i \times H') + (\theta_o^{3.33} \times D_w)}{\eta^2} \times \frac{1}{(\rho_b \times K_o) + \theta_w + (\theta_o \times H')} = \frac{\left(6.23E-04 \times 0.102 \times 0.024 \right) + \left(0.0004 \times 1.10E-05 \right)}{0.0404} \times \frac{1}{(2.15 \times 0.1564) + 0.09 + \left(0.109 \times 0.024 \right)} = 8.82E-05$



Soil-Water Partition Coefficient $S-19 = K_d = K_{\infty} \times I_{\infty} = 11.50 \times 0.014$ = 0.1564

CRIOO

Tier 2 Industrial/Commercial Calculations for MTBE

$$S-20 = \Theta_{w} = \frac{1}{\eta} \times \frac{1}{K_{v}} = 0.20 \times \left[\frac{0.300}{1830.000} \right]^{0.000} = 0.0917$$

$$Alr-Filled Porosity$$

$$S-21 = \Theta_{0} = \frac{1}{\eta} \cdot \Theta_{w} = 0.20 \cdot 0.09 = 0.1090$$

Total Soil Porosity S-24 =
$$\eta = 1 - \frac{\rho_b}{\rho_a}$$
 = $1 - \frac{2.15}{2.69}$ = 0.2007

Soil Saturation Limit
$$S-29 = C_{aat} = \frac{S}{\rho_b} \times \left[(K_d \times \rho b) + \Theta w + (H' \times \Theta a) \right] = \frac{51000}{2.15} \times \left[\{ 0.1564 \times 2.15 \} + 0.092 + \{ 0.024 \times 0.109 \} \right] = 10,221.04 \text{ mg/kg}$$

Tier 2 Industrial/Commercial Calculations for Benzo[a]pyrene \$ & \$ Infinite Group, Inc. - DBA Downtown 66 2016-1089

		SSL	SSL & RBCA							••							Date Com	oiled:	02/20/18	
		RBCA	IRIS/HEAST															zion: 4/25		
Input Values	5		تستستا																	
	's Bulk Density ->	0	Conv	verted	Value to	be used in	calcuta	tion sheet	~>	-		USDA Soil Cla	ssification	n: Sa	nd					
Orga	nic Matter (%) ->	0	FOC % (0.58 conv	ersior	1) ->	0.000	Orga	nic Matter (n	ng/kg)	0	F	OC mg/kg (0.58	conversio	n)	0.000	7	foc conversion (o g/g:	0.000	
2.15	Pb - Dry Soil Bulk	Density			<u> </u>					= 1.8; S		lay = 1.7; or S				_				
	ps - Soil Particle							r, Site Spe												
0.109	O Air Filled So	il Porosity	0.	109	Value f	rom S-21	Top 1	meter = 0.3	28; below	1 meter	= 0.13; G	ravel = 0.05; S	Sand = 0.1	14; Sil	t =0.24; Cla	ay = 0.1	9; or Calculated	Value ((S21)	
0.092	Ow - Water Filled	Soil Porosity	0.	092	Value f	rom S-20											7; or Calculated			
0.201	n - SSL: Total So	il Porosity	0.	201	Value f	from S-24						0; Clay = 0.38								
	I - Hydraulic Grad							pecific												
0.014	foc - Total Organ	ic Carbon (g/c)				Surfac	te Soil = 0.	006; Sub	surface S	0.00 = (io	2; or Site Spe	cific							
	DF - Dilution Fac			593		from S-22				is less th	an 20, the	n 20 default is	used, el	se cal	culated val	lue is us	sed			
	d - Mixing Zone (468		rom S-25		alculated v												
	K - Hydraulic Cor			ec =	1.00E-0			pecific	8.64	1E+00) cm/d	3.15E+	03 cm/y	r Us	e cm/d for l	R15, R1	19, & R26. cm/	r for R2	4	
			roundwater Flow (m)		feet =			pecific (m)												
	d Aquifer Thicl				feet =	10		pecific (m)												
	I - Infiltration Rat							r Illinois												
	K, - Saturated Hy							able K for I												
			ion Objective Class 1					0.025			ater Reme	ediation Objec	tive Class	5 2						
	1/(2b+3) - Expon							able K for I												
	BW - Body Weig							ential = 70	(carcinog	genic); 15	(non-can	clnogenic); tnd	lustrial/Co	omme	rclal = 70; (Constru	ction Worker =	70; RBC	A = 70	
			stion Factor for Carcinoge	ens			114													
50	IR _{edi} -Soil Ingest	ion Rate					Resid	ential = 200); Industr	riat/Comm	nercial = 5	io; Constructio	n Worker	r = 480)					
7.3	SFOral Slop F	actor					Benzo	(a)Pyrene	= 7.3											
1	IR., -Daily Water	Ingestion Rat	•				Resid	entla1 = 2; l	ndustrial	/Comme	cial = 1									
0.00162	S - Solubility In V	Vater					Benzo	alpyrene	0.0016	2										
	TR - Target Can			_			Resid	ential = 10	6; Industi	rial/Comn	nercial = 1	10 ⁻⁶ ; Construct	ion Work	er = 11	0 ⁻⁶ at point	of hum	an exposure			
70	AT _c -Average Tir	ne for Carcino	gens				170													
	URF - Inhalation		<u> </u>				Benzo	alpyrene :	28 8 × 10	·2							-			
	EF - Exposure F										nercial = 2	50; Constructi	ion Worke	er = 3(
25	ED - Exposure D	uration for Int	alation fo Carcinogens									Construction								
85.81	Q/C - Inverse of	the mean con	centration at the center of	a squ	are sourc	ce						85.81; Const								
9.50E+08	T - Exposure Inte	erval					Resid	entiat = 9.5	x10 ⁶ ; In:	dustriaVC	ommercia	ai = 7.9 x 10 ⁸ ; (Construct	tion W	orker = 3.6	x 10 ⁶				
0.043	D _i - Diffusivity In	Air					Benzo	o(a)pyrene	0.043											
4.63E-05	H' - Henry's Law	Constant					Benzo	o[a]pyrene	= 4.63 x	10 ⁻⁵										
9.00E-06	D Diffusivity in	Water					Benzo	ojajpyrene :	= 9.00 x	10 ⁻⁸										_
1020000	K _{oc} - Organic Ca	rbon Partition	Coefficient				Benzo	ojajpyrene :	= 1.020.0	000										
	rec organicou					-		-[-] -)												
Industrial/C	ommercial Inges	tion Tier II O	piective																	
			k BW x AT, x 365			1.0E-06	x	70	v	70	v	365					1.8E+00			
S-3 =	_		x EF x ED x IRsoil		- = -	7.300	x	1.00E-06		250	<u> </u>	25			50	_ =	2.28E+00	=	0.784	mg/kg
		31 ₀ X 11	/ X EF X ED X INSUII			7.300	^	1.006-06	x	250	x	25		x	20		2.28E+00			
		_																		
Construction	on Worker Ingest																			
S-3 =	_		x BW x AT _c x 365		_ = -	1.0E-06	X	70	x	70	X	365	_			=	1.8E+00	=	17.01	mg/kg
		Sf _o :	: 10 ⁻⁸ x EF x IRsoil			7.300	×	1.00E-06	x	30	×	480					1.05E-01		*****	
Industrial/C	ommercial Inhal	ation Tier II C	bjective																	
	· .		'R x ATc x 365			1.0E-06	*	70	¥ .	. 365							0.02555			
S-6 =					_ = -										4 4 4 4 4 4 4 4	_ =		=	2.11E+02	mg/kg
I		URF x 1	000 x EF x ED x 1/VF			1.10E-03	×	1000	×	250	x	25	> ((1/	5.68E+07)	1.21E-04			

Tier 2 Industrial/Commercial Calculations for Benzo[a]pyrene

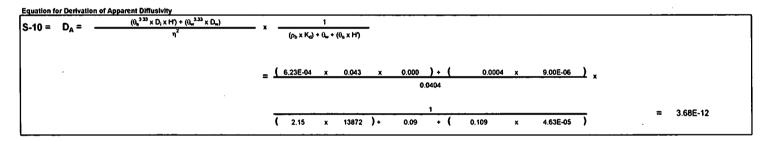
S & S Infinite Group, Inc. - DBA Downtown 66

						2016-10	189									
Construction Worker	Inhalation Tier II Objective															
S-7 =	TR x ATc x 365	. =	1.0E-06	x	70	x	365					. =	0.02555	=	2.71E+02	mg/kg
3-, -	URF x 1000 x EF x ED x 1/VF	_	1.10E-03	x	1000	x	30	×	1	> ((1/ 3.50E+05)	-	9.43E-05	_	2.7 12 702	mg/kg

RESIDENTIAL OR COMMERCIAL

S-8 = VF =
$$\frac{Q}{C} \times \frac{(3.14 \times D_A \times T)^{1/2} \times 10^4}{(2 \times \rho_b \times D_A)}$$
 = 85.81 $\times \frac{(3.14 \times 3.68E-12 \times 9.50E+08)^{1/2} \times 0.0001}{(2 \times 2.15 \times 3.68E-12)}$ = $\frac{0.0009}{1.58E-11}$ = 56844975.3174

Construction Worker
$$S-8 = VF = \frac{Q}{C} \times \frac{(3.14 \times D_A \times T)^{1/2} \times 10^4}{(2 \times \rho_b \times D_A)} = 85.81 \times \frac{(3.14 \times 3.68E \cdot 12 \times 3.68E \cdot 12 \times 3.60E \cdot 06)^{1/2} \times 0.0001}{(2 \times 2.15 \times 3.68E \cdot 12)} = \frac{0.0001}{1.58E \cdot 11} = 3.50E \cdot 06$$



Target Soil Leachate Concentration (Class 1)
$$S-18 = C_{w} = DF \times GW_{eq} = 20.00 \times 0.005$$

$$= 0.1$$

$$Soil-Water Partition Coefficient$$

$$S-19 = K_{d} = K_{ee} \times I_{ee} = 1.02E+06 \times 0.014$$

$$= 13872$$

Water-Filled Porosity
$$S-20 = \Theta_{w} = \eta \times \frac{1}{K_{s}} \times \frac{1}{K_{s}} = 0.20 \times \left[\frac{0.300}{1830.000} \right]^{0.000} = 0.0917$$

Tier 2 Industrial/Commercial Calculations for Benzo[a]pyrene

S & S Infinite Group, Inc. - DBA Downtown 66

					2016-1089	
Air-Filled Porosity						
S-21 = Θ _a = η · Θ _w	=	0.20	•	0.09	·	0.1090

Total Soil Porosity
$$S-24 = \eta = 1 \cdot \frac{\rho_b}{\rho_e} = 1 \cdot \frac{2.15}{2.69} = 0.2007$$

Estimation of Mixing Zone Depth
$$S-25 = d = (0.0112 \times L^2)^{0.5} + d_0 \left[1 - \exp \left(\frac{(-L \times I)}{(K \times I \times d_0)} \right) \right]$$

$$= (0.0112 \times 15.850^{-2})^{0.5} + \frac{(-15.850 \times 0.3)}{31.536 \times 0.0200 \times 3.048} \right] = 4.468 \text{ m}$$

Soil Saturation Limit S-29 =
$$C_{\text{sat}} = \frac{S}{\rho_b} \times \left[(K_d \times \rho b) + \Theta w + (H' \times \theta a) \right] = \frac{1.62E \cdot 0.03}{2.15} \times \left[(13872 \times 2.15) + 0.092 + (4.63E \cdot 0.05) \times 0.109 \right] = 22.47 \text{ mg/kg}$$

LEAKING UST TECHNICAL REVIEW NOTES JUL 17 2018

REVIEWER: NR LPC #1430650114 -- Peoria County

Reviewed by: Scott McGill Date Reviewed: June 4, 2018

Re: LPC #1430650114 -- Peoria County JMF Peoria/S & S Infinite Group, Inc.

400 North East Adams Street Leaking UST Incident No. 20161089

Leaking UST Technical File

Document(s) Reviewed:

This document consists of a corrective action plan and budget dated March 19, 2018 and received by the Illinois EPA on March 20, 2018 and prepared by CW3M Company, Inc. This plan and budget were prepared in accordance with the 734 requirements and summarized as follows:

General Site Information:

Site subject to: 734

IEMA date(s): «IEMA_Date»	Payment from the Fund? (Y/N/unknown): yes
UST system removed? (Y/N): yes	OSFM Fac. ID #: 20161089
Encountered groundwater? (Y/N/unknown):	SWAP mapping and evaluation completion
yes	date: June 4, 2018
Free product? (Y/N/unknown): no	Site placement correct in SWAP? (Y/N): yes
Current/past land use: vacant lot	Inspection Required? (Date/Plan): no
Size & product of USTs: 1-6,000 diesel fuel, 2- and 1-560 used oil	-10,000 gasoline, 2-350 gasoline, 1-560 diesel
Is site located in EJ area? yes	Is investigation of indoor inhalation exposure route required? no
Has enough sampling been completed to	PLA Checklist Complete? Yes
perform a Right-to-Know Evaluation? yes	

Corrective Action Plan/Budget Review Notes:

The owner/operator propose a corrective action plan consisting of a Tier 2 evaluation and institutional controls. It should be noted that groundwater was not encountered during early action activities. The proposed institutional controls consist of a worker caution, Industrial/Commercial land use restriction and groundwater use restriction. The location of the worker caution is depicted in Drawing: 0006. The owner/operator propose 4 additional on-site soil borings to determine if additional soil should be removed from the site. The soil borings are depicted in Drawing: 0004A. 3 of the 4 borings will be advanced to a depth of 20 feet. The other soil boring will be advanced to a depth of 20 feet to determine the vertical extent of contamination. Soil samples will be collected at 5-foot intervals and the results will be evaluated for the BTEX, MTBE and PNA constituents. The results will be used to determine the depth of the excavation. Soil excavation activities will be submitted in an amendment to the corrective

action plan. Also, a potable well is located on-site and the owner/operator will address abandonment of the well in an amendment to the corrective action plan. Previous analytical soil results are summarized in tables included in Appendix F. The Tier 2 calculations are included in Appendix G.

The corrective action plan budget proposal is included in Appendix D. This amount includes costs in the amount of \$28,643.22. This amount includes costs for advancement of 4 soil borings to a depth of 20 feet including soil sampling for the BTEX, MTBE and PNA constituents, personnel costs and material costs. The following personnel costs lack supporting documentation and should be cut from the budget:

- 1. Costs in the amount of \$5,056.00 associated with a Senior Project Manager for 40 hours to complete corrective action design, report development and IEPA correspondence.,
- 2. Costs in the amount of \$2,022.40 associated with a Senior Project Manager for 16 hours to complete TACO Tier 2 calculations, development of cleanup objectives and groundwater modeling.,
- 3. Costs in the amount of \$3,033.00 associated with a Senior Project Manager for 24 hours to complete budget preparation and data evaluation.,
- 4. Costs in the amount of \$2,085.30 associated with a Senior Accountant Technician for 30 hours to complete reimbursement preparation forms. And
- 5. Costs in the amount of \$1,779.84 associated with a Geologist III to complete reimbursement development, inputs, contractor invoicing and evaluation with budget.

The following cuts should be made to the material costs: Copy costs in the amount of \$165.00, PID rental at \$129.00/day and measuring wheel at \$24.00/day.

Illinois EPA Decision:

The proposed corrective action plan should be approved however the budget proposal should be modified based on the aforementioned cuts to the budget. The owner/operator should submit an amended corrective action plan to address additional soil excavation activities at the site and abandonment of the potable well.

Response Due:

An amended corrective action plan should be submitted to the Illinois EPA.

LPC 1430650114 - Peoria County Peoria/S & S Infinite Group, Inc. 400 North East Adams Street Leaking UST Incident No. 20161089 Leaking UST Technical File

Right-to-Know Evaluation

The Bureau of Land site identified above has been reviewed. A check mark next to any one of the following criteria indicates further evaluation of the site is necessary.

CRIT	ERIA:
	Groundwater contamination is measured or modeled to exceed, within the setback zone or regulated recharge area of a potable Community Water Supply (CWS) well, or setback zone of a private well or non-CWS well, either TACO Tier 1 groundwater remediation objectives under Part 742, Appendix B, Table E or Class I groundwater standards under Part 620; or Five or fewer properties More than five properties
Ü	Measured off-site groundwater contamination from volatile chemicals from the site where a release occurred poses a threat of indoor inhalation exposure above appropriate Tier 1 remediation objectives for the current use of the site; or Five or fewer properties More than five properties
<u>r</u>	Soil contamination exceeding applicable remediation objectives for the soil component of the groundwater ingestion route is modeled to exceed, within the setback zone or regulated recharge area of a potable Community Water Supply (CWS) well, or setback zone of a private well or non-CWS well, either TACO Tier 1 groundwater remediation objectives under Part 742, Appendix B, Table E or Class I groundwater standards under Part 620; or Five or fewer properties More than five properties
	Contaminated soil is measured off-site to exceed the appropriate Tier 1 remediation objectives based on the current use of the off-site property; or \Box Five or fewer properties \Box More than five properties
	Measured off-site soil gas contamination from the site where the release occurred poses a threat of exposure above the appropriate Tier 1 remediation objectives for the current use of the site: or ☐ Five or fewer properties ☐ More than five properties
ū	BOL refers a matter to the Division of Legal Counsel for enforcement under Section 43(a) of the Act; or
口	BOL refers a site to the Division of Legal Counsel for issuance of a seal order under Section 34(a) of the Act.
Comm	ents:
Г	At least one of the above criteria is met and the above-identified site must be further evaluated.
	Insufficient information submitted to make an adequate RTK decision.
x	None of the above criteria are met and the above-identified site does not warrant any further evaluation.
Project	Manager Signature: Low Clilo Date: 5/11/18

VI Incomplete Pathway Checklist

Reviewed by: Scott Mc Date Reviewed: June 4,	· · · · · · · · · · · · · · · · · · ·			
SECTION 1				
Yes x No	Is there free product exceeding one-eighth of an inch in depth as measured in a groundwater monitoring well?			
Yes x No	Do laboratory analytical results indicate concentrations of indicator contaminants as a result of the release from the UST that exceed the soil saturation (C_{sat}) limit as determined at 35 Ill. Adm. Code 742.220?			
☐ Yes x No ☐ N/A	Is there contaminated groundwater (i.e., based upon laboratory analytical results [actual measured concentrations], levels of indicator contaminants as a result of the release from the UST that exceed Tier 1, Class I groundwater remediation objectives for the groundwater component of the groundwater ingestion route at 35 Ill. Adm. Code 742.Appendix B.Table E)?			
If "No" or "N/A" is chec (in Section 4) of this che	cked for all three of the above questions, continue with the final question ecklist.			
If "Yes" is checked for a in Section 2 to assess the	any one or more of the three questions above, continue with the questions e potential for PVI.			
SECTION 2				
☐ Yes ☐ No ☐ N/A	Is there an interval of at least five feet of uncontaminated soil between contaminated groundwater and the lowest point of an overlying receptor (building basement, foundation, slab, or crawl space) or ground surface if there is no overlying receptor?			
☐ Yes ☐ No ☐ N/A	Is there an interval of at least 15 feet of uncontaminated soil between C _{sat} soil or free product in a groundwater monitoring well and the lowest point of an overlying receptor (building basement, foundation, slab, or crawl space) or ground surface if there is no overlying receptor?			
If "No" is checked for either or both of the above two questions, investigation of PVI (via the				

indoor inhalation exposure route in accordance with Part 742) is required. Continue with

Page	2
- ~_	_

Sections 3 and 4 for informational purposes only, then go to the Conclusion section and check the box indicating that investigation of PVI is required.

			potential for PVI.			
SECT	TION 3					
] Yes	☐ No	No Are there natural or man-made pathways that may allow migration of vapors to indoor receptors?			
If "No	" is che	cked, con	tinue with the question in Section 4 to assess the potential for PVI.			
If "Ye	s" is ch	ecked, cor	ntinue with the following question.			
] Yes	☐ No	Has the UST owner or operator provided a 20-Day Certification?			
Contii	nue with	the quest	ion in Section 4 to assess the potential for PVI.			
SECT	TON 4					
] Yes	x No	Are there petroleum vapors in buildings as a result of the release from the UST?			
			gas sampling is not required. Investigation of PVI (via the indoor te in accordance with Part 742) is not required.			
		ecked, inv	restigation of PVI (via the indoor inhalation exposure route in accordance ed.			
CON	CLUSIC	ON				
Based	upon th	ne results o	of the current review and the Illinois EPA site-specific Tier 3 evaluation:			
	Investigation of PVI (via the indoor inhalation exposure route in accordance with Part 742) is required.					
X	Invest	igation of	PVI is not required.			

McGill, Scott

From:

McGill, Scott

Sent:

Friday, June 01, 2018 11:25 AM

To:

'vince@cwmcompany.com'

Cc:

Kuhlman, Eric

Subject:

RE: S & S Infinite Group, Inc., Incident No. 20161089

Vince,

Please provide supporting documentation for the following personnel costs within a week. Thanks in advance:

- 1. Costs in the amount of \$5,056.00 associated with a Senior Project Manager for 40 hours to complete corrective action design, report development and IEPA correspondence.,
- 2. Costs in the amount of \$2,022.40 associated with a Senior Project Manager for 16 hours to complete TACO Tier 2 calculations, development of cleanup objectives and groundwater modeling.,
- 3. Costs in the amount of \$3,033.00 associated with a Senior Project Manager for 24 hours to complete budget preparation and data evaluation.,
- 4. Costs in the amount of \$2,085.30 associated with a Senior Accountant Technician for 30 hours to complete reimbursement preparation forms. And
- 5. Costs in the amount of \$1,779.84 associated with a Geologist III to complete reimbursement development, inputs, contractor invoicing and evaluation with budget.



ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

1021 NORTH GRAND AVENUE EAST, P.O. BOX 19276, SPRINGFIELD, ILLINOIS 62794-9276 • (217) 782-3397

BRUCE RAUNER, GOVERNOR

ALEC MESSINA, DIRECTOR

217/524-3300

CERTIFIED MAIL

JUN 2 0 2018

7017 2680 0001 0213 3807

S & S Infinite Group, Inc. Attn: Syed Muneeb 400 North East Adams Street Peoria, IL 61603

IEPA - DIVISION OF RECORDS MANAGEMENT
RELEASABLE

SEP 1 8 2018

Re: LPC #1430650114 -- Peoria County

Peoria/S & S Infinite Group, Inc. 400 North East Adams Street

Leaking UST Incident No. 20161089

Leaking UST Technical File

REVIEWER: RDH

Dear Mr. Muneeb:

The Illinois Environmental Protection Agency (Illinois EPA) has reviewed the Corrective Action Plan (plan) submitted for the above-referenced incident. This plan, dated March 19, 2018, was received by the Illinois EPA on March 20, 2018. Citations in this letter are from the Environmental Protection Act (415 ILCS 5) (Act) and Title 35 of the Illinois Administrative Code (35 Ill. Adm. Code).

Pursuant to Sections 57.7(b)(2) and 57.7(c) of the Act and 35 Ill. Adm. Code 734.505(b) and 734.510(a), the plan is approved. The activities proposed in the plan are appropriate to demonstrate compliance with Title XVI of the Act. Please note that all activities associated with the remediation of this release proposed in the plan must be executed in accordance with all applicable regulatory and statutory requirements, including compliance with the proper permits.

In addition, the budget is modified pursuant to Sections 57.7(b)(3) and 57.7(c) of the Act and 35 Ill. Adm. Code 734.505(b) and 734:510(b). Based on the modifications listed in Section 2 of Attachment A, the amounts listed in Section 1 of Attachment A have been approved. Please note that the costs must be incurred in accordance with the approved plan. Be aware that the amount of payment from the Fund may be limited by Sections 57.7(c), 57.8(d), 57.8(e), and 57.8(g) of the Act, as well as 35 Ill. Adm. Code 734.630 and 734.655.

Further, pursuant to 35 Ill. Adm. Code 734.145, it is required that the Illinois EPA be notified of field activities prior to the date the field activities take place. This notice must include a description of the field activities to be conducted; the name of the person conducting the activities; and the date, time, and place the activities will be conducted and shall be made to EPA.FieldNotifications@illinois.gov. This notification of field activities must be provided at least two weeks prior to the scheduled field activities.

Pursuant to Sections 57.7(b)(5) and 57.12(c) and (d) of the Act and 35 Ill. Adm. Code 734.100 and 734.125, the Illinois EPA requires that a Corrective Action Plan that achieves compliance with applicable remediation objectives be submitted within 30 days after completion of the plan to:

Illinois Environmental Protection Agency Bureau of Land - #24 Leaking Underground Storage Tank Section 1021 North Grand Avenue East Post Office Box 19276 Springfield, IL 62794-9276

Please submit all correspondence in duplicate and include the Re: block shown at the beginning of this letter.

An underground storage tank system owner or operator may appeal this decision to the Illinois Pollution Control Board. Appeal rights are attached.

If you have any questions or need further assistance, please contact Scott McGill at (217) 524-5137.

Sincerely,

Eric A. Kuhlman Acting Unit Manager Leaking Underground Storage Tank Section Division of Remediation Management

Bureau of Land

Attachment: Attachment A Appeal Rights

c: Carol L. Rowe, CWM Company, Inc. (electronic copy)
BOL File

Attachment A

Re: LPC #1430650114 -- Peoria County Peoria/S & S Infinite Group, Inc. 400 North East Adams Street Leaking UST Incident No. 20161089 Leaking UST Technical File

SECTION 1

As a result of Illinois EPA's modification(s) in Section 2 of this Attachment A, the following amounts are approved:

\$1,820.00	Drilling and Monitoring Well Costs
\$4,434.28	Analytical Costs
\$0.00	Remediation and Disposal Costs
\$0.00	UST Removal and Abandonment Costs
\$0.00	Paving, Demolition, and Well Abandonment Costs
\$7,944.90	Consulting Personnel Costs
\$149.50	Consultant's Materials Costs

Handling charges will be determined at the time a billing package is reviewed by the Illinois EPA. The amount of allowable handling charges will be determined in accordance with Section 57.1(a) of the Environmental Protection Act (Act) and 35 Illinois Administrative Code (35 Ill. Adm. Code) 734.635.

SECTION 2

1. \$165.00 for costs for copy charges, which lack supporting documentation. Such costs are ineligible for payment from the Fund pursuant to 35 Ill. Adm. Code 734.630(cc). Since there is no supporting documentation of costs, the Illinois EPA cannot determine that costs will not be used for activities in excess of those necessary to meet the minimum requirements of Title XVI of the Act. Therefore, such costs are not approved pursuant to Section 57.7(c)(3) of the Act because they may be used for site investigation or corrective action activities in excess of those required to meet the minimum requirements of Title XVI of the Act.

Pursuant to 35 III. Adm. Code 734.850(b) costs associated with activities that do not have a maximum payment amount set forth pursuant to 35 III. Adm. Code 734 Subpart H must be determined on a site-specific basis and the owner/operator must demonstrate to the Illinois EPA the amounts sought for reimbursement are reasonable. The owner/operator has not provided sufficient documentation to support the rate requested for copy charges and/or the quantity of copies requested pursuant to 35 III. Adm. Code 734.505(a). The documentation was either not provided or fails to provide sufficient information for the Illinois EPA to make a site-specific reasonableness determination.

In addition, without supporting documentation the rate and/or the quantity of copies requested are not reasonable as submitted. Such costs are ineligible for payment from the Fund pursuant to Section 57.7(c)(3) of the Act and 35 Ill. Adm. Code 734.630(dd). It should be noted, the Illinois EPA only requires technical correspondence be submitted in duplicate and only an original for reimbursement correspondence.

2. \$129.00 for costs for PID, which lack supporting documentation. Such costs are ineligible for payment from the Fund pursuant to 35 Ill. Adm. Code 734.630(cc). Since there is no supporting documentation of costs, the Illinois EPA cannot determine that costs will not be used for activities in excess of those necessary to meet the minimum requirements of Title XVI of the Act. Therefore, such costs are not approved pursuant to Section 57.7(c)(3) of the Act because they may be used for site investigation or corrective action activities in excess of those required to meet the minimum requirements of Title XVI of the Act.

Pursuant to 35 Ill. Adm. Code 734.850(b) costs associated with activities that do not have a maximum payment amount set forth pursuant to 35 Ill. Adm. Code 734 Subpart H must be determined on a site specific basis and the owner/operator must demonstrate to the Agency the amounts sought for reimbursement are reasonable. The Agency has requested additional documentation to support the rate requested for a PID pursuant to 35 Ill. Adm. Code 734.505(a). The documentation was either not provided or fails to provide sufficient information for the Agency to make a site specific reasonableness determination.

In addition, without supporting documentation for the rate requested the PID costs are not reasonable as submitted. Such costs are ineligible for payment from the Fund pursuant to Section 57.7(c)(3) of the Act and 35 Ill. Adm. Code 734.630(dd).

- 3. \$24.00 for indirect corrective action costs for a measuring wheel charged as direct costs. Such costs are ineligible for payment from the Fund pursuant to 35 Ill. Adm. Code 734.630(v). In addition, such costs are not approved pursuant to 35 Ill. Adm. Code 734.630(dd) and Section 57.7(c)(3) of the Act because they are not reasonable.
- 4. Personnel Lacking Supporting Documentation

\$5,056.00 for costs for personnel hours requested under the Senior Project Manager title, which lack supporting documentation. Such costs are ineligible for payment from the Fund pursuant to 35 Ill. Adm. Code 734.630(cc). As there is no supporting documentation for the requested costs, the Illinois EPA cannot determine that costs will not be used for activities in excess of those necessary to meet the minimum requirements of Title XVI of the Act. Therefore, such costs are not approved pursuant to Section 57.7(c)(3) of the Act and 35 Ill. Adm. Code 734.630(o) because they may be used for site investigation or corrective action activities in excess of those required to meet the minimum requirements of Title XVI of the Act.

The Illinois EPA has requested additional documentation to support the personnel hours requested as noted above pursuant to 35 Ill. Adm. Code 734.505(a). The documentation was either not provided or fails to provide sufficient information for the Illinois EPA to make a task-specific reasonableness determination. Without supporting documentation, the personnel hours for Senior Project Manager are not reasonable as submitted. Such costs are ineligible for payment from the Fund pursuant to Section 57.7(c)(3) of the Act and 35 Ill. Adm. Code 734.630(dd). In addition, the request appears to be for activities and related services or materials that are unnecessary. Such costs are ineligible for payment from the Fund pursuant to 35 Ill. Adm. Code 734.630(aa).

Costs in the amount of \$5,056.00 associated with a Senior Project Manager for 40 hours to complete corrective action design, report development and IEPA correspondence lack supporting documentation and these costs are not reasonable as submitted.

5 Personnel Lacking Supporting Documentation

\$2,022.40 for costs for personnel hours requested under the Senior Project Manager title, which lack supporting documentation. Such costs are ineligible for payment from the Fund pursuant to 35 Ill. Adm. Code 734.630(cc). As there is no supporting documentation for the requested costs, the Illinois EPA cannot determine that costs will not be used for activities in excess of those necessary to meet the minimum requirements of Title XVI of the Act. Therefore, such costs are not approved pursuant to Section 57.7(c)(3) of the Act and 35 Ill. Adm. Code 734.630(o) because they may be used for site investigation or corrective action activities in excess of those required to meet the minimum requirements of Title XVI of the Act.

The Illinois EPA has requested additional documentation to support the personnel hours requested as noted above pursuant to 35 Ill. Adm. Code 734.505(a). The documentation was either not provided or fails to provide sufficient information for the Illinois EPA to make a task-specific reasonableness determination. Without supporting documentation, the personnel hours for Senior Project Manager are not reasonable as submitted. Such costs are ineligible for payment from the Fund pursuant to Section 57.7(c)(3) of the Act and 35 Ill. Adm. Code 734.630(dd). In addition, the request appears to be for activities and related services or materials that are unnecessary. Such costs are ineligible for payment from the Fund pursuant to 35 Ill. Adm. Code 734.630(aa).

Costs in the amount of \$2,022.40 associated with a Senior Project Manager for 16 hours to complete TACO Tier 2 calculations, development of cleanup objectives and groundwater modeling lack supporting documentation and these costs are not reasonable as submitted.

6. Personnel Lacking Supporting Documentation

\$3,033.00 for costs for personnel hours requested under the Senior Project Manager title, which lack supporting documentation. Such costs are ineligible for payment from the

Fund pursuant to 35 Ill. Adm. Code 734.630(cc). As there is no supporting documentation for the requested costs, the Illinois EPA cannot determine that costs will not be used for activities in excess of those necessary to meet the minimum requirements of Title XVI of the Act. Therefore, such costs are not approved pursuant to Section 57.7(c)(3) of the Act and 35 Ill. Adm. Code 734.630(o) because they may be used for site investigation or corrective action activities in excess of those required to meet the minimum requirements of Title XVI of the Act.

The Illinois EPA has requested additional documentation to support the personnel hours requested as noted above pursuant to 35 Ill. Adm. Code 734.505(a). The documentation was either not provided or fails to provide sufficient information for the Illinois EPA to make a task-specific reasonableness determination. Without supporting documentation, the personnel hours for Senior Project Manager are not reasonable as submitted. Such costs are ineligible for payment from the Fund pursuant to Section 57.7(c)(3) of the Act and 35 Ill. Adm. Code 734.630(dd). In addition, the request appears to be for activities and related services or materials that are unnecessary. Such costs are ineligible for payment from the Fund pursuant to 35 Ill. Adm. Code 734.630(aa).

Costs in the amount of \$3,033.00 associated with a Senior Project Manager for 24 hours to complete budget preparation and data evaluation lack supporting documentation and these costs are not reasonable as submitted.

7. Personnel Lacking Supporting Documentation

\$2,085.30 for costs for personnel hours requested under the Senior Accountant Technician title, which lack supporting documentation. Such costs are ineligible for payment from the Fund pursuant to 35 Ill. Adm. Code 734.630(cc). As there is no supporting documentation for the requested costs, the Illinois EPA cannot determine that costs will not be used for activities in excess of those necessary to meet the minimum requirements of Title XVI of the Act. Therefore, such costs are not approved pursuant to Section 57.7(c)(3) of the Act and 35 Ill. Adm. Code 734.630(o) because they may be used for site investigation or corrective action activities in excess of those required to meet the minimum requirements of Title XVI of the Act.

The Illinois EPA has requested additional documentation to support the personnel hours requested as noted above pursuant to 35 Ill. Adm. Code 734.505(a). The documentation was either not provided or fails to provide sufficient information for the Illinois EPA to make a task-specific reasonableness determination. Without supporting documentation, the personnel hours for Senior Accountant Technician are not reasonable as submitted. Such costs are ineligible for payment from the Fund pursuant to Section 57.7(c)(3) of the Act and 35 Ill. Adm. Code 734.630(dd). In addition, the request appears to be for activities and related services or materials that are unnecessary. Such costs are ineligible for payment from the Fund pursuant to 35 Ill. Adm. Code 734.630(aa).

Costs in the amount of \$2,085.30 associated with a Senior Accountant Technician for 30 hours to complete reimbursement preparation forms lack supporting documentation and these costs are not reasonable as submitted.

8. Personnel Lacking Supporting Documentation

\$1,779.84 for costs for personnel hours requested under the Geologist III title, which lack supporting documentation. Such costs are ineligible for payment from the Fund pursuant to 35 Ill. Adm. Code 734.630(cc). As there is no supporting documentation for the requested costs, the Illinois EPA cannot determine that costs will not be used for activities in excess of those necessary to meet the minimum requirements of Title XVI of the Act. Therefore, such costs are not approved pursuant to Section 57.7(c)(3) of the Act and 35 Ill. Adm. Code 734.630(o) because they may be used for site investigation or corrective action activities in excess of those required to meet the minimum requirements of Title XVI of the Act.

The Illinois EPA has requested additional documentation to support the personnel hours requested as noted above pursuant to 35 Ill. Adm. Code 734.505(a). The documentation was either not provided or fails to provide sufficient information for the Illinois EPA to make a task-specific reasonableness determination. Without supporting documentation, the personnel hours for Geologist III are not reasonable as submitted. Such costs are ineligible for payment from the Fund pursuant to Section 57.7(c)(3) of the Act and 35 Ill. Adm. Code 734.630(dd). In addition, the request appears to be for activities and related services or materials that are unnecessary. Such costs are ineligible for payment from the Fund pursuant to 35 Ill. Adm. Code 734.630(aa).

Costs in the amount of \$1,779.84 associated with a Geologist III for 16 hours to complete reimbursement development, inputs, contractor invoicing and evaluation with budget lack supporting documentation and these costs are not reasonable as submitted.

Appeal Rights

An underground storage tank owner or operator may appeal this final decision to the Illinois Pollution Control Board pursuant to Sections 40 and 57.7(c)(4) of the Act by filing a petition for a hearing within 35 days after the date of issuance of the final decision. However, the 35-day period may be extended for a period of time not to exceed 90 days by written notice from the owner or operator and the Illinois EPA within the initial 35-day appeal period. If the owner or operator wishes to receive a 90-day extension, a written request that includes a statement of the date the final decision was received, along with a copy of this decision, must be sent to the Illinois EPA as soon as possible.

For information regarding the filing of an appeal, please contact:

John Therriault, Assistant Clerk Illinois Pollution Control Board James R. Thompson Center 100 West Randolph, Suite 11-500 Chicago, IL 60601 312/814-3620

For information regarding the filing of an extension, please contact:

Illinois Environmental Protection Agency Division of Legal Counsel 1021 North Grand Avenue East Post Office Box 19276 Springfield, IL 62794-9276 217/782-5544 | ILLINOIS ENVIRONMENTAL PROTECTION AGENCY | 1021 NORTH GRAND AVENUE EAST, P.O. BOX 19276 | 24 | SPRINGREG, ILLINOIS 62794-9276 | 20 1M | \$ 06.880 | 000 4286648 | JUN 20 2018 | 000 4286648 | JUN 20 2018 | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 20 1M | 2

1430650114 – Peoria County S & S Infinite Group, Inc. Incident # 20161089 Leaking UST Technical File

701 W. South Grand Avenue Springfield, IL 62704

> Phone: (217) 522-8001 Fax: (217) 522-8009

November 12, 2018

Mr. Scott McGill, Project Manager LUST Section, Bureau of Land Illinois Environmental Protection Agency 1021 North Grand Avenue East Springfield, IL 62794-9276 RECEIVED

NOV 1 3 2018

PERMIT SECTION

RE: LPC #1430650114—Peoria County S & Sinfinite Group, Inc. - Peoria

400 North East Adams Street Incident Number: 2016-1089

LUST Technical Reports—Amended Corrective Action Plan

Dear Mr. McGill:

Enclosed, please find the Amended Corrective Action Plan (CAP) for the above-referenced site for Incident Number 2016-1089. This CAP includes the actions necessary to address the contamination from the 2016-1089 incident that were not included in the CAP previously approved for the 2014-0963 incident. Once the activities required to address the contamination over Tier 2 Clean-up Objectives found in the 2016-1089 incident are completed, a Corrective Action Completion Report combining the incidents will be prepared and submitted.

If you have any questions or require additional information, please contact Mr. Vince Smith or me at (217) 522-8001.

Sincerely

Carol Rowe, P.G.

Senior Environmental Geologist

RELEASABLE

MAR 0 8 2019

REVIEWER JRM

xc: Mr. Syed Muneeb, S & S Infinite Group, Inc. / Downtown 66

Mr. William T. Sinnott, CWM Company, Inc.

The appearance of some of the images following this page is due to

Poor Quality Original Documents

and not the scanning or filming processes.

Com Microfilm Company (217) 525-5860

CORRECTIVE ACTION PLAN & BUDGET AMENDMENT

S&S INFINITE GROUP, INC./ DBA-DOWNTOWN 66 RECEIVED

NOV 1 3 2018

PERMIT SECTION

PEORIA, ILLINOIS LPC #1430560114 — Peoria County

Incident Number 2016-1089

Submitted to:

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

Leaking Underground Storage Tank Section, Bureau of Land 1021 North Grand Avenue East Springfield, Illinois 62794-9276

Prepared by:

CW³M COMPANY, INC.

701 South Grand Avenue West Springfield, Illinois (217) 522-8001 400 West Jackson, Suite C Marion, Illinois (618) 997-2238

November 2018

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!			:
BETX has	Benzene, ethylbenzene, toluene, tota	al xylenes	*.
CACR	Corrective Action Completion Repo	rt	
CAP	Corrective Action Plan		
CA6	Coarse Aggregate 6	•	,
Csat	Soil saturation limit	••.	٠.
CUO	Clean-up Objective	• **,	•
CW ³ M	CW ³ M Company, Inc.	•	
CWS	Community Water Supply	· · · · ·	,
IEMA	Illinois Emergency Management Ag	ency	
IEPA	Illinois Environmental Protection A	gency	•
Ill. Adm. Code	Illinois Administrative Code	W. 1999	•1.
ISGS	Illinois State Geological Survey	`	• •
ISWS	Illinois State Water Survey	•	
LUST	Leaking Underground Storage Tank		•
MTBE	Methyl tert-butyl ether	. 4	
NFR	No Further Action Report		
OSFM:	Illinois Office of the State Fire Mars	shal	
PNA ?	Polynuclear Aromatic Hydrocarbon		
SICR	Site Investigation Completion Repor	t	
SWAP	Source Water Assessment Program	e per o est.	• • • •
TACO	Tiered Approach to Corrective Action	on Objectiv	ves
UST	Underground Storage Tank	•	

1. SITE HISTORY/EXECUTIVE SUMMARY

1.1 GENERAL

This Amended Corrective Action Plan (CAP) and Budget has been prepared in accordance with the requirements of the 35 Illinois Administrative Code (III. Adm. Code) 734. The Illinois Environmental Protection Agency (IEPA) Corrective Action Plan Form is included in this document as Appendix A.

Mr. Syed Muneeb, owner of the underground storage tanks (USTs) at the site, known as S&S Infinite Group, in Peoria, Illinois reported a release to the Illinois Emergency Management Agency (IEMA). Incident Number 2016-1089 was assigned to the notification on November 21, 2016. Mr. Syed Muneeb ultimately requested CW³M Company, Inc. (CW³M) to proceed with the reporting and early action requirements in accordance with 35 Ill. Adm. Code § 734.

The 20-Day Certification was submitted to the IEPA on December 2, 2016 (CW³M, 2016). A 45-Day Extension Request was submitted to the IEPA on December 20, 2016 (CW³M, 2016a) and was approved on December 28, 2016 (IEPA, 2016). A 45-Day Report was submitted to the IEPA on January 19, 2017 (CW³M, 2017) and was approved on January 26, 2017 (IEPA, 2017). A 45-Day Report Addendum was then submitted to the IEPA on February 10, 2017 (CW³M, 2017a) and was approved on May 17, 2017 (IEPA, 2017a). A Site Investigation Completion Report (SICR) was submitted to the IEPA on October 10, 2017 (CW³M, 2017b) and was approved February 2, 2018 (IEPA, 2018a). A CAP was submitted to the IEPA on March 20, 2018 (CW³M, 2018) and approved on June 20, 2018 (IEPA, 2018b). A previous incident had occurred on site, 2014-0963, and had a CAP to address the contamination from its incident was submitted July 2, 2015 (Marlin, 2015), and approved on July 21, 2015 (IEPA, 2015).

This report is certified by an Illinois Licensed Professional Engineer. The geological investigation and site investigation was performed under the direction of an Illinois Licensed Professional Geologist and completed in accordance with the Professional Geologist Licensing Act and its Rules for Administration.

1.2 SITE LOCATION

The site, known as S & S Infinite Group, Inc. / DBA - Downtown 66 is located at 400 North East Adams Street, Peoria, Peoria County, Illinois 61603. The site is located in the NE ¼ of the NE ¼ of Section 9, Township 8 North of the Centralia Baseline and Range 8 East of the Fourth Principal Meridian.

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1.3 UNDERGROUND STORAGE TANK INFORMATION

A permit for the removal of seven USTs was approved by the Office of the State Fire Marshal (OSFM) on December 12, 2016 (OSFM, 2016). Tank removal activities were conducted by CW³M personnel on January 3, 2017 through January 5, 2017. OSFM Tank Specialist Jim Coffey was on site to oversee the removal of the USTs.

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CW³M personnel were on site from January 4, 2017 through January 6, 2017, and January 9, 2017 through January 12, 2017 to complete early action activities, including removal of contaminated backfill material and replacement of clean fill to the UST excavation area. As the OSFM Field Specialists have been instructed not to make the official determination of the release in the field, the source of release has been determined in consult with the OSFM Field Specialist using the best professional judgment of the condition of tank, piping, and soil conditions.

- Tank 1: This fiberglass UST was abandoned in place in 2014 as part of a separate incident. Its details are listed on the next page in Table 1-1.
- Tank 2: This fiberglass UST was abandoned in place in 2014 as part of a separate incident. Its details are listed on the next page in Table 1-1.
- Tank 3: OSFM Tank Specialist Jim Coffey in conjunction with CW³M personnel determined the release from this fiberglass UST was a result of piping leaks and overfilling.
- Tank 4: OSFM Tank Specialist Jim Coffey in conjunction with CW³M personnel determined the release from this steel UST was a result of tank leaks as this tank had visual holes.
- Tank 5: OSFM Tank Specialist Jim Coffey in conjunction with CW³M personnel determined the release from this steel UST was a result of tank leaks as this tank had visual holes.
- Tank 6: OSFM Tank Specialist Jim Coffey in conjunction with CW³M personnel determined the release from this steel UST was a result of tank leaks as this tank showed signs of pitting.
- Tank 7: OSFM Tank Specialist Jim Coffey in conjunction with CW³M personnel determined the release from this steel UST was a result of tank leaks as this tank showed signs of pitting.

Table 1-1. Underground Storage Tank Summary

Tank	Tank	Tank	Incident	Release	Current
Number	Volume	Contents	Number	Information 🐧 🔗	Status

	(gallons)				
1	6,000	Diesel	2014-0963	Unknown	Removed 1/5/17
2	. 10,000	Gasoline	2014-0963	Unknown	Removed 1/5/17
3	10,000	Gasoline	2016-1089	Overfilling/Piping Leaks	Removed 1/4/17
4	350	Gasoline	2016-1089	Tank Leaks	Removed 1/3/17
5	; 350	Gasoline	2016-1089	Tank Leaks	Removed 1/3/17
6	560	Diesel	2016-1089	Tank Leaks	Removed 1/3/17
7	560	Used Oil	2016-1089	Tank Leaks	Removed 1/3/17

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1.4 EARLY ACTION SUMMARY

Samples were collected for every 20 feet of the excavation walls. Floor samples were obtained at the base of the tanks at a depth of around 12 feet. Samples for the piping trench of tank 3 were also taken every 20 feet at a depth of approximately 3 feet. Because tanks 1 and 2 were previously associated with Incident Number 2014-0963, the soil in the tank pit containing tanks 1, 2, and 3 was known to be contaminated. For this reason, the only samples taken from this pit were at the floor of tank 3 as well as the surrounding walls. The soil removed during the excavation of these three tanks was returned to the excavation after sampling had been completed.

All early action soil samples were collected and analyzed for benzene, ethylbenzene, toluene and total xylenes (BETX) and methyl tert-butyl ether (MTBE) contaminants. The wall samples and floor samples associated with tanks 4 through 7 were additionally analyzed for Polynuclear Aromatic Hydrocarbon (PNA) contaminants, due to the contents of the tanks. The floor of the used oil tank 7 was also sampled for used oil parameters. As previously stated, all tanks and product piping were removed. A total of 365.72 tons (243.81 cubic yards) of contaminated backfill was removed and taken to Indian Creek Landfill in Hopedale, Illinois for disposal. Analytical results and a map of the contaminants can be found in Appendix F and Appendix B, respectively. These activities were documented in the 45-Day Report (CW³M, 2017) and the 45-Day Report Addendum (CW³M, 2017a).

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1.5 SITE INVESTIGATION SUMMARY

On July 26, 2017 CW³M personnel were on site to conduct Stage 1 investigation activities. Two soil borings (24 and 25) were drilled and sampled, with boring 24 to a depth of 25 feet and boring 25 to a depth of 20 feet. Soil boring 24 was intended to be converted to a monitoring well to determine if contaminants from sample 11 had been in contact with groundwater. When no water was reached by 25 feet only soil samples were obtained. Since a groundwater investigation could not be performed, SB-24 was advanced to define the vertical extent of soil contamination. Once the groundwater level was determined to be lower than 25 feet, no more wells were attempted. Soil boring 25 was drilled to determine the horizontal extent of contamination from sample 11. Benzo(a) pyrene was exceeded at sample 24 but below Clean-up Objectives (CUOs) at sample 25A and B.

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One reason for the large change in groundwater level elevation from this incident, below 25 feet, and the previous incident, at around 13 feet, could be due to the site's location and unusually dry summer. The site is very near the Illinois River which could have huge changes in the groundwater level from changes in the river. Soil samples were analyzed for BETX, MTBE, and PNA indicator parameters. Laboratory analytical results and a table summarizing the results are included in Appendix F, while soil boring logs are included in Appendix E. At the end of Stage 1 investigation, the soil plume was fully defined on site and groundwater was not encountered. The site investigation activities were documented in the SICR (CW³M, 2017b).

2. REMEDIATION OBJECTIVES

2.1 DETERMINATION OF CLEAN-UP OBJECTIVES

In accordance with 35 Ill. Adm. Code 734.410, remediation objectives will be determined in accordance with 35 Ill. Adm. Code § 742. During the previous incident on this site #2014-0963 a Tiered Approach to Corrective Action Objectives (TACO) sample was taken as part of the CAP for that incident. For this incident the site specific physical parameters that were presented in the CAP for incident 2014-0963 (Marlin, 2015) are being used for incident 2016-1089.

The parameters that have been determined are:

Soil bulk density (r_b) , 2.15 g/cm³ Soil particle density (r_s) 2.69 g/cm³ Moisture content (w), 9.4% Organic carbon content (f_{oc}) .0136 g/g Hydraulic Conductivity 8.64 cm/day = 1.00 X 10⁴ cm/sec

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For the previous incident groundwater was encountered during drilling but never encountered after drilling. For the 2016-1089 incident, groundwater was not encountered. Since no groundwater was found, the assumed hydraulic gradient is 0.02.

2.2 SOIL AND GROUNDWATER OBJECTIVES

The soil objectives are listed for the site below in tabular format. With the TACO Tier 2 CUOs calculated, an industrial / commercial use restriction will be placed on the property and a groundwater ordinance will be placed on the site and the affected offsite properties. The calculations and the modeling of the existing contamination from incident 2016-1089 are included in Appendix G. The TACO inputs for plume width and length are shown on Drawing 0010 in Appendix B.

Table 2-1. Soil Remediation Objectives

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Parameter	TACO	TACO
	Residential	Industrial /
. 4	Tier 1	Commercial Tier 2
·	Clean-up Objective	Clean-up Objective
*	(mg/kg)	(mg/kg)
Benzene	0.03	3.70
Ethylbenzene	13.0	749.91
Toluene	12.0	535.89
Total Xylenes	5.6	73.45
Methyl tert-butyl ether	0.32	249.86
Acenaphthene	570	AND AND AND AND AND AND AND AND AND AND
Acenapthylene	30	·
Anthracene	12,000	. 5 <u>.</u>
Benzo(a)anthracene	- 0.9	· · · · · · · · · · · · · · · · · · ·
Benzo(a)pyrene	0.09	0.784
Benzo(b)flouranthene	0.9	
Benzo(g,h,i)perylene	160	
Benzo(k)flouranthene	9	
Chrysene	88	/s 6.7 }
Dibenzo(a,h)anthracene	0.09	· · · · · · · · · · · · · · · · · · ·
Flouranthene		`
Fluorene		
Indeno(1,2,3-c,d)pyrene	0.9	\$ 人 養養
Naphthalene	1.8	2.54
Phenanthrene	280	
Pyrene	2,300	
		· · · · · · · · · · · · · · · · · · ·

3. CORRECTIVE ACTION PLAN

The following CAP Amendment and Budget has been prepared by CW³M. Company, Inc., as their recommendation for the most appropriate and economical approach to the remediation of the contamination at the S & S Infinite Group, Inc. / DBA – Downtown 66 in Peoria, Illinois.

Based upon the analytical data from the soil samples collected on-site, it is apparent that soil contamination above the TACO Tier 2 calculated CUOs soil saturation limit was found on site for the current incident at sample location WC-1. The WC-1 sample is included because soil was not removed during early action from the tank pit from which these samples were taken. Soil contamination is confined to the site, and no groundwater contamination was found. All site investigation details were presented in the SICR (CW³M, 2017b).

Soil sample WC-1 exceeds the TACO Tier 2 soil saturation limit for total xylenes, so remediation must occur at that location. Sample WC-3 also has exceedances for industrial / commercial inhalation and construction worker inhalation CUOs. From the results of the soil samples proposed in the last CAP the soil contamination has been defined horizontally and vertically. The soil borings from the previous CAP show that while there is soil contamination at SB-26, SB-28, and SB-29, all the contamination is under Tier 2 CUOs a The areas around WC-1 and WC-3 are being proposed to be excavated to a depth of 10 feet due the two samples being taken at 7.5 feet and the results from SB-27 showing the ten to fifteen-foot zone beneath WC-1 below the CUOs. Drawing 0007 depicts the limits and total volume of the proposed excavation.

After the excavation is completed the excavation walls and floor will be sampled to re-evaluate the need for instituting any additional restrictions on site. The migration conditions for soil to groundwater contamination will be addressed as previously stated with a groundwater ordinance to address groundwater contamination at the S&S Infinite property and surrounding properties. Two samples are being proposed to be obtained from the floor of the excavation, and six wall samples are proposed with 2 from each of the northern and southern walls and 1 from each of the eastern and western walls. These samples are to determine if contamination over Tier 2 CUOs has spread past the border of the proposed excavation area. This sampling arrangement is proposed so that samples are obtained from a spacing no more than twenty feet apart.

A waste characterization sample will be drilled and sampled with the proposed excavation area to determine parameters for disposal of the contaminated soil. The contaminate soil will be excavated by use of a trackhoe (e.g., caterpillar 322 or equivalent). A backhoe or endloader will be employed for loading contaminated soil onto trucks. The loader will also be used to place clean backfill. Sloping or benching will be conducted where necessary to protect excavation walls. The excavated area will be capped with six inches of CA6 (Coarse Aggregate 6). The area for excavation is shown on Drawing 0007 in Appendix B.

Table 3-1. Estimated Excavation Limits

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Description	Disposal	Sq. Feet	Depth	Bulkii	ng // Cu. Yds.
Excavation	Landfill	1853	0' - 10'	1.05	721
TOTALS			,	, .	721

CW³M Company, Inc. personnel will be on-site during all remediation activities to perform contractor coordination and scheduling, maintenance of manifests, and all required technical documentation, sample collection and oversight of work for compliance with the approved CAP.

At the close of each day, if the excavation remains open, the excavation area will be scraped clean, shored up and protected from access with use of caution fences and barricades. Should excavation activities cause a dust control or nuisance problem, measures such as wetting will be employed to mitigate fugitive dust. Throughout the excavation, the access truck paths will be scraped clean to prevent tracking of soil onto the street. Should tracking still occur, the street or highway will also be scraped clean.

A safe distance will be maintained near structures (e.g., sidewalks, roadways, utilities and/or property boundaries) and, where weak soils are encountered, by sloping the excavation at a 1:1 slope. Should excavation walls begin to collapse, measures will be taken to secure them, and they will be benched back until a stable wall slope is achieved.

Soil to groundwater modeling in accordance with 35 III. Adm. Code § 742 has been conducted, and shows groundwater contamination could travel upwards of 64 feet in any direction for the remaining contamination after the excavation is complete. Since groundwater was never found at the site it is unclear which direction groundwater flows in so flow in all directions will be assumed.

With the removal of the highly contaminated soil in the area of Tank 1, the remaining contamination found at the site would model onto off site properties. To address the potential CW³M proposes a groundwater ordinance for the affected properties and the affected right-of-ways of North East Adams Street and Spalding Avenue. The only additional restriction required would be a construction worker caution in the area of early action sample 11.

The attached Budget includes the preparation of this report, as well as the preparation of the CACR. The recording of the No Further Remediation (NFR) letter is also included in the proposed budget.

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3.1 CURRENT AND PROJECTED USES OF THE SITE

The site is located near downtown Peoria and is surrounded by both commercial properties and townhomes; the site lies a few blocks north of Peoria Lake/Illinois River. Currently, the site is closed and there are no known plans on it for the future until such time as environmental issues are resolved. The likely usage would be commercial or industrial.

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3.2 INSTITUTIONAL CONTROLS PROPOSED

The site has public water and after the investigation of water well 74200, it is not within the setback of any known potable well, so a groundwater ordinance is being proposed for the all the affected properties. A Tier 2 Industrial-Commercial use restriction will be imposed on the site. The only additional restriction required would be a construction worker caution in the area of early action sample 11. Since an excavation is proposed to eliminate all contaminated soil above Tier 2 CUOs in the area around WC-1 and WC-3, sampling of the floor and wall of the excavation will be conducted to further determine the need for restrictions on the site.

3.3 WATER SUPPLY WELL SURVEY

A survey of water supply wells for the purpose of identifying and locating all community water supply (CWS) wells within 2,500 feet of the UST system and all potable water supply wells within 200 feet of the UST system has been completed. The Illinois State Water Survey (ISWS), the Illinois State Geological Survey (ISGS) and the IEPA Division of Public Water Supplies were contacted via the Source Water Assessment Program (SWAP) online.

The ISGS, ISWS, and IEPA Division of Public Water Supplies were accessed online on October 6, 2016 (EPA.STATE.IL.US, 2016). The response indicated that twenty ISGS wells are located within 2,500 feet of the site. The site is within the setback of 2 of the potable wells listed on Table 3-1. Well 43700 is described as an engineering well in the listing. Well 74200 was described as a water well installed by a creamery. CW³M has contacted the current owner of the former creamery site, who stated that only city provided water was used at the facility, and they did not believe that the well still existed. On August 23, 2018, a letter was sent to the Peoria Public Health Department requesting any information on the water well. On August 29, 2018, a reply was received stating that they had no records of the water well. Documentation of the correspondence sent and received are included in Appendix H. On September 4, 2018, CW³M personnel went to the creamery site to check for the presence of the water well but found no evidence of the well. With the investigation of the well yielding no verification of the well it has been determined that the well no longer exist or is no longer able to be used.

Table 3-2. Water Supply Well Information

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Туре	Distance From USTs (feet)	(feet)	
ISGS	2,300	98	200
ISGS	2,250	70	200
ISGS	1,929	90 g	200
ISGS	1,623	67	200
ISGS	1,477	62	200
ISGS	823	87 3	200
ISGS	854	877	200
ISGS	746	29	200
ISGS	731	47	200
ISGS	1,710	26	200
			
		37	200
ISGS	855		
ISGS	140	36	200
ISGS	253	51	200
ISGS	185	73	200
	463		200
ISGS		34	200
ISGS			
	900	36	200
	ISGS ISGS ISGS ISGS ISGS ISGS ISGS ISGS	USTs (feet) ISGS 2,300 ISGS 2,250 ISGS 1,929 ISGS 1,623 ISGS 1,477 ISGS 823 ISGS 854 ISGS 746 ISGS 746 ISGS 731 ISGS 1,710 ISGS 1,240 ISGS 1,240 ISGS 1,240 ISGS 253 ISGS 140 ISGS 253 ISGS 253 ISGS 463 ISGS 2,283 ISGS 2,070	Type Distance From USTs (feet) Depth (feet) ISGS 2,300 98 ISGS 2,250 70 ISGS 1,929 90 ISGS 1,623 67 ISGS 1,477 62 ISGS 823 87 ISGS 854 877 ISGS 746 29 ISGS 1,710 36 ISGS 1,240 37 ISGS 1,240 37 ISGS 855 44 ISGS 253 51 ISGS 185 73 ISGS 463 42 ISGS 2,283 34 ISGS 2,070 71

3.4 CLOSURE

Upon approval of the CAP and Budget and implementation of the proposed activities, the excavation wall and floor samples will be evaluated to determine the need for using additional restrictions or additional remediation on site, if warranted. Once all CAP activities conclude, a Corrective Action Completion Report (CACR) for both incidents at the site will be submitted to the IEPA. The closure report will be accompanied by a certification from an Illinois Registered Professional Engineer.

4.0 REFERENCES

63330

City-Data.com, 2016. Peoria, Illinois, www.city-data.com, accessed December 28, 2016.

CW³M, 2016. CW³M Company, Inc., 20-Day Certification, S&S Infinite Group, Peoria, Illinois, December 2, 2016.

CW³M, 2016a. CW³M Company, Inc., Early Action Extension Request, S&S Infinite Group, Peoria, Illinois, December 20, 2016.

CW³M, 2017. CW³M Company, Inc., 45 Day Report, S&S Infinite Group, Peoria, Illinois, January 19, 2017.

CW³M, 2017a. CW³M Company, Inc., 45 Day Report Addendum, S&S Infinite Group, Peoria, Illinois, February 10, 2017.

CW³M, 2017b. CW³M Company, Inc., Site Investigation Completion Report, S&S Infinite Group, Peoria, Illinois, October, 10, 2017.

CW³M, 2018. CW³M Company, Inc., Corrective Action Plan and Budget S&S Infinite Group, Peoria, Illinois, March 20, 2018.

EPA.STATE.IL.US, 2016. Source Water Assessment Program, Water Well Survey Map www.maps.epa.state.il.us, accessed October 6, 2016.

IEPA, 2015. Illinois Environmental Protection Agency, Corrective Action Plan Correspondence (2014-0963), S&S Infinite Group, Peoria, Illinois, July 21, 2015.

IEPA, 2016. Illinois Environmental Protection Agency, Early Action Extension Report Correspondence, S&S Infinite Group, Peoria, Illinois, December 28, 2016.

IEPA 2017. Illinois Environmental Protection Agency, 45 Day Report Correspondence, S&S Infinite Group, January 26, 2017.

IEPA 2017a. Illinois Environmental Protection Agency, 45 Day Correspondence, May 17, 2017.

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CW³M Company, Inc. Amended Corrective Action Plan S&S Infinite Group, Inc. LPC #1430560114 Incident Number 2016-1089

IEPA, 2018a. Illinois Environmental Protection Agency, Site Investigation Completion Report Correspondence. S&S Infinite Group. February 2, 2018.

IEPA, 2018b. Illinois Environmental Protection Agency, Corrective Action Plan and Budget Correspondence. S&S Infinite Group. June 20, 2018.

Marlin, 2015. Marlin Environmental, Corrective Action Plan (2014-0963), S&S Infinite Group, Peoria, Illinois, July 2, 2015.

OSFM, 2016. Illinois Office of the State Fire Marshal, Permit for Removal of Underground Storage Tanks(s), S&S Infinite Group, Peoria, Illinois, December 12, 2016.

APPENDIX A CORRECTIVE ACTION PLAN FORM

CORRECTIVE ACTION PLAN AMENDMENT S&S Infinite Group Peoria, Illinois



Illinois Environmental Protection Agency

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Bureau of Land • 1021 N. Grand Avenue E. • P.O. Box 19276 • Springfield • Illinois • 62794-9276

The Agency is authorized to require this information under Section 4 and Title XVI of the Environmental Protection Act (415 ILCS 5/4, 5/57 – 57.17). Failure to disclose this information may result in a civil penalty of not to exceed \$50,000.00 for the violation and an additional civil penalty of not to exceed \$10,000.00 for each day during which the violation continues (415 ILCS 5/42). Any person who knowingly makes a false material statement or representation, orally or in writing, in any label, manifest, record, report, permit, or license, or other document filed, maintained or used for the purpose of compliance with Title XVI commits a Class 4 felony. Any second or subsequent offense after conviction hereunder is a Class 3 felony (415 ILCS 5/44 and 57.17). This form has been approved by the Forms Management Center.

Leaking Underground Storage Tank Program (18 7/2)

A.	Site Identification (1996 - 1996 - 1996 - 1996 - 1996 - 1996 - 1996 - 1996 - 1996 - 1996 - 1996 - 1996 - 1996 - 1996 - 1996 - 1996	
	IEMA Incident # (6- or 8-digit): 20161089	PA LPC# (10-digit): 1430560114	
	Site Name: S&S Infinite Group, Inc./ DBA- Downtown 66	Tophical sectors (Control of the Control of the Con	
	Site Address (Not a P.O. Box): 400 North East Adams Street		
	City: Peoria County: Peoria	ZIP Code: 61603	
	;	្រុក ស្រី ស្រី ស្រី ស្រី ស្រី ស្រី ស្រី ស្រី	
В.	Site Information	arrive (Ather)	
	1. Will the owner or operator seek reimbursement from the Underground	d Storage Tank Fûnd? ি 📝 Yes 🔲 N	lo
	2. If yes, is the budget attached?	कार्योक्षर । क्षेत्रको बेटी केन अमेरिकेट १० के 18 कि १०	
	3. Is this an amended plan? ☐ Yes ☑ No	and the second	
	4. Identify the material(s) released: Gasoline, Diesel Fuel, Used Oil		
	5. This Corrective Action Plan is submitted pursuant to:	STATE OF THE STATE	
		SEE SENER)
	a. 35 III. Adm. Code 731.166 The material released was:	RECEIVED	
	-petroleum	NOV 1 3 2018	
	-hazardous substance (see Environmental		
	Protection Act Section 3.215)	IEPA/BOI	
	b. 35 III. Adm. Code 732.404		
	c. 35 III. Adm. Code 734.335	- NS	
_		The and the second seco	
Ξ.	Proposed Methods of Remediation		
	1. Soil Tier 2 Industrial/Commercial CUOs, Construction Worker Cautio		
	2. Groundwater Groundwater use restriction, Highway Authority Agree	ement 51 - 60 M	
D.	Soil and Groundwater Investigation Results		
-	(for incidents subject to 35 III. Adm. Code 731 only or 732 that were classified using	ng Method One or Two, if not previously provided)	ļ
	Provide the following:	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
	Description of investigation activities performed to define the extents	of soil and/or groundwater contamination:	
	Analytical results, chain-of-custody forms, and laboratory certification		
	• • • • • • • • • • • • • • • • • • •	. <u>.</u> . j	
	3. Tables comparing analytical results to applicable remediation objective	ves,	

IL 532 2287 LPC 513 Rev. July 2007 Corrective Action Plan
Page 1 of 4

- 4. Boring logs;
- 5. Monitoring well logs; and
- 6. Site maps meeting the requirements of 35 III. Adm. Code 732.110(a) or 734.440 and showing:
 - a. Soil sample locations;
 - b. Monitoring well locations; and
 - c. Plumes of soil and groundwater contamination.

E. Technical Information - Corrective Action Plan

Provide the following:

1. Executive summary identifying the objectives of the corrective action plan and the technical approach to be utilized to meet such objectives;

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Sec. 1.

- a. The major components (e.g., treatment, containment, removal) of the corrective action plan;
- b. The scope of the problems to be addressed by the proposed corrective action; and
- c. A schedule for implementation and completion of the plan;
- Identification of the remediation objectives proposed for the site;
- 3. A description of the remedial technologies selected:
 - a. The feasibility of implementing the remedial technologies;
 - b. Whether the remedial technologies will perform satisfactorily and reliably until the remediation objectives are achieved; and
 - c. A schedule of when the technologies are expected to achieve the applicable remediation objectives;
- 4. A confirmation sampling plan that describes how the effectiveness of the corrective action activities will be monitored during their implementation and after their completion;
- 5. A description of the current and projected future uses of the site;
- 6. A description of engineered barriers or institutional controls that will be relied upon to achieve remediation objectives:
 - a. an assessment of their long-term reliability;
 - b. operating and maintenance plans; and
 - c. maps showing area covered by barriers and institutional controls;
- 7. The water supply well survey:
 - a. Map(s) showing locations of community water supply wells and other potable wells and the setback zone for each well:
 - b. Map(s) showing regulated recharge areas and wellhead protection areas;
 - c. Map(s) showing the current extent of groundwater contamination exceeding the most stringent Tier 1 remediation objectives;
 - Map(s) showing the modeled extent of groundwater contamination exceeding the most stringent Tier 1
 remediation objectives;
 - e. Tables listing the setback zone for each community water supply well and other potable water supply wells;
 - f. A narrative identifying each entity contacted to identify potable water supply wells, the name and title of each person contacted, and any field observations associated with any wells identified; and
 - g. A certification from a Licensed Professional Engineer or Licensed Professional Geologist that the survey was conducted in accordance with the requirements and that documentation submitted includes information obtained as a result of the survey (certification of this plan satisfies this requirement);

- 8. Appendices:
 - a. References and data sources report that are organized; and
 - b. Field logs, well logs, and reports of laboratory analyses;
- 9. Site map(s) meeting the requirements of 35 III. Adm. Code 732.110(a) or 734.440;
- 10. Engineering design specifications, diagrams, schematics, calculations, manufacturer's specifications, etc.;

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- 11. A description of bench/pilot studies;
- 12. Cost comparison between proposed method of remediation and other methods of remediation;
- 13. For the proposed Tier 2 or 3 remediation objectives, provide the following:
 - a. The equations used;
 - b. A discussion of how input variables were determined;
 - c. Map(s) depicting distances used in equations; and
 - d. Calculations; and
- 14. Provide documentation to demonstrate the following for alternative technologies:
 - The proposed alternative technology has a substantial likelihood of successfully achieving compliance with all applicable regulations and remediation objectives;
 - b. The proposed alternative technology will not adversely affect human health and safety or the environment;
 - c. The owner or operator will obtain all Illinois EPA permits necessary to legally authorize use of the alternative technology;
 - d. The owner or operator will implement a program to monitor whether the requirements of subsection (14)(a) have been met;
 - e. Within one year from the date of Illinois EPA approval, the owner or operator will provide to the Illinois EPA monitoring program results establishing whether the proposed alternative technology will successfully achieve compliance with the requirements of subsection (14)(a); and
 - f. Demonstration that the cost of alternative technology will not exceed the cost of conventional technology and is not substantially higher than at least two other alternative technologies, if available and technically feasible.

F. Exposure Pathway Exclusion

Provide the following:

- 1. A description of the tests to be performed in determining whether the following requirements will be met:
 - a. Attenuation capacity of the soil will not be exceeded for any of the organic contaminants;
 - b. Soil saturation limit will not be exceeded for any of the organic contaminants;
 - c. Contaminated soils do not exhibit any of the reactivity characteristics of hazardous waste per 35 III. Adm. Code 721.123;
 - d. Contaminated soils do not exhibit a pH \leq 2.0 or \geq 12.5; and
 - e. Contaminated soils which contain arsenic, barium, cadmium, chromium, lead, mercury, or selenium (or their associated salts) do not exhibit any of the toxicity characteristics of hazardous waste per 35 III. Adm. Code 721.124.
- 2. A discussion of how any exposure pathways are to be excluded.

G. Signatures

All plans, budgets, and reports must be signed by the owner or operator and list the owner's or operator's full name, 4000 address, and telephone number.

UST	Owner	or	Operator

Name S&SInfinite G	roup, Inc.
Contact Syed Muneel	b !
Address 400 North Ea	ast Adams Street
City Peoria	<u> </u>
State Illinois	
Zip Code 61603	<u> </u>
Phone (309) 453-22	80 1
Signature	
Date	11/3/18

Consultant

Company CWM Company, Inc.
Contact Carol L. Rowe, P.G.
Address 701 W. South Grand Avenue
City Springfield
State Illinois
Zip Code 62704
Phone (217) 522-800) 1
Signature (
Date Novemba B, 2018

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Email: cwm@cwmcompanyc.com *"*:

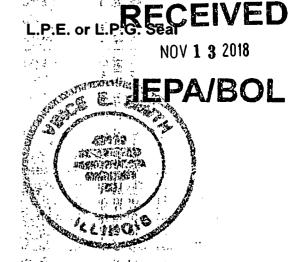
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I certify under penalty of law that all activities that are the subject of this plan were conducted under my supervision or were conducted under the supervision of another Licensed Professional Engineer or Licensed Professional Geologist and reviewed by me; that this plan and all attachments were prepared under my supervision; that to the best of my knowledge and belief, the work described in this plan has been completed in accordance with the Environmental Protection Act [415 ILCS 5], 35 III. Adm. Code 731, 732 or 734, and generally accepted standards and practices of my profession; and that the information presented is accurate and complete. I am aware there are significant penalties for submitting false statements or representations to the Illinois EPA, including but not limited to fines, imprisonment, or both as provided in Sections 44 and 57.17 of the Environmental Protection Act [415 ILCS 5/44 and 57.17].

Licensed Professional Engineer or Geologist

Name Vince E. Smith, P.E.
Company CWM Comapny, Inc.
Address 701 W. South Grand Avenue
City Springfield '
State Illinois
Zip Code 62704
Phone (217) 522-8001
III. Registration No. <u>662 - 0461/8</u>
License Expiration Date ///30/19
Signature Le Smith
Date 11/12/18



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APPENDIX B SITE MAPS AND ILLUSTRATIONS

CORRECTIVE ACTION PLAN AMENDMENT S&S Infinite Group Peoria, Illinois

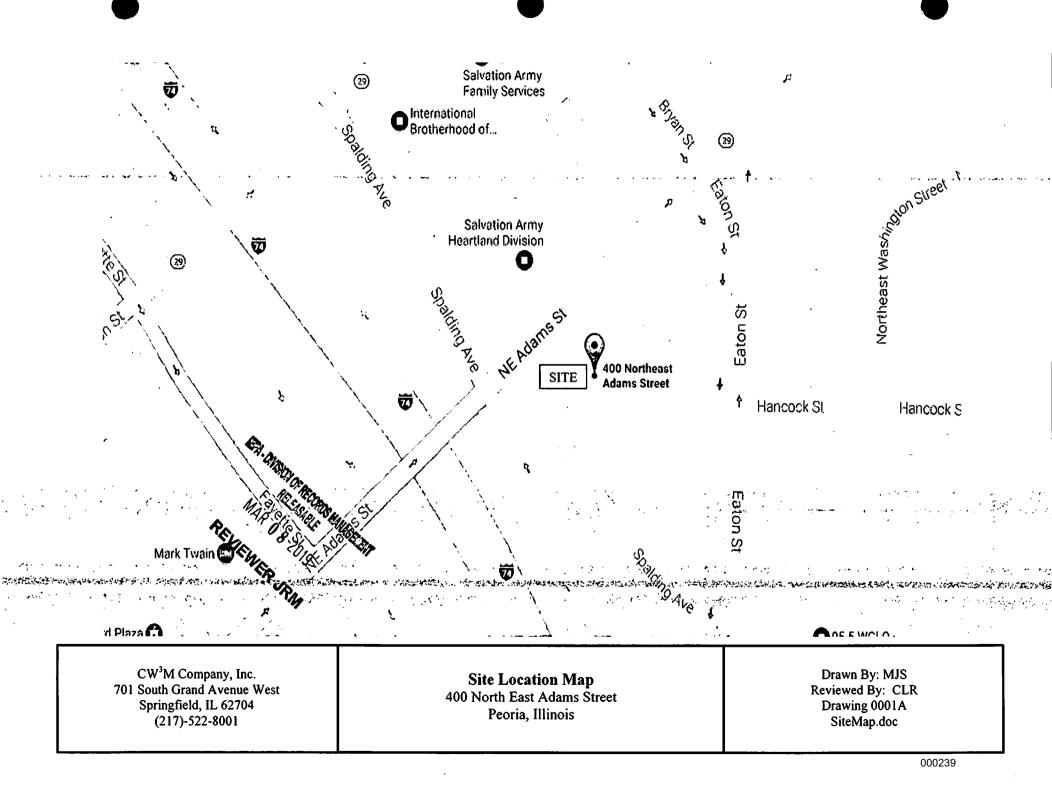
INDEX OF DRAWINGS.

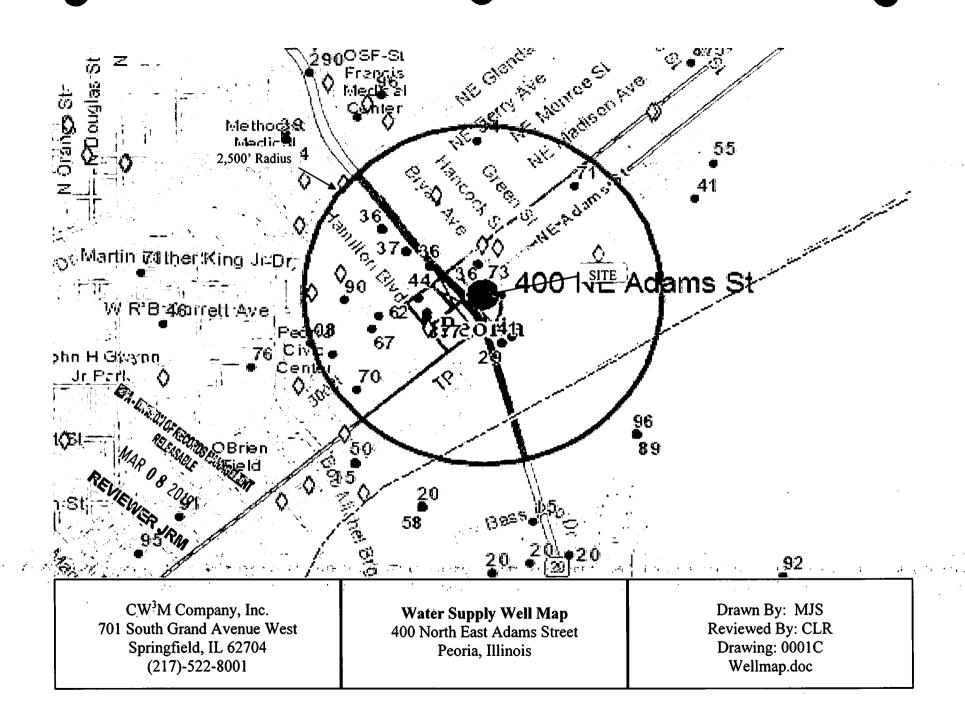
Drawing	Description
Number	
0001A	Site Location Map
0001B	Surrounding Populations Map
0001C	Water Supply Well Map
0002	Site Map
0003A	Early Action Excavation Map
, 0003B	Early Action Sample Location Map
0004	Soil Boring Location Map
. 0005A	Soil Contamination Values Map (0-5 feet)
0005B	Soil Contamination Values Map (5-10 feet)
0005C	Soil Contamination Values Map (10-15 feet)
0005D	Soil Contamination Values Map (15-20 feet)
0006	Soil Contamination Plume Map
0007	Proposed Excavation Area Map
0008	Proposed Construction Worker Caution Zone Map
0009	Proposed Groundwater Ordinance Map
0010	TACO Parameters Map
0011	TACO Modeling Map
0012	Highway Authority Agreement Map

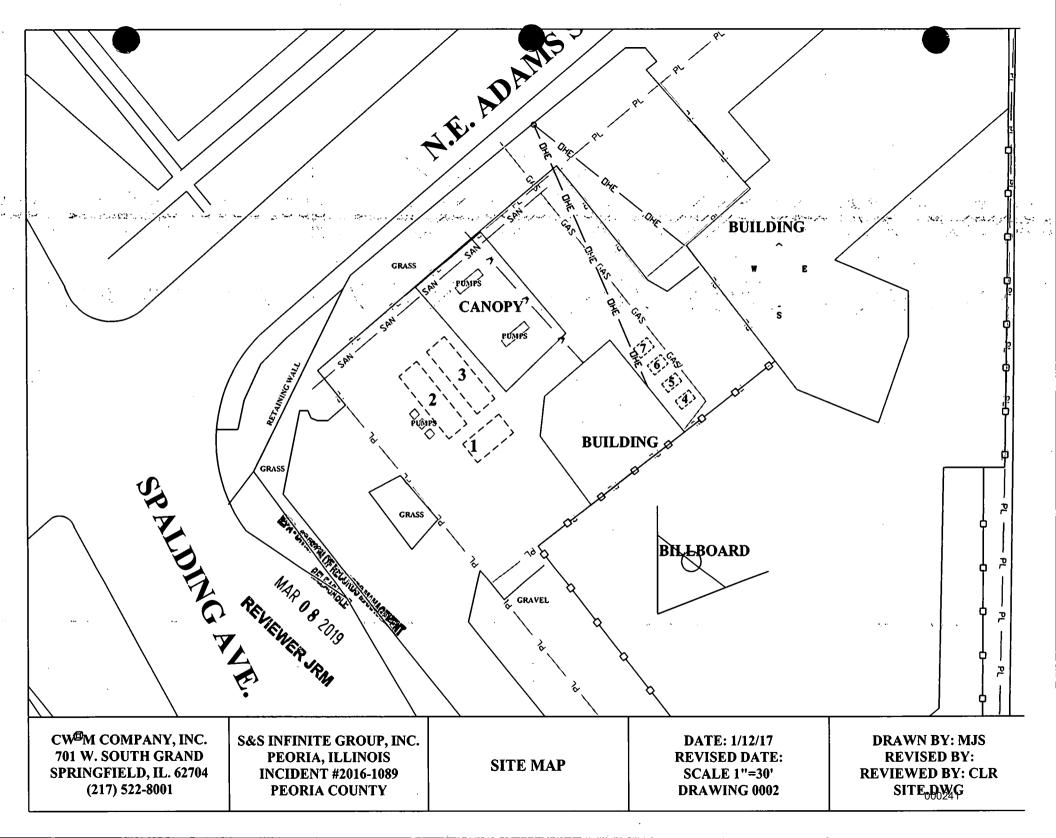


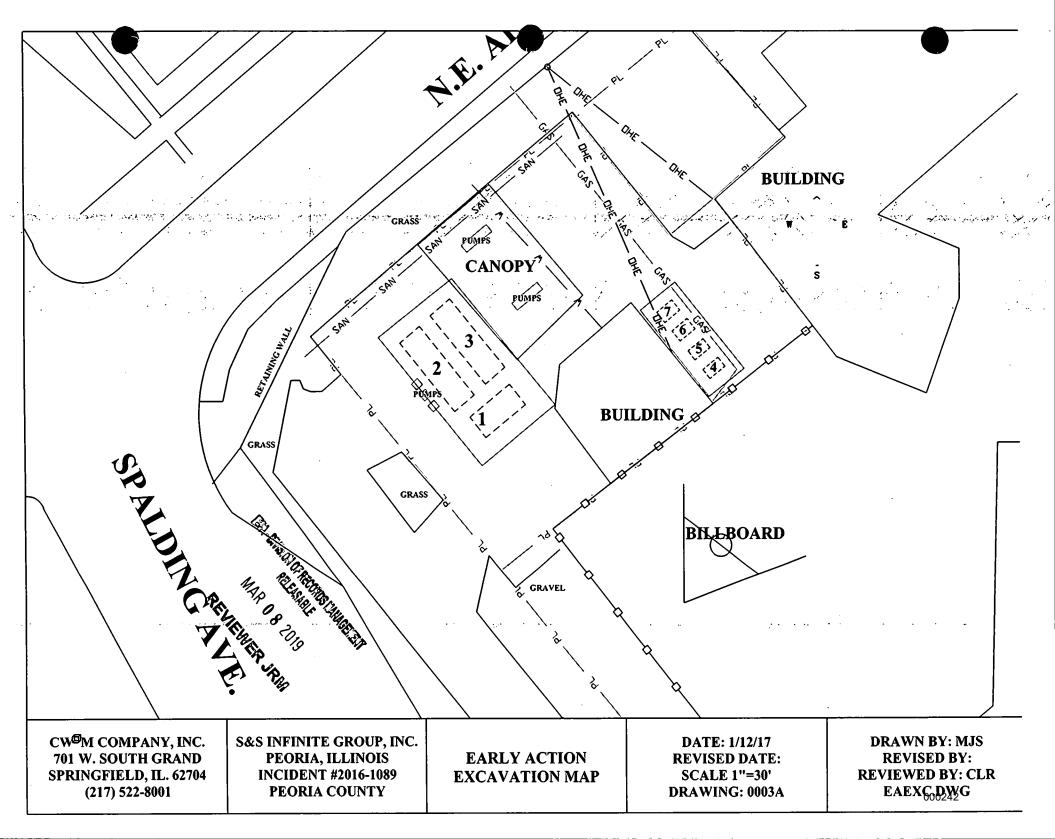
CW³M Company, Inc. 701 South Grand Avenue West Springfield, IL 62704 (217)-522-8001

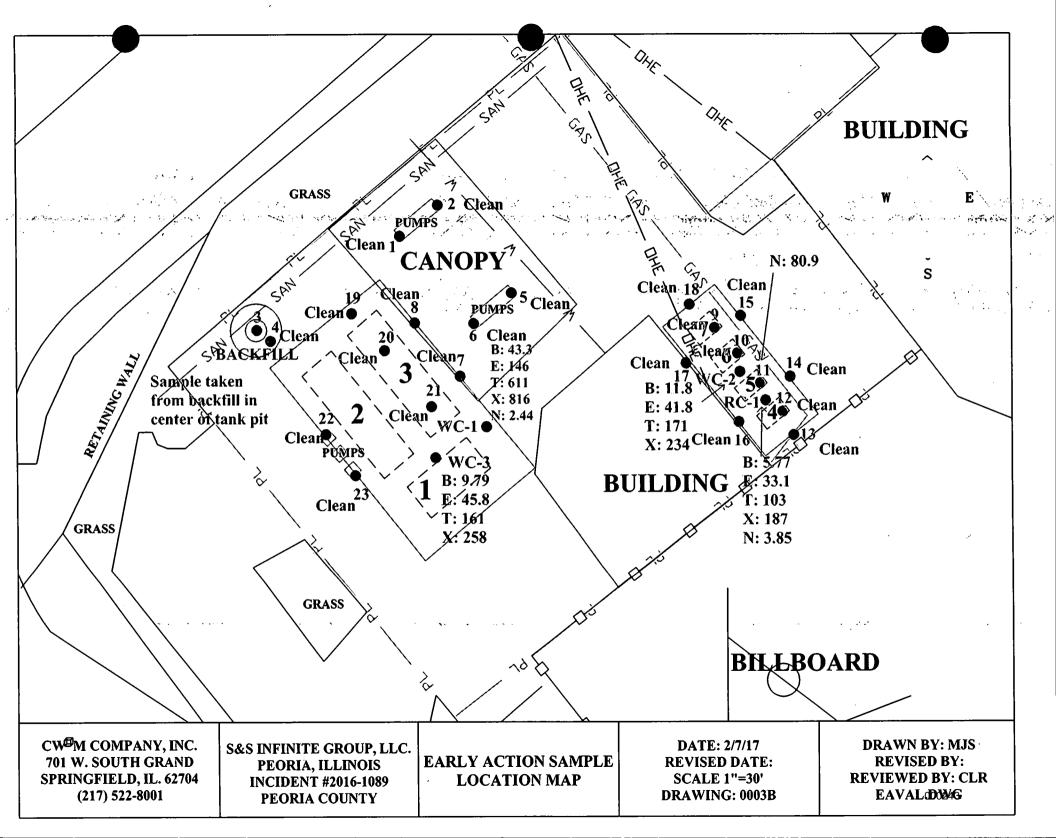
Surrounding Populations Map 400 North East Adams Street Peoria, Illinois Drawn By: MJS Reviewed By: CLR Drawing 0001B SP.doc

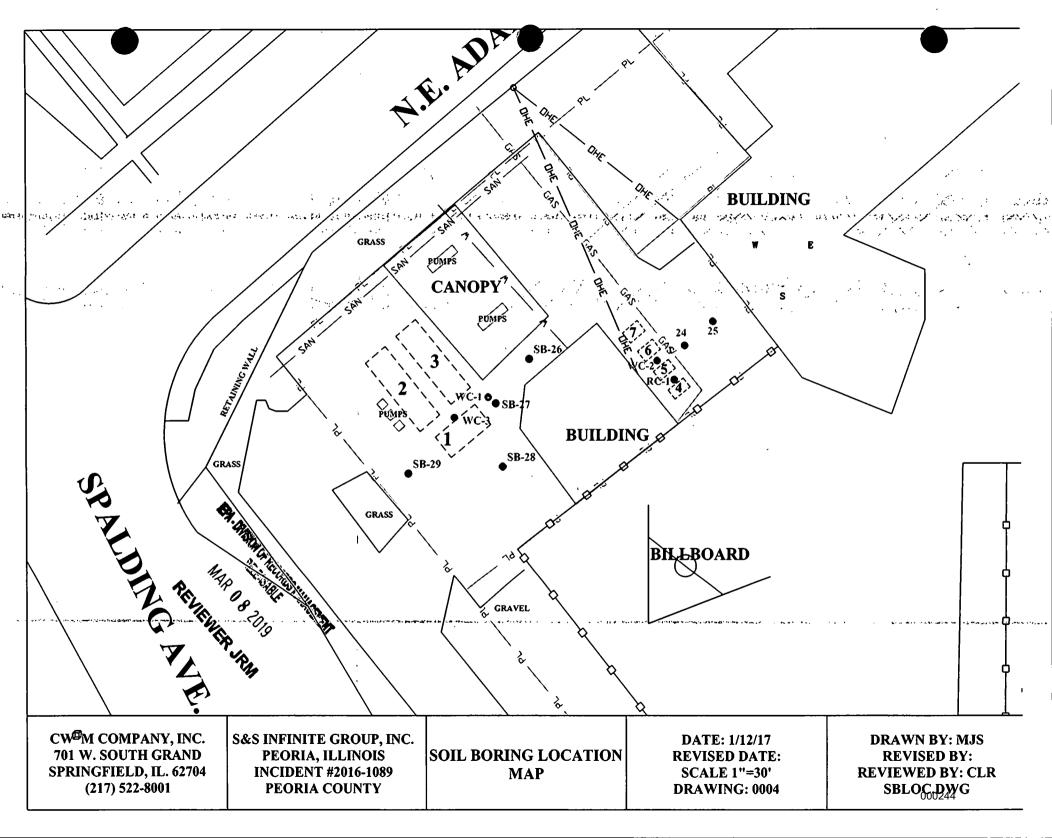


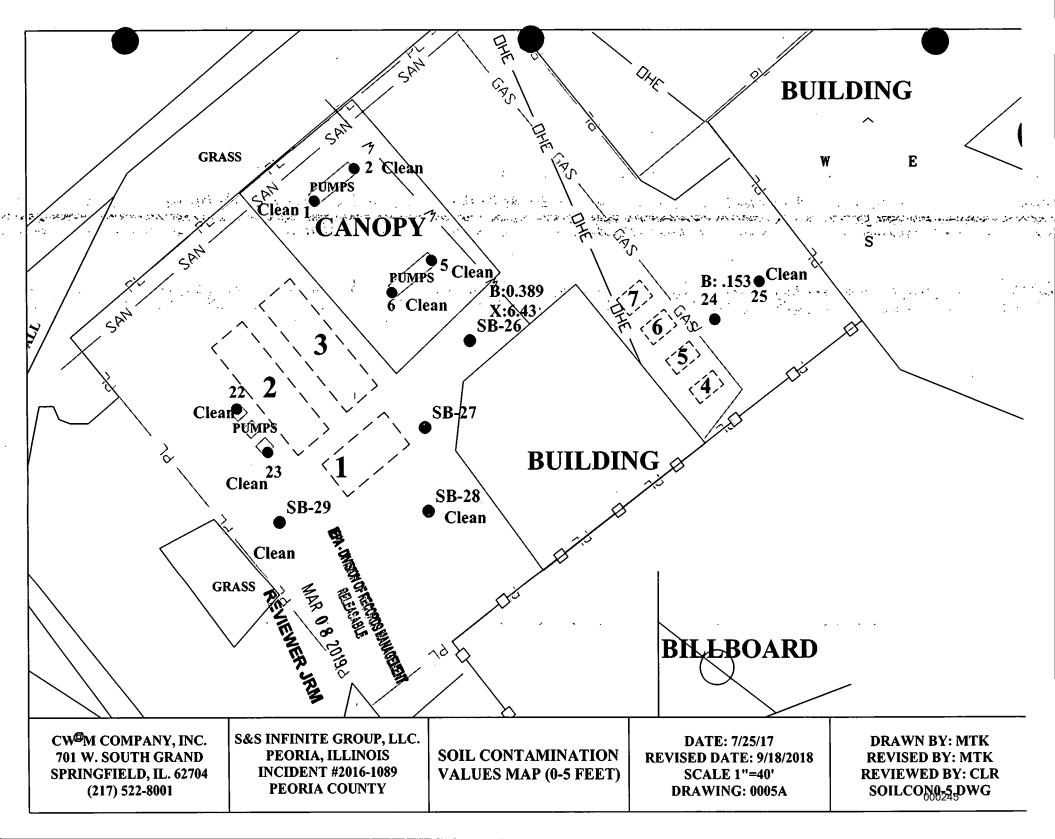


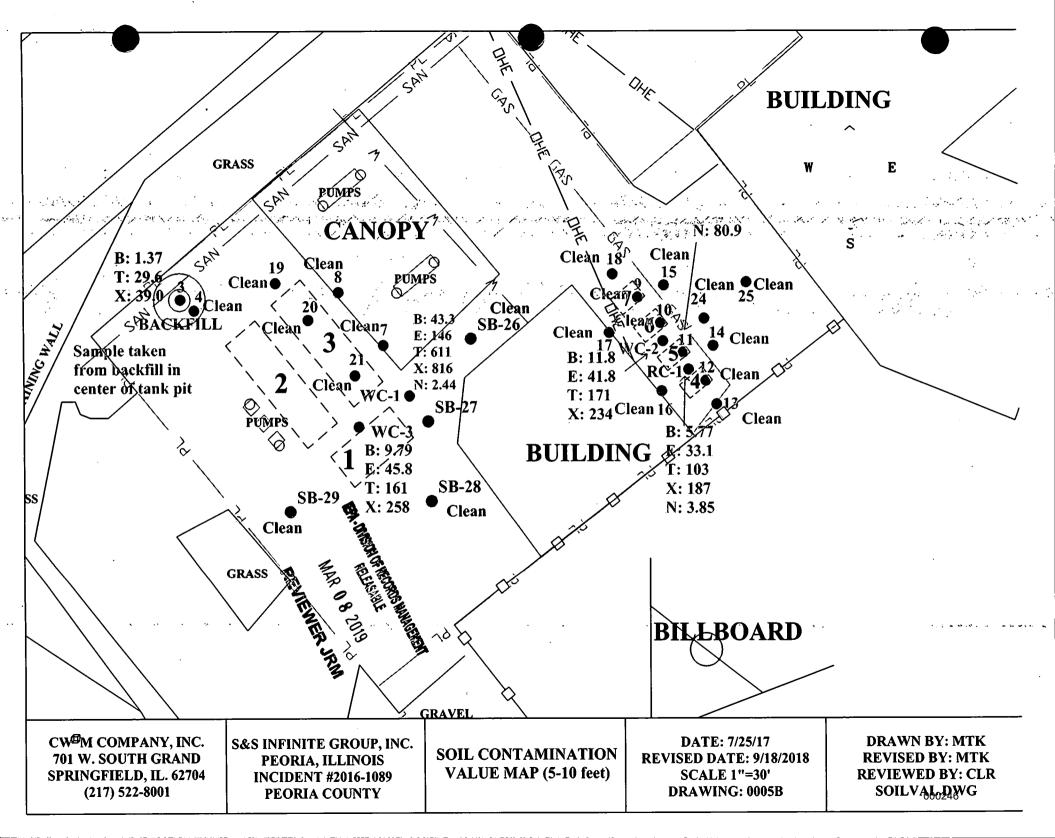


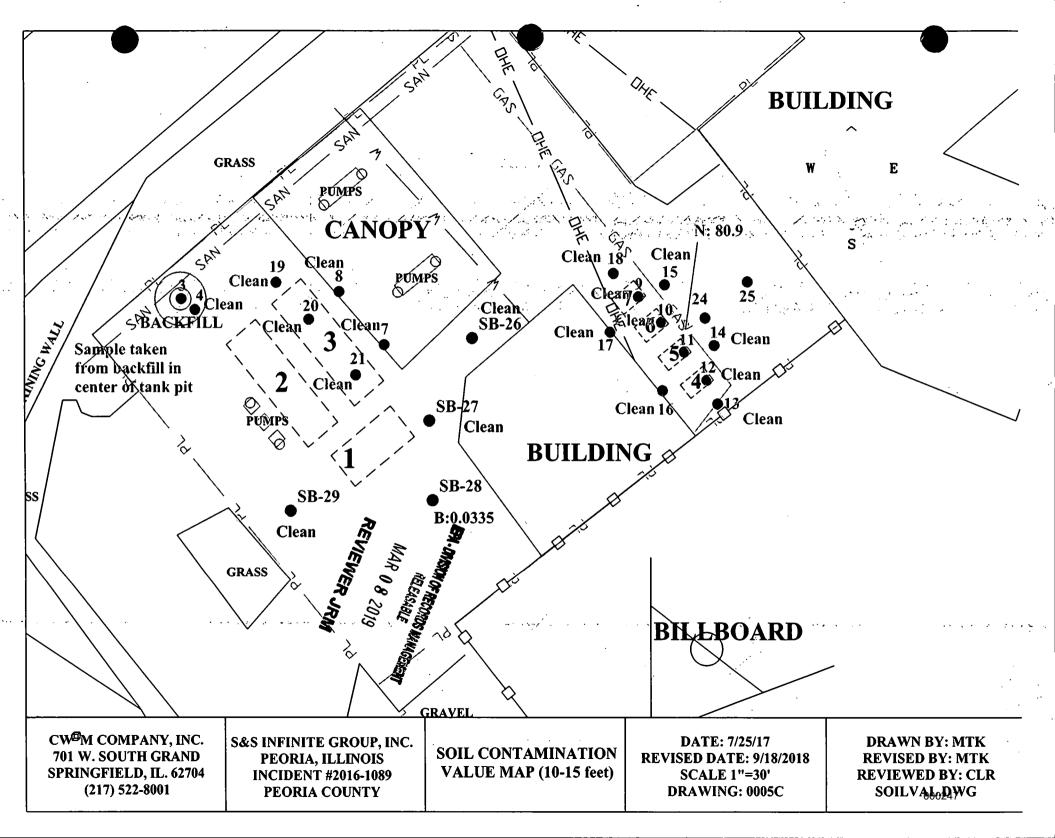


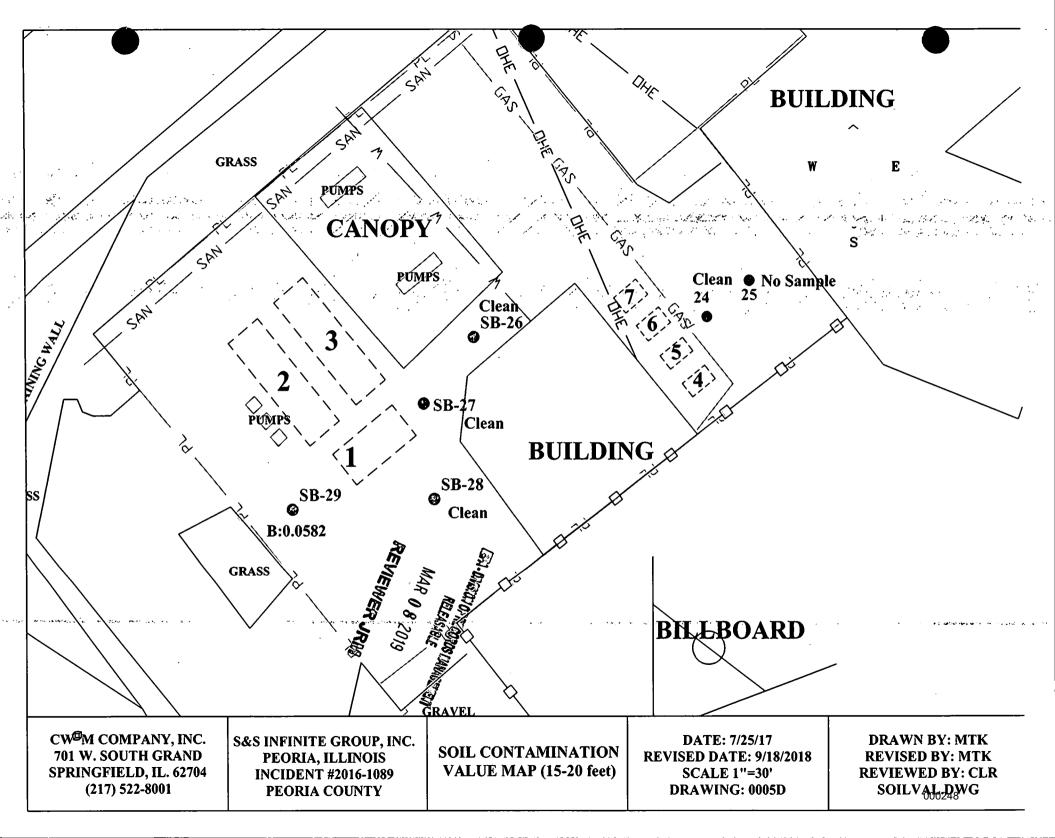


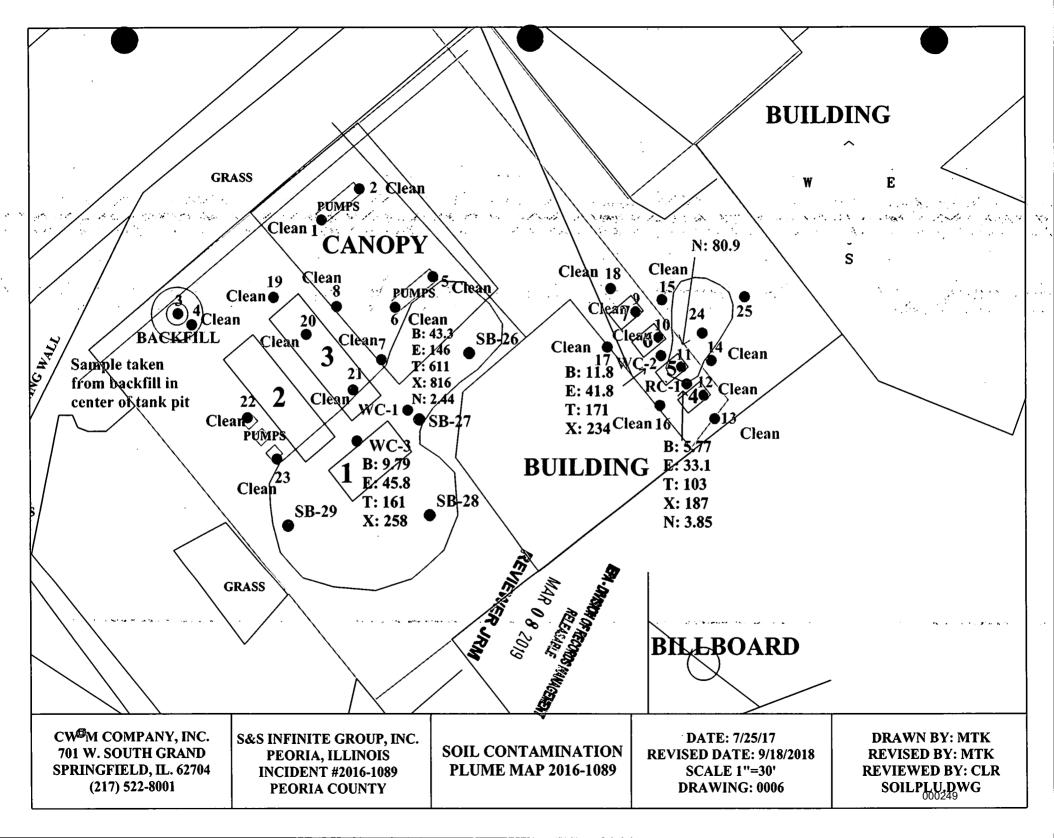


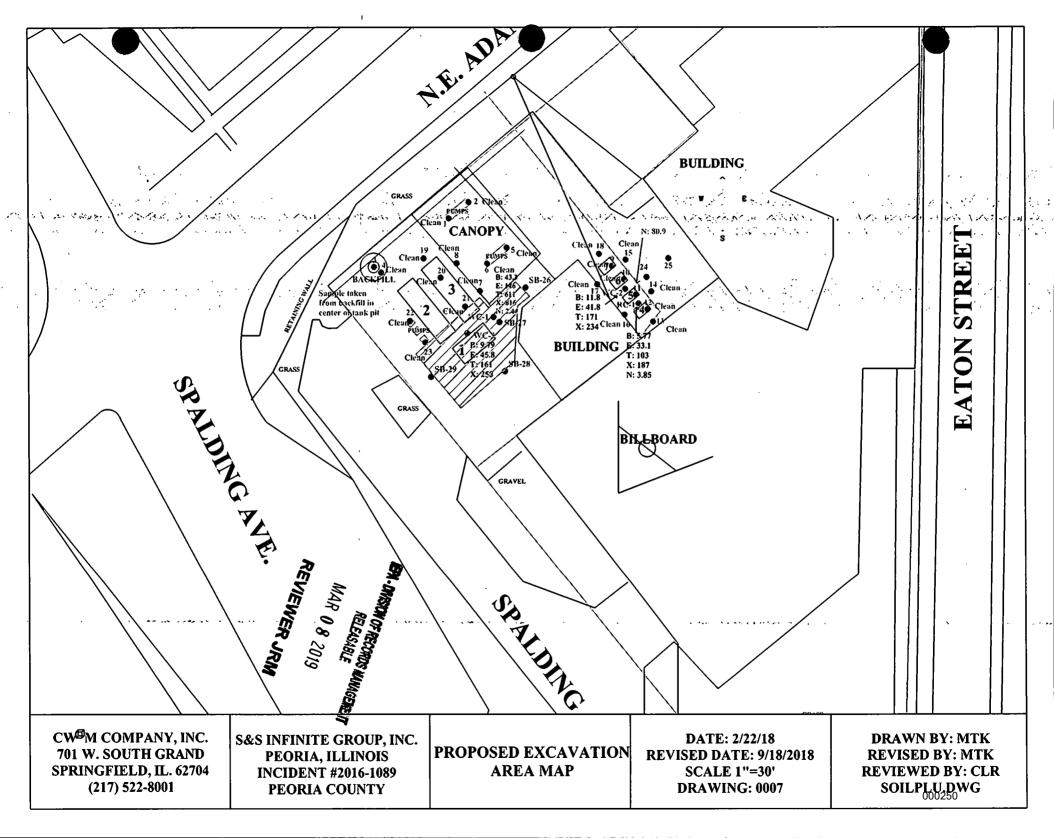


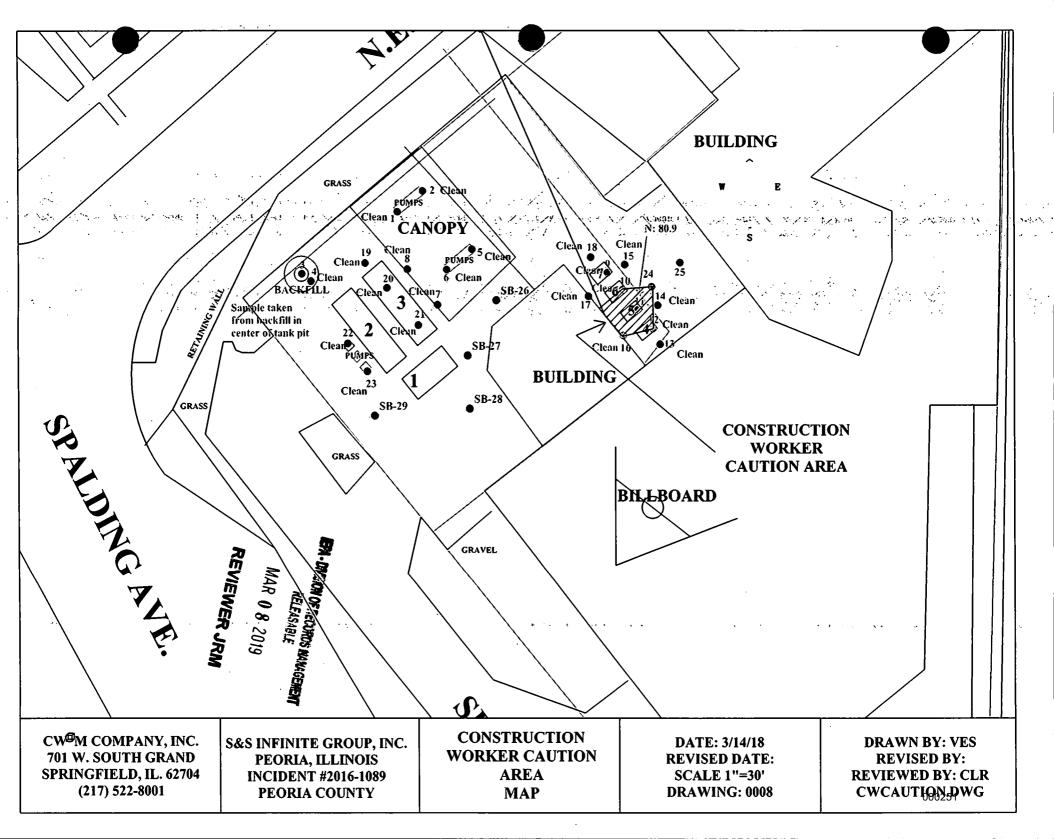


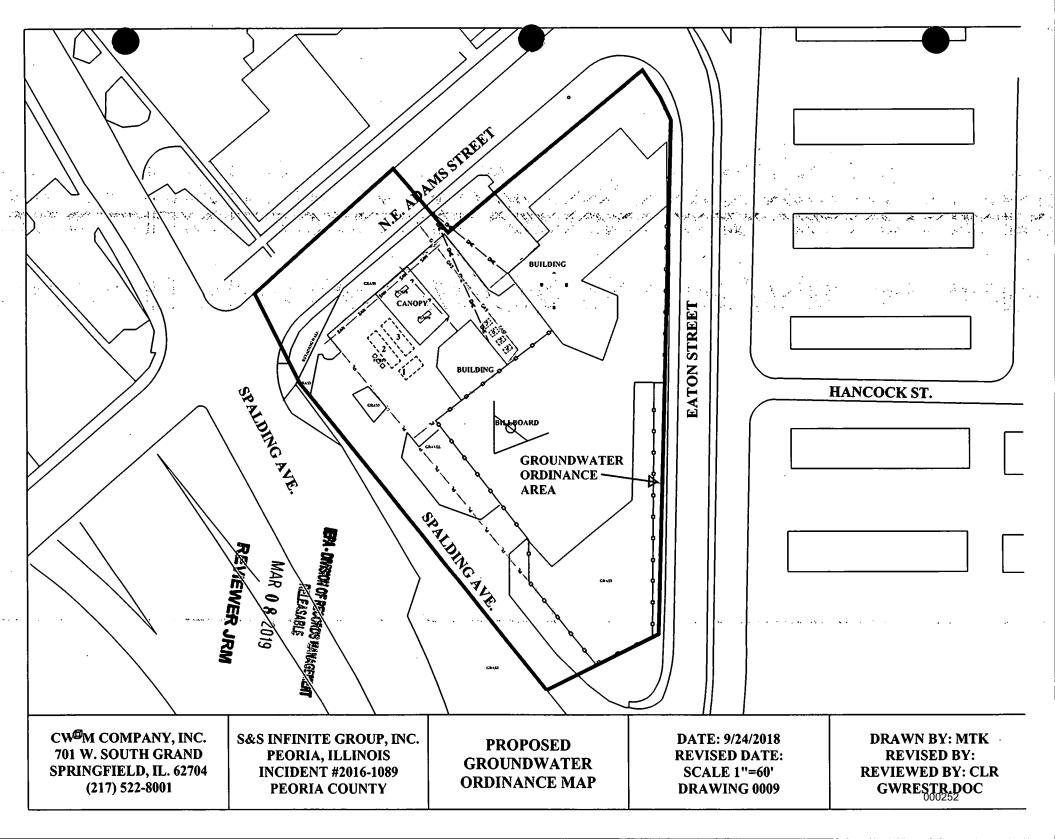


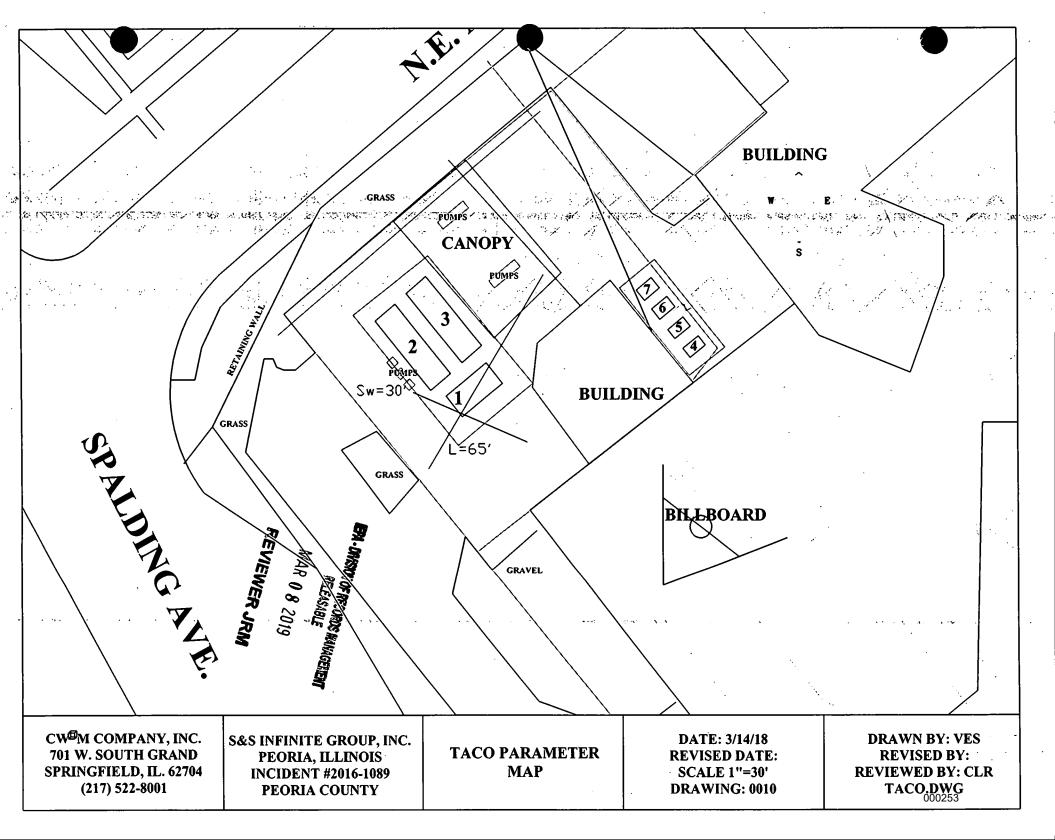


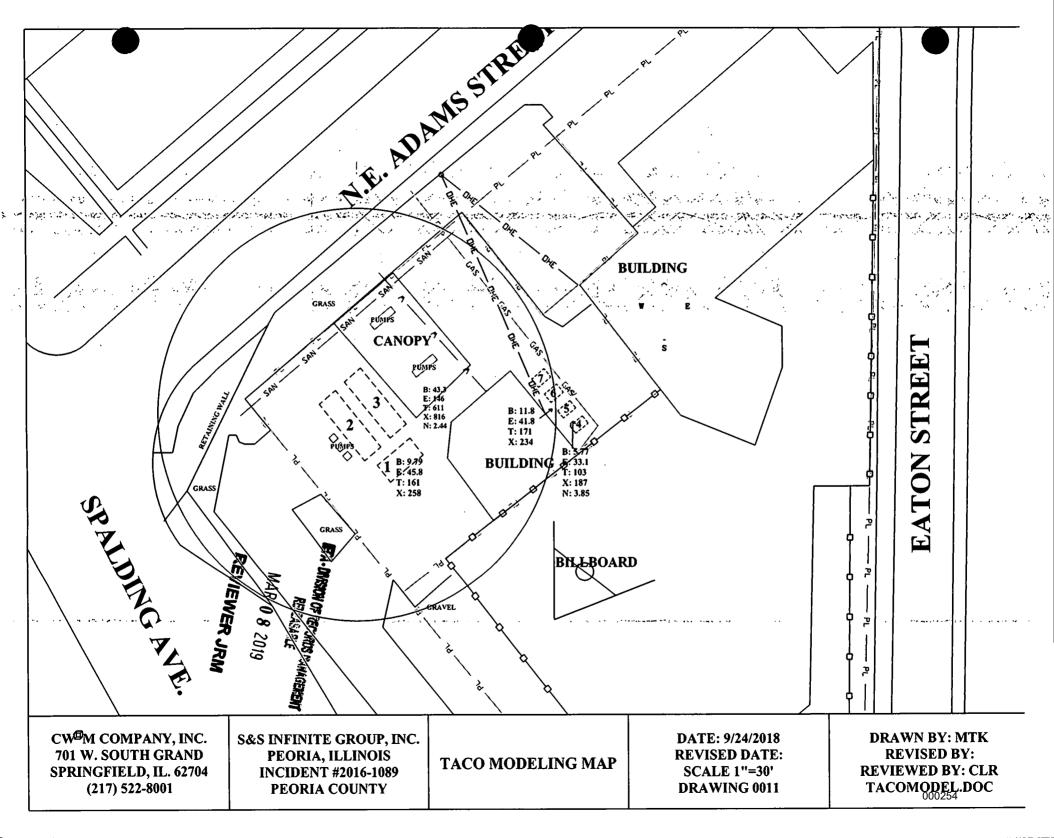












APPENDIX C OSFM ELIGIBILITY DETERMINATION

CORRECTIVE ACTION PLAN AMENDMENT S&S Infinite Group Peoria, Illinois



Office of the Illinois State Fire Marshal

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2/15/2017

S and S Infinite Group Incorporated 400 North East Adams Street Peoria, IL 616034202

In Re:

Facility No. 3010480

IEMA Incident No. 20161089

Downtown 66

400 North East Adams Street Peoria, Peoria, IL 616034202

Dear Applicant:

The Reimbursement Eligibility and Deductible Application received on February 15, 2017 for the above referenced occurrence has been reviewed. The following determinations have been made based upon this review.

It has been determined that you are eligible to seek payment of costs in excess of \$5,000. The costs must be in response to the occurrence referenced above and associated with the following tanks:

Eligible Tanks

Tank 3 10000 gallon Gasoline

Tank 4 350 gallon Gasoline

Tank 5 350 gallon Gasoline

Tank 6 560 gallon Diesel Fuel

Tank 7 560 gallon Used Oil

You must contact the Illinois Environmental Protection Agency to receive a packet of Agency billing forms for submitting your request for payment.

An owner or operator is eligible to access the Underground Storage Tank Fund if the eligibility requirements are satisfied:

- 1. Neither the owner nor the operator is the United States Government,
- 2. The tank does not contain fuel which is exempt from the Motor Fuel Tax Law,
- 3. The costs were incurred as a result of a confirmed release of any of the following substances:

"Fuel", as defined in Section 1.19 of the Motor Fuel Tax Law

Aviation fuel

Heating oil

Kerosene

Used oil, which has been refined from crude oil used in a motor vehicle, as defined in Section 1.3 of the Motor Fuel Tax Law.

- 4. The owner or operator registered the tank and paid all fees in accordance with the statutory and regulatory requirements of the Gasoline Storage Act.
- 5. The owner or operator notified the Illinois Emergency Management Agency of a confirmed release, the costs were incurred after the notification and the costs were a result of a release of a substance listed in this Section. Costs of corrective action or indemnification incurred before providing that notification shall not be eligible for payment.
- 6. The costs have not already been paid to the owner or operator under a private insurance policy, other written agreement, or court order.

7. The costs were associated with "corrective action".

This constitutes the final decision as it relates to your eligibility and the set deductible. We reserve the right to change the deductible determination should additional information that would change the determination become available. An underground storage tank owner or operator may appeal the decision to the Illinois Pollution Control Board (Board), pursuant to Section 57.9 (c) (2). An owner or operator who seeks to appeal the decision shall file a petition for a hearing before the Board within 35 days of the date of issuance of the final decision, (35 Illinois Administrative Code 105.504(b)).

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For information regarding the filing of an appeal, please contact:

Clerk Illinois Pollution Control Board State of Illinois Center 100 West Randolph, Suite 11-500 Chicago, Illinois 60601 (312) 814-3620

The following tanks are also listed for this site:

Tank 1 6000 gallon Diesel Fuel Tank 2 10000 gallon Gasoline

Your application indicates that there has not been a release from these tanks under this incident number. You may be eligible to seek payment of corrective action costs associated with these tanks if it is determined that there has been a release from one or more of these tanks. Once it is determined that there has been a release from one or more of these tanks you may submit a separate application for an eligibility determination to seek corrective action costs associated with this/these tanks.

If you have any questions, please contact our Office at (217) 785-1020.

Sincerely,

Deanne Lock

Division of Petroleum and Chemical Safety

APPENDIX D

CORRECTIVE ACTION PLAN BUDGET AND CERTIFICATION

CORRECTIVE ACTION PLAN AMEN DMENT
S&S Infinite Group
Peoria, Illinois

Owner/Operator and Licensed Professional Engineer/Geologist Budget Certification Form

I hereby certify that I intend to seek payment from the UST Fund for costs incurred while performing corrective action activities for Leaking UST incident 2016–1089 . I further certify that the costs set forth in this budget are for necessary activities and are reasonable and accurate to the best of my knowledge and belief. I also certify that the costs included in this budget are not for corrective action in excess of the minimum requirements of 415 ILCS 5/57, no costs are included in this budget that are not described in the corrective action plan, and no costs exceed Subpart H: Maximum Payment Amounts, Appendix D Sample Handling and Analysis amounts, and Appendix E Personnel Titles and Rates of 35 III. Adm. Code 732 or 734. I further certify that costs ineligible for payment from the Fund pursuant to 35 III. Adm. Code 732.606 or 734.630 are not included in the budget proposal or amendment. Such ineligible costs include but are not limited to:

Costs associated with ineligible tanks.

Costs associated with site restoration (e.g., pump islands, canopies).

Costs associated with utility replacement (e.g., sewers, electrical, telephone, etc.).

Costs incurred prior to IEMA notification.

Costs associated with planned tank pulls.

Legal fees or costs.

Costs incurred prior to July 28, 1989.

Owner/Operator: S & S Infinite Group, Inc.

Costs associated with installation of new USTs or the repair of existing USTs.

Authorized Representative: Syed Muneeb	IRIE:	Agent	
Signature:	Date:	11/3/15	NOV 1 3 2018
21d	in Llawaba	229	EPA/BOL
Subscribed and sworn to before me the d	CAROL L ROW Official Seal Notary Public - State of	E of Illinois	•
(Notary Public)	My Commission Expires N	rial 16, 2021	
In addition, I certify under penalty of law that all activi conducted under my supervision or were conducted to or Licensed Professional Geologist and reviewed by prepared under my supervision; that, to the best of mor report has been completed in accordance with the 732 or 734, and generally accepted standards and praccurate and complete. I am aware there are significated the Illinois EPA, including but not limited to fines, in Environmental Protection Act [415 ILCS 5/44 and 57.	under the supervision of and me; that this plan, budget, on the knowledge and belief, the Environmental Protection A ractices of my profession; and penalties for submitting mprisonment, or both as profession.	other Licensed Profes or report and all attach work described in the Act [415 ILCS 5], 35 III and that the information false statements or re ovided in Sections 44	sional Engineer ments were plan, budget, Adm. Code presented is presentations
L.P.E./L.P.G.: Vince E. Smith	L.P.E./L.P.G. Sea	al: A A Marke	Now the state of t
L.P.E./L.P.G. Signature:	Date	/////	
Subscribed and sworn to before me the	day of Wollinber		<u> </u>
	CAROL L BOWE	KL 1996	Secretarize and the secretarized and the secreta
(Notary Public)	otary Public - State of Illinois		
The Illinois EPA is authorized to require this informati	ion under 415 ILCS 5/1. Di	sclosure of this inform	ation is

required. Failure to do so may result in the delay or denial of any budget or payment requested hereunder.

RECEIVED



Illinois Environmental Protection Agency

Bureau of Land • 1021 N. Grand Avenue E. • P.O. Box 19276 • Springfield • Illinois • 62794-9276

General Information for the Budget and Billing Forms

LPC #: 143	0650114	County:	Peoria	·	: % 	<u>ं</u> <u>ः</u>
City: Peoria	sit	e Name:	S&SInf	inite Group	, Inc.	<u>.</u>
Site Address	s: 400 NE Adams Street			• • •	. 4	À .
IEMA Incide	nt No.: 2016-1089	· · · · · ·	_		(···
IEMA Notific	cation Date: 11/21/2016				***	\
Date this for	m was prepared: Mar 9, 2018					; ;
	s being submitted as a (check one, if a	nnlicable		·; '		
		ppiicable	·)·			2 V
□ Вс	udget Proposal			•	.*	<i>:</i> .
	udget Amendment (Budget amendments	must inclu	ide only tł	ne costs ov	er the pr	evious budget.)
				* * , ,		·
□ в	illing Package					RECEIVE
P	lease provide the name(s) and date(s) of	report(s)	documen	ting the cos	ts reque	sted:
N	lame(s):			· · ·		NOV 1 3 2018
	eate(s):	•				IEPA/BOL
	ge is being submitted for the site activ	ities indi	cated bel	ow:	**************************************	ILPA/BUL
35 III. Adm.	Code 734:				-4 - - 4 	: :
E	arly Action					: ,
☐ F	ree Product Removal after Early Action			·. ·		
□ s	ite Investigation Stage	1: 🔲	Stag	e 2: 🔲	Sta	nge 3: 🔲
		I Costs		•		
35 III. Adm.	Code 732:	•		25.	1. p	···t
	arly Action			. :		; ;
	ree Product Removal after Early Action			*.		
_	ite Classification					
_	ow Priority Corrective Action			· · · · · · · · · · · · · · · · · · ·		
	igh Priority Corrective Action					 21
35 III. Adm.				••		
	ite Investigation			• :.		
	corrective Action			•		\
	}				· · · · · · · · · · · · · · · · · · ·	1 5

IL 532 -2825 LPC 630 Rev. 1/2007

General Information for the Budget and Billing Forms

The following address will be used as the mailing address for checks and any final determination letters regarding payment from the Fund.

Pay to the order of: S&S Infinite G	roup		
Send in care of: CWM Company, Inc.		<u>, </u>	•
Address: P.O. Box 571			
City: Carlinville	State: IL	Zip: <u>62626</u>	
The payee is the: Owner Op	erator [] (Check one	or both.)	
		W-9 must be sub	
Signature of the owner or operator of the UST(s) (required)	Click here to prin	it off a W-9 Form.
Number of petroleum USTs in Illinois presently parent or joint stock company of the owner or or joint stock company of the owner or operated	operator; and any company	owner or operator; a owned by any paren	ny subsidiary, it, subsidiary
Fewer than 101: 🛛 101 o	r more:		
Number of USTs at the site: 7 (Nave been removed.)	umber of USTs includes U	STs presently at the s	site and USTs that
Number of incidents reported to IEMA for this	site: 2		
Incident Numbers assigned to the site due to r	releases from USTs: 20	140963	20161089
Please list all tanks that have ever been locate			

Product Stored in UST	Size (gallons)	Did UST have a release?	Incident No.	Type of Release Tank Leak / Overfill / Piping Leak
Diesel	6,000	Yes 🗓 No 🗌	20140963	Overfill
Gasoline	10,000	Yes 💢 No 🗌	20140963	Overfill
Gasoline	10,000	Yes 🗶 No 🗌	20161089	0verfill
Gasoline	. 350	Yes 🗓 No 🗌	20161089	Tank Leak
Gasoline	350	Yes 🛛 No 🗌	20161089	Tank Leak
Used Oil	560	Yes 🗓 No 🗌	20161089	Tank Leak
Used Oil	560	Yes 🗓 No 🗌	20161089	Tank Leak
		Yes No No		
		Yes No	·	

Budget Summary

;					
734	Free Product	Stage 1 Site Investigation	Stage 2 Site Investigation	Stage 3 Site Investigation	Corrective Action
					Proposed
Drilling and Monitoring Well Costs Form	\$	\$	\$	\$	\$ 1,547.20
Analytical Costs Form	\$ 1.44.5	\$	\$	\$ 1	\$ 2,918.98
Remediation and Disposal Costs Form	\$	\$	\$	\$ 100 miles	\$ 71,580.88
UST Removal and Abandonment Costs Form	\$ 177	\$ 12 PM	\$	\$ 2 m 1 = 2	*
Paving, Demolition, and Well Abandonment Cost Form		\$	\$	\$	\$
Consulting Personnel Costs Form	Section 1	\$ 4 TO THE POST OF		\$	\$ 29,749.77
Consultant's Materials Costs Form	\$	\$	\$	\$ 100 mm	\$ 806.50
Handling Charges Form	the Illinois EPA.	es will be determi The amount of al n the Handling Ch	lowable handling	billing package is charges will be d	submitted to
Total	\$ ·	\$	\$	*	\$ 106,603.33

The state of the s

25.

Drilling and Monitoring Well Costs Form

Drilling 1.

Number of Borings to Be Drilled	Type HSA/PUSH/ Injection	Depth (feet) of Each Boring	Total Feet Drilled	Reason for Drilling
1	PUSH	10.00	10.00	Waste Characterization Parameters
				4.
	£			. : £:
				· .
				+ 2
				÷-

 Subpart H minimum payment amount applies.

Total Feet Rate per Foot (Rate per Foot (\$)	Total Cost (\$)
Total Feet via HSA:		29.65	1 3
Total Feet via PUSH:	10.00	23.21	232.10
Total Feet for Injection via PUSH:	_	19.34	÷ (**)
		Total Drilling Costs:	1,547.20

Monitoring / Recovery Wells 2.

Monite	oring / Recovery Wells	,		
Number of Wells	Type of Well HSA / PUSH / 4" or 6" Recovery / 8" Recovery	Diameter of Well (inches)	Depth of Well (feet)	Total Feet of Wells to Be installed (\$)
				2
•				· 🕳 .
			•	
	,		***	
	•		\$ \$ \$ \$	3

		2.5°.	
Well Installation	Total Feet	Rate per Foot (\$)	Total Cost (\$)
Total Feet via HSA:		•: .:	
Total Feet via PUSH:		•	i i i i i i i i i i i i i i i i i i i
Total Feet of 4" or 6" Recovery:			<u>4</u>
Total Feet of 8" or Greater Recovery:			
		Total Well Costs:	ì

Total Drilling and Monitoring Well Costs:	÷ \$1,547.20
Total Diffilling and Monitoring Well 909ts.	" \$1,547.20

Analytical Costs Form

Laboratory Analysis	Number of Samples		Cost (\$) per Analysis		Total per Parameter
Chemical Analysis	_			•	
BETX Soil with MTBE EPA 8260	9	Х	109.59	, =	\$986.31
	<u> </u>	X		=	
BETX Water with MTBE EPA 8260		X			
COD (Chemical Oxygen Demand)		X	<u>'</u>	=	
Corrosivity Flash Point or Ignitability Analysis EPA 1010	1	x	42.54	=	\$42.54
		X	42.54	_	\$42.5
Fraction Organic Carbon Content (foc) ASTM-D 2974-00		X	47	=	
Fat, Oil, & Grease (FOG) LUST Pollutants Soil - analysis must include volatile, base/ neutral, polynuclear aromatics and metals list in Section 732.		х		=	
Appendix B and 734.Appendix B Dissolved Oxygen (DO)		X		=	
	1	X	18.05	=	\$18.05
Paint Filter (Free Liquids)	<u> </u>	X		=	\$10.00
PCB / Pesticides (combination)		X	(9)	<u> </u>	· · · · · ·
PCBs		X -	· .c	=	
Pesticides				. =	
<u>рН</u> :	1	X	18.05	=	\$18.05
Phenol			: <u>a</u>	" =	44.507.0
Polynuclear Aromatics PNA, or PAH SOIL EPA 8270	8	X	195.98	. =	\$1,567.84
Polynuclear Aromatics PNA, or PAH WATER EPA 8270		Х	. 52	=	
Reactivity		X	•	· =	
SVOC - Soil (Semi-Volatile Organic Compounds)		Х	1::4	=	
SVOC - Water (Semi-Volatile Organic Compounds)		Χ̈́		.=	
TKN (Total Kjeldahl) "nitrogen"		Χ	7	` =	
TPH (Total Petroleum Hydrocarbons)		X	1 1	_ =	
VOC (Volatile Organic Compounds) - Soil (Non-Aqueous)		X		; =	
VOC (Volatile Organic Compounds) - Water		X	. 75	, `=	
		X		, =	
1		"X	1.5	• =	
		Χ	41	= .	
		ιX	7 12	·=	
		X		: =	
Geo-Technical Analysis) (A) E-		
Soil Bulk Density (pb) ASTM D2937-94		X	: 3	. =	
Ex-situ Hydraulic Conductivity / Permeability		Х	\$ -4	=	
Moisture Content (w) ASTM D2216-92 / D4643-93		Х	:2	_=	
Porosity		X		=	
Rock Hydraulic Conductivity Ex-situ		X	. 1	=	
Sieve / Particle Size Analysis ASTM D422-63 / D1140-54		X		i =	
Soil Classification ASTM D2488-90 / D2487-90		X		· =	
Soil Particle Density (ps) ASTM D854-92		Х		=	
		X.		=	
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Analytical Costs Form

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Analytical Costs Form					
Metals Analysis		÷.			
				i. I	
Soil preparation fee for Metals TCLP Soil (one fee per soil sample)		X		=	****
Soil preparation fee for Metals Total Soil (one fee per soil sample)	1	Х	20.62	=	\$20.62
Water preparation fee for Metals Water (one fee per water sample)		Х	: =	.i=	
		1, 20	• :	; -	
Arsenic TCLP Soil		X		=	
Arsenic Total Soil :		Х		=	
Arsenic Water :		X	Ğ	=	· .
Barium TCLP Soil		Х	મ	=	
Barium Total Soil		Х	~ 3	,=	
Barium Water		Х	च *	· =	
Cadmium TCLP Soil		Х	<u></u>	·=	
Cadmium Total Soil		Х		=	
Cadmium Water		Х	. 5	=	
Chromium TCLP Soil		X		=	
Chromium Total Soil		х	ů.	=	
Chromium Water		Х	. 3	=	
Cyanide TCLP Soil		Х	2	=	
		X		=	
Cyanide rotal Coll		X			
Cyanide Water		X	<u> </u>	= -:-=	
Iron TCLP Soil		x	4471	=	
Iron Total Soil		X			
Iron Water				=	****
Lead TCLP Soil	1	X	20.62	.=	\$20.62
Lead Total Soil		X		=	
Lead Water		Χ	<u>: 🔌</u>	· =	
Mercury TCLP Soil		Χ.		_=	
Mercury Total Soil		X		.=	
Mercury Water :		X		=	
Selenium TCLP Soil	.=	X		' =	
Selenium Total Soil		Х	.in - 148	=	
Selenium Water		X		,=	
Silver TCLP Soil		X	42	. =	
Silver Total Soil		X.	4.2	=	
Silver Water		X		. =	
Metals TCLP Soil (a combination of all metals) RCRA		Χ.	- 1	. =	
Metals Total Soil (a combination of all metals) RCRA		X.		. =	
Metals Water (a combination of all metals) RCRA		X.	4,6	=	
		X	•	=	
		X	7	/ =	
:		X		 :=	
		Х	: 2	=	
Other				<u> 1</u>	
EnCore® Sampler, purge-and-trap sampler, or equivalent sampling device	9	X	12.89	=	\$116.01
Sample Shipping per sampling event ¹	2	X	64.47	╘	\$128.94

¹A sampling event, at a minimum, is all samples (soil and groundwater) collected in a calendar day.

Remediation and Disposal Costs Form

A. Conventional Technology

Excavation, Transportation, and Disposal of contaminated soil and/or the 4-foot backfill material removal during early action activities:

Number of Cubic Yards	Cost per Cubic Yard (\$)	Total Cost
721.00	73.49	\$52,986.29

Backfilling the Excavation:

Number of Cubic Yards	Cost per Cubic Yard (\$)	Total Cost
721.00	25.79	\$18,594.59

Overburden Removal and Return:

Number of Cubic Yards	Cost per Cubic Yard (\$)	Total Cost
:	, ; j	1. 2 m

B. Alternative Technology

Alternative Technology			
Selected:		· , •;;.	
		٠.	
Number of Cubic Yards of S	Soil to Be Remediated		
Total Non-Consulting Perso	nnel Costs Summary Sheet (\$)		
Total Remediation Materials	Costs Summary Sheet (\$)	2.2.1.2.	
:	· · · · · · · · · · · · · · · · · · ·	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	3
Total Cost of the System			(2) (2) (3) (4) (4) (4) (4) (4) (4) (4) (4) (4) (4

Remediation and Disposal Costs Form

. Ground	lwater Remediation and/or Fre	e Product Removal Syst	em	. · ·
	Total Non-Consulting Personnel	Costs Summary Sheet (\$)		
	Total Remediation Materials Cos	ts Summary Sheet (\$)		
	Total Cost of the System		: `	
Ground	iwater and/or Free Product Re	emoval and Disposal		10 14 15 15 15 15 15 15 15 15 15 15 15 15 15
☐ Sub	part H minimum payment amount a	pplies.		. <u> </u>
	Number of Gallons	Cost per Gallon (\$)		Total Cost (\$)
•	Number of Gallons	Cost per Gallon (\$)		Total Cost (\$)
	Number of Gallons	Cost per Gallon (\$)	,	Total Cost (\$)
Drum C	Number of Gallons Disposal	Cost per Gallon (\$)		Total Cost (\$)
				Total Cost (\$)
	Disposal			Total Cost (\$)

Number of Drums of Solid Waste	Cost per Drum (\$)	Total Cost (\$)
;		. Al
		- <u>13</u>
		17.
Number of Drums of Liquid Waste	Cost per Drum (\$)	Total Cost (\$)
		2 8 · ·
		3
		79.55
Total Drum Dispo	sal Costs	11.

į	Total Remediation and Disposal Costs:		\$71,580.88	
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Consulting Personnel Costs Form

Employee Nan	ne	Personnel Title	Hours	Rate* (\$)	Total Cost
Remediation Category		Task	· · ·		
,	<u>, </u>			: 💸	:
,		Senior Project Manager	40.00	126.40	\$5,056.00
CCAP	Amended Corre	ctive Action Design / Report Devel	opment / IEPA Co	оптеspondence	
		1	· ·		
		Senior Prof. Engineer	2.00	164.33	\$328.66
CCAP	Report Review	and Certification	• • • • • • • • • • • • • • • • • • • •		
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		1	VI .	/ <u>·</u> ·	
		Senior Draftperson/CAD	6.00	75:83	\$454.98
CCAP	Drafting and Ed	iting Maps for Report			
			• • • •		· ·
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·			·		
					
. :		Senior Admin. Assistant	3.00	- 56.88-	. \$170.64
CCAP	Report Compila	tion, Assembly, and Distribution		·	•
		· · · · · · · · · · · · · · · · · · ·	٠. د. ٠٠ .	J	
			2.0		• ••
:				1 mag 11	
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		Senior Project Manager	10.00	126.40	\$1,264.00
TACO 2 or 3	TACO Tier 2 Ca	alculations / Development of CUOs	/ GW Modeling	16.	
:			1	,	- · · · ·
,			<u> </u>		
			•		
			· · · ·		

; ;				e de la companya de l	
Employee Name	•	Personnel Title	Hours:	Rate* (\$)	Total Cost
Remediation Category		Task		***	
	·				
		Senior Project Manager	14.00	126.40	\$1,769.60
CCAP-Budget	Budget Preparat	ion / Data Evaluation		<u> </u>	
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•					:
		Senior Prof. Engineer	2.00	164.33	\$328.66
CCAP-Budget :	Budget Review	& Certification		i	
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	٠,	Senior Draftperson/CAD	8.00	77.35	\$618.80
ELUC	Drafting Maps fo	or Groundwater Ordinance			
			•••	7 7	
		Senior Admin. Assistant	5.00	; 58:02	\$290.10
ELUC	Groundwater Or	dinance Notification / Corresponde			
			1, minor		·
		Engineer III	24.00	128.93	\$3,094.32
ELUC	Groudwater Ord	inance Development / Corresponde	ence with City_A	leeting	
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		Senior Project Manager	10.00	128.93	\$1,289.30
ELUC	Groundwater Or	dinance Negotiation Development	/ Correspondence	e / Notifications	
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Employee Name		Personnel Title	Hours	Rate* (\$)	Total Cost
Remediation Category		Task		12 Ha 15	
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٠		Senior Project Manager	8.00	128.93	\$1,031.4
CCA-Field	Scheduling Wa	ste Characterization Drilling/Excav	vation Preparation/	Landfill Authoiza	tion/Corr.
		<u> </u>		ng .	
; , 		Engineer III	6.00	128.93	\$773.5
CCA-Field	Drilling Waste (Characterization		91 191	
		T	· · · · ·		
		Senior Admin. Assistant	2.00	58.02	\$116.0
CCA-Field	JULIE/Client No	otification for Waste Characterizati	ion Drilling/Excava	tion/Analytical ,	
			***	3)	
		Senior Project Manager	8.00	128.03	- \$1,024.2
CCA-Field	Field Documen	tation			****
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•		Engineer III	36.00	128.93	\$4,641.4
CCA-Field	Everytien Die	posal and Backfill Oversight/Samp	ling/Field Penede		
<u>.</u>	Excavation Dis	posai and Backini Oversignosamp	milg/Field Reports		
, , ,		Senior Draftperson/CAD	5.00	77.35	
CCA-Field	Drafting/Docum	nentation/Excavation/Sampling/Re	sults	2.4	
			* 94	- 	· · · · · · · · · · · · · · · · · · ·
		Senior Project Manager	6.00	128 93	·· \$773.5
CCA-Field .	Applytical Resu	ilts / Tablulation	• • • • • • • • • • • • • • • • • • • •		
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		Engineer III	8.00	128,93	\$1,031.4
CCA-Field	Waste Characte	erization Sampling / Field Reports	/ Sample Coording		•
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Employee Name Remediation Category		Personnel Title	Hours	Rate* (\$)	Total Cost
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:		Senior Prof. Engineer	6.00	164.33	\$985.98
CA-Pay	Reimbursement	Review and Certification	· · · · · · · · · · · · · · · · · · ·	* 6.5	; ;
·		Senior Acct. Technician	30.00	69,51	\$2,085.30
CA-Pay	Reimbursement	Prepartion Form (min 2 claims)	·· .		
				- 12 · 12 · 12 · 12 · 12 · 12 · 12 · 12	
		Senior Admin. Assistant	8.00	56.88	\$455.04
CA-Pay	Reimbursement	Compilation, Assembly, and Dist	ribution		• •
:		Geologist III	16.00	111.24	\$1,779:84
CA-Pay	Reimbursement	Development / Inputs / Contracto	r Invoicing / Evalu	tion with Budget	, (./
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Refer to the applicable Maximu	ım Payment Amou	unts document.	* *		
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		Total of Consulti	ng rersonnel C	losts 2	\$29,749.77

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Consultant's Materials Costs Form

Materials, Equipme	nt, c	or Field Purchase	Time or Amount Used	Rate (\$)	Unit	Total Cost	
Remediation Category			Description/	Justification	Sec.		
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ELUC		Groundwater ordinance, g	roundwater ordinar	nce notifications		•	
		<u> </u>			\$40 m		
Mileage			600.00	.54	/mile	\$3	324.00
CCA-Field		Four Round Trips from Sp	oringfield Office to S	ite (1 Drilling, 3 E	Excavation)		
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Materials, Equipment,	or Field Purchase	Time or Amount Used	Rate (\$)	Unit	Total Cost
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PID Rental CCA-Field	Detect VOC Levels in Soil	4.00	75.00	/day	\$300.00
CCA-Fleid	Detect VOC Levels III 301				
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APPENDIX E BORE LOGS

CORRECTIVE ACTION PLAN AMENDMENT S&S Infinite Group Peoria, Illinois

INCIDENT #: 2016-1089 BOREHOLE NUMBER: WC-1		Illinois Environmental Protection Agency	CW [□] M COMPANY, INC.						
INCIDENT № 2016-1-08P							DRILLI	NG BORI	EHOLE LOG
INCIDENT № 2016-1-08P								Page 1 o	f l
SITE NAME: S & S Infinite Group SITE ADARES: A Color of Noticing Street Peoria, IL, 51693 DATESTIMES TARTED: 11/21/16 3-00 PM DATESTIME FINISHED: 11/21/16 3-10 PM DATESTIME FINISHED: 11/21/16 3-10 PM DATESTIME FINISHED: 11/21/16 3-10 PM DEPTH SOIL AND ROCK (FEET) DESCRIPTION CLASS Recovery (pgn) DESCRIPTION DESCRIPTI	II T	NCIDENT #: 2016-1089		BOREHOI	LE NUM	BER:	WC-1		
DATE/TIME STARTED 1/21/16 3:09 PM	SITE NA	AME: S & S Infinite Group		BORING I	LOCATI	ON:	15' N of the 1	NW corner of	fbuilding
DATECTIME STARTED: 11/21/6 3:00 PM DATECTIME STARTED: 11/21/6 3:00 PM DATECTIME FINISHED: NUMBER MACKETLE. DATECTIME FINISHED: 11/21/6 3:00 PM DATECTIME FINISHED: NUMBER MACKETLE. DATECTIME FINISHED: NUMBER MACKETLE. DATECTIME FINISHED: NUMBER MACKETLE. DATECTIME FINISHED: NUMBER MACKETLE. DATECTIME FINISHED: NUMBER MACKETLE. DATECTIME FINISHED: NUMBER MACKETLE. DATECTIME FINISHED: NUMBER MACKETLE. DATECTIME FINISHED: NUMBER MACKETLE. DATECTIME FINISHED: NUMBER MACKETLE. DATECTION FINISHED: NUMBER MACKETL	SITE AI			DIC TURE	·	T	المعادلة المعادد		
DATE/TIME FINISHED: 11/10/6 3-10 PM BEFTI SOIL AND ROCK USCS Sample PT Concrete C	DATE								
DEPTH SOLL AND ROCK USCS Sample PID Sample SAMPLE REMARKS: (Odor, Color,									
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	Illinois Environmental Protection Agency					CW [□] M	COMPANY, INC.	
		DRILLING BOREHOLE LOG						
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IN	CIDENT #: 2016-1089		ROBEHOI	E NIIM	RFR.	WC-2		
	ME: S & S Infinite Group	BOREHOLE NUMBER: BORING LOCATION:				of the NE corner of building		
	DRESS: 400 North East Adams Street		JORING LOCATION.			20 5 & 5 E of the NE corner of building		
	Peoria, IL 61603		RIG TYPE	:	Truck mo	unted drill rig	A #2 -	
DATE/T	IME STARTED: 11/21/16 3:10 PM		DRILLING/	SAMPLI			1 3 - Si 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1	
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(FEET)	DESCRIPTION	CLASS	Recovery	(ppm)	Type	NUMBER	Moisture, Penetrometer, etc.)	
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	Top soil	ОН		0				
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	Manway / Surface Elevation:		ı			* · ·	- 1 表 4 - 1	
	Groundwater Depth While Drilling:	N/A	Auger De	pth:	10'	Driller:	AEDC	
$\overline{\nabla}$	Groundwater Depth After Drilling:		Rotary De	pth:		Geologist:	MDR	

	Illinois Environmental Protection Agency	CW [□] M COMPANY, INC.						
	;					DRILLI	NG BOREHOLE LOG	
						•	Page 1 of 1	
IN	CIDENT #: 2016-1089	-	BOREHOLE NUMBER:			WC-3		
	SITE NAME: S & S Infinite Group				ON:	15' N & 12' V	W of the NW corner of building	
SITE AD	DRESS: 400 North East Adams Street					.· · !	***	
	Peoria, IL 61603		RIG TYPE			unted drill rig		
	IME STARTED: 12/16/16 8:55 PM		DRILLING/				A Section of the sect	
	IME FINISHED: 12/16/16 9:10 PM	Linco	BACKFIL		Grout / C		REMARKS: (Odor, Color,	
DEPTH	SOIL AND ROCK DESCRIPTION	USCS CLASS	Sample Recovery	PID (ppm)	Sample Type	· ·	Moisture, Penetrometer, etc.)	
(FEET)	Concrete	CLASS	Recovery	(ppin)	Турс	NONIDER	infolsture, I encuonicier, etc.)	
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NOTES	Stratification lines are approximate, in-situ transition between				and DIF		一	
NOTES:	Composite of 5' section with highest degree of co	ntaminati	on in WC-	i, wC-2	., and PIL			
	EOB 20' Dry Sand							
	Manway / Surface Elevation:					•		
		NI/A	Auger De	nth:	10'	Driller:	AEDC	
*	Groundwater Depth While Drilling:	N/A					•	
	Groundwater Depth After Drilling:		Rotary De	epth:		Geologist:	. MDR	

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CW[□]M COMPANY, INC. **Illinois Environmental Protection Agency DRILLING BOREHOLE LOG** Page 1 of 2 **BOREHOLE NUMBER:** SB-24 INCIDENT #: 2016-1089 **BORING LOCATION:** 15' E and 25' N of the NW corner of the building SITE NAME: S & S Infinite Group SITE ADDRESS: 400 North East Adams Street Truck mounted drill rig Peoria, IL 61603 **RIG TYPE:** DRILLING/SAMPLE METHOD: Push DATE/TIME STARTED: 7/26/17 8:00 AM BACKFILL: Grout / Concrete DATE/TIME FINISHED: 7/26/17 8:30 AM REMARKS: (Odor, Color, **USCS** Sample Sample | SAMPLE DEPTH SOIL AND ROCK **CLASS** NUMBER Moisture, Penetrometer, etc.) (FEET) **DESCRIPTION** Recovery (ppm) Type Concrete Gravel/Sand Backfill No odor or discoloration OH 3 3 30 0 Brown/Black Silty Clay CL 90% 0 Grab SB-24A BETX, MTBE, PNA But marked at 101 Tree ::2.5' <u>ağdrıyı illi</u> 0 .: **(i**) SB-24B BETX, MTBE, PNA Sand: Med-Large Grained SP Slight Odor and Discoloration 11 Company of the Compan 争不可以。 47.5 `2 .: . **基實施**。26 80% 0 ·SB-24C BETX, MTBE, PNA Grab ் இரு நடித் . . 7.5' 0 12 90% 0 Grab SB-24D BETX, MTBE, PNA 40 · 20 12.5' . . 0 14 大表 生。 Brown fine-grained and coarse-grained sand SP 15 Stratification lines are approximate, in-situ transition between soil types may be gradual. NOTES: Composite of 5' section were sampled at the highest PID reading or in the center of the sample The soil boring log continues on page 2 Manway / Surface Elevation: . **8**. . . 25' Driller: **AEDC** none Auger Depth: **Groundwater Depth While Drilling:** 3610 GTR/MTK **Groundwater Depth After Drilling:** Rotary Depth: Geologist:

	Illinois Environmental Protection Agency	CW [□] M COMPANY, INC.						
						DRILLI	NG BOREHOLE LOG	
						•	Page 2 of 2	
IN	ICIDENT #: 2016-1089		BOREHOLE NUMBER:			SB-24	1Bř. –	
	ME: S & S Infinite Group		BORING LOCATION:				N of the NW corner of the building	
	DDRESS: 400 North East Adams Street		1				19 35	
	Peoria, IL 61603		RIG TYPE: Truck mounted drill rig !					
ATE/T	IME STARTED: 7/26/17 8:00 AM		DRILLING/	SAMPLI	Е МЕТНО	D: Push		
ATE/T	IME FINISHED: 7/26/17 8:30 AM		BACKFIL		Grout / C		<u> </u>	
DEPTH		USCS	Sample	PID	Sample		REMARKS: (Odor, Color,	
(FEET)	DESCRIPTION	CLASS	Recovery	(ppm)	Type		Moisture, Penetrometer, etc.)	
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	Sand: Med-Large Grained	SP				· .		
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JOTES	Stratification lines are approximate, in-situ transition between : Composite of 5' section were sampled at the higher	sou types n	nay de gradua Pading or in	i. The cen	ter of the	cample		
NO LES	. Composite of 5 section were sampled at the fight	ot LID IC	aunig or m	are cen	tor or tile	Sample		
	EOB 25' Dry Sand					. ; '	*	
	Manway / Surface Elevation:					·	* * * * * * * * * * * * * * * * * * *	
T	Groundwater Depth While Drilling:	None	Auger De	nth·	25'	Driller:	AEDC	
$\overline{\Box}$		INOHE				-		
\vee	Groundwater Depth After Drilling:		Rotary D	eptn:		Geologist:	GTR/MTK	

	Illinois Environmental Protection Agency	7	·	-		CW [□] M COMPANY, INC.		
						DRILLIN	NG BOREHOLE LOG	
							Page 1 of 2	
IN	CIDENT #: 2016-1089		BOREHOLE NUMBER:			SB-25	(i) d	
	ME: S & S Infinite Group		BORING LOCATION:			15'E and 5' N of the NW corner of the Building		
SITE AD	DRESS: 400 North East Adams Street					· · · · · · · · · · · · · · · · · · ·	<u> </u>	
	Peoria, IL 61603	RIG TYPE			unted drill rig	A STATE OF THE STA		
	ME STARTED: 7/26/17 8:30 AM		DRILLING/					
DATE/II DEPTH	IME FINISHED: 7/26/17 8:50 AM SOIL AND ROCK	USCS	BACKFIL Sample	PID	Grout / C Sample		REMARKS: (Odor, Color,	
(FEET)	DESCRIPTION	CLASS			I -		Moisture, Penetrometer, etc.)	
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	Gravei/Sand Backtill	l On				+ ?*	ino odor or discoloration	
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	Stratification lines are approximate, in-situ transition between	n soil types n	nay be gradual) <u>.</u>		: :	<u> </u>	
NOTES:	Composite of 5' section were sampled at the high				ter of the	sample	i di	
	The soil boring log continues on page 2		-			•		
						· . : .	े. :	
	Manway / Surface Elevation:					•	<u> </u>	
	Groundwater Depth While Drilling:	None	Auger De	pth:	20'	Driller:	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	
∇	Groundwater Depth After Drilling:		Rotary Do	epth:		Geologist:	GTR/MTK	

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	Illinois Environmental Protection Agency	-					COMPANY, INC.
	;					DRILLI	NG BOREHOLE LOG
							Page 2 of 2
IN	NCIDENT #: 2016-1089	_	BOREHOI			SB-25	
	AME: S & S Infinite Group		BORING L	OCATI	ON:	15' E and 5' l	N of the NW corner of the Building
SITE AL	DDRESS: 400 North East Adams Street		DIC TYPE		Tle	unted drill rig	
DATE	Peoria, IL 61603 TIME STARTED: 7/26/17 8:30 AM		RIG TYPE DRILLING/				6 Mg 45
	IME FINISHED: 7/26/17 8:50 AM		BACKFIL		Grout / Co		5
DEPTH		USCS	Sample	PID			REMARKS: (Odor, Color,
(FEET)	DESCRIPTION	CLASS	Recovery	(ppm)	Туре	NUMBER	Moisture, Penetrometer, etc.)
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	Sand: Med-Large Grained	SP					$\frac{1}{2}$.
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	Stratification lines are approximate, in-situ transition between a Composite of 5' section were sampled at the higher				ter of the	sample	
	EOB 20' Dry Sand Manway / Surface Elevation:				,		
	Groundwater Depth While Drilling:	None	Auger De	nth.	20'	Driller:	AEDC
$\overline{}$	Croundwater Depth After Drilling:	140116	Rotary De			Geologist:	GTR/MTK

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	Illinois Environmental Protection Agency	CW [□] M COMPANY, INC.					
	•	DRILLI	NG BOREHOLE LOG				
						:	Page 1 of 2
IN	CIDENT #: 2016-1089		BOREHOI	LE NUM	BER:	SB-26	**
	ME: S & S Infinite Group		BORING LOCATION:			11' N and 21	W of the NE comer of the Building
SITE AD	DRESS: 400 North East Adams Street						* 6 5
DATE OF	Peoria, IL 61603	RIG TYPE DRILLING/			unted drill rig	*	
	ME STARTED: 8/2/2018 12:00 PM IME FINISHED: 8/2/2018 12:25 PM		BACKFIL		Grout / C		- 104 - 204
DEPTH	SOIL AND ROCK	USCS	Sample	PID	Sample		REMARKS: (Odor, Color,
(FEET)	DESCRIPTION	CLASS	Recovery	(ppm)	Туре	NUMBER	Moisture, Penetrometer, etc.)
0	Concrete						1. · 3. ·
	Top Soil :	ОН					No odor or discoloration
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_	Dark brown silty clay	CL					· · · · · · · · · · · · · · · · · · ·
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	Stratification lines are approximate, in-situ transition between Sampled at location of highest PID per 5' interval			•	•	•	ें। ~:
HOTES:	;	•	6. 				
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	Manway / Surface Elevation:					:	
	Groundwater Depth While Drilling:	~19'	Auger De	pth:	20'	Driller:	
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	Illinois Environmental Protection Agency	CW [□] M COMPANY, INC.						
					DRILLING BOREHOLE LOG			
	·						Page 2 of 2	
IN	CIDENT #: 2016-1089					SB-26	1:30	
_	ME: S & S Infinite Group		BORING LOCATION:			11' N and 21' W of the NE corner of the Building		
SITE AD	DRESS: 400 North East Adams Street							
	Peoria, IL 61603		RIG TYPE			unted drill rig	A AND A AND	
	IME STARTED: 8/2/2018 12:00 PM IME FINISHED: 8/2/2018 12:25 PM		DRILLING/ BACKFIL		Grout / C			
DEPTH		USCS	Sample	PID	Sample		REMARKS: (Odor, Color,	
(FEET)	DESCRIPTION	CLASS	_	(ppm)	Туре		Moisture, Penetrometer, etc.)	
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	Stratification lines are approximate, in-situ transition between	Soil types n	nav be gradual			<u>; </u>		
NOTES:	Sampled at location of highest PID per 5' interval	oon types II	, oe grauda	•		;	en Pa	
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	Manway / Surface Elevation:		-					
	Groundwater Depth While Drilling:	~19'	Auger De	pth:	20'	Driller:	AEDC	
$\overline{\nabla}$	Groundwater Depth After Drilling:		Rotary Do	epth:		Geologist:	MJS/GTR	

	Illinois Environmental	Protection Agency					•	COMPANY, INC.		
	· .						DRILLI	NG BOREHOLE LOG		
							•	Page 1 of 2		
IN	CIDENT #: 2016-1089	<u> </u>		BOREHO	LE NIIM	(BER:	SB-27	11 ugo 1 o1 2		
	ME: S & S Infinite Group							W of the NE corner of the Building		
	DRESS: 400 North East Ada	ms Street		BORING LOCATION: 1' N and 43' W of the NE corner of the Building						
	Peoria, IL 61603			RIG TYPE: Truck mounted drill rig						
TE/TI	ME STARTED: 8/2/2018-1			DRILLING				7		
	ME FINISHED: 8/2/2018 1			BACKFIL	L:	Grout / C	oncrete			
ЕРТН	SOIL AND	ROCK	USCS	Sample	PID	Sample		REMARKS: (Odor, Color,		
EET)	DESCRIP	TION	CLASS	Recovery	(ppm)	Type	NUMBER	Moisture, Penetrometer, etc.)		
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	Top Soil		ОМ					No odor or discoloration		
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	Stratification lines are approximate	e, in-situ transition between	soil types r	nay be gradua	l			of his		
TES:	Sampled at location of high	nest PID per 5' interval	or center	if 0 PID/ S	amples	taken onl	ly from 10-1	5' and 15-20' per IEPA request		
	·						: ·			
		•				•				
	Manway / Surface Elevat	ion:		Τ						
	Groundwater Depth Whi	le Drilling:	~18'	Auger De	pth:	20'	Driller:	S AEDC		
∇	Groundwater Depth Afte	r Drilling:		Rotary D	epth:	,	Geologist:	MJS/GTR		

	Illinois Environmental Protection Agency					CW [□] M	COMPANY, INC.		
	5						NG BOREHOLE LOG		
						<u>:</u>	Page 2 of 2		
	CIDENT #: 2016-1089		BOREHOI			SB-27	. \$		
	ME: S & S Infinite Group		BORING I	LOCATI	ON:	I' N and 43'	W of the NE corner of the Building		
SITE AD	DRESS: 400 North East Adams Street		DIC TVD	· · · · · · · · · · · · · · · · · · ·	Tours				
DATE	Peoria, IL 61603 :		RIG TYPE DRILLING	<u> </u>					
	IME STARTED: 8/2/2018 12:25 PM IME FINISHED: 8/2/2018 12:45 PM	-	BACKFIL		Grout / C				
DEPTH		USCS	Sample	PID	Sample		REMARKS: (Odor, Color,		
(FEET)	DESCRIPTION	CLASS	_		_	NUMBER	Moisture, Penetrometer, etc.)		
	Light brown sand	SW				• • • •	2		
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30	Stratification lines are approximate, in-situ transition between	coil turcs =	nav ha geoderal		<u> </u>				
NOTES	: Sampled at location of highest PID per 5' interval	son types n	nay oc gradua		•	;	<i>1</i> 7		
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	Manway / Surface Elevation:						A, T		
	Groundwater Depth While Drilling:	~18'	Auger De	pth:	20'	Driller:	AEDC		
$\overline{\nabla}$	Groundwater Depth After Drilling:		Rotary De	epth:		Geologist:	MJS/GTR		
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CW[□]M COMPANY, INC. **Illinois Environmental Protection Agency DRILLING BOREHOLE LOG** Page 1 of 2 **BOREHOLE NUMBER:** SB-28 INCIDENT #: 2016-1089 **BORING LOCATION:** 12' S and 62' W of the NE corner of the Building SITE NAME: S & S Infinite Group SITE ADDRESS: 400 North East Adams Street RIG TYPE: Truck mounted drill rig Peoria, IL 61603 DRILLING/SAMPLE METHOD: Push **DATE/TIME STARTED: 8/2/2018 12:45 PM** DATE/TIME FINISHED: 8/2/2018 1:05 PM BACKFILL: Grout / Concrete REMARKS: (Odor, Color, USCS SAMPLE DEPTH **SOIL AND ROCK** Sample Sample **CLASS** NUMBER Moisture, Penetrometer, etc.) (FEET) **DESCRIPTION** Recovery (ppm) Type Concrete No odor or discoloration Top Soil OM 0 Grab Dark brown sandy clay CL 2 BETX, MTBE, PNA 90% 0 Grab **SB-28A** . ..: 0 Grab SW Brown sand 0 Grab 10.9 % 11. 90% 0 **SB-28B** BETX, MTBE, PNA Grab 0 Grab 10 0 Grab 11 12 BETX, MTBE, PNA Light brown sand SW 90% 0 Grab SB-28C 13 2 # B 0 Grab 於實際 公司 公司 公司 14 15 Stratification lines are approximate, in-situ transition between soil types may be gradual. NOTES: Sampled at location of highest PID per 5' interval or center if 0 PID Manway / Surface Elevation: r 🕉 **AEDC** Driller: ~18' Auger Depth: Groundwater Depth While Drilling: iiRotary Depth: MJS/GTR Geologist: **Groundwater Depth After Drilling:**

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	Illinois Environmental Protection Agency					CW [□] M COMPANY, INC.				
	- •					DRILLIN	NG BOREHOLE LOG			
	•					<u> </u>	Pagé 2 of 2			
IN	NCIDENT #: 2016-1089	_	BOREHOL	LE NUM		SB-28				
	AME: S & S Infinite Group		BORING I	OCATI	ON:	12' S and 62'	W of the NE corner of the Building			
SITE AI	DDRESS: 400 North East Adams Street		DIC TYPE		Toucleme	ounted drill rig				
DATE	Peoria, IL 61603 TIME STARTED: 8/2/2018 12:45 PM		RIG TYPE DRILLING				4.			
	IME STARTED: 8/2/2018 1:05 PM		BACKFIL	_	Grout / C					
DEPTH		USCS	Sample	PID	Sample		REMARKS: (Odor, Color,			
(FEET)	DESCRIPTION	CLASS	Recovery	(ppm)	Type	NUMBER	Moisture, Penetrometer, etc.)			
15	Light brown sand	sw		0			11			
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_	Black sand	SW		433	Grab	SB-28D	BETX, MTBE, PNA			
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_	End of Boring 20'						25			
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	Stratification lines are approximate, in-situ transition between			l .		•				
NOTES	: Sampled at location of highest PID per 5' interval	or center	עוץ ט זו			· .	\$			
						:	<u>.</u>			
	Manway / Surface Elevation:					<u> </u>				
	Groundwater Depth While Drilling:	~18'	Auger De	pth:	20'	Driller:	AEDC			
$\overline{\nabla}$	Groundwater Depth After Drilling:		Rotary Do			Geologist:	MJS/GTR			
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CW[□]M COMPANY, INC. Illinois Environmental Protection Agency DRILLING BOREHOLE LOG Page 1 of 2 **BOREHOLE NUMBER:** SB-29 INCIDENT #: 2016-1089 **BORING LOCATION:** 5' N and 80' W of the NE corner of the Building SITE NAME: S & S Infinite Group SITE ADDRESS: 400 North East Adams Street RIG TYPE: Truck mounted drill rig Peoria, IL 61603 **DATE/TIME STARTED: 8/2/2018 1:05 PM** DRILLING/SAMPLE METHOD: Push DATE/TIME FINISHED: 8/2/2018 1:25 PM BACKFILL: Grout / Concrete REMARKS: (Odor, Color, SOIL AND ROCK **USCS** Sample Sample SAMPLE **DEPTH** Recovery (FEET) **CLASS** NUMBER Moisture, Penetrometer, etc.) DESCRIPTION (ppm) Type Concrete No ödor or discoloration Top Soil OM 0 Grab throughout Dark brown silty clay CL 2 85% 0 SB-29A BETX, MTBE, PNA Grab 0 Grab \$\frac{1}{2} \frac swBrown sand 5 0 Grab SW Light brown sand 3 90% 0 Grab Slight odor and discoloartion 50 Grab SB-29B BETX, MTBE, PNA 10 71. 0 Grab 11 1. 12 BETX, MTBE, PNA 95% 0 Grab SB-29C 13 sa 🤾 🕹 0 Grab **集集长**。 1.37.12 15 Stratification lines are approximate, in-situ transition between soil types may be gradual. 3. 44 Mg NOTES: Sampled at location of highest PID per 5' interval or center if 0 PID Manway / Surface Elevation: i . **AEDC** ~18' Driller: Groundwater Depth While Drilling: Auger Depth: 20' Rotary Depth: MJS/GTR **Groundwater Depth After Drilling:** Geologist:

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	Illinois Environmental Protection Agency							NY, INC. EHOLE LOG
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	**************************************		BOREHOI	FNIIM	BED.	SB-29	Page 2	DI Z
	AME: S & S Infinite Group		BORING I				W of the NE	corner of the Building
	DDRESS: 400 North East Adams Street							
	Peoria, IL 61603		RIG TYPE			ounted drill rig		
	TIME STARTED: 8/2/2018 1:05 PM	C						
DEPTH	FIME FINISHED: 8/2/2018 1:25 PM SOIL AND ROCK	USCS	BACKFIL Sample	PID	Grout / C		REMARK	S: (Odor, Color,
(FEET)		CLASS		(ppm)	Туре			Penetrometer, etc.)
15	Light brown sand	sw						
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	Stratification lines are approximate, in-situ transition between			l.		Y.	Ŷ.	
NOTES	: Sampled at location of highest PID per 5' interval	or center	if 0 PID			,	n	٠.
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	Manway / Surface Elevation:						1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	.:
		1.01	Augor Do	nth:	20'	Driller:		AEDC
	Groundwater Depth While Drilling:	~18'	Auger De		20	;		
	Groundwater Depth After Drilling:		Rotary Do	eptn:		Geologist:	na vi	MJS/GTR
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APPENDIX F ANALYTICAL RESULTS

CORRECTIVE ACTION PLAN AMENDMENT S&S Infinite Group Peoria, Illinois

Release Confirmation/Waste Characterization

	Location	WC-1	WC-2	WC-3	RC-1
	Date	11/21/2016	11/21/2016	12/16/2016	1/3/2017
·	Depth				
Parameter	Tier I CUO				
Benzene	0.03	43.3	11.8	9.79	5.77
Ethylbenzene	13.0	146.0	· 41.8	45.8	33.1
Toluene	12.0	611.	171.	161.	103.
Total Xylenes	5.6	816.	234.	258.	187.
MTBE	0.32	ND	ND	ND	ND
Acenaphthene	570	ND	ND		ND
Acenaphthylene	30	ND	ND	-	ND
Anthracene	12,000	ND	ND		ND
Benzo(a)anthracene	0.9	ND	ND		ND
Benzo(a)pyrene	0.09	ND	ND		ND
Benzo(b)flouranthene	0.9	ND	ND		ND
Benzo(g,h,i)perylene	160	ND	ND		ND
Benzo(k)flouranthene	9	ND	ND		ND
Chrysene	88	NĐ	ND		ND
Dibenzo(a,h)anthracene	0.09	ND	ND		ND
Flouranthene	3,100	0.061	ND		. ND
Fluorene	560	ND	ND	. 1	ND
Indeno(1,2,3-c,d)pyrene	0.9	ND	ND		ND.
Napthalene	1.8	2.44	0.343		3.85
Phenanthrene	280	0.09	ND		0.09
Pyrene	2,300	0.066	ND		ND

Numbers not bold indicate actual quantities, but are below the TACO Tier 1 Most Stringent Soil Cle

BOLD & SHADING - Exceeds the TACO Tier 1 Most Stringent Soil Clean-up Objective.

ND -- Not Detected

Early Action - Soil

This is seen to see

		Location	1	2.	3	4	5	6	7
·		Date	1/5/2017	1/5/2017	1/5/2017	1/5/2017	1/6/2017	1/6/2017	1/6/2017
		Depth	3'	3'	Backfill	Backfill	3'	3'	7'
	Parameter	Tier I CUO							
	Benzene	0.03	ND	ND	1.37	ND	ND	ND	ND
	Ethylbenzene	13.0	ND	ND	7.18	ND	ND	ND	ND
	Toluene	12.0	ND	ND	29.6	ND	ND	ND	ND
	Total Xylenes	5.6	ND	ND	39.	ND	ND	ND	ND
	MTBE	0.32	ND	ND	ND	ND	ND	ND	ND
	Acenaphthene	570							
	Acenaphthylene	30							
	Anthracene	12,000							
	Benzo(a)anthracene	0.9					,		
	Benzo(a)pyrene	0.09							
	Benzo(b)flouranthene	0.9							
	Benzo(g,h,i)perylene	160							
	Benzo(k)flouranthene	9							
	Chrysene	88							
	Dibenzo(a,h)anthracene	0.09							
and the second of the second o	Flouranthene	3,100			,				
and the second of the second o	Fluorene	560							
	Indeno(1,2,3-c,d)pyrene	0.9					, •		
	Napthalene	1.8				·			
	Phenanthrene	· 280							
	Pyrene	2,300							
Andrew Commence of the Commenc	Numbers not bold indicate	actual quantities, bi	it are below t	he TACO Ti	er 1 Most St	ringent Soil (Clean-up Ob	jective.	· · · · ·
किसीन रहाती व रहाडीक्षां क्षितियो विकास किसी विवास किसी है।	BOLD & SHADING E	cceeds the TACO T	ier 1 Most St	ringent Soil	Clean-up Ob	ective.	nace of the co	والمساور والمراز	indiani di di di di di di di di di di di di di
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Early Action - Soil

	Location	8	9	10	11	12	13	14	15	16	17
• -	Date	1/6/2017	1/9/2017	1/9/2017	1/9/2017	1/9/2017	1/9/2017	1/9/2017	1/9/2017	1/9/2017	1/9/2017
	Depth	7'	11'	11'	11'	11'	7'	7'	7'	7'	7'
Parameter	Tier I CUO										
Benzene	0.03	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	13.0	ND	ND	ND	ND.	ND	ND	ND	ND	ND	ND
Toluene	12.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total Xylenes	5.6	ND	ND	ND	ND :	ND	ND	ND .	ND	ND	ND
MTBE	0.32	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acenaphthene	570		ND	ND	0.121	ND	ND	ND	ND	ND	ND
Acenaphthylene	30		ND	ND	0.165	ND	ND	ND	ND	ND	ND
Anthracene	12,000		ND	ND	0.063	ND	ND	ND	ND	ND	ND
Benzo(a)anthracene	0.9		ND	ND	ND	ND	ND	ND	ND	ND	ND .
Benzo(a)pyrene	0.09		ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(b)flouranthene	0.9		ND	ND	ND	ND	· ND	ND	ND	ND	ND
Benzo(g,h,i)perylene	160		ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(k)flouranthene	9		ND	ND	ND	ND	ND	ND	ND	ND_	ND
Chrysene	88		ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibenzo(a,h)anthracene	0.09		ND	ND	ND	ND	ND	ND	ND	ND	ND
Flouranthene	3,100		ND	ND	0.131	ND	ND.	ND .	ND	ND	ND
Fluorene	560		ND	ND.	0.237	ND	ND	ND	ND '	ND	ND.
Indeno(1,2,3-c,d)pyrene	0.9	4	.ND	ND -	ND	ND	ND	ND	ND	ND	ND
Napthalene	1.8		ND	ND	80.9	0.146	ND	ND	ND	ND	ND
Phenanthrene	280		ND	ND	0.657	ND	. ND	ND	ND	ND	ND
Pyrene	2,300		ND	ND	0.167	ND	ND	ND	ND	ND	ND
Numbers not bold indicate BOLD & SHADING Ex	actual quantities, by	i stalik i yevate ba i I	Commence to the	त्र कृतिक ्ष्र कृतिक	elle Malakiski a q	eng nasani (1944).	4-5-5-6-6-4-4-4	بالمحدوثاته وديجا بيي	. Navatiria de la como	and the second	ئۇدىيىقانىداك ئالاردىك سىلىدى ئۇدىيىقانىداك ئالاردىك سىلىدى
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Early Action - Soil

		Location	18	19	20	21	22	23
		Date	1/9/2017	1/10/2017	1/10/2017	1/10/2017	1/10/2017	1/10/2017
		Depth	7'	7'	13'	13'	3'	3'
	Parameter	Tier I CUO						
	Benzene	0.03	ND	ND	0.0263	ND	ND	ND
	Ethylbenzene	13.0	ND	ND	ND	ND	ND	ND
	Toluene	12.0	ND	ND .	0.132	ND	ND	ND
	Total Xylenes	5.6	ND	ND	0.133	ND	.ND	ND
	MTBE	0.32	ND	ND	ND	ND	ND	ND
	Acenaphthene	570	ND					
	Acenaphthylene	30	ND					
	Anthracene	12,000	ND					
	Benzo(a)anthracene	0.9	ND					
	Benzo(a)pyrene	0.09	ND					
	Benzo(b)flouranthene	0.9	ND					
	Benzo(g,h,i)perylene	160	ND					
•	Benzo(k)flouranthene	9	ND					
	Chrysene	88	ND					
	Dibenzo(a,h)anthracene	0.09	ND					
	<u> </u>	. 3,100	ND			.,		
	Fluorene	560	ND					
erander ergen gehar filt er filt filt er filt er filt er filt er filt er filt er filt er filt er filt er filt General er filt er filt er filt er filt er filt er filt er filt er filt er filt er filt er filt er filt er fil Filt er filt er filt er filt er filt er filt er filt er filt er filt er filt er filt er filt er filt er filt e	Indeno(1,2,3-c,d)pyrene	0.9	ND					
	Napthalene	1.8	ND					
	Phenanthrene	280	ND					
	Pyrene	2,300	ND					
र्वे अनुसन्धाः स्थाने । स्थाने । स्थाने । स्थाने । स्थाने । स्थाने । स्थाने । स्थाने । स्थाने । स्थाने । स्थान स्थाने । स्थाने । स्थाने । स्थाने । स्थाने । स्थाने । स्थाने । स्थाने । स्थाने । स्थाने । स्थाने । स्थाने । स	Numbers not bold indicate	actual quantities, b	ı .	:			,	
प्रतिकृतिका राज्य विविधित्व सम्बद्धाः स्व मोद्यार क्षेत्रावः विविध	BOLD & SHADING E	ceeds the TACO T		FA. STOPPEN LOVER	Lateria piana ru i	Approximate observed to	وه الله الله الله الله الله الله الله ال	المراجعة والمتحجمة
film in the second	ND Not Detected :				1. (5)	<u>.</u>	,	1



·	Location	24A	· 24B	24C	24D	24E	24F	25A	25B
	Date	7/26/2017	7/26/2017	7/26/2017	7/26/2017	7/26/2017	7/26/2017	7/26/2017	7/26/2017
	Depth	2.5	5	7.5	12.5	17.5	22.5	12.5	17.5
Parameter	TEIR I CUO								
Benzene	0.03	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	13.0	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	12.0	ND	ND	ND	ND	ND	ND	ND	ND
Total Xylenes	5.6	ND	ND	ND	ND	ND	ND	ND	ND
MTBE	0.32	ND	ND	ND	ND	ND	ND	ND	ND
Acenaphthene	570	ND	ND	ND	ND	ND	ND	ND	ND
Acenaphthylene	30	ND	ND	ND	ND	ND	D	ND	ND
Anthracene	12,000	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(a)anthracene	0.9	0.125	ND	ND	ND	ND	D	ND	ND
Benzo(a)pyrene	0.09	0.153	ND	ND	ND	D	D	ND	ND
Benzo(b)flouranthene	0.9	0.228	ND	ND	ND	ND	ND	ND	ND
Benzo(g,h,i)perylene	160	0.115	ND	ND	D	ND	ND	ND_	ND
Benzo(k)flouranthene	9	0.0771	ND	ND	ND	ND	ND	ND	ND
Chrysene	88	0.199	ND	ND	ND	ND	ND	ND	ND
Dibenzo(a,h)anthracene	0.09	ND	ND	ND	ND	ND	ND	ND	ND
Flouranthene	3,100	0.307	ND	ND	ND	, ND	ND	ND	0.0506
Fluorene	560	ND	ND	ND	ND	ND	ND	ND	ND
Indeno(1,2,3-c,d)pyrene	0.9	0.102	ND	ND	ND	ND	ND	ND	ND
Napthalene	1.8	···ND	ND	ND	ND	ND	0.333	ND	ND
Phenanthrene	280	0.162	: ND	···ND	ND	ND	ND	ND***	··· ND
Pyrene	2,300	0.285	ND	ND	ND.	ND	ND	ND	0.043

Numbers not bold indicate actual quantities, but are below the TACO Tier 1 Most Stringent Soil Clean-up Objective.

BOLD & SHADING -- Exceeds the TACO Tier 1 Most Stringent Soil Clean-up Objective.

ND -- Not Detected

Stage 1 - Soil

.....

	Location	24A	24B	24C	24D	24E	24F	25A	25B
	Date	7/26/2017	7/26/2017	7/26/2017	7/26/2017	7/26/2017	7/26/2017	7/26/2017	7/26/2017
	Depth	2.5	5	7.5	12.5	17.5	22.5	12.5	17.5
Parameter	TEIR I CUO		. ,		4 - •				
Benzene	0.03	ND	ND	ND	ND	ND	ND	ND	ND ND
Ethylbenzene	13.0	ND	ND	ND	ND	ND	ND	ND	D
Toluene	12.0	ND	ND	ND	ND	ND	ND	ND	ND
Total Xylenes	5.6	ND	ND	ND	ND	ND	ND	ND	ND
MTBE	0.32	ND	ND	ND	ND	ND	ND	ND	ND
Acenaphthene	570	ND	ND	ND	ND	ND	ND	ND	ND
Acenaphthylene	30	ND	ND	ND	ND	ND	ND	ND	ND
Anthracene	12,000	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(a)anthracene	0.9	0.125	D	D	ND	ND	ND	ND	ND
Benzo(a)pyrene	0.09	0.153	ND	D	ND	ND	ND	ND	ND
Benzo(b)flouranthene	0.9	0.228	2	ND	ND	ND	ND	ND	ND
Benzo(g,h,i)perylene	160	0.115	N	ND	ND	ND	ND	ND	ND
Benzo(k)flouranthene	9	0.0771	ND	ND	ND	ND	ND	ND	ND
Chrysene	88	0.199	ND	ND	ND	ND	ND	ND	ND
Dibenzo(a,h)anthracene	0.09	ND	ND	ND	ND	ND	ND	ND	ND
Flouranthene	3,100	0.307	ND	ND	ND	ND	ND	ND	0.0506
Fluorene	560	ND	ND	ND	ND	ND	ND_	ND	ND
Indeno(1,2,3-c,d)pyrene	0.9	0.102	ND	ND	ND	ND	ND	ND	ND
Napthalene	1.8	ND	ND	ND	ND:	ND	0.333	ND	ND
Phenanthrene	280	0.162	44ª ND ±	ND.	ND	ND	// ND	ND	ND
Pyrene	2,300	0.285	ND	ND	ND	ND	ND	ND	0.043

Numbers not bold indicate actual quantities, but are below the TACO Tier 1 Most Stringent Soil Clean-up Objective.

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BOLD & SHADING -- Exceeds the TACO Tier 1 Most Stringent Soil Clean-up Objective.

ND -- Not Detected ...





	Location	SB-26A	SB-26B	SB-26C	SB-26D	SB-27C	SB-27D	SB-28A	SB-28B	SB-28C	SB-28D
	Date	8/2/2018	8/2/2018	8/2/2018	8/2/2018	8/2/2018	8/2/2018	8/2/2018	8/2/2018	8/2/2018	8/2/2018
	Depth	2.5'	7.5'	12.5'	17.5'	12.5'	17.5'	2.5'	7.5'	12.5'	18'
Parameter	TEIR I CUO									rocker with	<u> </u>
Benzene	0.03	0.389	ND	ND	ND	ND	ND	ND	ND	0.0335	0.0195
Ethylbenzene	13.0	1.01	ND	ND	ND	ND	ND	ND	ND	ND	0.106
Toluene	12.0	4.44	0.0637	ND	ND	ND	ND	ND	ND	ND	ND
Total Xylenes	5.6	6.43	ND	ND	ND	ND	ND	ND	ND	ND	0.114
MTBE	0.32	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acenaphthene	570	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acenaphthylene	30	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Anthracene	12,000	ND	ND	ND	ND	ND	ND	ND	ND	ND _	ND
Benzo(a)anthracene	0.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(a)pyrene	0.09	ND	ND	ND	ND	ND	ND .	ND	ND	ND	ND
Benzo(b)flouranthene	0.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(g,h,i)perylene	160	ND	ND	ND	ND	ND	ND	ND	ND /	ND	ND
Benzo(k)flouranthene	9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chrysene	88	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibenzo(a,h)anthracene	0.09	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Flouranthene	3,100	· ND	ND	ND	ND	ND	ND	ND	0.0485	ND	ND .
Fluorene	560	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Indeno(1,2,3-c,d)pyrene	0.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Napthalene	1.8	ND	· ND	ND	ND	ND	ND	ND	ND	ND	ND
Phenanthrene	~ 280 - 4	ND.	ND	· ND · /	ND:	ND	ND	ND	ND	ND	ND
Pyrene	2,300	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

. Although Med Mercerod in

Numbers not bold indicate actual quantities, but are below the TACO Tier 1 Most Stringent Soil Clean-up Objective.

BOLD & SHADING -- Exceeds the TACO Tier 1 Most Stringent Soil Clean-up Objective.

ND -- Not Detected with and Described

000297

TO INDEPENDED DESCRIPTION



Control of the Contro

AND TO DESCRIPTION OF THE PRODUCTION OF THE PROPERTY OF THE PR

SB-29A	SB-29B	SB-29C	SB-29D
8/2/2018	8/2/2018	8/2/2018	8/2/2018
2.5'	9,	12.5'	17.5'

0.0168	ND	ND	0.0582
ND	ND	ND	ND
ND	ND	ND	0.12
ND	ND	ND	ND
ND	ND	ND	ND
ND	ND	ND	ND
ND	ND	ND	ND
ND	ND	ND	ND
ND	ND	ND	ND
ND	ND	ND	ND
ND	ND	ND	ND
ND	ND	ND	ND
ND	ND	ND	ND
ND	ND	ND	ND
ND	ND	ND	ND
ND	ND	ND	ND
ND	ND	ND	ND
ND .	ND	ND	ND
ND	ND.	ND	ND
ND	ND	ND	····ND
ND	ND	ND	ND

SUBURBAN LABORATORIES, Inc.



1950 S. Batavia Ave., Suite 150 Geneva, Illinois 60134 Tel. (708) 544-3260 • Toll Free (800) 783-LABS Fax (708) 544-8587 www.suburbanlabs.com

August 15, 2018

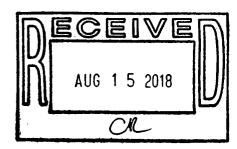
Carol Rowe CWM Company, Inc 701 West South Grand Springfield, IL 62704

TEL: (217) 522-8001 FAX: (217) 522-8009

RE: S and S Infinite Peoria

Dear Carol Rowe:

Workorder: 1808461



Suburban Laboratories, Inc. received 14 sample(s) on 8/6/2018 for the analyses presented in the following report.

All data for the associated quality control (QC) met EPA, method, or internal laboratory specifications except where noted in the case narrative. If you are comparing these results to external QC specifications or compliance limits and have any questions, please contact us.

This final report of laboratory analysis consists of this cover letter, case narrative, analytical report, dates report, and any accompanying documentation including, but not limited to, chain of custody records, raw data, and letters of explanation or reliance. This report may not be reproduced, except in full, without the prior written approval of Suburban Laboratories, Inc.

If you have any questions regarding these test results, please call me at (708) 544-3260.

Sincerely,

Keith Sinon

Project Manager

708-544-3260 ext 212

keith@suburbanlabs.com

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1950 S. Batavia Ave., Suite 150, Geneva, IL 60134 (708) 544-3260

Case Narrative

Client: CWM Company, Inc

Date: August 15, 2018 PO #:

Project: S and S Infinite Peoria WorkOrder: 1808461

OC Level:

Temperature of samples upon receipt at SLI: 2 C

Chain of Custody #: 128334

General Comments:

- All results reported in wet weight unless otherwise indicated. (dry = Dry Weight)
- Sample results relate only to the analytes of interest tested and to sample as received by the laboratory.
- Environmental compliance sample results meet the requirements of 35 IAC Part 186 unless otherwise indicated.
- Waste water analysis follows the rules set forth in 40 CFR part 136 except where otherwise noted.
- Accreditation by the State of Illinois is not an endorsement or a guarantee of the validity of data generated.
- For more information about the laboratories' scope of accreditation, please contact us at (708) 544-3260 or the Agency at (217) 782-6455.
- All radiological results are reported to the 95% confidence level.

Abbreviations:

- Reporting Limit: The concentration at which an analyte can be routinely detected on a day to day basis, and which also meets regulatory and client needs.
- Quantitation Limit: The lowest concentration at which results can be accurately quantitated.
- J: The analyte was positively identified above our Method Detection Limit and is considered detectable and usable; however, the associated numerical value is the approximate concentration of the analyte in the sample.
- ATC: Automatic Temperature Correction. TNTC: Too Numerous To Count
- TIC: Tentatively Identified Compound (GCMS library search identification, concentration estimated to nearest internal standard).
- SS (Surrogate Standard): Quality control compound added to the sample by the lab.

Method References:

For a complete list of method references please contact us.

- E: USEPA Reference methods
- SW: USEPA, Test Methods for Evaluating Solid Waste (SW-846)
- M: Standard Methods for the Examination of Water and Wastewater
- USP: Latest version of United States Pharmacopeia

Workorder Specific Comments:





1950 S. Batavia Ave., Suite 150, Geneva, IL 60134 (708) 544-3260

Laboratory Results

Client ID: CWM Company, Inc

Report Date: August 15, 2018

Project Name: S and S Infinite Peoria

Workorder: 1808461

Client Sample ID: SB-26 A

Matrix: SOIL

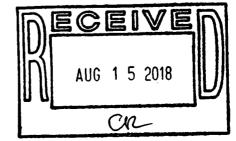
Lab ID: 1808461-001

Date Received: 08/06/2018 11:40 AM Collection Date: 08/02/

Collection Date: 08/02/2018 12:10 PM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch II
VOLATILE ORGANIC COMPOUN	DS	Method:	EPA-8260B-R	ev 2, Dec-96		Analyst: SJ	
Benzene	0.389	0.0138		mg/Kg-dry	46.210721	08/07/2018 10:56 AM	R99069
Ethylbenzene	1.01	0.0553		mg/Kg-dry	46.210721	08/07/2018 10:56 AM	R99069
m,p-Xylene	4.80	0.111		mg/Kg-dry	46.210721	08/07/2018 10:56 AM	R99069
Methyl tert-butyl ether	· ND	0.0553		mg/Kg-dry	46.210721	08/07/2018 10:56 AM	R99069
o-Xylene	. 1.63	0.0553		mg/Kg-dry	46.210721	08/07/2018 10:56 AM	R99069
Total Xylenes .	6.43	0.111		mg/Kg-dry	46.210721	08/07/2018 10:56 AM	R99069
Toluene	4.44	0.0553		mg/Kg-dry	46.210721	08/07/2018 10:56 AM	R99069
Internal Quality Control Compoun	<u>ds</u>						
SS: 4-Bromofluorobenzene	100	80-130		%Rec	46.210721	08/07/2018 10:56 AM	R99069
SS: Dibromofluoromethane	90.7	76.1-120		%Rec		08/07/2018 10:56 AM	R99069
SS: Toluene-d8	100	85-115		%Rec	46.210721	08/07/2018 10:56 AM	R99069
SEMIVOLATILE ORGANICS, BY	SCMS SIM	Method:	EPA-8270C-R	ev 3, Dec-96		Analyst: KH	
Acenaphthene	ND	0.0470	٠.	mg/Kg-dry	1	08/11/2018 2:36 AM	53979
Acenaphthylene	, ND	0.0470		mg/Kg-dry	1	08/11/2018 2:36 AM	53979
Anthracene	. ND	0.0470		mg/Kg-dry	1	08/11/2018 2:36 AM	53979
Benzo(a)anthracene	. ND	0.0470		mg/Kg-dry	1	08/11/2018 2:36 AM	53979
Benzo(a)pyrene	ND .	0.0470		mg/Kg-dry	1	08/11/2018 2:36 AM	53979
Benzo(b)fluoranthene	ND	0.0470		mg/Kg-dry	1	08/11/2018 2:36 AM	53979
Benzo(g,h,i)perylene	ND	0.0470		mg/Kg-dry	· 1	08/11/2018 2:36 AM	53979
Benzo(k)fluoranthene	ND	0.0470		mg/Kg-dry	1	08/11/2018 2:36 AM	53979
Chrysene	ND	0.0470		mg/Kg-dry	1	08/11/2018 2:36 AM	53979
Dibenzo(a,h)anthracene	/ ND	0.0470		mg/Kg-dry	1	08/11/2018 2:36 AM	53979
Fluoranthene	, ND	0.0470		mg/Kg-dry	1	08/11/2018 2:36 AM	53979
Fluorene	· ND	0.0470		mg/Kg-dry	1	08/11/2018 2:36 AM	53979
Indeno(1,2,3-cd)pyrene	ND	0.0470		mg/Kg-dry	1	08/11/2018 2:36 AM	53979
Naphthalene	, ND	0.0470		mg/Kg-dry	1	08/11/2018 2:36 AM	53979
Phenanthrene	ND	0.0470		mg/Kg-dry	1	08/11/2018 2:36 AM	53979
Pyrene	ND ND	0.0470		mg/Kg-dry	1	08/11/2018 2:36 AM	53979
Internal Quality Control Compound	<u>ds</u>						
SS: 2-Fluorobiphenyl	94.2	72.1-138		%Rec	1	08/11/2018 2:36 AM	53979
SS: 4-Terphenyl-d14	116	45.3-152		%Rec	1	08/11/2018 2:36 AM	53979
SS: Nitrobenzene-d5	99.3	62.6-144		%Rec	1	08/11/2018 2:36 AM	53979
PERCENT MOISTURE		Method:	ASTM-D2216-F	Rev 2005		Analyst: amo	
Percent Moisture	: 17	1.0	С	wt%	1	08/06/2018 5:41 PM	R99016







1950 S. Batavia Ave., Suite 150, Geneva, IL 60134 (708) 544-3260

Laboratory Results

Report Date: August 15, 2018

Client ID: CWM Company, Inc

Project Name: S and S Infinite Peoria Workorder: 1808461

Client Sample ID: SB-26 B

è							
Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch II
VOLATILE ORGANIC COMPOUNDS		Method:	EPA-8260B-Re	ev 2, Dec-96		Analyst: SJ	
Benzene	ND	0.0129		mg/Kg-dry	45.307091	08/07/2018 11:22 AM	R99069
Ethylbenzene	ND	0.0518		mg/Kg-dry	45.307091	08/07/2018 11:22 AM	R99069
m,p-Xylene	ND	0.104		mg/Kg-dry	45.307091	08/07/2018 11:22 AM	R99069
Methyl tert-butyl ether .	ND	0.0518		mg/Kg-dry	45.307091	08/07/2018 11:22 AM	R99069
o-Xylene :	ND	0.0518		mg/Kg-dry	45.307091	08/07/2018 11:22 AM	R99069
Total Xylenes	ND	0.104		mg/Kg-dry	45.307091	08/07/2018 11:22 AM	R99069
Toluene	0.0637	0.0518		mg/Kg-dry	45.307091	08/07/2018 11:22 AM	R99069
Internal Quality Control Compounds							
SS: 4-Bromofluorobenzene	100	80-130		%Rec	45.307091	08/07/2018 11:22 AM	R99069
SS: Dibromofluoromethane	87.7	76.1-120	•	%Rec	45.307091	08/07/2018 11:22 AM	R99069
SS: Toluene-d8	98.8	85-115		%Rec	45.307091	08/07/2018 11:22 AM	R99069
SEMIVOLATILE ORGANICS, BY GCMS	SIM	Method:	EPA-8270C-R	ev 3, Dec-96		Analyst: KH	
, Acenaphthene	ND	0.0450		· mg/Kg-dry	1	08/10/2018 11:51 PM	53979
Acenaphthylene	ND	0.0450		mg/Kg-dry	1	08/10/2018 11:51 PM	53979
Anthracene	ND	0.0450		mg/Kg-dry	1	08/10/2018 11:51 PM	53979
Benzo(a)anthracene	ND	0.0450		mg/Kg-dry	1	08/10/2018 11:51 PM	53979
Benzo(a)pyrene	ND	0.0450		mg/Kg-dry	1	08/10/2018 11:51 PM	53979
Benzo(b)fluoranthene	ND	0.0450		mg/Kg-dry	1	08/10/2018 11:51 PM	53979
Benzo(g,h,i)perylene	ND	0.0450		mg/Kg-dry	1	08/10/2018 11:51 PM	53979
Benzo(k)fluoranthene	ND	0.0450		mg/Kg-dry	1	08/10/2018 11:51 PM	53979
Chrysene	ND	0.0450		mg/Kg-dry	1	08/10/2018 11:51 PM	53979
Dibenzo(a,h)anthracene	ND	0.0450		mg/Kg-dry	1	08/10/2018 11:51 PM	53979
Fluoranthene	ND	0.0450		mg/Kg-dry	1	08/10/2018 11:51 PM	53979
Fluorene	ND	0.0450		mg/Kg-dry	1	08/10/2018 11:51 PM	53979
Indeno(1,2,3-cd)pyrene	ND	0.0450		mg/Kg-dry	1	08/10/2018 11:51 PM	53979
Naphthalene	ND	0.0450		mg/Kg-dry	1	08/10/2018 11:51 PM	53979
Phenanthrene	ND	0.0450		mg/Kg-dry	1	08/10/2018 11:51 PM	53979
Pyrene	ND	0.0450		mg/Kg-dry	1	08/10/2018 11:51 PM	53979
Internal Quality Control Compounds	.,,	2.3400		gring ory	•	337.072013 11.01 1 W	33313
	94.6	72.1-138		%Rec	1	08/10/2018 11:51 PM	53979
SS: 2-Fluorobiphenyl SS: 4-Terphenyl-d14	116	45.3-152		%Rec	1	08/10/2018 11:51 PM	53979
SS: Nitrobenzene-d5	97.2	62.6-144		%Rec	1	08/10/2018 11:51 PM	53979
PERCENT MOISTURE		Method:	ASTM-D2216-I	Rev 2005		Analyst: amo	
Percent Moisture	13	1.0	С	wt%	1	08/06/2018 5:41 PM	R99016

Created: 8/15/2018 5:58:56 PM



Page 4 of 20



1950 S. Batavia Ave., Suite 150, Geneva, IL 60134 (708) 544-3260

Laboratory Results

Client ID: CWM Company, Inc

Report Date: August 15, 2018

Project Name: S and S Infinite Peoria

Workorder: 1808461

Client Sample ID: SB-26 C

Matrix: SOIL

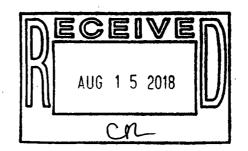
Lab ID: 1808461-003

Date Received: 08/06/2018 11:40 AM

Collection Date: 08/02/2018 12:20 PM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
VOLATILE ORGANIC COMPOUNDS		Mathad	EPA-8260B-R	2 Dos 96			
VOLATILE ORGANIC COMPOUNDS		wethou.	EPA-02005-R	ev 2, Dec-96		Analyst: SJ	
Benzene	ND	0.0147		mg/Kg-dry	55.819769	08/07/2018 1:13 PM	R99069
Ethylbenzene	ND	0.0589		mg/Kg-dry	55.819769	08/07/2018 1:13 PM	R99069
m,p-Xylene	ND	0.118		mg/Kg-dry	55.819769	08/07/2018 1:13 PM	R99069
Methyl tert-butyl ether	ND	0.0589		mg/Kg-dry	55.819769	08/07/2018 1:13 PM	R99069
o-Xylene .	ND	0.0589		mg/Kg-dry	55.819769	08/07/2018 1:13 PM	R99069
Total Xylenes	ND	0.118		mg/Kg-dry	55.819769	08/07/2018 1:13 PM	R99069
Toluene	ND	0.0589		mg/Kg-dry	55.819769	08/07/2018 1:13 PM	R99069
Internal Quality Control Compounds							
SS: 4-Bromofluorobenzene	100	80-130		%Rec	55.819769	08/07/2018 1:13 PM	R99069
SS: Dibromofluoromethane	87.1	76.1-120		%Rec	55.819769	08/07/2018 1:13 PM	R99069
SS: Toluene-d8	97.6	85-115		%Rec	55.819769	08/07/2018 1:13 PM	R99069
SEMIVOLATILE ORGANICS, BY GÇMS	SIM	Method:	EPA-8270C-R	ev 3, Dec-96		Analyst: KH	
Acenaphthene	ND	0.0415	•	mg/Kg-dry	1.	08/11/2018 12:32 AM	53979
Acenaphthylene	ND	0.0415		mg/Kg-dry	1	08/11/2018 12:32 AM	53979
Anthracene	ND	0.0415		mg/Kg-dry	1	08/11/2018 12:32 AM	53979
Benzo(a)anthracene	ND	0.0415		mg/Kg-dry	. 1	08/11/2018 12:32 AM	53979
Benzo(a)pyrene	ND	0.0415		mg/Kg-dry	1	08/11/2018 12:32 AM	53979
Benzo(b)fluoranthene	ND	0.0415		mg/Kg-dry	1	08/11/2018 12:32 AM	53979
Benzo(g,h,i)perylene	ND	0.0415		mg/Kg-dry	1	08/11/2018 12:32 AM	53979
Benzo(k)fluoranthene	ND	0.0415		mg/Kg-dry	1	08/11/2018 12:32 AM	53979
Chrysene	ND	0.0415		mg/Kg-dry	1 .	08/11/2018 12:32 AM	53979
Dibenzo(a,h)anthracene	ND	0.0415		mg/Kg-dry	1	08/11/2018 12:32 AM	53979
Fluoranthene	ND	0.0415		mg/Kg-dry	1	08/11/2018 12:32 AM	53979
Fluorene	ND	0.0415		mg/Kg-dry	1	08/11/2018 12:32 AM	53979
Indeno(1,2,3-cd)pyrene	ND	0.0415		mg/Kg-dry	1	08/11/2018 12:32 AM	53979
Naphthalene	ND	0.0415	•	mg/Kg-dry	1	08/11/2018 12:32 AM	53979
Phenanthrene	ND .	0.0415		mg/Kg-dry	1	08/11/2018 12:32 AM	53979
Pyrene	ND	0.0415		mg/Kg-dry	1	08/11/2018 12:32 AM	53979
Internal Quality Control Compounds		,			·	00.1.7.2010 12.027111	30373
SS: 2-Fluorobiphenyl	95.6	72.1-138		%Rec	1	08/11/2018 12:32 AM	53979
SS: 4-Terphenyl-d14	124	45.3-152		%Rec	1	08/11/2018 12:32 AM	53979
SS: Nitrobenzene-d5	95.0	62.6-144		%Rec	1	08/11/2018 12:32 AM	53979
PERCENT MOISTURE		Method: /	ASTM-D2216-I	Rev 2005		Analyst: amo	
Percent Moisture	5.2	1.0	с	wt%	1	08/06/2018 5:41 PM	R99016

Created: 8/15/2018 5:58:56 PM



Page 5 of 20



1950 S. Batavia Ave., Suite 150, Geneva, IL 60134 (708) 544-3260

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Laboratory Results

Client ID: CWM Company, Inc

Report Date: August 15, 2018

Project Name: S and S Infinite Peoria

Workorder: 1808461

Cliént Sample ID: SB-26 D

Matrix: SOIL

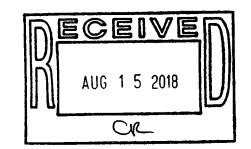
Lab ID: 1808461-004

Date Received: 08/06/2018 11:40 AM Collection Date: 08/02/2018 12:25 PM

					. Date: 00	702,2010 12.23 1 141	
Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch II
VOLATILE ORGANIC COMPOUNDS		Method:	EPA-8260B-R	ev 2, Dec-96		Analyst: SJ	
Benzene	ND	0.0381		mg/Kg-dry	144.89394	08/07/2018 1:39 PM	R99069
Ethylbenzene	ND	0.152		mg/Kg-dry	144.89394	08/07/2018 1:39 PM	R99069
m,p-Xylene	ND	0.305		mg/Kg-dry	144.89394	08/07/2018 1:39 PM	R99069
Methyl tert-butyl ether	ND	0.152		mg/Kg-dry	144.89394	08/07/2018 1:39 PM	R99069
o-Xylene .	ND	0.152		mg/Kg-dry	144.89394	08/07/2018 1:39 PM	R99069
Total Xylenes	ND	0.305		mg/Kg-dry	144.89394	08/07/2018 1:39 PM	R99069
Toluene	ND	0.152		mg/Kg-dry	144.89394	08/07/2018 1:39 PM	R99069
Internal Quality Control Compounds							
SS: 4-Bromofluorobenzene	101	80-130		%Rec	144.89394	08/07/2018 1:39 PM	R99069
SS: Dibromofluoromethane	86.4	76.1-120		%Rec	144.89394	08/07/2018 1:39 PM	R99069
SS: Toluene-d8	98.8	85-115		%Rec	144.89394	08/07/2018 1:39 PM	R99069
SEMIVOLATILE ORGANICS, BY GCM	S SIM	Method:	EPA-8270C-Re	ev 3, Dec-96		Analyst: KH	
Acenaphthene	ND	0.0416		mg/Kg-dry	1	08/11/2018 1:13 AM	53979
Acenaphthylene	ND	0.0416		mg/Kg-dry	1	08/11/2018 1:13 AM	53979
Anthracene	ND	0.0416		mg/Kg-dry	1	08/11/2018 1:13 AM	53979
Benzo(a)anthracene	ND	0.0416		mg/Kg-dry	1	08/11/2018 1:13 AM	53979
Benzo(a)pyrene	ND	0.0416		mg/Kg-dry	1	08/11/2018 1:13 AM	53979
Benzo(b)fluoranthene	ND	0.0416		mg/Kg-dry	1	08/11/2018 1:13 AM	53979
Benzo(g,h,i)perylene	ND	0.0416		mg/Kg-dry	1	08/11/2018 1:13 AM	53979
Benzo(k)fluoranthene	ND	0.0416		mg/Kg-dry	1	08/11/2018 1:13 AM	53979
Chrysene	ND	0.0416		mg/Kg-dry	1	08/11/2018 1:13 AM	53979
Dibenzo(a,h)anthracene	ND	0.0416		mg/Kg-dry	1	08/11/2018 1:13 AM	53979
Fluoranthene	ND	0.0416		mg/Kg-dry	1	08/11/2018 1:13 AM	53979
Fluorene	ND	0.0416		mg/Kg-dry	1	08/11/2018 1:13 AM	53979
Indeno(1,2,3-cd)pyrene	ND	0.0416		mg/Kg-dry	1	08/11/2018 1:13 AM	53979
Naphthalene	ND	0.0416		mg/Kg-dry	1	08/11/2018 1:13 AM	53979
Phenanthrene	ND	0.0416		mg/Kg-dry	1	08/11/2018 1:13 AM	53979
Pyrene	ND	0.0416		mg/Kg-dry	1	08/11/2018 1:13 AM	53979
Internal Quality Control Compounds				J J = 7	•		555.6
SS: 2-Fluorobiphenyl	97.5	72.1-138		%Rec	1	08/11/2018 1:13 AM	53979
SS: 4-Terphenyl-d14	126	45.3-152		%Rec	1	08/11/2018 1:13 AM	53979
SS: Nitrobenzene-d5	96.4	62.6-144		%Rec	1	08/11/2018 1:13 AM	53979
PERCENT MOISTURE		Method:	ASTM-D2216-F		·	Analyst: amo	300.0

Created: 8/15/2018 5:58:57 PM

Percent Moisture



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08/06/2018 5:41 PM



1950 S. Batavia Ave., Suite 150, Geneva, IL 60134 (708) 544-3260

Laboratory Results

Client ID: CWM Company, Inc

Report Date: August 15, 2018

Project Name: S and S Infinite Peoria

Workorder: 1808461

Client Sample ID: SB-27 C

Matrix: SOIL

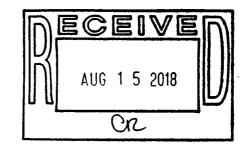
Lab ID: 1808461-005

Date Received: 08/06/2018 11:40 AM

Collection Date: 08/02/2018 12:40 PM

Parameter :	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
VOLATILE ORGANIC COMPOUNDS		Method:	EPA-8260B-Rev 2	?, Dec-96		Analyst: SJ	
Benzene	ND	0.0134	m	ig/Kg-dry	51.499670	08/07/2018 2:04 PM	R99069
Ethylbenzene	ND	0.0536	m	g/Kg-dry	51.499670	08/07/2018 2:04 PM	R99069
m,p-Xylene	ND	0.107	m	ig/Kg-dry	51.499670	08/07/2018 2:04 PM	R99069
Methyl tert-butyl ether	ND	0.0536	m	ig/Kg-dry	51.499670	08/07/2018 2:04 PM	R99069
o-Xylene	ND	0.0536	m	ig/Kg-dry	51.499670	08/07/2018 2:04 PM	R99069
Total Xylenes	ND	0.107		ig/Kg-dry	51.499670	08/07/2018 2:04 PM	R99069
Toluene	ND	0.0536	m	ig/Kg-dry	51.499670	08/07/2018 2:04 PM	R99069
Internal Quality Control Compounds							
SS: 4-Bromofluorobenzene	101	80-130		%Rec	51.499670	08/07/2018 2:04 PM	R99069
SS: Dibromofluoromethane	86.8	76.1-120		%Rec	51.499670	08/07/2018 2:04 PM	R99069
SS: Toluene-d8	101	85-115		%Rec	51.499670	08/07/2018 2:04 PM	R99069
SEMIVOLATILE ORGANICS, BY GCMS	S SIM	Method:	EPA-8270C-Rev 3	, Dec-96		Analyst: KH	
Acenaphthene	ND	0.0409	m	g/Kg-dry	1	08/11/2018 1:54 AM	53979
Acenaphthylene	ND	0.0409	m	g/Kg-dry	1	08/11/2018 1:54 AM	53979
Anthracene .	ND	0.0409	m	g/Kg-dry	1	08/11/2018 1:54 AM	53979
Benzo(a)anthracene	ND	0.0409	m	g/Kg-dry	1	08/11/2018 1:54 AM	53979
Benzo(a)pyrene	ND	0.0409	m	g/Kg-dry	1	08/11/2018 1:54 AM	53979
Benzo(b)fluoranthene	ND	0.0409	m	g/Kg-dry	1	08/11/2018 1:54 AM	53979
Benzo(g,h,i)perylene	ND	0.0409	m	g/Kg-dry	1	08/11/2018 1:54 AM	53979
Benzo(k)fluoranthene	ND	0.0409	m	g/Kg-dry	1	08/11/2018 1:54 AM	53979
Chrysene	ND	0.0409	m	g/Kg-dry	1	08/11/2018 1:54 AM	53979
Dibenzo(a,h)anthracene	ND	0.0409	m	g/Kg-dry	1	08/11/2018 1:54 AM	53979
Fluoranthene	ND	0.0409	m	g/Kg-dry	1	08/11/2018 1:54 AM	53979
Fluorene	ND	0.0409	m	g/Kg-dry	1	08/11/2018 1:54 AM	53979
Indeno(1,2,3-cd)pyrene	ND	0.0409		g/Kg-dry	1	08/11/2018 1:54 AM	53979
Naphthalene	ND	0.0409	m	g/Kg-dry	1	08/11/2018 1:54 AM	53979
Phenanthrene	ND	0.0409	m	g/Kg-dry	1	08/11/2018 1:54 AM	53979
Pyrene	ND	0.0409	m	g/Kg-dry	1	08/11/2018 1:54 AM	53979
Internal Quality Control Compounds				- •			
SS: 2-Fluorobiphenyl	103	72.1-138		%Rec	1	08/11/2018 1:54 AM	53979
SS: 4-Terphenyl-d14	126	45.3-152		%Rec	1	08/11/2018 1:54 AM	53979
SS: Nitrobenzene-d5	97.3	62.6-144		%Rec	1	08/11/2018 1:54 AM	53979
PERCENT MOISTURE		Method: /	ASTM-D2216-Rev	2005		Analyst: amo	
Percent Moisture .	3.8	1.0	С	wt%	1	08/06/2018 5:41 PM	R99016

Created: 8/15/2018 5:58:57 PM



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1950 S. Batavia Ave., Suite 150, Geneva, IL 60134 (708) 544-3260

Laboratory Results

Client ID: CWM Company, Inc

Project Name: S and S Infinite Peoria

Report Date: August 15, 2018 Workorder: 1808461

Client Sample ID: SB-27 D

Lab ID: 1808461-006

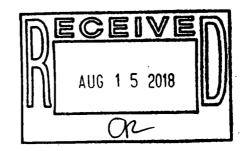
Matrix: SOIL

Collection Date: 08/02/2018 12:45 PM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
VOLATILE ORGANIC COMPOUNDS		Method:	EPA-8260B-R	ev 2, Dec-96	•	Analyst: SJ	
Benzene	ND	0.0121		mg/Kg-dry	45.442978	08/07/2018 3:21 PM	R99069
Ethylbenzene	ND	0.0485		mg/Kg-dry	45.442978	08/07/2018 3:21 PM	R99069
m,p-Xylene	ND	0.0970		mg/Kg-dry	45.442978	08/07/2018 3:21 PM	R99069
Methyl tert-butyl ether	ND	0.0485		mg/Kg-dry	45.442978	08/07/2018 3:21 PM	R99069
o-Xylene ;	ND	0.0485		mg/Kg-dry	45.442978	08/07/2018 3:21 PM	R99069
Total Xylenes	ND	0.0970		mg/Kg-dry	45.442978	08/07/2018 3:21 PM	R99069
Toluene	ND	0.0485		mg/Kg-dry	45.442978	08/07/2018 3:21 PM	R99069
Internal Quality Control Compounds							
SS: 4-Bromofluorobenzene	101	80-130		%Rec	45.442978	08/07/2018 3:21 PM	R99069
SS: Dibromofluoromethane	87.5	76.1-120	,	%Rec	45.442978	08/07/2018 3:21 PM	R99069
SS: Toluene-d8	98.5	85-115		%Rec	45.442978	08/07/2018 3:21 PM	R99069
SEMIVOLATILE ORGANICS, BY GCMS S	IM	Method: I	EPA-8270C-R	ev 3, Dec-96		Analyst: KH	
Acenaphthene	ND	0.0420		mg/Kg-dry	1	08/11/2018 2:34 AM	53979
Acenaphthylene	ND	0.0420		mg/Kg-dry	1	08/11/2018 2:34 AM	53979
Anthracene	ND	0.0420		mg/Kg-dry	1	08/11/2018 2:34 AM	53979
Ponza/a\anthenana	ND	0.0420		mg/Kg-dry	1	08/11/2018 2:34 AM	53979
Benzo(a)pyrene	ND	0.0420		mg/Kg-dry	1	08/11/2018 2:34 AM	53979
Benzo(b)fluoranthene	ND	0.0420		mg/Kg-dry	1	08/11/2018 2:34 AM	53979
Benzo(q,h,i)perylene	ND	0.0420		mg/Kg-dry	1	08/11/2018 2:34 AM	53979
Benzo(k)fluoranthene	ND	0.0420		mg/Kg-dry	1	08/11/2018 2:34 AM	53979
Chrysene	ND	0.0420		mg/Kg-dry	1	08/11/2018 2:34 AM	53979
Dibenzo(a,h)anthracene	ND	0.0420		mg/Kg-dry	1	08/11/2018 2:34 AM	53979
Fluoranthene	ND	0.0420		mg/Kg-dry	1	08/11/2018 2:34 AM	53979
Fluorene	ND	0.0420		mg/Kg-dry	1	08/11/2018 2:34 AM	53979
Indeno(1,2,3-cd)pyrene	ND	0.0420		mg/Kg-dry	1	08/11/2018 2:34 AM	53979
Naphthalene	ND	0.0420		mg/Kg-dry	1	08/11/2018 2:34 AM	53979
Phenanthrene	ND	0.0420		mg/Kg-dry	1	08/11/2018 2:34 AM	53979
Pyrene	ND	0.0420		mg/Kg-dry	1	08/11/2018 2:34 AM	53979
Internal Quality Control Compounds		0.0120		mg/rtg-dry	•	00/11/2010 2.34 AW	55519
SS: 2-Fluorobiphenyl	103	72.1-138		%Rec	1	08/11/2018 2:34 AM	53979
SS: 4-Terphenyl-d14	121	45.3-152		%Rec	1	08/11/2018 2:34 AM	53979
SS: Nitrobenzene-d5	95.4	62.6-144		%Rec	1	08/11/2018 2:34 AM	53979
PERCENT MOISTURE	•	Method: A	ASTM-D2216-F			Analyst: amo	200.0
Percent Moisture	6.3	1.0	С	wt%	1	08/06/2018 5:41 PM	R99016

Date Received: 08/06/2018 11:40 AM

Created: 8/15/2018 5:58:58 PM



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1950 S. Batavia Ave., Suite 150, Geneva, IL 60134 (708) 544-3260

Laboratory Results

Client ID: CWM Company, Inc

Project Name: S and S Infinite Peoria

Workorder: 1808461

Report Date: August 15, 2018

Client Sample ID: SB-28 A

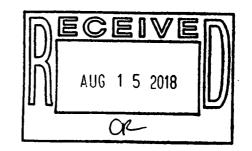
Lab ID: 1808461-007

Matrix: SOIL

Date Received: 08/06/2018 11:40 AM Collection Date: 08/02/2018 12:55 PM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
VOLATILE ORGANIC COMPOUNDS		Method:	EPA-8260B-R	ev 2. Dec-96		Analyst: SJ	
			_,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			, maryot. 00	
Benzene .	ND	0.0174		mg/Kg-dry	65.034729	08/07/2018 3:47 PM	R99069
Ethylbenzene	ND	0.0696		mg/Kg-dry	65.034729	08/07/2018 3:47 PM	R99069
m,p-Xylene	ND	0.139		mg/Kg-dry	65.034729	08/07/2018 3:47 PM	R99069
Methyl tert-butyl ether	ND	0.0696		mg/Kg-dry	65.034729	08/07/2018 3:47 PM	R99069
o-Xylene ,	ND	0.0696		mg/Kg-dry	65.034729	08/07/2018 3:47 PM	R99069
Total Xylenes	ND	0.139		mg/Kg-dry	65.034729	08/07/2018 3:47 PM	R99069
Toluene	ND	0.0696		mg/Kg-dry	65.034729	08/07/2018 3:47 PM	R99069
Internal Quality Control Compounds							
SS: 4-Bromofluorobenzene	100	80-130		%Rec	65.034729	08/07/2018 3:47 PM	R99069
SS: Dibromofluoromethane	86.3	76.1-120		%Rec	65.034729	08/07/2018 3:47 PM	R99069
SS: Toluene-d8	101	85-115		%Rec	65.034729	08/07/2018 3:47 PM	R99069
SEMIVOLATILE ORGANICS, BY GCMS	SIM	Method:	EPA-8270C-R	ev 3, Dec-96		Analyst: KH	
Acenaphthene	ND	0.0423		mg/Kg-dry	1	08/11/2018 3:15 AM	53979
Acenaphthylene	ND	0.0423		mg/Kg-dry	1	08/11/2018 3:15 AM	53979
Anthracene	ND	0.0423		mg/Kg-dry	1	08/11/2018 3:15 AM	53979
Benzo(a)anthracene	ND	0.0423		mg/Kg-dry	1	08/11/2018 3:15 AM	53979
Benzo(a)pyrene	ND	0.0423		mg/Kg-dry	1	08/11/2018 3:15 AM	53979
Benzo(b)fluoranthene	ND	0.0423		mg/Kg-dry	1	08/11/2018 3:15 AM	53979
Benzo(g,h,i)perylene	ND	0.0423		mg/Kg-dry	1	08/11/2018 3:15 AM	53979
Benzo(k)fluoranthene	ND	0.0423		mg/Kg-dry	1	08/11/2018 3:15 AM	53979
Chrysene	ND	0.0423		mg/Kg-dry	1	08/11/2018 3:15 AM	53979
Dibenzo(a,h)anthracene	ND	0.0423		mg/Kg-dry	1	08/11/2018 3:15 AM	53979
Fluoranthene	ND	0.0423		mg/Kg-dry	1	08/11/2018 3:15 AM	53979
Fluorene	ND	0.0423		mg/Kg-dry	1	08/11/2018 3:15 AM	53979
Indeno(1,2,3-cd)pyrene	ND	0.0423		mg/Kg-dry	1	08/11/2018 3:15 AM	53979
Naphthalene	ND	0.0423		mg/Kg-dry	1	08/11/2018 3:15 AM	53979
Phenanthrene	ND	0.0423		mg/Kg-dry	1	08/11/2018 3:15 AM	53979
Pyrene	ND	0.0423		mg/Kg-dry	1	08/11/2018 3:15 AM	
Internal Quality Control Compounds	110	0.0720		g/r/g-ury	•	00/11/2016 3.13 AIVI	53979
SS: 2-Fluorobiphenyl	101	72.1-138		%Rec	1	08/11/2018 3:15 AM	53979
SS: 4-Terphenyl-d14	124	45.3-152		%Rec	1	08/11/2018 3:15 AM	
SS: Nitrobenzene-d5	98.1	62.6-144		%Rec	1	08/11/2018 3:15 AM 08/11/2018 3:15 AM	53979 53979
PERCENT MOISTURE		Method: /	ASTM-D2216-	Rev 2005		Analyst: amo	\
Percent Moisture	6.5	1.0	С	wt%	1	08/06/2018 5:41 PM	R99016

Created: 8/15/2018 5:58:58 PM



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1950 S. Batavia Ave., Suite 150, Geneva, IL 60134 (708) 544-3260

Laboratory Results

Client ID: CWM Company, Inc

Report Date: August 15, 2018

Project Name: S and S Infinite Peoria

Workorder: 1808461

Client Sample ID: SB-28 B

Matrix: SOIL

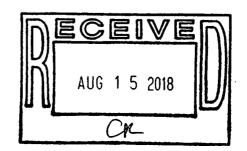
Lab ID: 1808461-008

Date Received: 08/06/2018 11:40 AM

Collection Date: 08/02/2018 1:00 PM

		Report			Dilution		
Parameter	Result	Limit	Qual.	Units		Date Analyzed	Batch ID
VOLATILE ORGANIC COMPOUNDS		Method:	EPA-8260B-R	ev 2, Dec-96		Analyst: SJ	
Benzene	ND	0.0146		mg/Kg-dry	52.525422	08/07/2018 4:12 PM	R99069
Ethylbenzene	ND	0.0584		mg/Kg-dry	52.525422	08/07/2018 4:12 PM	R99069
m,p-Xylene	ND	0.117		mg/Kg-dry	52.525422	08/07/2018 4:12 PM	R99069
Methyl tert-butyl ether	ND	0.0584		mg/Kg-dry	52.525422	08/07/2018 4:12 PM	R99069
o-Xylene	ND	0.0584		mg/Kg-dry	52.525422	08/07/2018 4:12 PM	R99069
Total Xylenes	ND	0.117		mg/Kg-dry	52.525422	08/07/2018 4:12 PM	R99069
Toluene	ND	0.0584		mg/Kg-dry	52.525422	08/07/2018 4:12 PM	R99069
Internal Quality Control Compounds							
SS: 4-Bromofluorobenzene	102	80-130		%Rec	52.525422	08/07/2018 4:12 PM	R99069
SS: Dibromofluoromethane	87.3	76.1-120		%Rec	52.525422	08/07/2018 4:12 PM	R99069
SS: Toluene-d8	101	85-115		%Rec	52.525422	08/07/2018 4:12 PM	R99069
SEMIVOLATILE ORGANICS, BY GCMS	SIM	Method:	EPA-8270C-R	ev 3, Dec-96		Analyst: KH	
Acenaphthene	ND	0.0441		mg/Kg-dry	1	08/11/2018 3:56 AM	53979
Acenaphthylene	ND *	0.0441		mg/Kg-dry	1	08/11/2018 3:56 AM	53979
Anthracene	ND	0.0441		mg/Kg-dry	1	08/11/2018 3:56 AM	53979
Benzo(a)anthracene	ND	0.0441		mg/Kg-dry	1	08/11/2018 3:56 AM	53979
Benzo(a)pyrene	ND	0.0441		mg/Kg-dry	1	08/11/2018 3:56 AM	53979
Benzo(b)fluoranthene	ND	0.0441		mg/Kg-dry	1	08/11/2018 3:56 AM	53979
Benzo(g,h,i)perylene	ND	0.0441		mg/Kg-dry	1	08/11/2018 3:56 AM	53979
Benzo(k)fluoranthene	ND	0.0441		mg/Kg-dry	1	08/11/2018 3:56 AM	53979
Chrysene	ND	0.0441		mg/Kg-dry	1	08/11/2018 3:56 AM	53979
Dibenzo(a,h)anthracene	ND*	0.0441		mg/Kg-dry	1	08/11/2018 3:56 AM	53979
Fluoranthene	0.0485	0.0441		mg/Kg-dry	1	08/11/2018 3:56 AM	53979
Fluorene	ND	0.0441		mg/Kg-dry	1	08/11/2018 3:56 AM	53979
Indeno(1,2,3-cd)pyrene	ND	0.0441		mg/Kg-dry	1	08/11/2018 3:56 AM	53979
Naphthalene	ND	0.0441		mg/Kg-dry	1	08/11/2018 3:56 AM	53979
Phenanthrene	ND	0.0441		mg/Kg-dry	1	08/11/2018 3:56 AM	53979
Pyrene	ND	0.0441		mg/Kg-dry	1	08/11/2018 3:56 AM	53979
Internal Quality Control Compounds					•	00.7.7.20.10 0.00 7.111	00070
SS: 2-Fluorobiphenyl	102	72.1-138	•	%Rec	1	08/11/2018 3:56 AM	53979
SS: 4-Terphenyl-d14	123	45.3-152		%Rec	1	08/11/2018 3:56 AM	53979
SS: Nitrobenzene-d5	96.5	62.6-144		%Rec	1	08/11/2018 3:56 AM	53979
PERCENT MOISTURE		Method: /	ASTM-D2216-I	Rev 2005		Analyst: amo	
Percent Moisture	10	1.0	С	wt%	1	08/06/2018 5:41 PM	R99016

Created: 8/15/2018 5:58:58 PM



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1950 S. Batavia Ave., Suite 150, Geneva, IL 60134 (708) 544-3260

Laboratory Results

Client ID: CWM Company, Inc

Report Date: August 15, 2018

Project Name: S and S Infinite Peoria

Workorder: 1808461

Client Sample ID: SB-28 C

Matrix: SOIL

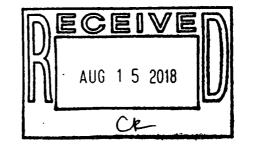
Lab ID: 1808461-009

Date Received: 08/06/2018 11:40 AM

Collection Date: 08/02/2018 1:05 PM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch I
VOLATILE ORGANIC COMPOUNDS		Method:	EPA-8260B-R	ev 2, Dec-96		Analyst: SJ	
Benzene	0.0335	0.0144		mg/Kg-dry	53.64922	08/08/2018 1:55 AM	R99074
Ethylbenzene	ND	0.0578		mg/Kg-dry	53.64922	08/08/2018 1:55 AM	R99074
m,p-Xylene	ND	0.116		mg/Kg-dry	53.64922	08/08/2018 1:55 AM	R99074
Methyl tert-butyl ether	ND	0.0578		mg/Kg-dry	53.64922	08/08/2018 1:55 AM	R99074
o-Xylene	ND	0.0578		mg/Kg-dry	53.64922	08/08/2018 1:55 AM	R99074
Total Xylenes	ND	0.116		mg/Kg-dry	53.64922	08/08/2018 1:55 AM	R99074
Toluene	ND	0.0578		mg/Kg-dry	53.64922	08/08/2018 1:55 AM	R99074
Internal Quality Control Compounds							
SS: 4-Bromofluorobenzene	101	80-130		%Rec	53.64922	08/08/2018 1:55 AM	R99074
SS: Dibromofluoromethane	88.7	76.1-120		%Rec	53.64922	08/08/2018 1:55 AM	R99074
SS: Toluene-d8	98.8	85-115		%Rec	53.64922	08/08/2018 1:55 AM	R99074
SEMIVOLATILE ORGANICS, BY GCMS	SIM	Method:	EPA-8270C-R	ev 3, Dec-96	,	Analyst: KH	
Acenaphthene	ND	0.0429		mg/Kg-dry	1	08/11/2018 4:36 AM	53979
Acenaphthylene	ND	0.0429		mg/Kg-dry	1	08/11/2018 4:36 AM	53979
Anthracene .	ND	0.0429		mg/Kg-dry	1	08/11/2018 4:36 AM	53979
Benzo(a)anthracene	ND	0.0429		mg/Kg-dry	1	08/11/2018 4:36 AM	53979
Benzo(a)pyrene	ND	0.0429		mg/Kg-dry	1	08/11/2018 4:36 AM	53979
Benzo(b)fluoranthene	ND	0.0429		mg/Kg-dry	1	08/11/2018 4:36 AM	53979
Benzo(g,h,i)perylene	ND	0.0429		mg/Kg-dry	1	08/11/2018 4:36 AM	53979
Benzo(k)fluoranthene	ND	0.0429		mg/Kg-dry	1	08/11/2018 4:36 AM	53979
Chrysene	ND	0.0429		mg/Kg-dry	1	08/11/2018 4:36 AM	53979
Dibenzo(a,h)anthracene	ND	0.0429		mg/Kg-dry	1	08/11/2018 4:36 AM	53979
Fluoranthene	ND	0.0429		mg/Kg-dry	1	08/11/2018 4:36 AM	53979
Fluorene	. ND	0.0429		mg/Kg-dry	1	08/11/2018 4:36 AM	53979
Indeno(1,2,3-cd)pyrene	ND	0.0429		mg/Kg-dry	1	08/11/2018 4:36 AM	53979
Naphthalene	ND	0.0429		mg/Kg-dry	1 '	08/11/2018 4:36 AM	53979
Phenanthrene	ND	0.0429		mg/Kg-dry	1	08/11/2018 4:36 AM	53979
Pyrene	ND	0.0429		mg/Kg-dry	1	08/11/2018 4:36 AM	53979
Internal Quality Control Compounds							
SS: 2-Fluorobiphenyl	103	72.1-138		%Rec	1	08/11/2018 4:36 AM	53979
SS: 4-Terphenyl-d14	121	45.3-152		%Rec	1	08/11/2018 4:36 AM	53979
SS: Nitrobenzene-d5	98.4	62.6-144		%Rec	1	08/11/2018 4:36 AM	53979
PERCENT MOISTURE		Method: /	ASTM-D2216-I	Rev 2005		Analyst: amo	
Percent Moisture	7.1	1.0	c	wt%	1	08/06/2018 5:41 PM	R99016

Created: 8/15/2018 5:58:59 PM



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1950 S. Batavia Ave., Suite 150, Geneva, IL 60134 (708) 544-3260

Laboratory Results

Client ID: CWM Company, Inc

Report Date: August 15, 2018 Workorder: 1808461

Project Name: S and S Infinite Peoria

Matrix: SOIL

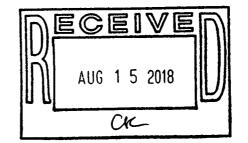
Lab ID: 1808461-010

Client Sample ID: SB-28 D

Created: 8/15/2018 5:58:59 PM

Date Received: 08/06/2018 11:40 AM Collection Date: 08/02/2018 1:10 PM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
VOLATILE ORGANIC COMPOUNDS		Method:	EPA-8260B-R	ev 2, Dec-96		Analyst: SJ	
Benzene	0.0195	0.0129		mg/Kg-dry	43.535804	08/08/2018 2:20 AM	R99074
Ethylbenzene	0.106	0.0514		mg/Kg-dry	43.535804	08/08/2018 2:20 AM	R99074
m,p-Xylene	0.114	0.103		mg/Kg-dry	43.535804	08/08/2018 2:20 AM	R99074
Methyl tert-butyl ether	ND	0.0514		mg/Kg-dry	43.535804	08/08/2018 2:20 AM	R99074
o-Xylene .;	ND	0.0514		mg/Kg-dry	43.535804	08/08/2018 2:20 AM	R99074
Total Xylenes	0.114	0.103		mg/Kg-dry	43.535804	08/08/2018 2:20 AM	R99074
Toluene	ND	0.0514		mg/Kg-dry	43.535804	08/08/2018 2:20 AM	R99074
Internal Quality Control Compounds							
SS: 4-Bromofluorobenzene	104	80-130		%Rec	43.535804	08/08/2018 2:20 AM	R99074
SS: Dibromofluoromethane .	89.4	76.1-120		%Rec	43.535804	08/08/2018 2:20 AM	R99074
SS: Toluene-d8	98.6	85-115		%Rec	43.535804	08/08/2018 2:20 AM	R99074
SEMIVOLATILE ORGANICS, BY GCMS	SIM	Method:	EPA-8270C-R	ev 3, Dec-96		Analyst: KH	
Acenaphthene	ND	0.0467		mg/Kg-dry	1	08/14/2018 11:15 AM	53979
Acenaphthylene	ND	0.0467		mg/Kg-dry	1	08/14/2018 11:15 AM	53979
Anthracene .	ND	0.0467		mg/Kg-dry	1	08/14/2018 11:15 AM	53979
Benzo(a)anthracene	ND	0.0467		mg/Kg-dry	1	08/14/2018 11:15 AM	53979
Benzo(a)pyrene	ND	0.0467		mg/Kg-dry	1	08/14/2018 11:15 AM	53979
Benzo(b)fluoranthene	ND	0.0467		mg/Kg-dry	1	08/14/2018 11:15 AM	53979
Benzo(g,h,i)perylene	ND	0.0467		mg/Kg-dry	1	08/14/2018 11:15 AM	53979
Benzo(k)fluoranthene	ND	0.0467		mg/Kg-dry	1	08/14/2018 11:15 AM	53979
Chrysene	ND	0.0467		mg/Kg-dry	1	08/14/2018 11:15 AM	53979
Dibenzo(a,h)anthracene	ND	0.0467		mg/Kg-dry .	1	08/14/2018 11:15 AM	53979
Fluoranthene	ND	0.0467		mg/Kg-dry	1	08/14/2018 11:15 AM	53979
Fluorene	ND	0.0467		mg/Kg-dry	1	08/14/2018 11:15 AM	53979
Indeno(1,2,3-cd)pyrene	ND	0.0467		mg/Kg-dry	1	08/14/2018 11:15 AM	53979
Naphthalene :	ND	0.0467		mg/Kg-dry	1	08/14/2018 11:15 AM	53979
Phenanthrene	ND	0.0467		mg/Kg-dry	1	08/14/2018 11:15 AM	53979
Pyrene	ND	0.0467		mg/Kg-dry	1	08/14/2018 11:15 AM	53979
Internal Quality Control Compounds				• • •			
SS: 2-Fluorobiphenyl	86.4	72.1-138		%Rec	1	08/14/2018 11:15 AM	53979
SS: 4-Terphenyl-d14	114	45.3-152		%Rec	1	08/14/2018 11:15 AM	53979
SS: Nitrobenzene-d5	97.7	62.6-144		%Rec	1	08/14/2018 11:15 AM	53979
PERCENT MOISTURE		Method:	ASTM-D2216-	Rev 2005		Analyst: amo	
Percent Moisture	15	1.0	С	wt%	1	08/06/2018 5:41 PM	R99016



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1950 S. Batavia Ave., Suite 150, Geneva, IL 60134 (708) 544-3260

Laboratory Results

Client ID: CWM Company, Inc
Project Name: S and S Infinite Peoria

Report Date: August 15, 2018

Workorder: 1808461

Client Sample ID: SB-29 A

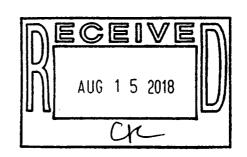
Matrix: SOIL

Lab ID: 1808461-011

Date Received: 08/06/2018 11:40 AM Collection Date: 08/02/2018 1:15 PM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
VOLATILE ORGANIC COMPOUNDS		Method:	EPA-8260B-R	ev 2, Dec-96	-	Analyst: SJ	
Benzene	0.0168	0.0145		mg/Kg-dry	51.3938	08/08/2018 2:46 AM	R99074
Ethylbenzene	ND	0.0579		mg/Kg-dry	51.3938	08/08/2018 2:46 AM	R99074
m,p-Xylene	ND	0.116		mg/Kg-dry	51.3938	08/08/2018 2:46 AM	R99074
Methyl tert-butyl ether	ND	0.0579		mg/Kg-dry	51.3938	08/08/2018 2:46 AM	R99074
o-Xylene	ND	0.0579		mg/Kg-dry	51.3938	08/08/2018 2:46 AM	R99074
Total Xylenes	ND	0.116		mg/Kg-dry	51.3938	08/08/2018 2:46 AM	R99074
Toluene	ND	0.0579		mg/Kg-dry	51.3938	08/08/2018 2:46 AM	R99074
Internal Quality Control Compounds							
SS: 4-Bromofluorobenzene	101 .	80-130		%Rec	51.3938	08/08/2018 2:46 AM	R99074
SS: Dibromofluoromethane	88.0	76.1-120		%Rec	51.3938	08/08/2018 2:46 AM	R99074
SS: Toluene-d8	98.7	85-115		%Rec	51.3938	08/08/2018 2:46 AM	R99074
SEMIVOLATILE ORGANICS, BY GCMS S	SIM	Method:	EPA-8270C-R	ev 3, Dec-96		Analyst: KH	
Acenaphthene	ND	0.0449		mg/Kg-dry	1	08/14/2018 11:57 AM	53979
Acenaphthylene	ND	0.0449		mg/Kg-dry	1	08/14/2018 11:57 AM	53979
Anthracene	ND	0.0449		mg/Kg-dry	1	08/14/2018 11:57 AM	53979
Benzo(a)anthracene	ND	0.0449		mg/Kg-dry	1	08/14/2018 11:57 AM	53979
Benzo(a)pyrene	ND	0.0449		mg/Kg-dry	1	08/14/2018 11:57 AM	53979
Benzo(b)fluoranthene	ND	0.0449		mg/Kg-dry	1	08/14/2018 11:57 AM	53979
Benzo(g,h,i)perylene	ND	0.0449		mg/Kg-dry	1	08/14/2018 11:57 AM	53979
Benzo(k)fluoranthene	ND	0.0449		mg/Kg-dry	1	08/14/2018 11:57 AM	53979
Chrysene	ND	0.0449		mg/Kg-dry	1	08/14/2018 11:57 AM	53979
Dibenzo(a,h)anthracene	ND	0.0449		mg/Kg-dry	1	08/14/2018 11:57 AM	53979
Fluoranthene	ND	0.0449		mg/Kg-dry	1	08/14/2018 11:57 AM	53979
Fluorene	ND	0.0449		mg/Kg-dry	1	08/14/2018 11:57 AM	53979
Indeno(1,2,3-cd)pyrene	ND	0.0449		mg/Kg-dry	1	08/14/2018 11:57 AM	53979
Naphthalene	ND	0.0449		mg/Kg-dry	1	08/14/2018 11:57 AM	53979
Phenanthrene	ND	0.0449		mg/Kg-dry	1	08/14/2018 11:57 AM	53979
Pyrene	ND	0.0449		mg/Kg-dry	1	08/14/2018 11:57 AM	53979
Internal Quality Control Compounds							
SS: 2-Fluorobiphenyl	93.3	72.1-138		%Rec	1	08/14/2018 11:57 AM	53979
SS: 4-Terphenyl-d14	127	45.3-152		%Rec	1	08/14/2018 11:57 AM	53979
SS: Nitrobenzene-d5	89.8	62.6-144		%Rec	1	08/14/2018 11:57 AM	53979
PERCENT MOISTURE		Method:	ASTM-D2216-	Rev 2005		Analyst: amo	
Percent Moisture	11	1.0	С	wt%	1	08/06/2018 5:41 PM	R99016

Created: 8/15/2018 5:58:59 PM



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1950 S. Batavia Ave., Suite 150, Geneva, IL 60134 (708) 544-3260

Laboratory Results

Client ID: CWM Company, Inc

Project Name: S and S Infinite Peoria

Report Date: August 15, 2018

Workorder: 1808461

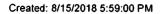
Client Sample ID: SB-29 B

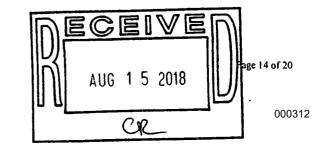
Lab ID: 1808461-012

Matrix: SOIL

Date Received: 08/06/2018 11:40 AM Collection Date: 08/02/2018 1:20 PM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch II
			~				Daten 11
VOLATILE ORGANIC COMPOUNDS		Method:	EPA-8260B-R	ev 2, Dec-96		Analyst: SJ	
Benzene	ND	0.0142		mg/Kg-dry	54.459112	08/08/2018 3:11 AM	R99074
Ethylbenzene	ND .	0.0570		mg/Kg-dry	54.459112	08/08/2018 3:11 AM	R99074
m,p-Xylene	ND	0.114		mg/Kg-dry	54.459112	08/08/2018 3:11 AM	R99074
Methyl tert-butyl ether	ND	0.0570		mg/Kg-dry	54.459112	08/08/2018 3:11 AM	R99074
o-Xylene	ND	0.0570		mg/Kg-dry	54.459112	08/08/2018 3:11 AM	R99074
Total Xylenes	ND	0.114		mg/Kg-dry	54.459112	08/08/2018 3:11 AM	R99074
Toluene	ND	0.0570		mg/Kg-dry	54.459112	08/08/2018 3:11 AM	R99074
Internal Quality Control Compounds							
SS: 4-Bromofluorobenzene	102	80-130		%Rec	54.459112	08/08/2018 3:11 AM	R99074
SS: Dibromofluoromethane	88.7	76.1-120		%Rec	54.459112	08/08/2018 3:11 AM	R99074
SS: Toluene-d8	99.8	85-115		%Rec	54.459112	08/08/2018 3:11 AM	R99074
SEMIVOLATILE ORGANICS, BY GCMS SI	М	Method:	EPA-8270C-R	ev 3, Dec-96		Analyst: KH	,
Acenaphthene	ND	0.0412		mg/Kg-dry	1	08/14/2018 12:41 PM	53979
Acenaphthylene	ND	0.0412		mg/Kg-dry	1	08/14/2018 12:41 PM	53979
Anthracene	ND	0.0412		mg/Kg-dry	1	08/14/2018 12:41 PM	53979
Benzo(a)anthracene	ND	0.0412		mg/Kg-dry	1	08/14/2018 12:41 PM	53979
Benzo(a)pyrene	ND	0.0412		mg/Kg-dry	1	08/14/2018 12:41 PM	53979
Benzo(b)fluoranthene	ND	0.0412		mg/Kg-dry	1	08/14/2018 12:41 PM	53979
Benzo(g,h,i)perylene	ND	0.0412		mg/Kg-dry	1	08/14/2018 12:41 PM	53979
Benzo(k)fluoranthene	ND	0.0412		mg/Kg-dry	1 .	08/14/2018 12:41 PM	53979
Chrysene	ND	0.0412		mg/Kg-dry	1	08/14/2018 12:41 PM	53979
Dibenzo(a,h)anthracene	ND	0.0412		mg/Kg-dry	1	08/14/2018 12:41 PM	53979
Fluoranthene	ND	0.0412		mg/Kg-dry	1	08/14/2018 12:41 PM	53979
Fluorene	ND	0.0412		mg/Kg-dry	1	08/14/2018 12:41 PM	53979
Indeno(1,2,3-cd)pyrene	ND	0.0412		mg/Kg-dry	1	08/14/2018 12:41 PM	53979
Naphthalene	ND	0.0412		mg/Kg-dry	1	08/14/2018 12:41 PM	53979
Phenanthrene	ND	0.0412		mg/Kg-dry	1	08/14/2018 12:41 PM	53979
Pyrene	ND	0.0412		mg/Kg-dry	1	08/14/2018 12:41 PM	53979
Internal Quality Control Compounds							
SS: 2-Fluorobiphenyl	101	72.1-138		%Rec	1	08/14/2018 12:41 PM	53979
SS: 4-Terphenyl-d14	126	45.3-152		%Rec	1	08/14/2018 12:41 PM	53979
SS: Nitrobenzene-d5	92.6	62.6-144		%Rec	. 1	08/14/2018 12:41 PM	53979
PERCENT MOISTURE		Method: A	ASTM-D2216-	Rev 2005		Analyst: amo	
Percent Moisture	4.5	1.0	С	wt% .	1	08/06/2018 5:41 PM	R99016







1950 S. Batavia Ave., Suite 150, Geneva, IL 60134 (708) 544-3260

Laboratory Results

Matrix: SOIL

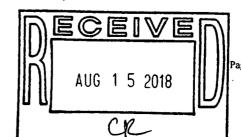
Client ID: CWM Company, Inc Report Date: August 15, 2018

Project Name: S and S Infinite Peoria Workorder: 1808461

Client Sample ID: SB-29 C

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID	
VOLATILE ORGANIC COMPOUNDS		Method: EPA-8260B-Rev 2, Dec-96				Analyst: SJ		
Benzene	ND	0.0148		mg/Kg-dry	57.004743	08/08/2018 3:36 AM	R99074	
Ethylbenzene	ND	0.0593		mg/Kg-dry	57.004743	08/08/2018 3:36 AM	R99074	
m,p-Xylene	ND	0.119		mg/Kg-dry	57.004743	08/08/2018 3:36 AM	R99074	
Methyl tert-butyl ether	ND	0.0593		mg/Kg-dry	57.004743	08/08/2018 3:36 AM	R99074	
o-Xylene	ND	0.0593		mg/Kg-dry	57.004743	08/08/2018 3:36 AM	R99074	
Total Xylenes	ND	0.119		mg/Kg-dry	57.004743	08/08/2018 3:36 AM	R99074	
Toluene	ND	0.0593		mg/Kg-dry	57.004743	08/08/2018 3:36 AM	R99074	
Internal Quality Control Compounds								
SS: 4-Bromofluorobenzene	101	80-130		%Rec	57.004743	08/08/2018 3:36 AM	R99074	
SS: Dibromofluoromethane	88.8	76.1-120		%Rec	57.004743	08/08/2018 3:36 AM	R99074	
SS: Toluene-d8	99.2	85-115		%Rec		08/08/2018 3:36 AM	R99074	
SEMIVOLATILE ORGANICS, BY GCMS	SIM	Method:	EPA-8270C-Re	v 3, Dec-96		Analyst: KH		
Acenaphthene	ND	0.0416		mg/Kg-dry	1	08/14/2018 1:24 PM	53979	
Acenaphthylene	ND	0.0416		mg/Kg-dry	1	08/14/2018 1:24 PM	53979	
Anthracene	ND	0.0416		mg/Kg-dry	1	08/14/2018 1:24 PM	53979	
Benzo(a)anthracene	ND	0.0416		mg/Kg-dry	1	08/14/2018 1:24 PM	53979	
Benzo(a)pyrene	ND	0.0416		mg/Kg-dry	1	08/14/2018 1:24 PM	53979	
Benzo(b)fluoranthene	ND	0.0416		mg/Kg-dry	1	08/14/2018 1:24 PM	53979	
Benzo(g,h,i)perylene	ND	0.0416		mg/Kg-dry	1	08/14/2018 1:24 PM	53979	
Benzo(k)fluoranthene	ND	0.0416		mg/Kg-dry	. 1	08/14/2018 1:24 PM	53979	
Chrysene	ND	0.0416		mg/Kg-dry	1	08/14/2018 1:24 PM	53979	
Dibenzo(a,h)anthracene	ND	0.0416		mg/Kg-dry	1	08/14/2018 1:24 PM	53979	
Fluoranthene	ND ·	0.0416		mg/Kg-dry	1	08/14/2018 1:24 PM	53979	
Fluorene	ND	0.0416		mg/Kg-dry	1	08/14/2018 1:24 PM	53979	
Indeno(1,2,3-cd)pyrene	ND	0.0416		mg/Kg-dry	1	08/14/2018 1:24 PM	53979	
Naphthalene	ND	0.0416		mg/Kg-dry	1	08/14/2018 1:24 PM	53979	
Phenanthrene	ND	0.0416		mg/Kg-dry	1	08/14/2018 1:24 PM	53979	
Pyrene	ND	0.0416		mg/Kg-dry	1	08/14/2018 1:24 PM	53979	
Internal Quality Control Compounds								
SS: 2-Fluorobiphenyl	97.9	72.1-138		%Rec	1	08/14/2018 1:24 PM	53979	
SS: 4-Terphenyl-d14	111	45.3-152		%Rec	1	08/14/2018 1:24 PM	53979	
SS: Nitrobenzene-d5	92.3	62.6-144		%Rec	1	08/14/2018 1:24 PM	53979	
PERCENT MOISTURE		Method:	ASTM-D2216-R	ev 2005		Analyst: amo		
Percent Moisture	3.9	1.0	С	wt%	1	08/06/2018 5:41 PM	R99016	

Created: 8/15/2018 5:59:00 PM



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1950 S. Batavia Ave., Suite 150, Geneva, IL 60134 (708) 544-3260

Laboratory Results

Client ID: CWM Company, Inc

Report Date: August 15, 2018

Project Name: S and S Infinite Peoria

Workorder: 1808461

Client Sample ID: SB-29 D

Matrix: SOIL

Lab ID: 1808461-014

Date Received: 08/06/2018 11:40 AM

Collection Date: 08/02/2018 1:30 PM

240 121 .000 .01 01.	Duit Itte	011 001 001 001 2010		Collection Date: 08/02/2018 1:30 PM				
Parameter	Result	Report esult Limit Qual.		Units	Dilution Factor	Date Analyzed	Batch ID	
VOLATILE ORGANIC COMPOUNDS		Method: EPA-8260E				Analyst: SJ		
Benzene	0.0582	0.0189		mg/Kg-dry	71.865927	08/10/2018 1:40 PM	R99226	
Ethylbenzene .	ND	0.0756		mg/Kg-dry	71.865927	08/10/2018 1:40 PM	R99226	
m,p-Xylene	ND	0.151		mg/Kg-dry	71.865927	08/10/2018 1:40 PM	R99226	
Methyl tert-butyl ether	ND	0.0756		mg/Kg-dry	71.865927	08/10/2018 1:40 PM	R99226	
o-Xylene	ND	0.0756		mg/Kg-dry	71.865927	08/10/2018 1:40 PM	R99226	
Total Xylenes	ND	0.151		mg/Kg-dry	71.865927	08/10/2018 1:40 PM	R99226	
Toluene	0.120	0.0756		mg/Kg-dry	71.865927	08/10/2018 1:40 PM	R99226	
Internal Quality Control Compounds								
SS: 4-Bromofluorobenzene	101	80-130		%Rec	71.865927	08/10/2018 1:40 PM	R99226	
SS: Dibromofluoromethane	90.4	76.1-120		%Rec	71.865927	08/10/2018 1:40 PM	R99226	
SS: Toluene-d8	99.2	85-115		%Rec	71.865927	08/10/2018 1:40 PM	R99226	
SEMIVOLATILE ORGANICS, BY GCMS	SIM	Method:	EPA-8270C-R	ev 3, Dec-96		Analyst: KH		
Acenaphthene	ND	0.0416		mg/Kg-dry	1	08/14/2018 2:09 PM	53979	
Acenaphthylene	ND	0.0416		mg/Kg-dry	1	08/14/2018 2:09 PM	53979	
Anthracene	ND	0.0416		mg/Kg-dry	1	08/14/2018 2:09 PM	53979	
Benzo(a)anthracene	ND	0.0416		mg/Kg-dry	1	08/14/2018 2:09 PM	53979	
Benzo(a)pyrene	ND	0.0416		mg/Kg-dry	1	08/14/2018 2:09 PM	53979	
Benzo(b)fluoranthene	ND	0.0416		mg/Kg-dry	1	08/14/2018 2:09 PM	53979	
Benzo(g,h,i)perylene .	ND	0.0416		mg/Kg-dry	1	08/14/2018 2:09 PM	53979	
Benzo(k)fluoranthene	ND	0.0416		mg/Kg-dry	1	08/14/2018 2:09 PM	53979	
Chrysene	ND	0.0416		mg/Kg-dry	1	08/14/2018 2:09 PM	53979	
Dibenzo(a,h)anthracene	ND	0.0416		mg/Kg-dry	1	08/14/2018 2:09 PM	53979	
Fluoranthene	ND	0.0416		mg/Kg-dry	1	08/14/2018 2:09 PM	53979	
Fluorene	ND	0.0416		mg/Kg-dry	1	08/14/2018 2:09 PM	53979	
Indeno(1,2,3-cd)pyrene	ND	0.0416		mg/Kg-dry	1	08/14/2018 2:09 PM	53979	
Naphthalene	ND	0.0416		mg/Kg-dry	1	08/14/2018 2:09 PM	53979	
Phenanthrene	ND	0.0416		mg/Kg-dry	1	08/14/2018 2:09 PM	53979	
Pyrene	ND	0.0416		mg/Kg-dry	1	08/14/2018 2:09 PM	53979	
Internal Quality Control Compounds								
SS: 2-Fluorobiphenyl	98.4	72.1-138		%Rec	1	08/14/2018 2:09 PM	53979	
SS: 4-Terphenyl-d14	126	45.3-152		%Rec	1	08/14/2018 2:09 PM	53979	
SS: Nitrobenzene-d5	92.6	62.6-144		%Rec	1	08/14/2018 2:09 PM	53979	
PERCENT MOISTURE		Method:	ASTM-D2216-	Rev 2005		Analyst: amo		
Percent Moisture	4.9	1.0	С	wt%	1	08/06/2018 5:41 PM	R99016	

Created: 8/15/2018 5:59:00 PM



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1950 S. Batavia Ave., Suite 150, Geneva, IL 60134 (708) 544-3260

PREP DATES REPORT

Client: Project: CWM Company, Inc

S and S Infinite Peoria

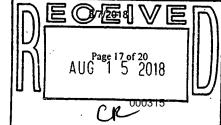
Report Date: August 15, 2018

Lab Order: 1808461

Sample ID	Collection Date	Batch ID	Prep Method	Prep Test Name	TCLP Date	Prep Date
1808461-001A	8/2/2018 12:10:00 P	53971	5035PR	CLOSED SYSTEM P&T VOC		8/7/2018
1808461-001B		53979	3550SIM_B	SOLID PREP SONICATION: BNA		8/7/2018
1808461-002A	8/2/2018 12:15:00 P	53971	5035PR	CLOSED SYSTEM P&T VOC Prep		8/7/2018
1808461-002B		53979	3550SIM_B	SOLID PREP SONICATION: BNA		8/7/2018
1808461-003A	8/2/2018 12:20:00 P	53971	5035PR	CLOSED SYSTEM P&T VOC	•	8/7/2018
1808461-003B		53979	3550SIM_B	SOLID PREP SONICATION: BNA		8/7/2018
1808461-004A	8/2/2018 12:25:00 P	53971	5035PR	CLOSED SYSTEM P&T VOC		8/7/2018
1808461-004B	•	53979	3550SIM_B	SOLID PREP SONICATION:		8/7/2018
1808461-005A	8/2/2018 12:40:00 P	53971	5035PR	CLOSED SYSTEM P&T VOC		8/7/2018
1808461-005B	1	53979	3550SIM_B	SOLID PREP SONICATION: BNA		8/7/2018
1808461-006A	8/2/2018 12:45:00 P	53971	5035PR	CLOSED SYSTEM P&T VOC		8/7/2018
1808461-006B	i	53979	3550SIM_B	SOLID PREP SONICATION:		8/7/2018
1808461-007A	8/2/2018 12:55:00 P	53971	5035PR	CLOSED SYSTEM P&T VOC		8/7/2018
1808461-007B		53979	3550SIM_B	SOLID PREP SONICATION:		8/7/2018
1808461-008A	8/2/2018 1:00:00 PM	. 53971	5035PR	CLOSED SYSTEM P&T VOC		8/7/2018
1808461-008B	:. · · ·	53979	3550SIM_B	SOLID PREP SONICATION:		8/7/2018
1808461-009A	8/2/2018 1:05:00 PM	53971	5035PR	CLOSED SYSTEM P&T VOC		8/7/2018
1808461-009B		53979	3550SIM_B	SOLID PREP SONICATION: BNA		8/7/2018
1808461-010A	8/2/2018 1:10:00 PM	53971	5035PR .	CLOSED SYSTEM P&T VOC		8/7/2018
1808461-010B		53979	3550SIM_B	SOLID PREP SONICATION: BNA		8/7/2018
1808461-011A	8/2/2018 1:15:00 PM	53971	5035PR	CLOSED SYSTEM P&T VOC		8/7/2018
1808461-011B		53979	3550SIM_B	SOLID PREP SONICATION: BNA		8/7/2018
1808461-012A	8/2/2018 1:20:00 PM	53971	5035PR	CLOSED SYSTEM P&T VOC	,	8/7/2018
1808461-0128		53979	3550SIM_B	SOLID PREP SONICATION: BNA		8/7/2018
1808461-013A	8/2/2018 1:25:00 PM	53971	5035PR	CLOSED SYSTEM P&T VOC		8/7/2018
1808461-013B	:	53979	3550SIM_B	SOLID PREP SONICATION:		8/7/2018
1808461-014A	8/2/2018 1;30:00 PM	53971	5035PR	BNA CLOSED SYSTEM P&T VOC		8/7/2018
1808461-014B		53979	3550SIM_B	Prep SOLID PREP SONICATION:		

BNA

Created: 8/15/2018 5:59:01 PM





1950 S. Batavia Ave., Suite 150, Geneva, IL 60134 (708) 544-3260

Qualifier Definitions

WO#: 1808461 Date: 8/15/2018

Qualifiers:

*/x	Value exceeds Maximum Contaminant Level
В	Analyte detected in the associated Method Blank
С	Value is below Minimum Concentration Limit
С	Analyte not in SLI scope of accreditation
E	Estimated, detected above quantitation range
G	Refer to case narrative page for specific comments
Н	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limit (QL)
N	Tentatively identified compounds
ND	Not Detected at the Reporting Limit
P	Present
Q	Accreditation is not available from Wisconsin
R	RPD outside accepted recovery limits
S	Spike Recovery outside accepted recovery limits
Т	Analyte detected in sample trip blank
V	EPA requires field analysis/filtration. Lab analysis would be considered past hold time.



Page 18 of 20

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SUBURBAN LABO	PRATORIES	, Inc.				CHAIN C	F CUS	TODY	RECORD	# 128	334
• 1950 S. Batavia Ave., Ste 150	, Geneva, IL 6013	4 Tel.	708.544.32	60 Fax: 7	708.544.8	587 Toll Free:	800.783.LAE	S www.su	burbanlabs.com		8
Company Name CWM Company, In	<i>C</i> .		TURN	IAROUND	TIME REC	QUESTED	ANALYS	IS & METHOD	REQUESTED	Page \ of	J 6
Company Address 701 S. Grand Ave	•		☑ Normal	□ RI		dditional Rush Irges Approvod.	Enter a	n "X" in box belo	ow for request	PO No.	Page
City Springfield, State IL	ZIP 62704		*Date & Time	Needed:		··				Shipping Method	
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CWMQ CWMCOMPANY, COI	r;	beliams od liw	(Re	equired)	_		ואוצו			LAB US	EUNLY
Project 10/Location Infinite / FEDri	a		文 LUST	□ SR	RP .	SDWA	13			SLI ORDER No.	461
Project Manager (Report to) Carol L. Rowe		···	☐ 503 Sluc	ige 🔲 NF	PDES	☐ MWRDGC	150			Sample container supplied by custom	
Sample Collector(s) Name MJS/GTR			□ Disposa	Ot		ase specify in comment on below,	18			Temperature of Received Samples	ر د د د
SAMPLE IDENTIFICATION	COLLECTION		GRAB/	CONTA	INERS		1			Samples received same day as collect	
Use One Line Per Preservation & Container Type		ME MATR	1 - 1		& TYPE	PRESERVATIVE				R . Condition	
1 5B-26 A	81211812	:10 5	G.	3/140m	L/40E.	MEOHNONE	XX			111 4	1
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3 SB-26 C		20			100		r r le vie				3
4 5B-26 D	, , 12				Polytonia Section						Ý
5 SB-27C	1 112	:40		/ 55						Fried	3
6 SB-27 D	1 V 112	:45 322		· [plant whiley	6
7 5B-28 A	/ //2	:55	经能产		1200					1.12.11	
8 58-28 B	,	VO 🔻		· 新年		en fireit			<u>: </u>	err er statet	8
9 5B-38 C	1 1:	75			3200		<u> </u>				7
10 SB-28 D	, , 1:	10		(A) 411	9.02×99.66	ESS C					10
11 SB-29 A	1 1:	15								E Garma	
12 SB-29B		30 6		V	/		M124/L				17
	SPECIAL INSTRUC	TIONS:			45		``!\\\][-		<u> </u>	CONDITION CONDIT	ON CODES
Waste Water (WW), Surface Water(SW),										2 Improper preserva	don
Ground Water (GW), Solid Waste (WA), Sludge (U), Wipe (P) <u>CONTAINER;</u> 2oz,					•		111 111	AUG 1	5 2018	3 Institutions sample	
4oz, 8oz, 40ml Vial, 500ml, Liter (L), Tube,							- 111 111	AUU I	5 2010	Hoadapace/air but	bles for VOCs
Glass (G). Plastic (P) PRESERVATIVE;							ןט ען			5. Received past hole	ling time
H ₂ SO ₄ , HCl, HNO ₃ , Methanol (MeOH)			•				-	CK		6. Received frozen	
NaOH, Sodium Bisulfate (NaB), NaThle				. /						7. Label conflicts with	
1. Relinguished By Date 8/2/0	2. Relifiquished By		Oato	418	3. Relingu	HO OU	Dat	16/18	4. Relinquished By ~	unis americali	Date
Received By A loo Time present 5.00 0m		U	Joe Time	7:3521:	Recolved	By	— — <u>,</u> <u>,</u> ii.i.i.	:40 an	Received By	☐ ice	Time
Submission of samples subject to Terms and Cor		(Theseur C	Rev. 07/	20/08	7	bieseur [1)	1000	Wh	ite-Original, Pin	ı k0 9 9an1pTer Copy

SUBURBAN LABO 1950 S. Batavia Ave., Ste 15			708.544.32	en E	~~ 700 EAA C			CUSTODY		1 133	3385	
Company Name CWM Company, Inc.	0, Geneva, 12 00154	iei.			ax: 708.544.8 ND TIME RE				suburbanlabs.con	··		
Company Address Good Ave. IN	Company Address S. Grand Ave. W.				RUSH* *	dditional Rush	l	ANALYSIS & METH(Page J of	<u>₹ 0</u>	
city Socionfield State IL Zip 62704			Date & Time	Needed:		arges Approved.	Enter an "X" in box below for request			Shipping Method		
Phone (217) 522-8001 / Fax 800		Fax	Normal TAT is	specified	on the price quot	ation or fee schedule.	[6]			Reporting Level (at		
Email Address		Report	Rush work mu Specify Reg			None/Info Only	MTBE			additional charge)	1 2 3 4	
CWMB CUMCOM pany, COM Project 10/Location	<u>w</u>	be emplied		equired)	SRP	SDWA		씩		2000	SEONLY	
Project Manages (Pages to)	oria		•			_		<u> </u>		12	308461	
Carol L. Rowl			□ 503 Stud		NPDES	☐ MWRDGC	(A)	7		Sample containers		
Sample Collector(s), Name MJS/GTR		1	Disposa	ם י		ase specify in comment on below.	20			Received Samples:	\d\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	
SAMPLE IDENTIFICATION	COLLECTION		GRAB/	CON	ITAINERS					Samples received		
Use One Line Per Preservation & Container Type	DATE TIME		- 		SIZE & TYPE	PRESERVATIVE				R Condition		
1 513-29 C	812118 1:25		6	3/1 40	onl/402.	MeoH/None	又	<u> </u>		學等學學	13	
2 SB-29D	11/1 1:3		V	1	_\ <u>\</u>	\downarrow					1	
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12	, ,	 								7 15 10 10 10 10 10 10 10 10 10 10 10 10 10		
MATRIX: Drinking Water (DW), Soil (S), COMMENTS &	SPECIAL INSTRUCTIO	NS;		- 			₩	JECE		CONDITIC	ON CODES	
Waste Water (WW), Surface Water(SW), Ground Water (GW), Solid Waste (WA), Sludge (U), Wipe (P) CONTAINER: 2oz, 4oz, 8oz, 40ml Vlal, 500ml, Liter (L), Tube, Glass (G), Plastic (P) PRESERVATIVE: H ₂ SO ₄ , HCl, HNO ₃ , Methanol (MeOH)								AUG 1	5 2018	Improper/damaged Improper preservation Improper preservation Improper preservation Improper preservation Improper preservation Improper preservation Improper preservation Improper preservation	tion volume obles for VOCs ting time	
NaOH, Sodium Bisulfate (NaB), NaThio 1. Relinquished By Date	2. Relinguished By	8/1	Date	17	3. Relinquis	spled By /	,	Opto	4Relinquished By	7. Label conflicts with	COC Date	
1. Relinquished By Date 8/2/1	8 Mostin		8/	418	TO Z	7/av		8/6/18				
Received By Cloe Present 5:PD P	m Received By Val		Ice Time	300	Received B	The	D i	1 1 1 4 1 1 1 4	Received By	lce present	Time	
Submission of samples subject to Terms and Con-	ditions on back.		<u>-</u> -		07/20/08	, , ,	7			nite-Original Pini	GRAMAN CODY	

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Illinois Environmental Protection Agency

Bureau of Land • 1021 N. Grand Avenue E. • P.O. Box 19276 • Springfield • Illinois • 62794-9276

The Agency is authorized to require this information under Section 4 and Title XVI of the Environmental Protection Act (415 ILCS 5/4, 5/57 – 57.17). Failure to disclose this information may result in a civil penalty of not to exceed \$50,000.00 for the violation and an additional civil penalty of not to exceed \$10,000.00 for each day during which the violation continues (415 ILCS 5/42). Any person who knowingly makes a false material statement or representation, orally or in writing, in any label, manifest, record, report, permit, or license, or other document filed, maintained or used for the purpose of compliance with Title XVI commits a Class 4 felony. Any second or subsequent offense after conviction hereunder is a Class 3 felony (415 ILCS 5/44 and 57.17). This form has been approved by the Forms Management Center.

Leaking Underground Storage Tank Program Laboratory Certification for Chemical Analysis

Λ	Sita	Ida	ntific	ation
Α.	OHE	IUE	HILLIER	

IEMA Incident # (6- or 8-digit):	20161089	IEPA LPC# (10-digit): 1430650114				
Site Name: S & S Infinite Grou	p, Inc.					
Site Address (Not a P.O. Box):	400 North East Adams Street	: 3				
City: Peoria	County: Peoria	ZIP Code: 61603				
		•				

Leaking UST Technical File

B. Sample Collector

I certify that:

- 1. Appropriate sampling equipment/methods were utilized to obtain representative samples.
- 2. Chain-of-custody procedures were followed in the field.
- 3. Sample integrity was maintained by proper preservation.
- 4. All samples were properly labeled.

AUG 2 3 2018.

ře

MTS
(Initial)
MJS
(Initial)
(Initial)
(Initial)

C. Laboratory Representative

I certify that:

- 1. Proper chain-of-custody procedures were followed as documented on the chain-of-custody forms
- 2. Sample integrity was maintained by proper preservation.
- 3. All samples were properly labeled.
- 4. Quality assurance/quality control procedures were established and carried out.
- Sample holding times were not exceeded.

(Initial)
(Initial)
(Initial)
(Initial)
(Initial)
(Initial)

IL 532 2283 LPC 509 Rev. March 2006 Laboratory Certification for Chemical Analysis
Page 1 of 2

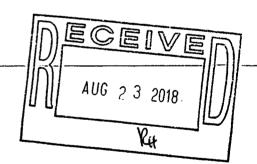
- 6. SW-846 Analytical Laboratory Procedure (USEPA) methods were used for the analyses.
- An accredited lab performed quantitative analysis using test methods identified in 35 IAC 186.180 (for samples collected on or after January 1, 2003).

(Initial)
(Initial)

D. Signatures

I hereby affirm that all information contained in this form is true and accurate to the best of my knowledge and belief. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Sample Collector	Laboratory Representative
Name Matthew Saladino	NameKeith Sinon
Title Environmental Engineer	Title Project Manager
Company CWM Company, Inc.	Company Suburban Laboratories, Inc.
Address 701 South Grand Ave. West	Address 1950 S. Batavia Ave Ste 150
City Springfield	City Geneva
State IL	State IL
Zip Code 62704	Zip Code 60134
Phone 217-522-8001	Phone 708-544-3260
Signature Mulhant & 4	Signature Settle C
Date <u>4/2/18</u>	Date 8/15/18



APPENDIX G TACO CALCULATIONS

CORRECTIVE ACTION PLAN AMENDMENT S&S Infinite Group Peoria, Illinois

R-26 Input/Summary Sheet

Conference and the

	AIDEIDO40		R-26 Input/St	ımmary Sheet	•	¥
Versi	ion: 4/25/2016 or 8 digit)		2016-1089			
IEPA LPC # (10 dig			1430560114			1
Site Name:			S & S Infinite Group, Inc	DBA Downtown	n 66	rate
Site Address:			400 North East Adams Peorla			 / (
City:			Peoria			:-
Zip Code:			61603			<u>s</u>
SSL Equations Use			S5,6,7,8,9,10,17,18,19,20,21 R-1, R-2, R3	,22,24		
RBCA Equations U Contact Information for		rmed Calculat	CWM Company, Inc.,			<i>i</i> !
Land Use:			Residential & Construct	lon Worker		
Objective from S17	used in R26:		No Class 1			*
Groundwater: Standard or Mass I	Limit Equations:		Standard Equations	·	If Mass Limit, then Specifiy Acre	
Square Feet of Plu	me for Mass Lim	It Eq.:	0.00			< use this # above
Date Data is Entere	ed: Description		February 20, 2018			1
Entry	Holcomb Bulk De	ensity (pcf), o	or	Shelby Tub	pe Location:	
2.15	Dry Soil Bulk De	nsity (g/cm	or kg/L): 1.5, or Gravel =2.0, 3	Sand = 1.8, Silt	= 1.6, Clay = 1.7, or site specific	<u>ئىرە:</u>
2.69	ρs - Soil Particle	Density		Reference		- ,
0.201	Total Soil Porosi			0.201	0.201	<u>,,</u>
0.092 0.109	Water Filled Po Air Filled Porosit			0.092	0.092 0.109	<u> </u>
0.109	Or - Total Soil Po		A)		0.103 0.25; Sand = 0.32; Silt = 0.40; Clay = 0.3	36 🕹
0.094	w - Average Soil	Moisture Co	ntent		e Soil (top 1m) = 0.1; Subsurface Soil (below 1	m) =0.2; or Site Specific
Sand	USDA Soil Class	sification (Pic	ck from List)		0	Entry
0.01360	Fractional Orga	inic Carbon /	fac) in a/a		Organic Matter (9 Organic Matter (mg/k	
3.01360	Taxional Orga		/ 9/9		Total Organic Carbon (g/	
1.00E-04	Average Hydraulic					
1.00E-04	Falling Hydraulic C Rising Hydraulic C			ł	Hydraulic Gradient Calcula	
0.02000			m/sec) es with no groundwater)	Meters	MW-3	- 1.02
10	d Aquifer Thick			3.048 m	MW-11	1.00
10	d Depth of Source	(fl) (Vertical Thi	ickness of Contamination)	3.048 m	Distance	ce: 1
			the groundwater plume emanating to	0.000		
	groundwater flow (ft)		the source in the direction of	0 cm	·.·`	13 _
65	L - Source Lengt	h Parallel to	Groundwater Flow (ft)	19.812 m	1 .	
30	Sw: Source Wid	th -horizonta	plane (ft) (RBCA)	914.4 cm		
0 0	tion of Contamina	-1 in accusal	vater at distance X from the so		Surface Water	
C _(x) - Concentrat	Benzene	nt in groundy	MTBE		Surface Water	
	Toluene	-				
	Ethylbenzene					* # **
	Total Xylenes Chemica	Is of Conce	rn			
Benzene Benzene	Naphtha					•
Toluene			Chrysene Benzo(k)fluoranthene		· ·.	• •
Ethylbenzene Total Xylenes			Indeno(1,2,3-cd)pyrene	1		1 2
MTBE	,			1		
Mass Limit Equa	itlons .		SSL Equations Needed	_	m esperan	
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	tion Equations					
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Text discussion for "i", L, da, ds, Sw, Sd

Hydraulic Gradient

The Hydraulic Gradient (i) was determined from an onsite survey of each of the groundwater monitoring wells. The riser elevations were determined and the depth to groundwater was noted in each well. This data was used to generate a potentiometric flow map with contour lines which show potentiometric head. A corresponding flow line, perpendicular to the contour lines, was determined between two known points of groundwater elevation. The hydraulic gradient was determined by the difference in elevation divided by the length of flow between the points.

Source Length

The Source Length Parallel to Groundwater Flow (L) was determined from the site map and analytical results. A value of 45.1104 m was used to encompass the length of contamination parallel to groundwater flow. This value is the distance between soil borings BH-1 and BH-2.

Aquifer Thickness

The Aquifer Thickness (d_a) is a site specific value determined by the length of the monitoring well screen. "The Aquifer Thickness value used in the modeling equations was 3.048 meters.

Depth of Source

The Depth of Source (d_s) was determined from the analytical results and soil boring logs. A value of 3.048 m was used to encompass the vertical thickness of contamination based upon a clean soil sample at BH-1A, "hot" samples at BH-2B and BH-2C, and a clean soil sample at BH-2D. Thus the vertical thickness of soil contamination has been determined to be 3.048 m.

Source Width

The source width perpendicular to groundwater flow direction in the Horizontal Plane (S_w) was determined from the site map and analytical results. A value of 3566.16 cm was used to encompass the width of contamination in the horizontal plane. This value is the distance between clean wells MW-4 and and MW-6.

Source Depth

The source width perpendicular to groundwater flow direction in the Vertical Plane (S_d) was determined from the soil boring logs and analytical results. A value of 304.8 cm was used to encompass the width of contamination in the vertical plane based on the depths of contamination present and the PID readings from the bore logs.

Distance (X)

			BENZ	ENE			•	
	Soil Exceed	ances				Groundwater Excee	dances .	;
	Soil	Х	Gw _{obj} (mg/L)	C(x)		Groundwater	, X	C(x)
Location	Concentration (mg/kg)	(ft)	R26 Csource	(mg/L)	Location	Concentration (mg/L)	(ft)	(mg/L)
	,						194	
backfill 3	1.37	70	0.093	0.0049				
WC-1	43.3	159	2.948	0.0049			Ä.	
WC-3	9.79	117	0.666	0.0049				
SB-26A	0.389	43	0.026	0.0048			-;;	. •
SB-28C	0.0335		0.002					
SB-29D	0.0582		0.004				****	
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	Soil Exceed	ances	1010			Groundwater Excee	dances	
-	Soil	X	Gw _{obj} (mg/L)	C(x)		Groundwater	.:. :.: X .	C(x)
Location_	Concentration (mg/kg)	(ft)	R26 Csource	(mg/L)	Location	Concentration (mg/L)	** (ft)	(mg/L
LUCALIUIT	Concentration (mg/kg)	1117	1120 0304100	(g.c)		:	- W + 4 + 1	
backfill 3	29.6		0.671		-	19 No.	; 45. 50	
WC-1	611	7	13.853	0.9515	1		1 36°	·
WC-3	161	4	3.650	0.6916	1		+	1
VVC-3			3.030	0.0310	<u> </u>			1
	1				+		-	†
	-		· · · · ·		-		8	+
			 				. 42	+
	<u> </u>				+	· · · · · · · · · · · · · · · · · · ·		:
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			-		+		3	+
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Location	Soil Concentration (mg/kg)	X (ft)	Gw _{obj} (mg/L) R26 Csource	C(x) (mg/L)	Location	Groundwater Concentration (mg/L)	X (ft)	C(x) (mg/L)
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Location	Concentration (mg/kg)	(ft)	R26 Csource	(mg/L)	Location	Concentration (mg/L)	iii (ft)	(mg/L)
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WC-3	258		2.359				. 5/	<u> </u>
SB-26A	6.43		0.059				2.1	Ļ
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Location	Soil Concentration (mg/kg)	X (ft)	Gw _{obj} (mg/L) R26 Csource	C(x) (mg/L)	Location	Groundwater Concentration (mg/L)	(ft)	C(x) (mg/L
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	Soil Exceeds					Groundwater Excee		
	Soil	Х	Gw _{obj} (mg/L)	C(x)		Groundwater .	: 25 X	C(x)
Location	Concentration (mg/kg)	(ft)	R26 Csource	(mg/L)	Location	Concentration (mg/L)	:; (ft)	(mg/L)
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Location SB-24A	Soil Exceed Soil Concentration (mg/kg) 0.153	x (ft)	Gw _{obj} (mg/L) R26 Csource	C(x)		Groundwater Exceed Groundwater		C	
Location SB-24A	Concentration (mg/kg)			C(x)	1	Groundwater	n. Y.	C(x)	
SB-24A	0.153	V-7		(mg/L)	Location	Concentration (mg/L)	X (ft)	(mg/L	
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		WATER CLEAN-U						
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•		Most Stringent	Class I	Class II	ADLs			
	Parameter	CUO	GW	GW	(U)			
	Benzene	0.005	0.005	0.025	<0.002			
	Ethylbenzene	0.7	0.7	1	<0.002			•
	MTBE	0.07	0.07	0.07	<0.005	•		
	Toluene	1.0	1.0	2.5	<0.002			
	Total Xylenes	10.0	10.0	10.0	<0.005			
	Acenaphthene	0.42	0.42	2.1	<0.018			
	Acenaphthylene [^]	0.21	0.21	1.05	<0.010			
	Anthracene	2.1	2.1	10.5	<0.0066			
·	Benzo(a)anthracene	0.00013	0.00013	0.00065	<0.00013			
	Benzo(a)pyrene	0.0002	0.0002	0.002	<0.0002			
	Benzo(b)fluoranthene	0.00018	0.00018	0.0009	<0.00018			
,	Benzo(g,h,i)perylene^	0.21	0.21	1.05	<0.00076			
	Benzo(k)fluoranthene	0.00017	0.00017	0.00085	<0.00017			
	Chrysene	0.0015	0.0015	0.0075	<0.0015			
	Dibenz(a,h)anthracene	0.0003	0.0003	0.0015	<0.0003			
	Fluoranthene	0.28	0.28	1.4	<0.0021			
	Fluorene	0.28	0.28	1.4 :	<0.0021	. :		
	Indeno(1,2,3-cd)pyrene	0.00043	0.00043	0.00215	<0.00043	•		· · ·
	Naphthalene	0.14	0.14	0.22	<0.010			
•	Phenanthrene [^]	0.21	0.21	1.05	<0.0064			
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Summary of Tier 2 Calculations S & S Infinite Group, Inc. - DBA Downtown 66 2016-1089 02/20/18

Table 3

Tier 1 Objectives

	Benzene		Toluene		Ethylbenzen	e	Total Xylene	S	Naphthalen	ė	MTBE	
Residential Ingestion	12 .	mg/kg	16,000	mg/kg	7,800	mg/kg	16,000	mg/kg	1,600	mg/kg	780	mg/kg
Inhalation	0.8 ∤	mg/kg	650	mg/kg	400	mg/kg	320	mg/kg	170	mg/kg	8,800	mg/kg
Migration Class 1	0.03	mg/kg	12 1	mg/kg	13	mg/kg	150	mg/kg	12	mg/kg	0.32	mg/kg
Migration Class 2	0.17	mg/kg	29 1	mg/kg	19	· mg/kg	150	mg/kg	18	mg/kg	0.32	mg/kg
Industrial/Commercial Ingestion	100	mg/kg	410,000	mg/kg	200,000	mg/kg	410,000	mg/kg	41,000	mg/kg	20,000	mg/kg
Inhalation	1.60	mg/kg	650	mg/kg	400	mg/kg	320	mg/kg	270	mg/kg	8,800	mg/kg
Construction Worker Ingestion	2,300	mg/kg	410,000	mg/kg	20,000	mg/kg	41,000	mg/kg	4,100	mg/kg	2,000	mg/kg_
Inhalation	2.20	mg/kg	42 1	mg/kg	58) mg/kg	5.6	mg/kg	1.80	mg/kg	140	mg/kg
Soil Saturation	580	mg/kg	290	mg/kg	150	mg/kg	110	⊢ mg/kg	212.16	mg/kg	8,400	mg/kg

Tier 2 SSL Objectives

				ile	7 2 33L UD	Jecuves							
		Benzene	Equation	Toluene	Equation	Ethylbenzene	Equation	Total Xylenes	Equation	Naphthalene	Equation	MTBE	
Residential	Ingestion	11.64 (S-2	6,257	S-1	7,821	S-1	15,643	S-1	1,564	S-1	782.1	S-1
	Inhalation	1.94 1	S-6	52,029.80	\$-4	14,496.77	S-4	1,782.86	S-4	246.63	S-4	29,111.06	S-4
Migration Mass-Lir	nit Class 1	0.19	S-28	38.45	S-28	26.92	S-28	384.54 1	S-28	5.38	S-28	2.69	S-28
Migrati	on Class 1	0.073	S-17	44.11	S-17	61.76	S-17	1,093.87	S-17	19.16	S-17	0.28	S-17
Industrial-Commercial	Ingestion	104.06	S-2	1,635,200	S-1	204,400	S-1	408,800	S-1	40,880	S-1	20,440	S-1
	Inhalation	3.70	S-6	82,835.85	S-4	23,080.08	S-4	2,838.46	S-4	392.66	S-4	46,347.27	S-4
Migration Mass-Lir	nit Class 1	0.19	S-28	. 38.45 1	S-28	26.92	S-28	384.54	S-28	5.38	S-28	2.69	S-28
Migrati	on Class 1	0.073	S-17	44.11	S-17	61.76 I	S-17	1,093.87	S-17	19.16	S-17	0.28	S-17
Construction Worker	Ingestion	2,258.21	S-3	163,236	S-1	10,202	S-1	81,618	Ş-1	122,427	S-1_	20,405	S-1
	Inhalation	5.21 1	S-7	535.89	S-5	1,343.80	S-5	73.45 J	S-5	2.54	S-5	249.86	S-5
Soil Saturation		1,322.01	S-29	1,168.82	\$-29	749.91	S-29	601.63	S-29	212.16	S-29	10,221.04	S-29

all values are in mg/kg

Site Specific Value cannot exceed Soil Saturation Limit, otherwise Tier 2 Inhalation or Tier 2 Migration objectives are the Soil Saturation objective

Groundwater Contaminate Concentration Exceedances at Surface Water or Set Back Zone (mg/L)

		O COMO MARC		ite wondendadion		ioco at our laoc ire		2000 = 0.10 (1.11 <u>3</u> 1=)						
	;	Benzene '	Equation	Toluene	Equation	Ethylbenzene	Equation	Total Xylenes	Equation	Naphthalene	Equation	MTBE		
	Result	#DIV/0!	R-26	#DIV/01	R-26	#DIV/01	R-26	#DIV/0!	R-26			#DIV/0!	R-26	
	Surface Water Objective	0.86		0.6	. •	0.014	•	0.36			[<u>.</u>	+ + #		Sec. 30. 100
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Version, 4:25/2016

S & S Infinite Group, Inc. - DBA Downtown 66 2016

Math for R-26 Celculations

ENZENE MATH FOR VERTICAL SOIL MODELING AND R-28 MODELING OF VERTICAL MODELED SOIL (Attachment A)

Sample Location	C., • (sail contamination at modeling point) / (Equation S-17)	GW C_/DF	Conversion: 1 foot = 30.48 cm	R-16: a _s = 0.10 * X	R-17: a, = a,/3	R-18: a ₄ • a ₄ / 20	Term 1" • [X / (2 * 0.)]	Term 2" = (1 - SOR∏1 + (4 * Å * a _i) / (U) <u>)</u>
	C.	C. / DF • GW _{mi} (mg/L)	X (f0) X (cm)	0.1 x X (cm) 0, (cm)	a_(cm) / 3 • a_(am)	a, (cm) / 20 · a, (cm)	X / 2 . 0, . Term 1"	1 - SQRT 1 -(4 x A = 0,)/ U]* Tem?
		1865 / 20,000 • 0.05327		0.1 1 2133.0 + 213.36		213.38 / 20 + 10.668	21336 / 2 21338 - 6	1 SQRT[] +(4 x 0.0009 x 213 26)/ 0.69120]0.4530
		58.956 / 20.000 · 2.84778	159 4848.32	0.1 x 4848.32 + 484.632		484 632 / 20 • 24.2318		1 - 50RT1 1 +(4 = 0.0009 = 464 632)/ 069120 1+ -0.0773
MC-3	979 / 0734 * 13.330	13 330 / 20 000 - 0 66648		0.1 : 3568.18 • 356.616	158 618 / 3 • 118.072	356 616 / 20 • 17,8308		1 - SORT 1 - 4 4 # 0 0009 # 356 616 1/ 0 59170 0 - 40.5304
58-26A	0.389 / 0,734 • 0.630	0530 / 20000 • 0.07648	43 1310 64	0.1 x 1310.64 • 131.084	131,084 / 3 • 43,688	131.084 / 20 - 4.5532	1310 84 / 2 - 131 064 • 8	1 - 50M(1 1 +1 4 5 00009 8 131304 1/ 063/20 10 40/29/2
SB-78C	0.0562 / 0.734 = 0.018	0.048 / 20.000 · 0.00228 0.079 / 20.000 · 0.002398						
28-740	0.0562 / 0.734 - 0.075	0.079 7 20 000 4 0.00396				1		· · · · · · · · · · · · · · · · · · ·
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Sample Location	β₁ = 5/(4 * SQRT]α, * X[)	β₂ = 8₄ / (2 * SC/RT C ₃ * XD)	ERF(B ₁) ERF(B ₂) Section 742 APPENDIX C:	C ₀₀ = C = o ^{(1·1}) : er((β ₁) : er((β ₂)
		S ₄ /(2 π SQRT (α, π X))* β ₂	Table G	Cymry 80 ("loss" , "loss") a ERF(\$) a ERF(\$) a mgf.
		··· * · · · · · · · · · · · · · · · · ·		· · · · · · · · · · · · · · · · · · ·
tectra 3	9144 /(4 x SORT (71.12 x 2139 8)) + 0,6888\$	3048 /(2 x SORT (10558 x 21336)) = 1.01015	0.593419 0.845873	0.09327 x 6 x 4.539 x 0.593419 x 0.845873 * 0.00487
WC-1	9144 /(4 s SORT (161.544 s 4848.32)) + 0.25839	304.8 /(2 x SQRT (24.7318 x 4848.32)) • 0.44472	0 28\$169 0 470608	2.94778 E6 5 N. 10285169 x 0.470806 - 0.00492
WC-3	914.4 /(4 m SORT (118.872 m 3568,18)) • 0,35110	304.8 // 2 x SORT (17.6308 x 2568.16)) • 0.60439	0 380484 0 607783	0.65548 K. 8 4 4800 1 0.360484 K 0.607783 0 0.00488
SB-26A	914.4 // 4 s SORT (49.688 s 1910.64)) - 0.95533	304.8 /(2 x SQRT (85532 x 1310.64)) + 1,64443	0.623318 0.979959	0.02848 ±0 ± x 43571 ± 0.823318 ± 0.979959 ± 0.00484
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8, 1(2 i 508T (10 to 13 i 1352) i 14 to 15 to	C. C. 1 OF COME (WOLD) Kigh Kigh) 01 - Kigh 01 - Kigh 01 - Kigh 1 - C. 1 OF COME (WOLD) Kigh 1 - C. 1 O	7 255 1347 1 255 1 255 0 256 1 256 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	C, C, 10F 0.004_00000 1 K(0) K(00) 0.1 o K(00) 0.1 o K(00) 0.1 o K(00) 0.2 o K	1 2705 - 1200 1 2000 - 26675 4 1127 0.1 1 1120 - 1120 1 2120 1 2 0 0 0 0 0 0 0 0 0 0 0 0			1,250	1 2705 - 1200 1 2000 - 26675 4 1127 0.1 1 1120 - 1120 1 2120 1 2 0 0 0 0 0 0 0 0 0 0 0 0	1 2755 - 1345 1760 - 2044 (1974) 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	C, C, 10F 0.004_00000 1 K(0) K(00) 0.1 o K(00) 0.1 o K(00) 0.1 o K(00) 0.2 o K	1 2505 - 13-27 1 2500 - 15-57 1 2 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2	7 255 1347 1 255 1 255 0 256 1 256 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	C, C, 195 - 0.00-1704) R(0) X(00) 0.1 - X(
S. 1 2 1 SORT (1989) 1 115777 1 100000 1 100000 3 19875 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	C. 1 OF COMPANY Kin Kin Kin Company Kin Kin Kin Company Kin Kin Company Kin Kin Kin Kin Kin Kin Kin Kin Kin Kin	C, C, 195 come, regular R(0, X (cm), 0.1 c. X (cm),	C, C, 10F = 0.04 (reg) 1 (1) X (reg) 0.1 - X (reg) 0.1 - X (reg) 0.1 - X (reg) 0.2 (reg) 1 (2) - 0.0 (1 2555 - 1155 -				1 2555 - 1155 -	1 2505 • 1345 1 2505 • 1508 1 2 2 2 1 2505 • 1518 1 2 2 2 1 2 2 2 1 2 2 2 2 2 2 2 2 2 2	C, C, 10F = 0.04 (reg) 1 (1) X (reg) 0.1 - X (reg) 0.1 - X (reg) 0.1 - X (reg) 0.2 (reg) 1 (2) - 0.0 (6, C, 106 c 094 (100) 1 (10) X (cm) 0.1 c X	C, C, 195 come, regular R(0, X (cm), 0.1 c. X (cm),	C. C. 1956 - Cond. (WV) 3 (0) 1 (1 (2) 1 (
9, /(? . SON) _{10.70} EFF General Estimation Ge	7. 37.55 - 13.27	(7.505 - 13.27 7.500 - 0.6710	C, C, 10F - 004_mmpdJ R(0) X(cm) 0.1 - X(cm) 0.01 - X(cm) 0.01 - X(cm) 0.1 - X	1 2355 - 1945 17500 - 1944 1750 - 1944 1750 - 1945			1,255	1 2355 - 1945 17500 - 1944 1750 - 1944 1750 - 1945	1 2505 - 1947 1 2509 - 1944 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1	C, C, 10F - 004_mmpdJ R(0) X(cm) 0.1 - X(cm) 0.01 - X(cm) 0.01 - X(cm) 0.1 - X	(2. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1.	(7.505 - 13.27 7.500 - 0.6710	C, C, 1955 - 1947 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
8, 1(2 i 500Th, 2) Gettin	C. C. 1 OF ** ON-A-(my) K(0) K(m) () 1 ** K(m) () 1 ** K(m) () 1 ** K(m) () 1 ** C. (m) () 1 **	C, C, 1 OF 0 Wingfury, 1 R(p) X(cm) 0.1 • X(cm) 0.1 • X(cm) 0.1 • X(cm) 1.3 • 0.4(cm) 0.4 cm) 1.20 • 0.4(cm) 0.4 c	C, C, 10F - 004_00000 1 K(0) K(00) 0.1 - 1 K(00) 0.1 - 1 K(00) 0.2 (00) 0.2	1 2755 • 1245 1 1355 (2 700 • 2 24655 4 1112 0 1 1 1120 • 3 1215 (2 700 • 2 24655 4 1112 0 1 1 1112 (3 8 8 1120 1 2 8 8 1112 (3 8 8 8 1112 (3 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8			1 1 1 1 1 1 1 1 1 1	1 2755 • 1245 1 1355 (2 700 • 2 24655 4 1112 0 1 1 1120 • 3 1215 (2 700 • 2 24655 4 1112 0 1 1 1112 (3 8 8 1120 1 2 8 8 1112 (3 8 8 8 1112 (3 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	1 3755 • 13470 1 1500 • 346475 4 1112 0 1 1 1132 • 3134 1 3 • 4464 1112 1 70 • 6459 1112 1 2 1 1112 • 6 1 1 1112 1 1 1 1 4 4 1 1 1 1 1 1 1 1 1	C, C, 10F - 004_00000 1 K(0) K(00) 0.1 - 1 K(00) 0.1 - 1 K(00) 0.2 (00) 0.2	6, C, 106 - 004 (170)	C, C, 1 OF 0 Wingfury, 1 R(p) X(cm) 0.1 • X(cm) 0.1 • X(cm) 0.1 • X(cm) 1.3 • 0.4(cm) 0.4 cm) 1.20 • 0.4(cm) 0.4 c	C, C, 1956 - ON-ATTO-1 1870 X (cm) 0.1 - X (
8, 1(2 i SORT (0.0000 i 13132)) 1. 13.0000 1.00000 3.0003	C. 1 OF 0 OF 1 OF 1 OF 1 OF 1 OF 1 OF 1 OF	C. C. 1 OF C WALLEY MAN MAN MAN MAN MAN DATE 1 STATE 1	C, C, 10F - 0.04 (reg) 1, 150 (reg) 0, 1 - 1.5 (reg) 0, 1 - 1.5 (reg) 0, 1 - 1.5 (reg) 0, 1 - 1.5 (reg) 0, 1 - 1.5 (reg) 1, 1	1 1 1 1 1 1 1 1 1 1				1 1 1 1 1 1 1 1 1 1	1 2505 - 1447 1 1505 - 1504 (10) 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	C, C, 10F - 0.04 (reg) 1, 150 (reg) 0, 1 - 1.5 (reg) 0, 1 - 1.5 (reg) 0, 1 - 1.5 (reg) 0, 1 - 1.5 (reg) 0, 1 - 1.5 (reg) 1, 1	C, C, 10F = 094 (40) X(40) X(40) Q (1 - X(40) Q (40	C. C. 1 OF C WALLEY MAN MAN MAN MAN MAN DATE 1 STATE 1	C, C, 1 pF - Con_mry1 Xr(m) Xr(m) C 1 - Xr
5, 1(3 + 54.[C *5091b_1.3)	7. 5. 5. 6. 6. 6. 6. 6. 6. 6. 6. 6. 6. 6. 6. 6.	() 2505 () 1247 () 1250 ()	C, C, 10F - 004_mmpd. Rel. Nearl 0.1 - Nearl 2, 2 - 10F - 0.4 mm T 1 - 30F 1 - 10F 1 -	1 2505 - 1947 1 2000 - 18507 1 2 1 1 1 1 1 2 2 1 1 1 1 1 1 1 1 1 1			1,255 1,25	1 2505 - 1947 1 2000 - 18507 1 2 1 1 1 1 1 2 2 1 1 1 1 1 1 1 1 1 1	1 2505 - 13471 1 1 200 - 0.04 (1994) 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	C, C, 10F - 004_mmpd. Rel. Nearl 0.1 - Nearl 2, 2 - 10F - 0.4 mm T 1 - 30F 1 - 10F 1 -	7 255 - 1547 1 255 - 1545 1 255 - 1545 1 255 1 255 - 1545 1 255 1	() 2505 () 1247 () 1250 ()	C, C, 1955 - 1947 1 155 - 000-4700 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
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3, 1(2 i SORT (0.0000 i 131.52)) 10.0000 j 3.0000 j 3.0000 j 3.0000 j 3.0000 j 3.00	C, C, 105 - OM_ATRY] K(B, K(cm) 0.1 - K(cm) 0.1 - K(cm) 0.1 - K(cm) 1.3 - 0.4 cm) 0.1 - 1.1 - 0.0 - 1.	C. C. 1 OF C WALFERD 1 (cm) 0.1 o X (cm) 0.1	C, C, 10F - 0.04 (reg) 1 (1) X (reg) 0.1 - X (reg) 0.1 - X (reg) 0.2 (reg) 1 (2) - 0.04 (1 2505 - 1447 1 1450 - 0044 (reg) 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	C, C, 10F - 0.04 (reg) 1 (1) X (reg) 0.1 - X (reg) 0.1 - X (reg) 0.2 (reg) 1 (2) - 0.04 (C, C, 10F 0 0M_m(mpd) R(0) X(m) 0.1 a X(m) 0.1 a X(m) 0, q(m) 7 3 a q(m) 0, q(m) 7 7 a q(m) 0, q(m) 7 7 a q a Tmm 1 1 80F1 1 a q 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	C. C. 1 OF C WALFERD 1 (cm) 0.1 o X (cm) 0.1	C, C, 1 OF * CM_minpl, R(0) X (cm) 0.1 * X (
\$\frac{\text{5.}}{\text{5.}} \frac{\text{6.6}\text{6.5}}{\text{6.5}} \frac{\text{6.6}\text{6.5}}{\text{6.5}} \frac{\text{6.6}\text{6.5}}{\text{6.5}\text{6.5}} \frac{\text{6.7}\text{6.5}}{\text{6.5}\text{6.5}} ext{6.5}} \frac{\text{6.7}\text{6.5}}{\text{6.5}\text{6.5}} \frac{\text{6.7}\text{6.5}}{\text{6.5}\text{6.5}\text{6.5}} \frac{\text{6.5}\text{6.5}\text{6.5}}{\text{6.5}\text{6.5}} \	C. C. LOS CONTROL M. M. M. M. M. M. M. M. M. M. M. M. M.	C, C, 195 c 000-470-43 R(0 X (cm) 0.1 c X (cm) 0.1 c X (cm) 0.1 c X (cm) 1.3 c 0.4 (cm) 0.1 c 0.	(2) C. (1		Table Tabl	Table Tabl	Table Tabl		1 2555 - 1 127	(2) C. (1	() 250	C, C, 195 c 000-470-43 R(0 X (cm) 0.1 c X (cm) 0.1 c X (cm) 0.1 c X (cm) 1.3 c 0.4 (cm) 0.1 c 0.	C, C, 195 - COM_NTM N N(m) N(m) N(m) A(m) A(m) A(m) A(m) A(m) A(m) (1) - A(m)
9, /(3 + 500T 1 0000 + 313.9 h 1000000 100000 100000 100000 100000 100000 100000 1000000 100000 100000 100000 100000 100000 100000 1000000 100000 100000 100000 100000 100000 100000 1000000 100000 100000 100000 100000 100000 100000 1000000 100000 100000 100000 100000 100000 100000 1000000 100000 100000 100000 100000 100000 100000 1000000 100000 100000 100000 100000 100000 100000 1000000 100000 100000 100000 100000 100000 100000 1000000 100000 100000 100000 100000 100000 100000 1000000 100000 100000 100000 100000 100000 100000 1000000 100000 100000 100000 100000 100000 100000 1000000 100000 100000 100000 100000 100000 100000 100000 100000 100000 100000 100000 100000 100000 1000000 100000 100000 100000 100000 100000 100000 1000000 100000 100000 100000 100000 100000 100000 1000000 100000 100000 100000 100000 100000 100000 1000000 100000 100000 100000 100000 100000 100000 1000000 1000000 1000000 1000000 1000000 1000000 1000000 100000	C. C. LOS - CM-4 (mg/L) K(ii) K(cm) 0.1 - K(cm) a_1 (m) 7 3 - c_4 (m) 0.1 m - 1 a_1 (m) 7 7 - 1 a_1 (m) 7 7 1 a_2 (m) 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	C. C. 195 - OWN_CHENT NO. 1 - X (cm) 0.1 - X	C, C, 10F - 0944, R(0) X(01) X (01) - X(01) Q(01) 1 3 0 Q(01) 1 3 0 Q(01) 1 30 0 Q(1 1 1 1 1 1 1 1 1 1			1,255	1 1 1 1 1 1 1 1 1 1	1 2505 - 1945 1780 - 1944 1780 - 1944 1780 - 1944 1780 - 1945 1780 1780 - 1945 1780 - 1945 1780 - 1945 1780 - 1945 1780 - 1945 1780 - 1945 1780 - 1945 1780 - 1945 1780 - 1945 1780	C, C, 10F - 0944, R(0) X(01) X (01) - X(01) Q(01) 1 3 0 Q(01) 1 3 0 Q(01) 1 30 0 Q(C. C. 108 - 0.04-1704	C. C. 195 - OWN_CHENT NO. 1 - X (cm) 0.1 - X	C, C, 195 - 0.04, 170-1 1.05 - 0.04, 170-1 1.05
5, 1(2 i SORT (0.0000 i 13.52)) 1 (0.0000 i 1.00000 j 3.00000 j	C. C. 105 - OM_ATRY] Kigh Kigh (1 - Kigh) 0.1 - Kigh Algan) 1. 3 - Algan) 0.2 - Algan) 0.1 - Kigh 1. 3 - Algan) 0.2 - Algan) 0.1 - Algan 1. 30 - Algan) 1. 3138 1. 3138 1. 3 - Algan 1. 3138 1. 30 - Algan 1. 3138 1. 3 - Algan 1. 3138 1. 30 - Algan 1. 3138 1. 3 - Algan 1. 3138 1. 30 - Algan 1. 3138 1. 3 - Algan 1. 3138 1. 3 - Algan 1. 3138 1. 3 - Algan 1. 3	C. C. 1 OF COMPANY, R. R. R. R. R. R. R. R. R. R. R. R. R.	C. C. 10F - 0.04_(100) K(c) K(c) 0.1 - 1.5(c) Q(c) Q(c) 1.2 - 0.4(c) Q(c) Q(c) 1.2 - 0.4(c) Q(c) 1.2 - 0.4(c) Q(c) 1.2 - 0.4(c) Q(c) 1.2 - 0.4(c) Q(c) 1.2 - 0.4(c) Q(c) 1.2 - 0.4(c) Q(c) 1.2 - 0.4(c) Q(c) 1.2 - 0.4(c) Q(c) 1.2 - 0.4(c) Q(c) 1.2 - 0.4(c) Q(c) 1.2 - 0.4(c) Q(c) Q(c) Q(c) Q(c) Q(c) Q(c) Q(c) Q	1 1 1 1 1 1 1 1 1 1				1 1 1 1 1 1 1 1 1 1	1 2755 a 1245 1 2555 a 1245 1 2555 a 1245 4 1127 0 1 1 1127 0 1 1127 1 3 a 4(40) 0 1 0 1 1127 1 3 a 4(40) 0 1 1127 1 3 a 4(40) 0 1 1127 1 3 a 1127 1 3 a 1127 1 3 a 1127 1 3 a 1445 1 1127 1 3 a	C. C. 10F - 0.04_(100) K(c) K(c) 0.1 - 1.5(c) Q(c) Q(c) 1.2 - 0.4(c) Q(c) Q(c) 1.2 - 0.4(c) Q(c) 1.2 - 0.4(c) Q(c) 1.2 - 0.4(c) Q(c) 1.2 - 0.4(c) Q(c) 1.2 - 0.4(c) Q(c) 1.2 - 0.4(c) Q(c) 1.2 - 0.4(c) Q(c) 1.2 - 0.4(c) Q(c) 1.2 - 0.4(c) Q(c) 1.2 - 0.4(c) Q(c) 1.2 - 0.4(c) Q(c) Q(c) Q(c) Q(c) Q(c) Q(c) Q(c) Q	C. C. 1 OF 0 ONL- (1997) 1 (8) X(cm) 0.1 a X(cm) 0.1 a X(cm) 0.2 cm) 1 a Cm 1 a	C. C. 1 OF COMPANY, R. R. R. R. R. R. R. R. R. R. R. R. R.	C, C, 1 OF 6 OM-LING X(cm) 0.1 • X(cm) 0.1
8, 1(2 i SORT (10000 i 13132)) 115777 100000 100000 3 30075 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	C. 1 OF - 0 Market No. 2 (10) - 11 (C, C, 1 OF 6 ON_metropol K(e) X(ev) 0.1 s X(ev) 0.0 s X(ev) 1.3 s Q (ev) 1. 3 s Q (ev)	C, C, 198 - Observed Kill Kiery O1 - Kiery O1 - Kiery Q, 1 - C, 198 - Observed Kill Kiery O1 - Kiery O1 - Kiery O1 - C, 198 - Observed Kiery O1 - C, 198 - Observ		Table Tabl	Table Tabl	Table Tabl		1 2005 - 1120 1 1120 1 2005 - 1004 1000	C, C, 198 - Observed Kill Kiery O1 - Kiery O1 - Kiery Q, 1 - C, 198 - Observed Kill Kiery O1 - Kiery O1 - Kiery O1 - C, 198 - Observed Kiery O1 - C, 198 - Observ	C, C, 10F - 004_(mody) R(0) X(m) 0.1 - X(m) 0.01 - X(m) 0.001 - X(m) 0.1 - X(C, C, 1 OF 6 ON_metropol K(e) X(ev) 0.1 s X(ev) 0.0 s X(ev) 1.3 s Q (ev) 1. 3 s Q (ev)	C. C. 105 - 0.04-4774 R. X(cm) 0.1 - X(cm)
5, 1(3 : 500° 1 : 10° 1 : 1	7. See 1927 1.05° - ON_ACTON X(cm) O1 - X(cm) A(cm) 1.05° - O. ACTON X 1.05°	C, C, 1 OF C OW_CPM_3 R(P) X(cm) 0.1 • X(cm) 0.1 • X(cm) 1.3 • Q(cm) 1.3 • Q(cm) 1.70 • Q(cm) 1.	1 250 1 250 1 250 2 2 2 2 2 2 2 2 2	1 2755 c 13472 1 3755 c 13442 1 3050 c 66710	Table Tabl	Table Tabl	Total Tota	1 2755 c 13472 1 3755 c 13442 1 3050 c 66710	1 2555 13472 1 2555 2555 1 2555 1 2555 1 2555 1 2555 1 2555 1 2555 1 2555 1 2555 1 2555 1 2555 1 2555 2555 1 2555 1 2555 1 2555 1 2555 1 2555 1 2555 1 2555 1 2555 1 2555 1 2555 1 2555 2555 1 2555 1 2555 1 2555 1 2555 1 2555 1 2555 1 2555 1 2555 1 2555 1 2555 1 2555 2555 1 2555 1 2555 1 2555 1 2555 1 2555 1 2555 1 2555 1 2555 1 2555 1 2555 1 2555 2555 1 2555 1 2555 1 2555 1 2555 1 2555 1 2555 1 2555 1 2555 1 2555 1 2555 1 2555 2555 1 2555 1 2555 1 2555 1 2555 1 2555 1	1 250 1 250 1 250 2 2 2 2 2 2 2 2 2	(2) C. (1	C, C, 1 OF C OW_CPM_3 R(P) X(cm) 0.1 • X(cm) 0.1 • X(cm) 1.3 • Q(cm) 1.3 • Q(cm) 1.70 • Q(cm) 1.	C, C, 1955 - 1947 1 155 - 000-4700 1 10 1 10 1 10 1 10 1 10 1 10 1 10
9, /(3 + 5007 (1 1000 + 1120) 1 10000 1 10000 1 10000 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	C. C. 108 - CM_armyl Kill Kichl O1 - Kichl O1 - Kichl Acid V 3 - Calch Can V 75 - Can V 4 - Can V 7 - Can	C. C. 1 OF COMPANY REPLY REPLY 0.1 • X (cm)	(2) (2) (1) (2) (2) (1) (2) (2) (1) (2) (2) (3) (4) (4) (4) (4) (5) (6) (7) (7) (7) (7) (8) (8) (7) (7) (7) (8) (8) (7) (8) (8) (8) (8) (8) (8) (8) (8) (8) (8	1 1 1 1 1 1 1 1 1 1				1 1 1 1 1 1 1 1 1 1	1 3755 - 13470 1 3750 1 7000 - 346575 4 11127 0 1 1 11127 1 3 11127 1 70 - 0.000 1 11127 1 70 - 0.000 1 11127 1 70 - 0.000 1 11127 1 7000 1 11127 1 7000 1 11127 1 7000 1 11127 1 7000 1 11127 1 7000 1 11127 1 7000 1 11127 1 7000 1 11127 1 7000 1 11127 1 7000 1 11127 1 7000 1 11127 1 7000 1 11127 1 7000 1 11127 1 7000 1 11127 1 7000 1 11127 1 7000 1 11127 1 7000 1 11127 1 7000 1 11127 1 7000 1 11127 1 7000	(2) (2) (1) (2) (2) (1) (2) (2) (1) (2) (2) (3) (4) (4) (4) (4) (5) (6) (7) (7) (7) (7) (8) (8) (7) (7) (7) (8) (8) (7) (8) (8) (8) (8) (8) (8) (8) (8) (8) (8	C. C. 1 OF - CONGINGAL ROLL ROLL ROLL ROLL ROLL ROLL ROLL RO	C. C. 1 OF COMPANY REPLY REPLY 0.1 • X (cm)	C, C, 105 - 0.04-1873 17.05 - 0.04-1874 1.05
3, 1(2 i 5087 h 2)	7, C, 1 OF ** OF ** OF ** OF ** OF ** N(cm) 0.1 ** X(cm)	C, C, 1 OF C ON MARKEN KEN OI - KEN OI - KEN OI - KEN OI - KEN OI - KEN OI - KEN OI - C OI - KEN OI - C OI	C. (C. 10F - 0044 NGW) K(cm) 0.1 - K(cm) 0.10 - K(cm) 0.1				Total Tota		1 1 1 1 1 1 1 1 1 1	C. (C. 10F - 0044 NGW) K(cm) 0.1 - K(cm) 0.10 - K(cm) 0.1	C. C. 10F • 00M_mmpdJ R(0) X(cm) 0.1 • X(c	C, C, 1 OF C ON MARKEN KEN OI - KEN OI - KEN OI - KEN OI - KEN OI - KEN OI - KEN OI - C OI - KEN OI - C OI	C. C. 1 OF 6 OF Man Man Man Man Man Man Man Man Man Man
\$\frac{k_{\text{0}}}{2} \frac{k_{\text{0}}}{2} \frac{k_{\text{0}}}{2} \frac{k_{\text{0}}}{2} \frac{(600 \text{0})}{1000000}	C. C. LOST - CW-LIND) Kill Kinn OI - Kinn OI - Kinn Acre Acr Acre	C, C, 195 - 60-4-10-1 10 - 10-1 10-1 10-1 10-1 10-1 1	C, C, 10F - 00H _m (mpd) R(m) X(m) 01 - X(cm) a_(m) a_(m) a_(m) 1 3 - a_(m) a_(m) 1 70 - a_(m) a_(m) 1 70 - a_(m) 1 120 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 2.55	Table Tabl	Table Tabl	Total Tota	1 2.55	1, 2355 - 13472 13572 75000 - 66710 1, 2128 1, 1127 1, 1	C, C, 10F - 00H _m (mpd) R(m) X(m) 01 - X(cm) a_(m) a_(m) a_(m) 1 3 - a_(m) a_(m) 1 70 - a_(m) a_(m) 1 70 - a_(m) 1 120 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	C, C, 10F • ON_MENTON R(m) (cm) 01 • X(cm) q(m) q(m) 7 3 • q(cm) q(cm) 7 70 • q(cm) X 7 2 • q • Term T 1 · SOFT 1 · (4 1 2 2 2 3 2 3 3 3 3 3 3 3 3 3 3 3 3 3 3	C, C, 195 - 60-4-10-1 10 - 10-1 10-1 10-1 10-1 10-1 1	C, C, 15F • CM_RTV1 X(R) X(R) X(R) 01 • X(R) 01 R (R) 1 0 • Q(R) 1 0 • Q(R) 1 (R) 1 0 • Q(R) 1 0 •
9, 1(3 - 50876-30) 24. 1 - 3087 (1 0000 - 313.9) - 100000 1 00000	C. C. 108 - CM_armyll Kill Kicml 0.1 - Kicml a, cml 1, 3 - C, cml 1, 70 - 1, a, cml 1, 10 - Kicml 1 - CM-1 - 1, a - C, cml 1, 20 - C, cml 1,	C. C. 1 OF COMPANIENTY J. R. R. R. R. R. R. R. R. R. R. R. R. R.	C. C. (OF - 0904_0090) R(0) X(00) 0.1 - X(00) Q(00) (- 0004_0090) (- 00090 0.1500) (- 0009000) (- 0009000) (- 0009000) (- 0009000) (- 0009000) (- 0009000) (- 0	1 1 1 1 1 1 1 1 1 1			1305 1305 1305 1305 1305 1315	1 1 1 1 1 1 1 1 1 1	1 2505 - 13421 1 2505 - 1 2505	C. C. (OF - 0904_0090) R(0) X(00) 0.1 - X(00) Q(00) (- 0004_0090) (- 00090 0.1500) (- 0009000) (- 0009000) (- 0009000) (- 0009000) (- 0009000) (- 0009000) (- 0	7 2555 - 13-27 1 2550	C. C. 1 OF COMPANIENTY J. R. R. R. R. R. R. R. R. R. R. R. R. R.	C, C, 105 • Own_introl.) R(i) X(cm) 0.1 •
8, 1(2 i SONTRA 1)	C, C, 105 • OM_ATMPJ X(0) X(cm) 0.1 • X(cm) 0.1 • X(cm) 0.1 • X(cm) 1.3 • Q(cm) 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1	C. C. 1 OF 6 Wingfired M (New) 01 s New) 01 s New) 01 s New) 01 s New) 1 s Off	1 255 - 125						1 1 1 1 1 1 1 1 1 1	1 255 - 125	C, C, 10F - 00M_m(mpd.) R(0) X(m) 0.1 - X(m) 0.10 A(m) 1.20 A(m) 0.10 A(m) 1.20 A(m) 0.10 A(m) 1.20 A(m) 0.10 A(m) 1.20 A(m) 1	C. C. 1 OF 6 Wingfired M (New) 01 s New) 01 s New) 01 s New) 01 s New) 1 s Off	C, 105 - 0.00 -
5. 1 2 1 SORT (1989) 1 115777 1 100000 100000 3 19879 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	C. () OF ** ON-A (MPG) X (M) X (M) X (M) Q (M)	C, C, 10F • 694_c(mgV) R(m) R(m) Q (m) Q (m) Q (m) Q (m) Q (m) R (C, C, 10F - 00H _m (mpd) R(n) X(m) 01 - X(m) 0, m q(m) 7 3 - q(m) 0, (m) 7 30 - q(m) 0 X 7 3 - q (m) 1 10 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	1 1 1 1 1 1 1 1 1 1				1 1 1 1 1 1 1 1 1 1	1 2.755 - 13.472 1 3.755 - 13.64 1 2000 - 156.773 4 17127 01 1 17127 2 3 01 2.1572 1 3 0 4.64 17167 1 3 0 4.64 17167 1 3 0 4.64 17167 1 3 0 4.64 17167 1 3 0 4.64 17167 1 3 0 4.64 17167 1 3 0 6.05 17167 1 3 0 4.64 17167 1 3 0 6.05 17167 1 3 0 6.	C, C, 10F - 00H _m (mpd) R(n) X(m) 01 - X(m) 0, m q(m) 7 3 - q(m) 0, (m) 7 30 - q(m) 0 X 7 3 - q (m) 1 10 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	C, C, 10F - 00M_mmpdJ R(0) X(cm) 01 - X(cm) a_(cm) 1 - 0 - 0 (cm) a_(cm) 1 - 0 - 0 (cm) a_(cm) 1 - 0 - 0 (cm) 0 - 0 - 0 (cm) 1 - 0 - 0 (cm) 0 - 0 - 0 (cm) 0 - 0 - 0 (cm) 0 - 0 - 0 (cm) 0 - 0 - 0 (cm) 0 - 0 - 0 (cm) 0 - 0 - 0 (cm) 0 - 0 - 0 (cm) 0 - 0 (c	C, C, 10F • 694_c(mgV) R(m) R(m) Q (m) Q (m) Q (m) Q (m) Q (m) R (C. C. 105 - 604-4 (mg/l X (cm) 0.1 - X (cm) 0.1 - X (cm) 1.3 - 0.4
5, 1(3 : 500° 1 : 100° 1 : 100° 24, 1(3 : 500° 1 : 100° 1 : 100° 25, 1(3 : 500° 1 : 100° 1 : 100° 1 : 100° 25, 1(3 : 500° 1 : 100° 1 : 100° 1 : 100° 1 : 100° 1 : 10	C. C. 156 - 0M_mmVJ Kill Kimil 01 - Kimil 01 - Kimil 13 - C. C. C. 156 - 0M_mmVJ Kimil 01 - Kimil 1333 - C. C. C. 156 - 0M_mmVJ Kimil 01 - S. C. C. C. C. C. C. C. C. C. C. C. C. C.	C, C, 1 OF C OW_CMP(1) R(D) X (cm) 0.1 x X (cm) 0.1 x X (cm) 1 cm 1 cm 1 cm 1 cm 1 cm 1 cm 1 cm 1	C, C, 10F - 6W _{ell} (mpl) K(m) K(m) 01 - K(m) 0, a (m) a (m) 7 - a (m) a (m) 7 70 - a (m) X / 2 - a - Temr 1 - 5.081 1 · (4 4 1 2 × 5 - 13.25 1 3.25 1	1 2 1 2 1 2 1 2 2 1 2 2	Table Tabl	Table Tabl	Total Tota	1 2 1 2 1 2 1 2 2 1 2 2	1 2355 * 13427 13425 1 70500 * 041319 1 2133 * 13437 1 2133 * 13437 1 3 * 2,113 2343 1 3 * 2,113 2343 1 3 * 3,113 2343 1 3 *	C, C, 10F - 6W _{ell} (mpl) K(m) K(m) 01 - K(m) 0, a (m) a (m) 7 - a (m) a (m) 7 70 - a (m) X / 2 - a - Temr 1 - 5.081 1 · (4 4 1 2 × 5 - 13.25 1 3.25 1	1 255 L. C. C. C. C. C. C. C. C. C. C. C. C. C.	C, C, 1 OF C OW_CMP(1) R(D) X (cm) 0.1 x X (cm) 0.1 x X (cm) 1 cm 1 cm 1 cm 1 cm 1 cm 1 cm 1 cm 1	C, C, 1955 - C, 1955 - COM_MINDAL N(m) (11 - X(cm) 0.1 - X(cm) 0.1 - X(cm) 1 - Q(cm) 1
6, 1(3 - 5007 (0.000 - 3).00 1 100000 1 100000 1 100000 - 0.0010 2013 ((3 - 5007 (0.000 - 3).00)) - 7,0777 1 1000000 1 100000 1 1000000 - 0.00100 2014 ((3 - 5007 (0.000 - 3).00)) - 7,07777 1 1000000 1 1000000 1 1000000 - 0.00100 2015 ((3 - 5007 (0.000 - 3).00)) - 7,07777 1 1000000 1 1000000 1 1000000 - 0.00100 2016 ((3 - 5007 (0.000 - 3).00)) - 7,07777 1 1000000 1 1000000 1 1000000 - 0.00100 2017 ((3 - 5007 (0.0000 - 3).00)) - 7,07777 1 1000000 1 1000000 1 1000000 - 0.00100 2018 ((3 - 5007 (0.0000 - 3).00)) - 7,07777 1 1000000 1 1000000 1 1000000 - 0.00100 2018 ((3 - 5007 (0.0000 - 3).00)) - 7,07777 1 1000000 1 1000000 1 1000000 - 0.00100 2018 ((3 - 5007 (0.0000 - 3).00)) - 7,07777 1 1000000 1 1000000 1 1000000 - 0.00100 2018 ((3 - 5007 (0.0000 - 3).00)) - 7,07777 1 1000000 1 1000000 1 1000000 - 0.00100 2018 ((3 - 5007 (0.0000 - 3).00)) - 7,07777 1 1000000 1 1000000 1 1000000 - 0.00100 2018 ((3 - 5007 (0.0000 - 3).00)) - 7,07777 1 1000000 1 1000000 1 1000000 - 0.00100 2018 ((3 - 5007 (0.0000 - 3).00)) - 7,07777 1 10000000 1 1000000 1 1000000 - 0.00100 2018 ((3 - 5007 (0.0000 - 3).00)) - 7,07777 1 1000000 1 1000000 1 1000000 - 0.00100 2018 ((3 - 5007 (0.0000 - 3).00)) - 7,07777 1 1000000 1 1000000 1 1000000 - 0.00100 2018 ((3 - 5007 (0.0000 - 3).00)) - 7,07777 1 1000000 1 1000000 1 1000000 - 0.00100 2018 ((3 - 5007 (0.0000 - 3).00)) - 7,07777 1 1000000 1 1000000 1 1000000 - 0.001000 2018 ((3 - 5007 (0.0000 - 3).00)) - 7,07777 1 1000000 1 1000000 - 0.001000 2018 ((3 - 5007 (0.0000 - 3).00)) - 7,07777 1 1000000 1 1000000 - 0.001000 2018 ((3 - 5007 (0.0000 - 3).00)) - 7,07777 1 1000000 - 0.001000 2018 ((3 - 5007 (0.0000 - 3).00)) - 7,07777 1 1000000 - 0.001000 2018 ((3 - 5007 (0.0000 - 3).00)) - 7,07777 1 1000000 - 0.001000 2018 ((3 - 5007 (0.0000 - 3).00)) - 7,07777 1 1000000 - 0.001000 2018 ((3 - 5007 (0.0000 - 3).00)) - 7,07777 1 1000000 2018 ((3 - 5007 (0.0000 - 3).00)) - 7,07777 1 1000000 2018 ((3 - 5007 (0.000	C, C, 105 - 0M-4 mpJ	C. C. 1 DE COMPANION MAN MAN MAN MAN MAN MAN MAN MAN MAN MA	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1							1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	C. C. 10F - 0M_m(mpd.) R(0) X(cm) 0.1 - X(cm) 0.1 - X(cm) 0.01 - X(cm) 0.1 - X	C. C. 1 DE COMPANION MAN MAN MAN MAN MAN MAN MAN MAN MAN MA	C, 105 - 1947 1 2000 - 0.04 - 1947 1 21 - 1944 1 21 -
## (11.7) 11.10 1.3 1.00 1.3 1.00 1.3 1.00 1.10 1.3 1.00 1.10 1.3 1.00 1.10 1.	C, C, 10F = 0M_m(myd) X(m)	C, C, 1 OF 6 0M_a(mg/d) X(cm) 0.1 • X(cm) Q, m, X(cm) Q, m, X(cm) Q, m, X(cm) Q, m, X 1 2 • Q, Tem'r 1 · SGRT 1 · (4	C, C, 10F - 0.04 (cm) X(m) X(cm) 0.1 - X(cm) Q (cm) 1 3 - Q(cm) Q (cm) 1 30 - Q(cm) X 1 3 - Q - T(cm) 1 . SQRI 1 - (4	Totalement C, C, 100 C,	[Squirms 5.1] C, C, 1074 C, 1074	[Squirms 5.1] C, C, 1074 C, 1074	Follower 1: 1, 2, 1 or 1 or 2, 1 or 2, 1 or 3, 2 or 3, 3 or 4, 2 or 4, 2 or 4, 2 or 4, 3 or 4,	Totalement C, C, 100 C,	1 3.785 * 13.472 13.472 13.000 * 6.0710	C, C, 10F - 0.04 (cm) X(m) X(cm) 0.1 - X(cm) Q (cm) 1 3 - Q(cm) Q (cm) 1 30 - Q(cm) X 1 3 - Q - T(cm) 1 . SQRI 1 - (4	C, C, 1 OF - ON-MINOPAL R(I) X(CI) 01 - X(CI) 0, Q(CI) 0, Q(CI) 1 0 - Q(CI) 0, Q(CI) 1 70 - Q(CI) 1 70 - Q(CI) 1 1 0 (4	C, C, 1 OF 6 0M_a(mg/d) X(cm) 0.1 • X(cm) Q, m, X(cm) Q, m, X(cm) Q, m, X(cm) Q, m, X 1 2 • Q, Tem'r 1 · SGRT 1 · (4	C, C, 1 OF 6 6W _{Me} (myd) K(t) K(em) 0.1 • K(em) 0.4 (em) 1.3 • C ₁ (em) 1.70 • C ₁ (em) K 1.2 • C ₂ • T ₁ em 1.1 · SORT 1 · C ₃ (em) 1.20 • C ₄ (em) 1.20 • C ₄ (em) K 1.2 • C ₄ • T ₁ em 1.1 · SORT 1 · C ₄ (em) 1.20 •
5. 1/1 2 1. SOUT 1000	C, C, 105 - 6M_c(mg) () 1 - X(cm) 0, 1 - X(c	C, C, 1 OF • ON_MINTEGLY X(m) X(mm) Q1 • X(mm) Q,(m) Q,(m) Q,(m) 7 20 • Q,(mm) X 1 2 • Q • Term Y 1 · SORT 1 · Q • Term Y 1 · SORT 1 · Q • Term Y 1 · SORT 1 · Q • Term Y 1 · SORT 1 · Q • Term Y 1 · SORT 1 · Q • Term Y 1 · SORT 1 · Q • Term Y 1 · SORT 1 · Q • Term Y 1 · SORT 1 · Q • Term Y 1 · SORT 1 · Q • Term Y 1 · SORT 1 · Q • Term Y 1 · SORT 1 · Q • Term Y 1 · SORT 1 · Q • Term Y 1 · SORT 1 · Q • Term Y 1 · SORT 1 · Q • Term Y 1 · SORT 1 · Q • Term Y 1 · SORT 1 · Q • Term Y 1 · SORT 1 · Q • Term Y 1 · SORT 1 · Q • Term Y 1 · SORT 1 · Q • Term Y 1 · Q • Term Y 1 · Q • Term Y 1 · Q • Term Y 1 · Q • Term Y 1 · Q • Term Y 1 · Q • Term Y 1 · Q • Term Y 1 · Q • Term Y 1 · Q • Term Y 1 · Q • Term Y 1 · Q • Term Y 1 · Q • Term Y 1 · Q • Term Y 1 · Q • Term Y 1 · Q • Term Y 1 · Q • Term Y 1 · Q · Q · Q · Q · Q · Q · Q · Q · Q ·	C, C, I OF - GW-(mg/L) K(t) K(m) 0.1 - K(m) 0,1 - K(m) 0,1 - K(m) 1 3 - 0,4(m) 0,1 770 0,4(m) 1 770 0,4(m) 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		[Special St.] C. C. C. C. C. C. C.	[Special St.] C. C. C. C. C. C. C.	[Common 27] C. C. C. C. C. C. C. C		1, 0, 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	C, C, I OF - GW-(mg/L) K(t) K(m) 0.1 - K(m) 0,1 - K(m) 0,1 - K(m) 1 3 - 0,4(m) 0,1 770 0,4(m) 1 770 0,4(m) 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	C, C, 1 OF - GW-(1707) X(t) X(cm) 0.1 - X(cm) 0.4(cm) 1 3 - 0.4(cm) 1 70 - 0.4(cm) X 1 3 - 0.4 cm 1 . SORT 1 - (4	C, C, 1 OF • ON_MINTEGLY X(m) X(mm) Q1 • X(mm) Q,(m) Q,(m) Q,(m) 7 20 • Q,(mm) X 1 2 • Q • Term Y 1 · SORT 1 · Q • Term Y 1 · SORT 1 · Q • Term Y 1 · SORT 1 · Q • Term Y 1 · SORT 1 · Q • Term Y 1 · SORT 1 · Q • Term Y 1 · SORT 1 · Q • Term Y 1 · SORT 1 · Q • Term Y 1 · SORT 1 · Q • Term Y 1 · SORT 1 · Q • Term Y 1 · SORT 1 · Q • Term Y 1 · SORT 1 · Q • Term Y 1 · SORT 1 · Q • Term Y 1 · SORT 1 · Q • Term Y 1 · SORT 1 · Q • Term Y 1 · SORT 1 · Q • Term Y 1 · SORT 1 · Q • Term Y 1 · SORT 1 · Q • Term Y 1 · SORT 1 · Q • Term Y 1 · SORT 1 · Q • Term Y 1 · Q • Term Y 1 · Q • Term Y 1 · Q • Term Y 1 · Q • Term Y 1 · Q • Term Y 1 · Q • Term Y 1 · Q • Term Y 1 · Q • Term Y 1 · Q • Term Y 1 · Q • Term Y 1 · Q • Term Y 1 · Q • Term Y 1 · Q • Term Y 1 · Q • Term Y 1 · Q • Term Y 1 · Q • Term Y 1 · Q · Q · Q · Q · Q · Q · Q · Q · Q ·	C, (C, (C, (C, (C)) X(cm) 0.1 • X(cm)
7 3129 01 1 3129 1 3129 1 3 1329 1 3 1 100 1 1 110 1 1 1 1 1 1 1 1 1 1 1	C, C, 105 - 0M-mpU X(h) X(m) 0.1 - X(m) 0.1 - X(m) 0.4(m) 1 3 - 4(m) 0.4(m) 7 7 2 1 0 - 1(m) 1 0.04(1) 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	C, C, / DF * OW_mmp(J) X(R) X(en) 01 * X(en) 01 * X(en) 1 5 * Q(en) Q(en) 1 70 * Q(en) X / 2 * Q * Tenn' 1 * SOR11 1 * (4 * A * Q)/	C, C, 105 • CW_mmyL) K(t) X(cm) () • X(cm) Q, (cm) 1 3 • Q, (cm) 1 70 • Q, (cm) X 1 2 • Q, • Tem 1 • (• 1 A • Q, 1/	1500000000011 C, C, 105 c. 0.0M_mmgU X (d) X (cm) 0.1 X (cm) 0.2 (cm) 1 3 + 9 (cm) 1 70 + 10 (cm) X 1 2 1 Q + 7cm 1 1 5087 1 1 (4 1 A 1 Q) 1	(Equation 5:1) C. (G. (G. C. (G. G. G. (G. G. (G. G. G. G. (G. G. G. G. G. (G. G. G. G. G. G. (G. G. G. G. G. G. G. G. G. G. G. G. G.	(Equation 5:1) C. (G. (G. C. (G. G. G. (G. G. (G. G. G. G. (G. G. G. G. G. (G. G. G. G. G. G. (G. G. G. G. G. G. G. G. G. G. G. G. G.	[Special St.] C. C. C. C. C. C. C.	1500000000011 C, C, 105 c. 0.0M_mmgU X (d) X (cm) 0.1 X (cm) 0.2 (cm) 1 3 + 9 (cm) 1 70 + 10 (cm) X 1 2 1 Q + 7cm 1 1 5087 1 1 (4 1 A 1 Q) 1	1/2000 11 C ₂ C ₂ 1 DF • 6W _M (m/V) X (M) X (m) 0.1 • X (cm) Q ₁ (cm) 1 3 • Q ₁ (cm) 1 2D • Q ₁ (cm) X 1 2 • Q ₂ • Tenn 1 · (• · · · · · · · · · · · · · · · · ·	C, C, 105 • CW_mmyL) K(t) X(cm) () • X(cm) Q, (cm) 1 3 • Q, (cm) 1 70 • Q, (cm) X 1 2 • Q, • Tem 1 • (• 1 A • Q, 1/4	C, C, 1 OF • CW_mMyJ K(t) X(m) 0.1 • X(cm) 0.1 • X(cm) 0.1 * X(cm)	C, C, / DF * OW_mmp(J) X(R) X(en) 01 * X(en) 01 * X(en) 1 5 * Q(en) Q(en) 1 70 * Q(en) X / 2 * Q * Tenn' 1 * SOR11 1 * (4 * A * Q)/	C, C, 10F • 504_mmy(x) X(cm) 01 • X(cm) x,(cm) x,(cm) x + x, x + x + x + x + x + x + x + x +
1 3138 01 1 3128 - 3128 1 3 2 484 1 3158 1 3 2 484 1 3158 1 3 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4	C, 105 - CW_(myL) K(m) (1) - K(m) Q,(m) Q,(m) Q,(m) (2) - Q,(m) (2) - Q, (m) (3) - Q, (m) (4) (4) (4) (4) (4) (4) (4) (4) (4) (4	C. C. 105 • SWa_(myd.) K(g) K(en) 0.1 • K(C. C. 198 - CMM_RRDQ K(R) K(R) K(R) 01 - K(RM) Q (R) Q (R) 1 - CMM (R) Q (R) 1 - CMM (R) K(R) R) R (R)	C. 10 - 10 - 10 - 10 - 10 - 10 - 10 - 10	C. 100 - 100	C. 100 - 100	C. 100 - 100	C. 10 - 10 - 10 - 10 - 10 - 10 - 10 - 10	C. C. 100 - COM_MODUL ATO X (cm) 01 - X (cm) 04 cm 1 - 3 - 9 (cm)	C. C. 198 - CMM_RRDQ K(R) K(R) K(R) 01 - K(RM) Q (R) Q (R) 1 - CMM (R) Q (R) 1 - CMM (R) K(R) R) R (R)	C. C. 1.05 ・ OVALINDAD X(67) X(67) (0.1 ・ X(67) Q(67) Q(67) (2.10) (2.10) (3.10) (3.10) (3.10) (3.10) (3.10) (3.10) (3.10) (4.10) (3.	C. C. 105 • SWa_(myd.) K(g) K(en) 0.1 • K(C. C. 105 • 504_my/l K(d) X(em) 01 • X(em) 04 (em) 04 (em) 04 (em) 1 20 04 (em) 1 20 04 (em) 1 20 07 1 1 50 07 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
7 313 0 11 3138 - 3124	C. 1 DF • OW_mmp(J) X (t) X (cm) 0.1 • X (cm) 0.4 (cm) 1.70 • Q (cm) 1.70 • Q (cm) X 7 2 • Q • 1 cm 1 · 20 x 1 1 · 1 • 1 x 1 1 1 · 1 • 1 x 1 1 1 1 · 1 • 1 x 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	C ₄ C ₅ 1 OF • GW _M (mpQ1) X(m) Q1 • X(cm) Q1 (cm) Q4(cm) Q4(cm) 1 30 • Q4(cm) X 1 2 • Q • Term 1 · SOR1 1 • (4 · A · Δ · 1)	C, C, 1 OF GM_(mp2) K(n) K(m) 0.1 * K(cm) 0.0 * K(cm)	C. 10 - 004(mpd.) Kin Kin (01 - Kin (10 - Ki			[EQUIDIDED 5.1] C. C. C. C. C. C. C. C	C. 10 - 004(mpd.) Kin Kin (01 - Kin (10 - Ki	C, C, 105 - 0M_mmy] Kin Kim 01 - Kim 01 - Kim 01 - Kim 02 - Cm	C, C, 1 OF GM_(mp2) K(n) K(m) 0.1 * K(cm) 0.0 * K(cm)	C, C, 10F - CHW_(myX) X(8) X(8m) 0.1 - X(8m) 0.1 - X(8m) 1 - X(8m) 1 - X - X - X - X - X - X - X - X - X -	C ₄ C ₅ 1 OF • GW _M (mpQ1) X(m) Q1 • X(cm) Q1 (cm) Q4(cm) Q4(cm) 1 30 • Q4(cm) X 1 2 • Q • Term 1 · SOR1 1 • (4 · A · Δ · 1)	C, 1 OF 6 GW_C (1700) 1 (1) 1 (4 1 A 1 O 1) 1 (1700) 1 (1
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7 71129 01 1 7123 0 7134	C / OF • GW_(mgU) X(m) X(cm) 0.1 • X(cm) Q(cm) Q(cm) Q(cm) Q(cm) Q(cm) X 7 2 0 Q 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	C / OF • GW_(mpt) Xth X (cm) Q.1 • X (cm) Q.1 cm) Q.1 cm) Q.1 cm) Q.1 cm) X / 2 Q.1 cm 1 · SORT 1 · (4 · 1 · A · 1 · Q.1)	C. C. 105 . COW(mpd.) X(m) 0, 1 . X(cm) 0, 1 . X (cm) 0, 1 . 3 . 0, 1 cm) 0, 1 . 30 . 0, 1 . 30 . 0, 1 . 30 . 30 . 30 . 30 . 30 . 30 . 30 .	C. C. 1. DF • GW_mmy1 X(m) X(m) 01 • X(m) 0, (m) 1 0 • A(m) 1 0 • A(m) 1 0 • A(m) 1 1 0 • A 1 1 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Rigidion S. C. C. C. C.	Rigidion S. C. C. C. C.		C. C. 1. DF • GW_mmy1 X(m) X(m) 01 • X(m) 0, (m) 1 0 • A(m) 1 0 • A(m) 1 0 • A(m) 1 1 0 • A 1 1 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	C. C. 106 - GW_mmgU X(t) X(cm) 0.1 - X(cm) 0.4 (cm) 0.4 (cm) 1.3 - 0.4 (cm) 1.70 - 0.4 (cm) 1.7 - 0.4 (cm) 1.5001 1 - (4 1 A 1 0.1)	C. C. 105 . COW(mpd.) X(m) 0, 1 . X(cm) 0, 1 . X (cm) 0, 1 . 3 . 0, 1 cm) 0, 1 . 30 . 0, 1 . 30 . 0, 1 . 30 . 30 . 30 . 30 . 30 . 30 . 30 .	C. 1 DF . GW. [IND] X (E) X (EN) (0.1 - X (EN) 0.1 EX (EN) 1 3 - 0.4 (EN) 1 73 - 0.4 (EN) X / 2 - 0.4 - Tenn'l 1 · SOR1 1 · (+ 1 - 1 - 0.)/	C / OF • GW_(mpt) Xth X (cm) Q.1 • X (cm) Q.1 cm) Q.1 cm) Q.1 cm) Q.1 cm) X / 2 Q.1 cm 1 · SORT 1 · (4 · 1 · A · 1 · Q.1)	C. C. / OF • GW-(modu) X(m) X(cm) Q(cm) Q(cm) X 2 Q • Term 1 X X X X X X X X X
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7 313 0 11 1313	C. 1 DF • OW_mmp(J) X (t) X (cm) 0.1 • X (cm) 0.4 (cm) 1.70 • Q (cm) 1.70 • Q (cm) X 7 2 • Q • 1 cm 1 · 20 x 1 1 · 1 • 1 x 1 1 1 · 1 • 1 x 1 1 1 1 · 1 • 1 x 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	C ₄ C ₅ 1 OF • GW _M (mpQ1) X(m) Q1 • X(cm) Q1 (cm) Q4(cm) Q4(cm) 1 30 • Q4(cm) X 1 2 • Q • Term 1 · SOR1 1 • (4 · A · Δ · 1)	C, C, 1 OF GM_(mp2) K(n) K(m) 0.1 * K(cm) 0.0 * K(cm)	C. 10 - 004(mpd.) Kin Kin (01 - Kin (10 - Ki			[EQUIDIDED 5.1] C. C. C. C. C. C. C. C	C. 10 - 004(mpd.) Kin Kin (01 - Kin (10 - Ki	C, C, 105 - 0M_mmy] Kin Kim 01 - Kim 01 - Kim 01 - Kim 02 - Cm	C, C, 1 OF GM_(mp2) K(n) K(m) 0.1 * K(cm) 0.0 * K(cm)	C, C, 10F - CHW_(myX) X(8) X(8m) 0.1 - X(8m) 0.1 - X(8m) 1 - X(8m) 1 - X - X - X - X - X - X - X - X - X -	C ₄ C ₅ 1 OF • GW _M (mpQ1) X(m) Q1 • X(cm) Q1 (cm) Q4(cm) Q4(cm) 1 30 • Q4(cm) X 1 2 • Q • Term 1 · SOR1 1 • (4 · A · Δ · 1)	C, 1 OF 6 GW_C (1700) 1 (1) 1 (4 1 A 1 O 1) 1 (1700) 1 (1
7 313 0 11 3138 - 3124	C, 10F = GW_(mpL) K(t) X(cm) 0.1 x X(cm) Q_(cm) 1 3 = Q_(cm) 1 20 = Q_(cm) X / 2 = Q_ = 16m 1 : SUK! 1 (1	C. C. 1 G	C. C. 1 CB - CMM_MPQU X (cm) 01 - X (cm) Q (cm) Q (cm) 1 3 - Q (cm) 4 (cm) 1 30 - 1 Q (cm) X / 3 - Q (cm) 1 500 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	C. 10 - 0.04 mpg) 10 x x cm 01 x x cm 0				C. 10 - 0.04 mpg) 10 x x cm 01 x x cm 0	C. C. 100 - CMM_mpgJ Aft X(cm) 0.1 - X(cm) 0.0 - A(cm) 0.1 - X(cm) 0.2 - A(cm) 0.1 - A(cm) 1.20 0.1 - A(cm) 0.1 -	C. C. 1 CB - CMM_MPQU X (cm) 01 - X (cm) Q (cm) Q (cm) 1 3 - Q (cm) 4 (cm) 1 30 - 1 Q (cm) X / 3 - Q (cm) 1 500 1 1 (4 + A + Q + V	C. C. 1.05 • CWM_RRPQU X (cm) 01 • X (cm) Q (cm) Q (cm) 1 • • Q (cm) 1 • Q (cm) 1 · 3 • Q (cm) 1 · 3 · 4 · 4 · 4 · 4 · 4 · 4 · 4 · 4 · 4	C. C. 1 G	C. 1.05 • GW_M(WYL) X(61) X(621) Q1 • X(621) Q1 (621) Q1 (621) Q1 (621) X 1 2 • Q • T(621) 1 • (4 1 A 1 Q 1)
9. 11 2 1 2000 1 10000	C, 105 - CW_(myL) K(m) (1) - K(m) Q,(m) Q,(m) Q,(m) (2) - Q,(m) (2) - Q, (m) (3) - Q, (m) (4) (4) (4) (4) (4) (4) (4) (4) (4) (4	C. C. 105 • SWa_(myd.) K(g) K(en) 0.1 • K(C. C. 198 - CMM_RRDQ K(R) K(R) K(R) 01 - K(RM) Q (R) Q (R) 1 - CMM (R) Q (R) 1 - CMM (R) K(R) R) R (R)	C. 10 - 10 - 10 - 10 - 10 - 10 - 10 - 10				C. 10 - 10 - 10 - 10 - 10 - 10 - 10 - 10	C. C. 10	C. C. 198 - CMM_RRDQ K(R) K(R) K(R) 01 - K(RM) Q (R) Q (R) 1 - CMM (R) Q (R) 1 - CMM (R) K(R) R) R (R)	C. C. 1.05 ・ OVALINDAD X(67) X(67) (0.1 ・ X(67) Q(67) Q(67) (2.10) (2.10) (3.10) (3.10) (3.10) (3.10) (3.10) (3.10) (3.10) (4.10) (3.	C. C. 105 • SWa_(myd.) K(g) K(en) 0.1 • K(C. C. 105 604mm/LJ K(d) X(em) 0.1 X(em) 0.4 (em) 0.4 (em) 0.4 (em) 1.20 0.4 (em) 1.20 0.4 (em) 1.20 0.1 1 50 0.1 1 (4 1.4 1.0.1)
1 3138 01 1 3128 - 3128 1 3 2 484 1 3158 1 3 2 484 1 3158 1 3 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4	C, 106 GW_(myd) X(m) 01 X(m) Q(m) Q(m) 1 20 Q(m) 1 20 Q(m) X 1 2 Q 1 m 1 3 Q 1 m 1 1 3 Q 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	C. C. 105 6 Wagnerd J. K(et) 2 (et) 2 (et) 2 (et) 3 6 (et) 4 (et) 3 6 (et) 4 (et) 7 7 6 (et) 7 7 7 7 7 8 7 7 1 1 5.071 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	C. C. 1.05 ・ 0.04_mpqJ X(0) X(cm) 0.1 ・ X(cm) 0.1 で X(cm) 0.1 ・ X(cm) 0.1 ・ X(cm) 0.2 ・ 0.04 cm) 1 2 ・ 0.04 cm 0.1 ・ 0	C. 10 - 10 - 10 - 10 - 10 - 10 - 10 - 10	[[Equition 5.17] C. C. 1.05	[[Equition 5.17] C. C. 1.05	[Education 5-1] C. (C. (D. C. (mg/L) X (mg) ()	C. 10 - 10 - 10 - 10 - 10 - 10 - 10 - 10	C. C. 198 - 004_mpq1 kin ken 0.1 - Kem q. 0.	C. C. 1.05 ・ 0.04_mpqJ X(0) X(cm) 0.1 ・ X(cm) 0.1 で X(cm) 0.1 ・ X(cm) 0.1 ・ X(cm) 0.2 ・ 0.04 cm) 1 2 ・ 0.04 cm 0.1 ・ 0	C. C. 106 - 004_mpQJ K(g) X(gn) 01 - X(gn) 04(gn) 4(gn) 4(gn) 4(gn) 4(gn) 7 0 - 4(gn) X / 2 - 4 0 Tenr 1 : 5081 1 · (4 - A - 4)/	C. C. 105 6 Wagnerd J. K(et) 2 (et) 2 (et) 2 (et) 3 6 (et) 4 (et) 3 6 (et) 4 (et) 7 7 6 (et) 7 7 7 7 7 8 7 7 1 1 5.071 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	C. C. 1.05 - 0.04_myth, X(pt) X(pt) (0.1 - X(pt) 0.1 -
2 313 01 1 312	C, 1 CF o CM, (myl) X(p) X(myl) (1 s X(myl) X(p) X (myl) X (my	C. C. 10F • CW_mmydd K(th) x (cm) 01 • X (cm) 04 (cm) 1 0 • C (cm) 1 00 • C (cm) 1 0 • C (cm) 1	G. C. 106 - 004_mpp.] Kith Xient 0.1 - Xient 0.1 - Xient 0.2 - 108 - 0.4 - 101 - Xient 0.2 - 101 - Xie	C, C, 105 • ON_MIND() X(m) X(m) Q, 1 X(m) Q, (m) 1 3 • Q, (m) Q, (m) 1 70 • Q, (m) X 1 2 1 Q • Tem' 1 · SORT] 1 • (4 1 A 1 Q) 1	C. (C. 1 C. C. Markey) K(m) (1) • K(cm) (2) • K(cm) (2) • C(cm) (3) • C(cm) (3) • C(cm) (3) • C(cm) (4) (4) (4) (4) (4) (4) (4) (4) (4) (4	C. (C. 1 C. C. Markey) K(m) (1) • K(cm) (2) • K(cm) (2) • C(cm) (3) • C(cm) (3) • C(cm) (3) • C(cm) (4) (4) (4) (4) (4) (4) (4) (4) (4) (4	C, C, 1 05 · CWM_IND(J) X(cm) 0.1 · X(cm)	C, C, 105 • ON_MIND() X(cm) Q, 1 X(cm) Q, (cm) 1 3 • Q, (cm) 1 70 • Q, (cm) X 1 2 1 Q • Tem' 1 · SORT] 1 • (4 1 A 1 Q) 1	C, C, 106 • 504_mmp() X(n) X(cm) 0.1 • X(cm) 0.01 (cm) 1 0 • Q(cm) Q(cm) 1 20 • Q(cm) 1 20 • Q(cm) X 1 2 1 Q • Tem' 1 · \$0011 1 • (• 1 A 1 Q) 1	G. C. 106 - 004_mpp.] Kith Xient 0.1 - Xient 0.1 - Xient 0.2 - 108 - 0.4 - 101 - Xient 0.2 - 101 - Xie	C. C. 10F 6 04-mm/L Kill X(en) 01 X(en) 0, (en) 0 0, (en) 0 0, (en) 0 0, (en) 0 0, (en) 0 0, (en) 0 0 0, (en) 0 0 0, (en) 0 0 0, (en) 0 0 0, (en)	C. C. 10F • CW_mmydd K(th) x (cm) 01 • X (cm) 04 (cm) 1 0 • C (cm) 1 00 • C (cm) 1 0 • C (cm) 1	C. C. 1.05 - 504_mm/J. X(m) X(m) 0.1 - X(m)
2 31329 01 1 3132 2 3133 1 3132 1 3 2 3432 1 3 2 3432 1 3 2 3 343 1 3 1 3 1 1 1 1 1 1 1 1 1 1 1 1 1	C, C, 105 - 0M-mpU X(h) X(m) 0.1 - X(m) 0.1 - X(m) 0.4(m) 1 3 - 4(m) 0.4(m) 7 7 2 1 0 - 1(m) 1 0.04(1) 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	C, C, / DF * OW_mmp(J) X(R) X(en) 01 * X(en) 01 * X(en) 1 5 * Q(en) Q(en) 1 70 * Q(en) X / 2 * Q * Tenn' 1 * SOR11 1 * (4 * A * Q)/	C, C, 105 • CW_mmyL) K(t) X(cm) () • X(cm) Q, (cm) 1 3 • Q, (cm) 1 70 • Q, (cm) X 1 2 • Q, • Tem 1 • (• 1 A • Q, 1/4	1500000000011 C, C, 105 c. 0.0M_mmgU X (d) X (cm) 0.1 X (cm) 0.2 (cm) 1 3 + 9 (cm) 1 70 + 10 (cm) X 1 2 1 Q + 7cm 1 1 5087 1 1 (4 1 A 1 Q) 1	(Equation 5:1) C. (G. (G. C. (G. G. G. (G. G. (G. G. G. G. (G. G. G. G. G. (G. G. G. G. G. G. (G. G. G. G. G. G. G. G. G. G. G. G. G.	(Equation 5:1) C. (G. (G. C. (G. G. G. (G. G. (G. G. G. G. (G. G. G. (G. G. G. G. G. G. (G. G. G. G. G. G. G. G. G. G. G. G. G.	[Special St.] C. C. C. C. C. C. C.	1500000000011 C, C, 105 c. 0.0M_mmgU X (d) X (cm) 0.1 X (cm) 0.2 (cm) 1 3 + 9 (cm) 1 70 + 10 (cm) X 1 2 1 Q + 7cm 1 1 5087 1 1 (4 1 A 1 Q) 1	1/2000 11 C ₂ C ₂ 1 DF • 6W _M (m/V) X (M) X (m) 0.1 • X (cm) Q ₁ (cm) 1 3 • Q ₁ (cm) 1 2D • Q ₁ (cm) X 1 2 • Q ₂ • Tenn 1 · (• · · · · · · · · · · · · · · · · ·	C, C, 105 • CW_mmyL) K(t) X(cm) () • X(cm) Q, (cm) 1 3 • Q, (cm) 1 70 • Q, (cm) X 1 2 • Q, • Tem 1 • (• 1 A • Q, 1/4	C, C, 1 OF • CW_mMyJ K(t) X(m) 0.1 • X(cm) 0.1 • X(cm) 0.1 * X(cm)	C, C, / DF * OW_mmp(J) X(R) X(en) 01 * X(en) 01 * X(en) 1 5 * Q(en) Q(en) 1 70 * Q(en) X / 2 * Q * Tenn' 1 * SOR11 1 * (4 * A * Q)/	C, C, 10F • 504_mmy(x) X(cm) 01 • X(cm) x,(cm) x,(cm) x + x, x + x + x + x + x + x + x + x +
7 3129 01 1 3129 1 3129 1 3 1329 1 3 1 100 1 1 110 1 1 1 1 1 1 1 1 1 1 1	C, C, 108 - 0M-(myl) X(h) X(m) 0.1 - X(m) a_(m) 1 3 - a_(m) a_(m) 7 70 - 1 a_(m) X 7 7 2 - a_0 - 1 m 1 1 - 20 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	C, C, 1 OF • GW_(mpL) X(m) 0,1 • X(cm) Q,(cm) Q,(cm) Q,(cm) Q,(cm) X 1 2 1 Q • Tem1' 1 · SORT 1 · (4 1 A 1 Q)/	C, C, 1 OF « OW μησήλ Κήλ Χ(στ) 0.1 « Χ(στη α, (στη 1 3 « α, (στη 1 20 » α, (στη 1 20 » α, (στη 1 20 » Το πτί 1 . 5087] 1 · (4 1 Α 1 α 1/1	1(αμουρικτι) C, C, 1 OF « ΔΜ _Μ ΙΝΝΊ Χ(R) Χ(κη) () 1 Χ(κη) α ₁ (κη) 1 3 « α ₁ (κη) α ₁ (κη) 1 70 « α ₁ (κη) Χ 1 2 α ₂ « Tenn' 1 · SORI 1 · (4 1 A 1 α 1)	(Equation 5-1) C. C. 1.05 • 0.04 month) X (A) X (An) 0.1 • X (An) 0.1 • 3 • 9 (An) 0.4 (An) 1.20 • 4 (An) X 1.2 • 9 (An) X 1.2	(Equation 5-1) C. C. 1.05 • 0.04 month) X (A) X (An) 0.1 • X (An) 0.1 • 3 • 9 (An) 0.4 (An) 1.20 • 4 (An) X 1.2 • 9 (An) X 1.2	[EGENOMEN ST.] C. C. 1 OF SWILMOND X (em) O. 1 X (em) Q. (em) Q. (em) Q. (em) Q. (em) Q. (em) X Z Q. • Tem 1 . SORT 1 · (4 . A . Q.)	1(αμουρικτι) C, C, 1 OF « ΔΜ _Μ ΙΝΝΊ Χ(R) Χ(κη) () 1 Χ(κη) α ₁ (κη) 1 3 « α ₁ (κη) α ₁ (κη) 1 70 « α ₁ (κη) Χ 1 2 α ₂ « Tenn' 1 · SORI 1 · (4 1 A 1 α 1)	1/3 C, C, 1 OF • 6W-μηνήλ Κήλ Χ(στ) 0.1 • Χ(στ) α,(στ) 1 • α,(στ) α,(στ) 1 70 • α,(στ) 7 1 α, • Τεστί 1 · (4 1 Α 1 α.)/	C, C, 1 OF « OW μησήλ Κήλ Χ(στ) 0.1 « Χ(στη α, (στη 1 3 « α, (στη 1 20 » α, (στη 1 20 » α, (στη 1 20 » Το πτί 1 . 5087] 1 · (4 1 Α 1 α 1/1	C, C, 1 OF • OW_minpl_J X(t) X(cm) 0.1 • X(cm) 0.1 • X(cm) 1 3 • Q(cm) 1 20 • Q(cm) X 1 2 • Q • Tem1' 1 · SORTJ 1 · (4 1 A 1 Q)/	C, C, 1 OF • GW_(mpL) X(m) 0,1 • X(cm) Q,(cm) Q,(cm) Q,(cm) Q,(cm) X 1 2 1 Q • Tem1' 1 · SORT 1 · (4 1 A 1 Q)/	C, (2, 158 - 604m_mms) X(81) X(82) 0.1 - X(82) 0.1 - X(82) 1 3 - 4,620 0.4(82) X 7 3 - 4, - 76m1 1 - 56871 1 - (4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
7 3128 01 1 3128 - 3121 3128 1 3 - 514 1 3 1328 1 3 - 514 1 1128 1 3 - 514 1 1 1 1 1128 1 3 - 514 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	C, 1 OF 0 Warmed Kin Kinn 01 . Kinn a ten 1 3 . a ten 1 . 70 . 1 a ten 1 . 70 . 1 . 1 .	C, C, 10F • ON_M_CMP(1) X(m) X(m) Q,1 • X(m) Q,(m) Q,(m) 1 0 • Q,(m) 1 20 • Q,(m) X 1 2 • Q • Tem'l 1 · SORT 1 · (•	C, 1 OF . OF Man (1701) X (21) A X (211) A (21		(Regularity) C. 1 05 - 0444 (mg/) X (m) 0.1 - X (cm) 0.4 (m) 1.3 - 0.4 (m) X (c	(Regularity) C. 1 05 - 0444 (mg/) X (m) 0.1 - X (cm) 0.4 (m) 1.3 - 0.4 (m) X (c	[Common 2.1] C. C. C. C. C. C. C. C		1, 0, 1 0	C, 1 OF - GW_M(MYL) X (2) 1 - X (207) Q, (207) Q	C, C, 1 OF - GW-(1797) A (2) X (277) C, (278) C, (279) C,	C, C, 10F • ON_M_CMP(1) X(m) X(m) Q,1 • X(m) Q,(m) Q,(m) 1 0 • Q,(m) 1 20 • Q,(m) X 1 2 • Q • Tem'l 1 · SORT 1 · (•	C, (C, (C, (C, (C) X (cm) 0.1 x X (cm) 0
2. 112 01 1322 - 3324 1324 1 3 1320 1 3	C, C, 10F - 6M-4(mg) K(m) (cm) 0,1 - K(cm)	C, C, 1 CF • ON_MENTO() X(cm) 0.1 • X(cm) Q(cm) 1, 3 • Q(cm) 1, 20 • Q(cm) X 1, 2 • Q • Term' 1 · SGRT 1 · (• 1.25 × 1.32 × 1.32 × 1.25 × 1.32 × 1.3	C, C, 1 OF - GW-(1707) A (t) X (cm) 0.1 - X (cm) 0.4 (cm) 1 3 - 0.4 (cm) 1 7 0 - 0.4 (cm) 1 7 7 0 - 0.4 (cm) X / 2 - 0.4 (cm) 1 - 5.081 1 - 0.4 (cm) 1 - 5.081 1 - 0.4 (cm) 1 - 5.081 1 - 0.4 (cm) 1 - 5.081 1 - 0.4 (cm) 1 - 5.081 1 - 0.4 (cm) 1 - 0.4 (cm	1500000000001 C, C, 100000000000	[Squirms 51] C, C, 10 C	[Squirms 51] C, C, 10 C	[Common 3:1]	1500000000001 C, C, 100000000000	1 2 255 5 1127 1 2000 0 051110	C, C, 1 OF - GW-(1707) A (t) X (cm) 0.1 - X (cm) 0.4 (cm) 1 3 - 0.4 (cm) 1 7 0 - 0.4 (cm) 1 7 7 0 - 0.4 (cm) X / 2 - 0.4 (cm) 1 - 5.081 1 - 0.4 (cm) 1 - 5.081 1 - 0.4 (cm) 1 - 5.081 1 - 0.4 (cm) 1 - 5.081 1 - 0.4 (cm) 1 - 5.081 1 - 0.4 (cm) 1 - 0.4 (cm	C, C, 1 OF - CHING K(m) K(m) (cm) C1 - K(cm) Q (cm) 1 3 - Q (cm) A (cm) 1 70 - Q (cm) K 1 2 - Q - Tenn' 1 - SORT 1 - C 4 1 - C 4 1 1 - C	C, C, 1 CF • ON_MENTO() X(cm) 0.1 • X(cm) Q(cm) 1, 3 • Q(cm) 1, 20 • Q(cm) X 1, 2 • Q • Term' 1 · SGRT 1 · (• 1.25 × 1.32 × 1.32 × 1.25 × 1.32 × 1.3	C, (OF 6 0M_a(mgd) K(d) X(em) 0.1 • X(em) a ₁ (em) 1.3 • a ₁ (em) 1.30 • l ₁ (em) X 1.2 • a ₁ • Tem I 1 508T 1 • (4
2, 1112, 0.1, 1212, 2, 5125, 1212, 1, 1212, 1, 12, 1, 12, 1, 12, 1, 12, 1, 12, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,	C, C, 10F • 0M_m(myd) X(d) X(cm) 0.1 • X(cm) d.(cm) 1 • 0.(cm) 1 20 • (cm) 1 2	C, C, 1 OF • ONLA (1997) K(cm) 0.1 • X(cm) Q, (cm) Q, (cm) 1. 3 • Q, (cm) 1. 20 • Q, (cm) X, 1. 2 • Q, • Term T 1 · SGRTJ 1 · (4	C, C, 10F - 0.04_m(mgV) X(t) X(cm) 0.1 - X(cm) 0.0 - (cm) 1.3 - 0.4(cm) 0.1 - 3.0 - 1.0 - 1.2 - 0.4(cm) 0.1 - 3.0 - 1.0 - 1.2 - 0.4(cm) 0.1 - 3.0 - 1.0 - 1.2 - 0.4(cm) 0.1 - 3.0 - 1.0 -	1 2355 - 13422 13-272 1 50500 - 66710	[Squirms 3.1] C, C, 150 C OW_MIND() X(m)	[Squirms 3.1] C, C, 150 C OW_MIND() X(m)	[5] [1] [2] [2] [3] [4] [4] [5] [6] [6] [7] [7] [8]	1 2355 - 13422 13-272 1 50500 - 66710	1 2355 - 13422 13-272 1 20200 - 64710	C, C, 10F - 0.04_m(mgV) X(t) X(cm) 0.1 - X(cm) 0.0 - (cm) 1.3 - 0.4(cm) 0.1 - 3.0 - 1.0 - 1.2 - 0.4(cm) 0.1 - 3.0 - 1.0 - 1.2 - 0.4(cm) 0.1 - 3.0 - 1.0 - 1.2 - 0.4(cm) 0.1 - 3.0 - 1.0 -	C, C, 1 OF - OW_MINOUS K(m) K(m) 01 - X (cm) Q (cm) 1 3 - Q (cm) 1 20 - Q (cm) X 1 2 - Q - TemT 1 - SORT 1 - (4	C, C, 1 OF • ONLA (1997) K(cm) 0.1 • X(cm) Q, (cm) Q, (cm) 1. 3 • Q, (cm) 1. 20 • Q, (cm) X, 1. 2 • Q, • Term T 1 · SGRTJ 1 · (4	C, C, 1 OF 6 694-6170(3) K(cm) 0.1 • K(cm) 0.1 • K(cm) 0.4 cm; 0.4 cm; 1 2 • Q, (cm) 1 20 • Q, (
### (1.1. 1.1.	7 205 14.77 13.47 13.47 15.000 6 67110	C, C, 1 OF 6 0M_a(mg/d) X(en) 0.1 • X(en) 0.1 • X(en) a_(en) 1.3 • a_(en) 1.30 • a_(en) 1.30	C, C, 10F - 00M_mmpdJ	1 1 1 1 1 1 1 1 1 1	[Squirms 1]	[Squirms 1]	Total 18.77 19.000 67110 18.000 67110 18.000 19.00	1 1 1 1 1 1 1 1 1 1	1 3355 - 13472 1372 / 3000 - 67110	C, C, 10F - 00M_mmpdJ	C, C, 1 OF • ON_MENTON K(0) X(cm) 0.1 • X(cm) Q (m) Q (cm) 1 3 • Q (cm) Q (cm) 1 70 • Q (cm) X 1 2 • Q • Term T 1 · SORT 1 · C (1 XXS • 13.772 1 13.772 1 30000 • GF110	C, C, 1 OF 6 0M_a(mg/d) X(en) 0.1 • X(en) 0.1 • X(en) a_(en) 1.3 • a_(en) 1.30 • a_(en) 1.30	C. C. 1 OF 6 WALENTY J. Kell Kem O. 1 Kem Q. Cm Q. Cm J. Cm
9, // 3 SSRT (0898 : 3152) 19777 1900000 190000 190000 190000 190000 190000 190000 1900000 190000 190000 190000 190000 190000 190000 1900000 190000 190000 190000 190000 190000 190000 1900000 190000 190000 190000 190000 190000 190000 1900000 190000 190000 190000 190000 190000 190000 1900000 190000 190000 190000 190000 190000 190000 1900000 190000 190000 190000 190000 190000 190000 19000000 1900000 1900000 19000000 190000000 190000000 190000000 19000000 1900000000 19000000 19000000 19000000000	C, C, 105 - 0Ma_fmpU X(m) X(m) 0: X(m) 0: X(m) 0, a (m) 7 0 - a (m) 7 70 - a (m) X 7 7 1 a Q - 10m 1 1 1 1 1 1 1 2 1 2 1 2 1 2 1 2 1 2 1	C. C. 1 DF 0 CM_M_CMPGJ K(M) X(cm) 0.1 x X(cm) 0.1 x X(cm) 0.4 cm) 1 3 0 Cm) 0.4 cm) 1 70 0 Q (cm) 1 70 0 Q (cm) 1 1 0 Q (cm) 1 0 Q (cm) 1 1 0 Q (cm) 1 1 0 Q (cm) 1 1 0 Q (cm) 1 1 0 Q (cm) 1 1 0 Q (cm) 1 1 0 Q (cm) 1 1 0 Q (cm) 1 1 0 Q (cm) 1 1 0 Q (cm) 1 0 Q (cm) 1 1 0 Q (cm) 1 1 0 Q (cm) 1 1 0 Q (cm) 1 1 0 Q (cm) 1 1 0 Q (cm) 1 1 0 Q (cm) 1 1 0 Q (cm) 1 1 0 Q (cm) 1 1 0 Q (cm) 1 0 Q (cm) 1 0 Q (cm) 1 1 0 Q (cm) 1 Q	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1							1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	C. C. 1 CF - COM_CHAPA R(0) R(0) C - 1 CF - 1 CF - C - 1 CF - C - 1 CF - C - 1 CF - C - 1 CF - C - 1 CF - C - 1 CF - C - 1 CF - C - 1 CF - C - 1 CF - C - 1 CF - C - 1 CF - 1 CF - C - 1 CF - C - 1 CF - C - 1 CF - C - 1 CF - C - 1 CF - C - 1 CF - C - 1 CF - C - 1 CF - C - 1 CF - C - 1 CF - C - 1 CF - 1 CF - C - 1 CF - C - 1 CF - C - 1 CF - C - 1 CF - C - 1 CF - C - 1 CF - C - 1 CF - C - 1 CF - C - 1 CF - C - 1 CF - C - 1 CF - 1	C. C. 1 DF 0 CM_M_CMPGJ K(M) X(cm) 0.1 x X(cm) 0.1 x X(cm) 0.4 cm) 1 3 0 Cm) 0.4 cm) 1 70 0 Q (cm) 1 70 0 Q (cm) 1 1 0 Q (cm) 1 0 Q (cm) 1 1 0 Q (cm) 1 1 0 Q (cm) 1 1 0 Q (cm) 1 1 0 Q (cm) 1 1 0 Q (cm) 1 1 0 Q (cm) 1 1 0 Q (cm) 1 1 0 Q (cm) 1 1 0 Q (cm) 1 0 Q (cm) 1 1 0 Q (cm) 1 1 0 Q (cm) 1 1 0 Q (cm) 1 1 0 Q (cm) 1 1 0 Q (cm) 1 1 0 Q (cm) 1 1 0 Q (cm) 1 1 0 Q (cm) 1 1 0 Q (cm) 1 0 Q (cm) 1 0 Q (cm) 1 1 0 Q (cm) 1 Q	C, 1.05 - 1947 1 2000 - 0.04 - 0.05 -
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8, 1(2 i 500Th, 3)	C. C. 1 OF ** ON_*(NT) X(NT) X(NT) A (NT) A	C. C. 1 OF COMPARING N(cm) 01 o N(cm) 01 o N(cm) 13 o G(cm) 1 TO o G(cm) 1 TO o G(cm) 1 TO o G(cm) 1 TO o G(cm) 1 TO o G(cm) 1 TO o G(cm) 1 TO o G(cm) 1 TO o G(cm) 1 TO o G(cm) 1 TO o G(cm) 1 TO o G(cm) 1 TO O O O TO O O TO O O TO O O TO O O TO O O TO O TO O TO O TO O TO O TO O O TO O	C. C. 10F - COMMENTED A COMMENT OF STATE OF STAT						1 1 1 1 1 1 1 1 1 1	C. C. 10F - COMMENTED A COMMENT OF STATE OF STAT	C, C, 10F - 0944 M(0) X(cm) 0.1 - X(cm) 0.1 - X(cm) 0.01 - X(cm) 0.2 - X(cm) 0	C. C. 1 OF COMPARING N(cm) 01 o N(cm) 01 o N(cm) 13 o G(cm) 1 TO o G(cm) 1 TO o G(cm) 1 TO o G(cm) 1 TO o G(cm) 1 TO o G(cm) 1 TO o G(cm) 1 TO o G(cm) 1 TO o G(cm) 1 TO o G(cm) 1 TO o G(cm) 1 TO o G(cm) 1 TO O O O TO O O TO O O TO O O TO O O TO O O TO O TO O TO O TO O TO O TO O O TO O	C. 1 DES - 13-27 13-25 - 13-27 1 DES - 13-25
8, 1(2 i 500Th, 3)	C. C. C. C. C. C. C. C. C. C. C. C. C. C	C. C. 1 OP - OWN_CHINGLY K(cm) 0.1 • X(cm) 0.1 • X(cm) 0.1 • X(cm) 1.3 • C. (cm) 0.4 (cm) 1.7 • C. (cm) 1.7	C. C. LOF - COMMENTED A COLUMN						1 1 1 1 1 1 1 1 1 1	C. C. LOF - COMMENTED A COLUMN	C, C, 10F - 0944 M(0) X(cm) 0.1 - X(cm) 0.1 - X(cm) 0.0 - Q(cm) 0.0 (cm) 1. 30 - Q(cm) 0.0 (cm) 1. 30 - Q(cm) 0.0 (cm) 1. 30 - Q(cm) 0.0 (cm) 1. 30 - Q(cm) 0.0 (cm)	C. C. 1 OP - OWN_CHINGLY K(cm) 0.1 • X(cm) 0.1 • X(cm) 0.1 • X(cm) 1.3 • C. (cm) 0.4 (cm) 1.7 • C. (cm) 1.7	C. 1 DES - 13-27 13-25 - 13-27 1 DES - 0-04-4 TRULY 1 R. X(cm) 0.1 s. X(cm) 0.1 c.
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5, 1(2 i SORT (10000 i 13152) i 10.0000 j 1000000 j 100	C. 1. OF - OM_ATTPO] X(0) X(00) 0.1 - X(00) 0.1 - X(00) 0.1 - X(00) 1.2 - X(00) 0.1 - X(00	C. C. 1 OF COMPARTMY A REAL NEWS OI - X REAL DESCRIPTION OF COMPARTMY A REAL DESCRIPTION OF CO	C. C. LOP - COMMENTAL ROLL NEW COLL - X (ACM) Q. C. LOP - COMMENTAL ROLL - X (ACM) Q.	1305 1305 1305 1305 1305 1315				1305 1305 1305 1305 1305 1315	1 2505 - 13470 1 2500 - 13500 2 13500	C. C. LOP - COMMENTAL ROLL NEW COLL - X (ACM) Q. C. LOP - COMMENTAL ROLL - X (ACM) Q.	6, C, 106 - 004-cmpd. R(0) X(cm) 0.1 - X(cm) 0.0 - X(cm) 0.0 - X(cm) 0.1 - X(cm) 0.0 - X(cm) 0.1 - X(c	C. C. 1 OF COMPARTMY A REAL NEWS OI - X REAL DESCRIPTION OF COMPARTMY A REAL DESCRIPTION OF CO	C, C, 1 OF 6 OF 6 OF 110 (18 Kem) 0.1 s. Kem) 0.1 s. Kem) 0.1 s. Kem) 0.1 s. Kem) 0.1 s. Kem) 0.1 s. Kem) 0.2 s. Kem) 0.1 s. Kem) 0.2 s. Kem) 0.3 s. K
9, /(2 - 300T (0.000 - 3132 lb : 154767 (10000 1.00000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.00000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.00000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.00000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.00000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.00000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.00000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.00000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.00000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.00000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.00000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.00000 1.00	C. 1. OF - OM_ATTPL X(cm) 0.1 - X(cm) A_	C. C. 1 OF COMPARTMY A RIGHT NEW OI - X (cm) 0.1 - X (cm) 0.1 - X (cm) 1.3 - 0.4 (cm) 0.4 (cm) 1.70 - 0.4 (cm) X 1.2 - 0.4 - T (cm) 1.5 (cm) 1.0 (cm) 1.2 (c	6, C, 10F - 0004_00000 1 R(0) X(cm) 01 - X(cm) 0, 01 - X(cm) 0, 01 - X(cm) 0, 01 - X(cm) 0, 01 - X(cm) 0, 01 - X(cm) 0, 01 - X(cm) 0	1355 1356 1356 1357 1358			1300 1300 1300 1300 1300 1310	1355 1356 1356 1357 1358	1 2505 - 13470 1 2505 - 13500 1 15170 2 1125 0 1 13120 1 13120 1 13120 1 2505 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	6, C, 10F - 0004_00000 1 R(0) X(cm) 01 - X(cm) 0, 01 - X(cm) 0, 01 - X(cm) 0, 01 - X(cm) 0, 01 - X(cm) 0, 01 - X(cm) 0, 01 - X(cm) 0	7 2505 - 13-27 1 2500	C. C. 1 OF COMPARTMY A RIGHT NEW OI - X (cm) 0.1 - X (cm) 0.1 - X (cm) 1.3 - 0.4 (cm) 0.4 (cm) 1.70 - 0.4 (cm) X 1.2 - 0.4 - T (cm) 1.5 (cm) 1.0 (cm) 1.2 (c	C, C, 105 - 0.04-1770-1 16757 1 1 1 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2
9, /(3 + 500T (1 1000 + 1120) + 12000 (1 10000) + 15000 (1 1	C. C. 108 - CM_armyll Kill Kicml 0.1 - Kicml a, cml 1, 3 - C, cml 1, 70 - 1, a, cml 1, 10 - Kicml 1 - CM-1 - 1, a - C, cml 1, 20 - C, cml 1,	C. C. 1 OF COMPANIENTY J. R. R. R. R. R. R. R. R. R. R. R. R. R.	C. C. (OF - 0904_0090) R(0) X(00) 0.1 - X(00) Q(00) (- 0004_0090) (- 00090 0.1500) (- 0009000) (- 0009000) (- 0009000) (- 0009000) (- 0009000) (- 0009000) (- 0	1 1 1 1 1 1 1 1 1 1			1305 1305 1305 1305 1305 1315	1 1 1 1 1 1 1 1 1 1	1 2505 - 13421 1 2505 - 1 2505	C. C. (OF - 0904_0090) R(0) X(00) 0.1 - X(00) Q(00) (- 0004_0090) (- 00090 0.1500) (- 0009000) (- 0009000) (- 0009000) (- 0009000) (- 0009000) (- 0009000) (- 0	7 2555 - 13-27 1 2550	C. C. 1 OF COMPANIENTY J. R. R. R. R. R. R. R. R. R. R. R. R. R.	C, C, 105 • Own_introl.) K(m) K(m) 01 • K(m) Q(m) 1 3 • Q(m) (m) 1 10 • Q(m) 1
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9, 1(3 1 2011 1 1000 1 10000 1 10000 1 100000 1 100000 1 1 10000 1 1 10000 1 1 10000 1 1 10000 1 1 10000 1 1 10000 1 1 10000 1 1 10000 1 1 100000 1	C. C. 106 - CM-4 (mod.) K(B) K(cm) 0.1 - K(cm) a_(cm) 7 3 - C_4(cm) a_(cm) 7 3 - C_4(cm) A_5(cm) 7 7 - C_4 C_5 C_5 C_5 C_5 C_5 C_5 C_5 C_5 C_5 C_5	C. C. 1 OF COMPANY REPORT OF X (cm) OI - X (cm) A (cm) 1 3 - A (cm) A (cm) 1 70 - A (cm) X 1 2 - A - Tame 1 . SOTI 1 - (A 1 . 3 . 4 . 4 . 4 . 4 . 4 . 4 . 4 . 4 . 4	7 2505 - 13472 1 2505 - 15675 - 13175 - 13175 - 13175 - 13175 1 2 2 4 5 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 2355 - 13472 13-255 - 05110 1 2 21320 0 1 2 2 2 2 21320 0 1 2 21320 0 1 2 2 2 2 21320 0 1 2 2 2 21320 0 1 2 2 2 21320 0 1 2 21320 0 1 2 2 2 21320 0 1 2 2 2 21320 0 1 2 2 2 21320 0 1 2 2 2 21320 0 1 2 2 2 21320 0 1 2 2 2 21320 0 1 2 2 2 21320 0 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	(Squarma 3-1)	(Squarma 3-1)	Comment of C. Comment of C	1 2355 - 13472 13-255 - 05110 1 2 21320 0 1 2 2 2 2 21320 0 1 2 21320 0 1 2 2 2 2 21320 0 1 2 2 2 21320 0 1 2 2 2 21320 0 1 2 21320 0 1 2 2 2 21320 0 1 2 2 2 21320 0 1 2 2 2 21320 0 1 2 2 2 21320 0 1 2 2 2 21320 0 1 2 2 2 21320 0 1 2 2 2 21320 0 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	1 1 1 1 1 1 1 1 1 1	7 2505 - 13472 1 2505 - 15675 - 13175 - 13175 - 13175 - 13175 1 2 2 4 5 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 3755 - 1, 12 - 10 - 10 - 10 - 10 - 10 - 10 - 10 -	C. C. 1 OF COMPANY REPORT OF X (cm) OI - X (cm) A (cm) 1 3 - A (cm) A (cm) 1 70 - A (cm) X 1 2 - A - Tame 1 . SOTI 1 - (A 1 . 3 . 4 . 4 . 4 . 4 . 4 . 4 . 4 . 4 . 4	C. C. 1956 - C. 1956 - C. C. 1956 - C. C. 1956 - C. C. 1956 - C. C. 1956 - C. C. 1956 - C. C. 1956 - C. C. 1956 - C. C. 1956 - C. C. 1956 - C. C. C. C. C. C. C. C. C. C. C. C. C.
9, 1(3 - 507 (1 0509 - 3) 2 - 1129 1 - 5000 1 0000 1 1500 1 - 1000 1 0000 1 1500 1 - 1000 1 0000 1 1500 1 - 1000 1 0000 1 1500 1 - 1000 1 0000 1 1500 1 - 1000 1 0000 1 1500 1 - 1000 1 0000 1 1500 1 - 1000 1 0000 1 0000 1 1500 1 - 1000 1 0	C. C. LOS - CW-LINDA KIR King OI - King a.cm / 3 - C. C. OS - CW-LINDA KIR King OI - KING A.CM / 3 - C. C. OS - CW-LINDA KIR KING KING CONTROL OF CONTROL	C, C, 1 OF C OW_TWY) R(D, X(cm) 0.1 - X(cm) 0.1 - X(cm) 1.3 - 0.4(cm) 0.1 - 0.4(cm) 0.	C, C, 10F - 00H _m (mpd) A(t) X(cm) 01 - X(cm) a(cm) 1 3 - a(cm) 1 70 -	1 2.855 • 13.427 13.627 2.0000 • 667110 1.21328 1.21328 1.21328 1.2232 1.2332			Comment C, C, Comment C, C, Comment C, C, Comment C, C, Comment C, C, Comment C, C, Comment C, C, Comment C, C, Comment C, C, Comment C, C, Comment C, C, Comment C	1 2.855 • 13.427 13.627 2.0000 • 667110 1.21328 1.21328 1.21328 1.2232 1.2332	1 2755 - 13472 13-255 - 13427 1 2000 - 15677 4 13127 01 - 31328 - 31328 1 21328 1 20 - 4468 13127 1 2 0 - 4468 13127 1 2 0 - 4468 13127 1 2 0 - 4468 13127 1 2 0 - 4468 13127 1 2 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	C, C, 10F - 00H _m (mpd) A(t) X(cm) 01 - X(cm) a(cm) 1 3 - a(cm) 1 70 -	7 250 - 124	C, C, 1 OF C OW_TWY) R(D, X(cm) 0.1 - X(cm) 0.1 - X(cm) 1.3 - 0.4(cm) 0.1 - 0.4(cm) 0.	C, C, 195 - CM-1771 X(cm) (1 - X(cm) 0.1 - X(cm) 0.1 - X(cm) 1.3 - Q(cm) (1.70 - 1.4cm) (1.70 -
5, 1(3 : 5007 1.0600 1.00	C. C. 105 - 0.04_fmp3/ Kfg/ Kfm/ 01 - Xfm/ a_fmy/ 1 3 - a_fm/ 120 / 20 - 144m/ K / 2 - 120 / 2 -	C, C, 10F • 694_cmpt, R(en) (1 • X(en) Q, 1 • X(en) Q, en)	C, C, 10F - 00H _m (mpd) R(m) X(m) 01 - X(cm) a_(m) a_(m) a_(m) 1 3 - a_(m) a_(m) 1 70 - a_(m) 1 70 - a_(m) 1 71 - a_m - T _m (m) 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1	Table Tabl	Table Tabl	Total 1.5 1.	1 1 1 1 1 1 1 1 1 1	1 2.055 - 13477 13-050 - 0-0710	C, C, 10F - 00H _m (mpd) R(m) X(m) 01 - X(cm) a_(m) a_(m) a_(m) 1 3 - a_(m) a_(m) 1 70 - a_(m) 1 70 - a_(m) 1 71 - a_m - T _m (m) 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	C, C, 10F • ON_MENTON R(m) X(m) 01 • X(m) Q1 m Q(m) 1 0 • Q(m) Q(m) 1 70 • Q(m) Q(m) 1 70 • Q(m) X 1 2 • Q • Temi 1 1 500T 1 • (4 4 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	C, C, 10F • 694_cmpt, R(en) (1 • X(en) Q, 1 • X(en) Q, en)	C. C. 155 - COM-STOPEN ROLL K(cm) 0.1 - X(cm) 0.1 - X(cm) 0.1 - X(cm) 0.1 - X(cm) 0.1 - X(cm) 1.1 - X(cm) 0.1 - X(cm) 1.1 - X(cm) 0.1 - X(cm) 1.1 - X(
\$\frac{k}{5}\$, \$\frac{l}{l}\$ \$\frac{1}{2}\$, \$\frac{k}{l}\$ \$\frac{1}{2}\$, \$1	C. C. 108 - 0.04_mm/J Kill X(cm) 01 - X(cm) 4(cm) 1 - 0.04(cm) 5 - 0.0	C, C, 1 OF 6 OM_CHEVING K(eth) 0.1 s K(eth) 0.1 s K(eth) 2 O. (first) 0.2 O. (first) 1.25 O	C. C. 10F - 0.04 Kim Kim J - 1. Kim C - 1. K		Table Tabl	Table Tabl	Table Tabl		1 2505 - 1547 1575 - 1580 1 2000 - 1547 1 2000 1 2000 1547 1 2000 1547 1 2000 1547 1 2000 1547 1 2000 1547 1 2000 1547 1 2000 1 200	C. C. 10F - 0.04 Kim Kim J - 1. Kim C - 1. K	C, C, 10F • ON_MENTON R(0) X(00) 0.1 • X(00) 0.1 • X(00) 0.10 • X(00)	C, C, 1 OF 6 OM_CHEVING K(eth) 0.1 s K(eth) 0.1 s K(eth) 2 O. (first) 0.2 O. (first) 1.25 O	C, (c, 105 o OM_almyl) R(B) X(cm) 0.1 s X(cm) a, cm
\$\frac{k_{\text{0}}}{2} \frac{k_{\text{0}}}{2} \frac{k_{\text{0}}}{2} \frac{k_{\text{0}}}{2} \frac{(600 \text{0})}{1000000}	7, 525 - 13.27 1 25 - 0.04 (FW) 1 1 1 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2	C, C, 10F • 694_cmpd. R(B) X(cm) 0.1 • X(cm) 0.1 • X(cm) 0.2 cm) 1.3 • G(cm) 1.70 •	7 255 - 124 - 2000 - 15450		Table Tabl	Table Tabl	Table Tabl		1 2555 - 1547 - 1548 -	7 255 - 124 - 2000 - 15450	C. C. 10F • ON_MENTOV K(e) X(ev) 0.1 • X(ev) 0.1 • X(ev) 0.1 • X(ev) 0.2 • Qu) Q. (ev) 1.2 • Q. (ev) 1.20 • Qu) Q. (ev) 1.20 • Q	C, C, 10F • 694_cmpd. R(B) X(cm) 0.1 • X(cm) 0.1 • X(cm) 0.2 cm) 1.3 • G(cm) 1.70 •	C, C, 195 o OM_minply R(B) X(cm) 0.1 • X(cm) 0.1 • X(cm) 0.1 • X(cm) 1.3 • 0.4(cm) 0.1 • X(cm) 1.3 • 0.4(cm) 0.1 • X(cm) 1.3 • 0.4(cm) 0.1 • X(cm) 0.1
\$4. 1 3 1 SORT (0 1989 1 13157) 1 1 100000 1 100000 3 19875 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	7, 2, 19, 27 13, 28 13,	C. C. 1 OF 6 Wingfired M (Kern) 0.1 s. X(ern) 0.1 s. X(ern) 0.1 s. X(ern) 1.2 s. 0.4 (ern) 1.2 s. 0.4 (ern) 1.20 s. 0.4 (ern) 1.20 s. 0.4 (ern) 1.2 s. 0.4 (ern	1 200 - 100						1 2005 - 1127 1207 - 1208 12090 - 12090 1 1127 1	1 200 - 100	C, C, 10F - 004_(mpt) R(0) X(m) 0.1 - X(m) 0.1 - X(m) 0.0 0.0	C. C. 1 OF 6 Wingfired M (Kern) 0.1 s. X(ern) 0.1 s. X(ern) 0.1 s. X(ern) 1.2 s. 0.4 (ern) 1.2 s. 0.4 (ern) 1.20 s. 0.4 (ern) 1.20 s. 0.4 (ern) 1.2 s. 0.4 (ern	C. 1 OF 6 OF 1857 1 (4) X (47)
8, 1(2 i SORT (0.0000 i 13132) 10 115777 1 1000000 3 300755 10 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	7, C, 1 OF ** OF ** OF ** OF ** OF ** N(cm) 0.1 ** X(cm)	C, C, 1 OF C ON MARKEN KEN OI - KEN OI	C. (C. 10F - 0044 NGW) K(cm) 0.1 - K(cm) 0.10 - K(cm) 0.1				Total Tota		1 1 1 1 1 1 1 1 1 1	C. (C. 10F - 0044 NGW) K(cm) 0.1 - K(cm) 0.10 - K(cm) 0.1	C. C. 10F • 00M_mmpdJ R(0) X(cm) 0.1 • X(c	C, C, 1 OF C ON MARKEN KEN OI - KEN OI	C. C. 1 OF 6 OF Man Man Man Man Man Man Man Man Man Man
8, 1(2 i 508Th-10 i 7.2777 100000 1,00000	C. 1. OF ** ON_*(my) X(m)	C. C. 1 OF COMPARING N(cm) 0.1 o. N(cm) a.(cm) 1.3 o. a.(cm) a.(cm) 1.5 o. a.(cm) a.(cm) 1.70 o.	C. C. LOF - COMMENTED LATER CONTROL - COMMENTED LATER CONTROL - COMMENT LATER	1 1 1 1 1 1 1 1 1 1				1 1 1 1 1 1 1 1 1 1	1 2505 a 13470 1 2505 a 12505 b 12505 a 12505	C. C. LOF - COMMENTED LATER CONTROL - COMMENTED LATER CONTROL - COMMENT LATER	C. C. 1 OF 0 ONL- (1974) Kigh Kigh O 1 1 Kigh O 1 2 (cm) C	C. C. 1 OF COMPARING N(cm) 0.1 o. N(cm) 0.1 o. N(cm) 1.3 o. a, (cm) 1.3 o. a, (cm) 1.7 o. a, (cm	C. C. 1 OF * C. Man, May 1, R. M. M. M. M. M. M. M. M. M. M. M. M. M.
5, 1(2 i SONTR-10 1000000 100000 100000 100000 100000 100000 100000 1000000 100000 100000 100000 100000 100000 100000 1000000 100000 100000 100000 100000 100000 1000000 100000 100000 100000 100000 100000 100000 100000 10000	C. C. 108 - CM_armyl Kill Kichl O1 - Kichl O1 - Kichl Acid V 3 - Calch Can V 75 - Can V 4 - Can V 7 - Can	C. C. 1 OF COMPANY REPLY REPLY 0.1 • X (cm)	(2) (2) (1) (2) (2) (1) (2) (2) (1) (2) (2) (3) (4) (4) (4) (4) (5) (6) (7) (7) (7) (7) (8) (8) (7) (7) (7) (8) (8) (7) (8) (8) (8) (8) (8) (8) (8) (8) (8) (8	1 1 1 1 1 1 1 1 1 1				1 1 1 1 1 1 1 1 1 1	1 3755 - 13470 1 3750 1 7000 - 346575 4 11127 0 1 1 11127 1 3 11127 1 70 - 0.000 1 11127 1 70 - 0.000 1 11127 1 70 - 0.000 1 11127 1 7000 1 11127 1 7000 1 11127 1 7000 1 11127 1 7000 1 11127 1 7000 1 11127 1 7000 1 11127 1 7000 1 11127 1 7000 1 11127 1 7000 1 11127 1 7000 1 11127 1 7000 1 11127 1 7000 1 11127 1 7000 1 11127 1 7000 1 11127 1 7000 1 11127 1 7000 1 11127 1 7000 1 11127 1 7000 1 11127 1 7000	(2) (2) (1) (2) (2) (1) (2) (2) (1) (2) (2) (3) (4) (4) (4) (4) (5) (6) (7) (7) (7) (7) (8) (8) (7) (7) (7) (8) (8) (7) (8) (8) (8) (8) (8) (8) (8) (8) (8) (8	C. C. 1 OF - CONGLING X(CO) 0.1 - X(CO) Q(CO) 1 - Q(CO)	C. C. 1 OF COMPANY REPLY REPLY 0.1 • X (cm)	C, C, 105 - 0.04-1873 17.05 - 0.04-1874 1.05

S & S Infinite Group, Inc. - DBA Downtown 66 2016-1089
Marine Ass careations
The Company of West of World Society of West of W

Sen Sen A	Sample C. * (sol contamention at onothing point) Location 1.(Equation 5.17)	GWm - C, I	Comerton: 1 foot = 30 46 cm	R-16: 9, # 0.10 * X	R-17: 0, 0 0,/3		R-18: 9-9,770	((°o. છ/)) • .t ws	Tem T . (1.50RT) . (4.1.0
l	3	C. / DF GW=(mg/L)	X(R) X (cm)	0.1 s X (cm) Q, (cm)	o, (cm) ,	o (cm)	Q, (cm) / 70 · Q, (cm)	X / 2 .	• Tomil 1 · SORT 1 · (4 : A : Q)/ U • Tem2
WC.1	1 146 / 4411 • 33,097	33 (9) / 20 000 • 1.63417	6 243.84	0.1 1 243.64 0 24.384	24384 / 3	0,128 2	. 8,128 24,384 / 20 . 1,2192 243 84 /	2 24384 •	8 11 . SORTI 1 -(4 . 0.000 c 24384 1/ 0.69120 1- 40,1830
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Sample						ERF(p,)	ERF(P)	C	
Š		P - 8, /(4 · SORTIA, · XI)	- 1	No. 2/2 - 20M		Section 742 APPENDIX C:		- 1	
	8, /(4 : SORT	(o = x))• B	3	. 2 : 60RT (a,	g . x ≫. P ₂	Tethe	*	ERFOR A ERFORM	
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S & S Infinite Group, Inc. - DBA Downtown 66 2016-1089
Main tel R-33 Calkidation
TOTAL XTELERS MAIN FOR VERTICAL SOIL MODELING AND R-25 MODELING OF VERTICAL MODELED SOIL (Attachment A)

Sample	C* = (10)	contaminani / (Equation	ion at mod	deling point)		GW _™ •	C_ / DF		1 10000	ersion: 30 48 cm		R-16: c	- 0.10 °)	,		R-17	l: a,•a,1:	,		R-1	8: a, = a,/	20			n 1°= PC/						Tem 2" =	(1 - SQR	ηι • (4 · 4	· 4)/(V))			
				۵.		/ DF	•	e GW _{eq} (mg/L)	X (0)	X (cm)	0,1	2 X	(cm)	e, (tm)	Q. (CIT)	-	3	• 9(cm) a,	(cm) /	20	• a _e (cm)	X	/ 2		4	• Tem1	1 .	SORT	, ,	(4	•	λ .	۵,)/ U	<u> </u>	Term 2*
									L																												-
beckfill 3	39	/ 54	69 •	7,131	7.131	/ 20	8	0.35653																				-									
	618	5.4	169_ •	149,196	149.198	/ 20	<u> </u>	• 7,45978			-								_									-									-
MC-3	258_	/ 5.4	(89 -	47,172	47,172	/ 20	900 4	• 2.35861			-												_					-									
SB-Z6A	8.43		69 •	1,176	1,176	/· 20	<u> </u>	0,05878	_										_				_		_			+									-
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Sample				В	5, / (4 *	SORTIO	۲.×D								ß	5-8,/0	2 · 6QR1	η _α ·χ					ERF(B ₁) Section 742.	ERF(P ₂) APPENDOLC: ±0 G					= a cat(β ₁				
	8	- 11	-		SORT (-		×	; »·	•	ß.	Š,	11	2		SOR	T (۹.		×)) •	B	Tel	de G	C	10	476	 7-77	■ ERF(B.) 1	RF(P ₂)	•	ą
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backfill 3	-																								0.35653								
WC-1																									7,45978								
WC-3							-																		2.35881								
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Semp	Semple 14 (tool contamendon of modernig point)		1 foot = 30.48 cm	•	R-17: q • q/3		R-18: q. = q./20	Tem 1 (K/C. a.)	
	<u>6.</u>	3	X (ft) X (cm)	5	a, (cm) / 3	• Q, (cm) Q, (cm)	/ 70 ° Q, (cm)	х / 2 х д	• Tem 1'1 . 6087[1 +(4 • 1 2 0,)/ U • Tem 2"
=	80.9 / 8544 - 11,877	601690 - 000 02 / 12611	14 428.72	ą	4807 / 3	• 14.724 47.83	/ 70 • 21230	478.72 / 2 3 42.672	1
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Sample						(4) ERF(B.)		C C	
Location		β, • 5, / (4 · SΩRTIα, · X)		β, • S ₄ / (2 · SΩRT)α, · χη		Section 742 APPEND		20-1-10-1-10-10-10-10-10-10-10-10-10-10-1	
	* · · · · · · · · · · · · · · · · · · ·	SGRT (a, x))• β,	3,	2 1 SORT (P.	SORT (a, r X))* B)	Table G	C	("-" "-") " ERF(P.) " ERF(P.)	, mor
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Illinois Enviromental Protection Agency Leaking Underground Storage Tank Program SSL Input Parameters for Use with Tier 2 Calculations

A.	Site	Iden	tifica	ition

IEMA Incident # (6- or 8-digit):	2016	6-1089	IEPA LPC # (10	-digit):	1430560114
Site Name: S & S Infinite Grou	p, Inc DBA [Downtown 66			
Site Address (not a P.O. Box):	400 North Ea	ast Adams			
City: Peoria	_ County:	Peoria	•	Zip Code:	61603
Leaking UST Technical File			·		
Tier 2 Calculation Information					
Equation(s) Used (ex: S12,S17,S	S28): <u>S5,6,</u>	7,8,9,10,17,18,1	9,20,21,22,24		
Contact Information for Individua	al Who Perforn	ned Calculations	:		
CWM Company, Inc.,				7	
Land Use: Residential		Soil Typ	e: <u>Sand</u>		
Groundwater: X Class I		Class II	o		
Mass Limit: . Yes	No	If Yes, then Spe	ecify Acreage:		
 Mass Limit Acreage other than Failure to use site-specific para Maps depicting source width, p Inputs must be submitted in the 	ameters where lume dimension	allowed could a	ffect payment from		37 n nd 11 133

AT (ingestion)	= Residential = 6	yr
	Çon. Worker = 0.115	yr
AT (inhalation)	= Residential = 30	yr
	Con. Worker = 0.115	yr
AT _c	= : 70	yr
BW	= Res. (NonCarcinogen) = 15	kg
	Res. (Carcinogen) = 70	kg
	Con. Worker = 70	kg
C _{sat} =	Benzene = 1322.012	mg/kg
	. Toluene = 1168.824	mg/kg
	Ethylbenzene = 749.906	mg/kg
	Total Xylenes = 601.626	mg/kg
	MTBE = 10221.038	mg/kg
	Naphthalene = 212.157	mg/kg
	• ••	mg/kg
	;	mg/kg
	•	mg/kg
	<u> </u>	mg/kg

d			3.048	
d _a			3.040	m
₫s		=	3.048	m
DA	=	Benzene = 0	.000197775126141909	cm ² /s
		Toluene	e = 7.67193169192489E-05	cm ² /s
		Ethylbenzen	e = 3.95299980402237E-05	cm²/s
		Xylene:	s = 2.61358477517448E-05	cm ² /s
		MTBE	E = 8.82257978856706E-05	cm ² /s
		Naphthalen	e = 1:22914273421043E-06	cm ² /s
				cm²/s
				cm ² /s
				cm ² /s
			~ .	cm ² /s
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157-341 (20) (3) 158-7**6**, 137-7 (3) 173-341 (2)

1.135 July

Incider	nt #	201	16-1	1089
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Incident # 2016-108	39_	<u> </u>	
C _w	=	Benzene = 0.1	mg/L
		Toluene = 20	mg/L
		Ethylbenzene = 61.757	mg/L
		Total Xylenes = 1093.865	mg/L
		MTBE = 0.28	mg/L
		Naphthalene = 19.162	mg/L
		;	mg/L
))	mg/L
			mg/L
		•	mg/L
d	=	3.883	m
	_	Residential = 30	
ED (inhalation of	-	4	yr
carcinogens)		Con. Worker = 1	yr
ED (ingestion of	=	Residential = 6	yr
noncarcinogens)		Con. Worker = 1	yr
ED (inhalation of	=	Residential = 30	yr
noncarcinogens)		Con. Worker = 1	yr
ED (ingestion of	=	Residential = 30	yr
groundwater)		Con. Worker = 1	yr
ED _{M-L}	=	. 70	yr
EF	=	Residential = 350	d/yr
		Con. Worker = 30	d/yr
F(x)	=	0.194	unitless
f _{oc}	=	0.0136	g/g
GW _{obj}	=	: Benzene = 0.005	mg/L
		Toluene = 1	mg/L
		Ethylbenzene = 0.7	mg/L
	•	Total Xylenes = 10	mg/L
		MTBE = 0.07	mg/L
		Naphthalene = 0.14	mg/L
			mg/L
		*	mg/L
		•	mg/L
			mg/L
H	=	Benzene = 0.23	unitless
		Toluene = 0.271	unitless
		Ethylbenzene = 0.324	unitless
		Total Xylenes = 0.271	unitless
		. MTBE = 0.0241	unitless
		Naphthalene = 0.0198	unitless
		•	unitless
· ·		·	unitless
		•	unitless
			unitless
<u> </u>	=	0.02	m/m
<u> </u>	=	0.3	m/yr
I _{M-L}	=	0.18	m/yr
IF _{soil-adj}	=	. 114	(mg-yr)/(kg-d)
IR _{soil}	=	Residential = 200	mg/d
, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		•	
		Con. Worker = 480	mg/d

D _i	=	Benzene = 0.088	cm ² /s
-1		Toluene = 0.087	_
	, •	Ethylbenzene = 0.075	_
	:	Total Xylenes = 0.0735	_
		MTBE = 0.102	_
		Naphthalene = 0.0000075	٥.
			cm²/s
		***	cm ² /s
,		· . .* #	cm²/s
			cm²/s
D _w	=	Benzene = 0.0000102	2.
,		Toluene = 0.0000086	•
		Ethylbenzene = 0.0000078	_
		Total Xylenes = 0.00000923	_
		MTBE = 0.000011	^
		Naphthalene = 0.0000075	2
		,	cm²/s
			cm²/s
		· · · · · · · · · · · · · · · · · · ·	cm²/s
		**************************************	cm²/s
DF	=	1.669686986	unitless
ED (ingestion of	=	4 17 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	yr ·
carcinogens		Con. Worker = 1	yr
K _{oc}	=	Benzêne = 50	
	÷	Toluene = 158	
	٠	Ethylbenzene = 320	
		Total Xylenes = 398	
		MTBE = 11.5	
		Naphthalene = 500	
		9 2 %	cm³/g or L/kg cm³/g or L/kg
		> 0 · · · · · · · · · · · · · · · · · ·	cm /g or L/kg cm ³ /g or L/kg
		₹ <u>0</u> 38	cm ³ /g or L/kg
K _s	=	1830	m/yr
L	=	12.192	m
PEF	=	•	m³/kg
PEF'	=	, · . · ·	m³/kg
Q/C (VF equations)	=	Residential = 68.81	(g/m ² -s)/(kg/m ³)
l ·		Con. Worker = 85.81	
L			. (g/m²-s)/(kg/m³)
Q/C (PEF equations)	÷.		(g/m²-s)/(kg/m³)
RfC (mg/m ³)	<u></u>		(g/m²-s)/(kg/m³) ochronic
RfC (mg/m³) Benzene	= -	0.03	(g/m²-s)/(kg/m³) ochronic 0.08
RfC (mg/m³) Benzene Toluene	·II. II II. I	0.03 *** <u>#</u>	(g/m²-s)/(kg/m³) ochronic 0.08 5
RfC (mg/m³) Benzene Toluene Ethylbenzene	. II. II. II. II. II.	0.03 李道法 5 写题第 1 必要等	(g/m²-s)/(kg/m³) ochronic 0.08 5
RfC (mg/m³) Benzene Toluene Ethylbenzene Total Xylenes		0.03	(g/m²-s)/(kg/m³) ochronic 0.08 5 9 0.4
RfC (mg/m³) Benzene Toluene Ethylbenzene Total Xylenes MTBE		0.03	(g/m²-s)/(kg/m³) ochronic 0.08 5 9 0.4 2.5
RfC (mg/m³) Benzene Toluene Ethylbenzene Total Xylenes		0.03	(g/m²-s)/(kg/m³) chronic 0.08 5 9 0.4 2.5 0.003
RfC (mg/m³) Benzene Toluene Ethylbenzene Total Xylenes MTBE		0.03	(g/m²-s)/(kg/m³) ochronic 0.08 5 9 0.4 2.5 0.003
RfC (mg/m³) Benzene Toluene Ethylbenzene Total Xylenes MTBE		0.03 (1) (1) (1) (1) (1) (1) (1) (1) (1) (1)	(g/m²-s)/(kg/m³) pchronic 0.08 5 9 0.4 2.5 0.003 NA NA
RfC (mg/m³) Benzene Toluene Ethylbenzene Total Xylenes MTBE		0.03 (1) (1) (1) (1) (1) (1) (1) (1) (1) (1)	(g/m²-s)/(kg/m³) chronic 0.08 5 9 0.4 2.5 0.003 NA NA NA
RfC (mg/m³) Benzene Toluene Ethylbenzene Total Xylenes MTBE		0.03	(g/m²-s)/(kg/m³) pchronic 0.08 5 9 0.4 2.5 0.003 NA NA
RfC (mg/m³) Benzene Toluene Ethylbenzene Total Xylenes MTBE		0.03	(g/m²-s)/(kg/m³) chronic 0.08 5 9 0.4 2.5 0.003 NA NA NA
RfC (mg/m³) Benzene Toluene Ethylbenzene Total Xylenes MTBE		0.03	(g/m²-s)/(kg/m³) chronic 0.08 5 9 0.4 2.5 0.003 NA NA NA
RfC (mg/m³) Benzene Toluene Ethylbenzene Total Xylenes MTBE		0.03	(g/m²-s)/(kg/m³) chronic 0.08 5 9 0.4 2.5 0.003 NA NA NA
RfC (mg/m³) Benzene Toluene Ethylbenzene Total Xylenes MTBE		0.03	(g/m²-s)/(kg/m³) chronic 0.08 5 9 0.4 2.5 0.003 NA NA NA
RfC (mg/m³) Benzene Toluene Ethylbenzene Total Xylenes MTBE		0.03	(g/m²-s)/(kg/m³) chronic 0.08 5 9 0.4 2.5 0.003 NA NA NA
RfC (mg/m³) Benzene Toluene Ethylbenzene Total Xylenes MTBE		0.03	(g/m²-s)/(kg/m³) chronic 0.08 5 9 0.4 2.5 0.003 NA NA NA
RfC (mg/m³) Benzene Toluene Ethylbenzene Total Xylenes MTBE		0.03	(g/m²-s)/(kg/m³) Dehronic 0.08 5 9 0.4 2.5 0.003 NA NA NA NA
RfC (mg/m³) Benzene Toluene Ethylbenzene Total Xylenes MTBE		0.03	(g/m²-s)/(kg/m³) Dehronic 0.08 5 9 0.4 2.5 0.003 NA NA NA NA

(.. **4**) ; m 30 °. · 16

Incident # 2016-1089

IR _w		=	Residential = 2	L/d
K =			31.536	m/yr
K _d (non-ionizing =			Benzene = 0.68	cm²/g or L/kg
organcis	s)		Toluene = 2.1488	cm²/g or L/kg
			Ethylbenzene = 4.352	cm²/g or L/kg
		Т	otal Xylenes = 5.4128	cm²/g or L/kg
			MTBE = 0.1564	cm²/g or L/kg
			Naphthalene = 6.8	cm²/g or L/kg
				cm²/g or L/kg
				cm²/g or L/kg
				cm²/g or L/kg
				cm²/g or L/kg
K _d (ionizing or		=		cm ² /g or L/kg
K _d (inorga		=		cm²/g or L/kg
VF'	=		Jenzene = 477.089	m³/kg
		Tolu	ene = 766.007	m³/kg
		Ethylb	enzene = 1067.141	m³/kg
			(ylenes = 1312.403	m³/kg
		MT	BE = 714.311	m³/kg
	Napl	nthale	ne = 6051.797	m³/kg
	•		•	m³/kg
			:	m ³ /kg
				m ³ /kg
			<i>:</i>	m ³ /kg
VM _{M-L}			#VALUEI	m³/kg
A IAIW-F	_			m³/kg
			#VALUE!	
			#VALUE!	m³/kg
			#VALUE!	m³/kg
			#VALUE!	m³/kg
	•		#VALUE!	m³/kg
			•	m³/kg
				m³/kg
			:	m³/kg
			<u>.</u>	m³/kg
VF' _{M-L}	=		#VALUE!	m³/kg
(VI-L			y #VALUE!	m³/kg
			· •	m³/kg
			#VALUE!	
			#VALUEI	m³/kg
			*#VALUE!	m³/kg
			, #VALUEI	m³/kg
			4	m³/kg
			•	m³/kg
				m³/kg
				m ³ /kg
η		=	0.201	L _{pore} /L _{soil}
θ _a		=	0.109	Lair/Lsoil
				<u>un -avil</u>

RfD _o mg/(kg-d)	-	Chronic Subchronic
Benzene	=	0.004 0.012
Toluene	=	0.08
Ethylbenzene	=	0.1 0.05
Total Xylenes	=	0.2 0.4
MTBE	=	0.01
Naphthalene	=	0.02 0.6
	=	0.6
	=	, NA
	=	NA NA
	=	NA NA
S	=	Benzene = 1800 mg/L
		Toluene = 530 mg/L
		Ethylbenzene = 170 mg/L
	• • • • • • • • • • • • • • • • • • • •	Total Xylenes = 110 mg/L
		MTBE = 51000 mg/L
		Naphthalene = 31 mg/L
		mg/L
		mg/L
,		mg/L
		mg/L
SF _o	= '	Benzene = 0.055 (mg/kg-d) ⁻¹
		Toluene = NA (mg/kg-d) ⁻¹
		Ethylbenzene = 0.011 (mg/kg-d) ⁻¹
l .	•	Total Xylenes = NA (mg/kg-d) ⁻¹
		MTBE = NA (mg/kg-d) ⁻¹
		Naphthalene = NA (mg/kg-d) ⁻¹
		- (mg/kg-d) ⁻¹
		(mg/kg-d) ⁻¹
i		(mg/kg-d) ⁻¹
	•	(mg/kg-d) ⁻¹
T	=	Residential = 9.5E08 s
'	7. •	Con. Worker = 3.6 x 10 ⁶ S
т т	=	
T _{M-L}		
THQ	=	i dinaess
TR	=	1.00E-06 unitless
U _m	=	4.69 m/s
- 101		
	=	Benzene = $7.8 \times 10^{-6} (\mu g/m^3)^{-1}$
URF	= "	Benzene = 7.8×10^{-6} (µg/m ³) ⁻¹ 11.32 m/s
URF U _t	= = "	11.32, m/s
URF U _t V	= =	11.32 m/s 0.5 % unitless
URF U _t	= =	11.32, m/s 0.5 4 unitless Benzene = 6214.753 m³/kg
URF U _t V	= = =	11.32, m/s 0.5 . unitless Benzene = 6214.753 m³/kg Toluene = 9978.318 m³/kg
URF U _t V	= = =	11.32, m/s 0.5 unitless Benzene = 6214.753 m³/kg Toluene = 9978.318 m³/kg Ethylbenzene = #3901.009 m³/kg
URF U _t V	= = = = = = = = = = = = = = = = = = = =	11.32, m/s 0.5 unitless Benzene = 6214.753 m³/kg Toluene = 9978.318 m³/kg Ethylbenzene = 17095.878 m³/kg Total Xylenes = 17095.878 m³/kg
URF U _t V	= = =	11.32, m/s 0.5 unitless Benzene = 6214.753 m³/kg Toluene = 9978.318 m³/kg Ethylbenzene = 13901.009 m³/kg Total Xylenes = 17095.878 m³/kg MTBE = 9304.904 m³/kg
URF U _t V	= = = = = = = = = = = = = = = = = = = =	11.32, m/s 0.5 unitless Benzene = 6214.753 m³/kg Toluene = 9978.318 m³/kg Ethylbenzene = 13901.009 m³/kg Total Xylenes = 17095.878 m³/kg MTBE = 9304.904 m³/kg Naphthalene = 78833.093 m³/kg
URF U _t V	= = = = = = = = = = = = = = = = = = = =	11.32, m/s 0.5 unitless Benzene = 6214.753 m³/kg Toluene = 9978.318 m³/kg Ethylbenzene = 13901.009 m³/kg Total Xylenes = 17095.878 m³/kg MTBE = 9304.904 m³/kg Naphthalene = 78833.093 m³/kg
URF U _t V	= = = = = = = = = = = = = = = = = = = =	11.32, m/s 0.5 unitless Benzene = 6214.753 m³/kg Toluene = 9978.318 m³/kg Ethylbenzene = t3901.009 m³/kg Total Xylenes = 17095.878 m³/kg MTBE = 9304.904 m³/kg Naphthalene = 78833.093 m³/kg m³/kg
URF U _t V	= = = = = = = = = = = = = = = = = = = =	11.32, m/s 0.5 unitless Benzene = 6214.753 m³/kg Toluene = 9978.318 m³/kg Ethylbenzene = 33901.009 m³/kg Total Xylenes = 17095.878 m³/kg MTBE = 9304.904 m³/kg Naphthalene = 78833.093 m³/kg m³/kg m³/kg m³/kg
URF U _t V	= = = = = = = = = = = = = = = = = = = =	11.32 m/s 0.5 unitless Benzene = 6214.753 m³/kg Toluene = 9978.318 m³/kg Ethylbenzene = 3901.009 m³/kg Total Xylenes = 17095.878 m³/kg MTBE = 9304.904 m³/kg Naphthalene = 78833.093 m³/kg m³/kg m³/kg m³/kg m³/kg m³/kg m³/kg
URF U _t V	= = = = = = = = = = = = = = = = = = = =	11.32, m/s 0.5 unitless Benzene = 6214.753 m³/kg Toluene = 9978.318 m³/kg Ethylbenzene = 3901.009 m³/kg Total Xylenes = 1,7095.878 m³/kg MTBE = 9304.904 m³/kg Naphthalene = 78833.093 m³/kg m³/kg m³/kg m³/kg
URF U _t V	= 号*** = ******************************	11.32 m/s 0.5 unitless Benzene = 6214.753 m³/kg Toluene = 9978.318 m³/kg Ethylbenzene = 3901.009 m³/kg Total Xylenes = 17095.878 m³/kg MTBE = 9304.904 m³/kg Naphthalene = 78833.093 m³/kg m³/kg m³/kg m³/kg m³/kg m³/kg m³/kg
URF U _t V	=	11.32 m/s 0.5 unitless Benzene = 6214.753 m³/kg Toluene = 9978.318 m³/kg Ethylbenzene = 3901.009 m³/kg Total Xylenes = 17095.878 m³/kg MTBE = 9304.904 m³/kg Naphthalene = 78833.093 m³/kg m³/kg m³/kg m³/kg m³/kg m³/kg m³/kg
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URF U _t V	章 ・ ・ ・ ・ ・ ・ ・ ・ ・ ・ ・ ・ ・ ・ ・ ・ ・ ・ ・	11.32 m/s 0.5 unitless Benzene = 6214.753 m³/kg Toluene = 9978.318 m³/kg Ethylbenzene = 3901.009 m³/kg Total Xylenes = 17095.878 m³/kg MTBE = 9304.904 m³/kg Naphthalene = 78833.093 m³/kg m³/kg m³/kg m³/kg m³/kg m³/kg m³/kg
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URF U _t V	章 章 章 章 章 章 章 章 章 章	11.32 m/s 0.5 unitless Benzene = 6214.753 m³/kg Toluene = 9978.318 m³/kg Ethylbenzene = 3901.009 m³/kg Total Xylenes = 17095.878 m³/kg MTBE = 9304.904 m³/kg Naphthalene = 78833.093 m³/kg m³/kg m³/kg m³/kg m³/kg m³/kg m³/kg m³/kg
URF U _t V	章 章	11.32 m/s 0.5 unitless Benzene = 6214.753 m³/kg Toluene = 9978.318 m³/kg Ethylbenzene = 3901.009 m³/kg Total Xylenes = 17095.878 m³/kg MTBE = 9304.904 m³/kg Naphthalene = 78833.093 m³/kg m³/kg m³/kg m³/kg m³/kg m³/kg m³/kg m³/kg
URF U _t V	章 章 章	11.32 m/s 0.5 unitless Benzene = 6214.753 m³/kg Toluene = 9978.318 m³/kg Ethylbenzene = 3901.009 m³/kg Total Xylenes = 17095.878 m³/kg MTBE = 9304.904 m³/kg Naphthalene = 78833.093 m³/kg m³/kg m³/kg m³/kg m³/kg m³/kg m³/kg m³/kg
URF U _t V	章 章 章	11.32 m/s 0.5 unitless Benzene = 6214.753 m³/kg Toluene = 9978.318 m³/kg Ethylbenzene = 17095.878 m³/kg MTBE = 9304.904 m³/kg Naphthalene = 78833.093 m³/kg m³/kg m³/kg m³/kg m³/kg m³/kg m³/kg m³/kg

Incident # 2016-1089

θ,,	= :	0.092	Lwater/Lsoil
Ρυ	= ;	2.15	kg/l or g/cm ³
ρ _s	= :	2.69	g/cm ³
ρ _w	= ;	1	g/cm ³
1/(2b+3)	= :	0.09	unitless

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Illinois Enviromental Protection Agency Leaking Underground Storage Tank Program RBCA Input Parameters for Use with Tier 2 Calculations

A.	Site Identification			
	IEMA Incident # (6- or 8-digit):	2016-1089	IEPA LPC # (10-digit):	1430560114
	Site Name: S&S Infinite Group	, Inc DBA Downtown 66		
	Site Address (not a P.O. Box):	400 North East Adams		· ·
	City: Peoria	County: Peoria	Zip Code:	61603
	Leaking UST Technical File			
В.	Tier 2 Calculation Information			
	Equation(s) Used (ex: R12,R14,F	R26): R16, R17, R18,R19, R2	21, R22, R23, R24,R26	· · · · · · · · · · · · · · · · · · ·
	Contact Information for Individual	Who Performed Calculations:		
	CWM Company, Inc.,			
	Land Use: Residential_	So	il Type: Sand	•
	Groundwater: X Class I	Class II		
	Mass Limit: Yes X	No If Yes, then S	specify Acreage:	
	Objective from S17 used in R267	Yes X N	ło	
	If Yes, then	Specify C _{source} from S17	See Attached mg/L.	
	- Mass Limit Acreage other than		d up.	\$ *

- Maps depicting source width, plume dimensions, distance, etc. must also be submitted.
 Inputs must be submitted in the designated unit.

ΑT _c		70	yr
AT.		Residential = 30	yr
O'n	-	Con. Worker = 0.115	уг
BW	=	70	yr
Ceource	=	See Attached	mg/L
C _(x)	2	See Attached	mg/L
d	=	100	cm

Deir	=	See Attached	cm²/s
Dwater	=	See Attached	cm²/s
D _e eff	=	See Attached	cm²/s
ED	_	Residential = 30	yr
		Con. Worker = 1	yr
EF	=	Residential = 350	d/yr.
		Con. Worker = 30	d∕yr

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erf	=	See Attached	unitless	
f _{oc}	=	0.0136	g/g	
GW _{comp}	=	See Attached	mg/L	
GW _{source}	=	See Attached	mg/L	
H'	=	See Attached	cm3 _{este} /cm³	
i	=	0.02	cm/cm	
1	=	30	cm/yr	
IRair	=	20	m³/d	
	_	Residential = 100	mg/d	
	-	Con. Worker = 480	mg/d	
IR.,	=	Residential = 2	L/d	
K	=	8.640	cm/d	
		3153.600	cm/yr	
K _{oc}	=	See Attached	cm³/g or L/kg	
K _e (non-ionizing organics)	=	See Attached	cm³ _{water} /g _{sell}	
K _e (ionizing organics)	=	Not Applicable	cm³ _{water} /g _{sell}	
K ₆ (inorganics)	=	Not Applicable	cm ³ water/g _{soil}	
L _s	=	100	ст	
LF _{sw}	=	See Attached	(mg/L _{max})/(mg/kg _{cd})	
M	=	0.5	mg/cm ²	
Pe	=	6.9 · 10 ⁻¹⁴	g/cm²-s	
RAF _d	=	0.5	unitless	
a _x	=	See Attached	cm	
a _v	=	See Attached	cm	
a,	=	See Attached	cm	
λ	=	See Attached	q ₋₁	
π	=	3.1416		
· T	-	9.46 · 10 ⁸	s	

RAF _d (PNAs)	=	0.05	unitless
RAF _d (inorganics)	=	0	unitless
RAF.	=	1	unitless
RBSL _{air} (carcinoginic)	=	See Attached	µg/m³
RBSL _{air} (noncardnogínic)	=	See Attached	µg/m³
RfD _i	=	See Attached	mg/kg-d
SA	=	3,160	cm ² /d
S₀	=	200.0	cm
S _w	=	640.1	cm
SF,	=	See Attached	(mg/kg-d) ⁻¹
SF.	=	See Attached	(mg/kg-d) ⁻¹
THQ	=	1	unitless
TR	=	1.00E-06	unitless
U	=	0.6912	cm/d
U _{air}	=	225	cm/s
Ugw	=	3153.620	cm/y
VFp	=	3.97133E-12	kg/m³
VF _{samb}	=	See Attached	(mg/m ³ _{se})/mg/kg _{est} or kg/m
VF ₈₃	=	See Attached	kg/m3
W	=		cm
w	=	0.094	g _{water} /g _{soil}
δείτ	=	200	cm
δ _{gw}	=	200	····cm
θ _{as}	=	0.0479	cm ³ _{sir} /cm ³ _{soil}
θ _{ws}	=	0.2021	cm ³ cm ³ cm ³ eat
θτ	=	0.25	cm³/cm³ _{coll}
Ρδ	=	2.15	g/cm ³
ρ.,	=	1	g/cm ³
			• • • •

	H'	λ	Koc
Benzene	0.23	0.0009	50
Toluene	0.271	0.011	158_
Ethylbenzene	0.324	0.003	320
Total Xylenes	0.271	0.0019	398
MTBE	0.0241	0	11.5
Naphthalene	0.0198	0.0027	500
-			

		Benzene R26	Modeled G	roundwater fi	rom Vertical N	Modeled Soil		. **.
	C _{source} from					_	erf: S _w /(4 ·	erf: S_/(2
Location	S17 (mg/L)	C(x) (mg/L)	X (cm)	ax (cm)	a _y (cm)	az (cm)	√[a,·X])	√[a, · X])
backfill 3	0.093	0.005	1950.72	195.072	65.024	9.7536	0.47483982	0.88182975
WC-1	2.948	0.005	4541.52	454.152	151.384	22.7076	0.21509171	0.49786925
WC-3	0.666	0.005	3322.32	332.232	110.744	16.6116	0.29091523	0.64108327
SB-26A	0.026	0.005	1158.24	115.824	38.608	5.7912	0.71545561	0.99150109
SB-28C	0.002							
SB-29D	0.004					-		
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			Renzene R	26 Modeled (Groundwater		
Location	C(x) (mg/L)	X (cm)	a _x (cm)	a _y (cm)	a _z (cm)	erf: S,,/(4 · √[a,·X})	erf: S ₊ / (2 · √[a₂ · X])
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Toluene R26 Modeled Groundwater from Vertical Modeled Soils												
Location	C _{source} from S17 (mg/L)	C(x) (mg/L)	X (cm)	a _x (cm)	a _y (cm)	a, (cm)	erf: S _{**} / (4 · · · · · · · · · · · · · · · · · ·	erf: S _w / (2 ⋅ √(α ₂ · X())				
backfill 3	0.6711											
WC-1	13.8528	0.9515	213.36	21.336	7.112	1.0668	0.99999999	1				
WC-3	3.6502	0.6916	121.92	12.192	4.064	0.6096	1	1 .				
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	Toluene R26 Modeled Groundwater												
Location	C(x) (mg/L)	X (cm)	a _x (cm)	а _у (ст)	a, (cm)	erf: S _w / (4 ⋅ √[α _γ ⋅ X])	erf: S _* / (2 · √[a₂ · X])						
	 												
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	Ethylbenzene R26 Modeled Groundwater from Vertical Modeled Soils C _{source} from											
Location		C(x) (mg/L)	X (cm)	a _z (cm)	a _y (cm)	a² (cw)	erf: S _# / (4 ⋅ √[a _y · X])	erf: S _w / (2 √[a ₂ · XI)				
						1 2122						
WC-1	1.6549	0.6304	243.84	24.384	8.128	1.2192	0.99999963	1				
WC-3	0.5191											
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Location	C(x) (mg/L)	X (cm)	a _x (cm)	a _y (cm)	a _z (cm)	√[a,·X])	√[a₂ X])						
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	Total Xylenes R26 Modeled Groundwater from Vertical Modeled Soils													
Location	C _{source} from S17 (mg/L)	C(x) (mg/L)	X (cm)	a _x (cm)	a _y (cm)	a² (cw)	erf: S ₊ / (4 · √[a _y · X])	erf: S _* / (2 √[a₂ · X])						
backfill 3	0.3565	· ·		<u> </u>			 							
WC-1	7.4598													
WC-3	2.3586													
SB-26A	0.0588													
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			Total Xylenes	R26 Modele	d Groundwat	ter	
Location	C(x) (mg/L)	X (cm)	a _x (cm)	a _y (cm)	a _z (cm)	erf: S,, / (4 · · · \[a, · X\])	erf: S _w / (2 · √(a₁ · X])
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MTBE R26 Modeled Groundwater from Vertical Modeled Soils													
Location	C _{source} from S17 (mg/L)		X (cm)	a _x (cm)	a _y (cm)	a, (cm)	erf: S _∞ / (4 · √[α _r · X])	erf: S ₊ / (2 √(a₁ · XI)					
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MTBE R26 Modeled Groundwater											
Location	C(x) (mg/L)	X (cm)	a _x (cm)	a _y (cm)	az (cm)	erf: S ₊ / (4 · √[a _y · X])	erf; S _w / (2 · √(α ₁ · X))				
											
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Tier 2 Industrial/Commercial Calculations for Benzene S& S Infinite Group, Inc. - DBA Downtown 66 2016-1089

SSL SSL & RBCA

Date Compiled: 02/20/18

V1.30/F: 473/27/0

Input Values									
Holcomb*	s Bulk Density> 0 Converted Value to be used	n calculation sheet ->	-	USC	A Soil Classification:	Sand			
Orga	nic Matter (%) -> 0 FOC % (0.58 conversion) -> 0.000	Organic Matter (mg/kg)	0	FOC	mg/kg (0.58 conversion)	0.000	foc conversion to g/g:	0.000	
2.150	Pb - Dry Soil Bulk Density	1.5 or, Gravel = 2.0; Sand	= 1.8; Silt	1.6; Clay =	1.7; or Site Specific		_		
2.69	ps - Soil Particle Density	2.65 or, Site Specific							
0.109	O _a - Air Filled Soil Porosity 0.109 Value from S-21						0.19; or Calculated Value (S21		
	6w · Water Filled Soil Porosity 0.092 Value from S-20	Top 1 meter = 0.15; below	1 meter =	0.30; Gravel	= 0.20; Sand = 0.18; S	ilt =0.16; Clay =	= 0.17; or Calculated Value (S20)	
	η - SSL: Total Soil Porosity		nd = 0.32; S	in = 0.40; Cl	ay = 0.36; or Calculate	d Value (S24)			
	i - Hydraulic Gradient	Site Specific							
	foc - Total Organic Carbon (g/g)	Surface Soil = 0.006; Subs							
	DF - Dilution Factor 1.670 Value from S-22	If calculated value for DF i	is less than	20, then 20	default is used, else c	alculated value	is used		
	d - Mixing Zone (m) 3.884 Value from S-25								
	d _e - Depth of source (m) , feet = 10	Depth of Source (Vertical t							
	K - Hydraulic Conductivity (m/yr) cm/sec = 1.00E-04		4E+00	cm/d	3.15E+03 / cm/yr	Use cm/d for R	15, R19, & R26. cm/yr for R24		
	L - Source Length Parallel to Groundwater Flow (m) feet = 40	Site Specific (m)							
	d _a - Aquifer Thickness (m) - ! feet = 10	Site Specific (m)							
	I - Infiltration Rate (m/yr)	0,3 for Illinois							
	K ₄ - Saturated Hydraulic Conductivity	See Table K for Input Valu							
	GW _{ooj} - Groundwater Remediation Objective Class 1			er Remediat	ion Objective Class 2				
	1/(2b+3) - Exponent for S20	See Table K for Input Valu							
	BW - Body Weight		<u>enic); 15 (r</u>	on-carcinogo	nic); Industrial/Comm	ercial = 70; Con	struction Worker = 70; RBCA =	70	
	IF _{sched} -Age Adjusted Soil Ingestion Factor for Carcinogens	114							
50	IR _{sol} -Soil Ingestion Rate	Residential = 200; Industri	at/Comme	cial = 50; Co	nstruction Worker = 40	30			
0.055	SF _o -Oral Slope Factor	Benzene = 0.055	•		•				
1_	IR, -Daily Water Ingestion Rate	!Residential = 2; Industrial/	Commercia	l = 1					
1800	S - Solubility In Water	Benzene = 1750							
1.0E-06	TR - Target Cancer Risk	Residential = 10 ⁻⁶ ; Industri	ial/Comme	cial = 10 ⁻⁶ ; C	onstruction Worker =	10 ⁻⁶ at point of I	human exposure		
· 70	AT _c -Average Time for Carcinogens	170							
7.80E-06	URF - Inhalation Unit Risk Factor	Benzene = 7.8 x 10 *					;		
	EF - Exposure Frequency	Residential = 350; Industri				30			
	ED - Exposure Duration for Inhalation fo Carcinogens	(Residential = 30; Industria				,			
	Q/C - Inverse of the mean concentration at the center of a square source	Residential = 68.81; Indus							
	T - Exposure Interval	Residential = 9.5 x10 ^a ; Ind	lustrial/Con	mercial = 7.	9 x 10 ⁸ ; Construction \	Vorker = 3.6 x 1	10°		
30	T _{M4} - Exposure Interval for Mall Limit Volatilization Factor Equation \$26	30							
	ED _{bet} - Exposure Duration for Migration to Groundwater Mass-Limit Equation S28	70				<u> </u>			
0.18	I _{ML} - Infiltration Rate for Migration to Groundwater Mass-Limit Equation S28	0.18							
0.088	D _i - Diffusivity in Air	Benzene = 0.088					<u> </u>		
0.23	H - Henry's Law Constant	Benzene = 0.228					-		
	D., - Diffusivity in Water	Benzene = 9.8 x 10 ⁻⁶							
50	K Organic Carbon Partition Coefficient	Benzene = 58.9							

_		<u> </u>	 													
Ţ	Industrial/Commerci	al Ingestion Tier II Benzene Objective														
I.	S-3 =	. TR x BW x AT _e x 365	 1.0E-06	x	70	.x	·70 ·	x	365			_	1.8E+00	_	104.058	mg/kg
ľ	3-3 -	Sf _e x 10 ⁶ x EF x ED x IRsoil	 0.055	×	1.00E-06	x	250	х	25	х	50	_	1.72E-02	-	104.030	mg/kg
ı																ı

1	Construction Worker I	ngestion Tier II Benzene Objective											
٠	S-3 =		_	1.0E-06	x 70	x	. 70 .4	x	· 365	_ 1.8E+00	_	2258.21	
	A watesembe	. 30 Sf₀ x 10 ⁶ x EF x IRsoil		0.055	×21.00E-06	х	30	х	1 480	7.92E-04	-	2230.21	mg/kg
1		·							•				

Tier 2 Industrial/Commercial Calculations for Benzene S & S Infinite Group, Inc. - DBA Downtown 66

Construction Worker I	nhalation Tier II Benzene Objective																
S-6 =	TR x ATc x 365	. = -	1.0E-06	x	70	х	365						_ =	0.02555	=	3.704	mg/kg
3-0	URF x 1000 x EF x ED x 1/VF		7.80E-06	×	1000	×	250	×	25	>	(1/	7.07E+03)	6.90E-03			

1	Construction Work	er Inhalation Tier II Benzene Objective							· · · · · ·									
٠.	S-7·=·····	TR x ATc x 365	1.0E-06	x	70	x	365						:		=	5.209	mg/kg	and the angles of the state of
1	0 -7 -	URF x 1000 x EF x ED x 1/VF	7.80E-06	×	1000	x	30	×	1	:	(1/	4.77E+01)	4.90E-03				

RESIDE	ITIAL OR C	OMMERCIA	<u>. </u>		.												
S.9 -	VF =	Q v	(3.14 x D _A x T) ^{1/2} x 10 ⁻⁴	_ =	85.81	٠,	3.14	×	1.98E-04	×	7.90E+08) ^{1/2} ×	0.0001	_ =	6.0104	= :	7067.4376
3-8 =	4r -	c ^	(2 x ρ _b x D _A)		00.01	^T	2	x	2.15	x	1.98E-04)			0.0009		

Soil Component of the Migration to Groundwater Cleanup Objective (Class 1)
$$S-17 = C_{w} \times \left[K_{s} + \frac{(\theta_{w} + \theta_{s} \times H)}{\rho b} \right] = 0.1 \times \left[0.68 + \frac{(0.092 + 0.109 \times 0.230)}{2.15} \right] = 0.073 \text{ mg/kg}$$

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Tier 2 Industrial/Commercial Calculations for Benzene S & S Infinite Group, Inc. - DBA Downtown 66 2016-1089

							2016-108	19									
Target Sol S-18 =	oll Leachate Concentration (C C _w =	Class 1) DF x GW _{obj}	-	20.00	×	0.005		•	•					:	=	0.1	
	r Partition Coefficient	K _{oo} x t _{oo}	=	50.00	X	0.014	, es (s)	· • • • • • • • • • • • • • • • • • • •				,	pr 1 the cons	er en ereze merci	=	0.68	
Water-Fille S-20 =	led Porosity $\Theta_{\mathbf{w}} = -\eta \times \frac{1}{K_{\mathbf{s}}}$	1/(20-3)	=	0.20	x[-	0.300 1830.000]0.090	·							=	0.0917	
Air-Filled	Porosity $\Theta_a = \eta \cdot \Theta_w$		=	0.20	•	0.09									=	0.1090	
Ditution F		Kxixd	= -	31.54 0.300	x	0.0200	×	3.884	+	1					=	1.6697	
GW Ingest	<u> </u>	TR x BW x AL x 365 SF _e x IR _w x EF x ED	_ = -	1.0E-06 0.055	x x	70 1.000	x x	70 250	x x	365 25	-		= 1.85	÷00 .75	=	0.0052	mg/L
Total Soil S-24 =	, D.		=	1		2.15 2.69	•				•				=	0.2007	
S-25 =	- , ,	1 1	(-L x i) x i x d _a) = (0.0112	·	12.192	²) ^{0.5} +	. 3						· .	٠		·
Soil Satur	ration Limit				.* · :	3.048	×	1 - exp	{-	-12.192 31.536	X X	0.3 0.0200) x 3.048	<u>—</u>]	,, · = ,	3.884	m
تمنتنخا	<u> </u>	((K _a x pb) + (9w + (H' x 8a))	= -		-x [(X) + 		٠ (0.230	x 0.1	09)]	=	1,322.01	mg/kg
S-30 =	Outdoor inhalation ROs g = ROS g	Osoil X H X pb X 1000 I' X Oa + Ow + Kd X pb	· — = -	3.704 2.300E-01	x	0.230 0.109	*	2.150 0.092	x +	1000	х	2.150	•		=	1,159.96	mg/m³

Tier 2 Industrial/Commercial Calculations for Toluene \$4.5 Infinite Group, Inc. - DBA Downtown 66 2016-1089

Date Compiled: 02/20/18 Version #252010

	Input Values		RBCA	J [IRIS/HEAST]										Vernon	+7570	:0	
1		s Bulk Density>	> 0	Converted	Value to be used in	calculation sheet -				JSDA Soil Classi	ification: S	and					
		nic Matter (%) ->		FOC % (0.58 conversion		Organic Matter (n		Ö		OC mg/kg (0.58 co		0.000	foc co	nversion to g	ı/a:	0.000	T
		Pb - Dry Soil Bull			7 - 1 - 0.000	1.5 or, Gravel = 2						0.000			7 3. 1		
		os - Soil Particle				/2.65 or, Site Spec		110, 0	1.0, 0.0,			-					
		Θ. · Air Filled So		0.109	Value from S-21	Top 1 meter = 0.2		meter = 0),13; Grav	el = 0.05; Sand	= 0.14; Silt	=0.24; Clay =	0.19; or Cal	culated Valu	e (S21)		
Ï		Ow - Water Filler		0.092	Value from S-20	Top 1 meter = 0.1											
water that the same of		n - SSL: Total Sc		0.201	Value from S-24	0.43 or, Gravel - 0											
		i - Hydraulic Gra		****		(Site Specific		0.00,00		0.01		(0					
		foc - Total Organ)		Surface Soil = 0.0	06; Subsu	ırface Soil	= 0.002;	or Site Specific	_			•			
		DF - Dilution Fac		1.670	Value from S-22	if calculated value		less than :	20, then 2	20 default is use	d, else calc	ulated value l	ls used				
		d - MixIng Zone		3.884	Value from S-25	2; or calculated va											
		d Depth of sou			feet = 10	Depth of Source (
		K - Hydraulic Co			1.00E-04	Site Specific	8.64	E+00)	cm/d	3.15E+03	cm/yr U	se cm/d for R	15, R19, & R	26. cm/yr fo	r R24		
				roundwater Flow (m)	feet = 40	Site Specific (m)											
		d _a - Aquifer Thic			feet = 10	Site Specific (m)											
		I - Infiltration Rat	te (m/yr)			0.3 for Illinois											
	1830	K Saturated H	ydraulic Condu	uctivity		See Table K for Ir	put Value	s									
	1.000	GW _{obj} - Groundw	vater Remedia	lion Objective Class 1		2.5	GW _{obj} - G	3roundwate	er Remed	diation Objective	Class 2						
		1/(2b+3) - Expor				See Table K for Ir											
		BW - Body Weig		· · · · · · · · · · · · · · · · · · ·		(Residential = 70 (carcinoge	nic); 15 (no	on-carcin	ogenic); Industri	al/Commer	cial = 70; Con	struction Wo	rker = 70; RE	BCA = 7	0	
	114	Age Adj-	usted Soil Inge	estion Factor for Carcinogens		114											
	50	IR -Soil Ingest	tion Rate			Residential = 200	Industrial	t/Commerc	cla1 = 50;	Construction Wo	orker = 480	1					
	1	IR., -Daily Water	Ingestion Rat	е		Residential = 2; Ir	dustrial/C	ommercial	1=1								
		S - Solubility In V				Toluene = 526											
		TR - Target Can				Residential = 10 ⁻⁶	Industria	1/Commerc	cial = 10 ⁻⁶	Construction V	Vorker = 10	⁶ at point of h	numan expos	ure			
		EF · Exposure F				Residential = 350	Industrial	l/Commerc	cial = 250	; Construction W	Vorker = 30						
				alation for Non-Carcinogens		Residential = 30;											
				centration at the center of a squ	are source	Residential = 68.8											
		T - Exposure Inte				Residential = 9.5	c10°; Indu	strlal/Com	mercial =	7.9 x 10 ⁶ ; Cons	truction Wo	orker = 3.6 x 1	10,				
				II Limit Volatilization Factor Equ		30											
	-			ation to Groundwater Mass-Limit Eq		. 70											
				ion to Groundwater Mass-Limit I	Equation S28	0.18											
		D _i - Diffusivity In				Toluene = 0.087											
		H' - Henry's Law				Toluene = 0,272											
		D Diffusivity In				Toluene = 8,6 x 1											
				rcinogens In Ingestion Equation		Residential = 6; Ir	dustrial/C	ommercial	1 = 25; Co	onstruction Work	er = 0.115						
				rcinogens In Inhalation Equation	η	Residential = 30;	ndustrial/	Commercia	al = 25; C	Construction Wor	rker = 0.115	<u> </u>					
		THQ - Target Ha RfC - Inhalation		testina		1 IChronic = 5; Subc	honele - E										
		RfD _o · Oral Refe		incerniation .		[Chronic = 0.08; S											
	158.00	Koc - Organic Ca		Coefficient		Toluene = 182	Demonie	- 0.0									
	158.00	N _{oc} • Organic Ca	noon Parmon	Coenicient	·	10luene = 182											
	(Industrial/C	ommercial inges	stion Remedia	tion Objectives for Non-Carci	nogenic Contamina	nts											
	4			x BW x AT x 365	, _ 1	x 70	×	25	×	365	•		63	8750			,.
	S-1 =	_		R(D _a) x EF x ED x IR _{evi}	0.000001		X	250	<u> </u>	25	×	50	- =	90625	=	1635200	mg/kg
				<u> </u>													
			S 10														
•	Constructio	n worker ingest		Ion Objectives for Non-Carcin	ogenic Contaminan	ts × ' '70		0.115		365			- 20	20.25			
10 mg/mg 10 mg/mg	S-1 =	· · · —		x BW x AT x 365	- = <u> </u>				ж.		-	. 400		38.25	=	163236	mg/kg
المام والفياء المام ال	Sec. 4.5.22	and the same of these		RID.) x EF x ED x IR	7 77 70 0.000001	x.1/2:9:0.8.	X	- 30		คร เราเปล่ามาค เกร	as Marie Th	480		.018			-e-25224.34
	Ь								. •				•.				
	Constructio	n Worker Inhala	tion Tier II Be	nzene Objective													
	S-4 =			HQ x AT x 365	_ 1	x 25	x	365					_ 9	125		2025 0/0	
	3-4 =			ED x (1/R/C x 1/VF)	250	x 25	x 1/	5	x 1/	11347.37618				10158	= 1	32835.846	mg/kg
				•						Tier 2	2 Inhalatio	on Objectiv	e cannot e	xceed Soi	il Satu	ration Lin	nit
												•					
	Inhalation A	ion-Carcinogeni															
	S-5 =		T	HQ x AT x 365	1	x 0.115	x	365						.975	=	535.886	mg/kg
	J-5 -		EF x l	ED x (1/R(C x 1/VF)	30	x 1	x 1/	5	x 1/	76.60077386			0.0	78328	_	JJJ.000	g/kg
	L																
	RESIDENT	AL OR COMMER															
	S-8 =	VF = Q	.x(3.14 x D _A x T) ^{1/2} x 10 ⁻⁴	_ = 85.81	<u>(</u> 3.14	x	7.67E-05	x	7.90E+08) ^{1/2} x	0.0001	_ = _3.	7434	= -	11347.3762	
	-	· - <u>c</u>		(2 x ρ _b x D _A)		^ (2	x	2.15	x	7.67E-05)		3.3	0E-04	_		
	•	=				•					•		*	-			

Tier 2 Industrial/Commercial Calculations for Toluene S & S Infinite Group, Inc. - DBA Downtown 66 2016-1089

Target Soil Leachate Concentration (Class 1)
$$S-18 = C_w = DF \times GW_{obj} = 20.00 \times 1.000 = 20$$

Soil-Water Partition Coefficient

S-19 =
$$K_d$$
 = $K_{\infty} \times I_{\infty}$ = 158.00 \times 0.014 ... = 2.1488.

[Water-Filled Porosity]

$$S-20 = \Theta_{W} = \eta_{1} \times \frac{1}{K_{4}} = 0.20 \times \left[\frac{0.300}{1830.000} \right]^{0.000} = 0.0917$$

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Tier 2 Industrial/Commercial Calculations for Toluene S & S Infinite Group, Inc. - DBA Downtown 66

Air-Filled Porosity

= 0.1090

Dilution Factor

S-22 = DF = 1. Kxixd =
$$\frac{31.54 \times 0.0200 \times 3.884}{0.300 \times 12.192}$$
 + 1

= 1.6697

GW Ingestion

#DIV/0!

Total Soil Porosity

$$S-24 = \eta = 1 \cdot \frac{P_0}{Q_0} = 1 \cdot \frac{2.15}{2.69}$$

0.2007

S-25 =
$$d = (0.0112 \times L^2)^{0.5} + d_0$$
 1-exp $\frac{(L \times I)}{(K \times I \times I)}$

 $= (0.0112 \times 12.192^{2})^{0.5} +$

Soil Saturation Limit

$$S-29 = C_{sat} = \frac{S}{\rho_b} \times \left[\left(\left(K_d \times \rho b \right) + \Theta w + \left(H' \times \Theta a \right) \right) \right] = -$$

$$= \frac{530}{2.15} \times \{ (2.1488 \times 2.15) + 0.00 \}$$

Soil Gas Outdoor Inhalation

= 65,851.91 mg/m³

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Tier 2 Industrial/Commercial Calculations for Ethylbenzene S & S Infinite Group, Inc. - DBA Downtown 66 2016-1089

SSL SSL & RBCA RBCA IRIS/HEAST Date Compiled: 02/20/18

			RBCA	IRISHEAST									Date Comp	ilea. 0222071 or +7579tr	•
	Input Values	ì	KBUA	[INDITERS I]									vers	G: +.3.500	
1		s Bulk Density ->	1 0 1	Conv	erted Value to be	used in ca	alculation sheet>	- -	T	USDA Soil Classific	cation: Sand				
		nic Matter (%) ->					Organic Matter (mg/kg		_	OC mg/kg (0.58 conv		O fo	c conversion to	q/q; 0.000	
		ρ _b - Dry Soil Bulk					1.5 or, Gravel = 2.0; S							3.5.	
		ps - Soil Particle					2.65 or, Site Specific	,	, 0	,,				-	
		O Air Filled Sol		0.	109 Value from		Top 1 meter = 0.28; b	low 1 meter =	0.13: Gra	vel = 0.05: Sand =	0.14: Sitt =0.24: C	Clay = 0.19: or	Calculated Val	lue (S21)	
		Ow - Water Filled			092 Value from		Top 1 meter = 0.15; b						_		
		n - SSL: Total So			201 · Value from		0.43 or, Gravel - 0.25;						Calculated Val	100 (020)	
		i - Hydraulic Grad		0.	zor - value nom		Site Specific	38HU - U.32,	SIII - 0.40	7, Clay = 0.30, 01 Ca	aiculateu value (3	24)			· · · · · ·
		foc - Total Organ					Surface Soil = 0.006;	inheurface C	∧ii − 0 002	· or Cita Concilie					
		DF - Dilution Fac		1	670 Value from		If calculated value for				else calculated v	hezu zi auter			
		d - Mixing Zone (884 Value from		2; or calculated value	DI 13 1033 (110		20 4014411 13 4300,	CISC CONCUMENT	4140 13 0300			
j		d Depth of sou			1 feet = 10		Depth of Source (Vert	cal thickness	of contam	(nation)					
		K - Hydraulic Cor			ec = 1.00E-04		Site Specific	8.64E+00		•	cm/yr Use cm/d	/ar B15 B10	e Doc amber	(A+ D24	
				undwater Flow (m)	r feet = 40		Site Specific (m)	0.04E+00	r alva	3.135,403	Chryr 1038 Chru	101 K13, K13,	a rezo. Gibyi i	101 1024	
				undwater Flow (m)											
		d. · Aquifer Thick			feet = 10		Site Specific (m)								
		I - Infiltration Rate					0.3 for Illinois								
		K Saturated Hy					See Table K for Input								
				n Objective Class 1		- 1			ater Reme	diation Objective C	lass 2				
		1/(2b+3) - Expon					See Table K for Input								
		BW - Body Welgi					Residential = 70 (care	nogenic); 15	(non-carci	nogenic); Industrial	Commercial = 70	: Construction	Worker = 70; f	RBCA = 70	
	114	Age Adju - Age Adju	isted Soil Ingest	tion Factor for Carcinoge	ens	•	114								
	50	IRSoil Ingesti	ion Rate				Residential = 200; Ind	strial/Comm	ercial = 50	: Construction Worl	ker = 480				
		IRDaily Water					Residential = 2; Indus			•					
		S - Solubility in V					Ethylbenzene = 169								
		TR - Target Cand					Residential = 10 ⁻⁶ ; Ind	-atrial/Camer	iat 40	8. Canalanaian 14/a	40 ⁻⁰ -41	-1 -1 h			
		EF - Exposure Fr			•		Residential = 350; Ind					it of numan e	cposure		
				ation for Non-Carcinoge	ne .		Residential = 30; Indu								
				ntration at the center of			Residential = 68.81; I					or Table H			
		T - Exposure Inte		madion of the senter or	a aquaic source		Residential = 9.5 x10								
				Limit Volatilization Facto	Caustian C2C		30	HIGHSHIAPCC	minercial	- r.s x iv , consut	action volker - 3	.O X 10			
														-	
				on to Groundwater Mass-Li			70								
				n to Groundwater Mass-I	imit Equation S28		0.18								
		D _i - Diffusivity in				(Ethylbenzene = 0.075								
	0.324	H' - Henry's Law	Constant				Ethylbenzene = 0.323								
	7.80E-06	D., - Diffusivity in	Water				Ethylbenzene = 7.8 x	0-8							
	25	AT - Average Tin	ne for Non-Carc	inogens in Ingestion Equ	ation		Residential = 6; Indus	rial/Commerc	iat = 25; C	onstruction Worker	= 0.115				
	25	AT - Average Tin	ne for Non-Carc	inogens In Inhalation Eq	uation	í	Residential = 30; Indu	trial/Comme	rciat = 25;	Construction Worke	er = 0.115				
		THQ - Target Ha					1								
	1	RfC - Inhalation f	Reference Conc	entration			Chronic = 1; Subchron	lc=9 ·				•	•		
	0.1	RfD _o - Oral Refer	rence Dose		•	. (Chronic = 0.1; Subchr	onic = 0.05 .	· ·						
	320.00	K _{oc} - Organic Car	rbon Partition Co	pefficient			Ethylbenzene = 363			•					
	Industrial/Co	ommercial inges		on Objectives for Non-	Carcinogenic Cor	ntaminants	S								
	S-1 =			BW x AT x 365		1	x 70 >	25	X	365			638750	= 20440	0
	3-1 -		10 ⁻⁸ x (1/Rf	D _e) x EF x ED x IR _{ect}	- 0.	.000001	x 1/ 0.1 >	250	×	25	x 50		3.125	- 20440	0 mg/kg
	0	- 107	a Banadada	- ALI											
	Constructio	n worker ingesti	on Kemediatio	n Objectives for Non-C	arcinogenic Cont	taminants	x ** 70)		A second	***					
	S-1 =	· · · ·	. INQ X	BW x AT x 365 D _o) x EF x ED x IR _{soil}	_ = -	1	x /0)	0.115.	X	365		= -	2938.25	= 10202	2 mg/kg
· intrade.	Taile with	erigin, y	, ′_ · 10° x (1/Rf	D _o) x EF x ED x IR _{eol}	.^ <u></u>	.000001 🚓	د . يو ر 0.05 x 1/	. 30 -	4. N. X	القصور الرياكات	x _ , 480	266214.35	0.288	ett me di zu dinan i	
~ ··· ·	(a	n Worker Inhalat		and Ohio addiso		•									
	Constructio	n worker innalat					**			•					
	S-4 =			Q x AT x 365	=	1 250	x 25 x x 25 x		44	45000 07070		=	9125	= 23080) mg/kg
•			EF X EL	x (1/RfC x 1/VF)		250	x 25 x	1/ 1	x 1/	15808.27272			0.395363		
								•		Tier 21	nhalation Obje	ective cann	ot exceed So	oil Saturation	Limit
	inhalation N	ion-Carcinogenic													
	S-5 =			Q x AT x 365	=	1	x 0.115)	365				= -	41.975	= 1343.7	98 mg/kg
	ا		EF x EC	x (1/RfC x 1/VF)		30	x 1 x	/ 9	x 1/	106.7141782			0.031230		
										Tier 2 I	nhalation Obje	ective cann	ot exceed So	oil Saturation	Limit
	RESIDENTI	AL OR COMMER													
		Q	(3.	14 x D _A x T) ^{1/2} x 10 ⁻⁴		05.00	(3.14 x	3.95E-0	5 x	7.90E+08)	^{1/2} x 0.000)1	2.6871		
	S-8 =	VF = -	x———	14 x D _A x T) ^{1/2} x 10 ⁻⁴ (2 x ρ _b x D _A)	=	85.81	x 1	2.15		3.95E-05		= -		= 15808.27	727
	l	C		(∠ x P₂ x D₄)			(2)	2.15	x	3.95E-U5)			1.70E-04		

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Tier 2 Industrial/Commercial Calculations for Ethylbenzene s & S Infinite Group, Inc. - DBA Downtown 66

Equation for Derivation of Apparent Diffusivity $S-10 = D_A = \frac{(0_a^{2.33} \times D_a \times H) + (0_a^{3.33} \times D_a)}{\eta^2} \times \frac{1}{(\rho_b \times K_d) + \theta_a + (0_a \times H)}$ $= \frac{\left(6.23E-04 \times 0.075 \times 0.324 \right) + \left(0.0004 \times 7.80E-06 \right)}{0.0404} \times \frac{1}{(2.15 \times 4.352) + 0.09 + \left(0.109 \times 0.324 \right)} = 3.95E-05$

Target Soil Leachate Concentration (Class 1) $S-18 = C_w = DF \times GW_{obj} = 20.00 \times 0.700$ = 14

Soil-Water Partition Coefficient $S-19 = K_d = K_{\infty} \times I_{\infty} = 320.00 \times 0.014 = 4.352$

Water-Filled Porosity $S-20 = \Theta_{w} = \eta \times \frac{1}{K_{*}} \qquad = 0.20 \times \left[\frac{0.300}{1830.000} \right]^{0.000} = 0.0917$

en en la la companya de la companya de la companya de la companya de la companya de la companya de la companya Companya de la companya de la companya de la companya de la companya de la companya de la companya de la compa

Tier 2 Industrial/Commercial Calculations for Ethylbenzene \$ & S Infinite Group, Inc. - DBA Downtown 66 2016-1089

Air-Filled Porosity $S-21 = \Theta_{a} = \eta + \Theta_{w} = 0.20 + 0.09 = 0.1090$

Dilution Factor

S-22 = DF = 1 + Kxixd = 31.54 x 0.0200 x 3.884 + 1 = 1.6697

| S-23 = | TR x BW x At_e x 365 | = | 1.0E-06 | x | 70 | x | 0 | x | 365 | = | 0.0E+00 | = #DIV/O! mg/L

Total Soil Porosity $S-24 = \eta = 1 \cdot \frac{P_0}{P_0} = 1 \cdot \frac{2.15}{2.69} = 0.2007$

Estimation of Mixing Zone Depth $S-25 = d = (0.0112 \times L^{2})^{0.5} + d_{e} \left[1 - \exp \left(\frac{(L \times I)}{(K \times I \times d_{e})} \right) \right]$ $= (0.0112 \times 12.192^{-2})^{0.5} + \frac{1 - \exp \left(\frac{-12.192}{31.536} \times 0.0200 \times 3.048 \right)}{(1 - \exp \left(\frac{-12.192}{31.536} \times 0.0200 \times 3.048 \right)} \right] = 3.884$ m

Soil Saturation Limit $S-29 = C_{ast} = \frac{S}{\rho_b} \times \left[(K_d \times \rho b) + \Theta w + (H' \times \theta a) \right] = \frac{170}{2.15} \times \left[(4.352 \times 2.15) + 0.092 + (0.324 \times 0.109) \right] = 749.91 \text{ mg/kg}$

Soil Gas Outdoor Inhalation
S-30 = ROs g = ROs

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Tier 2 Industrial/Commercial Calculations for Total Xylenes

					S & S	Infinite G		c. • DBA D	owntown	66					
			1 (2016-1	1089							
		SSL	SSL & RBCA									Date Com		02/20/18	
Input Value	•	RBCA	IRIS/HEAST									(60)	m 42%T	216	
	o's Bulk Density>	O	Converted	I Value to be used in	calculat	linn sheet				JSDA Soil Classifie	ation: Sand				
	anic Matter (%) ->		FOC % (0.58 conversion			nic Matter (0		OC mg/kg (0.58 conv		foc conversion	o a/a·	0.000	
	Ph - Dry Soil Bull			7 0.000						lay = 1.7; or Site S		100 001110131011	<u> </u>	0.000	
2.69	ps - Soil Particle					r, Site Spe		J - 1.0, Oil	- 1.0, 0	ay - 1.1, 01 One 0	podnio				
0.109	⊕ • Air Filled So		0.109	Value (rom S-21				v 1 meter =	0 13· Gr	avel = 0.05: Sand	= 0 14: Silt =0 24: Clos	v = 0.19; or Calculated Va	lue (S21		
0.092	Ow - Water Filled			Value from S-20								y = 0.17; or Calculated Va			
0.201				Value from S-24							Calculated Value (S24)		100 (320		
0.02	i - Hydraulic Grad	dient	0.201	Value Holli 3-24	Site S		0.25, 58	mu - 0.32,	3III - 0.4	0, Clay - 0.36, 01 (Jaiculated Value (524)	·			
0.014	foc - Total Organ		,				006: Sub	nsurface Si	il = 0 00°	2; or Site Specific					
20,000	DF - Dilution Fac		1.670	Value from S-22							d, else calculated valu	ie is used			
3.884	d - Mixing Zone		3.884	Value from S-25		alculated :		10 1000 1110	,		<u> </u>				
3.048	d Depth of sou			feet = 10				thickness	of contac	nination)	• • • • • • • • • • • • • • • • • • • •				
31,54	K - Hydraulic Co		n) cm/sec =			pecific		4E+00			cmAr liles cm/d for B	15, R19, & R26, cm/yr fo	r P24		
12.192			roundwater Flow (m)	feet = 40		pecific (m)		46+00	COLOG	3.1321031	Class Tose cure to iv	119, 1113, di 120, Gibyi 10	11024		
3,048	d Aquifer Thick		iounuwaler Flow (III)	feet = 10		pecific (m)									
				1001 - 10											
0.3	I - Infiltration Rat		adl. (b.			Illinois	1414-1								
1830	K Saturated H	•	· · · · · · · · · · · · · · · · · · ·		See I	able K for									
10.000			lion Objective Class 1		<u>:</u>	10			ter Reme	diation Objective C	class 2				
0.090	1/(2b+3) - Expon					able K for					_				
70	BW - Body Weig					ential = 70	(carcino	genic); 15	(non-carc	inogenic); Industri:	aVCommercial = 70; C	onstruction Worker = 70;	RBCA =	70	
114	Age Adji -Age Adji	usted Soil Inge	estion Factor for Carcinogens		114										
50	IR _{coll} -Soil Ingest	tion Rate			Reside	ential = 20	0; Indust	daVComme	ercial = 51	0; Construction Wo	orker = 480				
1	IR., -Daily Water	Ingestion Rate	9		Reside	ential = 2;	Industria	VCommerc	la1 = 1						
110	S - Solubility in V	Vater			Total 2	Kylenes =	186								
1.0E-06	TR - Target Can							rial/Comm	ercial = 1	0 ⁻⁶ : Construction V	/orker = 10 ⁻⁸ at point o	f human exposure			
250	EF - Exposure F									50; Construction W					
25			alation for Non-Carcinogens							Construction Wor					
68.81	Q/C - Inverse of	the mean con-	centration at the center of a squ	are source	Reside	ential = 68	.81; Indu	strial/Com	nercial =	85.81; Construction	n Worker = 85.81; or 1	Table H			
7.90E+08	T - Exposure Inte	erval			Reside	ential = 9.5	5 x10 ⁸ ; In	dustrial/Co	mmercia	1 = 7.9 x 10°; Cons	truction Worker = 3.6	к 10 ⁶			
30			Il Limit Volatilization Factor Equ	ation S26	30										
70	ED Exposure D	Duration for Migr	ation to Groundwater Mass-Limit Eq	uation S28	70										
0.18			ion to Groundwater Mass-Limit I		0.18										
0.074	D _i · Diffusivity in		ion to Groundwater images Emilie	Equation 020		Kylenes =	0.072								
0.074	H' - Henry's Law														
						Kylenes =		-d							
	D Diffusivity in					Xylenes =									
25			rcinogens In Ingestion Equation							Construction Work					
25			rcinogens In Inhalation Equation	<u> </u>	Reside	emiai = 30	; Industr	al/Comme	cial = 25	Construction Wor	ker = 0.115				
0.1	THQ - Target Ha				1	1									
	RfC - Inhalation					ic = 0.1; S									
0.2	RíD _o - Oral Refe				_	ic = 0.2; S		C = U.4							
398.00	K _∞ - Organic Ca	arbon Partition	Coefficient /		Total 2	Xylenes =	260				•		•		
0.4.55															
	Commercial inges	stion Kemedia ∩⊔∩	ition Objectives for Non-Carcl x BW x AT x 365	nogenic Contamina 1	ints	70	U	25		365		_ 638750			
S-1 =			KID X EL X ED X IK ¹⁰⁸	- = -0.000001	X 1/	0.2	- x -	250	- 2 -	25	X 50	- = - 030750	=	408800	mg/kg
															
	ion Worker Ingest	uon Remediat	ion Objectives for Non-Carcin x BW x AT x 365	ogenic Contaminar	าเร	70	J	0.115 .	J	365		2020 25			
S-1 =	······································		KID ^O XELXEDXIK ^{eog}	=: -0.000001	X 1/	0.4	- 2.	30	 	303	X 480	- = 2938.25 0.036	=	81618	mg/kg
							. • Î								
															
Constructi	ion Worker Inhala	tion Tier II Be	nzene Objective												
S-4 =	•	Т	HQ x AT x 365	_ 1	×	25	×	365			•	<u> </u>	_	2838.457	mg/kg
13-4-		EF x l	ED x (1/RfC x 1/VF)	250	×	25	x 1/	0.1	x 1/	19441.48884		3.214774369	-		
L			-							Tier 2	Inhalation Object	ive cannot exceed S	oil Sate	uration Limit	ı
Inhalation	Non-Carcinogeni														
S-5 =			HQ x AT x 365	_ =	x	0.115	X	365				<u> </u>	=	73,451	mg/kg
1		EE ~ (O v (1/P(C v 1A/F)	30		4	v 1/	0.4	~ 1/	131 2/02022		0.671470702			

2.61E-05 x

1

RESIDENTIAL OR COMMERCIAL

EF x ED x (1/R/C x 1/VF)

(3.14 x D_A x T)^{1/2} x 10⁻⁴

(2 x Pb x DA)

0.571470792

2.1849

1.12E-04

) 1/2 x 0.0001

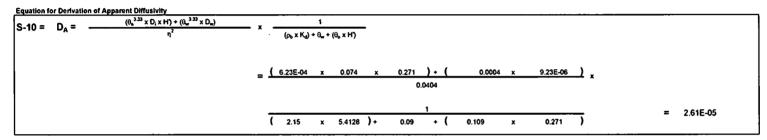
7.90E+08

2.61E-05)

= 19441,4888

Tier 2 Industrial/Commercial Calculations for Total Xylenes s & S Infinite Group, Inc. - DBA Downtown 66 2016-1089

Construction Worker
$$S-8 = VF = \frac{Q}{C} \times \frac{(3.14 \times D_A \times T)^{1/2} \times 10^4}{(2 \times \rho_b \times D_b)} = 85.81 \times \frac{(3.14 \times 2.61E-05 \times 3.60E+06)^{1/2} \times 0.0001}{(2 \times 2.61E-05)} = \frac{0.1475}{1.12E-04} = 1312.4030$$





Target Soil Leachate Concentrati	ion (Class 1)										
S-18 = C _w =	DF x GW _{obj}	=	20.00	x	10.000	•		•	=	200	
							•				

Soll-Wate	r Partition Coefficient			*
S-19 =	K _d =	K _{oo} x f _{oo}	= 398.00 x 0.014	= 5.4128
. .	A 4 30 10 10 10 10 10 10 10 10 10 10 10 10 10			

the second of the second second second of the second secon

Water-Filled Porosity
$$S-20 = \Theta_{w} = \eta \times \frac{1}{K_{s}} = 0.20 \times \left[\frac{0.300}{1830.000} \right]^{0.000} = 0.0917$$

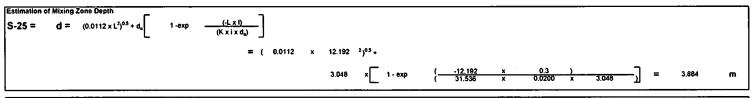
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Tier 2 Industrial/Commercial Calculations for Total Xylenes S & S Infinite Group, Inc. - DBA Downtown 66 2016-1089

Air-Filled Po	rosity	· · · · · · · · · · · · · · · · · · ·						
S-21 =	$\Theta_a = \eta$	θ,,	=	0.20	•	0.09	=	0.1090
ı								

GW Ingestion	TR x BW x At, x 365	_ 1,0E-06	х	70	x	0	×	365		0.0E+00	 #DIV/01	
S-23 = -	SF _o x IR _w x EF x ED	0.000	x	1.000	×	250	x	25	_	0	 #010/01	mg/L

Total Soil Poresity
$$S-24 = \eta = 1 \cdot \frac{\rho_0}{\rho_k} = 1 \cdot \frac{2.15}{2.69} = 0.2007$$



Soil Saturation Limit				
$S-29 = C_{sat} = \frac{S}{\rho_b} \times \left[(K_a \times \rho b) + \Theta w + (H' \times \theta a) \right] = \frac{110}{2.15} \times \left[(5.4128 \times 2.15) + 0.092 + (4.4128 \times 2.15) \right]$	0.271	x 0.109)] =	601.63 mg/kg

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Tier 2 Industrial/Commercial Calculations for Naphthalene S & S Infinite Group, Inc. - DBA Downtown 66 2016-1089

SSL & RBC RBCA IRIS/HEAS Date Compiled: 02/20/18

= 89649.2492

5.29E-06

	Input Values	1																
		s Bulk Density ->				ie to be used in			•		Soil Classification							
•		nic Matter (%) ->	<u> </u>	FOC % (0.58 cor	version)>	0,000			0		g/kg (0.58 conversion		foc c	conversion to	9/9:	0.000		
		ρ _b - Dry Soil Bull							d = 1.8; Sift	= 1.6; Clay	= 1.7; or Site Spec	ific						
		ps - Soil Particle					2.65 or, Site S				 							
		O Air Filled So				lue from S-21					l = 0.05; Sand = 0							
		Ow - Water Filled				ue from S-20					1 = 0.20; Sand = 0			r Calculated	value (S			
•		n - SSL: Total Sc			0.201 Val	lue from S-24		1 - 0.25; Se	ind = 0.32;	Sift = 0.40; C	lay = 0.36; or Cald	ulated Value (524)			• •		
		 i - Hydraulic Grad foc - Total Organ 			-		Site Specific Surface Soil =	0.000 - 011	haudaea Se	u = 0 002: 6	r Cita Cancilla							
		DF - Dilution Fac									default is used, e	ise calculated	value is used					
		d - Mixing Zone					2: or calculate		15 1000 1110									
		d Depth of sou			fee	et = 10	Depth of Sour	ce (Vertica	1 thickness	of contamina	ation)							
		K - Hydraulic Co		сп	/sec = 1.0	0E-04	Site Specific	8.6	4E+00	cm/d	3.15E+03 + cm/y	T Use cm/d fo	r R15, R19, &	R26. cm/yr f	or R24			
				oundwater Flow (m)	• fee	et = 40	Site Specific (m)										
	3.048	d Aquifer Thic	kness (m)		fee	et = 10	Site Specific (m)				•						
	0.3	I - Infiltration Rat	te (m/yr)				0.3 for Illinois	· ·										
!	1830	K Saturated H	ydraulic Conduc	tivity			See Table K f	or Input Va	lues									
	0.140	0 GW _{obj} - Groundwater Remediation Objective Class 1						1 0.22 GW _{eq} · Groundwater Remediation Objective Class 2										
	0.090	0 1/(2b+3) - Exponent for S20						See Table K for Input Values										
								Residential = 70 (carcinogenic); 15 (non-carcinogenic); Industrial/Commercial = 70; Construction Worker = 70; RBCA = 70										
		IF _{ectodi} -Age Adj	114															
	50	Soil Ingest بهوا	tion Rate				Residential =	200; Indust	rial/Comme	ercial = 50; C	onstruction Worke	r = 480						
	1	1 IR., -Daily Water Ingestion Rate						(Residential = 2; Industrial/Commercial = 1										
	31	S - Solubility in \	Water				Naphthalene:											
		0E-06 TR - Target Cancer Risk						Residential = 10 ⁴ ; Industrial/Commercial = 10 ⁴ ; Construction Worker = 10 ⁴ at point of human exposure Residential = 350; Industrial/Commercial = 250; Construction Worker = 30										
		EF - Exposure F															_	
				lation for Non-Carcino							nstruction Worker 81; Construction V		as Table II					
				entration at the center of	or a square s	ource					7.9 x 10°; Construction v							
		T - Exposure Int		A facile à de l'adillamente a Para	400 (***********	600	Residential =	9.5 X10"; II	idustnavco	mmerciai =	7.9 X 10"; Construc	tion worker = .	3.6 X 10				-	
				Limit Volatilization Fac			70											
				tion to Groundwater Mass			0.18											
				n to Groundwater Mas	s-umii Equa	100N 528	Nachthalene	0.000	· · · ·								-	
		D _i - Diffusivity in					Naphthalene											
'		H' - Henry's Law D., - Diffusivity is					Naphihalene		,									
				inogens In Ingestion E	· auatian					lal = 25: Car	struction Worker	. 0 115						
	25			cinogens in ingestion i							instruction Worker							
	1	THQ - Target Ha		unogens in initialadori	Lquolion		1	00, 11100011		- 20, 00	MISS SECTION TO INC.	- 0,110						
		RfC - Inhalation		centration		-	(Chronic = 0.0	03; Subchr	onic = 0.00	3 - 1				•				
*	0.020	RfD _o - Oral Refe	erence Dose				Chronic = 0.0	2; Subchro	nic = 0.6 .		•	•		•		-		
	500.00	K _{ec} - Organic Ca	rbon Partition C	coefficient			Naphthalene	= 2,000		´ :							-	
	Industrial/Commercial Ingestion Remediation Objectives for Non-Carcinogenic Contaminants THQ x BW x AT x 365 638750																	
	S-1 =	_		ID ₆) x EF x ED x IR _{eol}	=	0.000001		×	250	×	25 x	50		15.625	=	40880	mg/kg	
_	Construction	on Worker Ingest	tion Remediation	on Objectives for Non	-Carcinogen	ilc Contaminan	ts											
	642	, ***: <u>**</u> _	THQ	x BW x AT x 365		1	x 70	, x	0.115	x	365	••		938.25	·_ ′	422427		
College Commission of the second	3:1 ,	9.6 . Se	√10 ⁻⁶ x (1/R	ID _a) x EF x ED _. x IR _{col}	5 v.	, 0.000001	, x414≥, 0.6	, x	30 _{*5}	.,,,X.,	الامال فينادا! شا	, 480, .	*****	0.024	- -	122421 ber (Dai)	mg/kg	
Are made to the second	Construction Worker Inhalation Tier II Benzene Objective																	
				izene Objective 1Q x AT x 365		1	. ne		365	•	•			9125				
	S-4 =	_		D x (1/R(C x 1/VF)		250	x 25	x 1/	0.003	x 1/ 8	9649.24924		 = _,	3.23871	=	392.664	mg/kg	
			, EF X E	O A (IIRIO A IIVY)		230			0.003	A 1/ 0	3043.24324			J.43011			- '	
	Inhalation f	Von-Carcinogeni	ic Construction	Worker														
	S-5 =		Th	IQ x AT x 365		1	x 0.11	5 x	365					41.975	=	2.540	mg/kg	
	3-3 -		EF x E	D x (1/RfC x 1/VF)		30	x 1	x 1/	0.003	x 1/ 60	5.1797139			6.52402	_	2.040	,,,,,,,,	

x (3.14 x x x

1.23E-06 x

2.15

7.90E+08) 1/2 x 0.0001

1.23E-06)

RESIDENTIAL OR COMMERCIAL

(3.14 x D_A x T)^{1/2} x 10⁻⁴

(2 x pb x DA)

Tier 2 Industrial/Commercial Calculations for Naphthalene S & S Infinite Group, Inc. - DBA Downtown 65

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$S-8 = VF = \frac{Q}{x} \times \frac{(3.14 \times D_A \times T)^{1/2} \times 10^{-4}}{(3.14 \times D_A \times T)^{1/2} \times 10^{-4}} = 85.81 \times \frac{(3.14 \times 1.23E-06 \times 3.64)}{(3.14 \times D_A \times T)^{1/2} \times 10^{-4}} = 85.81 \times \frac{(3.14 \times D_A \times T)^{1/2} \times 10^{-4}}{(3.14 \times D_A \times T)^{1/2} \times 10^{-4}} = 85.81 \times \frac{(3.14 \times D_A \times T)^{1/2} \times 10^{-4}}{(3.14 \times D_A \times T)^{1/2} \times 10^{-4}} = 85.81 \times \frac{(3.14 \times D_A \times T)^{1/2} \times 10^{-4}}{(3.14 \times D_A \times T)^{1/2} \times 10^{-4}} = 85.81 \times \frac{(3.14 \times D_A \times T)^{1/2} \times 10^{-4}}{(3.14 \times D_A \times T)^{1/2} \times 10^{-4}} = 85.81 \times \frac{(3.14 \times D_A \times T)^{1/2} \times 10^{-4}}{(3.14 \times D_A \times T)^{1/2} \times 10^{-4}} = 85.81 \times \frac{(3.14 \times D_A \times T)^{1/2} \times 10^{-4}}{(3.14 \times D_A \times T)^{1/2} \times 10^{-4}} = 85.81 \times \frac{(3.14 \times D_A \times T)^{1/2} \times 10^{-4}}{(3.14 \times D_A \times T)^{1/2} \times 10^{-4}} = 85.81 \times \frac{(3.14 \times D_A \times T)^{1/2} \times 10^{-4}}{(3.14 \times D_A \times T)^{1/2} \times 10^{-4}} = 85.81 \times \frac{(3.14 \times D_A \times T)^{1/2} \times 10^{-4}}{(3.14 \times D_A \times T)^{1/2} \times 10^{-4}} = 85.81 \times \frac{(3.14 \times D_A \times T)^{1/2} \times 10^{-4}}{(3.14 \times D_A \times T)^{1/2} \times 10^{-4}} = 85.81 \times \frac{(3.14 \times D_A \times T)^{1/2} \times 10^{-4}}{(3.14 \times D_A \times T)^{1/2} \times 10^{-4}} = 85.81 \times \frac{(3.14 \times D_A \times T)^{1/2}}{(3.14 \times D_A \times T)^{1/2}} = 85.81 \times \frac{(3.14 \times D_A \times T)^{1/2}}{(3.14 \times D_A \times T)^{1/2}} = 85.81 \times \frac{(3.14 \times D_A \times T)^{1/2}}{(3.14 \times D_A \times T)^{1/2}} = 85.81 \times \frac{(3.14 \times D_A \times T)^{1/2}}{(3.14 \times D_A \times T)^{1/2}} = 85.81 \times \frac{(3.14 \times D_A \times T)^{1/2}}{(3.14 \times D_A \times T)^{1/2}} = 85.81 \times \frac{(3.14 \times D_A \times T)^{1/2}}{(3.14 \times D_A \times T)^{1/2}} = 85.81 \times \frac{(3.14 \times D_A \times T)^{1/2}}{(3.14 \times D_A \times T)^{1/2}} = 85.81 \times \frac{(3.14 \times D_A \times T)^{1/2}}{(3.14 \times D_A \times T)^{1/2}} = 85.81 \times \frac{(3.14 \times D_A \times T)^{1/2}}{(3.14 \times D_A \times T)^{1/2}} = 85.81 \times \frac{(3.14 \times D_A \times T)^{1/2}}{(3.14 \times D_A \times T)^{1/2}} = 85.81 \times \frac{(3.14 \times D_A \times T)^{1/2}}{(3.14 \times D_A \times T)^{1/2}} = 85.81 \times \frac{(3.14 \times D_A \times T)^{1/2}}{(3.14 \times D_A \times T)^{1/2}} = 85.81 \times \frac{(3.14 \times D_A \times T)^{1/2}}{(3.14 \times D_A \times T)^{1/2}} = 85.81 \times \frac{(3.14 \times D_A \times T)^{1/2}}{(3.14 \times D_A \times T)^{1/2}} = 85.81 \times \frac{(3.14 \times D_A \times T)^{1/2}}{(3.14 \times D_A \times T)^{1/2}} = 85.81 \times \frac{(3.14 \times D_A \times T)^{1/2}}{(3.14 \times D_A \times T)^{1/2}} = 85.81 \times \frac{(3.14 \times D_A \times T)^{1/2}}{(3.14$	$\frac{0E+06}{x}$ $\frac{1/2}{x}$ $\frac{0.0001}{x}$ = $\frac{0.0320}{x}$ = 6051,7971
	3E-06) 5.29E-06

Equation for Derivation of Volatilization Factor - Construction Worker

Equation for Derivation of Apparent Diffusivity

$$S-10 = D_A = \frac{(\theta_a^{333} \times D_1 \times H) + (0_w^{333} \times D_w)}{\eta^2} \times \frac{1}{(\rho_b \times K_d) + 0_w + (0_a \times H)}$$

$$= \frac{(6.23E-04 \times 0.059 \times 0.020) + (0.0004 \times 7.50E-06)}{0.0404} \times \frac{1}{(2.15 \times 6.8) + 0.09 + (0.109 \times 0.020)} = 1.23E-06$$

Soli Component of the Migration to Groundwater Cleanup Objective (Class 1) $S-17 = C_w \times \left[K_d + \frac{(\theta_w + \theta_o \times H')}{\rho b} \right] = 2.8 \times \left[6.8 + \frac{(0.092 + 0.109 \times 0.020)}{2.15} \right] = 19.163 \text{ mg/kg}$

Target Soil Leachate Concentration (Class 1)

S-18 = C_w = DF x GW_{obj} = 20.00 x 0.140 = 2.8

Soil-Water Partition Coefficient $S-19 = K_d = K_{\infty} \times f_{\infty} = 500.00 \times 0.014 = 6.8$

Water-Filled Porosity $S-20 = \Theta_{W} = \eta \times \frac{1}{K_{s}} \times \frac{V^{(2b-3)}}{K_{s}} = 0.20 \times \left[\frac{0.300}{1830.000} \right]^{0.000} = 0.0917$

to and the standard of the common the standard of the common that is a standard of the common the common the common that is a standard of the common that is a standa

Tier 2 Industrial/Commercial Calculations for Naphthalene \$ & \$ Infinite Group, Inc. - DBA Downtown 66 2016-1089

					•		
Air-Filled Porosity							
S-21 = Θ _a = η · Θ _w	=	0.20	•	0.09		=	0.1090

Total Soil Porosity
$$S-24 = \eta = 1 \cdot \frac{\rho_b}{\rho_a} = 1 \cdot \frac{2.15}{2.69} = 0.2007$$

Estimation of Mixing Zone Depth
$$S-25 = d = (0.0112 \times L^{2})^{0.5} + d_{a} \left[1 \cdot \exp \frac{(-L \times 1)}{(K \times 1 \times d_{a})} \right]$$

$$= (0.0112 \times 12.192^{-2})^{0.5} + \frac{1}{30.048 \times 10^{-2}} \left[\frac{-12.192 \times 0.3}{31.536 \times 0.0200 \times 3.048} \right] = 3.884 \text{ m}$$

The control of the co

and the second of the second o

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SSL	SSL & RBCA
RBCA	IRIS/HEAST

Date Compiled: 02/20/18 Version 400/2010

0.196883

= 41.975

0.167994

Tier 2 Inhalation Objective cannot exceed Soil Saturation Limit

= 46347.267 mg/kg

mg/kg

= 249.860

Organi 2.150 p 2.69 p 0.109 G 0.092 G 0.201 n 0.02 i 0.014 fc	Bulk Density -> 0 nic Matter (%) -> 0 p _b - Dry Soil Bulk Density ps - Soil Particle Density 9 ₆ - Air Filled Soil Porosity	Converted FOC % (0.58 conversion	d Value to be used in	Organic				ISDA Soil Classifica			(00		: 0,000		
2.150 ρ 2.69 ρ 0.109 Θ 0.092 Θ 0.201 η 0.02 i	pb - Dry Soil Bulk Density ps - Soil Particle Density 9 Air Filled Soil Porosity	FOC % (0.58 conversion	n) → 0.000		c Matter (me	-0>			_11	000	(44		. 0.000	_	
2.69 ρ 0.109 6 0.092 6 0.201 η 0.02 i 0.014 fc	os - Soil Particle Density O - Air Filled Soil Porosity					gring) U	10	DC mg/kg (0.58 conver	sion) U	0.000	100	conversion to g/g	. 0.000		
0.109 € 0.092 € 0.201 ŋ 0.02 i 0.014 fo	9 Air Filled Soil Porosity			1.5 or, G	Gravel = 2.0	0; Sand = 1.8; Silt	= 1.6; Cla	y = 1.7; or Site Spe	cific						
0.092 € 0.201 ŋ 0.02 i 0.014 fo				2.65 or,	Site Speci	fic									
0.201 ŋ 0.02 i 0.014 fc		0.109	Value from S-21	Top 1 m	eter = 0.28	3; below 1 meter =	0.13; Gra	vel = 0.05; Sand = (D.14; Silt =0.	.24; Clay	= 0.19; or	Calculated Value	(S21)		
0.02 i 0.014 fo	Dw - Water Filled Soil Porosity		Value from S-20					vel = 0.20; Sand = (= 0.17; or	Calculated Value	(S20)		
0.014 fc	n - SSL & Or - RBCA: Total Soi	Porosity	·· Value from S-24	0.43 ог.	Gravel - 0	.25; Sand = 0.32;	Sin = 0.40;	; Clay = 0.36; or Ca	iculated Vali	ue (\$24)					
	- Hydraulic Gradient			■ Site Spe											
יו מחח חכ	loc - Total Organic Carbon (g/					06; Subsurface So									
	DF - Dilution Factor	1,670	Value from S-22				n 20, then	20 default is used,	eise calcula	ted value	is used				
	d - Mixing Zone (m)	3.884	Value from S-25		culated va										
	d _e - Depth of source (m)		feet = 10			Vertical thickness									
	K - Hydraulic Conductivity (m/		1.00E-04	. Site Spe		8.64E+00	cm/d	3.15E+03 i ci	n/yr Use cr	m/d for R1	15, R19, 8	R26, cm/yr for F	24		
	L - Source Length Parallel to (Groundwater Flow (m)	feet = 40	Site Spe											
	d _a - Aquifer Thickness (m)		, feet = 10	Site Spe											
	l - Infiltration Rate (m/yr)			0.3 for III											
	K Saturated Hydraulic Cond					put Values									
0.070	GW _{obj} - Groundwater Remedia	ntion Objective Class 1		i 0.0	07 (0	3W _{obj} - Groundwa	ter Remed	liation Objective Cla	iss 2						
	1/(2b+3) - Exponent for S20					put Values		•							
	BW - Body Weight				tial = 70 (c	carcinogenic); 15 (non-carcin	nogenic); Industrial/	Commercial	= 70; Co	nstruction	Worker = 70; RB	CA = 70		
114 II	IF _{eoBedi} -Age Adjusted Soil Ing	estion Factor for Carcinogens		114											
50	IR _{soll} -Soil Ingestion Rate			Residen	tial = 200;	Industrial/Comme	rcial = 50;	Construction Work	er = 480						
1	IR., -Daily Water Ingestion Ra	te		/Residen	tial = 2; fn	dustrial/Commerc	ial = 1								
	S - Solubility in Water	-		MTBE =	51,000										
1.0E-06 T	TR - Target Cancer Risk	•		Residen	tial = 10 ⁻⁶ ;	Industrial/Comme	rcial = 10°	Construction Wo	rker = 10 ⁻⁶ a	t point of	human ex	posure			
250 E	EF - Exposure Frequency							0; Construction Wor							
25 E	ED - Exposure Duration for In	halation for Non-Carcinogens						Construction Worke							
		centration at the center of a squ	are source					5.81; Construction							
.90E+08 T	T - Exposure Interval			Residen	tlal = 9.5 x	c108; Industrial/Co	mmercial :	= 7.9 x 10 ⁸ ; Constru	ction Worke	r = 3.6 x	10 ⁸				
	T _{M4.} - Exposure Interval for Ma	all Limit Volatilization Factor Equ	uation S26	30											
70 E	EDw Exposure Duration for Mig	ration to Groundwater Mass-Limit Ed	quation S28	70											
0.18	I _{M-L} - Infiltration Rate for Migra	tion to Groundwater Mass-Limit	Equation S28	0.18											
0.102	D _i - Diffusivity in Air			MTBE =	0.102										
0.0241 H	H' - Henry's Law Constant			MTBE =	0.0241										
	D Diffusivity in Water	-			1.1 x 10 ⁻⁵										
		arcinogens in Ingestion Equation	n				al = 25; C	onstruction Worker	= 0.115						
		arcinogens In Inhalation Equatio						Construction Worke							
	THQ - Target Hazard Quotien			1											
3 F	RfC - Inhalation Reference Co	ncentration		(Chronic	= 3; Subc	hronic = 2.5									
0.01 F	RfD _o - Oral Reference Dose	$(\mathbf{r}_{k}) = (\mathbf{r}_{k}) \cdot ($	* %. * *	Chronic	= 0.01; St	sbchronic = 0.1									
11.50 K	K _{ee} - Organic Carbon Partition	Coefficient		MTBE ≈	11.5										
						•									_
sidential ir	ngestion Remediation Obies	tives for Non-Carcinogenic Co	ontaminants												_
		2 x BW x AT x 365	1	×	70	x 25	×	365			_	638750			
-1 =	10 ⁻⁸ x (1	RM) x EF x ED x IR	0.000001	x 1/	0.01	x 250	×	25	x	50	- = -	31.25	2044	U	mg/l
		- -													
		tion Objectives for Non-Carcin			70					•		****			
1-= 22-	10 ⁶ v (1	2 x BW x AT x 365	1	X	70	x 0.115	X	365			- = -	2936.25	2040	5	mg/k
,,	10° x (1	RfD _a)'x EF x ED x IR _{eal}	0.000001	x 1/` * '	10.1	х 30	х	1	x	480		0.144		(

365

2.5

0.115

S-4 =

S-5 =

Construction Worker Inhalation Tier II Benzene Objective
S4 = THQ x AT x 365

Inhalation Non-Carcinogenic Construction Worker

EF x ED x (1/R/C x 1/VF) .

THQ x AT x 365 EF x ED x (1/RfC x 1/VF)

ممانين بالبيلوية وللأمامين بالأ

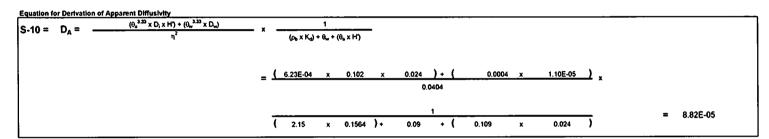
of the burners of a sur-

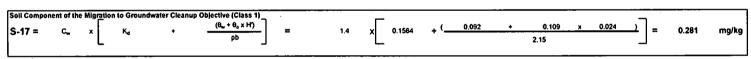
Tier 2 Industrial/Commercial Calculations for MTBE S & S Infinite Group, Inc. - DBA Downtown 66

	5 & 5 Intinite Group, Inc DBA Downtow
	 2016-1089
ESIDENTIAL OR COMMERCIAL	

RESIDENT	IAL OR CO	DMMERCI/	AL														
S-8 =	VF =	Q	(3.14 x D _A x T) 1/2 x 10 ⁻⁴	 85.81	.(3.14	_x	8.82E-05	_ x	7.90E+08) ^{1/2} x	0.0001	4.01	43	_	10581,5678	
3-0 -	VF -	<u> </u>	(2 x p _b x D _A)	 00.01	<u> </u>	2	×	2.15	x	8.82E-05)		3.79E	-04	_		
i																	

Construction Worker
$$S-8 = VF = \frac{Q}{C} \times \frac{(3.14 \times D_A \times T)^{1/2} \times 10^4}{(2 \times p_b \times D_A)} = \frac{85.81}{(2 \times 2.15 \times 8.82E-05)} \times \frac{3.60E+06}{3.79E-04} \right)^{1/2} \times \frac{0.0001}{3.79E-04} = 714.3116$$





Target Soil Leachate Co	oncentration (Class 1)			·
S-18 = C _w =	DF x GW _{obj}	· = 20.00 x 0.070		= 1.4
			The state of the s	; ;; ;; ;; ;; ;; ;; ;; ;; ;; ;; ;; ;; ;

Soli-Water Partition Coefficient
$$S-19 = K_d = K_{\infty} \times I_{\infty} = 11.50 \times 0.014 = 0.1564$$

and the state of the control of the

Tier 2 Industrial/Commercial Calculations for MTBE \$ & \$ Infinite Group, Inc. - DBA Downtown 66

	S & S Intinite Group, Inc DBA Downtown
	2016-1089
er-Filled Porosity	

Water-Filled Porosity
$$S-20 = \Theta_{w} = \eta \times \frac{1}{K_{s}} (26-3) = 0.20 \times \left[\frac{0.300}{1630.000} \right]^{0.000} = 0.0917$$

Air-Filled Porosity
$$S-21 = \Theta_n = \eta \cdot \Theta_w = 0.20 \cdot 0.09$$

Total Soil Porosity
$$S-24 = \eta = 1 - \frac{\rho_b}{\rho_b} = 1 - \frac{2.15}{2.89} = 0.2007$$

Estimation of Mixing Zone Depth
$$S-25 = d = (0.0112 \times L^{3})^{0.5} + d_a \left[1 - \exp \frac{(-L \times I)}{(K \times I \times d_a)} \right]$$

$$= (0.0112 \times 12.192^{-2})^{0.5} + 3.048 \times \left[1 - \exp \left(\frac{-12.192}{31.536} \times \frac{0.3}{0.0200} \times \frac{0.3}{3.048} \right) \right] = 3.884 \text{ m}$$

L		•							
- 1	Soil Saturati	on Limit		51000 0.1554	_				
	S-29 =	$C^{ext} = \frac{-b}{-b}x$	[(K _d x pb) + Ow + (H' x 8a)]	= \frac{51000}{2.15} x [(0.1564)	x 2.15) +	0.092	+ (0.024	x 0.109)] =	10,221.04 mg/kg

Soil Gas Outdoor	Inhalation ·					5.5			
6.30 = PO	g = ROsoil X H X pb	X 1000	. 249.860 x	c 0.024	. X	2.150 x	1000	<u> </u>	= 30,046.19 mg/m ³
S-30 = ROs	H'X Ga + Gw + I	Kd X ρb	0.024, x	0.109	.,++	. 0.092	0.156	X 2.150	- 00,000.10 1119/111
	•		•					· · ·	

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والأستراطية والكراب والأموان والمرازي والمناوي المتعلق والمراهي والأراز والمرازع والمرازع والمرازع والمعارية والمعارف

= 0.1090

Tier 2 Industrial/Commercial Calculations for Benzo[a]pyrene s & S Infinite Group, Inc. - DBA Downtown 66 2016-1089

		SSL	SSL & RBCA						-					Date Con	npiled:	02/20/18	
		RBCA	IRIS/HEAST												er ser cut	5 . . f	
t Values					die de de coest la		alles about			HE	DA Soil Clas	aiffa ation i	Food				
	s Bulk Density> Inic Matter (%)>	0	FOC % (0.58 conve		lue to be used in		anic Matter (m		-		mg/kg (0.58 c		0.000	foc conversion	to o/o:	0.000	T
	ρ _b - Dry Soil Bulk		1 00 % (0.30 conve	131011)	- 0.000						= 1.7; or Sit		0.000	100 00111010101	10 99.	0.000	
	ps - Soil Particle						or Site Spec		- 1.0, 011	- 1.0, Oldy	- 1.1, 01 01	о орсошо					
	Θ _a - Air Filled Soi		0.1	09 V	alue from S-21				1 meter =	0 13: Grav	el = 0.05° Sa	and = 0 14.	Sit =0 24: Clay	= 0.19; or Calculate	d Value	(S21)	
	Ow - Water Filled		0.0		alue from S-20									= 0.17; or Calculate			
	n - SSL: Total Soi				alue from S-24								ted Value (S24)				
	I - Hydraulic Grad				0.00 0-24		Specific	,	0.02,	J U. 1U.	0.07 - 0.00,	0, 00,00,0	100 10100 (02.72				
	foc - Total Organi					Surfa	ce Soil = 0.0				or Site Speci						
0.000	DF - Dilution Fact	or	1.6		alue from S-22				s less tha	n 20, then 2	O default is	used, else	calculated value	is used			
	d - Mixing Zone (alue from S-25		calculated v										
	K - Hydraulic Cor				.00E-04		Specific	8.64	E+00	cm/d	3.15E+0	3 cm/yr	Use cm/d for R1	15, R19, & R26. cm	lyr for R2	:4	
			oundwater Flow (m)		eet = 40		Specific (m)										
	d Aquifer Thick			fe	eet = 10		Specific (m)										
	I - Infiltration Rate						or Illinois										
	K, - Saturated Hy						Table K for I										
			on Objective Class 1							er Remedia	ation Objectiv	ve Class 2					
	1/(2b+3) - Expon						Table K for I									_	
_	BW - Body Weigh						dential = 70	(carcinog	enic); 15 (non-carcino	genic); Indu	ustrial/Com	mercial = 70; Co	enstruction Worker =	70; RBC	A = 70	
	Age Adju-	sted Soil Inges	stion Factor for Carcinoger	ns		114											
	Soil Ingesti نوم	on Rate				Resid	dential = 200	; Industri	al/Comme	orcial = 50; (Construction	Worker =	480				
7.3	SFOral Slop Fa	ctor				Benz	o[a]Pyrene :	7.3								<u> </u>	
1	IR, -Daily Water	ngestion Rate				Resid	dential = 2; l	ndustrial/	Commerc	ial = 1							
00162	S - Solubility in W	ater .			_		o[a]pyrene =										
0E-06	TR - Target Cand	er Risk				'Resid	tential = 10°	; Industri	ial/Comme	ercial = 10 ⁻⁶	; Constructio	n Worker	= 10 ⁻⁶ at point of	human exposure			
70	AT _e -Average Tin	e for Carcinog	jens			70											
10E-03	URF - Inhalation	Unit Risk Facto	or .			Benz	o[a]pyrene =	8.8 x 10	2								
	EF - Exposure Fr										Constructio						
			lation fo Carcinogens								onstruction \						
			entration at the center of a	square	source						.81; Constru						
	T - Exposure Inte								lustrial/Co	mmercial =	7.9 x 10°; C	onstruction	Worker = 3.6 x	10"			
	D _i - Diffusivity in						o[a]pyrene =										
	H' - Henry's Law						o[a]pyrene =										
	Dw - Diffusivity in						o(a)pyrene =										
20000	K _∞ - Organic Car	bon Partition C	Coefficient			Benz	o[a]pyrene =	1,020,0	00								
. 2																	
ustnavc	ommercial inges		BW x AT _c x 365		4 05 00												
3 =					= 1.0E-06	Х.	70	X	70	X	365			_ = <u>1.8E+00</u>	=	0.784	m
		Sf _o x 10	x EF x ED x IRsoil		7.300	. X.	1.00E-06	x	250	x	25	. X	50	2.28E+00			
<u> </u>														4			
			·	:	•												
nstructio	n Worker Ingesti																
3 =			BW x AT _c x 365		_ 1.0E-06	×	70	X	70	x	365			<u> 1.8E+00</u>	=	17.01	mg
-	_	, Sf _o x	10 ⁻⁸ x EF x IRsoil		7.300	×	1.00E-06	×	30	×	480			1.05E-01	,		
	ammarcial inhais	tion Tier II Ot	jective			•							,	• • •		•	
	5.54		R x ATc x 365	<u> </u>	1.0E-06	: ik#	∕\$?a 70 _	X - 5	. ,365 ≓	<u>٠٠:٠٠</u>	\$ 1 1 1		. (A. 11)	0:02555	• •	2.11E+02	mg



						2016-1	089								
Construction Worker	Inhalation Tier II Objective														
c 7 -	TR x ATc x 365	_ = .	1.0E-06	x	70	X	365					= 0.02555	=	2.71E+02	mg/kg
S-7 =	URF x 1000 x EF x ED x 1/VF		1.10E-03	×	1000	×	30	×	1 >	(1/	3.50E+05)	9.43E-05		2	

RESIDENTIAL OR COMMERCIAL

S-8 = VF =
$$\frac{Q}{C} \times \frac{(3.14 \times D_A \times T)^{1/2} \times 10^4}{(2 \times p_b \times D_A)}$$
 = 85.81 $\times \frac{(3.14 \times 3.68E-12 \times 9.50E+08)^{1/2} \times 0.0001}{(2 \times p_b \times D_A)}$ = 56844975.3174

Equation for Derivation of Apparent Diffusivity
$$S-10 = D_A = \frac{(\theta_a^{2.33} \times D_1 \times H) + (\theta_a^{2.33} \times D_m)}{\eta^2} \times \frac{1}{(g_b \times K_a) + \theta_m + (\theta_a \times H)}$$

$$= \frac{\left(6.23E-04 \times 0.043 \times 0.000 \right) + \left(0.0004 \times 9.00E-06 \right)}{0.0404} \times \frac{1}{\left(2.15 \times 13872 \right) + 0.09 + \left(0.109 \times 4.63E-05 \right)} = 3.68E-12$$

Soli Component of the Migration to Groundwater Cleanup Objective (Class 1)
$$S-17 = C_w \times \left[K_0 + \frac{(\theta_w + \theta_o \times H)}{\rho b} \right] = 0.1 \times \left[13872 + \frac{(0.092 + 0.109 \times 4.63E-05)}{2.15} \right] = 1387.204 \text{ mg/kg}$$

Water-Filled Porosity
$$S-20 = \Theta_{w} = \eta \times \frac{1}{K_{w}} \times \frac{1}{K_{w}} = 0.20 \times \left[\frac{0.300}{1830.000}\right]^{0.000} = 0.0917$$

Tier 2 Industrial/Commercial Calculations for Benzo[a]pyrene S & S Infinite Group, Inc. - DBA Downtown 66

S & S Infinite Group, Inc. - DBA Downtown 66
2016-1089

Air-Filled Porosity

 $S-21 = \Theta_a = \eta + \Theta_w = 0.20 + 0.09$

GW Ingestion
S-23 = TR x BW x Al_x x 365
SF_o x IR_m x EF x ED = 1.0E-06 x 70 x 70 x 365
SF_o x IR_m x EF x ED = 1.0E-06 x 70 x 250 x 25 = 1.8E+00 45625 = 0.0000 mg/L

Total Soil Porosity $S-24 = \eta = 1 \cdot \frac{P_b}{P_a} = 1 \cdot \frac{2.15}{2.59} = 0.2007$

Soil Saturation Limit $S-29 = C_{sat} = \frac{S}{\rho_b} \times \left[\{ (K_d \times \rho b) + \Theta w + (H' \times \theta a) \} \right] = \frac{1.62E-03}{2.15} \times \left[\{ 13872 \times 2.15 \} + 0.092 + \{ 4.63E-05 \times 0.109 \} \right] = 22.47 \text{ mg/kg}$

Soli Gas Outdoor Inhalation
S-30 = ROs g = ROs

the property of the second sec

S & S Infinite Group, Inc. - DBA Downtown 66 2016-1089

Appendix C - Table K Parameter Estimates for Calculating Water - Filled Soil Porosity (Ow)

Soil Texture	Saturated Hydraulic Conductivity (Ks) (m/yr)	1/ (2b+3)
Sand	1830	0.09
Loamy Sand	540	0.085
Sandy Loam	230	0.08
Silt Loam	120	0.074
Loam	60	0.073
Sandy Clay Loam	40	0.058
Silt Clay Loam	13	0.054
Clay Loam	20	0.05
Sandy Clay	10	0.042
Silt Clay	8	0.042
Clay .	5	0.039

Version: 4/25/2016

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A TOP TO

· X %

APPENDIX H

Water Well Survey Correspondence

CORRECTIVE ACTION PLAN AMENDMENT S&S Infinite Group Peoria, Illinois

701 W. South Grand Avenue Springfield, IL 62704

> Phone: (217) 522-8001 Fax: (217) 522-8009

August 21, 2018

Peoria City/County Health Department 2116 North Sheridan Road Peoria, Illinois 61604

RE: LPC #1430650114—Peoria County

S & S Infinite Group, Inc. - Peoria 400 North East Adams Street Incident Number: 2016-1089

LUST Technical Reports—Site Investigation Completion Report

To whom it may concern:

We at CW³M have been hired by Mr. Syed Muneeb of S&S Infinite Group, Inc. for site assessment and remedial proceedings at their Northeast Adams Street site located at 400 North East Adams Street, Peoria, Illinois, 61603. For us to continue our work at the site we would like to know what is the status of a water well adjacent to the site.

The water well information is as follows

API number #121430074200

Located at 422 North East Adams Street.

Longitude: -89.584916 Latitude: 40.694276

Well'Owner: Peoria Creamery Co.

On behalf of S&S Infinite, Inc. we thank you for your assistance. If there is any information about the current status of the well please notify us by email at vince@cwincompany.com or by mail at 701 South Grand Avenue West, Springfield, Illinois 62704.

If you have any questions or require additional information, please contact Mr. Vince Smith or me at (217) 522-8001.

Sincerely

Carol Rowe, P.G.

Senior Environmental Geologist

xc:

Mr. Syed Muneeb, S&S Infinite Group, Inc. Mr. William T. Sinnott, CW³M Company, Inc.



Peoria City/County Health Department

Health Protection Division Environmental Health

August 29, 2018

Carol Rowe, P.G. 701 W South Grand Ave. West Springfield, IL 62704

RE: ENVIRONMENTAL RECORDS FOR 400 NE ADAMS STREET, PEORIA, ILLINOIS

Dear Carol Rowe:

The Peoria City/County Health Department has reviewed your request for environmental records, documents and files for the property described as 400 NE Adams Street in Peoria, Illinois.

At this time, this Department does not have any environmental records relating to the aforementioned property.

If I can be of any further assistance in this matter, please feel free to contact me. I can be reached at 309-679-6160 Monday through Friday.

Sincerely,

Carey A Panier, BS, LEHP, REHS/RS
Interim Director of Environmental Health

LEAKING UST TECHNICAL REVIEW NOTES

Reviewed by: Scott McGill

Date Reviewed: January 31, 2019

Re: LPC #1430650114 -- Peoria Co Peoria/S & S Infinite Group, Inc. 400 North East Adams Street Leaking UST Incident No. 20161089

Leaking UST Technical File

Document(s) Reviewed:

This document consists of an amended corrective action plan and budget dated November 12, 2018 and received by the Illinois EPA on November 13, 2018 and prepared by CW3M Company. This plan and budget were prepared in accordance with the 734 requirements and summarized as follows:

Corrective Action Plan/Budget Review Notes:

The owner and operator submitted an amended corrective action plan to address contamination at the site. The owner and operator submitted an amended corrective action plan consisting of soil excavation and institutional controls. The owner and operator propose to excavate 721 cubic yards of impacted soils to a depth of 10 feet as depicted in Drawing: 0007. The excavated soils are in the vicinity of WC-1 and W-3 consisting of soils above the Tier 2 cleanup objectives. Benzene concentrations exceed the Tier 2 industrial/commercial inhalation and Xylenes exceed the Tier 2 Csat cleanup objectives. The owner and operator also propose institutional controls consisting of a construction worker caution, industrial/commercial land use restriction and groundwater ordinance. It should be noted that soil contamination in the vicinity of WC-2 and RC-1 above the Tier 2 cleanup objectives was previously removed during early action activities. Confirmation samples consisting of 6 side wall and 2 floor samples will be collected after completion of excavation activities. The excavation will be capped with 6 inches of CA6 rock. A waste characterization sample is also proposed at the site.

The amended budget proposal is included in Appendix D in the amount of \$106,603.33. This amount includes costs for advancement of a waste characterization sample including analytical soil sampling for the BTEX, MTBE and PNA constituents, excavation and backfilling 721 cubic yards of soil, personnel and material costs.

Illinois EPA Decision:

The amended corrective action plan consisting of soil excavation and backfilling and institutional controls should be approved. The budget proposal should be modified with the following cuts:

1. Costs in the amount of \$1,779.84 associated with a Geologist III to complete 16 hours consisting of reimbursement development/inputs/contractor invoicing/evaluation with budget since these costs lack supporting documentation and not reasonable as submitted;

- 2. \$1,289.30 associated with a Senior Project Manager to complete 10 hours for groundwater ordinance negotiation development/correspondence/notification; and
- 3. \$227.49 associated with a Senior Draftperson/CAD to complete 3 hours consisting of drafting and editing maps for report.

A corrective action completion report should be submitted to the Illinois EPA.

Response Due:

A corrective action completion report should be submitted to the Illinois EPA.

LPC #1430650114 - Peoria Co. Peoria/S2 S Infinite Group, Inc WST Technical File.

McGill, Scott

From:

vince@cwmcompany.com

Sent:

Thursday, January 31, 2019 11:54 AM

To: Subject: McGill, Scott [External] RE:

Scott,

The soil in the vicinity of WC-2 and RC-1 was removed as part of early action. While the tank pit at the northwest corner of the property had no soil removed, the tank pit east of the building was excavated during early action. The floor and wall samples after the excavation indicate the levels of remaining contamination in the area of WC-2 and RC-1. Only sample 11 from early action exceeds the Tier 2 CUOs, which is only for the construction worker inhalation objective for naphthalene. A construction worker caution is being requested for that area.

Let me know if you have any other questions.

Vince E. Smith, P.E. Sr. Environmental Engineer CWM Company, Inc. 701 W. South Grand Ave. Springfield, IL 62704 217-522-8001 Fax 217-522-8009 vince@cwmcompany.com

----- Original Message ------

Subject:

From: "McGill, Scott" <Scott.McGill@Illinois.gov>

Date: Thu, January 31, 2019 10:10 am

To: "vince@cwmcompany.com" < vince@cwmcompany.com>

I was in the process of completing the review of the corrective action plan for S & S Infinite Group, Inc. The plan indicates that 721 cubic yards of soil is being excavated in the vicinity of WC-1 and WC-3 in order to address soil contamination exceeding the Tier 2 cleanup objectives. Soil contamination also exceeds Tier 2 cleanup objectives in the vicinity of WC-2 and RC-1 since Benzene concentrations range from 11.8 to 5.77 mg/kg, respectively, as depicted in Drawing:0003B and the Tier 2 cleanup objective is 3.70 mg/kg. Is there a reason that soil contamination is not being excavated in this area of the site or has that impacted soil already been addressed?

State of Illinois - CONFIDENTIALITY NOTICE. The information contained in this communication is confidential, may be attorney-client privileged or attorney work product, may constitute inside information or internal deliberative staff communication, and is intended only for the use of the addressee. Unauthorized use, disclosure or copying of this communication or any part thereof is strictly prohibited and may be unlawful. If you have received this communication in error, please notify the sender immediately by return e-mail and destroy this communication and all copies thereof, including all attachments. Receipt by an unintended recipient does not waive attorney-client privilege, attorney work product privilege, or any other exemption from disclosure.

RELIENTA JAN

McGill, Scott

LPC#1430650114-Pearia (Pearia | S&S Infinite
WST Technical File

From:

vince@cwmcompany.com

Sent:

Monday, February 04, 2019 9:05 AM

To: Subject: McGill, Scott [External] RE:

Scott,

For the first item, we would be willing to reduce the requested hours from 6 to 3, if that helps with the approval. Additional drafting beyond the SICR was needed to prepare the drawings needed in the two CAP submittals.

For the second item, we would like to point out that we received nothing for preparing the original CAP, other than the time to review and certify it. The 40 hours requested are for the preparation of this submittal, as well as the previous submittal which was approved with modifications. For a site with two unresolved incidents, to review the historical data and incorporate it into a single plan to address both incidents, and prepare two CAP submittals, one of which requests additional excavation, we feel that 40 hours is minimal and nowhere near excessive. In reality, we have already spent more than twice that amount in hours preparing the plans, and know that we will never recover it all.

For the third item, we are willing to accept the elimination of the requested 10 hours for the Senior Project Manager.

Let me know if you have any other questions.

Vince E. Smith, P.E.
Sr. Environmental Engineer
CWM Company, Inc.
701 W. South Grand Ave.
Springfield, IL 62704
217-522-8001
Fax 217-522-8009
vince@cwmcompany.com

----- Original Message ------

Subject:

From: "McGill, Scott" <Scott.McGill@Illinois.gov>

Date: Fri, February 01, 2019 8:48 am

To: "vince@cwmcompany.com" <vince@cwmcompany.com>

Vince,

I'm in the process of reviewing the corrective action plan budget for S & S Infinite Group, Inc, and I need further justification on the following personnel costs:

- 1. \$454.98 associated with 6 hours for a Senior Draftperson/CAD to complete activities consisting of drafting and editing maps for report. 6 hours appears to be excessive for drafting and editing maps for the report.;
- 2. \$5,056.00 associated with 40 hours for a Senior Project Manager to complete activities consisting of amended correction design/report development/IEPA correspondence; and
- 3. \$1,289.30 associated with 10 hours for a Senior Project Manager to complete groundwater ordinance negotiation development/correspondence/notifications. It appears that the

Engineer III is completing 24 hours for the same work proposed by the Senior Project Manager.

Thanks for your help.

State of Illinois - CONFIDENTIALITY NOTICE: The information contained in this communication is confidential, may be attorney-client privileged or attorney work product; may constitute inside information or internal deliberative staff communication, and is intended only for the use of the addressee. Unauthorized use, disclosure of copying of this communication or any part thereof is strictly prohibited and may be unlawful. If you have received this communication in error, please notify the sender immediately by return e-mail and destroy this communication and all copies thereof, including all attachments. Receipt by an unintended recipient does not waive attorney-client privilege, attorney work product privilege, or any other exemption from disclosure.

LPC#1430650114-Peoria Co. Peoria 1525 Infinite Group, Inc Technical File

McGill, Scott

From:

vince@cwmcompany.com

Sent:

Thursday, February 07, 2019 10:51 AM

To: Subject: McGill, Scott [External] RE:

Attachments:

Amendment cons-personnel-costs - revised pdf; Amendment consulting-material-costs-

summary - revised.pdf

Scott,

We had previously agreed in an email to remove the \$1,289.30 for Sr. Project Manager doing groundwater ordinance work. While looking at the proposed budget on this matter, we realized that the CACR fpreparation costs were not included in the submittal you are looking at, so we have revised the personnel and consultant materials portions of the budget to include the CACR costs, and to include the changes in the personnel costs which we previously agreed to. The attached budget sections replace those same sections previously submitted.

Let me know if you have any questions.

Vince E. Smith, P.E. Sr. Environmental Engineer CWM Company, Inc. 701 W. South Grand Ave. Springfield, IL 62704 217-522-8001 Fax 217-522-8009 vince@cwmcompany.com

TEPA DIVISION OF RECORDS MANAGEMENT REVIEWER: JAMR

RECEIVED

FEB 07 2019

----- Original Message -----Subject:

From: "McGill, Scott" <Scott.McGill@Illinois.gov>

Date: Thu, February 07, 2019 6:53 am

To: "vince@cwmcompany.com" < vince@cwmcompany.com>

IEPA/BOL

Vince.

The budget proposal for S & S Infinite Group, Inc. included personnel costs in the amount of \$1,289.30 associated with a Senior Project Manager consisting of groundwater ordinance negotiation development/correspondence/notifications which lack supporting documentation. Please send me supporting documentation for these costs. Thanks in advance.

State of Illinois - CONFIDENTIALITY NOTICE: The information contained in this communication is confidential. may be attorney-client privileged or attorney work product, may constitute inside information or internal deliberative staff communication, and is intended only for the use of the addressee. Unauthorized use, disclosure or copying of this communication or any part thereof is strictly prohibited and may be unlawful. If you have received this communication in error, please notify the sender immediately by return e-mail and destroy this communication and all copies thereof, including all attachments. Receipt by an unintended recipient does not waive attorney-client privilege, attorney work product privilege, or any other exemption from disclosure.

Consulting Personnel Costs Form

Employee Nam	e	Personnel Title	Hours	Rate* (\$)	Total Cost
Remediation Category		Task			
					,
		Senior Project Manager	40.00	126.40	\$5,056.00
CCAP	Amended Corre	ective Action Design / Report Develo	ppment / IEPA C	orrespondence	
	•		1	<u> </u>	
		Senior Prof. Engineer	2.00	, 164.33	\$328.66
CCAP	Report Review	and Certification			
•			Ī		
		,	•		
			,		
	• .	1			
		Senior Draftperson/CAD	3.00	75.83	\$227.49
ССАР	Drafting and Ed	iting Maps for Report			·
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		Senior Admin. Assistant	3.00	56.88	\$170.64
CCAP	Report Compila	tion, Assembly, and Distribution	•		
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			•		
					-
		Senior Project Manager	10.00	126.40	\$1,264.00
TACO 2 or 3	TACO Tier 2 Ca	alculations / Development of CUOs /	GW Modeling		
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Employee Nam	e	Personnel Title	Hours	Rate* (\$)	Total Cost
Remediation Category		Task	C 1		
			•	1	
	·- -	Senior Project Manager	14.00	126.40	\$1,769.60
CCAP-Budget	Budget Prepara	ition / Data Evaluation			
			•	İ	
			<u> </u>		·
		la six s	T		
		Senior Prof. Engineer	2.00	164.33	\$328.66
CCAP-Budget	Budget Review	& Certification			
		Senior Draftperson/CAD	<u> </u>	1	
	<u> </u>	Seriioi Diatipeisoniono	8.00	77.35	\$618.80
ELUC	Drafting Maps for	or Groundwater Ordinance			
		Senior Admin. Assistant	T	50.00	2002.40
ELUC	· ·		5.00	58.02	\$290.10
	Groundwater O	rdinance Notification / Correspond	ience		
,		Engineer III	24.00	128.93	\$3,094.32
ELUC		.l		,	
	Groudwater Ord	dinance Development / Correspon	dence with City /	weeting	
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Employee Name		Personnel Title	Hours	Rate* (\$)	Total Cost
Remediation Category		Task			
			1		
333333		Senior Project Manager	8.00	128.93	\$1,031.44
CCA-Field	Scheduling Was	ste Characterization Drilling/Excavat	tion Preparation	/Landfill Authoiza	ation/Corr.
		Engineer III	6.00	128.93	\$773.58
CCA-Field	Drilling Waste C	haracterization			
<u> </u>		Senior Admin. Assistant	2.00	58.02	\$116.04
. CCA-Field	JULIE/Client No	tification for Waste Characterization	n Drilling/Excava	ation/Analytical	· · · · · · · · · · · · · · · · · ·
		Senior Project Manager	8.00	128.03	\$1,024.24
CCA-Field	Field Document	ation			
		Engineer III	36.00	128.93	\$4,641.48
CCA-Field	Excavation Disp	osal and Backfill Oversight/Samplin	ng/Field Reports		
		Senior Draftperson/CAD	5.00	77.35	\$386.75
CCA-Field	Drafting/Docum	 entation/Excavation/Sampling/Resu		11.33	\$360.73
		Senior Project Manager		400.00	2770 50
CCA-Field	Analytical Resul		6.00 ;	128.93	\$773.58
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	<u>r</u>	Engineer III	8.00	128.93	\$1,031.44
CCA-Field	Waste Characte	erization Sampling / Field Reports /	Sample Coordin	ation .	

Employee Name	<u> </u>	Personnel Title	Hours	Rate* (\$)	Total Cost
emediation Category		Task			
	·	Senior Prof. Engineer	6.00	164.33	\$985.98
CA-Pay	Reimbursement	Review and Certification			
		Senior Acct. Technician	30.00	69.51	\$2,085.30
CA-Pay	Reimbursement	Prepartion Form (min 2 claims)	-		
· · · · · · · · · · · · · · · · · · ·		Senior Admin. Assistant	8.00	56.88	\$455.04
CA-Pay	Reimbursement	Compilation, Assembly, and Distri	ibution .	•.	
	,	Geologist III	16.00	111.24	\$1,779.84
CA-Pay	Reimbursement	Development / Inputs / Contractor	Invoicing / Evalu	ution with Budget	:
•			,	1	
•					· , · · · · · · · · · · · · · · · · · ·
·		Senior Project Manager	30.00	128.93	\$3,867.90
CACR	Preparation of C	Corrective Action Completion Repo	<u>rt _/</u>		
		Senior Prof. Engineer	3.00	164.33	\$492.99
CACR.	Certification of C	Corrective Action Completion Repo	int 7		,
		Senior Admin. Assistant	2.00	56.88	\$113.76
[CACR]	Assembly and D	istribution of Corrective Action Co	mpletion Report		
<u>, , , , , , , , , , , , , , , , , , , </u>	<u> </u>				· .
			-	•	

Total of Consulting Personnel Costs

\$32,707.63

Consultant's Materials Costs Form

Materials, Equipment,	or Field Purchase	Time or Amount Used	Rate (\$)	Unit	Total Cost	
Remediation Category		Description/Justification `				
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Postage	· · · · · · · · · · · · · · · · · · ·	3.00	7.50	/each	\$22.50	
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Postage	· T	4.00	7.50	/each	\$30.00	
CA-Pay	Reimbursement Distribut	ion / Forms —————	•	· -		
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	1		•			
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Postage		4.00	7.50	/each	\$30.00	
ELUC	Groundwater ordinance,	groundwater ordinan	ce notifications			
	•		<u> </u>	J		
Mileage CCA-Field	Four Round Trips from S	600.00	.54 ite (1 Drilling, 3 F	/mile	\$324.00	
UCA-FIEIU	Tour Round Trips Hoff S	philigheid Office to S				

Materials, Equipment	, or Field Purchase	Time or Amount Used	Rate (\$)	Unit	Total Cost	
Remediation Category		Description	Justification	•		
		.1			•	
PID Rental	· · · · · · · · · · · · · · · · · · ·	4.00	75.00	/day	\$300.00	
CCA-Field	Detect VOC Levels in,	Soil Samples				
			· · · · · · · · · · · · · · · · · · ·			
Occasion Occasion		4.00	35.00	Iday	£100.00	
Sampling Supplies CCA-Field Disposable Latex Gloves,		es, Bags, Sampling St	25.00 pplies	/day	\$100.00	
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Postage	·	3.00	7.50	/each	\$22.50	
CACR	Report/ Forms/ Distribu	ution				
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		Total of Consultar	nt Materials Cost	s	\$829.00	





1021 NORTH GRAND AVENUE EAST, P.O. BOX 19276, SPRINGFIELD, ILLINOIS 62794-9276 • (217) 782-3397

JB PRITZKER, GOVERNOR

JOHN J. KIM, ACTING DIRECTOR

217/524-3300

#### **CERTIFIED MAIL**

7017 2680 0001 0207 7415

FEB 11 2019

S & S Infinite Group, Inc. Attn: Syed Muneeb 400 North East Adams Street Peoria, IL 61603

Re:

LPC #1430650114 -- Peoria County Peoria/S & S Infinite Group, Inc. 400 North East Adams Street Leaking UST Incident No. 20161089 Leaking UST Technical File

Dear Syed Muneeb:

REVIEWER JRW

The Illinois Environmental Protection Agency (Illinois EPA) has reviewed the Corrective Action Plan (plan) submitted for the above-referenced incident. This plan, dated November 12, 2018, was received by the Illinois EPA on November 13, 2018. On February 7, 2019, revised Consulting Personnel and Material Costs Forms were received which included costs associated with the development of the Corrective Action Completion Report that was omitted in the November 12, 2018 plan. Citations in this letter are from the Environmental Protection Act (415 ILCS 5) (Act) and Title 35 of the Illinois Administrative Code (35 Ill. Adm. Code).

Pursuant to Sections 57.7(b)(2) and 57.7(c) of the Act and 35 Ill. Adm. Code 734.505(b) and 734.510(a), the plan is approved. The activities proposed in the plan are appropriate to demonstrate compliance with Title XVI of the Act. Please note that all activities associated with the remediation of this release proposed in the plan must be executed in accordance with all applicable regulatory and statutory requirements, including compliance with the proper permits.

In addition, the budget is modified pursuant to Sections 57.7(b)(3) and 57.7(c) of the Act and 35 Ill. Adm. Code 734.505(b) and 734.510(b). Based on the modifications listed in Section 2 of Attachment A, the amounts listed in Section 1 of Attachment A have been approved. Please note that the costs must be incurred in accordance with the approved plan. Be aware that the amount of payment from the Fund may be limited by Sections 57.7(c), 57.8(d), 57.8(e), and 57.8(g) of the Act, as well as 35 Ill. Adm. Code 734.630 and 734.655.

Further, pursuant to 35 Ill. Adm. Code 734.145, it is required that the Illinois EPA be notified of field activities prior to the date the field activities take place. This notice must include a description of the field activities to be conducted; the name of the person conducting the activities; and the date, time, and place the activities will be conducted and shall be made to EPA. Field Notifications @illinois.gov. This notification of field activities must be provided at least two weeks prior to the scheduled field activities.

4302 N. Main St., Rockford, IL 61103 (815) 987-7760 595 S. State St., Elgin, IL 60123 (847) 608-3131 2125 S. First St., Champaign, IL 61820 (217) 278-5800 2009 Mall St., Collinsville, IL 62234 (618) 346-5120 Pursuant to Sections 57.7(b)(5) and 57.12(c) and (d) of the Act and 35 Ill. Adm. Code 734.100 and 734.125, the Illinois EPA requires that a Corrective Action Completion Report that achieves compliance with applicable remediation objectives be submitted within 30 days after completion of the plan to:

Illinois Environmental Protection Agency Bureau of Land - #24 Leaking Underground Storage Tank Section 1021 North Grand Avenue East Post Office Box 19276 Springfield, IL 62794-9276

Please submit all correspondence in duplicate and include the Re: block shown at the beginning of this letter.

If within four years after the approval of this plan, compliance with the applicable remediation objectives has not been achieved and a Corrective Action Completion Report has not been submitted, the Illinois EPA requires the submission of a status report pursuant to Section 57.7(b)(6) of the Act.

An underground storage tank system owner or operator may appeal this decision to the Illinois Pollution Control Board. Appeal rights are attached.

If you have any questions or need further assistance, please contact Scott McGill at (217) 524-5137.

Sincerely,

Michael T. Lowder

Unit Manager

Leaking Underground Storage Tank Section

Division of Remediation Management

Bureau of Land

Attachments:

Attachment A

Appeal Rights

c: Carol L. Rowe, CWM Company, Inc. (electronic copy)

BOL File

#### Attachment A

Re: LPC #1430650114 -- Peoria County Peoria/S & S Infinite Group, Inc. 400 North East Adams Street Leaking UST Incident No. 20161089

Leaking UST Technical File

#### **SECTION 1**

As a result of Illinois EPA's modification(s) in Section 2 of this Attachment A, the following amounts are approved:

\$1,547.20	Drilling and Monitoring Well Costs
\$2,918.98	Analytical Costs
\$71,580.88	Remediation and Disposal Costs
\$0.00	UST Removal and Abandonment Costs
\$0.00	Paving, Demolition, and Well Abandonment Costs
\$30,927.79	Consulting Personnel Costs
\$829.00	Consultant's Materials Costs

Handling charges will be determined at the time a billing package is reviewed by the Illinois EPA. The amount of allowable handling charges will be determined in accordance with Section 57.1(a) of the Environmental Protection Act (Act) and 35 Illinois Administrative Code (35 Ill. Adm. Code) 734.635.

#### **SECTION 2**

\$1,779.84 for costs for reimbursement development/inputs/contractor invoicing/evaluation and budget, which lack supporting documentation. Such costs are ineligible for payment from the Fund pursuant to 35 Ill. Adm. Code 734.630(cc). Since there is no supporting documentation of costs, the Illinois EPA cannot determine that costs will not be used for activities in excess of those necessary to meet the minimum requirements of Title XVI of the Act. Therefore, such costs are not approved pursuant to Section 57.7(c)(3) of the Act because they may be used for site investigation or corrective action activities in excess of those required to meet the minimum requirements of Title XVI of the Act. Also, these costs are unreasonable as submitted.

In addition, the above-referenced deduction is for consulting personnel costs associated with the procurement, oversight and payment of subcontractors or field purchases. Such costs are handling charges pursuant to 35 Ill. Adm. Code 734.115. The Corrective Action Budget must not include handling charges pursuant to 35 Ill. Adm. Code 734.335(b).

#### Appeal Rights

An underground storage tank owner or operator may appeal this final decision to the Illinois Pollution Control Board pursuant to Sections 40 and 57.7(c)(4) of the Act by filing a petition for a hearing within 35 days after the date of issuance of the final decision. However, the 35-day period may be extended for a period of time not to exceed 90 days by written notice from the owner or operator and the Illinois EPA within the initial 35-day appeal period. If the owner or operator wishes to receive a 90-day extension, a written request that includes a statement of the date the final decision was received, along with a copy of this decision, must be sent to the Illinois EPA as soon as possible.

For information regarding the filing of an appeal, please contact:

John Therriault, Assistant Clerk Illinois Pollution Control Board James R. Thompson Center 100 West Randolph, Suite 11-500 Chicago, IL 60601 312/814-3620

For information regarding the filing of an extension, please contact:

Illinois Environmental Protection Agency Division of Legal Counsel 1021 North Grand Avenue East Post Office Box 19276 Springfield, IL 62794-9276 217/782-5544

701 W. South Grand Avenue Springfield, IL 62704

> Phone: (217) 522-8001 Fax: (217) 522-8009

August 13, 2019

Mr. Scott McGill, Project Manager LUST Section, Bureau of Land Illinois Environmental Protection Agency 1021 North Grand Avenue East Springfield, IL 62794-9276

RE: LPC #1430650114—Peoria County

S & S Infinite Group, Inc. - Peoria 400 North East Adams Street Incident Number: 2016-1089

LUST Technical Reports — Corrective Action Plan Budget Amendment

DIVISION OF RECORDS MANNIGEMENT OCT 24 2019

REVIEWER: JMR

1430650114 – Peoria County S & S Infinite Group, Inc.

Incident # 20161089 Leaking UST Technical File

Dear Mr. McGill:

On behalf of S & S Infinite Group, Inc, owner of the USTs at the above referenced site in Peoria, Illinois, we are submitting the attached Corrective Action Plan Budget Amendment. The consulting material costs for the excavation were inadvertently left out of the approved budget, and are being proposed in this submittal. The excavation has been completed; we are waiting on analytical. As soon as available, the remainder of Corrective Action activities will be completed.

If you have any questions or require additional information, please contact Mr. Matthew Saladino or me at (217) 522-8001.

Sincerely,

xc:

Carol Rowe, P.G. . Senior Environmental Geologist

Mr. Syed Muneeb, S & S Infinite Group, Inc. / Downtown 66 Mr. William T. Sinnott, CW³M Company, Inc.

RECEIVED

AUG 1 6 2019

IEPA/BOL

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AUG 1 6 2019

IEPA/BOL



# Illinois Environmental Protection Agency

Bureau of Land • 1021 N. Grand Avenue E. • P.O. Box 19276 • Springfield • Illinois • 62794-9276

## General Information for the Budget and Billing Forms

LPC #: 1	1430650114	County:	<u>Pe</u> oria	<u> </u>
City: Pe	oria	Site Name:	S & S Infinite Group,	Inc.
Site Addr	ress: 400 NE Adams Street			
IEMA Inc	sident No.: 2016-1089		_	
IEMA No	tification Date: 11/21/2016	<del></del>	· · ·	
Date this	form was prepared: <u>8/9/2019</u>		<del></del>	
This for	m is being submitted as a (check o	ne, if applicable	):	
	Budget Proposal			S. C. S. S. S. S. S. S. S. S. S. S. S. S. S.
$\square$	Budget Amendment (Budget amend	ments must inclu	ide only the costs over	the previous-budget:)
	Billing Package		•	AUG 1 6 2019
	Please provide the name(s) and da	te(s) of report(s)	documenting the costs	requestable of A ID
	Please provide the name(s) and dat	(0)	addamenting the court	MEPAIDU
•	Name(s):			
This nos	Date(s):			
	kage is being submitted for the sit	e activities mun	cated below:	
35 III. Ac	dm. Code 734:			
	Early Action			
	Free Product Removal after Early A	ction		
	Site Investigation	Stage 1:	Stage 2:	Stage 3:
$\boxtimes$	Corrective Action	Actual Costs		•
35 III. Ac	dm. Code 732:			
	Early Action			
. $\Box$	Free Product Removal after Early A	ction		• .
	Site Classification			
	Low Priority Corrective Action			•
	High Priority Corrective Action			•
35 III. Ac	dm. Code 731:			
	Site Investigation			
$\Box$	Corrective Action			

IL 532 -2825 LPC 630 Rev. 1/ 2007

## General Information for the Budget and Billing Forms

ŗ

The following address will be used as the mailing address for checks and any final determination letters regarding payment from the Fund.

Pay to the order of:S&S_Infinite	Group		
Send in care of: CWM Company, Inc.			
Address: P.O. Box 571			
City: Carlinville	State: IL	Zip: <u>6</u>	2626
The payee is the: Owner 🕱	Operator (Check	one or both.)	
			e submitted.
Signature of the owner or operator of the	UST(s) (required)	Click here t	o print off a W-9 Form.
Number of petroleum USTs in Illinois pre parent or joint stock company of the own or joint stock company of the owner or op  Fewer than 101:	er or operator; and any com		
Number of USTs at the site:7have been removed.)	(Number of USTs include	es USTs presently a	t the site and USTs that
Number of incidents reported to IEMA fo	r this site: 2		
Incident Numbers assigned to the site du	ue to releases from USTs:	20140963	20161089
Please list all tanks that have ever been	located at the site and tanks	that are presently lo	ocated at the site

Product Stored in UST	Size (gallons)	Did UST have a release?		Incident No.	Type of Release Tank Leak / Overfill / Piping Leak
Diesel	6,000	Yes 🔼	No 🗌	2014-0963	Overfil1
Gasoline	10,000	Yes 🖳	No 🗌	2014-0963	Overfill
Gasoline	10,000	Yes 🗓	No 🗌	2016-1089	Overfill
Gasoline	350	Yes 🗓	No 🗌	2016-1089	Tank Leak
Gasoline	350	Yes 🗓	No 🗌	2016-1089	Tank Leak
Used Oil	560	Yes 🙀	No 🗌	2016-1089	Tank Leak
Used Oil	560	Yes 🔀	No 🗌	2016-1089	Tank Leak
		Yes 🗌	No 🗌		
		Yes 🗌	No 🗌		





## Owner/Operator and Licensed Professional Engineer/Geologist Budget Certification Form

I hereby certify that I intend to seek payment from the UST Fund for costs incurred while performing corrective action activities for Leaking UST incident 2016-1089. I further certify that the costs set forth in this budget are for necessary activities and are reasonable and accurate to the best of my knowledge and belief. I also certify that the costs included in this budget are not for corrective action in excess of the minimum requirements of 415 ILCS 5/57, no costs are included in this budget that are not described in the corrective action plan, and no costs exceed Subpart H: Maximum Payment Amounts, Appendix D Sample Handling and Analysis amounts, and Appendix E Personnel Titles and Rates of 35 III. Adm. Code 732 or 734. I further certify that costs ineligible for payment from the Fund pursuant to 35 III. Adm. Code 732.606 or 734.630 are not included in the budget proposal or amendment. Such ineligible costs include but are not limited to:
Costs associated with ineligible tanks.  Costs associated with site restoration (e.g., pump islands, canopies).
Costs associated with utility conferement (a.g. cowers electrical telephone etc.)
Costs associated with utility replacement (e.g., sewers, electrical, telephone, etc.).  Costs incurred prior to IEMA notification.  Costs associated with planned tank pulls.
Legal fees or costs.
Costs incurred prior to July 28, 1989.  Costs personated with installation of new LISTs or the repair of existing LISTs.
Costs associated with installation of new osts of the repair of existing osts.
Owner/Operator: S & S Infinite Group, Inc. / DBA - Downtown 66
Authorized Representative: Syed Muneeb Title: Owner
Signature: Date: 8/7/19
and 1
Subscribed and sworm to before me the day of day of
CAROL L ROWE Seal: Official Seal
Notary Public - State of Hillingia
My Commission Expires Mar 18, 2021
In addition, I certify under penalty of law that all activities that are the subject of this plant, budget, or report were conducted under my supervision or were conducted under the supervision of another Licensed Professional Engineer
or Licensed Professional Geologist and reviewed by me; that this plan, budget, or report and all attachments were
prepared under my supervision; that, to the best of my knowledge and belief, the work described in the plan, budget,
or report has been completed in accordance with the Environmental Protection Act [415 ILCS 5], 35 III. Adm. Code 732 or 734, and generally accepted standards and practices of my profession; and that the information presented is
accurate and complete. I am aware there are significant penalties for submitting false statements or representations
to the Illinois EPA, including but not limited to fines, imprisonment, or both as provided in Sections 44 and 57:17, of the
to the Illinois EPA, including but not limited to fines, imprisonment, or both as provided in Sections 44 and 57:17 of the Environmental Protection Act [415 ILCS 5/44 and 57.17].
L.P.E./L.P.G.: Vince E. Smith
L.P.E./L.P.G. Signature: Date: 8/13/19. Live HER
Subscribed and sworn to before me the 13th day of August 2019
CAROLA ROWE
Official Seal
(Notary Public)  Notary Public - State of Illinois  My Commission Evolves May 18, 2021
My Commission Expires Mar 18, 2021  The Illinois EPA is authorized to require this information under 415 ILCS 5/1. Disclosure of this information is required. Failure to do so may result in the delay or denial of any budget or payment requested hereunder.

# **Budget Summary**

734	Free Product	Stage 1 Site Investigation	Stage 2 Site Investigation	Stage 3 Site Investigation	Corrective Action		
Drilling and Monitoring Well Costs Form	\$	\$	\$	\$	\$		
Analytical Costs Form	\$	\$	\$	\$	\$		
Remediation and Disposal Costs Form	\$	\$	\$	\$	\$		
UST Removal and Abandonment Costs Form	\$	\$	\$	\$	<u>\$</u>		
Paving, Demolition, and Well Abandonment Costs Form	\$	\$	\$	\$	\$		
Consulting Personnel Costs Form	\$	\$	\$	\$	\$		
Consultant's Materials Costs Form	\$	\$	\$	\$	\$ 765.00		
Handling Charges Form	Handling charges will be determined at the time a billing package is submitted to the Illinois EPA. The amount of allowable handling charges will be determined in accordance with the Handling Charges Form.						
Total	\$	\$	\$	\$	\$ 765.00		

# **Consultant's Materials Costs Form**

Materials, Equipment, or Field Purchase		Time or Amount Used	Rate (\$)	Unit	Total Cost	
Remediation Category	•	Description/Justification				
	<del>- T</del>					
					<u> </u>	
	<del></del>					
				•		
•				<u> </u>	<u> </u>	
••	<u>-</u>			<u></u>		
PID Rental	· · · · · · · · · · · · · · · · · · ·	3.00	75.00	/day	\$225.00	
CCA-Field	Detect VOC Levels in S	Soil Samples ————————————————————————————————————				
	<del></del>					
Sample Supplies		1.00	25.00	/each	\$25.00	
CCA-Field	Disposable Latex Glove	es, Bags, Deionized W	/ater, Twine, Mis	cellaneous	Expenses	
Meals. Incidentals (Tazewell)		3.00	55.00	/day	\$165.00	
		•				
Hatal					A	
CCA-Field		2.00	94.00	/each	\$188.00	
· ·						
Nellanea						
Mileage	Two Pound Tring from	Springfield Office to Si	.54	/mile	* \$162.00	
CCA-Field	Two Round Trips from	opringriela Office to Si	te (Excavation a	nd Backfill)		

Total of Consultant Materials Costs	\$765.00	l
	J 4100.00	

**Environmental Consulting Services** 

701 W. South Grand Avenue Springfield, IL 62704

Phone: (217) 522-8001

1430650114 - Peoria County S & S Infinite Group, Inc.

Incident # 20161089 Leaking UST Technical File 8009

September 10, 2019

Mr. Scott McGill, Project Manager LUST Section, Bureau of Land Illinois Environmental Protection Agency 1021 North Grand Avenue East Springfield, IL 62794-9276

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SEP 1 6 2019

IEPA/BOL

RE: LPC #1430650114—Peoria County

S & S Infinite Group, Inc. - Peoria 400 North East Adams Street Incident Number: 2016-1089

LUST Technical Reports — Corrective Action Plan Budget Amendment

Dear Mr. McGill:

On behalf of S & S Infinite Group, Inc., owner of the USTs at the above referenced site in Peoria, Illinois, we are submitting the attached Corrective Action Plan Budget Amendment. This includes costs associated with concrete replacement for work done on behalf of both incidents, which has not been included in any budget to date submitted for the incident. We apologize for any inconvenience this may have caused.

The areas requiring concrete replacement are as follows:

Former eastern UST field containing tanks 1, 2 and 3: 1,316 sq. ft.*

Corrective action excavation area: 1,853 sq. ft.*

The former was *The former western UST field and corrective action excavation area overlap an approximate 526 sq. ft.; therefore, this amount has been approximate 526 sq. ft.; approximate 526 sq. ft.; therefore, this amount has been removed from the proposed?

1,316 sq. ft. + 518 sq. ft. + 1,853 sq. ft. - 526 sq ft. = 3,161 sq. ft.

If you have any questions or require additional information, please contact Mr. Matthew Saladino or me at (217) 522-8001.

RECEIVED

SEP 1 6 2019

IEPA/BOL

Sincerely,

Carol Rowe, P.G.

Senior Environmental Geologist

Mr. Syed Muneeb, S & S Infinite Group, Inc. / Downtown 66 Mr. William T. Sinnott,  $CW^3M$  Company, Inc. xc:



# Illinois Environmental Protection Agency

Bureau of Land • 1021 N. Grand Avenue E. • P.O. Box 19276 • Springfield • Illinois • 62794-9276

### General Information for the Budget and Billing Forms

LPC #:	1430650114	County:	Peoria ·	
City: Pe	oria	Site Name:	S & S Infinite Group	Inc.
Site Add	ress: 400 NE Adams Street		<del>_</del>	
IEMA Inc	cident No.: 2016-1089 20	14-0963		
IEMA No	otification Date: 11/21/2016		· <u></u>	<del></del>
Date this	form was prepared: Aug 30, 2019	<del></del>		
This for	m is being submitted as a (check o	ne, if applicable	e):	
	Budget Proposal			
$\boxtimes$	Budget Amendment (Budget amend	lments must incl	ude only the costs ove	er the previous budget.)
	Billing Package			
	Please provide the name(s) and da	te(s) of report(s)	documenting the cost	s requested.
	Name(s):		<del></del>	SFP 1 6 2019
	Date(s):			I DA I TO A
This pac	ckage is being submitted for the sit	e activities indi	cated below:	<b>IEPA/BOL</b>
35 III. Ad	dm. Code 734:			
	Early Action			
· .	Free Product Removal after Early A	ction		
	Site Investigation	Stage 1: [	Stage 2:	Stage 3:
$\boxtimes$	Corrective Action	Actual Costs		_
35 III. Ad	dm. Code 732:			·. •
	Early Action			
	Free Product Removal after Early A	ction		
	Site Classification		•	
	Low Priority Corrective Action			•
	High Priority Corrective Action			•
35 III. Ac	dm. Code 731:			
	Site Investigation			
	Corrective Action			

IL 532 -2825 LPC 630 Rev. 1/ 2007

# General Information for the Budget and Billing Forms

The following address will be used as the mailing address for checks and any final determination letters regarding payment from the Fund.

Pay to the order of: S&S	Infinite G	roup			
Send in care of: CWM Compa	any, Inc.				
Address: P.O. Box 571	·				
City: Carlinville		_ State: <u>IL</u>		Zip: <u>6</u>	2626
The payee is the: Own	er 🔽 Op	erator 🗌	(Check o	ne or both.)	
Signature of the owner or operation	or of the UST(s	) (required)			e submitted. o print off a W-9 Form.
Number of petroleum USTs in II parent or joint stock company o or joint stock company of the ov  Fewer than 101:	ntile owner or d ner or operato	more:	any compa	ny owned by any	parent, subsidiary
Number of USTs at the site: have been removed.)	(Ni	umber of UST	s includes	USTs presently a	the site and USTs that
Number of incidents reported to	IEMA for this s	site:2			
Incident Numbers assigned to the	ne site due to re	eleases from I	JSTs: 2	20140963	20161089
Please list all tanks that have ev	er been located	d at the site a	nd tanks th	at are presently lo	ocated at the site.
Product Stored in UST	Size	Did UST	have	Incident No.	7. 45.

Product Stored in UST	Size (gallons)	Did UST have a release?	Incident No.	Type of Release Tank Leak / Overfill , Piping Leak
Diesel	6,000	Yes 🗓 No 🗌	20140963	Overfill
Gasoline	10,000	Yes 🗓 No 🗌	20140963	Overfill
Gasoline	10,000	Yes 💢 No 🗌	20161089	Overfill
Gasoline	350	Yes 🗓 No 🗌	20161089	Tank Leak
Gasoline	350	Yes 🛛 No 🗌	20161089	Tank Leak
Used Oil	560	Yes 🛛 No 🗌	20161089	Tank Leak
Used Oil	560	Yes 🗓 No 🗌	20161089	Tank Leak
		Yes No No		- Deak
		Yes No No		

Add More Rows

Undo Last Add

000394

### Owner/Operator and Licensed Professional Engineer/Geologist Budget Certification Form

activities for Leaking UST incident 2016–10: this budget are for necessary activities and are reason also certify that the costs included in this budget are not 415 ILCS 5/57, no costs are included in this budget costs exceed Subpart H: Maximum Payment Amounts Appendix E Personnel Titles and Rates of 35 III. Adm.	able and accurate to the best of my knowledge and belief. I of for corrective action in excess of the minimum requirements that are not described in the corrective action plan, and no , Appendix D Sample Handling and Analysis amounts, and Code 732 or 734. I further certify that costs ineligible for 732.606 or 734.630 are not included in the budget proposal or
Costs associated with ineligible tanks.	
	oump islands, canopies).
Costs associated with utility replacement (e.g.	nump islands, canopies).  g., sewers, electrical, telephone, etc.).
Costs incurred prior to IEMA notification.	
Costs associated with planned tank pulls. Legal fees or costs.	CED 1 6 2010
Costs incurred prior to July 28, 1989.	SEP <b>1 6</b> 2019
Costs associated with installation of new US	Ts or the repair of existing USTs.
	Ts or the repair of existing USTs. IEPA/BOL
Owner/Operator: S & S Infinite Group, I	nc.
Authorized Representative: Syed Muneeb	Title: Owner
	Date: 9 /3/19
Signature	Date: <u>9/3/19</u>
Subscibed and sure to be a made of the Brell	ay of September, 80)15.
Subscribed and sworn to before me the da	ay of enter.
	CAROL L ROWE Seal Official Seal
(Notary Public)	Notary Public - State of Illinois My Commission Expires Mar 18, 2021
In addition, I certify under negative of law that all activiti	es that are the subject of this plan, budget, or report were
conducted under my supervision or were conducted un	nder the supervision of another Licensed Professional Engineer
	ne; that this plan, budget, or report and all attachments were
	knowledge and belief, the work described in the plan, budget,
	Environmental Protection Act [415 ILCS 5], 35 III. Adm. Code actices of my profession; and that the information presented is
	and a second control of the second control of the second control of the second control of the second control of the second control of the second control of the second control of the second control of the second control of the second control of the second control of the second control of the second control of the second control of the second control of the second control of the second control of the second control of the second control of the second control of the second control of the second control of the second control of the second control of the second control of the second control of the second control of the second control of the second control of the second control of the second control of the second control of the second control of the second control of the second control of the second control of the second control of the second control of the second control of the second control of the second control of the second control of the second control of the second control of the second control of the second control of the second control of the second control of the second control of the second control of the second control of the second control of the second control of the second control of the second control of the second control of the second control of the second control of the second control of the second control of the second control of the second control of the second control of the second control of the second control of the second control of the second control of the second control of the second control of the second control of the second control of the second control of the second control of the second control of the second control of the second control of the second control of the second control of the second control of the second control of the second control of the second control of the second control of the second control of the second control of the second control of the second control of the second control of the second control of the second control of the second control of the second control o
to the Illinois EPA, including but not limited to fines, im	prisonment, or both as provided in Sections 44 and 57,17 of the
Environmental Protection Act [415 ILCS 5/44 and 57.1	prisonment, or both as provided in Sections 44 and 57, 17 of the 7].
	JIM I
L.P.E./L.P.G.: Vince E. Smith	L.P.E./L.P.G. Seal: 3 46118
	PERFECTION D
L.P.E./L.P.G. Signature	Date: 9/8//96000000000000000000000000000000000
Should be desired and the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State	avos soplember 2019
Subscribed and sworn to before me the	KIMO/3
	CHICK E HOWE
	Segicial Seal  Notary Public - State of Illinois
(Notary Public)	My Commission Expires Mar 18, 2021
The Illinois EPA is authorized to require this information	in under 415 ILCs 5/1. Disclosure or this information is

required. Failure to do so may result in the delay or denial of any budget or payment requested hereunder.

# **Budget Summary**

734	Free Product	Stage 1 Site Investigation	Stage 2 Site Investigation	Stage 3 Site Investigation	Corrective Action
					Proposed
Drilling and Monitoring Well Costs Form	\$	\$	\$	\$	\$
Analytical Costs Form	\$	\$ .,	\$	\$	\$
Remediation and Disposal Costs Form	\$	\$	\$	\$	\$
UST Removal and Abandonment Costs Form	\$	\$	\$	\$	\$
Paving, Demolition, and Well Abandonment Costs Form	\$	\$	\$	\$	\$ 18,144.14
Consulting Personnel Costs Form	\$	\$	\$	\$	\$ 3,143.08
Consultant's Materials Costs Form	\$	\$	\$	\$	\$ 162.20
Handling Charges Form	the Illinois EPA.	es will be determi The amount of al the Handling Ch	lowable handling	billing package is charges will be d	submitted to etermined in
Total	\$	\$	\$	\$	\$ 21,449.42

# Paving, Demolition, and Well Abandonment Costs Form

### A. Concrete and Asphalt Placement/Replacement

Number of Square Feet	Asphalt or Concrete	Thickness (inches)	Cost (\$) per Square Foot	Replacement or Placement for an Engineered Barrier	Total Cost
3,161.00	Concrete	6.00	5.74	Replacement	\$18,144.14
the glaba, i.e. a		-		·	

Total Concrete and Asphalt Placement/Replacement Costs:	\$18,144.14
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# B. Building Destruction or Dismantling and Canopy Removal

Total Building Destruction or Dismantling and Canopy Removal Costs:	
* *	

# Paving, Demolition, and Well Abandonment Costs Form

#### C. Well Abandonment

Monitoring Well ID #	Type of Well (HSA / PUSH / Recovery)	Depth of Well (feet)	Cost (\$) per Foot	Total Cost
	-			

	Total Mon	itoring W	ell Abandor	nment Costs:	
Total Pavin	g, Demolitic	on, and We	ell Abandon	ment Costs:	\$18,144.14
	-		-		

# **Consulting Personnel Costs Form**

Employee Name	)	Personnel Title	Hours	Rate* (\$)	Total Cost	
Remediation Category		Task				
		Engineer III	6.00	131.51	\$789.06	
CCAP-Budget	T	<u> </u>	_1			
	Budget Amenda	ment Inputs				
•	<del></del>	Senior Prof. Engineer				
0040.0	T		2.00	170.97	\$341.94	
CCAP-Budget	Budget Amenda	nent Review and Certification	<u>.</u>			
	1	Senior Admin. Assistant	2.00	59.18	\$118.36	
CCAP-Budget	Budget Amendn	nent Compilation, Assembly, and (	Distribution			
		1				
	•	Senior Project Manager	12.00	131.51	\$1,578.12	
CCA-Field	Concrete Renlad	cement / Set up / Form Area / Con	aplatian (Marifica	tion.	or 6.0 ma 1994	
	Concrete (Cepial	cement 7 Set up 7 Form Area 7 Con	inpletion / verifica	ition	· · · · ·	
*		Senior Draftperson/CAD	4.00	78.90	\$315.60	
CCA-Field	Editing of Maps	for Concrete Replacement / Drafti	na Concrete Loc	ation Mans		
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^{*}Refer to the applicable Maximum Payment Amounts document.

**Total of Consulting Personnel Costs** 

\$3,143.08

### **Consultant's Materials Costs Form**

Materials, Equipment	, or Field Purchase	Time or Amount Used	Rate (\$)	Unit	Total Cost
Remediation Category		Description/Justification			
Mileage		300.00	.53	/mile	\$159.00
CCA-Field	2 Round Trips for Conc	rete Replacement / La	yout / Verification	n	
Postage CCAP-Budget	Copies of Budget Amen	2.00	1.60	/each	\$3.20
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**Total of Consultant Materials Costs** 

\$162.20



# **ILLINOIS ENVIRONMENTAL PROTECTION AGENCY**

1021 NORTH GRAND AVENUE EAST, P.O. BOX 19276, SPRINGFIELD, ILLINOIS 62794-9276 · (217) 782-3397

JB PRITZKER, GOVERNOR

JOHN J. KIM, DIRECTOR

(217) 524-3300

CERTIFIED MAIL
7018 1830 0000 5289 1517

OCT 22 2019

S & S Infinite Group, Inc. Attn: Syed Muneeb 10614 North Alex Drive Peoria, IL 61615

RELEASABLE

OCT 25 2019

REVIEWER KAL

Re:

1430650114 -- Peoria County Peoria/S & S Infinite Group, Inc. 400 North East Adams Street Leaking UST Incident 20161089 Leaking UST Technical File

#### Dear Syed Muneeb:

The Illinois Environmental Protection Agency (Illinois EPA) has reviewed the Corrective Action Plan Budget (budget) submitted for the above-referenced incident. This budget, dated August 13, 2019, was received by the Illinois EPA on August 16, 2019. Citations in this letter are from the Environmental Protection Act (415 ILCS 5) (Act) and Title 35 of the Illinois Administrative Code (35 Ill. Adm. Code).

The budget is approved for the amounts listed in Attachment A (Sections 57.7(b)(3) and 57.7(c) of the Act and 35 Ill. Adm. Code 734.505(b) and 734.510(b)). Please note that the costs must be incurred in accordance with the approved plan. Be aware that the amount of payment from the Fund may be limited by Sections 57.7(c), 57.8(d), 57.8(e) and 57.8(g) of the Act, as well as 35 Ill. Adm. Code 734.630 and 734.655.

All future correspondence must be submitted to:

Illinois Environmental Protection Agency
Bureau of Land - #24
Leaking Underground Storage Tank Section
1021 North Grand Avenue East
Post Office Box 19276
Springfield, IL 62794-9276

Please submit all correspondence in duplicate and include the Re: block shown at the beginning of this letter.

### Page 2

If you have any questions or need further assistance, please contact Scott McGill at (217) 524-5137.

Sincerely,

Michael T. Lowder

Unit Manager

Leaking Underground Storage Tank Program

Remedial Project Management Section

Bureau of Land

Attachment: Attachment A

Carol Rowe, CW3M Company (electronic copy)

BOL File

### Attachment A

Re: 1430650114 -- Peoria County Peoria/S & S Infinite Group, Inc. 400 North East Adams Street Leaking UST Incident 20161089 Leaking UST Technical File

### **SECTION 1**

The following amounts are approved:

\$0.00	Drilling and Monitoring Well Costs
\$0.00	Analytical Costs
\$0.00	Remediation and Disposal Costs
\$0.00	UST Removal and Abandonment Costs
\$0.00	Paving, Demolition, and Well Abandonment Costs
\$0.00	Consulting Personnel Costs
\$765.00	Consultant's Materials Costs

Handling charges will be determined at the time a billing package is reviewed by the Illinois EPA. The amount of allowable handling charges will be determined in accordance with Section 57.1(a) of the Environmental Protection Act and 35 Illinois Administrative Code 734.635.



# **ILLINOIS ENVIRONMENTAL PROTECTION AGENCY**

1021 North Grand Avenue East, P.O. Box 19276, Springfield, Illinois 62794-9276 (217) 782-3397

JB PRITZKER, GOVERNOR

JOHN J. KIM, DIRECTOR

(217) 524-3300

CERTIFIED MAIL
7018 1830 0000 5289 1500

OCT 22 2019

S & S Infinite Group, Inc. Attn: Syed Muneeb 10614 North Alex Drive Peoria, IL 61615

Re:

1430650114 -- Peoria County Peoria/S & S Infinite Group, Inc. 400 North East Adams Street Leaking UST Incident 20161089 Leaking UST Technical File RELEASABLE

OCT 25 2019

REVIEWER KAJ

#### Dear Syed Muneeb:

The Illinois Environmental Protection Agency (Illinois EPA) has reviewed the Corrective Action Plan Budget (budget) submitted for the above-referenced incident. This budget, dated September 10, 2019, was received by the Illinois EPA on September 16, 2019. Citations in this letter are from the Environmental Protection Act (415 ILCS 5) (Act) and Title 35 of the Illinois Administrative Code (35 Ill. Adm. Code).

The budget is modified pursuant to Sections 57.7(b)(3) and 57.7(c) of the Act and 35 Ill. Adm. Code 734.505(b) and 734.510(b). Based on the modifications listed in Section 2 of Attachment A, the amounts listed in Section 1 of Attachment A are approved. Please note that the costs must be incurred in accordance with the approved plan. Be aware that the amount of payment from the Fund may be limited by Sections 57.7(c), 57.8(d), 57.8(e) and 57.8(g) of the Act, as well as 35 Ill. Adm. Code 734.630 and 734.655.

All future correspondence must be submitted to:

Illinois Environmental Protection Agency Bureau of Land - #24 Leaking Underground Storage Tank Section 1021 North Grand Avenue East Post Office Box 19276 Springfield, IL 62794-9276

Please submit all correspondence in duplicate and include the Re: block shown at the beginning of this letter.

An underground storage tank system owner or operator may appeal this decision to the Illinois Pollution Control Board. Appeal rights are attached.

If you have any questions or need further assistance, please contact Scott McGill at (217) 524-5137.

Sincerely,

Michael T. Lowder

Unit Manager

Leaking Underground Storage Tank Program

Remedial Project Management Section

Bureau of Land

Attachment: Attachment A

Appeal Rights

Carol Rowe, CW3M Company (electronic copy)

**BOL** File

#### Attachment A

Re: 1430

1430650114 -- Peoria County Peoria/S & S Infinite Group, Inc. 400 North East Adams Street Leaking UST Incident 20161089 Leaking UST Technical File

#### **SECTION 1**

As a result of Illinois EPA's modification(s) in Section 2 of this Attachment A, the following amounts are approved:

\$0.00	Drilling and Monitoring Well Costs
\$0.00	Analytical Costs
\$0.00	Remediation and Disposal Costs
\$0.00	UST Removal and Abandonment Costs
\$18,144.14	Paving, Demolition, and Well Abandonment Costs
\$0.00	Consulting Personnel Costs
\$162.20	Consultant's Materials Costs

Handling charges will be determined at the time a billing package is reviewed by the Illinois EPA. The amount of allowable handling charges will be determined in accordance with Section 57.1(a) of the Environmental Protection Act (Act) and 35 Illinois Administrative Code (35 Ill. Adm. Code) 734.635.

#### **SECTION 2**

1. \$1,578.12, deduction for consulting personnel costs associated with the procurement, oversight, or payment of subcontracts or field purchases. Pursuant to 35 Ill. Adm. Code 734.115 "Handling Charges" mean administrative, insurance, and interest costs and a reasonable profit for the procurement, oversight, and payment of subcontracts and field purchases. Therefore, these costs are not reasonable as submitted. Such costs are ineligible for payment from the Fund pursuant to Section 57.7(c)(3) of the Act and 35 Ill. Adm. Code 734.630(dd) or 734.630(cc). In addition, the Corrective Action Budget must not include handling charges pursuant to 35 Ill. Adm. Code 734.335(b).

Personnel costs in the amount of \$1,578.12, associated with 12 hours for a Senior Project Manager to conduct concrete replacement, set up, form area, completion and verification, are considered handling charges and these costs are not reasonable as submitted.

2. \$789.06 deduction for personnel costs, which exceed the minimum requirements necessary to comply with the Act. Costs associated with site investigation and corrective action activities and associated materials or services exceeding the minimum requirements necessary to comply with the Act are not eligible for payment from the Fund pursuant to Section 57.7(c)(3) of the Act and 35 Ill. Adm. Code 734.630(o).

In addition, these costs are not reasonable as submitted. Such costs are ineligible for payment from the Fund pursuant to Section 57.7(c)(3) of the Act and 35 Ill. Adm. Code 734.630(dd).

Costs in the amount of \$789.06, associated with 6 hours for an Engineer III to conduct budget amendment inputs, exceeds the minimum requirements and are not reasonable as submitted.

3. \$341.94 deduction for personnel costs, which exceed the minimum requirements necessary to comply with the Act. Costs associated with site investigation and corrective action activities and associated materials or services exceeding the minimum requirements necessary to comply with the Act are not eligible for payment from the Fund pursuant to Section 57.7(c)(3) of the Act and 35 Ill. Adm. Code 734.630(o).

In addition, these costs are not reasonable as submitted. Such costs are ineligible for payment from the Fund pursuant to Section 57.7(c)(3) of the Act and 35 Ill. Adm. Code 734.630(dd).

Cost in the amount of \$341.94, associated with 2 hours for a Senior Professional Engineer to conduct budget amendment review and certification, exceed the minimum requirements and are not reasonable as submitted.

4. \$118.36 for costs for personnel costs, which exceed the minimum requirements necessary to comply with the Act. Costs associated with site investigation and corrective action activities and associated materials or services exceeding the minimum requirements necessary to comply with the Act are not eligible for payment from the Fund pursuant to Section 57.7(c)(3) of the Act and 35 Ill. Adm. Code 734.630(o).

In addition, these costs are not reasonable as submitted. Such costs are ineligible for payment from the Fund pursuant to Section 57.7(c)(3) of the Act and 35 Ill. Adm. Code 734.630(dd).

Costs in the amount of \$118.36, associated with 2 hours for a Senior Administrative Assistant to conduct budget amendment compilation, assembly and distribution exceed the minimum requirements and are not reasonable as submitted.

5. \$315.60 for costs for personnel cost, which lack supporting documentation. Such costs are ineligible for payment from the Fund pursuant to 35 Ill. Adm. Code 734.630(cc). Since there is no supporting documentation of costs, the Illinois EPA cannot determine that costs will not be used for activities in excess of those necessary to meet the minimum requirements of Title XVI of the Act. Therefore, such costs are not approved pursuant to Section 57.7(c)(3) of the Act because they may be used for site investigation or corrective action activities in excess of those required to meet the minimum requirements of Title XVI of the Act.

In addition, these costs are not reasonable as submitted. Such costs are ineligible for payment from the Fund pursuant to Section 57.7(c)(3) of the Act and 35III. Adm. Code 734.630(dd)

Personnel cost in the amount of \$315.60, associated with a Senior Draftperson/CAD to conduct editing of maps for concrete replacement and drafting concrete location maps, lack supporting documentation and are not reasonable as submitted.

#### Appeal Rights

An underground storage tank owner or operator may appeal this final decision to the Illinois Pollution Control Board pursuant to Sections 40 and 57.7(c)(4) of the Act by filing a petition for a hearing within 35 days after the date of issuance of the final decision. However, the 35-day period may be extended for a period of time not to exceed 90 days by written notice from the owner or operator and the Illinois EPA within the initial 35-day appeal period. If the owner or operator wishes to receive a 90-day extension, a written request that includes a statement of the date the final decision was received, along with a copy of this decision, must be sent to the Illinois EPA as soon as possible.

For information regarding the filing of an appeal, please contact:

John Therriault, Assistant Clerk Illinois Pollution Control Board James R. Thompson Center 100 West Randolph, Suite 11-500 Chicago, IL 60601 312/814-3620

For information regarding the filing of an extension, please contact:

Illinois Environmental Protection Agency Division of Legal Counsel 1021 North Grand Avenue East Post Office Box 19276 Springfield, IL 62794-9276 217/782-5544