LANDFILL – SOLID WASTE COMMITTEE

MEETING AGENDA
MEETING

August 24, 2022, 3:00 PM

419 Fulton Street – Room 404

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Landfill Commission Agendas and Minutes
ISSUED BY: STEPHEN M. MORRIS, CHAIRMAN

Public Works Department
3505 N. DRIES LANE, PEORIA IL 61604
309-494-8800

Internet Address: www.peoriagov.org

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CITY OF PEORIA – LANDFILL – SOLID WASTE COMMITTEE

ATTENDANCE

ANNOUNCEMENTS, ETC.

CITIZENS' OPPORTUNITY TO ADDRESS THE COMMITTEE

ANYONE WISHING TO MAKE A PUBLIC COMMENT CAN DO SO BY SENDING THOSE COMMENTS TO PUBLIC WORKS, BY **12:00 P.M**. ON August 24, 2022. PUBLIC COMMENTS CAN BE SENT TO THE PUBLIC WORKS DEPARTMENT, IN WRITING, AT **PUBLICWORKS@PEORIAGOV.ORG** OR VIA FAX AT 309-494-8855. THE EMAIL OR FAX SHOULD BE LABELED "PUBLIC COMMENT FOR August 24, 2022, PEORIA CITY/COUNTY LANDFILL COMMITTEE MEETING," AND WE ASK THAT YOU INCLUDE YOUR NAME AND ADDRESS.

CITIZENS WISHING TO ADDRESS AN ITEM NOT ON THE AGENDA SHOULD CONTACT A COMMISSION MEMBER PRIOR TO THE MEETING. ALL OTHER PUBLIC INPUT WILL BE HEARD UNDER PUBLIC COMMENT NEAR THE END OF THE COMMITTEE MEETING.

MINUTES

REQUEST FOR APPROVAL OF THE PEORIA CITY/COUNTY LANDFILL

MAY 25, 2022, MINUTES

AGENDA ITEMS

ITEM NO. 1 REPORT FROM FOTH INFRASTRUCTION & ENVIRONMENT, LLC
- A. Monthly Update
- B. Signature Approvals
- C. Profiled Waste Approvals
- D. Solar Updates

ITEM NO. 2 REPORT FROM PUBLIC WORKS ADMINISTRATION
- A. Landfill Monthly Budget Report

ITEM NO. 3 REPORT FROM WASTE MANAGEMENT
- A. Monthly Activity Reports

ITEM NO. 4 REPORT FROM PEORIA COUNTY
- A. Bobcat Project Vote for Approval

UNFINISHED BUSINESS

CCR DISCUSSION REQUEST

NEW BUSINESS

NONE

NEXT MEETING

October 5, 2022, at 3 pm

ADJOURNMENT

CITIZENS WISHING TO ADDRESS AN ITEM NOT ON THE AGENDA SHOULD CONTACT A COMMISSION MEMBER PRIOR TO THE MEETING. ALL OTHER PUBLIC INPUT WILL BE HEARD UNDER PUBLIC COMMENT NEAR THE END OF THE COMMITTEE MEETING.

NOTE: THE ORDER IN WHICH AGENDA ITEMS ARE CONSIDERED MAY BE MOVED FORWARD OR DELAYED BY AT LEAST 2/3 VOTE OF THE COMMISSION MEMBERS PRESENT.

DRAFT

CITY OF PEORIA – LANDFILL – SOLID WASTE COMMITTEE

ATTENDANCE

Call to order showed the following Landfill Committee Members in attendance:

MEMBERS PRESENT: Rick Fox, Stephen Morris, Lester Bergsten, Sharon Williams, Stephen Van Winkle, Zachary Oyler, Timothy Riggenbach -7

MEMBERS ABSENT: 0

Others in Attendance: Rebecca Cottrell, Shawn Schoonover, Brittney Eagan, Josh Gabehart, Tara Van Hoof, Mark Williams, Joyce Blumenshine, David Bryant, Victoria Locke, Jenny Vessel, Katherine Buckman, Scott Sorrell

ANNOUNCEMENTS, ETC.

NONE

CITIZENS' OPPORTUNITY TO ADDRESS THE COMMITTEE

ANYONE WISHING TO MAKE A PUBLIC COMMENT CAN DO SO BY SENDING THOSE COMMENTS TO PUBLIC WORKS, BY **12:00 P.M**. ON July 13, 2022. PUBLIC COMMENTS CAN BE SENT TO THE PUBLIC WORKS DEPARTMENT, IN WRITING, AT **PUBLICWORKS@PEORIAGOV.ORG** OR VIA FAX AT 309-494-8855. THE EMAIL OR FAX SHOULD BE LABELED "PUBLIC COMMENT FOR July 13, 2022, PEORIA CITY/COUNTY LANDFILL COMMITTEE MEETING," AND WE ASK THAT YOU INCLUDE YOUR NAME AND ADDRESS.

CITIZENS WISHING TO ADDRESS AN ITEM NOT ON THE AGENDA SHOULD CONTACT A COMMISSION MEMBER PRIOR TO THE MEETING. ALL OTHER PUBLIC INPUT WILL BE HEARD UNDER PUBLIC COMMENT NEAR THE END OF THE COMMITTEE MEETING.

MINUTES

REQUEST FOR APPROVAL OF THE PEORIA CITY/COUNTY LANDFILL
May 25, 2022, MINUTES

Van Winkle motioned to approve May 25, 2022, meeting minutes, seconded by Bergsten.

Correction made by Joyce Blmenshine, reference to siding with a "d" instead of sighting with a "t"

Vote taken as a group: 7 yays, 0 nays.

AGENDA ITEMS

ITEM NO. 1 REPORT FROM FOTH INFRASTRUCTION & ENVIRONMENT, LLC

A. Monthly Update

Van Hoof stated that billed to date was $ 185,660 which is currently around 55.5% above what was planned. High at the beginning of year due to repairs to the landfill but we are leveling out now. No shut downs since last meeting. Gas methane content at the flare was 45.5% for the month of May and 41.8% for the month of June. No leachate has been transported off-site to GPSD. Through May, general MSW was under the 2021 receipts by about 2,323 tons. Total tonnage received was approximately 1,100 tons over the 2021 waste receipts. Through June, general MSW was under the 2021 receipts by about 1,460 tons. Total tonnage received was approximately 2,050 tons over the 2021 waste receipts. No

recommended changes at this time. Updated on solar: identified solar companies: Brownfield solar Generation, Ameresco, AES Corp, Wabash Valley Electric Cooperative, and some others.

B. Signature Approvals

Semi-annual reporting for the year: Semi-Annual Pretreatment Report, Clean Air Act Permit Program, Semi-Annual New Source Performance Standards (NSPS) Report, Clean Air Act Permit Program (CAAPP) Semi-Annual Air Monitoring Report

Motion to approve by Williams seconded by Van Winkle

Vote taken as a group: 7 yays, 0 nays.

C. Profiled Waste Approvals

Van Hoof stated: 11 pre-approved waste profiles and two that need committee approval: EHS Solutions for Non-Hazardous Cosmetics Ingredients and Waste Management of Peoria for Resin Beads and Soil requires. Foth has no technical objections to these.

Motion to approve:

Vote taken as a group: 7 yays, 0 nays.

ITEM NO. 2 REPORT FROM PUBLIC WORKS ADMINISTRATION

A. Landfill Monthly Budget Report

Schoonover: stated in May our expenditures exceeded revenue by $154,000 mainly due to the old JC Dillon invoice for the GCCS old improvement project that was disputed. This was paid in May. In June revenues exceeded expenditures by $22,000. Through June revenues are $211,000 expenditures $357,000 red number of $150,000 we are basically right at budget. Our cash at fund balance is at $190,000.

Morris asked if there was anything we should be concerned about or if there was anything Schoonover was concerned about.

Schoonover stated there is nothing he is currently worried about since everything is coming in on budget.

ITEM NO. 3 REPORT FROM WASTE MANAGEMENT

A. Monthly Activity Reports

Waste Management was having trouble joining the meeting, so Foth gave report. Gabehart stated all random load checks where great from them. There was one permit application that WM needed a signature for. Foth reviewed sulfate and had no issues with that.

B. PCC 2 Well Map

ITEM NO. 4 REPORT FROM PEORIA COUNTY

A. Bobcat Project for Landfill

Cottrell stated Southern Illinois University reached out to the County and Landfill committee for access to the landfill and the surrounding property to look for bobcats. This is a continuation of a project that was done by Southern Illinois University in 2020 where they did find a bobcat.

Morris showed the committee a picture of a bobcat that Western University found at the landfill in 2020.

Cottrell stated that Southern Illinois University would like to do the same thing. A Waiver was created for this project for Southern Illinois University. They (SIU) are also going to

create a Memorandum of Understanding for this project as well.

Morris asked if SIU was liable for their own people.

Vessel stated the waiver states SIU would be liable for their own people.

Morris asked if there was a GPS tracker included in this packet.

Foth stated there was not.

Morris asked if there were any questions or concerns for this project. There being none he stated this would be included on next months agenda as an action item.

UNFINISHED BUSINESS

CCR DISCUSSION REQUEST

Morris gave an update to members about GFL and landfill 3. He stated that GFL submitted a proposal for change to the agreement and it is being analyzed by City, County and Legal. A response is being drafted before it will come before the committee for a policy discussion before it goes to council. They have not asked to cancel the contract, but they have asked to continue/delay it. Generically speaking there is not opposition to this provided that everyone gets what they thought that they were going to get relative to the original agreement.

Van Winkle asked if Morris knew when more information would be available to the committee.

Morris stated as he understood things, in order to meet the timeline GFL would need to start turning dirt in March of 2023 so we would either need to have an agreement to amend or they start turning dirt or neither. As the contract states GFL should be ready to except waste at Landfill 3 as soon as Landfill 2 is no longer able to accept waste. They date is not written any in the contract and has continued to be moved back. We think that date is somewhere in the late summer or early fall on 2024. To answer the question I don't know but it would need to be in the next couple months.

Van Winkle states that one of the things that concerns him especially since the end of the period balance is down to $190,000 is that one of the things in the Landfill 3 contract is that once Landfill 3 began operating that a lot of the cost that went into running Landfill one was going to be put on what was PDC. My concern is with the delay in opening Landfill 3 is that going to put us in a position where Landfill 2 is closed and we will be left with that and the means to take care of Landfill 1.

Morris stated he would pass this on and he believes this has been taken in to consideration. Along with a number of other bullet points that are under consideration for this.

Bergsten agrees with Van Winkles comments.

NEW BUSINESS

none

NEXT MEETING

DRAFT

August 24, 2022, at 3 pm

ADJOURNMENT

There being no further discussion, The Chairman declared the meeting adjourned

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REQUEST FOR DISCUSSION

To: **Peoria City/County Landfill Committee Members**

From: **Mark Williams and Joshua Gabehart, P.E., Foth Infrastructure and Environment, LLC**

AGENDA DATE REQUESTED: August 24, 2022

ACTION REQUESTED: Receive and File Monthly Report

BACKGROUND: The following report details engineering items occurring since the last scheduled Committee Meeting.

Financial Information

The attached spreadsheet shows Foth engineering services provided through July 31, 2022. The total amount billed to date is $215,683. We are currently above planned spend due to effort in the early part of the year to make repairs to landfill operations.

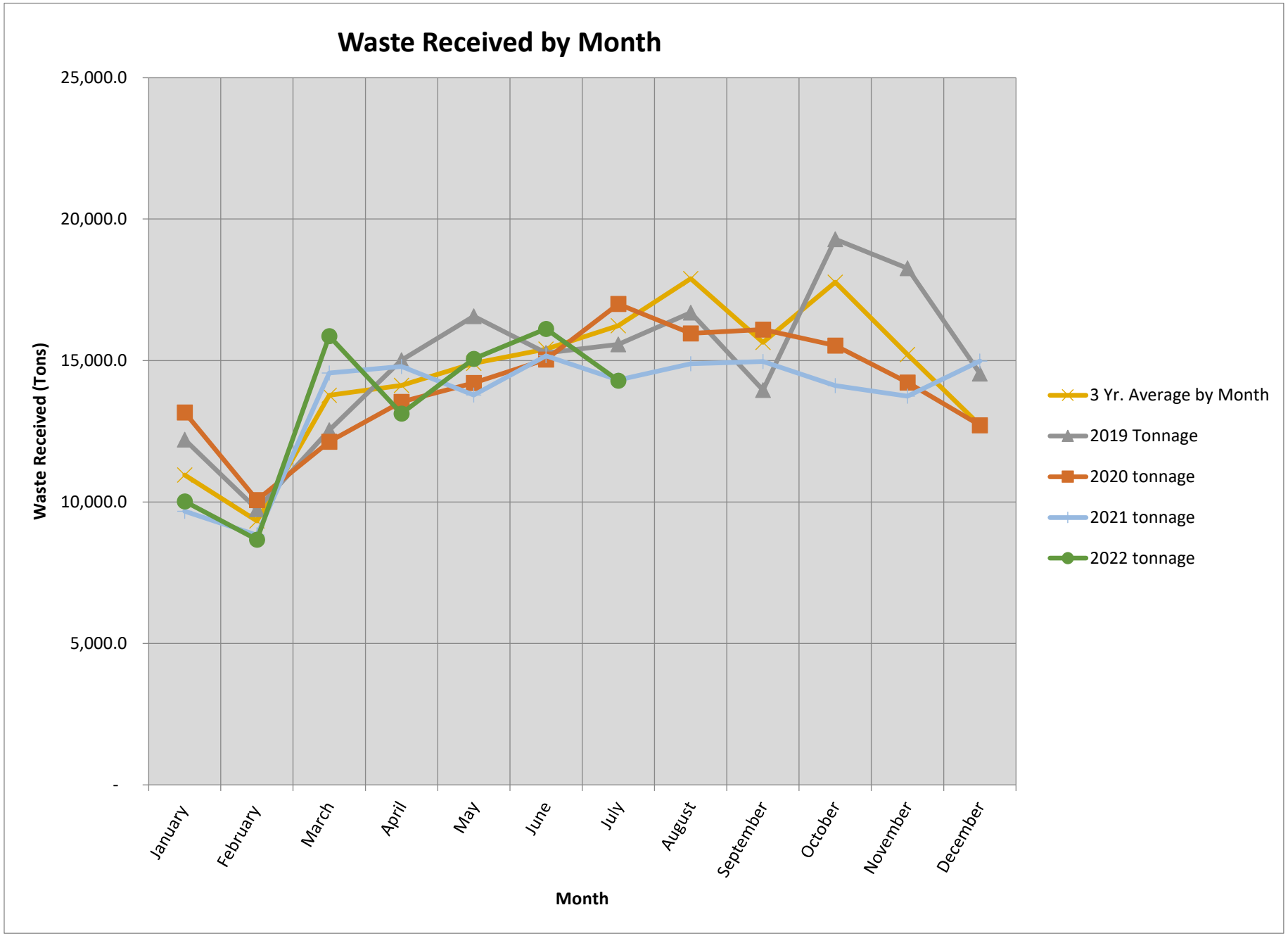
Updates Regarding Compliance Activities, Measures, and Progress

- There has been one shutdown since the last meeting that required a 405 – CAAPP form, this shutdown was scheduled to finish proper electrical grounding of the flare skid by Britton Electronics Automation.
- Gas methane content at the flare was 43% for the month of July, within the expected range.
- Since the last meeting, 10,000 gallons of leachate has been transported off-site to GPSD.
- Monthly tonnages through July are attached. Through July, general MSW was under the 2021 receipts by about 1,530 tons. Total tonnage received was approximately 2,025 tons over the 2021 waste receipts. There are no recommended changes to plan at this time.
- All lease and license agreements have been signed (including Beecher, Wyatt, Schmidt, Ehnle, and Harenburg).
- The solar update is provided in the request for discussion.

FINANCIAL IMPACT: Through July 31, 2022, the total spend is 64.5% of the January through December 31, 2022 contract, which is over the planned budget spend however, this has been leveling out, which was anticipated after regulatory submittals and repairs were making landfill operations run more smoothly. The attached monthly engineering services spreadsheet shows budgeted vs actual spends to date. Note that budgets for some of the phases have been adjusted (see Current Budget Estimate as compared to Beginning Estimate) to be more representative of budget spends to date and planned spends for the remainder of the year. Please note, the overall budget has not changed. Furthermore, effort associated with solar research has been applied to the current budget; however, if the Committee chooses to pursue more aggressively, a plan will be presented to the Committee to capture costs associated with additional efforts. Foth would propose working with city and county staff as much as possible to reduce our costs.

Waste Received by Month PCCL Landfill No 2

Month	2009 Tonnage	2010 Tonnage	2011 Tonnage	2012 tonnage	2013 tonnage	2014 tonnage	2015 tonnage	2016 Tonnage	2017 Tonnage	2018 Tonnage	2019 Tonnage	2020 tonnage	2021 tonnage	2022 tonnage	5 Yr. Average by Month	3 Yr. Average by Month	2 Yr. Average by Month
January		14,431.52	12,725.65	14,240.62	14,610.96	14,531.08	12,592.84	13,255.78	16,148.43	11,730.59	12,199.76	13,168.18	9,667.53	10,021.13	11,357.4	10,952.3	9,844.3
February		15,894.61	11,801.18	12,687.38	11,401.56	11,689.56	11,134.61	14,992.00	11,959.48	12,244.04	9,746.12	10,070.59	8,832.31	8,670.38	10,253.8	9,329.9	9,191.1
March		18,583.87	16,782.75	15,932.67	15,541.87	17,911.20	16,961.56	15,881.57	14,204.13	14,516.49	12,533.33	12,128.74	14,559.55	15,860.15	13,967.1	13,770.4	14,182.8
April		26,745.51	17,454.25	15,124.74	17,520.91	20,643.72	17,815.96	16,231.71	14,883.60	14,573.51	15,014.76	13,541.53	14,791.33	13,123.26	14,321.3	14,117.7	13,818.7
May	20,133.56	19,407.83	20,487.42	17,240.20	20,317.50	21,031.20	17,917.75	17,708.52	18,306.44	17,568.27	16,560.81	14,209.21	13,779.53	15,056.74	15,913.5	14,901.6	14,348.5
June	20,475.23	21,131.53	24,351.74	17,105.57	18,499.18	20,827.22	19,736.45	17,890.95	19,901.95	16,896.60	15,267.88	15,037.75	15,171.04	16,120.02	16,999.0	15,399.2	15,152.8
July	20,661.46	20,973.17	16,942.32	21,823.32	18,609.20	21,915.44	23,147.79	15,088.31	17,685.91	16,116.44	15,569.30	17,000.88	14,309.57	14,284.38	16,292.2	16,228.9	16,285.1
August	20,340.96	21,409.82	21,819.77	19,446.75	21,574.24	18,623.82	22,247.53	17,744.07	20,548.26	16,445.70	16,690.04	15,963.12	14,881.66		18,716.6	17,894.7	16,567.9
September	25,985.03	19,026.96	18,894.15	15,522.33	19,379.80	17,722.38	16,520.05	18,890.92	18,155.15	14,809.20	13,953.48	16,095.09	14,965.24		16,675.2	15,639.3	14,381.3
October	20,916.49	26,063.78	18,830.50	17,422.79	17,710.37	20,212.83	17,158.59	16,091.54	17,772.77	16,235.75	19,289.83	15,531.79	14,112.35		17,793.6	17,766.1	17,762.8
November	17,819.70	22,795.94	15,497.95	18,059.00	21,043.51	14,511.80	16,349.64	14,459.79	17,273.03	13,895.01	18,263.39	14,222.22	13,741.19		15,792.1	15,209.3	16,079.2
December	16,085.02	18,432.75	15,433.43	13,256.07	32,699.22	14,951.07	16,504.84	13,168.40	12,764.20	12,208.30	14,534.79	12,708.54	14,983.92		14,021.9	12,713.6	13,371.5
Total	**162,417.45**	**244,897.29**	**211,021.11**	**197,861.44**	**228,908.32**	**214,571.32**	**208,087.61**	**191,403.56**	**199,603.35**	**177,239.90**	**179,623.49**	**169,677.64**	**163,795.22**	**93,136.06**	**182,103.71**	**173,922.88**	**170,986.09**
General MSW		211,129.29	190,333.16	180,882.84	209,441.95	198,971.42	191,767.47	182,787.68	187,239.69	173,804.02	161,919.10	161,970.42	159,145.96	88,660.69			
Profiled Waste Tons	22,238.00	33,768.00	20,687.95	16,978.60	19,466.37	15,599.90	16,320.14	8,615.88	12,363.66	3,435.88	17,704.39	7,707.22	4,649.26	4,475.37			

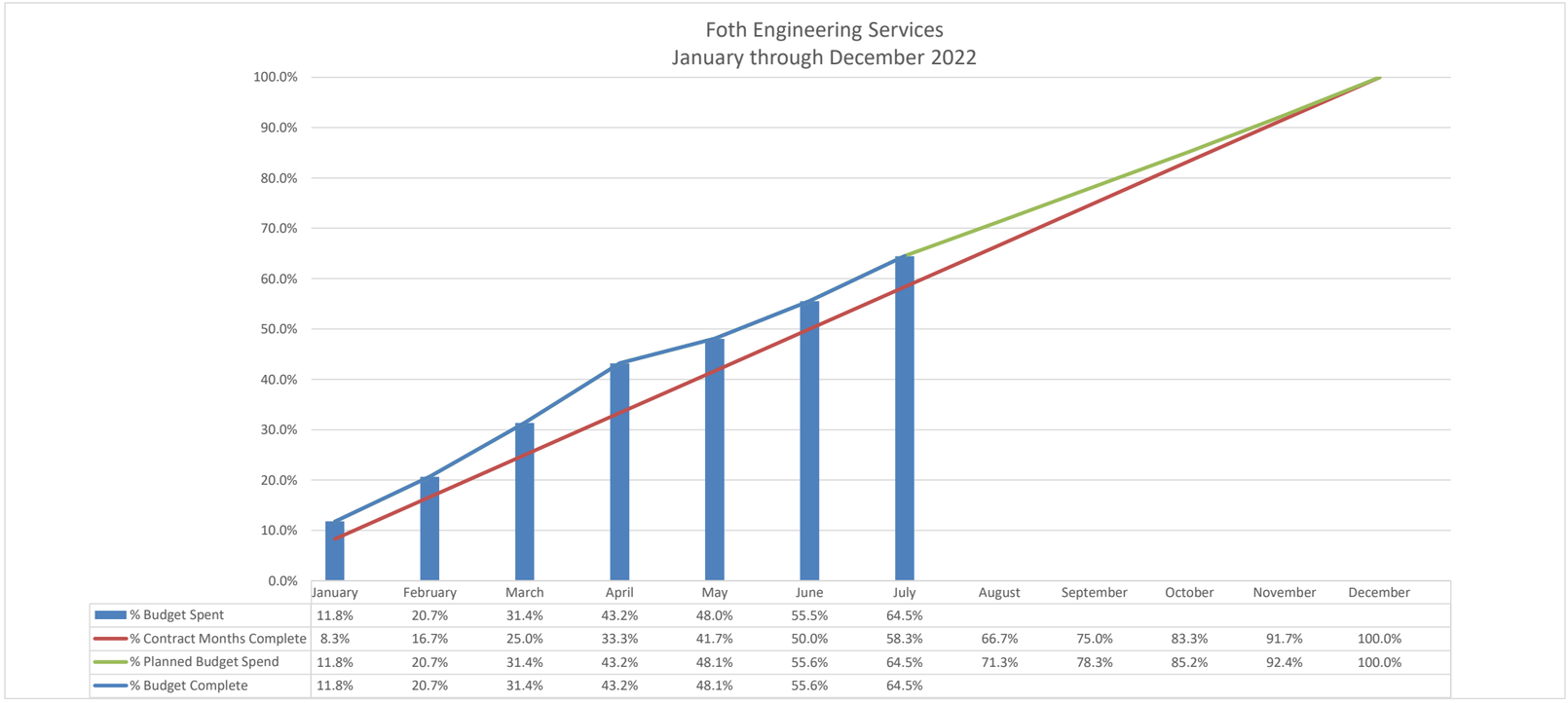

Waste Received by Month
25,000.0
20,000.0
15,000.0
10,000.0
5,000.0
-
Waste Received (Tons)
January
February
March
April
May
June
July
August
September
October
November
December
Month
3 Yr. Average by Month
2019 Tonnage
2020 tonnage
2021 tonnage
2022 tonnage

Foth Infrastructure & Environment, LLC
22P300.00 - Engineering Services January - December 2022
Joint City and County of Peoria Landfill Committee

Phase/ Task	Description	Beginning Estimate	Current Budget Estimate	January Budget	January Actual	February Budget	February Actual	March Budget	March Actual	April Budget	April Actual	May Budget	May Actual	June Budget	June Actual
Phase 1	**General Compliance and Guidance**	$ 118,500	$ 118,500	$ 17,420	$ 17,415	$ 6,555	$ 6,552	$ 10,104	$ 10,102	$ 16,779	$ 16,777	$ 6,398	$ 6,395	$ 9,572	$ 9,569
Phase 2	**Groundwater Support and Data Review**	$ 48,500	$ 41,700	$ 5,444	$ 5,441	$ 1,638	$ 1,637	$ 912	$ 912	$ 4,873	$ 4,872	$ 515	$ 515	$ 2,683	$ 2,682
Phase 3	**Gas System and Leachate Management Operations**	$ 121,500	$ 128,300	$ 15,540	$ 15,539	$ 16,285	$ 16,282	$ 22,165	$ 22,163	$ 9,149	$ 9,145	$ 7,352	$ 7,350	$ 10,591	$ 10,588
Phase 4	**Landfill No. 1. Construction Engineering**	$ 5,500	$ 10,500	$ 800	$ 765	$ 4,500	$ 4,492	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Phase 5	**Landfill No. 2 and No. 3 Expansion/Transition**	$ 20,500	$ 20,500	$ -	$ -	$ 721	$ 721	$ 2,178	$ 2,177	$ 3,525	$ 3,525	$ 2,098	$ 2,098	$ 1,623	$ 1,622
Phase 6	**Unplanned GCCS Repairs/Emergency**	$ 20,000	$ 15,000	$ 250	$ 270	$ -	$ -	$ 450	$ 444	$ 5,200	$ 5,119	$ -	$ -	$ 500	$ 492
	Total	$334,500	$ 334,500	$39,454	$39,431	$29,699	$29,683	$35,809	$35,797	$39,526	$39,439	$16,363	$16,357	$24,969	$24,953
	% Contract Months Complete			8.3%		16.7%		25.0%		33.3%		41.7%		50.0%	
	% Budget Spent			11.8%		20.7%		31.4%		43.2%		48.0%		55.5%	
	% Planned Budget Spend			11.8%		20.7%		31.4%		43.2%		48.1%		55.6%	

Operational Notes:

January - Phase 1: Worked on Annual Post Closure Cost Estimate to IEPA in January though it's not due until May 1 for internal resourcing purposes. Phase 3: Gas extraction well installation observation and issues with flare.
March - Phase 3: Significant effort to make needed repairs to the landfill operations.
April - Phase 1: CAAPP annual compliance reporting. Dam inspection. Phase 2: Work on annual report. Phase 3: Leachate pump installation and leachate pumping. Flare maintenance and replace thermo couplings. Phase 5: Review of contract terms.
June - Phase 1: Work on lease agreements. Solar research. More than typical waste profiles to review. Dam inspection documentation reporting. Phase 2: Prepared observed increase documentation. Phase 3: Surface emission monitoring. GPSD semi-annual reporting. GMD3 assessment monitoring report preparation. Phase 5: Review of contract terms, specifically transfer station. Phase 6: Pump replacement coordination.
July - Phase 1: Finalized lease agreements. PM travel to Committee meeting. Committee meeting agenda preparation. IEPA waiver extension. Semi-annual air reporting. Phase 2: Prepared observed increase documentation. Phase 3: Leachate pumping and other onsite maintenance. Surface emission monitoring. GPSD semi-annual reporting. Phase 5: Review of contract terms, specifically transfer station. Solar research.



	January	February	March	April	May	June	July	August	September	October	November	December
% Budget Spent	11.8%	20.7%	31.4%	43.2%	48.0%	55.5%	64.5%					
% Contract Months Complete	8.3%	16.7%	25.0%	33.3%	41.7%	50.0%	58.3%	66.7%	75.0%	83.3%	91.7%	100.0%
% Planned Budget Spend	11.8%	20.7%	31.4%	43.2%	48.1%	55.6%	64.5%	71.3%	78.3%	85.2%	92.4%	100.0%
% Budget Complete	11.8%	20.7%	31.4%	43.2%	48.1%	55.6%	64.5%					

Foth Infrastructure & Environment, LLC
22P300.00 - Engineering Services January - December 2022
Joint City and County of Peoria Landfill Committee

Phase/ Task	Description	July Budget	July Actual	August Budget	August Actual	September Budget	September Actual	October Budget	October Actual	November Budget	November Actual	December Budget	December Actual	YTD TOTAL Budget	YTD TOTAL Actual	% Complete
Phase 1	**General Compliance and Guidance**	$ 14,652	$ 14,648	$ 7,420	$ -	$ 7,400	$ -	$ 7,400	$ -	$ 7,400	$ -	$ 7,400	$ -	$ 118,500	$ 81,459	69%
Phase 2	**Groundwater Support and Data Review**	$ 415	$ 414	$ 3,500	$ -	$ 3,790	$ -	$ 4,000	$ -	$ 5,000	$ -	$ 8,927	$ -	$ 41,700	$ 16,472	40%
Phase 3	**Gas System and Leachate Management Operations**	$ 10,634	$ 10,629	$ 6,371	$ -	$ 6,354	$ -	$ 8,856	$ -	$ 8,856	$ -	$ 6,154	$ -	$ 128,300	$ 91,695	71%
Phase 4	**Landfill No. 1. Construction Engineering**	$ -	$ -	$ 2,500	$ -	$ 2,700	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 10,500	$ 5,257	50%
Phase 5	**Landfill No. 2 and No. 3 Expansion/Transition**	$ 3,701	$ 3,701	$ 1,331	$ -	$ 1,331	$ -	$ 1,331	$ -	$ 1,331	$ -	$ 1,331	$ -	$ 20,500	$ 13,844	68%
Phase 6	**Unplanned GCCS Repairs/Emergency**	$ 600	$ 631	$ 1,650	$ -	$ 1,600	$ -	$ 1,600	$ -	$ 1,600	$ -	$ 1,550	$ -	$ 15,000	$ 6,956	46%
	Total	$30,002	$30,023	$22,772	$0	$23,175	$0	$23,187	$0	$24,187	$0	$25,362	$0	$ 334,500	$ 215,683	64%
	% Contract Months Complete	58.3%		66.7%		75.0%		83.3%		91.7%		100.0%				
	% Budget Spent	64.5%		64.5%		64.5%		64.5%		64.5%		64.5%				
	% Planned Budget Spend	64.5%		71.3%		78.3%		85.2%		92.4%		100.0%				

Operational Notes:

January - Phase 1: Worked on Annual Post Closure Cost Estimate to IEPA in January though it's not due until May 1 for internal resourcing purposes. Phase 3: Gas extraction well installation observation and issues with flare.
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REQUEST FOR DISCUSSION

To: **Peoria City/County Landfill Committee Members**

From: **Joshua Gabehart, P.E.; Foth Infrastructure and Environment, LLC**

AGENDA DATE REQUESTED: August 24, 2022

ACTION REQUESTED: Approval for Chairman Morris' Signature

- One 405-CAAPP Form for a Flare Shutdown that Exceeded the One Hour Duration, this was scheduled as part of the wiring upgrades to the flare skid.

BACKGROUND:
The flare system operated as designed during the shutdown; there were no releases of landfill gas to the atmosphere. The cause of the shutdowns is discussed in the monthly update.

Foth does not expect other reports requiring Chairman Morris or Director Powers' signatures. However, we respectfully request approval to obtain Chairman Morris' signature should the need arise prior to the next Committee Meeting. If the need does arise, a report will be brought before the board at the next scheduled meeting.

FINANCIAL IMPACT:

REQUEST FOR DISCUSSION

To: **Peoria City/County Landfill Committee Members**

From: **Mark Williams and Joshua Gabehart, P.E.; Foth Infrastructure and Environment, LLC**

Agenda Date Requested: August 24, 2022

ACTION REQUESTED: Receive and six, five pre-approved waste profiles (633054IL, 633097IL, 633252IL, 633257IL, 633442IL, 633443IL).

BACKGROUND: Please see attached memorandum, which reviews and includes information pertaining to these profiles:

1. Profile 633054IL from Ameren Illinois was pre-approved per the Contaminated Soil and Debris Policy.
2. Profile 633097IL from Illinois Department of Transportation-D4 was pre-approved per the Contaminated Soil and Debris Policy.
3. Profile 633252IL from Illinois Department of Transportation -D4 was pre-approved per the Contaminated Soil and Debris Policy.
4. Profile 633257IL IDOT Wyoming Yard was pre-approved per the Contaminated Soil and Debris Policy.
5. Profile 633442IL from City of Galesburg was pre-approved per the Asbestos Containing Material Policy.
6. Profile 633443IL from City of Galesburg was pre- approved per the Asbestos Containing Material Policy.

Based on the information provided, Foth has no technical objections for acceptance of the waste profiles listed above.

FINANCIAL IMPACT: The waste profiles are expected to generate approximately $8,348.20 host fees.

Memorandum

Foth Infrastructure & Environment, LLC
2314 West Altorfer Drive
Peoria, IL 61615
(309) 691-5300 • Fax: (309) 691-1892
www.foth.com

August 24, 2022

TO: Joint City of Peoria - County of Peoria Solid Waste Disposal Facility Board

CC: Rick Powers, City of Peoria
Scott Sorrel, Peoria County

FR: Mark Williams, Foth Infrastructure & Environment, LLC

RE: Certified Non-Special and Special Waste Permit Approvals

Waste Management has presented the following waste streams.

Pre-Approved Waste Streams (No Action is Required. For Information Only)

- Ameren Illinois, Profile 633054IL
  - Contaminated Soil and Debris Policy
  - 1000 tons, repeat
  - Estimated Host Fee – $2680.00

- Illinois Department of Transportation -D4, Profile 633097IL
  - Contaminated Soil and Debris Policy
  - 360 yards, one-time
  - Estimated Host Fee – $1447.20

- Illinois Department of Transportation -D4, Profile 633252IL
  - Contaminated Soil and Debris Policy
  - 50 yards, one-time
  - Estimated Host Fee – $201.00

- IDOT Wyoming Yard, Profile 633257IL
  - Contaminated Soil and Debris Policy
  - 600 yards, one-time
  - Estimated Host Fee – $2412.00

- City of Galesburg, Profile 633442IL
  - Asbestos Containing Material Policy
  - 200 yards, repeat
  - Estimated Host Fee – $804.00

- City of Galesburg, Profile 633443IL
  - Asbestos Containing Material Policy
  - 200 yards, one-time
  - Estimated Host Fee – $804.00

See attached profile sheets. SDSs and laboratory reports are provided in Attachment A.

Committee approval does not relieve the Generator or Landfill Operator from complying with all applicable laws and regulations. Committee approval is based on information provided by Generator and Landfill Operator.

WASTE MANAGEMENT

EZ Profile™

Requested Facility: Peoria City - County Landfill ☐ Unsure Profile Number: 633054IL
☐ Multiple Generator Locations (Attach Locations) ☐ Request Certificate of Disposal ☐ Renewal? Original Profile Number: _____

A. GENERATOR INFORMATION (MATERIAL ORIGIN)

1. Generator Name: Ameren Illinois
2. Generator Site Address: 980 S. Henderson Street
   (City, State, ZIP) Galesburg IL 61401
3. County: Knox
4. Contact Name: Jennifer Spalding
5. Email: jspalding@ameren.com
6. Phone: (314) 554-2210 7. Fax: _____
8. Generator EPA ID: _____ ☑ N/A
9. State ID: _____ ☑ N/A

B. BILLING INFORMATION ☐ SAME AS GENERATOR

1. Billing Name: Intercon
2. Billing Address: 5512 State Road 19 and 113
   (City, State, ZIP) Waunakee WI 53597
3. Contact Name: Cole Meyer
4. Email: cmeyer@intercon-const.com
5. Phone: (608) 228-4243 6. Fax: (608) 850-2717
7. WM Hauled? ☐ Yes ☑ No
8. P.O. Number: _____
9. Payment Method: ☐ Credit Account ☐ Cash ☐ Credit Card

C. MATERIAL INFORMATION

1. Common Name: Solidified hydroexcavation spoils
   Describe Process(es) Generating Material: ☐ See Attached
   Solidification/de-watering of hydro-excavation spoils from utility conduit installation
2. Material Composition and Contaminants: ☐ See Attached

1. Soil	80-100 %
2. Corn cob	0-20 %
3. Drilling additives - See SDS attached	0-1 %
4.	
Total comp. must be equal to or greater than 100%	≥100%

3. State Waste Codes: _____ ☑ N/A
4. Color: brown
5. Physical State at 70˚F: ☑ Solid ☐ Liquid ☐ Other: _____
6. Free Liquid Range Percentage: _____ to _____ ☑ N/A
7. pH: _____ to _____ ☑ N/A
8. Strong Odor: ☐ Yes ☑ No Describe: _____
9. Flash Point: ☐ <140˚F ☐ 140˚–199˚F ☐ ≥200˚ ☑ N/A

D. REGULATORY INFORMATION

1. EPA Hazardous Waste? ☐ Yes* ☑ No
   Code: _____
2. State Hazardous Waste? ☐ Yes ☑ No
   Code: _____
3. Is this material non-hazardous due to Treatment, Delisting, or an Exclusion? ☐ Yes* ☑ No
4. Contains Underlying Hazardous Constituents? ☐ Yes* ☑ No
5. From an industry regulated under Benzene NESHAP? ☐ Yes* ☑ No
6. Facility remediation subject to 40 CFR 63 GGGGG? ☐ Yes* ☑ No
7. CERCLA or State-mandated clean-up? ☐ Yes* ☑ No
8. NRC or State-regulated radioactive or NORM waste? ☐ Yes* ☑ No

***If Yes, see Addendum (page 2) for additional questions and space.**

9. Contains PCBs? → If Yes, answer a, b and c. ☐ Yes ☑ No
   a. Regulated by 40 CFR 761? ☐ Yes ☐ No
   b. Remediation under 40 CFR 761.61 (a)? ☐ Yes ☐ No
   c. Were PCB imported into the US? ☐ Yes ☐ No
10. Regulated and/or Untreated Medical/Infectious Waste? ☐ Yes ☑ No
11. Contains Asbestos? ☐ Yes ☑ No
    → If Yes: ☐ Non-Friable ☐ Non-Friable – Regulated ☐ Friable

E. ANALYTICAL AND OTHER REPRESENTATIVE INFORMATION

1. Analytical attached ☑ Yes
   Please identify applicable samples and/or lab reports:
   TekLab work order number 22071055
2. Other information attached (such as MSDS)? ☑ Yes

F. SHIPPING AND DOT INFORMATION

1. ☐ One-Time Event ☑ Repeat Event/Ongoing Business
2. Estimated Quantity/Unit of Measure: 1000
   ☑ Tons ☐ Yards ☐ Drums ☐ Gallons ☐ Other: _____
3. Container Type and Size: Rolloff
4. USDOT Proper Shipping Name: ☑ N/A

G. GENERATOR CERTIFICATION (PLEASE READ AND CERTIFY BY SIGNATURE)

By signing this EZ Profile™ form, I hereby certify that all information submitted in this and all attached documents contain true and accurate descriptions of this material, and that all relevant information necessary for proper material characterization and to identify known and suspected hazards has been provided. Any analytical data attached was derived from a sample that is representative as defined in 40 CFR 261 - Appendix 1 or by using an equivalent method. All changes occurring in the character of the material (i.e., changes in the process or new analytical) will be identified by the Generator and be disclosed to Waste Management prior to providing the material to Waste Management.

☐ I am an Authorized Agent signing on behalf of the Generator, and I have confirmed with the Generator that information contained in this profile, as well as supporting documents provided, are accurate and complete.

Name (Print): Jennifer Spalding Date: 08/01/2022
Title: Consulting Environmental Scientist
Company: Ameren

Certification Signature

Jennifer Spalding

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THINK GREEN.®

QUESTIONS? CALL 800 963 4776 FOR ASSISTANCE Revised November 06, 2020

Profile Addendum: State of Illinois
GENERATOR'S NON-SPECIAL WASTE CERTIFICATION

F. Additional Waste Stream Information

Profile Number: 633054IL

Generators Name: Ameren Illinois

Generators SITE Address: 980 S. Henderson Street Galesburg IL 61401
(The location where the waste is generated)

Waste Name: Solidified hydroexcavation spoils

The Illinois Environmental Protection Act allows a Generator to certify that their pollution control waste or industrial process waste, is not an Illinois Special Waste (Section 3.45). By completing the following questionnaire, you may certify that the waste stream represented by the Waste Management Profile referenced above is not an Illinois Special Waste as defined in the Act.

Is the waste referenced above any of the following:

1. A Potentially Infectious Medical Waste (PIMW)? ☐ Yes ☑ No
2. A Hazardous Waste as defined in 40 CFR 261 or in 35 IAC 722.111? ☐ Yes ☑ No
3. A Liquid Waste (fails the paint filter test as defined in 35 IAC 811.107)? ☐ Yes ☑ No
4. A regulated PCB waste as defined in 40 CFR 761? ☐ Yes ☑ No
5. A NESHAP regulated asbestos waste other than waste from renovation or demolition? ☐ Yes ☑ No
6. A waste resulting from the shredding recyclable metals (auto fluff)? ☐ Yes ☑ No
7. A delisted Hazardous Waste or Treated Characteristic Hazardous Waste, subject to LDR requirements under 35 IAC 728.107? ☐ Yes ☑ No

In determining that this waste is not a liquid, I have used knowledge of the processes generating the waste and the attached supporting documentation: ☑ MSDS ☑ Analytical ☐ Other (explain below):

In determining that this waste is not RCRA hazardous, I have used knowledge of the processes generating the waste and the attached supporting documentation: ☑ MSDS ☑ Analytical ☐ Other (explain below):

8. Is the waste represented by this profile sheet exempt from Illinois Solid Waste Management Act fee? ☐ Yes ☑ No

Select option: ◯ Pollution Control Waste ◯ Other

By signing below, I certify my waste is NOT an Illinois Special Waste, and that I understand that a person who knowingly and falsely certifies that a waste is not special waste is subject to the penalties set forth in subdivision (6) of subsection (h) of section 44 of the Illinois Environmental Protection Act.

Name: (Print) Jennifer Spalding Title: Consulting Environmental Scientist

Signature: Jennifer Spalding Date: 08/01/2022

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WASTE MANAGEMENT

EZ Profile™

Requested Facility: Peoria City - County Landfill ☐ Unsure Profile Number: 633097IL
☐ Multiple Generator Locations (Attach Locations) ☐ Request Certificate of Disposal ☐ Renewal? Original Profile Number: _____

A. GENERATOR INFORMATION (MATERIAL ORIGIN)

1. Generator Name: Illinois Department of Transportation - D4
2. Generator Site Address: 609-621 W Glen Ave
   (City, State, ZIP) Peoria IL 61614
3. County: Peoria
4. Contact Name: Matt Stockert
5. Email: matts@environmentalops.com
6. Phone: (618) 581-4544 7. Fax: _____
8. Generator EPA ID: _____ ☑ N/A
9. State ID: _____ ☑ N/A

B. BILLING INFORMATION ☐ SAME AS GENERATOR

1. Billing Name: Otto Baum Co., Inc.
2. Billing Address: 866 N. Main St.
   (City, State, ZIP) Morton IL 61550
3. Contact Name: Adam Hodgson
4. Email: adamhodgson@ottobaum.com
5. Phone: (309) 284-1723 6. Fax: _____
7. WM Hauled? ☐ Yes ☑ No
8. P.O. Number: _____
9. Payment Method: ☐ Credit Account ☐ Cash ☐ Credit Card

C. MATERIAL INFORMATION

1. Common Name: Soil
   Describe Process(es) Generating Material: ☐ See Attached
   Excess soil from roadway reconstruction and maintenance
2. Material Composition and Contaminants: ☐ See Attached

1. soil	100 %
2.	
3.	
4.	
Total comp. must be equal to or greater than 100%	≥100%

3. State Waste Codes: _____ ☑ N/A
4. Color: brown
5. Physical State at 70˚F: ☑ Solid ☐ Liquid ☐ Other: _____
6. Free Liquid Range Percentage: _____ to _____ ☑ N/A
7. pH: 8.29 to 8.84 ☐ N/A
8. Strong Odor: ☐ Yes ☑ No Describe: _____
9. Flash Point: ☐ <140˚F ☐ 140˚–199˚F ☑ ≥200˚ ☐ N/A

D. REGULATORY INFORMATION

1. EPA Hazardous Waste? ☐ Yes* ☑ No
   Code: _____
2. State Hazardous Waste? ☐ Yes ☑ No
   Code: _____
3. Is this material non-hazardous due to Treatment, Delisting, or an Exclusion? ☐ Yes* ☑ No
4. Contains Underlying Hazardous Constituents? ☐ Yes* ☑ No
5. From an industry regulated under Benzene NESHAP? ☐ Yes* ☑ No
6. Facility remediation subject to 40 CFR 63 GGGGG? ☐ Yes* ☑ No
7. CERCLA or State-mandated clean-up? ☐ Yes* ☑ No
8. NRC or State-regulated radioactive or NORM waste? ☐ Yes* ☑ No

***If Yes, see Addendum (page 2) for additional questions and space.**

9. Contains PCBs? → If Yes, answer a, b and c. ☐ Yes ☑ No
   a. Regulated by 40 CFR 761? ☐ Yes ☐ No
   b. Remediation under 40 CFR 761.61 (a)? ☐ Yes ☐ No
   c. Were PCB imported into the US? ☐ Yes ☐ No
10. Regulated and/or Untreated Medical/Infectious Waste? ☐ Yes ☑ No
11. Contains Asbestos? ☐ Yes ☑ No
    → If Yes: ☐ Non-Friable ☐ Non-Friable – Regulated ☐ Friable

E. ANALYTICAL AND OTHER REPRESENTATIVE INFORMATION

1. Analytical attached ☑ Yes
   Please identify applicable samples and/or lab reports:
   SS-89789-1, SS-89789-2
2. Other information attached (such as MSDS)? ☐ Yes

F. SHIPPING AND DOT INFORMATION

1. ☑ One-Time Event ☐ Repeat Event/Ongoing Business
2. Estimated Quantity/Unit of Measure: 360
   ☐ Tons ☑ Yards ☐ Drums ☐ Gallons ☐ Other: _____
3. Container Type and Size: bulk
4. USDOT Proper Shipping Name: ☑ N/A

G. GENERATOR CERTIFICATION (PLEASE READ AND CERTIFY BY SIGNATURE)

By signing this EZ Profile™ form, I hereby certify that all information submitted in this and all attached documents contain true and accurate descriptions of this material, and that all relevant information necessary for proper material characterization and to identify known and suspected hazards has been provided. Any analytical data attached was derived from a sample that is representative as defined in 40 CFR 261 - Appendix 1 or by using an equivalent method. All changes occurring in the character of the material (i.e., changes in the process or new analytical) will be identified by the Generator and be disclosed to Waste Management prior to providing the material to Waste Management.

☑ I am an Authorized Agent signing on behalf of the Generator, and I have confirmed with the Generator that information contained in this profile, as well as supporting documents provided, are accurate and complete.

Name (Print): Matt Stockert Date: 07/05/2022
Title: IHS Program Manager
Company: Environmental Operations, Inc.

Certification Signature

Matt Stockert
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Profile Addendum: State of Illinois
GENERATOR'S NON-SPECIAL WASTE CERTIFICATION

F. Additional Waste Stream Information

Profile Number: 633097IL

Generators Name: Illinois Department of Transportation - D4

Generators SITE Address: 609-621 W Glen Ave Peoria IL 61614
(The location where the waste is generated)

Waste Name: Soil

The Illinois Environmental Protection Act allows a Generator to certify that their pollution control waste or industrial process waste, is not an Illinois Special Waste (Section 3.45). By completing the following questionnaire, you may certify that the waste stream represented by the Waste Management Profile referenced above is not an Illinois Special Waste as defined in the Act.

Is the waste referenced above any of the following:

1. A Potentially Infectious Medical Waste (PIMW)? ☐ Yes ☑ No
2. A Hazardous Waste as defined in 40 CFR 261 or in 35 IAC 722.111? ☐ Yes ☑ No
3. A Liquid Waste (fails the paint filter test as defined in 35 IAC 811.107)? ☐ Yes ☑ No
4. A regulated PCB waste as defined in 40 CFR 761? ☐ Yes ☑ No
5. A NESHAP regulated asbestos waste other than waste from renovation or demolition? ☐ Yes ☑ No
6. A waste resulting from the shredding recyclable metals (auto fluff)? ☐ Yes ☑ No
7. A delisted Hazardous Waste or Treated Characteristic Hazardous Waste, subject to LDR requirements under 35 IAC 728.107? ☐ Yes ☑ No

In determining that this waste is not a liquid, I have used knowledge of the processes generating the waste and the attached supporting documentation: ☐ MSDS ☑ Analytical ☐ Other (explain below):

In determining that this waste is not RCRA hazardous, I have used knowledge of the processes generating the waste and the attached supporting documentation: ☐ MSDS ☑ Analytical ☐ Other (explain below):

8. Is the waste represented by this profile sheet exempt from Illinois Solid Waste Management Act fee? ☑ Yes ☐ No

Select option: ◉ Pollution Control Waste ○ Other

By signing below, I certify my waste is NOT an Illinois Special Waste, and that I understand that a person who knowingly and falsely certifies that a waste is not special waste is subject to the penalties set forth in subdivision (6) of subsection (h) of section 44 of the Illinois Environmental Protection Act.

Name: (Print) Matt Stockert Title: IHS Program Manager

Signature: Matt Stockert Date: 07/05/2022

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Non-Hazardous WAM Approval

Requested Management Facility: Peoria City - County Landfill

Profile Number: 633097IL

Waste Acceptance Expiration Date: 07/06/2023

Common Name: Soil

WM Regulatory Volume Limit: ☑ NA

APPROVAL DETAILS

Approval Decision: ☑ Approved ☐ Not Approved

Profile Renewal: ☐ Yes ☑ No

Management Method: Direct Landfill

Generator Name: Illinois Department of Transportation - D4

Profile Expiration Date: 07/06/2023

Periodic Testing Due Date: ☑ NA

Other Due Date: ☑ NA (Specify)

Management Facility Precautions, Special Handling Procedures or Limitation on approval:

Generator Conditions

- Shall not contain free liquids.
- The waste profile number must appear on the shipping papers.

25 Co-Disposal (Pollution Control Waste)

Approved as non-special waste . Not an Illinois Special Waste per generator certification.

No manifest or Illinois Special Waste Hauling License required.

WM Authorization Name: Andrew Argona

Title: Waste Approval Manager

WM Authorization Signature: Andrew D Argona

Date: 07/06/2022

Agency Authorization (if Required):

Date:

WASTE MANAGEMENT

EZ Profile™

Requested Facility: Peoria City - County Landfill ☐ Unsure Profile Number: 633252IL
☐ Multiple Generator Locations (Attach Locations) ☐ Request Certificate of Disposal ☐ Renewal? Original Profile Number: _____

A. GENERATOR INFORMATION (MATERIAL ORIGIN)

1. Generator Name: Illinois Department of Transportation - D4
2. Generator Site Address: 701 W. Detweiller Dr,707 W Pioneer
   (City, State, ZIP) Peoria IL 61615
3. County: Peoria
4. Contact Name: Matt Stockert
5. Email: matts@environmentalops.com
6. Phone: (618) 581-4544 7. Fax: _____
8. Generator EPA ID: _____ ☑ N/A
9. State ID: _____ ☑ N/A

B. BILLING INFORMATION ☐ SAME AS GENERATOR

1. Billing Name: Oberlander Electric Co
2. Billing Address: 2101 N Main St
   (City, State, ZIP) E. Peoria IL 61611
3. Contact Name: Ryan Marvin
4. Email: rmarvin@oberlanderelectric.com
5. Phone: (309) 694-1468 6. Fax: _____
7. WM Hauled? ☐ Yes ☑ No
8. P.O. Number: _____
9. Payment Method: ☐ Credit Account ☐ Cash ☐ Credit Card

C. MATERIAL INFORMATION

1. Common Name: Soil
   Describe Process(es) Generating Material: ☐ See Attached
   Excess soil from roadway reconstruction and maintenance
2. Material Composition and Contaminants: ☐ See Attached

1. soil	100 %
2.	
3.	
4.	
Total comp. must be equal to or greater than 100%	≥100%

3. State Waste Codes: _____ ☑ N/A
4. Color: brown
5. Physical State at 70˚F: ☑ Solid ☐ Liquid ☐ Other: _____
6. Free Liquid Range Percentage: _____ to _____ ☑ N/A
7. pH: 7.70 to 8.08 ☐ N/A
8. Strong Odor: ☐ Yes ☑ No Describe: _____
9. Flash Point: ☐ <140˚F ☐ 140˚–199˚F ☑ ≥200˚ ☐ N/A

D. REGULATORY INFORMATION

1. EPA Hazardous Waste? ☐ Yes* ☑ No
   Code: _____
2. State Hazardous Waste? ☐ Yes ☑ No
   Code: _____
3. Is this material non-hazardous due to Treatment, Delisting, or an Exclusion? ☐ Yes* ☑ No
4. Contains Underlying Hazardous Constituents? ☐ Yes* ☑ No
5. From an industry regulated under Benzene NESHAP? ☐ Yes* ☑ No
6. Facility remediation subject to 40 CFR 63 GGGGG? ☐ Yes* ☑ No
7. CERCLA or State-mandated clean-up? ☐ Yes* ☑ No
8. NRC or State-regulated radioactive or NORM waste? ☐ Yes* ☑ No

***If Yes, see Addendum (page 2) for additional questions and space.**

9. Contains PCBs? → If Yes, answer a, b and c. ☐ Yes ☑ No
   a. Regulated by 40 CFR 761? ☐ Yes ☐ No
   b. Remediation under 40 CFR 761.61 (a)? ☐ Yes ☐ No
   c. Were PCB imported into the US? ☐ Yes ☐ No
10. Regulated and/or Untreated Medical/Infectious Waste? ☐ Yes ☑ No
11. Contains Asbestos? ☐ Yes ☑ No
    → If Yes: ☐ Non-Friable ☐ Non-Friable – Regulated ☐ Friable

E. ANALYTICAL AND OTHER REPRESENTATIVE INFORMATION

1. Analytical attached ☑ Yes
   Please identify applicable samples and/or lab reports:
   SS-68G74-1, SS-68G74-2, SS-68G74-3
2. Other information attached (such as MSDS)? ☐ Yes

F. SHIPPING AND DOT INFORMATION

1. ☑ One-Time Event ☐ Repeat Event/Ongoing Business
2. Estimated Quantity/Unit of Measure: 50
   ☐ Tons ☑ Yards ☐ Drums ☐ Gallons ☐ Other: _____
3. Container Type and Size: bulk
4. USDOT Proper Shipping Name: ☑ N/A

G. GENERATOR CERTIFICATION (PLEASE READ AND CERTIFY BY SIGNATURE)

By signing this EZ Profile™ form, I hereby certify that all information submitted in this and all attached documents contain true and accurate descriptions of this material, and that all relevant information necessary for proper material characterization and to identify known and suspected hazards has been provided. Any analytical data attached was derived from a sample that is representative as defined in 40 CFR 261 - Appendix 1 or by using an equivalent method. All changes occurring in the character of the material (i.e., changes in the process or new analytical) will be identified by the Generator and be disclosed to Waste Management prior to providing the material to Waste Management.

☑ I am an Authorized Agent signing on behalf of the Generator, and I have confirmed with the Generator that information contained in this profile, as well as supporting documents provided, are accurate and complete.

Name (Print): Matt Stockert Date: 07/22/2022
Title: IHS Program Manager
Company: Environmental Operations, Inc.

Certification Signature

Matt Stockert

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Profile Addendum: State of Illinois
GENERATOR'S NON-SPECIAL WASTE CERTIFICATION

F. Additional Waste Stream Information

Profile Number: 633252IL

Generators Name: Illinois Department of Transportation - D4

Generators SITE Address: 701 W. Detweiller Dr,707 W Pioneer Pkwy,1200 S 2nd Peoria IL 61615
(The location where the waste is generated)

Waste Name: Soil

The Illinois Environmental Protection Act allows a Generator to certify that their pollution control waste or industrial process waste, is not an Illinois Special Waste (Section 3.45). By completing the following questionnaire, you may certify that the waste stream represented by the Waste Management Profile referenced above is not an Illinois Special Waste as defined in the Act.

Is the waste referenced above any of the following:

1. A Potentially Infectious Medical Waste (PIMW)? ☐ Yes ☑ No
2. A Hazardous Waste as defined in 40 CFR 261 or in 35 IAC 722.111? ☐ Yes ☑ No
3. A Liquid Waste (fails the paint filter test as defined in 35 IAC 811.107)? ☐ Yes ☑ No
4. A regulated PCB waste as defined in 40 CFR 761? ☐ Yes ☑ No
5. A NESHAP regulated asbestos waste other than waste from renovation or demolition? ☐ Yes ☑ No
6. A waste resulting from the shredding recyclable metals (auto fluff)? ☐ Yes ☑ No
7. A delisted Hazardous Waste or Treated Characteristic Hazardous Waste, subject to LDR requirements under 35 IAC 728.107? ☐ Yes ☑ No

In determining that this waste is not a liquid, I have used knowledge of the processes generating the waste and the attached supporting documentation: ☐ MSDS ☑ Analytical ☐ Other (explain below):

In determining that this waste is not RCRA hazardous, I have used knowledge of the processes generating the waste and the attached supporting documentation: ☐ MSDS ☑ Analytical ☐ Other (explain below):

8. Is the waste represented by this profile sheet exempt from Illinois Solid Waste Management Act fee? ☑ Yes ☐ No

Select option: ◉ Pollution Control Waste ○ Other

By signing below, I certify my waste is NOT an Illinois Special Waste, and that I understand that a person who knowingly and falsely certifies that a waste is not special waste is subject to the penalties set forth in subdivision (6) of subsection (h) of section 44 of the Illinois Environmental Protection Act.

Name: (Print) Matt Stockert Title: IHS Program Manager

Signature: Matt Stockert Date: 07/22/2022

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WASTE MANAGEMENT

EZ Profile™

Requested Facility: Peoria City - County Landfill ☐ Unsure Profile Number: 633257IL
☐ Multiple Generator Locations (Attach Locations) ☐ Request Certificate of Disposal ☐ Renewal? Original Profile Number: _____

A. GENERATOR INFORMATION (MATERIAL ORIGIN)

1. Generator Name: IDOT Wyoming Yard
2. Generator Site Address: South 7th Street
   (City, State, ZIP) Wyoming IL 61491
3. County: Stark
4. Contact Name: Peter J Jerszynski
5. Email: Peter.J.Jerszynski@illinois.gov
6. Phone: (217) 558-3355 7. Fax: _____
8. Generator EPA ID: _____ ☑ N/A
9. State ID: 1750205009 ☐ N/A

B. BILLING INFORMATION ☐ SAME AS GENERATOR

1. Billing Name: CAD Construction
2. Billing Address: 150 South Baer Road
   (City, State, ZIP) Tremont IL 61568
3. Contact Name: Jake Harlow
4. Email: jake@cadconstructioninc.com
5. Phone: (309) 925-2092 6. Fax: _____
7. WM Hauled? ☐ Yes ☑ No
8. P.O. Number: _____
9. Payment Method: ☑ Credit Account ☐ Cash ☐ Credit Card

C. MATERIAL INFORMATION

1. Common Name: Potentially Contaminated Soil and Debris
   Describe Process(es) Generating Material: ☐ See Attached
   Excavated soil and debris from foundations for new storage buldings
2. Material Composition and Contaminants: ☐ See Attached

1. Soil	80-100 %
2. Debris	0-20 %
3.	
4.	
Total comp. must be equal to or greater than 100%	≥100%

3. State Waste Codes: _____ ☑ N/A
4. Color: Brown
5. Physical State at 70˚F: ☑ Solid ☐ Liquid ☐ Other: _____
6. Free Liquid Range Percentage: 0 to 0 ☐ N/A
7. pH: 7.21 to 7.21 ☐ N/A
8. Strong Odor: ☐ Yes ☑ No Describe: _____
9. Flash Point: ☐ <140˚F ☐ 140˚–199˚F ☑ ≥200˚ ☐ N/A

D. REGULATORY INFORMATION

1. EPA Hazardous Waste? ☐ Yes* ☑ No
   Code: _____
2. State Hazardous Waste? ☐ Yes ☑ No
   Code: _____
3. Is this material non-hazardous due to Treatment, Delisting, or an Exclusion? ☐ Yes* ☑ No
4. Contains Underlying Hazardous Constituents? ☐ Yes* ☑ No
5. From an industry regulated under Benzene NESHAP? ☐ Yes* ☑ No
6. Facility remediation subject to 40 CFR 63 GGGGG? ☐ Yes* ☑ No
7. CERCLA or State-mandated clean-up? ☐ Yes* ☑ No
8. NRC or State-regulated radioactive or NORM waste? ☐ Yes* ☑ No

***If Yes, see Addendum (page 2) for additional questions and space.**

9. Contains PCBs? → If Yes, answer a, b and c. ☐ Yes ☑ No
   a. Regulated by 40 CFR 761? ☐ Yes ☐ No
   b. Remediation under 40 CFR 761.61 (a)? ☐ Yes ☐ No
   c. Were PCB imported into the US? ☐ Yes ☐ No
10. Regulated and/or Untreated Medical/Infectious Waste? ☐ Yes ☑ No
11. Contains Asbestos? ☐ Yes ☑ No
    → If Yes: ☐ Non-Friable ☐ Non-Friable – Regulated ☐ Friable

E. ANALYTICAL AND OTHER REPRESENTATIVE INFORMATION

1. Analytical attached ☑ Yes
   Please identify applicable samples and/or lab reports:
   WC 1
2. Other information attached (such as MSDS)? ☐ Yes

F. SHIPPING AND DOT INFORMATION

1. ☑ One-Time Event ☐ Repeat Event/Ongoing Business
2. Estimated Quantity/Unit of Measure: 600
   ☐ Tons ☑ Yards ☐ Drums ☐ Gallons ☐ Other: _____
3. Container Type and Size: Dump Truck
4. USDOT Proper Shipping Name: ☑ N/A

G. GENERATOR CERTIFICATION (PLEASE READ AND CERTIFY BY SIGNATURE)

By signing this EZ Profile™ form, I hereby certify that all information submitted in this and all attached documents contain true and accurate descriptions of this material, and that all relevant information necessary for proper material characterization and to identify known and suspected hazards has been provided. Any analytical data attached was derived from a sample that is representative as defined in 40 CFR 261 - Appendix 1 or by using an equivalent method. All changes occurring in the character of the material (i.e., changes in the process or new analytical) will be identified by the Generator and be disclosed to Waste Management prior to providing the material to Waste Management.

☑ I am an Authorized Agent signing on behalf of the Generator, and I have confirmed with the Generator that information contained in this profile, as well as supporting documents provided, are accurate and complete.

Name (Print): Goebel Rowe Date: 07/26/2022
Title: Engineer
Company: CW3M Company

Certification Signature

Goebel T Rowe
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Profile Addendum: State of Illinois
GENERATOR'S NON-SPECIAL WASTE CERTIFICATION

F. Additional Waste Stream Information

Profile Number: 633257IL

Generators Name: IDOT Wyoming Yard

Generators SITE Address: South 7th Street Wyoming IL 61491
(The location where the waste is generated)

Waste Name: Potentially Contaminated Soil and Debris

The Illinois Environmental Protection Act allows a Generator to certify that their pollution control waste or industrial process waste, is not an Illinois Special Waste (Section 3.45). By completing the following questionnaire, you may certify that the waste stream represented by the Waste Management Profile referenced above is not an Illinois Special Waste as defined in the Act.

Is the waste referenced above any of the following:

1. A Potentially Infectious Medical Waste (PIMW)? ☐ Yes ☑ No
2. A Hazardous Waste as defined in 40 CFR 261 or in 35 IAC 722.111? ☐ Yes ☑ No
3. A Liquid Waste (fails the paint filter test as defined in 35 IAC 811.107)? ☐ Yes ☑ No
4. A regulated PCB waste as defined in 40 CFR 761? ☐ Yes ☑ No
5. A NESHAP regulated asbestos waste other than waste from renovation or demolition? ☐ Yes ☑ No
6. A waste resulting from the shredding recyclable metals (auto fluff)? ☐ Yes ☑ No
7. A delisted Hazardous Waste or Treated Characteristic Hazardous Waste, subject to LDR requirements under 35 IAC 728.107? ☐ Yes ☑ No

In determining that this waste is not a liquid, I have used knowledge of the processes generating the waste and the attached supporting documentation: ☐ MSDS ☑ Analytical ☐ Other (explain below):

In determining that this waste is not RCRA hazardous, I have used knowledge of the processes generating the waste and the attached supporting documentation: ☐ MSDS ☑ Analytical ☐ Other (explain below):

8. Is the waste represented by this profile sheet exempt from Illinois Solid Waste Management Act fee? ☑ Yes ☐ No

Select option: ◉ Pollution Control Waste ○ Other

By signing below, I certify my waste is NOT an Illinois Special Waste, and that I understand that a person who knowingly and falsely certifies that a waste is not special waste is subject to the penalties set forth in subdivision (6) of subsection (h) of section 44 of the Illinois Environmental Protection Act.

Name: (Print) Goebel Rowe Title: Engineer

Signature: Goebel T Rowe Date: 07/26/2022

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WASTE MANAGEMENT

EZ Profile™

Requested Facility: Peoria City - County Landfill ☐ Unsure Profile Number: 633442IL
☑ Multiple Generator Locations (Attach Locations) ☑ Request Certificate of Disposal ☐ Renewal? Original Profile Number: _____

A. GENERATOR INFORMATION (MATERIAL ORIGIN)

1. Generator Name: City of Galesburg
2. Generator Site Address: 246 E 5th street
   (City, State, ZIP) Galesburg IL 61401
3. County: Knox
4. Contact Name: Travis Gardner
5. Email: tgardner@relyonmsi.com
6. Phone: (309) 509-0243 7. Fax: _____
8. Generator EPA ID: _____ ☑ N/A
9. State ID: Illinois ☐ N/A

B. BILLING INFORMATION ☐ SAME AS GENERATOR

1. Billing Name: MSI
2. Billing Address: 1144 Monmouth BLVD
   (City, State, ZIP) Galesburg IL 61401
3. Contact Name: Travis Gardner
4. Email: tgardner@relyonmsi.com
5. Phone: (309) 509-0243 6. Fax: _____
7. WM Hauled? ☐ Yes ☑ No
8. P.O. Number: _____
9. Payment Method: ☑ Credit Account ☐ Cash ☐ Credit Card

C. MATERIAL INFORMATION

1. Common Name: Asbestos-Friable
   Describe Process(es) Generating Material: ☐ See Attached

Removal of regulated, uncontaminated friable, or non-friable that has become friable, asbestos containing materials from demolition/dismantling or remediation activities. DOES NOT include clean-up wastes, such as, soils that are

2. Material Composition and Contaminants: ☐ See Attached

1. Demolition debris, asbestos	100 %
2.	
3.	
4.	
Total comp. must be equal to or greater than 100%	≥100%

3. State Waste Codes: _____ ☑ N/A
4. Color: Various
5. Physical State at 70˚F: ☑ Solid ☐ Liquid ☐ Other: _____
6. Free Liquid Range Percentage: _____ to _____ ☑ N/A
7. pH: _____ to _____ ☑ N/A
8. Strong Odor: ☐ Yes ☑ No Describe: _____
9. Flash Point: ☐ <140˚F ☐ 140˚–199˚F ☐ ≥200˚ ☑ N/A

D. REGULATORY INFORMATION

1. EPA Hazardous Waste? ☐ Yes* ☑ No
   Code: _____
2. State Hazardous Waste? ☐ Yes ☑ No
   Code: _____
3. Is this material non-hazardous due to Treatment, Delisting, or an Exclusion? ☐ Yes* ☑ No
4. Contains Underlying Hazardous Constituents? ☐ Yes* ☑ No
5. From an industry regulated under Benzene NESHAP? ☐ Yes* ☑ No
6. Facility remediation subject to 40 CFR 63 GGGGG? ☐ Yes* ☑ No
7. CERCLA or State-mandated clean-up? ☐ Yes* ☑ No
8. NRC or State-regulated radioactive or NORM waste? ☐ Yes* ☑ No

***If Yes, see Addendum (page 2) for additional questions and space.**

9. Contains PCBs? → If Yes, answer a, b and c. ☐ Yes ☑ No
   a. Regulated by 40 CFR 761? ☐ Yes ☐ No
   b. Remediation under 40 CFR 761.61 (a)? ☐ Yes ☐ No
   c. Were PCB imported into the US? ☐ Yes ☐ No
10. Regulated and/or Untreated Medical/Infectious Waste? ☐ Yes ☑ No
11. Contains Asbestos? ☑ Yes ☐ No
    → If Yes: ☐ Non-Friable ☑ Non-Friable – Regulated ☑ Friable

E. ANALYTICAL AND OTHER REPRESENTATIVE INFORMATION

1. Analytical attached ☐ Yes
   Please identify applicable samples and/or lab reports:
2. Other information attached (such as MSDS)? ☐ Yes

F. SHIPPING AND DOT INFORMATION

1. ☐ One-Time Event ☑ Repeat Event/Ongoing Business
2. Estimated Quantity/Unit of Measure: 200
   ☐ Tons ☑ Yards ☐ Drums ☐ Gallons ☐ Other: _____
3. Container Type and Size: 30 yard loads
4. USDOT Proper Shipping Name: ☐ N/A
   RQ, NA2212, Asbestos, 9, PG III

G. GENERATOR CERTIFICATION (PLEASE READ AND CERTIFY BY SIGNATURE)

By signing this EZ Profile™ form, I hereby certify that all information submitted in this and all attached documents contain true and accurate descriptions of this material, and that all relevant information necessary for proper material characterization and to identify known and suspected hazards has been provided. Any analytical data attached was derived from a sample that is representative as defined in 40 CFR 261 - Appendix 1 or by using an equivalent method. All changes occurring in the character of the material (i.e., changes in the process or new analytical) will be identified by the Generator and be disclosed to Waste Management prior to providing the material to Waste Management.

☑ I am an Authorized Agent signing on behalf of the Generator, and I have confirmed with the Generator that information contained in this profile, as well as supporting documents provided, are accurate and complete.

Name (Print): Travis Gardner Date: 08/09/2022
Title: Project Manager
Company: MSI

Certification Signature

Travis Gardner

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THINK GREEN.® **QUESTIONS? CALL 800 963 4776 FOR ASSISTANCE** Revised November 06, 2020

EZ Profile™ Addendum

Only complete this Addendum if prompted by responses on EZ Profile™ (page 1) or to provide additional information. Sections and question numbers correspond to EZ Profile™.

Profile Number: 633442IL

C. MATERIAL INFORMATION

Describe Process Generating Material (Continued from page 1): If more space is needed, please attach additional pages.

contaminated with asbestos, lead-based painted debris, liquids and PCB containing building materials such as caulk/glaze/mastic/galbestos.

Material Composition and Contaminants (Continued from page 1): If more space is needed, please attach additional pages.

5.	
6.	
7.	
8.	
9.	
Total composition must be equal to or greater than 100%	≥100%

D. REGULATORY INFORMATION

Only questions with a "Yes" response in Section D on the EZ Profile™ form (page 1) need to be answered here.

1. EPA Hazardous Waste
   a. Please list all USEPA listed and characteristic waste code numbers:
   b. Is the material subject to the Alternative Debris standards (40 CFR 268.45)? ❑ Yes ❑ No
   c. Is the material subject to the Alternative Soil standards (40 CFR 268.49)? → If Yes, complete question 4. ❑ Yes ❑ No
   d. Is the material exempt from Subpart CC Controls (40 CFR 264.1083)? ❑ Yes ❑ No
      → If Yes, please check **one** of the following:
      ❑ Waste meets LDR or treatment exemptions for organics (40 CFR 264.1082(c)(2) or (c)(4))
      ❑ Waste contains VOCs that average <500 ppmw (CFR 264.1082(c)(1)) – will require annual update.
2. State Hazardous Waste → Please list all state waste codes: _____
3. For material that is Treated, Delisted, or Excluded → Please indicate the category, below:
   ❑ Delisted Hazardous Waste ❑ Excluded Waste under 40 CFR 261.4 → Specify Exclusion: _____
   ❑ Treated Hazardous Waste Debris ❑ Treated Characteristic Hazardous Waste → If checked, complete question 4.
4. Underlying Hazardous Constituents → Please list all Underlying Hazardous Constituents:
5. Industries regulated under Benzene NESHAP include petroleum refineries, chemical manufacturing plants, coke by-product recovery plants, and TSDFs.
   a. Are you a TSDF? → If yes, please complete Benzene NESHAP questionnaire. If not, continue. ❑ Yes ❑ No
   b. Does this material contain benzene? ❑ Yes ❑ No
      1. If yes, what is the flow weighted average concentration? _____ ppmw
   c. What is your facility's current total annual benzene quantity in Megagrams? ❑ <1 Mg ❑ 1–9.99 Mg ❑ ≥10 Mg
   d. Is this waste soil from a remediation? ❑ Yes ❑ No
      1. If yes, what is the benzene concentration in remediation waste? _____ ppmw
   e. Does the waste contain >10% water/moisture? ❑ Yes ❑ No
   f. Has material been treated to remove 99% of the benzene or to achieve <10 ppmw? ❑ Yes ❑ No
   g. Is material exempt from controls in accordance with 40 CFR 61.342? ❑ Yes ❑ No
      → If yes, specify exemption: _____
   h. Based on your knowledge of your waste and the BWON regulations, do you believe that this waste stream is subject to treatment and control requirements at an off-site TSDF? ❑ Yes ❑ No
6. 40 CFR 63 GGGGG → Does the material contain <500 ppmw VOHAPs at the point of determination? ❑ Yes ❑ No
7. CERCLA or State-Mandated clean up → Please submit the Record of Decision or other documentation with process information to assist others in the evaluation for proper disposal. A "Determination of Acceptability" may be needed for CERCLA wastes not going to a CERCLA approved facility.
8. NRC or state regulated radioactive or NORM Waste → Please identify Isotopes and pCi/g: _____

WASTE MANAGEMENT

EZ Profile™

Requested Facility: Peoria City - County Landfill ☐ Unsure Profile Number: 633443IL
☐ Multiple Generator Locations (Attach Locations) ☑ Request Certificate of Disposal ☐ Renewal? Original Profile Number: _____

A. GENERATOR INFORMATION (MATERIAL ORIGIN)

1. Generator Name: City Of Galesburg
2. Generator Site Address: 246 E 5th street
   (City, State, ZIP) Galesburg IL 61401
3. County: Knox
4. Contact Name: Travis Gardner
5. Email: tgardner@relyonmsi.com
6. Phone: (309) 509-0243 7. Fax: _____
8. Generator EPA ID: _____ ☑ N/A
9. State ID: _____ ☑ N/A

B. BILLING INFORMATION ☐ SAME AS GENERATOR

1. Billing Name: MSI
2. Billing Address: 1144 Monmouth BLVD
   (City, State, ZIP) Galesburg IL 61401
3. Contact Name: Travis Gardner
4. Email: tgardner@relyonmsi.com
5. Phone: (309) 509-0243 6. Fax: _____
7. WM Hauled? ☐ Yes ☑ No
8. P.O. Number: _____
9. Payment Method: ☑ Credit Account ☐ Cash ☐ Credit Card

C. MATERIAL INFORMATION

1. Common Name: Asbestos-Non-Friable
   Describe Process(es) Generating Material: ☐ See Attached

   Removal of uncontaminated, non-regulated, non-friable asbestos from Demolition/ renovation - when dry, cannot be crumbled, pulverized or reduced to powder by hand pressure. Specific to gaskets, resilient floor coverings and asphalt roofing

2. Material Composition and Contaminants: ☐ See Attached

1. Non-Friable Asbestos (Uncontaminated)	0-100 %
2.	
3.	
4.	
Total comp. must be equal to or greater than 100%	≥100%

3. State Waste Codes: _____ ☑ N/A
4. Color: Various
5. Physical State at 70˚F: ☑ Solid ☐ Liquid ☐ Other: _____
6. Free Liquid Range Percentage: _____ to _____ ☑ N/A
7. pH: _____ to _____ ☑ N/A
8. Strong Odor: ☐ Yes ☑ No Describe: _____
9. Flash Point: ☐ <140˚F ☐ 140˚–199˚F ☐ ≥200˚ ☑ N/A

D. REGULATORY INFORMATION

1. EPA Hazardous Waste? ☐ Yes* ☑ No
   Code: _____
2. State Hazardous Waste? ☐ Yes ☑ No
   Code: _____
3. Is this material non-hazardous due to Treatment, Delisting, or an Exclusion? ☐ Yes* ☑ No
4. Contains Underlying Hazardous Constituents? ☐ Yes* ☑ No
5. From an industry regulated under Benzene NESHAP? ☐ Yes* ☑ No
6. Facility remediation subject to 40 CFR 63 GGGGG? ☐ Yes* ☑ No
7. CERCLA or State-mandated clean-up? ☐ Yes* ☑ No
8. NRC or State-regulated radioactive or NORM waste? ☐ Yes* ☑ No

***If Yes, see Addendum (page 2) for additional questions and space.**

9. Contains PCBs? → If Yes, answer a, b and c. ☐ Yes ☑ No
   a. Regulated by 40 CFR 761? ☐ Yes ☐ No
   b. Remediation under 40 CFR 761.61 (a)? ☐ Yes ☐ No
   c. Were PCB imported into the US? ☐ Yes ☐ No
10. Regulated and/or Untreated Medical/Infectious Waste? ☐ Yes ☑ No
11. Contains Asbestos? ☑ Yes ☐ No
    → If Yes: ☑ Non-Friable ☐ Non-Friable – Regulated ☐ Friable

E. ANALYTICAL AND OTHER REPRESENTATIVE INFORMATION

1. Analytical attached ☑ Yes
   Please identify applicable samples and/or lab reports:

   see attached

2. Other information attached (such as MSDS)? ☐ Yes

F. SHIPPING AND DOT INFORMATION

1. ☐ One-Time Event ☑ Repeat Event/Ongoing Business
2. Estimated Quantity/Unit of Measure: 200
   ☐ Tons ☑ Yards ☐ Drums ☐ Gallons ☐ Other: _____
3. Container Type and Size: 30 yard loads
4. USDOT Proper Shipping Name: ☑ N/A

G. GENERATOR CERTIFICATION (PLEASE READ AND CERTIFY BY SIGNATURE)

By signing this EZ Profile™ form, I hereby certify that all information submitted in this and all attached documents contain true and accurate descriptions of this material, and that all relevant information necessary for proper material characterization and to identify known and suspected hazards has been provided. Any analytical data attached was derived from a sample that is representative as defined in 40 CFR 261 - Appendix 1 or by using an equivalent method. All changes occurring in the character of the material (i.e., changes in the process or new analytical) will be identified by the Generator and be disclosed to Waste Management prior to providing the material to Waste Management.

☑ I am an Authorized Agent signing on behalf of the Generator, and I have confirmed with the Generator that information contained in this profile, as well as supporting documents provided, are accurate and complete.

Name (Print): Travis Gardner Date: 08/09/2022
Title: Project Manager
Company: MSI

Certification Signature

Travis Gardner

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THINK GREEN.®

QUESTIONS? CALL 800 963 4776 FOR ASSISTANCE Revised November 06, 2020

EZ Profile™ Addendum

Only complete this Addendum if prompted by responses on EZ Profile™ (page 1) or to provide additional information. Sections and question numbers correspond to EZ Profile™.

Profile Number: 633443IL

C. MATERIAL INFORMATION

Describe Process Generating Material (Continued from page 1): If more space is needed, please attach additional pages.

products (specify in C.2.) DOES NOT include clean-up wastes, such as, soils that are contaminated with asbestos, lead-based painted debris, liquids and PCB containing building materials such as caulk/glaze/mastic/galbestos.

Material Composition and Contaminants (Continued from page 1): If more space is needed, please attach additional pages.

5.	
6.	
7.	
8.	
9.	
Total composition must be equal to or greater than 100%	≥100%

D. REGULATORY INFORMATION

Only questions with a "Yes" response in Section D on the EZ Profile™ form (page 1) need to be answered here.

1. EPA Hazardous Waste
   a. Please list all USEPA listed and characteristic waste code numbers:
   b. Is the material subject to the Alternative Debris standards (40 CFR 268.45)? ❑ Yes ❑ No
   c. Is the material subject to the Alternative Soil standards (40 CFR 268.49)? → If Yes, complete question 4. ❑ Yes ❑ No
   d. Is the material exempt from Subpart CC Controls (40 CFR 264.1083)? ❑ Yes ❑ No
      → If Yes, please check **one** of the following:
      ❑ Waste meets LDR or treatment exemptions for organics (40 CFR 264.1082(c)(2) or (c)(4))
      ❑ Waste contains VOCs that average <500 ppmw (CFR 264.1082(c)(1)) – will require annual update.
2. State Hazardous Waste → Please list all state waste codes: _____
3. For material that is Treated, Delisted, or Excluded → Please indicate the category, below:
   ❑ Delisted Hazardous Waste ❑ Excluded Waste under 40 CFR 261.4 → Specify Exclusion: _____
   ❑ Treated Hazardous Waste Debris ❑ Treated Characteristic Hazardous Waste → If checked, complete question 4.
4. Underlying Hazardous Constituents → Please list all Underlying Hazardous Constituents:
5. Industries regulated under Benzene NESHAP include petroleum refineries, chemical manufacturing plants, coke by-product recovery plants, and TSDFs.
   a. Are you a TSDF? → If yes, please complete Benzene NESHAP questionnaire. If not, continue. ❑ Yes ❑ No
   b. Does this material contain benzene? ❑ Yes ❑ No
      1. If yes, what is the flow weighted average concentration? _____ ppmw
   c. What is your facility's current total annual benzene quantity in Megagrams? ❑ <1 Mg ❑ 1–9.99 Mg ❑ ≥10 Mg
   d. Is this waste soil from a remediation? ❑ Yes ❑ No
      1. If yes, what is the benzene concentration in remediation waste? _____ ppmw
   e. Does the waste contain >10% water/moisture? ❑ Yes ❑ No
   f. Has material been treated to remove 99% of the benzene or to achieve <10 ppmw? ❑ Yes ❑ No
   g. Is material exempt from controls in accordance with 40 CFR 61.342? ❑ Yes ❑ No
      → If yes, specify exemption: _____
   h. Based on your knowledge of your waste and the BWON regulations, do you believe that this waste stream is subject to treatment and control requirements at an off-site TSDF? ❑ Yes ❑ No
6. 40 CFR 63 GGGGG → Does the material contain <500 ppmw VOHAPs at the point of determination? ❑ Yes ❑ No
7. CERCLA or State-Mandated clean up → Please submit the Record of Decision or other documentation with process information to assist others in the evaluation for proper disposal. A "Determination of Acceptability" may be needed for CERCLA wastes not going to a CERCLA approved facility.
8. NRC or state regulated radioactive or NORM Waste → Please identify Isotopes and pCi/g: _____

Attachment A - Waste Profile Lab Reports and SDSs

- Waste Profile 633054IL SDSs
- Waste Profile 633054IL Lab Report
- Waste Profile 633252IL Lab Report
- Waste Profile 633057IL Lab Report

Waste Profile 633054IL SDSs

BestCob Safety Data Sheet

DATE PREPARED: 05/20/2015 **DATE UPDATED:** 09/25/2019

Section 1: Identification

Product Names: Corncob fraction material, Cobsorbent, Diamond Dry, Well Dry, Horse Bedding, Animal Bedding, Flour, Granules, and Other.

Product Use: Absorbant, carrier, abrasive, and other industrial applications.

Manufactured Information:
BestCob
1895 Bland Blvd.
Independence, IA 50644

For Information or Emergency:
BestCob
P.O. Box 150
Rock Falls, IL 61071-0150
phone: 1-800-237-8262
email: sales@bestcob.com
website: www.bestcob.com

Section 2: Hazard Identification

Hazard Symbols/Statements

WARNING

MAY CAUSE MILD SKIN IRRITATION
MAY CAUSE EYE IRRITATION
MAY CAUSE RESPIRATORY IRRITATION
MAY FORM COMBUSTIBLE DUST CONCENTRATIONS IN AIR

HAZARD CLASSIFICATION	CATEGORY	INTERPRETATION
SKIN IRRITATION	3	MILD SKIN IRRITATION POSSIBLE
EYE IRRITATION	2b	EYE IRRITATION POSSIBLE
TARGET ORGAN SYSTEMIC TOXICITY	3	TRANSIENT RESPIRATORY IRRITATION POSSIBLE

PRECAUTIONARY STATEMENTS

If skin irritation occurs, get medical advice.
If in eyes, rinse cautionsly with water for several minutes - REMOVE CONTACT LENSES
If eye irritation persists, get medical advice.
Use outdoors or in well ventilated areas.
Avoid breathing dust.
If inhaled, remove to fresh air and keep at rest in a position comfortable for breathing.
Dispose of contents / container in accordance with national/local/regional regulations.

Section 3: Composition / Information on Ingredients

Substances

Chemical Name: None **Common Name:** Corn Cob Fractions **CAS#:** None **Impurities/Additives:** None

Mixtures

Not Applicable

Section 4: First Aid Measures

If Inhaled: Move victim to fresh air. Seek medical attention if irritation persists.

If on Skin: Wash affected area with soap and water. Seek medical attention if irritation persists. Wash contaminated clothing before use.

If in the Eyes: Immediately flush with cool water for at least 20 minutes. Seek medical attention if irritation persists.

If Swallowed: If the victim is alert and not conculsing, give one glass of water to dilute material. Seek immediate medical attention.

Special Treatment: None known.

Health Hazards: Consult section 11 of this SDS.

Section 5: Firefighting Measures

Extinguishing Media: Use media suitable for surrounding fire. No special media required.

Specific Fire Hazards: Decomposition products may be toxic, typical of wood smoke.

Special Firefighting Procedures: Wear full protective closthing and positive pressure, self contained breathing apparatus.

Section 6: Accidental Release Measures

Spill/Release Procedures: Collect spilled product and store to re-use. Contaminated product and or environmental media should be recovered and disposed of properly.

Environmental Precautions: Prevent spilled material from entering storm drains or bodies of water.

Protective Equipment: See section 8 of this SDS.

Section 7: Handling and Storage Procedures

Store in a cool, dry, well ventilated area.

Section 8: Exposure Controls / Personal Protection

Exposure Limits

Hazardous Component	OSHA PEL	ACGIH TLV
CornCob Fractions	15mg/m3 (total)	10mg/m3 (inhalable)
	5mg/m3 (respirable)	3mg/m3 (respirable)

Personal Protective Equipment / Protection Measures / Controls

Respiratory Protection: NIOSH approved particulate respirator, if needed
Eye Protection: Safety glasses with side shields, goggles, or faceshield recommended.
Skin Protection: Long sleeves, cotton gloves recommended.
Ventilation: Local exhaust ventilation recommended.

Section 9: Physical and Chemical Properties

Appearance and Odor: Free flowing, light red or tan grannules, no appreciable odor
pH (Full Strength): 4.5 (slurried in water)
Melting Point: N/A
Flash Point: 350°F (Open Cup), 388°F (Closed Cup)
Evaporation Rate: N/A
Flammable Limits: N/A
Vapor Pressure: Near 0.0 at 20 degrees celsius
Specific Gravity: 1.1
Solubility in Water: Practically insoluable

Partition Coefficient: N/A
Autoignition Temp: N/A
Decomposition Temp: N/A

Section 10: Stability and Reactivity

Stability: Product is stable
Conditions to Avoid: Excessive Heat (over 300°F)
Incompatibility: Strong oxidizers, caustics, acids
Hazardous Decomposition Products: CO_x

Section 11: Toxicological Information

Health Effects: May be irritating to the nose and respiratory tract. Skin irritation may result from repeated or prolonged exposure. May also irritate eyes.

Carcinogenicity: The ingredient is not a know / listed carcinogen.

Ingredient Toxicity Ranges:

Oral:	None Listed
Dermal:	None Listed
Inhalation:	None Listed

Section 12: Ecological Information

This product is not known to be ecotoxic, persistent, or have the potential to bioaccumulate.

Section 13: Disposal Considerations

Dispose of in accordance with all national / regional / state, and local regulations.

Section 14: Transport Information

This product is not regulated as a transportation hazard.

Section 15: Regulatory Information

SARA SECTION 311/312
HAZARD CATEGORY: IMMEDIATE HAZARD

Section 16: Other Information

NFPA Ratings:		HMIS Ratings:	
Health	1	Health	1
Flammability	0	Flammability	0
Instability	0	Instability	0

Note

The information is based on the data available to us and to the best of our knowledge is reliable and accurate. BestCob makes no warranty, expressed or implied, regarding the accuracy of this data or the results obtained from its use, and any use of the material itself or in combination with any other material or any process is the sole responsibility of the user.

SAFETY DATA SHEET

HDD-Defense

Section: 1. PRODUCT AND COMPANY IDENTIFICATION

Product name	:	HDD-Defense
Other means of identification	:	Not applicable.
Recommended use	:	As a fluid loss control agent for drilling fluids.
Restrictions on use	:	None Known.
Company	:	Drillchem Drilling Solutions, LLC PO Box 13107 Spring, TX 77393 USA Office: (281) 713-8941
Emergency telephone number	:	(800) 424-9300 (24 Hours) CHEMTREC
Issuing date	:	02/15/2018

Section: 2. HAZARDS IDENTIFICATION

GHS Classification

Physical Hazards	:	Not classified.
Health Hazards	:	Not classified.
Environmental Hazards	:	Not classified.
OSHA Defined Hazards	:	Not classified
Supplemental Information	:	Not Applicable

GHS Label element

Hazard pictograms	:	None
Signal Word	:	None
Hazard Statements	:	This product does not meet the criteria for classification.
Precautionary Statements	:	**Prevention:** Observe good industial hygiene practices **Response:** Wash hands after handling. **Storage:** Store away from incompatible materials **Disposal:** Dispose of waste and residues in accordance with local authorities requirements.
Other hazards	:	None known.

Section: 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	Mixtures Common name and synonyms	CAS Number	%
Natural Plant Fibers	Cellulose Powder, Cellulose	9004-34-6	40 - < 70
Bentonite	Smectite, Clay	1302-78-9	15 - < 35
Other components below reportable levels			0 - < 5

Section: 4. FIRST AID MEASURES

In case of eye contact	:	Do not rub eyes. Rinse with water. Get medical attention if irritation develops and persists.
In case of skin contact	:	Wash off with soap and water. Get medical attention if irritation develops and persists.
If swallowed	:	Rinse Mouth. Get medical attention if symptoms occur.
If inhaled	:	Move to fresh air. Call a physician if symptoms develop or persist.
Protection of first-aiders	:	In event of emergency assess the danger before taking action. Do not put yourself at risk of injury. If in doubt, contact emergency responders. Use personal protective equipment as required.
Notes to physician	:	Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.
Most important symptoms and effects, both acute and delayed	:	Dusts may irritate the respiratory tract, skin and eyes. Prolonged exposure may cause chronic effects.

Section: 5. FIREFIGHTING MEASURES

Suitable extinguishing media	:	Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2).
Unsuitable extinguishing media	:	Do not use water jet as an extinguisher, as this will spread the fire.
Specific hazards during firefighting	:	During fire, gases hazardous to health may be formed.
Hazardous combustion products	:	Not applicable.
Special protective equipment for firefighters	:	Material can be slippery when wet. se personal protective equipment.
Specific extinguishing methods	:	Use water spray to cool unopened containers. Use standard firefighting procedures and consider the hazards of other involved materials.

Section: 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures	:	Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Material can be slippery when wet. Wear appropriate protective equipment and clothing during clean-up. Do not breathe dust. Use a NIOSH/MSHA approved respirator if there is a risk of exposure to dust/fume at levels exceeding the exposure limits. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.
Environmental precautions	:	Avoid discharge into drains, water courses or onto the ground.
Methods and materials for containment and cleaning up	:	Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading.

Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water.
Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.
Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS

Section: 7. HANDLING AND STORAGE

Advice on safe handling	:	Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Minimize dust generation and accumulation. Provide appropriate exhaust ventilation at places where dust is formed. Do not breathe dust. Avoid prolonged exposure. Should be handled in closed systems, if possible. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.
Conditions for safe storage	:	Store locked up. Store in original tightly closed container. Store in a well-ventilated place. Store away from incompatible materials (see Section 10 of the SDS).
Suitable material	:	Not determined.
Unsuitable material	:	Not determined.

Section: 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational Exposure Limits

US OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value	Form
Inert or Nuisance Dust	TWA	5 mg/m3	Respirable fraction
		15 mg/m3	Total Dust.
		50 mppcf	Total Dust.
		15 mppcf	Respirable Fraction.

Engineering measures	:	Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. If engineering measures are not sufficient to maintain concentrations of dust particulates below the Occupational Exposure Limit (OEL), suitable respiratory protection must be worn. If material is ground, cut, or used in any operation which may generate dusts, use appropriate local exhaust ventilation to keep exposures below the recommended exposure limits.

Personal protective equipment

Eye protection	:	Chemical respirator with organic vapor cartridge, full facepiece, dust and mist filter.
Hand protection	:	Wear appropriate chemical resistant gloves. Suitable gloves can be recommended by the glove supplier.

Skin protection	:	Use of an impervious apron is recommended.
Respiratory protection	:	Use a NIOSH/MSHA approved respirator if there is a risk of exposure to dust/fume at levels exceeding the exposure limits. Chemical respirator with organic vapor cartridge, full facepiece, dust and mist filter.
Hygiene measures	:	Use a NIOSH/MSHA approved respirator if there is a risk of exposure to dust/fume at levels exceeding the exposure limits. Chemical respirator with organic vapor cartridge, full facepiece, dust and mist filter.

Section: 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	:	Powder, solid
Colour	:	Tan to Gray
Odour	:	None
Flash point	:	No data available.
pH	:	Not data available.
Odour Threshold	:	No data available.
Melting point/freezing point	:	No data available.
Initial boiling point and boiling range	:	No data available.
Evaporation rate	:	No data available.
Flammability (solid, gas)	:	No data available.
Upper explosion limit	:	No data available.
Lower explosion limit	:	No data available.
Vapour pressure	:	No data available.
Relative vapour density	:	No data available.
Relative density	:	No data available.
Density	:	1.74 g/cm3 (estimated)
Water solubility	:	No data available.
Solubility in other solvents	:	No data available.
Partition coefficient: n-octanol/water	:	No data available.
Auto-ignition temperature	:	No data available.
Thermal decomposition temperature	:	No data available.
Viscosity, dynamic	:	No data available.
Viscosity, kinematic	:	No data available.
Molecular weight	:	No data available.
VOC	:	No data available.

Section: 10. STABILITY AND REACTIVITY

Chemical stability	:	Material is stable under normal conditions.
Possibility of hazardous reactions	:	No dangerous reaction known under conditions of normal use.
Conditions to avoid	:	Contact with incompatible materials.
Incompatible materials	:	Powerful oxidizers. Chlorine.
Hazardous decomposition products	:	No hazardous decomposition products are known.

Section: 11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure	:	Inhalation, Eye contact, Skin contact, Ingestion

Potential Health Effects

Eyes	:	Dust may irritate the eyes.
Skin	:	Dust or powder may irritate the skin.
Ingestion	:	Expected to be a low ingestion hazard.
Inhalation	:	Dust may irritate respiratory system. Prolonged inhalation may be harmful.
Chronic Exposure	:	Prolonged inhalation may be harmful.

Experience with human exposure

Eye contact	:	Direct contact with eyes may cause temporary irritation
Skin contact	:	No adverse effects due to skin contact are expected
Ingestion	:	Expected to be a low ingestion hazard
Inhalation	:	Prolonged inhalation may be harmful

Toxicity

Product

Acute oral toxicity	:	No data available.
Acute inhalation toxicity	:	No data available.
Acute dermal toxicity	:	No data available.
Skin corrosion/irritation	:	No data available.
Serious eye damage/eye irritation	:	No data available.
Respiratory or skin sensitization	:	No data available.

Information on toxicological Effects	:	No data available.
Carcinogenicity	:	In June 2003, SCOEL (the EU Scientific Committee on Occupational Exposure Limits) concluded that the main effect in humans of the inhalation of respirable crystalline silica dust is silicosis. "There is sufficient information to conclude that the relative risk of lung cancer is increased in persons with silicosis (and, apparently, not in employees without silicosis exposed to silica dust in quarries and in the ceramic industry). Therefore, preventing the onset of silicosis will also reduce the cancer risk..." (SCOEL SUM Doc 94-final, June 2003) According to the current state of the art, worker protection against silicosis can be consistently assured by respecting the existing regulatory occupational exposure limits. Occupational exposure to respirable dust and respirable crystalline silica should be monitored and controlled. The product does not meet the criteria for classification as hazardous according to EC Regulation 1272/2008 and Directive 67/548/EC as amended. The product contains less than 1% w/w RCS (respirable crystalline silica).
OSHA		Not listed
Reproductive effects	:	This product is not expected to cause reproductive or developmental effects.
Germ cell mutagenicity	:	No data available
Teratogenicity	:	No data available
STOT - single exposure	:	No data available
STOT - repeated exposure	:	No data available.
Aspiration toxicity	:	Not an aspiration hazard.

Section: 12. ECOLOGICAL INFORMATION

Ecotoxicity	:	The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment

Persistence and degradability No data is available on the degradability of this product.

Mobility No data available

Bioaccumulative potential No data available.

Other information No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

Section: 13. DISPOSAL CONSIDERATIONS

Disposal methods	:	Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose of contents/container in accordance with local/regional/national/international regulations. Dispose in accordance with all applicable regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner.

Disposal considerations	:	Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

Section: 14. TRANSPORT INFORMATION

Land transport (DOT)

Not regulated as dangerous goods.

Air transport (IATA)

Not regulated as dangerous goods.

Sea transport (IMDG/IMO)

Not regulated as dangerous goods.

Section: 15. REGULATORY INFORMATION

TSCA List : Not Regulated

EPCRA - Emergency Planning and Community Right-to-Know Act

CERCLA Reportable Quantity

Not listed.

SARA 304 Extremely Hazardous Substances Reportable Quantity

Not Regulated

SARA 311/312 Hazards	:	No Chemicals listed.
SARA 302	:	No Chemicals listed.
SARA 313	:	No Chemicals listed.
Superfund Amendments and Reauthorization Act of 1986 (SARA)	:	**Immediate Hazard:** No **Delayed Hazard:** No **Fire Hazard:** No **Pressure Hazard:** No **Reactivity Hazard:** No

US. Toxic Substances Control Act (TSCA) Section 12(b) Export Notification (40 CFR 707, Subpart D):

The following components are listed: None

US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd. (a)):

Not Listed

US New Jersey Worker and Community Right-to-Know Act:

Not regulated

US Massachusetts RTK – Substance List:

Not regulated

US Pennsylvania Worker and Community Right-to-Know Law: Gypsum (calcium Sulphate) (CAS 13397-24-5)
Not listed

US Rhode Island RTK:
Not regulated.

US. California Proposition 65
California safe drinking water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

INTERNATIONAL CHEMICAL CONTROL LAWS :

United States TSCA Inventory
Not on inventory.

Canadian Domestic Substances List (DSL)
Not on inventory.

Australia. Industrial Chemical (Notification and Assessment) Act
Not on inventory.

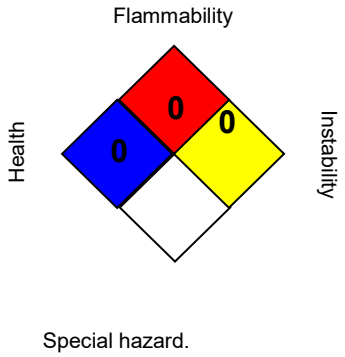
New Zealand. Inventory of Chemicals (NZIoC), as published by ERMA New Zealand
Not on inventory.

China Inventory of Existing Chemical Substances
Not on inventory.

Korea Existing Chemicals List (ECL)
Not on inventory.

Section: 16. OTHER INFORMATION

NFPA:



HMIS III:

HEALTH	0
FLAMMABILITY	0
PHYSICAL HAZARD	0

0 = not significant, 1 =Slight,
2 = Moderate, 3 = High
4 = Extreme, * = Chronic

Issuing Date	:	02/15/2018
Version Number	:	1.0

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

Safety Data Sheet
Lube Force

SDS Revision Date: 02/21/2020

1. Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product Identity	Lube Force
Alternate Names	BioDegradable Drilling Lubricant

1.2. Relevant identified uses of the substance or mixture and uses advised against

Intended use	Downhole Drilling Lubricant.
Application Method	See Technical Data Sheet.

1.3. Details of the supplier of the safety data sheet

Company Name	Right Turn Supply P.O. Box 840 Pella, IA 50219, USA
Emergency	
CHEMTREC (USA)	(800) 424-9300
24 hour Emergency Telephone No.	International +1-703-527-3887
Customer Service: Right Turn Supply	(641-780-1953)

2. Hazard identification of the product

2.1. Classification of the substance or mixture

No applicable GHS categories.

2.2. Label elements

Using the Toxicity Data listed in section 11 and 12 the product is labeled as follows.

No applicable GHS categories.

[Prevention]:
No GHS prevention statements
[Response]:
No GHS response statements
[Storage]:
No GHS storage statements
[Disposal]:
No GHS disposal statements

3. Composition/information on ingredients

This product contains the following substances that present a hazard within the meaning of the relevant State and Federal Hazardous Substances regulations.

Ingredient/Chemical Designations	Weight %	GHS Classification	Notes
Fatty acid **CAS Number: 0061790-12-3**	40-60%	**Not Classified**	**[1]**
Proprietary-Trade Secret **CAS Number: 0090622-46-1**	30-60%	**Asp. Tox. 1;H304**	**[1]**

[1] Substance classified with a health or environmental hazard.
[2] Substance with a workplace exposure limit.
[3] PBT-substance or vPvB-substance.
*The full texts of the phrases are shown in Section 16.

4. First aid measures

4.1. Description of first aid measures

General In all cases of doubt, or when symptoms persist, seek medical attention.
Never give anything by mouth to an unconscious person.

Inhalation Remove to fresh air, keep patient warm and at rest. If breathing is irregular or stopped, give artificial respiration. If unconscious place in the recovery position and obtain immediate medical attention. Give nothing by mouth.

Eyes Irrigate copiously with clean water for at least 15 minutes, holding the eyelids apart and seek medical attention.

Skin Remove contaminated clothing. Wash skin thoroughly with soap and water or use a recognized skin cleanser.

Ingestion Get Medical attention immediately. If swallowed, do not induce vomiting. If person is fully conscious, give water to drink. Never give anything by mouth to an unconscious person. If vomiting occurs, keep head lower than hips to help prevent aspiration.

4.2. Most important symptoms and effects, both acute and delayed

Overview Inhalation: Liquid, no dust is generated in normal use.
Skin: May be irritating to the skin with prolonged contact.
Eye: May cause irritation to the eyes and could cause prolonged impairment of vision.
Ingestion: Not anticipated route of exposure. If ingested may be irritating to mouth, throat and stomach. Exposure to solvent vapor concentrations from the component solvents in excess of the stated occupational exposure limits may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on the kidneys, liver and central nervous system. Symptoms include headache, nausea, dizziness, fatigue, muscular weakness, drowsiness and in extreme cases, loss of consciousness.

Repeated or prolonged contact with the preparation may cause removal of natural fat from the skin resulting in dryness, irritation and possible non-allergic contact dermatitis. Solvents may also be absorbed through the skin. Splashes of liquid in the eyes may cause irritation and soreness with possible reversible damage. See section 2 for further details.

5. Fire-fighting measures

5.1. Extinguishing media

Dry chemical, foam, carbon dioxide and water fog.

5.2. Special hazards arising from the substance or mixture

Hazardous decomposition: High temperatures and fires may produce such toxic substances as carbon monoxide and carbon dioxide.

5.3. Advice for fire-fighters

Cool closed containers exposed to fire by spraying them with water. Do not allow run off water and contaminants from fire fighting to enter drains or water ways.

ERG Guide No. ----

6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Remove sources of ignition, do not turn lights or unprotected electrical equipment on or off. In case of a major spill or spillage in a confined space evacuate the area and check that solvent vapor levels are below the Lower Explosive Limit before re-entering.

6.2. Environmental precautions

Use good personal hygiene practices. Wash hands before eating, drinking, smoking or using toilet. Promptly remove soiled clothing and wash thoroughly before reuse.

6.3. Methods and material for containment and cleaning up

Collect and place in suitable container for reuse or disposal.

7. Handling and storage

7.1. Precautions for safe handling

See section 2 for further details. - [Prevention]:

7.2. Conditions for safe storage, including any incompatibilities

Keep from freezing, store in a cool dry place.
Handle containers carefully to prevent damage and spillage or accumulation of dust.

Incompatible materials: Strong oxidizing agents and acids.

See section 2 for further details. - [Storage]:

7.3. Specific end use(s)

No data available.

8. Exposure controls and personal protection

8.1. Control parameters

Exposure

CAS No.	Ingredient	Source	Value
0061790-12-3	Fatty acid	OSHA	No Established Limit
		ACGIH	No Established Limit
		NIOSH	No Established Limit
		Supplier	No Established Limit
0090622-46-1	Proprietary-Trade Secret	OSHA	No Established Limit
ACGIH			No Established Limit
NIOSH			No Established Limit
Supplier			No Established Limit

Carcinogen Data

CAS No.	Ingredient	Source	Value
0061790-12-3	Fatty acid	OSHA	Select Carcinogen: No
		NTP	Known: No; Suspected: No
		IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No;
0090622-46-1	Proprietary-Trade Secret	OSHA	Select Carcinogen: No
		NTP	Known: No; Suspected: No
		IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No;

8.2. Exposure controls

Respiratory If workers are exposed to concentrations above the exposure limit they must use the appropriate, certified respirators.

Eyes Wear safety glasses or googles with side shields. Maintain eye wash station in work area.

Skin Overalls which cover the body, arms and legs should be worn. Skin should not be exposed. All parts of the body should be washed after contact.

Engineering Controls Provide adequate ventilation. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of particulates and any vapor below occupational exposure limits suitable respiratory protection must be worn.

Other Work Practices Use good personal hygiene practices. Wash hands before eating, drinking, smoking or using toilet. Promptly remove soiled clothing and wash thoroughly before reuse.

See section 2 for further details. - [Prevention]:

9. Physical and chemical properties

Appearance	Brown/Black Liquid
Odor	None
Odor threshold	Not Measured

pH	6.7
Melting point / freezing point	Not Measured
Initial boiling point and boiling range	> 212F
Flash Point	> 600F
Evaporation rate (Ether = 1)	Not Applicable
Flammability (solid, gas)	Not Applicable
Upper/lower flammability or explosive limits	**Lower Explosive Limit:** Not Measured **Upper Explosive Limit:** Not Measured
Vapor pressure (Pa)	Not Measured
Vapor Density	Not Applicable
Specific Gravity	0.9005-0.9305 g/cm3
Solubility in Water	Appreciable
Partition coefficient n-octanol/water (Log Kow)	Not Measured
Auto-ignition temperature	Not Measured
Decomposition temperature	Not Measured
Viscosity (cSt)	Not Measured

9.2. Other information

No other relevant information.

10. Stability and reactivity

10.1. Reactivity

Hazardous Polymerization will not occur.

10.2. Chemical stability

Stable under normal circumstances.

10.3. Possibility of hazardous reactions

No data available.

10.4. Conditions to avoid

Excessive heat and open flame.

10.5. Incompatible materials

Strong oxidizing agents and acids.

10.6. Hazardous decomposition products

High temperatures and fires may produce such toxic substances as carbon monoxide and carbon dioxide.

11. Toxicological information

Acute toxicity

Exposure to solvent vapor concentrations from the component solvents in excess of the stated occupational exposure limits may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse

effects on the kidneys, liver and central nervous system. Symptoms include headache, nausea, dizziness, fatigue, muscular weakness, drowsiness and in extreme cases, loss of consciousness.

Repeated or prolonged contact with the preparation may cause removal of natural fat from the skin resulting in dryness, irritation and possible non-allergic contact dermatitis. Solvents may also be absorbed through the skin. Splashes of liquid in the eyes may cause irritation and soreness with possible reversible damage.

Ingredient	Oral LD50, mg/kg	Skin LD50, mg/kg	Inhalation Vapor LD50, mg/L/4hr	Inhalation Dust/Mist LD50, mg/L/4hr	Inhalation Gas LD50, ppm
Fatty acid - (61790-12-3)	3,200.00, Rat - Category: 5	No data available	No data available	No data available	No data available
Proprietary (90622-46-1) Trade Secret	No data available	No data available	No data available	No data available	No data available

Note: When no route specific LD50 data is available for an acute toxin, the converted acute toxicity point estimate was used in the calculation of the product's ATE (Acute Toxicity Estimate).

Classification	Category	Hazard Description
Acute toxicity (oral)	---	Not Applicable
Acute toxicity (dermal)	---	Not Applicable
Acute toxicity (inhalation)	---	Not Applicable
Skin corrosion/irritation	---	Not Applicable
Serious eye damage/irritation	---	Not Applicable
Respiratory sensitization	---	Not Applicable
Skin sensitization	---	Not Applicable
Germ cell mutagenicity	---	Not Applicable
Carcinogenicity	---	Not Applicable
Reproductive toxicity	---	Not Applicable
STOT-single exposure	---	Not Applicable
STOT-repeated exposure	---	Not Applicable
Aspiration hazard	---	Not Applicable

12. Ecological information

12.1. Toxicity

No additional information provided for this product. See Section 3 for chemical specific data.

Aquatic Ecotoxicity

Ingredient	Americamysis bahia (Mycid Shrimp)	Microtox Threshold Level	ErC50 algae, mg/l
Fatty acid - (61790-12-3)	894,200 ppm	.Not Available	Not Available

Proprietary (90622-46-1) Trade Secret	Not Available	Not Available	Not Available

12.2.Persistence and degradability

This product is readily BioDegradable. 81% in 28 days

12.3. Bioaccumulative potential

Not Measured

12.4. Mobility in soil

No data available.

12.5. Results of PBT and vPvB assessment

This product contains no PBT/vPvB chemicals.

12.6. Other adverse effects

No data available.

13. Disposal considerations

13.1. Waste treatment methods

Observe all federal, state and local regulations when disposing of this substance.

14. Transport information

	DOT (Domestic Surface Transportation)	IMO / IMDG (Ocean Transportation)	ICAO/IATA
14.1. UN number	Not Applicable	Not Regulated	Not Regulated
14.2. UN proper shipping name	Not Regulated	Not Regulated	Not Regulated
14.3. Transport hazard class(es)	**DOT Hazard Class:** Not Applicable **DOT Label:** ---	**IMDG:** Not Applicable **Sub Class:** Not Applicable	**Air Class:** Not Applicable
14.4. Packing group	Not Applicable	Not Applicable	Not Applicable

14.5. Environmental hazards

IMDG Marine Pollutant: No

14.6. Special precautions for user

No further information

15. Regulatory information

Regulatory Overview	The regulatory data in Section 15 is not intended to be all-inclusive, only selected regulations are represented.
Toxic Substance Control Act (TSCA)	All components of this material are either listed or exempt from listing on the TSCA Inventory.
WHMIS Classification	Not Regulated

US EPA Tier II Hazards

Fire: No
Sudden Release of Pressure: No
Reactive: No
Immediate (Acute): No
Delayed (Chronic): No

EPCRA 311/312 Chemicals and RQs:
To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

EPCRA 302 Extremely Hazardous :
To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

EPCRA 313 Toxic Chemicals:
To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

Proposition 65 - Carcinogens (>0.0%):
To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

Proposition 65 - Developmental Toxins (>0.0%):
To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

Proposition 65 - Female Repro Toxins (>0.0%):
To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

Proposition 65 - Male Repro Toxins (>0.0%):
To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

N.J. RTK Substances (>1%) :
To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

Penn RTK Substances (>1%):

Edible oil

16. Other information

The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind, expressed or implied, is made with respect to the information contained herein. We accept no responsibility and disclaim all liability for any harmful effects which may be caused by exposure to our products. Customers/users of this product must comply with all applicable health and safety laws, regulations, and orders.

The full text of the phrases appearing in section 3 is:

H304 May be harmful if swallowed and enters airways.

This is the first version in the GHS SDS format. Listings of changes from previous versions in other formats are not applicable.

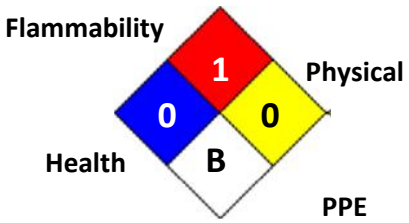
The information and data herein are believed to be accurate and have been compiled from sources believed to be reliable. It is offered for your consideration, investigation and verification. Buyer assumes all risk of use, storage and

handling of the product in compliance with applicable Federal, State and local law and regulations. Right Turn Supply makes no warranty of any kind, express or implied, concerning the accuracy of completeness of the information and data herein. The implied warranties of merchantability and fitness for a particular purpose are specifically excluded. Right Turn Supply will not be liable for claims relating to any use of this product.

Emergency Overview:

Risk Classification System:

HEALTH	**0**
FLAMMABILITY	**1**
PHYSICAL	**0**
PPE	**B**



End of Document

Lost Circulation Specialists, Inc.

Lost Circulation Specialists, Inc.

Effective Date: January 1, 2010

Section 1

Product Identification

Product Name:	Generic Name:
Magma Fiber	Mineral Fiber

Primary Components: Vitreous fiber made from blast furnase slug and/or basalt (mixture)

Section 2

Ingredients (Not specification values)

Materials	PEL	TLV	CAS#
Mineral Fiber	15 mg/M3 (total) 5 mg/M3 (respirable)	10 mg/M3 (total) 5 mg/M3 (respirable)	None Assigned

Section 3

Physical Data

Melting Point (F): 2400	Colour and Odor: White-Gray/Tan Fiber, Low Odor
Vapour Pressure: N/A	Vap Density (Air=1): N/A
Specific Gravity: 2.6	Solubility in Water: Not
Physical State: Solid	% Volatile by Vol: None

Section 4

Fire and Explosion Hazard Data

Flash Point (C): Non-Combustible (ASTME84)	Extinguishing Media: Non-Combustible
Flammable Limits: N/A	Fire and Explosion Hazard: None

Section 5

Reactivity Data

Stability: Stable

Conditions to Avoid: None

Incompatability: Acids (Gives off H2S under certain conditions)

Decomposition: None

Polymerization: Will not occur

Section 6

Health Hazard Data

Oral Ingestion	N/A
Eye Contact	Mineral fiber may cause transitory (temporary) mechanical irritation to eyes
Skin Contact	Skin contact may cause transitory skin irritation and possible irritation to eyes and upper respiratory tract
Skin Absorption	N/A
Inhalation	May cause transitory irritation to upper respiratory tract when handling this product, wear a NIOSH approved dust mask or respirator, avoid creating excessive dust IARC Group 3- Not Classifiable as carcinogenicity in humans NTP- Not Classified ACGIH- Not Classified
Over Exposure Effect	Mineral fiber may cause transitory mechanical irritation to eyes, skin or upper respiratory tract

First Aid Procedure

Eyes	Flush with water and see a physician if irritation continues
Skin	Wash fiber from skin with soap and water
Ingestion	Call a physician

Section 7

Special Protection

Ventilation	Local exhaust or mechanical ventilation to keep below TLV
Respiratory	Niosh approved 3M 8710 or equivalent dust respirator is recommended
Clothing	Gloves if dust is irratating, tight fitting goggles in dusty environment, wear long sleeved, loose fitting clothing closed at neck and wrists to minimize skin exposure, wash clothes separately from underwear
Eye Protection	To avoid eye irritation wear safety glasses or goggles

Section 8

Spill or Leak Procedure

Steps to be taken: Normal clean-up procedures, avoid creating excessive dust

Disposal method: To landfill in accordance with local, provincial and federal regulations

Section 9

Special precautions or other comments

TDG Shipping Name: Non-hazardous

HOME	MAGMA FIBER	CONTACT US

Safety Data Sheet
MAX GEL*

1. Identification of the substance/preparation and of the Company/undertaking

1.1 Product identifier

Product name MAX GEL*
Product code PID1046

1.2 Relevant identified uses of the substance or mixture and uses advised against

Recommended Use Viscosifier.

Uses advised against Consumer use

1.3 Details of the supplier of the safety data sheet

Supplier
M-I Drilling Fluids UK Limited
C/O Schlumberger
Enterprise Drive
Westhill Industrial Estate
Westhill, AB32 6TQ
Scotland UK
+47 51577424

MISDS@slb.com

1.4 Emergency Telephone Number

Emergency telephone - (24 Hour) Australia +61 2801 44558, Asia Pacific +65 3158 1074, China +86 10 5100 3039, Europe +44 (0) 1235 239 670, Middle East and Africa +44 (0) 1235 239 671, New Zealand +64 9929 1483, USA 001 281 561 1600

Norway	Poison information centre: +47 22 59 13 00

2. Hazards identification

2.1 Classification of the substance or mixture

Regulation (EC) No. 1272/2008

Health hazards Not classified

Environmental hazards Not classified

Physical Hazards Not classified

2.2 Label elements

Signal word
None

Hazard statements

This product is not classified as hazardous therefore no (H) hazard statements assigned.

Precautionary Statements - EU (§28, 1272/2008)
This product is not classified as hazardous therefore has no (P) precautionary statements assigned.

-

-

Contains
Crystalline silica (impurity)

Silica - crystalline, tridymite

2.3 Other data

Not classified as PBT/vPvB by current EU criteria

Australian statement of hazardous/dangerous nature
Classified as Non-Hazardous according to the criteria of NOHSC.
NON-HAZARDOUS SUBSTANCE. NON-DANGEROUS GOODS.

3. Composition/information on ingredients

3.1 Substances

Component	EC-No.	CAS-No	Weight % - range	Classification (67/548)	Classification (Reg. 1272/2008)	REACH registration number
Crystalline silica (impurity)	238-878-4	14808-60-7	1-5	Xn; R48/20	STOT Rep. 2 - H373	Exempt
Silica - crystalline, tridymite	239-487-1	15468-32-3	0-1	Xn; R48/20	STOT RE 2 (H373)	No data available

3.2 Mixtures

Not Applicable

Comments
Naturally occuring mineral.

The product contains other ingredients which do not contribute to the overall classification.

This product contains a small quantity of quartz, crystalline silica. Prolonged and repeated exposure to concentrations of crystalline silica exceeding the workplace exposure limit (WEL) may lead to chronic lung disease such as silicosis. IARC Monographs, Vol. 68, 1997, concludes that there is sufficient evidence that inhaled crystalline silica in the form of quartz or cristobalite from occupational sources causes cancer in humans. IARC Classification Group I.

4. First aid measures

4.1 First Aid

Inhalation If inhaled, remove from area to fresh air. Get medical attention if respiratory irritation develops or if breathing becomes difficult.

Ingestion Rinse mouth. Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. Get medical attention if symptoms occur.

Skin contact Wash skin thoroughly with soap and water. Get medical attention if irritation persists.

Eye contact Promptly wash eyes with lots of water while lifting eye lids. Remove contact lenses. Get medical attention if any discomfort continues.

4.2 Most important symptoms and effects, both acute and delayed

General advice The severity of the symptoms described will vary dependant of the concentration and the length of exposure. If adverse symptoms develop, the casualty should be transferred to hospital as soon as possible.

Main symptoms

Inhalation Please see Section 11. Toxicological Information for further information.

Ingestion Please see Section 11. Toxicological Information for further information.

Skin contact Please see Section 11. Toxicological Information for further information.

Eye contact Please see Section 11. Toxicological Information for further information.

4.3 Indication of any immediate medical attention and special treatment needed

Notes to physician Treat symptomatically.

5. Fire-fighting measures

5.1 Extinguishing media

Suitable extinguishing media
Use extinguishing media appropriate for surrounding material.

Extinguishing media which shall not be used for safety reasons
None known.

5.2 Special hazards arising from the substance or mixture

Unusual fire and explosion hazards
None known.

Hazardous combustion products
Thermal decomposition can lead to release of irritating gases and vapours

5.3 Advice for firefighters

Special protective equipment for fire-fighters

As in any fire, wear self-contained breathing apparatus and full protective gear.

Special Fire-Fighting Procedures
Containers close to fire should be removed immediately or cooled with water.

6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. See also section 8.

6.2 Environmental precautions

Disposal should be in accordance with applicable regional, national and local laws and regulations. Large spills released to the environment may disturb the natural chemical balance of soil/fresh water.

Environmental exposure controls
Avoid release to the environment. Local authorities should be advised if significant spillages cannot be contained.

6.3 Methods and materials for containment and cleaning up

Methods for containment
Prevent further leakage or spillage if safe to do so. Cover powder spill with plastic sheet or tarp to minimise spreading.

Methods for cleaning up
Sweep up and shovel into suitable containers for disposal. After cleaning, flush away traces with water.

6.4 Reference to other sections

See section 13 for more information.

7. Handling and storage

7.1 Precautions for safe handling

Handling
Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin and eyes. Avoid dust formation.

Hygiene measures
Use good work and personal hygiene practices to avoid exposure When using do not smoke, eat or drink. Wash hands and face before breaks and immediately after handling the product Remove contaminated clothing

7.2 Conditions for safe storage, including any incompatibilities

Technical measures/precautions	Ensure adequate ventilation. Keep airborne concentrations below exposure limits.
Storage precautions	Keep containers tightly closed in a dry, cool and well-ventilated place Protect from moisture
Storage class	Chemical storage.
Packaging material	Use specially constructed containers only

7.3 Specific end uses

See Section 1.2.

8. Exposure controls/personal protection

8.1 Control parameters

Exposure Limits No biological limit allocated

Component	EU OEL - Third List	Austria	Australia	Denmark
Crystalline silica (impurity)	Not determined	0.15 mg/m³ TWA alveolar dust, respirable fraction	0.1mg/m³TWArespirable dust	0.1mg/m³
Silica - crystalline, tridymite	Not determined	0.15 mg/m³ TWA alveolar dust, respirable fraction	0.1mg/m³TWArespirable dust	0.15 mg/m³ TWA 0.05 mg/m³ TWA K
Component	**Malaysia**	**France**	**Germany**	**Hungary**
Crystalline silica (impurity)	0.1 mg/m³ TWA	0.1 mg/m³TWA	Not determined	0.15mg/m³TWA
Silica - crystalline, tridymite	0.05 mg/m³ TWA	0.05 mg/m³TWA	Not determined	0.15mg/m³TWA
Component	**New Zealand**	**Italy**	**Netherlands**	**Norway**
Crystalline silica (impurity)	0.2 mg/m³ TWA Known or presumed human carcinogen	Not determined	0.075 mg/m³	0.3 mg/m³ TWA total dust 0.1 mg/m³ TWA respirable dust 0.3 mg/m³ STEL total dust 0.1 mg/m³ STEL respirable dust Carcinogen
Silica - crystalline, tridymite	0.1 mg/m³ TWA Known or presumed human carcinogen	Not determined	0.075 mg/m³	0.15 mg/m³ TWA total dust 0.05 mg/m³ TWA respirable dust 0.45 mg/m³ STEL total dust 0.15 mg/m³ STEL respirable dust Carcinogen
Component	**Poland**	**Portugal**	**Romania**	**Russia**
Crystalline silica (impurity)	2 mg/m³ TWA NDS >50% free crystalline silica 0.3 mg/m³ TWA NDS >50% free crystalline silica 4.0 mg/m³ TWA NDS 2% to 50% free crystalline silica 1.0 mg/m³ TWA NDS 2% to 50% free crystalline silica	0.025 mg/m³ TWA respirable fraction	0.1mg/m³TWArespirable fraction, dust	3 mg/m³ STEL 1123 disintegration aerosol, total mass of aerosols 3 mg/m³ STEL 1124 total mass of aerosols 1 mg/m³ TWA 1123 1 mg/m³ TWA 1124 Fibrogenic substance glass;regulated under Quartz 1123, 1124
Silica - crystalline, tridymite	2 mg/m³ TWA NDS >50% free crystalline silica 0.3 mg/m³ TWA NDS >50% free crystalline silica 4.0 mg/m³ TWA NDS 2% to 50% free crystalline silica 1.0 mg/m³ TWA NDS 2% to 50% free crystalline silica	Not determined	0.05mg/m³TWArespirable fraction, dust	3 mg/m³ STEL 1124 total mass of aerosols 1 mg/m³ TWA 1124 Fibrogenic substance 1124
Component	**Spain**	**Switzerland**	**Turkey**	**UK**

Crystalline silica (impurity)	0.05 mg/m³ TWA VLA-ED	0.15 mg/m³ TWA MAK	Not determined	Not determined
Silica - crystalline, tridymite	Not determined	0.15 mg/m³ TWA MAK	Not determined	Not determined

8.2 Exposure controls

All chemical Personal Protective Equipment (PPE) should be selected based on an assessment of both the chemical hazard present and the risk of exposure to those hazards. The PPE recommendations below are based on an assessment of the chemical hazards associated with this product. Where this product is used in a mixture with other products or fluids, additional hazards may be created and as such further assessment of risk may be required. The risk of exposure and need of respiratory protection will vary from workplace to workplace and should be assessed by the user in each situation.

Engineering measures to reduce exposure
Ensure adequate ventilation. Mechanical ventilation or local exhaust ventilation is required.

Personal protective equipment

Eye protection	Safety glasses with side-shields. Tightly fitting safety goggles.
Hand protection	Repeated or prolonged contact:, Use protective gloves made of:, Neoprene, Nitrile, Frequent change is advisable.
Respiratory protection	No personal respiratory protective equipment normally required, In case of insufficient ventilation wear suitable respiratory equipment, Suitable mask with particle filter P3 (European Norm 143), At work in confined or poorly ventilated spaces, respiratory protection with air supply must be used.
Skin and body protection	Wear suitable protective clothing, Eye wash and emergency shower must be available at the work place.

Hygiene measures Wash hands before eating, drinking or smoking, Remove and wash contaminated clothing before re-use.

9. Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state	Solid
Appearance	Powder
Odour	Odourless
Colour	Tan - Grey
Odour threshold	Not applicable

Property	Values	Remarks
pH	No information available	
pH @ dilution		
Melting/freezing point	No information available	
Boiling point/range	No information available	
Flash point	No information available	
Evaporation rate	No information available	

Flammability (solid, gas)	Not Applicable	
Flammability Limits in Air		Not applicable
Upper flammability limit	Not applicable	
Lower flammability limit	Not applicable	
Vapour pressure	No information available	
Vapour density	No information available	
Specific gravity	No information available	
Bulk density	No information available	
Relative density	2.3 - 2.5 sg	@ 20 °C.
Water solubility	Insoluble in water	
Solubility in other solvents	No information available	
Autoignition temperature	No information available	
Decomposition temperature	No information available	
Kinematic viscosity	No information available	
Dynamic viscosity	No information available	
Log Pow	No information available	

Explosive properties	Not Applicable
Oxidising properties	None known

9.2 Other information

Pour point	No information available
Molecular weight	No information available
VOC content(%)	None
Density	No information available

10. Stability and reactivity

10.1 Reactivity

No specific reactivity hazards associated with this product.

10.2 Chemical stability

Stable under normal temperature conditions and recommended use.

10.3 Possibility of Hazardous Reactions

Hazardous polymerisation
Hazardous polymerisation does not occur.

10.4 Conditions to avoid

Avoid dust formation. Protect from moisture.

10.5 Incompatible materials

No materials to be especially mentioned.

10.6 Hazardous decomposition products

See Section 5.

11. Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Product information This product contains a small quantity of quartz, crystalline silica. Prolonged and repeated exposure to concentrations of crystalline silica exceeding the workplace exposure limit (WEL) may lead to chronic lung disease such as silicosis.

Inhalation Inhalation of dust in high concentration may cause irritation of respiratory system.

Eye contact Dust may cause mechanical irritation.

Skin contact Prolonged contact may cause redness and irritation.

Ingestion Ingestion may cause stomach discomfort.

Unknown acute toxicity Not Applicable.

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Crystalline silica (impurity)	= 500 mg/kg (Rat)	No data available	No data available
Silica - crystalline, tridymite	No data available	No data available	No data available

Sensitisation This product does not contain any components suspected to be sensitizing.

Mutagenic effects This product does not contain any known or suspected mutagens.

Carcinogenicity Crystalline silica dust is listed by IARC in Group 1 as known to cause lung cancer in humans, if inhaled.

Reproductive toxicity This product does not contain any known or suspected reproductive hazards.

Routes of exposure Inhalation.

Routes of entry Inhalation.

Specific target organ toxicity (single exposure) Not classified

Specific target organ toxicity (repeated exposure) Not classified.

Aspiration hazard Not Applicable.

12. Ecological information

12.1 Toxicity

The product component(s) are not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment. Listed on PLONOR list of OSPAR

Toxicity to algae
This product is not considered toxic to algae.

Toxicity to fish
This product is not considered toxic to fish.

Toxicity to daphnia and other aquatic invertebrates
This product is not considered toxic to invertebrates.

Component	Toxicity to fish	Toxicity to algae	Toxicity to daphnia and other aquatic invertebrates
Crystalline silica (impurity)	No information available	No information available	No information available
Silica - crystalline, tridymite	No information available	No information available	No information available

12.2 Persistence and degradability

Not Applicable - Inorganic chemical.

12.3 Bioaccumulative potential

Not Applicable - Inorganic chemical.

12.4 Mobility in soil

Mobility
Insoluble in water.

12.5 Results of PBT and vPvB assessment

Not classified as PBT/vPvB by current EU criteria.

12.6 Other adverse effects.

None known.

13. Disposal considerations

13.1 Waste treatment methods

Waste from residues / unused products	Dispose of in accordance with local regulations.
Contaminated packaging	Empty containers should be transported/delivered using a registered waste carrier for local recycling or waste disposal.
EWC waste disposal No.	According to the European Waste Catalogue, Waste Codes are not product specific, but application specific. Waste codes should be assigned by the user based on the application for which the product was used The following Waste Codes are only suggestions: EWC waste disposal No: 01 05 99 - wastes not otherwise specified

14. Transport information

14.1 UN number
Not regulated

14.2 Proper shipping name
The product is not covered by international regulation on the transport of dangerous goods

14.3. Hazard class(es)

ADR/RID/ADN/ADG Hazard class	Not regulated
IMDG Hazard class	Not regulated
ICAO Hazard class/division	Not regulated

14.4 Packing group

ADR/RID/ADN/ADG Packing Group	Not regulated
IMDG Packing group	Not regulated
ICAO Packing group	Not regulated

14.5 Environmental hazard
No

14.6 Special precautions
Not Applicable

14.7 Transport in bulk according to Annex I/II of MARPOL 73/78 and the IBC Code
Please contact MISDS@slb.com for info regarding transport in Bulk.

15. Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

Germany, Water Endangering Classes (VwVwS)	Water endangering class = 1

Australian Standard for the Uniform Scheduling of Drugs and Poisons
No Poisons Schedule number allocated

New Zealand hazard classification Not classified.

HSNO approval no. Not required.

Group number Not required.

Commission Regulation (EU) No 453/2010 of 20 May 2010 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH). Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, including amendments.

This safety data sheet complies with the requirements of Regulation (EC) No. 1272/2008.

National Code of Practice for the Preparation of Material Safety Data Sheets 2nd Edition [NOHSC: 2011 (2003)].

National Occupational Health and Safety Commission's Approved Criteria for Classifying Hazardous Substances [NOHSC:1008 (2004) 3rd Edition].

National Occupational Health and Safety Commission's Exposure Standards for Atmospheric Contaminants in the occupational Environment [NOHSC:1003 (1995)].

Safe Work Australia.

Standard for the Uniform Scheduling of Drugs and Poisons (SUSDP).

Not classified as Dangerous Goods by the criteria of the Australian Dangerous Goods Code (ADG Code) for transport by road or rail.

International inventories

USA, Toxic Substances Control Act inventory (TSCA)	Complies
European Union - EINECS and ELINCS	Complies
Canada (DSL)	Complies.
Philippines (PICCS)	Complies
Inventory - Japan - Existing and New Chemicals list	Complies
China (IECSC)	Complies
Australia (AICS)	Complies
Korea (KECL)	Complies
Inventory - New Zealand - Inventory of Chemicals (NZIoC)	Complies

Contact REACH@miswaco.slb.com for REACH information.

15.2 Chemical Safety Report

No information available

16. Other information

Prepared by	Global Regulatory Compliance - Chemicals (GRC - Chemicals) , Anne Karin (Anka) Fosse
Supercedes date	14/Feb/2016
Revision date	28/Oct/2016
Version	4
The following sections have been revised:	3,, 5,, 6,, 7,, 9,, 10,, 11,, 16, No changes with regard to classification have been made.

Text of R phrases mentioned in Section 3
R48/20 - Harmful: danger of serious damage to health by prolonged exposure through inhalation

Full text of H-Statements referred to under sections 2 and 3

This product is not classified as hazardous therefore no (H) hazard statements assigned.

H373 - May cause damage to organs through prolonged or repeated exposure if inhaled

Disclaimer
The information contained herein is considered in good faith as reliable of the date issued and is based upon on measurements, tests or data derived from supplier's own study or furnished by others. In providing this SDS information, Supplier makes no express or implied warranties as to the information or product; merchantability or fitness of purpose; any express or implied warranty; or non-infringement of intellectual property rights; and supplier assumes no responsibility for any direct, special or consequential damages, results obtained, or the activities of others. To the maximum extent permitted by law, supplier's warranty obligations and buyer's sole remedies are as stated in separate agreement between the parties.

HALLIBURTON

SAFETY DATA SHEET

Product Trade Name: **PENETROL® DRY**

Revision Date: 11-Sep-2018 **Revision Number:** 4

1. Identification

1.1. Product Identifier

Product Trade Name: PENETROL® DRY
Synonyms None
Chemical Family: Polymer
Internal ID Code HM008514

1.2 Recommended use and restrictions on use

Application: Surfactant
Uses advised against Consumer use

1.3 Manufacturer's Name and Contact Details

Manufacturer/Supplier
Baroid Industrial Drilling Products
Product Service Line of Halliburton Energy Services, Inc.
P.O. Box 1675
Houston, TX 77251
Telephone: (281) 871-4613 or 1-877-379-7412

Baroid Industrial Drilling Products
645 - 7th Ave SW Suite 1800
Calgary, AB
T2P 4G8
Canada
Telephone: 1-403-231-9300

Prepared By Chemical Stewardship
Telephone: 1-281-871-6107
e-mail: fdunexchem@halliburton.com

1.4. Emergency telephone number:

Emergency Telephone Number 1-866-519-4752 or 1-760-476-3962
Global Incident Response Access Code: 334305
Contract Number: 14012

2. Hazards Identification

2.1 Classification in accordance with paragraph (d) of §1910.1200

As adopted by the competent authority, this product does not require an SDS or hazard warning label.

Not classified

2.2. Label Elements

Hazard Pictograms

Signal Word: Not Classified

Hazard Statements Not Hazardous

Precautionary Statements

Prevention	None
Response	None
Storage	None
Disposal	None

2.3 Hazards not otherwise classified

None known

3. Composition/information on Ingredients

Substances	CAS Number	PERCENT (w/w)	GHS Classification - US
Contains no hazardous substances in concentrations above cut-off values according to the competent authority	NA	60 - 100%	Not classified

The exact percentage (concentration) of the composition has been withheld as proprietary.

4. First Aid Measures

4.1. Description of first aid measures

Inhalation	If inhaled, remove from area to fresh air. Get medical attention if respiratory irritation develops or if breathing becomes difficult.
Eyes	In case of contact, immediately flush eyes with plenty of water for at least 15 minutes and get medical attention if irritation persists.
Skin	Wash with soap and water. Get medical attention if irritation persists.
Ingestion	Rinse mouth with water many times. Get medical attention, if symptoms occur

4.2 Most important symptoms/effects, acute and delayed

No significant hazards expected.

4.3. Indication of any immediate medical attention and special treatment needed

Notes to Physician Treat symptomatically.

5. Fire-fighting measures

5.1. Extinguishing media

Suitable Extinguishing Media

Water fog, carbon dioxide, foam, dry chemical.

Extinguishing media which must not be used for safety reasons

None known.

5.2 Specific hazards arising from the substance or mixture

Special exposure hazards in a fire

Decomposition in fire may produce harmful gases.

5.3 Special protective equipment and precautions for fire-fighters

Special protective equipment for firefighters

Full protective clothing and approved self-contained breathing apparatus required for fire fighting personnel.

6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Use appropriate protective equipment. Use only competent persons for cleanup. Ensure adequate ventilation. Avoid contact with skin, eyes and clothing. Avoid creating and breathing dust. Remove sources of ignition.
See Section 8 for additional information

6.2. Environmental precautions

None known.

6.3. Methods and material for containment and cleaning up

Scoop up and remove. Remove ignition sources and work with non-sparking tools.
Cover powder spill with plastic sheet or tarp to minimize spreading

7. Handling and storage

7.1. Precautions for safe handling

Handling Precautions
Avoid contact with eyes, skin, or clothing. Avoid creating or inhaling dust. Avoid dust accumulations. Remove sources of ignition. Ensure adequate ventilation. Use appropriate protective equipment.
Hygiene Measures
Handle in accordance with good industrial hygiene and safety practice.

7.2. Conditions for safe storage, including any incompatibilities

Storage Information
Store in a well ventilated area. Use good housekeeping in storage and work areas to prevent accumulation of dust. Close container when not in use. Keep from heat, sparks, and open flames.

8. Exposure Controls/Personal Protection

8.1 Occupational Exposure Limits

Substances	CAS Number	OSHA PEL-TWA	ACGIH TLV-TWA
Contains no hazardous substances in concentrations above cut-off values according to the competent authority	NA	Not applicable	Not applicable

8.2 Appropriate engineering controls

Engineering Controls Use approved industrial ventilation and local exhaust as required to maintain exposures below applicable exposure limits. Ensure adequate ventilation, especially in confined areas

8.3 Individual protection measures, such as personal protective equipment

Personal Protective Equipment If engineering controls and work practices cannot prevent excessive exposures, the selection and proper use of personal protective equipment should be determined by an industrial hygienist or other qualified professional based on the specific application of this product.

Respiratory Protection If engineering controls and work practices cannot keep exposure below occupational exposure limits or if exposure is unknown, wear a NIOSH certified, European Standard EN 149, AS/NZS 1715:2009, or equivalent respirator when using this product. Selection of and instruction on using all personal protective equipment, including respirators, should be performed by an Industrial Hygienist or other qualified professional.

Hand Protection Use gloves which are suitable for the chemicals present in this product as well as

	other environmental factors in the workplace.
Skin Protection	Wear clothing appropriate for the work environment. Dusty clothing should be laundered before reuse. Use precautionary measures to avoid creating dust when removing or laundering clothing.
Eye Protection	Safety glasses with side-shields. If splashes are likely to occur, wear: Goggles, Face-shield.
Other Precautions	None known.

9. Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

Physical State:	Pellet	**Color**	White to off white
Odor:	Odorless	**Odor Threshold:**	No information available

Property Remarks/ - Method	Values
pH:	5 - 7.5
Freezing Point / Range	No data available
Melting Point / Range	58 °C / 136 °F
Boiling Point / Range	No data available
Flash Point	No data available
Flammability (solid, gas)	No data available
Upper flammability limit	No data available
Lower flammability limit	No data available
Evaporation rate	No data available
Vapor Pressure	No data available
Vapor Density	No data available
Specific Gravity	1.06
Water Solubility	Soluble in water
Solubility in other solvents	No data available
Partition coefficient: n-octanol/water	No data available
Autoignition Temperature	No data available
Decomposition Temperature	No data available
Viscosity	No data available
Explosive Properties	No information available
Oxidizing Properties	No information available

9.2. Other information

VOC Content (%) No data available

10. Stability and Reactivity

10.1. Reactivity

Not expected to be reactive.

10.2. Chemical stability

Stable

10.3. Possibility of hazardous reactions

Will Not Occur

10.4. Conditions to avoid

Keep away from heat, sparks and flame.

10.5. Incompatible materials

Strong oxidizers. Strong acids. Strong bases.

10.6. Hazardous decomposition products

Carbon oxides. Oxides of sulfur. Oxides of nitrogen.

11. Toxicological Information

11.1 Information on likely routes of exposure

Principle Route of Exposure Ingestion. Skin contact. Eye contact. Inhalation.

11.2 Symptoms related to the physical, chemical and toxicological characteristics

Acute Toxicity

Inhalation May cause mild respiratory irritation.

Eye Contact May cause mechanical irritation to eye.

Skin Contact None known.

Ingestion May cause abdominal pain, vomiting, nausea, and diarrhea.

Chronic Effects/Carcinogenicity No data available to indicate product or components present at greater than 0.1% are chronic health hazards.

11.3 Toxicity data

Toxicology data for the components

Substances	CAS Number	LD50 Oral	LD50 Dermal	LC50 Inhalation
Contains no hazardous substances in concentrations above cut-off values according to the competent authority	NA	No data available	No data available	No data available

12. Ecological Information

12.1. Toxicity

Ecotoxicity effects

Product is not classified as hazardous to the environment.

Substance Ecotoxicity Data

Substances	CAS Number	Toxicity to Algae	Toxicity to Fish	Toxicity to Microorganisms	Toxicity to Invertebrates
Contains no hazardous substances in concentrations above cut-off values according to the competent authority	NA	No information available	No information available	No information available	No information available

12.2. Persistence and degradability

Substances	CAS Number	Persistence and Degradability
Contains no hazardous substances in concentrations above cut-off values according to the competent authority	NA	No information available

12.3. Bioaccumulative potential

Substances	CAS Number	Bioaccumulation
Contains no hazardous substances in concentrations above cut-off values according to the competent authority	NA	No information available

12.4. Mobility in soil

Substances	CAS Number	Mobility
Contains no hazardous substances in concentrations above cut-off values according to the competent authority	NA	No information available

12.5 Other adverse effects

No information available

13. Disposal Considerations

13.1. Waste treatment methods

Disposal methods Bury in a licensed landfill according to federal, state, and local regulations.
Contaminated Packaging Follow all applicable national or local regulations.

14. Transport Information

US DOT

UN Number Not restricted
UN proper shipping name: Not restricted
Transport Hazard Class(es): Not applicable
Packing Group: Not applicable
Environmental Hazards: Not applicable

Canadian TDG

UN Number Not restricted
UN proper shipping name: Not restricted
Transport Hazard Class(es): Not applicable
Packing Group: Not applicable
Environmental Hazards: Not applicable

IMDG/IMO

UN Number Not restricted
UN proper shipping name: Not restricted
Transport Hazard Class(es): Not applicable
Packing Group: Not applicable
Environmental Hazards: Not applicable

IATA/ICAO

UN Number Not restricted
UN proper shipping name: Not restricted
Transport Hazard Class(es): Not applicable
Packing Group: Not applicable
Environmental Hazards: Not applicable

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable
Special Precautions for User None

15. Regulatory Information

US Regulations

US TSCA Inventory All components listed on inventory or are exempt.

TSCA Significant New Use Rules - S5A2

Substances	CAS Number	TSCA Significant New Use Rules - S5A2
Contains no hazardous substances in concentrations above cut-off values according to the competent authority	NA	Not applicable

EPA SARA Title III Extremely Hazardous Substances

Substances	CAS Number	EPA SARA Title III Extremely Hazardous Substances
Contains no hazardous substances in concentrations above cut-off values according to the competent authority	NA	Not applicable

EPA SARA (311,312) Hazard Class
None

EPA SARA (313) Chemicals

Substances	CAS Number	Toxic Release Inventory (TRI) - Group I	Toxic Release Inventory (TRI) - Group II
Contains no hazardous substances in concentrations above cut-off values according to the competent authority	NA	Not applicable	Not applicable

EPA CERCLA/Superfund Reportable Spill Quantity

Substances	CAS Number	CERCLA RQ
Contains no hazardous substances in concentrations above cut-off values according to the competent authority	NA	Not applicable

EPA RCRA Hazardous Waste Classification
If product becomes a waste, it does NOT meet the criteria of a hazardous waste as defined by the US EPA.

California Proposition 65

Substances	CAS Number	California Proposition 65
Contains no hazardous substances in concentrations above cut-off values according to the competent authority	NA	Not applicable

U.S. State Right-to-Know Regulations

Substances	CAS Number	MA Right-to-Know Law	NJ Right-to-Know Law	PA Right-to-Know Law
Contains no hazardous substances in concentrations above cut-off values according to the competent authority	NA	Not applicable	Not applicable	Not applicable

Canadian Regulations

Canadian Domestic Substances List (DSL) All components listed on inventory or are exempt.

16. Other information

Preparation Information

Prepared By Chemical Stewardship
Telephone: 1-281-871-6107
e-mail: fdunexchem@halliburton.com

Revision Date: 11-Sep-2018

Reason for Revision Initial Release

Additional information
For additional information on the use of this product, contact your local Halliburton representative.

For questions about the Safety Data Sheet for this or other Halliburton products, contact Chemical Stewardship at 1-580-251-4335.

Key or legend to abbreviations and acronyms used in the safety data sheet
bw – body weight
CAS – Chemical Abstracts Service
d - day
EC50 – Effective Concentration 50%
ErC50 – Effective Concentration growth rate 50%
h - hour
LC50 – Lethal Concentration 50%
LD50 – Lethal Dose 50%
LL50 – Lethal Loading 50%
mg/kg – milligram/kilogram
mg/L – milligram/liter
mg/m^3 - milligram/cubic meter
mm - millimeter
mmHg - millimeter mercury
NIOSH – National Institute for Occupational Safety and Health
NTP – National Toxicology Program
OEL – Occupational Exposure Limit
PEL – Permissible Exposure Limit
ppm – parts per million
STEL – Short Term Exposure Limit
TWA – Time-Weighted Average
UN – United Nations
w/w - weight/weight

Key literature references and sources for data
www.ChemADVISOR.com/

Disclaimer Statement
This information is furnished without warranty, expressed or implied, as to accuracy or completeness. The information is obtained from various sources including the manufacturer and other third party sources. The information may not be valid under all conditions nor if this material is used in combination with other materials or in any process. Final determination of suitability of any material is the sole responsibility of the user.

End of Safety Data Sheet

SAFETY DATA SHEET
PLATINUM PAC* (ALL GRADES)

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Product name PLATINUM PAC* (ALL GRADES)

Synonyms, Trade Names PLATINUM PAC*, PLATINUM PAC UL*

1.2. Relevant identified uses of the substance or mixture and uses advised against

Identified uses Oil well drilling fluid additive.

1.3. Details of the supplier of the safety data sheet

Supplier

M-I SWACO
A Schlumberger Company
Woodlands Drive,
Kirkhill Industrial Estate,
Dyce, Aberdeen AB21 0GW.
Scotland UK
T = +44 (0)1224-246600
F = +44 (0)1224-246699
E-mail = MBXMSDS-EH@miswaco.slb.com

1.4. Emergency telephone number

(24 Hour) Australia +61 2801 44558, Asia Pacific +65 3158 1074, China +86 10 5100 3039, Europe +44 (0) 1235 239 670, Middle East and Africa +44 (0) 1235 239 671, New Zealand +64 9929 1483, USA 001 281 561 1600.

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Classification (1999/45/EEC) Not classified.

2.2. Label elements

Risk Phrases

NC Not classified.

Safety Phrases

NC Not classified.

2.3. Other hazards

Not Classified as PBT/vPvB by current EU criteria.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2. Mixtures

POLYANIONIC CELLULOSE	60-100%
Classification (EC 1272/2008) Not classified.	Classification (67/548/EEC) Not classified.

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

Composition Comments

The data shown is in accordance with the latest EC Directives.

SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures

Inhalation

Move the exposed person to fresh air at once. If respiratory problems, artificial respiration/oxygen. Get medical attention if any discomfort continues.

Ingestion

Do not induce vomiting. Immediately give a couple of glasses of water or milk, provided the victim is fully conscious. Get medical attention if any discomfort continues.

Skin contact

Remove contaminated clothing immediately and wash skin with soap and water. Get medical attention promptly if symptoms occur after washing.

Eye contact

Make sure to remove any contact lenses from the eyes before rinsing. Promptly wash eyes with plenty of water while lifting the eye lids. Continue to rinse for at least 15 minutes. Get medical attention if any discomfort continues.

4.2. Most important symptoms and effects, both acute and delayed

Inhalation.

Irritation of nose, throat and airway.

Ingestion

May cause discomfort if swallowed.

Skin contact

Prolonged skin contact may cause redness and irritation.

Eye contact

May cause temporary eye irritation.

4.3. Indication of any immediate medical attention and special treatment needed

Get medical attention if any discomfort continues.

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media

Extinguishing media

Use fire-extinguishing media appropriate for surrounding materials.

5.2. Special hazards arising from the substance or mixture

Hazardous combustion products

When heated, vapours/gases hazardous to health may be formed.

Unusual Fire & Explosion Hazards

High concentrations of dust may form explosive mixture with air.

5.3. Advice for firefighters

Special Fire Fighting Procedures

Containers close to fire should be removed immediately or cooled with water.

Protective equipment for fire-fighters

Self contained breathing apparatus and full protective clothing must be worn in case of fire.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Wear protective clothing as described in Section 8 of this safety data sheet.

6.2. Environmental precautions

Do not allow to enter drains, sewers or watercourses.

6.3. Methods and material for containment and cleaning up

Avoid generation and spreading of dust. Remove spillage with vacuum cleaner. If not possible, collect spillage with shovel, broom or the like. Ensure that waste and contaminated materials are collected and removed from the work area as soon as possible in a suitably labelled container. Product becomes slippery when wet.

6.4. Reference to other sections

Wear protective clothing as described in Section 8 of this safety data sheet.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

Avoid inhalation of dust and contact with skin and eyes. Avoid handling which leads to dust formation.

7.2. Conditions for safe storage, including any incompatibilities

Store in tightly closed original container in a dry, cool and well-ventilated place.

7.3. Specific end use(s)

The identified uses for this product are detailed in Section 1.2.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Ingredient Comments

NUI = Nuisance dust, WEL TWA 4mg/m3 Respirable Dust, 10 mg/m3 Total Dust.

8.2. Exposure controls

Protective equipment

Process conditions

All chemical Personal Protective Equipment (PPE) should be selected based on an assessment of both the chemical hazard present and the risk of exposure to those hazards. The PPE recommendations below are based on an assessment of the chemical hazards associated with this product. Where this product is used in a mixture with other products or fluids, additional hazards may be created and as such further assessment of risk may be required. The risk of exposure and need of respiratory protection will vary from workplace to workplace and should be assessed by the user in each situation.

Engineering measures

Provide adequate general and local exhaust ventilation.

Respiratory equipment

In case of inadequate ventilation or risk of inhalation of dust, use suitable respiratory equipment with particle filter (type P2).

Hand protection

For prolonged or repeated skin contact use suitable protective gloves. Use protective gloves made of: Nitrile. or Neoprene.

Eye protection

Wear approved chemical safety goggles where eye exposure is reasonably probable.

Other Protection

Wear appropriate clothing to prevent any possibility of skin contact. Provide eyewash station.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Appearance	Solid
Colour	White to yellow
Odour	Odourless.
Solubility	Soluble in water.
Relative density	0.3-0.5 sg
Bulk Density	300-900 kg/m3
pH-Value, Diluted Solution	6.0-8.5 @ 1%

9.2. Other information

Not relevant

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

There are no known reactivity hazards associated with this product.

10.2. Chemical stability

Stable under normal temperature conditions and recommended use.

10.3. Possibility of hazardous reactions

Not known.

10.4. Conditions to avoid

Avoid heat, flames and other sources of ignition. Avoid contact with water.

10.5. Incompatible materials

Materials To Avoid

Avoid contact with: Strong oxidising substances.

10.6. Hazardous decomposition products

When heated, vapours/gases hazardous to health may be formed.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Aspiration hazard:

Not anticipated to present an aspiration hazard based on chemical structure.

Inhalation

Dust may irritate respiratory system or lungs.

Ingestion

May cause discomfort if swallowed.

Skin contact

Prolonged and frequent contact may cause redness and irritation.

Eye contact

Particles in the eyes may cause irritation and smarting.

Route of entry

No route of entry noted.

Target Organs

No specific target organs noted

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity

Contact M-I SWACO's QHSE Department for ecological information at env@miswaco.slb.com.

12.1. Toxicity

Acute Fish Toxicity

Not considered toxic to fish.

12.2. Persistence and degradability

Degradability

There are no data on the degradability of this product.

12.3. Bioaccumulative potential

Bioaccumulative potential

No data available on bioaccumulation.

12.4. Mobility in soil

Mobility:

The product is soluble in water.

12.5. Results of PBT and vPvB assessment

Not Classified as PBT/vPvB by current EU criteria.

12.6. Other adverse effects

None known.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Recover and reclaim or recycle, if practical. Dispose of waste and residues in accordance with local authority requirements.

SECTION 14: TRANSPORT INFORMATION

General The product is not covered by international regulation on the transport of dangerous goods (IMDG, IATA, ADR/RID).

14.1. UN number

Not applicable.

14.2. UN proper shipping name

Not applicable.

14.3. Transport hazard class(es)

Not applicable.

14.4. Packing group

Not applicable.

14.5. Environmental hazards

Environmentally Hazardous Substance/Marine Pollutant

No.

14.6. Special precautions for user

Not applicable.

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Not applicable.

SECTION 15: REGULATORY INFORMATION

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Uk Regulatory References

Chemicals (Hazard Information & Packaging) Regulations. Control of Substances Hazardous to Health Regulations 2002 (as amended) Workplace Exposure Limits EH40.

EU Legislation

Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, including amendments.

Water hazard classification

WGK 1

15.2. Chemical Safety Assessment

International Chemical Inventories

Contact REACH@miswaco.slb.com for REACH information. Complies with the following national/regional chemical inventory requirements: Australia (AICS), Canada (DSL / NDSL), China (IECSC), Europe (EINECS / ELINCS), Japan (METI / ENCS), Korea (TCCL / ECL), New Zealand (NZIoC), Phillipines (PICCS), United States (TSCA).

SECTION 16: OTHER INFORMATION

Abbreviations and acronyms used in the safety data sheet

*a mark of M-I L.L.C.

General information

HMIS Health -1 HMIS Flammability - 1 HMIS Physical Hazard - 0 E - Safety glasses, Gloves, Dust Respirator

Information Sources

Product information provided by the commercial vendor(s). Material Safety Data Sheet, Misc. manufacturers. LOLI. European Chemicals Bureau - ESIS (European Chemical Substances Information).

Revision Comments

General revision. Compiled or revised by Sarah Malone

PLATINUM PAC* (ALL GRADES)

Issued By	Bill Cameron
Revision Date	15-Jun-12
Revision	1
Supersedes date	13-May-12
SDS No.	12588

Risk Phrases In Full

NC Not classified.

HALLIBURTON

SAFETY DATA SHEET

Product Trade Name: **POLYSELECT™ POWER THIN**

Revision Date: 17-Jan-2019 **Revision Number:** 2

1. Identification

1.1. Product Identifier

Product Trade Name: POLYSELECT™ POWER THIN
Synonyms None
Chemical Family: Blend
Internal ID Code HM008886

1.2 Recommended use and restrictions on use

Application: Additive
Uses advised against No information available

1.3 Manufacturer's Name and Contact Details

Manufacturer/Supplier
Baroid Fluid Services
Product Service Line of Halliburton Energy Services, Inc.
P.O. Box 1675
Houston, TX 77251
Telephone: (281) 871-4000

Baroid Fluid Services
Product Service Line of Halliburton Energy Services, Inc.
645 - 7th Ave SW Suite 1800
Calgary, AB
T2P 4G8
Canada
Telephone: 1-403-231-9300

Prepared By Chemical Stewardship
Telephone: 1-281-871-6107
e-mail: fdunexchem@halliburton.com

1.4. Emergency telephone number:

Emergency Telephone Number 1-866-519-4752 or 1-760-476-3962
Global Incident Response Access Code: 334305
Contract Number: 14012

2. Hazards Identification

2.1 Classification in accordance with paragraph (d) of §1910.1200

As adopted by the competent authority, this product does not require an SDS or hazard warning label.

Not classified

2.2. Label Elements

Hazard Pictograms

Signal Word: Not Classified

Hazard Statements Not Hazardous

Precautionary Statements

Prevention	None
Response	None
Storage	None
Disposal	None

2.3 Hazards not otherwise classified

None known

3. Composition/information on Ingredients

Substances	CAS Number	PERCENT (w/w)	GHS Classification - US
Contains no hazardous substances in concentrations above cut-off values according to the competent authority	NA	60 - 100%	Not classified

The exact percentage (concentration) of the composition has been withheld as proprietary.

4. First Aid Measures

4.1. Description of first aid measures

Inhalation	If inhaled, remove from area to fresh air. Get medical attention if respiratory irritation develops or if breathing becomes difficult.
Eyes	In case of contact, immediately flush eyes with plenty of water for at least 15 minutes and get medical attention if irritation persists.
Skin	Wash with soap and water. Get medical attention if irritation persists.
Ingestion	Rinse mouth with water many times. Get medical attention, if symptoms occur

4.2 Most important symptoms/effects, acute and delayed

No significant hazards expected.

4.3. Indication of any immediate medical attention and special treatment needed

Notes to Physician Treat symptomatically.

5. Fire-fighting measures

5.1. Extinguishing media

Suitable Extinguishing Media

Water fog, carbon dioxide, foam, dry chemical.

Extinguishing media which must not be used for safety reasons

None known.

5.2 Specific hazards arising from the substance or mixture

Special exposure hazards in a fire

Decomposition in fire may produce harmful gases. Spills produce extremely slippery surfaces.

5.3 Special protective equipment and precautions for fire-fighters

Special protective equipment for firefighters

Full protective clothing and approved self-contained breathing apparatus required for fire fighting personnel.

6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Use appropriate protective equipment. Spills of this product are very slippery. Avoid contact with skin, eyes and clothing. Avoid breathing vapors. Ensure adequate ventilation.
See Section 8 for additional information

6.2. Environmental precautions

None known.

6.3. Methods and material for containment and cleaning up

Isolate spill and stop leak where safe. Contain spill with sand or other inert materials. Scoop up and remove.

7. Handling and storage

7.1. Precautions for safe handling

Handling Precautions

Avoid contact with eyes, skin, or clothing. Wash hands after use. Avoid breathing vapors. Ensure adequate ventilation. Use appropriate protective equipment.

Hygiene Measures

Handle in accordance with good industrial hygiene and safety practice.

7.2. Conditions for safe storage, including any incompatibilities

Storage Information

Store away from oxidizers. Store in a cool, dry location. Product has a shelf life of 24 months.

8. Exposure Controls/Personal Protection

8.1 Occupational Exposure Limits

Substances	CAS Number	OSHA PEL-TWA	ACGIH TLV-TWA
Contains no hazardous substances in concentrations above cut-off values according to the competent authority	NA	Not applicable	Not applicable

8.2 Appropriate engineering controls

Engineering Controls Use in a well ventilated area.

8.3 Individual protection measures, such as personal protective equipment

Personal Protective Equipment If engineering controls and work practices cannot prevent excessive exposures, the selection and proper use of personal protective equipment should be determined by an industrial hygienist or other qualified professional based on the specific application of this product.

Respiratory Protection If engineering controls and work practices cannot keep exposure below occupational exposure limits or if exposure is unknown, wear a NIOSH certified, European Standard EN 149, AS/NZS 1715:2009, or equivalent respirator when using this product. Selection of and instruction on using all personal protective equipment, including respirators, should be performed by an Industrial Hygienist or other qualified professional.

Hand Protection Use gloves which are suitable for the chemicals present in this product as well as other environmental factors in the workplace.

Skin Protection Wear protective clothing appropriate for the work environment.

Eye Protection Safety glasses with side-shields. If splashes are likely to occur, wear: Goggles,

Face-shield.

Other Precautions None known.

9. Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

Physical State:	Liquid	**Color**	Yellowish
Odor:	Slight	**Odor Threshold:**	No information available

Property Remarks/ - Method	Values
pH:	7 - 9
Freezing Point / Range	No data available
Melting Point / Range	No data available
Pour Point / Range	No data available
Boiling Point / Range	No data available
Flash Point	> 100 °C / > 212 °F Cleveland Open Cup (COC)
Flammability (solid, gas)	No data available
Upper flammability limit	No data available
Lower flammability limit	No data available
Evaporation rate	No data available
Vapor Pressure	No data available
Vapor Density	No data available
Specific Gravity	1.16
Water Solubility	Soluble in water
Solubility in other solvents	No data available
Partition coefficient: n-octanol/water	No data available
Autoignition Temperature	No data available
Decomposition Temperature	No data available
Viscosity	No data available
Explosive Properties	No information available
Oxidizing Properties	No information available

9.2. Other information

VOC Content (%) No data available

10. Stability and Reactivity

10.1. Reactivity

Not expected to be reactive.

10.2. Chemical stability

Stable

10.3. Possibility of hazardous reactions

Will Not Occur

10.4. Conditions to avoid

None anticipated

10.5. Incompatible materials

Strong oxidizers.

10.6. Hazardous decomposition products

Carbon monoxide and carbon dioxide.

11. Toxicological Information

11.1 Information on likely routes of exposure

Principle Route of Exposure Eye or skin contact, inhalation.

11.2 Symptoms related to the physical, chemical and toxicological characteristics

Acute Toxicity

Inhalation May cause mild respiratory irritation.
Eye Contact May cause mild eye irritation.
Skin Contact May cause mild skin irritation.
Ingestion May cause abdominal pain, vomiting, nausea, and diarrhea.

Chronic Effects/Carcinogenicity No data available to indicate product or components present at greater than 0.1% are chronic health hazards.

11.3 Toxicity data

Toxicology data for the components

Substances	CAS Number	LD50 Oral	LD50 Dermal	LC50 Inhalation
Contains no hazardous substances in concentrations above cut-off values according to the competent authority	NA	No data available	No data available	No data available

12. Ecological Information

12.1. Toxicity

Ecotoxicity effects

Product is not classified as hazardous to the environment.

Substance Ecotoxicity Data

Substances	CAS Number	Toxicity to Algae	Toxicity to Fish	Toxicity to Microorganisms	Toxicity to Invertebrates
Contains no hazardous substances in concentrations above cut-off values according to the competent authority	NA	No information available	No information available	No information available	No information available

12.2. Persistence and degradability

Substances	CAS Number	Persistence and Degradability
Contains no hazardous substances in concentrations above cut-off values according to the competent authority	NA	No information available

12.3. Bioaccumulative potential

Substances	CAS Number	Bioaccumulation
Contains no hazardous substances in concentrations above cut-off values according to the competent authority	NA	No information available

12.4. Mobility in soil

Substances	CAS Number	Mobility
Contains no hazardous substances in concentrations above cut-off values according to the competent authority	NA	No information available

12.5 Other adverse effects

No information available

13. Disposal Considerations

13.1. Waste treatment methods

Disposal methods Disposal should be made in accordance with federal, state, and local regulations.
Contaminated Packaging Follow all applicable national or local regulations.

14. Transport Information

US DOT

UN Number Not restricted
UN proper shipping name: Not restricted
Transport Hazard Class(es): Not applicable
Packing Group: Not applicable
Environmental Hazards: Not applicable

Canadian TDG

UN Number Not restricted
UN proper shipping name: Not restricted
Transport Hazard Class(es): Not applicable
Packing Group: Not applicable
Environmental Hazards: Not applicable

IMDG/IMO

UN Number Not restricted
UN proper shipping name: Not restricted
Transport Hazard Class(es): Not applicable
Packing Group: Not applicable
Environmental Hazards: Not applicable

IATA/ICAO

UN Number Not restricted
UN proper shipping name: Not restricted
Transport Hazard Class(es): Not applicable
Packing Group: Not applicable
Environmental Hazards: Not applicable

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable
Special Precautions for User None

15. Regulatory Information

US Regulations

US TSCA Inventory All components listed on inventory or are exempt.

TSCA Significant New Use Rules - S5A2

Substances	CAS Number	TSCA Significant New Use Rules - S5A2
Contains no hazardous substances in concentrations above cut-off values according to the competent authority	NA	Not applicable

EPA SARA Title III Extremely Hazardous Substances

Substances	CAS Number	EPA SARA Title III Extremely Hazardous Substances
Contains no hazardous substances in concentrations above cut-off values according to the competent authority	NA	Not applicable

EPA SARA (311,312) Hazard Class

None

EPA SARA (313) Chemicals

Substances	CAS Number	Toxic Release Inventory (TRI) - Group I	Toxic Release Inventory (TRI) - Group II
Contains no hazardous substances in concentrations above cut-off values according to the competent authority	NA	Not applicable	Not applicable

EPA CERCLA/Superfund Reportable Spill Quantity

Substances	CAS Number	CERCLA RQ
Contains no hazardous substances in concentrations above cut-off values according to the competent authority	NA	Not applicable

EPA RCRA Hazardous Waste Classification

If product becomes a waste, it does NOT meet the criteria of a hazardous waste as defined by the US EPA.

California Proposition 65

Substances	CAS Number	California Proposition 65
Contains no hazardous substances in concentrations above cut-off values according to the competent authority	NA	Not applicable

U.S. State Right-to-Know Regulations

Substances	CAS Number	MA Right-to-Know Law	NJ Right-to-Know Law	PA Right-to-Know Law
Contains no hazardous substances in concentrations above cut-off values according to the competent authority	NA	Not applicable	Not applicable	Not applicable

NFPA Ratings: Health 1, Flammability 1, Reactivity 0
HMIS Ratings: Health 1, Flammability 0, Physical Hazard 0 , PPE: B

Canadian Regulations

Canadian Domestic Substances List (DSL) All components listed on inventory or are exempt.

16. Other information

Preparation Information

Prepared By	Chemical Stewardship Telephone: 1-281-871-6107 e-mail: fdunexchem@halliburton.com
Revision Date:	17-Jan-2019
Reason for Revision	SDS sections updated: 9 Change to physical properties

Additional information
For additional information on the use of this product, contact your local Halliburton representative.

For questions about the Safety Data Sheet for this or other Halliburton products, contact Chemical Stewardship at 1-580-251-4335.

Key or legend to abbreviations and acronyms used in the safety data sheet
bw – body weight
CAS – Chemical Abstracts Service
d - day
EC50 – Effective Concentration 50%
ErC50 – Effective Concentration growth rate 50%
h - hour
LC50 – Lethal Concentration 50%
LD50 – Lethal Dose 50%
LL50 – Lethal Loading 50%
mg/kg – milligram/kilogram
mg/L – milligram/liter
mg/m^3 - milligram/cubic meter
mm - millimeter
mmHg - millimeter mercury
NIOSH – National Institute for Occupational Safety and Health
NTP – National Toxicology Program
OEL – Occupational Exposure Limit
PEL – Permissible Exposure Limit
ppm – parts per million
STEL – Short Term Exposure Limit
TWA – Time-Weighted Average
UN – United Nations
w/w - weight/weight

Key literature references and sources for data
www.ChemADVISOR.com/
NZ CCID

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End of Safety Data Sheet

SDS no. PID676
Version 9
Revision date 19/Oct/2016
Supersedes date 29/Jul/2015

Safety Data Sheet
POLYSWELL*

1. Identification of the Substance/Preparation and of the Company/Undertaking

1.1 Product identifier

Product name POLYSWELL*

Product code PID676

1.2 Relevant identified uses of the substance or mixture and uses advised against

Recommended Use Lost circulation material.

Uses advised against Consumer use

1.3 Details of the supplier of the safety data sheet

Supplier
M-I L.L.C.
P.O.Box 42842
Houston, TX 77242
www.miswaco.slb.com
Telephone: 1 281-561-1511

M-I SWACO, A Schlumberger Company
200 - 125, 9th Avenue SE
Calgary, Alberta T2G 0P6, Canada
Telephone: 1-780-962-8221

E-mail address SDS@slb.com

Prepared by
Global Regulatory Compliance - Chemicals (GRC - Chemicals)

1.4 Emergency Telephone Number

Emergency telephone (24 Hour) Asia Pacific +65 3158 1074, Europe +44 (0) 1235 239 670, Middle East and Africa +44 (0) 1235 239 671, USA +1 281 561 1600, Canada +1 800 579 7421, Argentina: +54 11 5984 3690, Brazil : 0800-720-8000/0800-777-2323 (WGRA)

2. Hazards Identification

2.1 Classification of the substance or mixture

GHS - Classification

Health hazards Not classified

Environmental hazards Not classified

Physical Hazards

Combustible dust

2.2 Label elements

Signal word
WARNING

Hazard Statements
H232 - May form combustible dust concentrations in air

Precautionary Statements

Supplementary precautionary statements
P240 - Ground/bond container and receiving equipment
P241 - Use explosion-proof electrical/ ventilating/ lighting/ equipment
P243 - Take precautionary measures against static discharge

Unknown acute toxicity Not applicable.

3. Composition/information on Ingredients

3.1 Substances

Not applicable

3.2 Mixtures

This product does not contain any hazardous ingredients, or ingredients with national workplace exposure limits.

Chemical Name	CAS No	Weight-%
2-Propenoic acid, potassium salt, polymer with 2-propenamide	31212-13-2	80 - 100

Comments
The specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret

4. First Aid Measures

4.1 First aid measures

Inhalation If inhaled, remove from area to fresh air. Get medical attention if respiratory irritation develops or if breathing becomes difficult.

Ingestion Rinse mouth. Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. Get medical attention if symptoms occur.

Skin contact Wash skin thoroughly with soap and water. Get medical attention if irritation persists.

Eye Contact Promptly wash eyes with lots of water while lifting eye lids. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if any discomfort continues.

4.2. Most important symptoms and effects, both acute and delayed

General advice The severity of the symptoms described will vary dependant of the concentration and the

length of exposure. If adverse symptoms develop, the casualty should be transferred to hospital as soon as possible.

Symptoms

Inhalation Please see Section 11. Toxicological Information for further information.

Ingestion Please see Section 11. Toxicological Information for further information.

Skin contact Please see Section 11. Toxicological Information for further information.

Eye contact Please see Section 11. Toxicological Information for further information.

4.3 Indication of any immediate medical attention and special treatment needed

Notes to physician Treat symptomatically

5. Fire-Fighting Measures

5.1 Extinguishing media

Suitable extinguishing media
Water Fog, Alcohol Foam, CO_2, Dry Chemical.

Extinguishing media which must not be used for safety reasons
None known.

5.2. Special hazards arising from the substance or mixture

Unusual fire and explosion hazards
Suspended dust may present a dust explosion hazard.

Hazardous combustion products
Carbon oxides (COx), Nitrogen oxides (NOx), Hydrogen cyanide (hydrocyanic acid).

5.3 Advice for firefighters

Special protective equipment for fire-fighters
As in any fire, wear self-contained breathing apparatus and full protective gear.

Special Fire-Fighting Procedures
Containers close to fire should be removed immediately or cooled with water.

6. Accidental Release Measures

6.1. Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. See also section 8. Material becomes slippery when wet. Use caution if wet.

6.2 Environmental precautions

Disposal should be in accordance with applicable regional, national and local laws and regulations. Refer to applicable federal, state and local regulations.

Environmental exposure controls
Local authorities should be advised if significant spillages cannot be contained.

6.3 Methods and material for containment and cleaning up

Methods for containment
Prevent further leakage or spillage if safe to do so. Cover powder spill with plastic sheet or tarp to minimize spreading.

Methods for cleaning up
Swells on contact with water. Sweep up and shovel into suitable containers for disposal. After cleaning, flush away traces with water.

6.4 Reference to other sections

See section 13 for more information.

7. Handling and Storage

7.1 Precautions for safe handling

Handling
Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin and eyes. Avoid dust formation. Material becomes slippery when wet. Use caution if wet.

Hygiene measures
Use good work and personal hygiene practices to avoid exposure. Do not eat, drink or smoke when using this product.

7.2 Conditions for safe storage, including any incompatibilities

Technical measures/precautions Ensure adequate ventilation. Keep airborne concentrations below exposure limits.

Storage precautions Keep containers tightly closed in a dry, cool and well-ventilated place. Keep at 0-35°C. Avoid contact with:. Oxidizing agents. Strong acids.

Packaging materials Use specially constructed containers only.

8. Exposure Controls/Personal Protection

8.1 Control parameters

Exposure limits **NUI = Nuisance dust, TWA 4mg/m³ Respirable Dust, 10mg/m³ Total Dust. No biological limit allocated**

Chemical Name	ACGIH TLV	OSHA PEL	Argentina - Occupational Exposure Limits - TWAs (CMPs)	Brazil - Occupational Exposure Limits - TWAs (LTs)	Mexico - Occupational Exposure Limits - TWAs (LMPE-PPTs)
2-Propenoic acid, potassium salt, polymer with 2-propenamide	Not determined	Not determined	Not determined	Not determined	Not determined

IDLH (Immediately Dangerous to Life or Health)
This product contains substance(s) classified as Immediately Dangerous to Life or Health (IDLH) by the US National Institute for Occupational Safety and Health (NIOSH). The purpose of establishing an IDLH value is to ensure that the worker can escape from a given contaminated environment in the event of failure of the most protective respiratory protection equipment. In the event of failure of respiratory protection equipment every effort should be made to exit immediately.

Chemical Name	IDLH (Immediately Dangerous to Life or Health)
2-Propenoic acid, potassium salt, polymer with 2-propenamide 31212-13-2	-

8.2 Exposure controls

A risk assessment is recommended to be performed by a qualified and trained personnel to analyze the worksite and recommends the appropriate controls such as engineering controls, work practice controls, and administrative controls as primary means of

reducing employee exposure. When there is a remaining hazards after applying the primary controls, Personal Protective Equipment (PPE) must be used.

All chemical Personal Protective Equipment (PPE) should be selected based on an assessment of both the chemical hazard present and the risk of exposure to those hazards. The PPE recommendations below are based on an assessment of the chemical hazards associated with this product. Where this product is used in a mixture with other products or fluids, additional hazards may be created and as such further assessment of risk may be required. The risk of exposure and need of respiratory protection will vary from workplace to workplace and should be assessed by the user in each situation.

Engineering Controls
Ensure adequate ventilation. Local exhaust ventilation.

Personal protective equipment

Eye protection	Use eye protection according to EN 166, designed to protect against powders and dusts. Tightly fitting safety goggles. Safety glasses with side-shields.
Hand protection	Wear gloves according to EN 374 to protect against skin effects from powders Use protective gloves made of: Nitrile Neoprene Frequent change is advisable
Respiratory Protection	All respiratory protection equipment should be used within a comprehensive respiratory protection program that meets the requirements of 29 CFR 1910.134 (U.S. OSHA Respiratory Protection Standard) or local equivalent.If exposed to airborne mist/aerosol of this product, use an organic vapor cartridge with a P-95 pre-filter attached. In work environments containing oil mist/aerosol, use an organic vapor cartridge with a P-95 pre-filter attached.If exposed to vapors from this product, use a NIOSH/MSHA-approved respirator with an organic vapor cartridge.
Skin and body protection	Wear suitable protective clothing, Eye wash and emergency shower must be available at the work place.
Hygiene Measures	Wash hands before eating, drinking or smoking, Remove and wash contaminated clothing before re-use.

9. Physical and Chemical Properties

9.1 Information on basic physical and chemical properties

Physical state	Solid
Appearance	Powder Dust
Color	White
Odor	None
Odor threshold	Not applicable

Property	**Values**	**Remarks**
pH		
pH @ dilution		
Melting / freezing point	> 150 °C / > 302 °F	
Boiling point/range	No information available	
Flash point	No information available	PMCC
Evaporation rate (BuAc =1)	No information available	
Flammability (solid, gas)	Not applicable	
Flammability Limit in Air		
Upper flammability limit	No information available	
Lower flammability limit	No information available	
Vapor pressure	No information available	
Vapor density	No information available	
Specific gravity	0.8 - 1.0	
Bulk density	0.65 - 0.75	
Water solubility	Insoluble in water Swells on contact with water.	
Solubility in other solvents	No information available	
Autoignition temperature	No information available	
Decomposition temperature	> 150°C / 302°F	

Kinematic viscosity	No information available
Dynamic viscosity	No information available
log Pow	No information available
Explosive properties	Not applicable
Oxidizing properties	None known.

9.2 Other information

Pour point	No information available
Molecular weight	No information available
VOC content(%)	None
Density	No information available

Comments
The data listed above are typical physical and chemical properties and should not be construed as product specification.

10. Stability and Reactivity

10.1 Reactivity

No specific reactivity hazards associated with this product.

10.2 Chemical stability

Stable under normal temperature conditions and recommended use.

10.3 Possibility of Hazardous Reactions

Hazardous polymerization
Hazardous polymerization does not occur.

10.4 Conditions to avoid

Keep at temperatures between 0-35°C.

10.5 Incompatible materials

Oxidizing agents. Strong acids.

10.6 Hazardous decomposition products

See Section 5.2.

11. Toxicological Information

11.1 Information on toxicological effects

Acute toxicity

Inhalation	Inhalation of dust in high concentration may cause irritation of respiratory system.
Eye contact	Dust may cause mechanical irritation.
Skin contact	Prolonged contact may cause redness and irritation.
Ingestion	Ingestion may cause stomach discomfort.

LD50 Oral	> 5000 mg/kg (rat) (MIXTURE)
LD50 Dermal	> 5000 mg/kg (rat) (MIXTURE)

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation

2-Propenoic acid, potassium salt, polymer with 2-propenamide	No data available	No data available	No data available

Chemical Name	IARC Group 1 or 2	ACGIH - Carcinogens	OSHA listed carcinogens	NTP
2-Propenoic acid, potassium salt, polymer with 2-propenamide	No data available	No data available	No data available	No data available

Sensitization This product does not contain any components suspected to be sensitizing.

Mutagenic effects This product does not contain any known or suspected mutagens.

Carcinogenicity This product does not contain any known or suspected carcinogens.

Reproductive toxicity This product does not contain any known or suspected reproductive hazards.

Developmental toxicity Not known to cause birth defects or have a deleterious effect on a developing fetus.

Routes of Exposure Inhalation.

Routes of entry Inhalation.

Specific target organ toxicity - Single exposure Not classified

Specific target organ toxicity - Repeated exposure Not classified.

Aspiration hazard Not applicable.

12. Ecological Information

12.1 Toxicity

Toxicity to algae
IC50/Scenedesmus subspicatus/72 hrs > 100 mg/L (OECD201.

Toxicity to fish
LC50/Danio rerio/96 hrs > 100 mg/L (OECD203)
LC50/Oncorhynchus mykiss/96 hrs > 100 mg/L (OECD203).

Toxicity to daphnia and other aquatic invertebrates
EC50/Daphnia magna/48 hrs > 100 mg/L OECD202).

Chemical Name	Toxicity to fish	Toxicity to algae	Toxicity to daphnia and other aquatic invertebrates
2-Propenoic acid, potassium salt, polymer with 2-propenamide	No information available	No information available	No information available

12.2 Persistence and degradability

Not readily biodegradable.

12.3 Bioaccumulative potential

Does not bioaccumulate.

log Pow
-2

12.4 Mobility

Insoluble in water.

12.5 Results of PBT and vPvB assessment

This preparation contains no substance considered to be persistent, bioaccumulating nor toxic (PBT)
This preparation contains no substance considered to be very persistent nor very bioaccumulating (vPvB)

12.6 Other adverse effects.

None known.

13. Disposal Considerations

13.1 Waste treatment methods

Disposal Method	Disposal should be made in accordance with federal, state and local regulations.
Contaminated packaging	Empty containers should be taken for local recycling, recovery or waste disposal.

14. Transport information

14.1. UN number

UN No. (DOT)	Not regulated
UN No. (MT/ANTT)	Not regulated
UN No. (TDG)	Not regulated
UN/ID No. (ADR/RID/ADN/ADG)	Not regulated
UN No. (IMDG/ANTAQ)	Not regulated
UN No. (ICAO/ANAC)	Not regulated
UN No. (DPC)	Not regulated

14.2. UN proper shipping name

The product is not covered by international regulation on the transport of dangerous goods

14.3 Hazard class(es)

DOT Hazard class	Not regulated
ANTT Hazard class	Not regulated
TDG Hazard class	Not regulated
ADR/RID/ADN/ADG Hazard class	Not regulated
IMDG/ANTAQ Hazard class	Not regulated
ICAO/ANAC Hazard class/division	Not regulated
DPC Hazard class	Not regulated

14.4 Packing group

DOT Packing group	Not regulated
ANTT Packing group	Not regulated
TDG Packing group	Not regulated
ADR/RID/ADN/ADG Packing group	Not regulated
IMDG/ANTAQ Packing group	Not regulated
ICAO/ANAC Packing group	Not regulated
DPC Packing group	Not regulated

14.5 Environmental hazard

No

14.6 Special precautions
Not applicable

14.7 Transport in bulk according to Annex I/II of MARPOL 73/78 and the IBC Code
Please contact SDS@slb.com for info regarding transport in Bulk.

15. Regulatory Information

International inventories

USA (TSCA)	Complies
Canada (DSL)	Complies
Philippines (PICCS)	Does not comply
Japan (ENCS)	Complies
China (IECSC)	Complies
Australia (AICS)	Complies
Korean (KECL)	Does not comply
New Zealand (NZIoC)	Complies

Europe - REACH
All products supplied from the European Economic Area (EEA) are compliant with the REACH Regulation EC 1907/2006.For products supplied from the EEA, Schlumberger and/or its suppliers have pre-registered and is registering all of the substances that it and/or its suppliers manufactures in or imports into the EEA that are subject to Title II of the REACH Regulation. All products supplied from outside the EEA are subject to REACH only if imported into the EEA. The importer of the products must comply with REACH for each imported substance. Contact REACH@slb.com for REACH information.

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SARA 311/312 Hazard Categories
Should this product meet EPCRA 311/312 Tier reporting criteria at 40 CFR 370, refer to Section 2 of this SDS for appropriate classifications. Under the amended regulations at 40 CFR 370, EPCRA 311/312 Tier II reporting for the 2017 calendar year will need to be consistent with updated hazard classifications.

Chemical Name	SARA 302 / TPQs	SARA 313	CERCLA RQ
2-Propenoic acid, potassium salt, polymer with 2-propenamide	N/A	N/A	N/A

California Proposition 65

WARNING

This product can expose you to chemicals including those listed below, which is [are] known to the State of California to cause cancer, birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov

Chemical Name	California Proposition 65
2-Propenamid (impurity) 79-06-1	developmental toxicity male reproductive toxicity carcinogen

Canadian Classification

This Safety Data Sheet has been prepared in compliance with the Hazardous Products Regulations.

16. Other Information

Supersedes date	29/Jul/2015
Revision date	19/Oct/2016
Version	9
This SDS has been revised in the following section(s)	All sections.

HMIS classification

Health	0
Flammability	1
Physical hazard	0
PPE	E

*A mark of M-I L.L.C., a Schlumberger Company

SAFETY DATA SHEET

Sand Force

Section: 1. PRODUCT AND COMPANY IDENTIFICATION

Product name	:	Sand Force
Other means of identification	:	N/A
Recommended use	:	Viscosifier
Restrictions on use	:	None known
Company	:	Right Turn Supply LLC P.O. Box 132016 Spring, TX 77393
Emergency telephone number	:	(800) 424-9300 (24 Hours) CHEMTREC
Issuing date	:	08/01/2018
Reissue date	:	01/01/2021

Section: 2. HAZARDS IDENTIFICATION

GHS Classification

Flammable liquids	:	Not classified
Skin irritation	:	Not classified
Eye irritation	:	Not classified
Carcinogenicity	:	Not classified
Reproductive toxicity	:	Not classified
Specific target organ toxicity - single exposure	:	Not classified
Aspiration hazard	:	Not classified

GHS Label element

Hazard pictograms :

Signal Word	:	Warning
Hazard Statements	:	May form combustible dust concentrations in air.

Precautionary Statements :

Prevention:
P201 – Obtain special instructions before use.
P264 – Wash face, hands and any exposed skin thoroughly after handling.
P280 – Wear protective gloves/protective clothing/eye protection/face protection.

Response:
P308 + P313 – If exposed or concerned: Get medical advice/attention.
P302 + P352 – IF ON SKIN: Wash with plenty of soap and water.
P332 + P313 – If skin irritation occurs: Get medical advice/attention.
P363 – Wash contaminated clothing before reuse.
P305 + P351 + P338 – IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.
P337 + P313 – If eye irritation persists: Get medical attention/advice.

Storage:
P403 + P235: Store in a well-ventilated place. Keep cool
P404 – Store in a closed container
P405 – Store locked up.

Disposal:
P501 – Dispose of contents/container in accordance with local/regional/national regulations.

Other hazards : None Known

Section: 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substances	CAS Number	Percent	GHS Classification – US
Xanthan Gum	11138-66-22	60 – 100%	Expl. Dust (Combustible Dust)

The exact percentage (concentration) of the composition has been withheld as proprietary

Section: 4. FIRST AID MEASURES

In case of eye contact : Flush eyes with water for at least 15 minutes, holding eyelids open. Remove Any contact lenses. If irritation persists, seek medical attention.

In case of skin contact : Wash with soap and water. Get medical attention if irritation persists.

If swallowed : Under normal conditions, first aid procedures are not required.

If inhaled	:	If inhaled, remove from area to fresh air. Get medical attention if respiratory irritation develops or if breathing becomes difficult.
Protection of first-aiders	:	Move to fresh air. Call a physician if symptoms develop or persist.
Notes to physician	:	Treat symptomatically.
Most important symptoms and effects, both acute and delayed	:	No significant hazards expected.

Section: 5. FIREFIGHTING MEASURES

Suitable extinguishing media	:	Water, fog, carbon dioxide, foam, dry chemical.
Unsuitable extinguishing media	:	None known
Specific hazards during firefighting	:	Full protective clothing and approved self-contained breathing apparatus required for firefighting personnel.
Hazardous combustion products	:	Decomposition in fire may produce toxic gases. Organic dust in the presence of an ignition source can be explosive in high concentrations. Good housekeeping practices are required to minimize this potential
Special protective equipment for firefighters	:	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
Specific extinguishing methods	:	Use standard firefighting procedures and consider the hazards of other involved materials.

Section: 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures	:	Avoid contact with skin, eyes and clothing. Ventilate area. Avoid creating and breathing dust. Wear appropriate personal protective equipment.
Environmental precautions	:	None known.
Methods and materials for containment and cleaning up	:	Collect using dustless method and hold for appropriate disposal. Consider possible toxic or fire hazards associated with contaminating substances and use appropriate methods for collection, storage and disposal. In the event of spill or accidental release, notify relevant authorities in accordance with all applicable regulations. For waste disposal, see section 13 of the SDS.

Section: 7. HANDLING AND STORAGE

Advice on safe handling	:	Wear personal protective equipment. Avoid contact with eyes, skin or clothing. Wash hands after use. Do not eat, drink or smoke in work area. Wash contaminated clothing before reuse. Wear a NIOSH-approved, European Standard En 149, or equivalent when using this product. Material slippery when wet. Avoid creating or inhaling dust.
Conditions for safe storage	:	Store in a cool dry place. Keep away from oxidizers. Protect from physical damage.

Section: 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

8(a): OCCUPATIONAL EXPOSURE LIMITS:

Substances	CAS Number	OSHA PEL-TWA	ACGIH-TLV-TWA
Xanthan Gum	11138-66-2	15 mg/m³	10 mg/m³

Engineering measures	:	Use in a well-ventilated area. Use approved industrial ventilation and local exhaust. As required to maintain exposures below applicable exposure limits.

Personal protective equipment

Eye protection	:	Wear safety glasses with side shields or splash proof goggles.
Hand protection	:	Wear normal work gloves.
Skin protection	:	Wear suitable protective clothing.
Respiratory protection	:	Wear NIOSH-approved, European Standard EN 149 (FFP2/FFP3), AS/NZS 1715, or equivalent respirator when using this product. Handle only in a well-ventilated area.
Hygiene measures	:	Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

Section: 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	:	Powder

Colour	:	Off white to tan
Odour	:	Slight
Flash point	:	200.0 °F (93.3 °C) estimated
pH	:	7 (1%)
Odour Threshold	:	no data available
Melting point/freezing point	:	no data available
Initial boiling point and boiling range	:	no data available
Evaporation rate	:	no data available
Flammability (solid, gas)	:	no data available
Upper explosion limit	:	no data available
Lower explosion limit	:	no data available
Vapour pressure	:	no data available
Relative vapour density	:	no data available
Relative density	:	1.6
Density	:	42.5 lbs/ft³
Water solubility	:	Soluble in water
Solubility in other solvents	:	no data available
Partition coefficient: n-octanol/water	:	no data available
Auto-ignition temperature	:	no data available
Thermal decomposition temperature	:	no data available
Viscosity, dynamic	:	no data available
Viscosity, kinematic	:	no data available
Molecular weight	:	1,000,000

Section: 10. STABILITY AND REACTIVITY

Chemical stability	:	Material is stable under normal conditions.
Possibility of hazardous reactions	:	Hazardous polymerization will not occur
Conditions to avoid	:	Avoid creation of dust when handling and avoid all possible sources of ignition (spark or flame. Take precautionary measures against electrostatic discharges. To avoid fire or explosion, dissipate static electricity by grounding and bonding containers and equipment before transferring material. Prevent dust accumulation.
Incompatible materials	:	Strong oxidizing agents.

Hazardous decomposition products	:	Carbon monoxide and carbon dioxide.

Section: 11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure	:	Eye, skin contact, inhalation

Potential Health Effects

Eyes	:	May cause mild irritation to the eye.
Skin	:	None known.
Ingestion	:	None known
Inhalation	:	May impede respiration
Acute oral toxicity	:	No data available
Acute inhalation toxicity	:	No data available
Acute dermal toxicity	:	No data available
Skin corrosion/irritation	:	No data available
Serious eye damage/eye irritation	:	May cause mild irritation to the eye.
Respiratory or skin sensitization	:	No data available
Carcinogenicity	:	No data available to indicate product or components present at greater than 0.1% are chronic health hazards

Section: 12. ECOLOGICAL INFORMATION

Ecotoxicity

Ecotoxicity for the component:

Substances	CAS Number	LD50 Oral	LD50 Dermal	LC50 Inhalation
Xanthan Gum	11138-66-2	>45,000 mg/kg (Rat)	No data available	>21 mg/L (Rat) 1h >4.25 mg/L (Rat) 4h

Substances	CAS Number	Skin corrosion/irritation
Xanthan Gum	11138-66-2	Non-irritating to the skin in rabbits

Substances	CAS Number	Eye damage/irritation
Xanthan Gum	11138-66-2	Mechanical irritation of the eyes is possible.

Substances	CAS Number	Skin Sensitization
Xanthan Gum	11138-66-2	No information available.

Substances	CAS Number	Respiratory Sensitization
Xanthan Gum	11138-66-2	No sensitation responses were observed

Substances	CAS Number	Mutagenic Effects
Xanthan Gum	11138-66-2	No information available

Substances	CAS Number	Carcinogenic Effects
Xanthan Gum	11138-66-2	Did not show carcinogenic effects in animal experiments

Substances	CAS Number	Reproductive toxicity
Xanthan Gum	11138-66-2	Animal testing did not show any effects on fertility

Substances	CAS Number	STOT - single exposure
Xanthan Gum	11138-66-2	No significant toxicity observed in animal studies at concentration requiring classification.

Substances	CAS Number	STOT - repeated exposure
Xanthan Gum	11138-66-2	No significant toxicity observed in animal studies at concentration requiring classification.

Substances	CAS Number	Aspiration hazard
Xanthan Gum	11138-66-2	Not applicalbe

Substances	CAS Number	Toxicity to Algae	Toxicity to Fish	Toxicity to Microorganisms	Toxicity to Invertebrates
Xanthan Gum	11138-66-2	No information available	TLM96 320-560 ppm (Oncorhynchus mykiss) LC50 (96h) 490 mg/L (Oncorhynchus mykiss)	No information available	TLM96 >75,000 ppm (Mysidopsis bahia) LC50 (48h) 980 mg/L (Daphnia magna)

Environmental Effects : The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Persistence and degradability: no data available

Mobility: no data available

Bioaccumulative potential: no data available

Other information

No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

Section: 13. DISPOSAL CONSIDERATIONS

Disposal methods : Bury in a licensed landfill according to federal, state and local regulations. Follow all applicable national and local regulations.

Contaminated packaging	:	Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

Section: 14. TRANSPORT INFORMATION

US D.O.T Non-bulk (packages less than 119 gallons).:

Land transport (DOT):

Not regulated as dangerous goods.

Air transport (IATA)

Not regulated as dangerous goods

Sea transport (IMDG/IMO)

Not regulated as dangerous goods

Section: 15. REGULATORY INFORMATION

This product is not known to be a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

TSCA list	:	All components listed on inventory or are exempt

EPA SARA Title III Extremely hazardous substances: Not applicable.

EPA SARA (311, 312) Hazard Class: None

EPA SARA (313) Chemicals: This product does not contain a toxic chemical for routine annual “Toxic Chemical Release Reporting” under Section 313 (10 CFR 372)

EPA CERCLA/Superfund Reportable Spill Quantity: Not applicable

EPA RCRA Hazardous waste classification: If product becomes a waste, it does NOT meet the criteria of a hazardous waste as defined by the US EPA.

US STATE REGULATION:

US. California Controlled Substances. CA Department of Justice (California Health and Safety Code Section 11100): All components listed do not apply to the California Proposition 65 Regulation.

US. Massachusetts RTK - Substance List: Does not apply

US. New Jersey Worker and Community Right-to-Know Act: Does not apply

US. Pennsylvania Worker and Community Right-to-Know Law: Does not apply

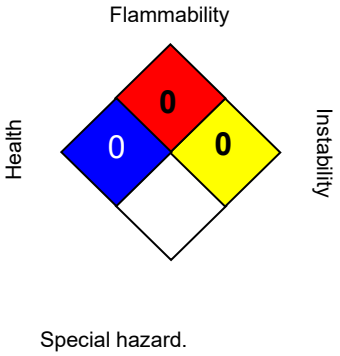
INTERNATIONAL CHEMICAL CONTROL LAWS:

United States TSCA Inventory: On TSCA Inventory

Canadian Domestic Substances List (DSL): On DSL Inventory

Section: 16. OTHER INFORMATION

NFPA:



HMIS III:

HEALTH	0
FLAMMABILITY	0
PHYSICAL HAZARD	0

0 = not significant, 1 =Slight,
2 = Moderate, 3 = High
4 = Extreme, * = Chronic

Revision Date	:	08/01/2018
Version Number	:	1.0

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

Safety Data Sheet
Sodium Carbonate, Anhydrous

Date Reviewed: January 2021 Supersedes: February 2015

This document has been prepared to meet the requirements of the U.S. OSHA Hazard Communication Standard, 29 CFR 1910.1200; the Canada's Workplace Hazards Materials Information System (WHMIS) and, the EC Directive, 2001/58/EC.

SECTION 1: Product and Company Identification

Product Name	Sodium Carbonate, Anhydrous
Alternate Product Name(s)	Soda Ash, Disodium Carbonate Also: Dense Soda Ash, Soda Ash Light, Synthetic Light Soda Ash, Soda Ash Liquid, Natural Light Soda Ash, Natural Light HA Soda Ash
Chemical Formula	Na_2CO_3
Product Use	Oil well drilling fluid additive. Calcium precipitation.

This chemical is certified to ANSI/NSF Standard 60, Drinking Water Chemicals – Health Effects (as packaged in the original, unopened container). Concentration not to exceed 100 ppm when used for corrosion control or scale control pH adjustment.

Supplier	Drillchem Drilling Solutions PO Box 132107 Spring, TX 77393
Telephone No. **Emergency No.**	Ph: (281) 713-8941 (24 Hours) 800-424-9300 CHEMTREC

SECTION 2: Hazards Identification

***Emergency Overview*:**
White, odorless, granular solid. Product is non-combustible. Reacts with acids to release carbon dioxide gas and heat. May irritate skin and eyes. Dusts may irritate respiratory tract. Not expected to be toxic to the environment, nor to aquatic organisms. Avoid simultaneous exposure to soda ash and lime dust. In the presence of moisture (i.e. perspiration) the two materials combine to form caustic soda (NaOH), which may cause burns.

Hazard Classification:

Class	Category	Hazard Statement
Eye Irritant	Category 2	H319 Causes serious eye irritation

EC Labelling:

Name of Substance to appear on label	Sodium Carbonate
Symbol(s)	Xi- irritating 
Label Phrases	R36: Irritating to eyes. S26: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. S2: Keep out of reach of children S22: Do not breath dust

Potential Health Effects:

Skin	Prolonged contact may cause skin irritation (red, dry, cracked skin).
Eyes	Irritating to the eyes.
Ingestions	Although low in toxicity, ingestion may cause nausea, vomiting, stomach ache, and diarrhea.
Inhalation	Prolonged inhalation of product dusts may irritate nose, throat, and lungs.
Chronic Effects	Excessive, long term contact may produce “soda ulcers” on hands and perforation of the nasal septum. Sensitivity reactions may occur from prolonged and repeated exposure. This product does not contain any ingredient designated by IARC, NTP, ACGIH or OSHA as probable or suspected human carcinogens.

SECTION 3: Composition/Information on Ingredients

Chemical Name	CAS #	Wt%	EC No.	EC Class
Sodium Carbonate	497-19-8	99.8	207-838-8	Xi, R36

SECTION 4: First Aid Measures

Skin	Wash with plenty of soap and water. Get medical attention if irritation occurs and persists. Remove and wash contaminated clothing before re-use.
Eyes	Immediately flush with water for at least 15 minutes lifting the upper and lower eyelids intermittently. See a medical doctor or ophthalmologist as necessary.
Ingestions	Rinse mouth with water. Dilute by giving 1 or 2 glasses of water. Do not induce vomiting. Never give anything by mouth to an unconscious person. If symptoms persist, contact a doctor or poison control center
Inhalation	Remove to fresh air. If breathing difficulty or discomfort occurs and persists, obtain medical attention.
Advice to Physician	While internal toxicity is low, irritant effects of high concentrations may produce corneal opacities, and vesicular skin reactions in humans with abraded skin only. Treatment is symptomatic and supportive.

SECTION 5: Firefighting measures

Extinguishing Media	Not combustible, use extinguishing method suitable for surrounding fire.
Fire/Explosion Hazards	Not applicable.
Fire Fighting Procedures	Wear full protective clothing and self-contained breathing apparatus
Flammable Limits	Not applicable
Auto-Ignition Temperature	Not applicable
Hazardous Combustion Products	Carbon dioxide.
Sensitivity to Impact	None
Sensitivity to Static Discharge	None

SECTION 6: Accidental Release Measures

Personal Precautions	Refer to Section 8 “Exposure Controls / Personal Protection”
Containment	Prevent large quantities of this product from contacting vegetation or waterways; large spills could kill vegetation and fish.
Clean Up	This product, if spilled, can be recovered and re-used if contamination does not present a problem. Vacuum or sweep up the material and collect in a suitable container for disposal. If the spilled product is unusable due to contamination, consult state or federal environmental agencies for acceptable disposal procedures and locations. See Section 13 “Disposal Considerations”.
Notification Requirements	Federal regulations do not require notification for spills of this product. State and local regulations may contain different requirements; consult local authorities.

SECTION 7: Handling and Storage

Handling	Use air conveying / mechanical systems for bulk transfer to storage. For manual handling of bulk transfer use mechanical ventilation to remove airborne dust from railcar, ship or truck. Use approved respiratory protection when ventilation systems are not available. Selection of respirators is based on the dust cloud generation. Keep material out of lakes, streams, ponds and sewer drains. Avoid eye contact or prolonged skin contact. Avoid breathing dusts. When dissolving, add to water cautiously and with stirring; solutions can get hot. Use good personal hygiene and housekeeping.
Storage	Store in a cool dry area, away from incompatible products (acids). Prolonged storage may cause product to cake from atmospheric moisture.

SECTION 8: Exposure Controls/ Personal Protection

Engineering Controls	Where possible, provide general mechanical and/or local exhaust ventilation to prevent release of airborne dust into the work environment. Eye wash facility should be provided in storage and general work area.

Personal Protective Equipment:

Eyes and Face	For dusty or misty conditions, or when handling solutions where there is reasonable probability of eye contact, wear chemical safety goggles and hardhat. Under these conditions do not wear contact lenses. Otherwise, appropriate eye and face protection equipment (ANSI Z87 approved) should be selected for the particular use intended for this material. Safety glasses with side shields are recommended.
Respiratory	Whenever dust in the worker's breathing zone cannot be controlled with ventilation or other engineering means, workers should wear respirators or dust masks approved by NIOSH/MSHA, EU CEN or comparable certification organization to protect them against airborne dust.
Hands, Body, and Arms	Wear long-sleeve shirt and trousers, and impervious gloves for routine product use. Cotton gloves are sufficient for dry product; wear impervious (e.g., rubber, neoprene, etc.) gloves when handling solutions. Protective shoes or boots.

Exposure Guidelines:
Federal guidelines treat the ingredient(s) in this product as a nuisance dust, as no product-specific guidelines have been issued for exposure. As with all nuisance dusts, worker breathing zone concentrations should be measured by validated sampling and analytical methods. The following limits (OSHA and MSHA) apply to this material:

Particulates Not Otherwise Regulated:
OSHA (PEL / TWA): 15 mg/m^3 (total dust); 5 mg/m^3 (rasp fraction) MSHA (PEL / TWA): 10 mg/m^3 (total dust)

SECTION 9: Physical and Chemical Properties

Appearance	White, granular solid
Odor	Odorless
Odor Threshold	Not applicable
Formula	Na_2CO_3
Molecular Weight	105.99
pH	11.3
Melting point/freezing point	854°C (1569°F)
Initial boiling point/boiling range	Decomposes
Flash point	None
Evaporation rate	Not Applicable
Flammability (solid, gas)	Not combustible
Flammability in Air	
Upper flammability limit	No information available
Lower flammability limit	No information available
Vapor Pressure	Not applicable
Vapor Density	Not applicable
Bulk Density (g/l)	Dense grades: 0.9 – 1.1 Natural light grade: 0.7 – 0.9 Synthetic light grade: 0.5 – 0.7
Specific Gravity	2.533 (vs. Water)
Water Solubility(ies)	212.5 g/l @ 20°C
Partition coefficient	No information available
Auto-ignition temperature	No information available
Decomposition temperature	400°C
Viscosity	
Viscosity, dynamic	No information available
Viscosity, cinematic	No information available
Percent Volatile	0%

SECTION 10: Stability and Reactivity

Stability	Stable
Conditions to Avoid	Contract with acids will release carbon dioxide, heat. Contract with lime dust in the presence of moisture can produce corrosive sodium hydroxide.
Materials to Avoid	May react with aluminum, acids, fluorine, lithium, and 2,4,6- Trinitrotoluene.
Polymerization	Will not occur.
Hazardous Decomposition	When heated to decomposition, carbon dioxide is released.
Other Precautions	When dissolving, add to water cautiously and with stirring; solutions can get hot.

SECTION 11: Toxicological Information

Eye	Severe irritant (50 mg, rabbit).
Skin	Mild irritant (500 mg/24hr, rabbit). Minor irritation may occur on abraded skin. Not a sensitizer (tested at 0.25% solution).
Oral	LD_{50}, rat: 4,090 mg/kg
Inhalation	LC_{50}, rat, 2hr 2.3 mg/l 24 – hour LC_{50}: 800 mg/m^3, 20 h exposure (guinea pig) (moderate toxicity)
Chronic	Excessive, long term contact may produce “soda ulcers” on hands and perforation of the nasal septum. Sensitivity reactions may occur from prolonged and repeated exposure.
Carcinogenicity	Not designated by IARC, NTP, ACGIH or OSHA as probable or suspected human carcinogens.

SECTION 12: Ecological Information

Acute Ecotoxicity	96 – hour LC_{50}: 265 – 565 mg/l (daphnia magnia) (low toxicity) 300 – 320 mg/l (blue gill sunfish) (low toxicity) 96 – hour TL_m: 1200 mg/l (mosquito-fish) 48 – hour TL_m: 840 mg/l (mosquito-fish) 48 – hour EC_{50}: 265 mg/l (daphnia magnia) 5 Day EC_{50}: 242 mg/l (Nitszcheria linearis)
Chronic Ecotoxicity	7 Day EC, biomass:14 mg/l (phytoplankton)
Mobility	Air: Not Applicable Water: Considerable solubility and mobility. Soil / sediments: Non-significant adsorption
Abiotic Degradation	Water (hydrolysis): degradation's products: carbonate (pH>10) / carbonic acid / carbon dioxide (pH<6). Soil**:** Hydrolysis as a function of pH.
Biotic Degradation	Aerobic / anaerobic: Not applicable (inorganic compound)
Potential for Bioaccumulation	Not applicable (ionizable inorganic compound)

Observed effects are related to alkaline properties of the product. Product is not significantly hazardous for the environment

SECTION 13: Disposal Considerations

Disposal Method	When this product is discarded or disposed of, as purchased, it is neither a characteristic nor a listed hazardous waste according to US Federal RCRA regulations (40 CFR 261). As a non-hazardous waste the material may be disposed of in a landfill in accordance with government regulations; check local or state regulations for applicable requirements prior to disposal. Any processing, usage, alteration, chemical additions to, or contamination of, the product may atler the disposal requirements. Under Federal Regulations, it is the generator's responsibility to determine if a waste is a hazardous waste.

SECTION 14: Transport Information

Proper Shipping Name	Not regulated
Primary Hazard Class/Division	Not regulated
UN/NA Number	Not applicable
Label(s), Placard(s), Marking(s)	Not applicable
Reportable Quantity (RQ)	None
49 STCC Number	Not Applicable
ADR (EU), TDG (Canada)	Not regulated
IMDG (sea), ICAO (air), IATA (air)	Not regulated

SECTION 15: Regulatory Information

SARA Title III (Superfund Amendments and Reauthorization Act)

Section 302 Extremely Hazardous Substances: 40CFR355, Appendix A	Not listed
Section 311 Hazard Class 40CFR370	Immediate (acute)
Section 312 Threshold Planning Quantity (TPQ) 40CFR370	No TPQ listed for sodium carbonate
Section 313 Reportable Ingredients 40CFR372	Not listed

CERCLA (Comprehensive Environmental Response Compensation and Liability Act):
40CFR302.4 – There is no listed RQ (reportable quantity) for this product.

TSCA (Toxic Substance Control Act)
This product is listed on the TSCA Inventory of Chemical Substances. No other TSCA rules affect this product

State Regulations:
This product does not contain any components that are regulated under California Proposition 65.

Other:
Clean Water Act (CWA) – Section 301/ 311: Not listed
Clean Air Act (CAA) – Section 112: Not regulated

CANADA:

WHMIS Classification	D2B Toxic Class E Corrosive Symbol:  This product has been classified in accordance with hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.
WHMIS Ingredient Disclosure List	Listed
DSL Status (Domestic Substances List)	Listed on DSL

EUROPEAN UNION:

EINECS Inventory	Listed: 207-838-8
Annex I (Substances Directive)	Listed: 011-005-00-2 Xi, R-36 (See label details in Section 16)
German Water Classification	Hazard class 1, low hazard to waters
EU – Food Additives Directive (95/2/EC) – Annex I – Generally Permitted for Use in Food	E500

INTERNATIONAL:

This product is also found in the chemical inventories of Australia, China, Korea, Japan and the Philippines.

SECTION 16: Other Information

HMIS (Hazardous Material Identification System)

Health	2
Flammability	0
Physical Hazard	0
Personal Protection (PPE)	B

Protection = B (Safety glasses and gloves)

4 = Severe, 3 = Serious, 2 = Moderate, 1 = Slight, 0 = Minimal

NFPA (National Fire Protection Association System)

Health	2
Flammability	0
Reactivity	0
Special	None

4 = Extreme, 3 = High, 2 = Moderate, 1 = Slight, 0 = Insignificant

Other Information:

Soda ash is produced in three principal grades: Dense, natural light and synthetic light soda ash. When these products are mixed in water they may be known as liquid soda ash. These grades differ only in physical characteristics such as bulk density and size and shape of particles, which influence flow characteristics and angle of repose. Other physical properties, as well as chemical as chemical properties of solutions, are common to each grade of soda ash.

Certified to ANSI / NSF 60

Concentration not to exceed 100 ppm when used for corrosion control or scale control pH adjustment.

Waste Profile 633054IL Lab Report

July 27, 2022

Patrick Umphenour
SET Environmental, Inc.
1560B Fairview Avenue
St. Louis, MO 63132
TEL: (314) 890-8600
FAX: (314) 890-8666

Illinois	100226
Kansas	E-10374
Louisiana	05002
Louisiana	05003
Oklahoma	9978

RE: 2207-0258 **WorkOrder:** 22071055

Dear Patrick Umphenour:

TEKLAB, INC received 1 sample on 7/18/2022 15:45:00 for the analysis presented in the following report.

Samples are analyzed on an as received basis unless otherwise requested and documented. The sample results contained in this report relate only to the requested analytes of interest as directed on the chain of custody. NELAP accredited fields of testing are indicated by the letters NELAP under the Certification column. Unless otherwise documented within this report, Teklab Inc. analyzes samples utilizing the most current methods in compliance with 40CFR. All tests are performed in the Collinsville, IL laboratory unless otherwise noted in the Case Narrative.

All quality control criteria applicable to the test methods employed for this project have been satisfactorily met and are in accordance with NELAP except where noted. The following report shall not be reproduced, except in full, without the written approval of Teklab, Inc.

If you have any questions regarding these tests results, please feel free to call.

Sincerely,

Aaron Renner
Project Manager
(630)324-6855
arenner@teklabinc.com

Report Contents

Client: SET Environmental, Inc.
Work Order: 22071055
Client Project: 2207-0258
Report Date: 27-Jul-22

This reporting package includes the following:

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Client: SET Environmental, Inc. **Work Order:** 22071055

Client Project: 2207-0258 **Report Date:** 27-Jul-22

Abbr	Definition
*	Analytes on report marked with an asterisk are not NELAP accredited
CCV	Continuing calibration verification is a check of a standard to determine the state of calibration of an instrument between recalibration.
CRQL	A Client Requested Quantitation Limit is a reporting limit that varies according to customer request. The CRQL may not be less than the MDL.
DF	Dilution factor is the dilution performed during analysis only and does not take into account any dilutions made during sample preparation. The reported result is final and includes all dilution factors.
DNI	Did not ignite
DUP	Laboratory duplicate is a replicate aliquot prepared under the same laboratory conditions and independently analyzed to obtain a measure of precision.
ICV	Initial calibration verification is a check of a standard to determine the state of calibration of an instrument before sample analysis is initiated.
IDPH	IL Dept. of Public Health
LCS	Laboratory control sample is a sample matrix, free from the analytes of interest,spiked with verified known amounts of analytes and analyzed exactly like a sample to establish intra-laboratory or analyst specific precision and bias or to assess the performance of all or a portion of the measurement system.
LCSD	Laboratory control sample duplicate is a replicate laboratory control sample that is prepared and analyzed in order to determine the precision of the approved test method. The acceptable recovery range is listed in the QC Package (provided upon request).
MBLK	Method blank is a sample of a matrix similar to the batch of associated sample (when available) that is free from the analytes of interest and is processed simultaneously with and under the same conditions as samples through all steps of the analytical procedures, and in which no target analytes or interferences should present at concentrations that impact the analytical results for sample analyses.
MDL	"The method detection limit is defined as the minimum measured concentration of a substance that can be reported with 99% confidence that the measured concentration is distinguishable from method blank results."
MS	Matrix spike is an aliquot of matrix fortified (spiked) with known quantities of specific analytes that is subjected to the entire analytical procedures in order to determine the effect of the matrix on an approved test method's recovery system. The acceptable recovery range is listed in the QC Package (provided upon request).
MSD	Matrix spike duplicate means a replicate matrix spike that is prepared and analyzed in order to determine the precision of the approved test method. The acceptable recovery range is listed in the QC Package (provided upon request).
MW	Molecular weight
NC	Data is not acceptable for compliance purposes
ND	Not Detected at the Reporting Limit
NELAP	NELAP Accredited
PQL	Practical quantitation limit means the lowest level that can be reliably achieved within specified limits of precision and accuracy during routine laboratory operation conditions.
RL	The reporting limit the lowest level that the data is displayed in the final report. The reporting limit may vary according to customer request or sample dilution. The reporting limit may not be less than the MDL.
RPD	Relative percent difference is a calculated difference between two recoveries (ie. MS/MSD). The acceptable recovery limit is listed in the QC Package (provided upon request).
SPK	The spike is a known mass of target analyte added to a blank sample or sub-sample; used to determine recovery deficiency or for other quality control purposes.
Surr	Surrogates are compounds which are similar to the analytes of interest in chemical composition and behavior in the analytical process, but which are not normally found in environmental samples.
TIC	Tentatively identified compound: Analytes tentatively identified in the sample by using a library search. Only results not in the calibration standard will be reported as tentatively identified compounds. Results for tentatively identified compounds that are not present in the calibration standard, but are assigned a specific chemical name based upon the library search, are calculated using total peak areas from reconstructed ion chromatograms and a response factor of one. The nearest Internal Standard is used for the calculation. The results of any TICs must be considered estimated, and are flagged with a "T". If the estimated result is above the calibration range it is flagged "ET"
TNTC	Too numerous to count (> 200 CFU)

Definitions

Client: SET Environmental, Inc. **Work Order:** 22071055

Client Project: 2207-0258 **Report Date:** 27-Jul-22

Qualifiers

# -	Unknown hydrocarbon	B -	Analyte detected in associated Method Blank
C -	RL shown is a Client Requested Quantitation Limit	E -	Value above quantitation range
H -	Holding times exceeded	I -	Associated internal standard was outside method criteria
J -	Analyte detected below quantitation limits	M -	Manual Integration used to determine area response
ND -	Not Detected at the Reporting Limit	R -	RPD outside accepted recovery limits
S -	Spike Recovery outside recovery limits	T -	TIC(Tentatively identified compound)
X -	Value exceeds Maximum Contaminant Level		

Case Narrative

http://www.teklabinc.com/

Client: SET Environmental, Inc.

Work Order: 22071055

Client Project: 2207-0258

Report Date: 27-Jul-22

Cooler Receipt Temp: 6.0 °C

Locations

Collinsville

Address 5445 Horseshoe Lake Road
Collinsville, IL 62234-7425
Phone (618) 344-1004
Fax (618) 344-1005
Email jhriley@teklabinc.com

Springfield

Address 3920 Pintail Dr
Springfield, IL 62711-9415
Phone (217) 698-1004
Fax (217) 698-1005
Email KKlostermann@teklabinc.com

Kansas City

Address 8421 Nieman Road
Lenexa, KS 66214
Phone (913) 541-1998
Fax (913) 541-1998
Email jhriley@teklabinc.com

Collinsville Air

Address 5445 Horseshoe Lake Road
Collinsville, IL 62234-7425
Phone (618) 344-1004
Fax (618) 344-1005
Email EHurley@teklabinc.com

Chicago

Address 1319 Butterfield Rd.
Downers Grove, IL 60515
Phone (630) 324-6855
Fax
Email arenner@teklabinc.com

Client: SET Environmental, Inc. **Work Order:** 22071055

Client Project: 2207-0258 **Report Date:** 27-Jul-22

State	Dept	Cert #	NELAP	Exp Date	Lab
Illinois	IEPA	100226	NELAP	1/31/2023	Collinsville
Kansas	KDHE	E-10374	NELAP	4/30/2023	Collinsville
Louisiana	LDEQ	05002	NELAP	6/30/2023	Collinsville
Louisiana	LDEQ	05003	NELAP	6/30/2023	Collinsville
Oklahoma	ODEQ	9978	NELAP	8/31/2022	Collinsville
Arkansas	ADEQ	88-0966		3/14/2023	Collinsville
Illinois	IDPH	17584		5/31/2023	Collinsville
Iowa	IDNR	430		6/1/2024	Collinsville
Kentucky	UST	0073		1/31/2023	Collinsville
Missouri	MDNR	00930		5/31/2023	Collinsville
Missouri	MDNR	930		1/31/2025	Collinsville

Client: SET Environmental, Inc. **Work Order:** 22071055

Client Project: 2207-0258 **Report Date:** 27-Jul-22

Lab ID: 22071055-001 **Client Sample ID:** AG1

Matrix: SOLID **Collection Date:** 07/18/2022 12:00

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
ASTM D92								
Ignitability, Open Cup	*	60		**>200**	°F	1	07/20/2022 09:07	R314623
STANDARD METHODS 2540 G 1997, 2011								
Total Solids	*	0.1		**83.9**	%	1	07/19/2022 10:23	R314631
SW-846 9012A (TOTAL)								
Cyanide	NELAP	0.22	J	**0.07**	mg/Kg	1	07/21/2022 11:20	194746
SW-846 9034 (REACTIVE)								
Sulfide, Reactive	NELAP	10.0		**< 10.0**	mg/Kg	1	07/19/2022 12:18	194696
SW-846 9045C								
pH (1:1)	NELAP	1.00		**7.91**		1	07/20/2022 14:23	R314684
SW-846 9065								
Phenols	NELAP	2.65		**< 2.65**	mg/Kg	1	07/19/2022 13:03	194672
SW-846 9095								
Paint Filter	NELAP	0		**Pass**	Pass/Fail	1	07/25/2022 09:13	R314820
SW-846 1311, 3010A, 6010B, METALS IN TCLP EXTRACT BY ICP								
Arsenic	NELAP	0.250		**< 0.250**	mg/L	1	07/25/2022 17:11	194804
Barium	NELAP	0.450		**1.28**	mg/L	1	07/25/2022 17:11	194804
Cadmium	NELAP	0.0200		**< 0.0200**	mg/L	1	07/25/2022 17:11	194804
Chromium	NELAP	0.100		**< 0.100**	mg/L	1	07/25/2022 17:11	194804
Lead	NELAP	0.400		**< 0.400**	mg/L	1	07/25/2022 17:11	194804
Selenium	NELAP	0.500		**< 0.500**	mg/L	1	07/25/2022 17:11	194804
Silver	NELAP	0.0700		**< 0.0700**	mg/L	1	07/25/2022 17:11	194804
SW-846 1311, 7470A IN TCLP EXTRACT								
Mercury	NELAP	0.00020		**< 0.00020**	mg/L	1	07/25/2022 14:33	194913
SW-846 1311, 3510C, 8270C, SEMI-VOLATILES IN TCLP EXTRACT BY GC/MS								
2,4,5-Trichlorophenol	NELAP	0.100		**ND**	mg/L	1	07/26/2022 15:16	194912
2,4,6-Trichlorophenol	NELAP	0.100		**ND**	mg/L	1	07/26/2022 15:16	194912
2,4-Dinitrotoluene	NELAP	0.100		**ND**	mg/L	1	07/26/2022 15:16	194912
Hexachlorobenzene	NELAP	0.100		**ND**	mg/L	1	07/26/2022 15:16	194912
Hexachlorobutadiene	NELAP	0.100		**ND**	mg/L	1	07/26/2022 15:16	194912
Hexachloroethane	NELAP	0.100		**ND**	mg/L	1	07/26/2022 15:16	194912
m,p-Cresol	NELAP	0.100		**ND**	mg/L	1	07/26/2022 15:16	194912
Nitrobenzene	NELAP	0.100		**ND**	mg/L	1	07/26/2022 15:16	194912
o-Cresol	NELAP	0.100		**ND**	mg/L	1	07/26/2022 15:16	194912
Pentachlorophenol	NELAP	0.200		**ND**	mg/L	1	07/26/2022 15:16	194912
Pyridine	NELAP	0.200		**ND**	mg/L	1	07/26/2022 15:16	194912
Cresols, Total	NELAP	0.200		**ND**	mg/L	1	07/26/2022 15:16	194912
Surr: 2,4,6-Tribromophenol	*	50.5-124		**70.2**	%REC	1	07/26/2022 15:16	194912
Surr: 2-Fluorobiphenyl	*	44.3-104		**69.6**	%REC	1	07/26/2022 15:16	194912
Surr: 2-Fluorophenol	*	30.2-83.3		**53.5**	%REC	1	07/26/2022 15:16	194912
Surr: Nitrobenzene-d5	*	34-108		**63.1**	%REC	1	07/26/2022 15:16	194912
Surr: Phenol-d5	*	23.2-62.1		**41.9**	%REC	1	07/26/2022 15:16	194912
Surr: p-Terphenyl-d14	*	38.5-117		**67.7**	%REC	1	07/26/2022 15:16	194912
SW-846 3550B, 8082, POLYCHLORINATED BIPHENYLS (PCBS) BY GC/ECD								
Aroclor 1016	NELAP	37.0		**ND**	µg/Kg	1	07/21/2022 04:46	194700
Aroclor 1221	NELAP	37.0		**ND**	µg/Kg	1	07/21/2022 04:46	194700

Client: SET Environmental, Inc. **Work Order:** 22071055

Client Project: 2207-0258 **Report Date:** 27-Jul-22

Lab ID: 22071055-001 **Client Sample ID:** AG1

Matrix: SOLID **Collection Date:** 07/18/2022 12:00

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 3550B, 8082, POLYCHLORINATED BIPHENYLS (PCBS) BY GC/ECD								
Aroclor 1232	NELAP	37.0		**ND**	µg/Kg	1	07/21/2022 04:46	194700
Aroclor 1242	NELAP	37.0		**ND**	µg/Kg	1	07/21/2022 04:46	194700
Aroclor 1248	NELAP	37.0		**ND**	µg/Kg	1	07/21/2022 04:46	194700
Aroclor 1254	NELAP	37.0		**44.2**	µg/Kg	1	07/21/2022 04:46	194700
Aroclor 1260	NELAP	37	J	**15**	µg/Kg	1	07/21/2022 04:46	194700
Surr: Decachlorobiphenyl	*	40.2-131		**79.0**	%REC	1	07/21/2022 04:46	194700
Surr: Tetrachloro-meta-xylene	*	39-122		**83.7**	%REC	1	07/21/2022 04:46	194700
SW-846 1311, 5030, 8260B, VOLATILE ORGANIC COMPOUNDS IN TCLP EXTRACT BY GC/MS								
1,1-Dichloroethene	NELAP	0.200		**ND**	mg/L	100	07/25/2022 12:40	194921
1,2-Dichloroethane	NELAP	0.200		**ND**	mg/L	100	07/25/2022 12:40	194921
1,4-Dichlorobenzene	NELAP	0.200		**ND**	mg/L	100	07/25/2022 12:40	194921
2-Butanone	NELAP	1.00		**ND**	mg/L	100	07/25/2022 12:40	194921
Benzene	NELAP	0.050		**ND**	mg/L	100	07/25/2022 12:40	194921
Carbon tetrachloride	NELAP	0.200		**ND**	mg/L	100	07/25/2022 12:40	194921
Chlorobenzene	NELAP	0.200		**ND**	mg/L	100	07/25/2022 12:40	194921
Chloroform	NELAP	0.200		**ND**	mg/L	100	07/25/2022 12:40	194921
Tetrachloroethene	NELAP	0.050		**ND**	mg/L	100	07/25/2022 12:40	194921
Trichloroethene	NELAP	0.200		**ND**	mg/L	100	07/25/2022 12:40	194921
Vinyl chloride	NELAP	0.200		**ND**	mg/L	100	07/25/2022 12:40	194921
Surr: 1,2-Dichloroethane-d4	*	80-120		**96.5**	%REC	100	07/25/2022 12:40	194921
Surr: 4-Bromofluorobenzene	*	80-120		**90.3**	%REC	100	07/25/2022 12:40	194921
Surr: Dibromofluoromethane	*	80-120		**105.6**	%REC	100	07/25/2022 12:40	194921
Surr: Toluene-d8	*	80-120		**91.6**	%REC	100	07/25/2022 12:40	194921
SW-846 9023								
Extractable Organic Halogens (EOX)	NELAP	48.5	B	**< 48.5**	mg/Kg	1	07/20/2022 14:40	194687

Contamination present in the MBLK for Extractable Organic Halogens (EOX). Sample results below the reporting limit are reportable per the TNI Standard.

Receiving Check List

http://www.teklabinc.com/

Client: SET Environmental, Inc.
Work Order: 22071055
Client Project: 2207-0258
Report Date: 27-Jul-22

Carrier: Chris Monke
Received By: ERH

Completed by: Payton Yoch
On: 18-Jul-22

Reviewed by: Marvin L. Darling
On: 18-Jul-22

Pages to follow: Chain of custody 1 Extra pages included 0

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐	Temp °C 6.0
Type of thermal preservation?	None ☐	Ice ☑	Blue Ice ☐	Dry Ice ☐
Chain of custody present?	Yes ☑	No ☐		
Chain of custody signed when relinquished and received?	Yes ☑	No ☐		
Chain of custody agrees with sample labels?	Yes ☑	No ☐		
Samples in proper container/bottle?	Yes ☑	No ☐		
Sample containers intact?	Yes ☑	No ☐		
Sufficient sample volume for indicated test?	Yes ☑	No ☐		
All samples received within holding time?	Yes ☑	No ☐		
Reported field parameters measured:	Field ☐	Lab ☐	NA ☑	
Container/Temp Blank temperature in compliance?	Yes ☑	No ☐		

When thermal preservation is required, samples are compliant with a temperature between 0.1°C - 6.0°C, or when samples are received on ice the same day as collected.

Water – at least one vial per sample has zero headspace?	Yes ☐	No ☐	No VOA vials ☑
Water - TOX containers have zero headspace?	Yes ☐	No ☐	No TOX containers ☑
Water - pH acceptable upon receipt?	Yes ☐	No ☐	NA ☑
NPDES/CWA TCN interferences checked/treated in the field?	Yes ☐	No ☐	NA ☑

Any No responses must be detailed below or on the COC.

Samples requiring pH should be analyzed as soon as possible after collection. Samples submitted for pH analysis are analyzed as soon as practicable upon arrival at the laboratory. - MDarling - 7/18/2022 5:21:40 PM

Sample was split for EOX analysis upon arrival at the laboratory. - ehurley - 7/19/2022 8:25:26 AM

CHAIN OF CUSTODY

pg. ____ of ____ Work order # 2207165

TEKLAB, INC. 5445 Horseshoe Lake Road - Collinsville, IL 62234 - Phone: (618) 344-1004 - Fax: (618) 344-1005

Client: SET ENVIRONMENTAL
Address: 1560 B FAIRVIEW AVE.
City / State / Zip: ST. LOUIS, MO. 63131
Contact: PATRICK UMPHENOUR Phone: 314-695-3248
E-Mail: PUMPHENOUR@SETENV.COM Fax:

Samples on: [X] ICE [ ] BLUE ICE [ ] NO ICE 4.0 °C LTG# 5
Preserved in: [ ] LAB [ ] FIELD
FOR LAB USE ONLY
Lab Notes

Client Comments: Ameren Galesburg Spoil Pile
Shawn Seymour 314-69-0047
SSeymour@Setenv.com
Code R Analysis

Are these samples known to be involved in litigation? If yes, a surcharge will apply [ ] Yes [X] No
Are these samples known to be hazardous? [ ] Yes [X] No
Are there any required reporting limits to be met on the requested analysis?. If yes, please provide limits in the comment section. [ ] Yes [X] No

Project Name/Number: 2207-0258
Sample Collector's Name: Chris Monke
Results Requested: [X] Standard [ ] 1-2 Day (100% Surcharge) [ ] Other ____ [ ] 3 Day (50% Surcharge)
Billing Instructions: P.O. 13403

Lab Use Only	Sample Identification	Date/Time Sampled	# and Type of Containers: UNPRES	HNO3	NaOH	H2SO4	HCL	MeOH	NaHSO4	OTHER	MATRIX: Aqueous	Drinking Water	Soil	Sludge	Special Waste	Groundwater	INDICATE ANALYSIS REQUESTED: Code R
2207165-001	AG1	7.18.22 12:00	X										X				X

Relinquished By	Date/Time	Received By	Date/Time
[signature]	15:45 7.18.22	[signature]	7/18/22 1545

The individual signing this agreement on behalf of the client, acknowledges that he/she has read and understands the terms and conditions of this agreement, and that he/she has the authority to sign on behalf of the client. See www.teklabinc.com for terms and conditions.

RMN 7/18/22

Photo Log Type:	Job Site
Customer:	Ameren
Job Name:	Ameren Galesburg Spoil Pile Sampling
Job Number	2207-0258
Division:	MWST
Date of Work:	07/18/22
IMPORTANT:	**Click each image to enlarge**

Photos	Notes
	Spoil pile location/GPS location
	Spoil pile
	Spoil pile
	Sample at Teklab

Photos	Notes
	Chain of Custody

Print

Prepared By: Christopher Monke

Waste Profile 633252IL Lab Report

July 21, 2022

Matt Stockert
Environmental Operations, Inc.
7733 Forsyth Boulevard, Suite 1600
Clayton, MO 63105
TEL: (314) 480-4633
FAX: (314) 436-2900

Illinois	100226
Kansas	E-10374
Louisiana	05002
Louisiana	05003
Oklahoma	9978

RE: IDOT 68G74 / 22556 **WorkOrder:** 22070650

Dear Matt Stockert:

TEKLAB, INC received 3 samples on 7/12/2022 16:05:00 for the analysis presented in the following report.

Samples are analyzed on an as received basis unless otherwise requested and documented. The sample results contained in this report relate only to the requested analytes of interest as directed on the chain of custody. NELAP accredited fields of testing are indicated by the letters NELAP under the Certification column. Unless otherwise documented within this report, Teklab Inc. analyzes samples utilizing the most current methods in compliance with 40CFR. All tests are performed in the Collinsville, IL laboratory unless otherwise noted in the Case Narrative.

All quality control criteria applicable to the test methods employed for this project have been satisfactorily met and are in accordance with NELAP except where noted. The following report shall not be reproduced, except in full, without the written approval of Teklab, Inc.

If you have any questions regarding these tests results, please feel free to call.

Sincerely,

Aaron Renner
Project Manager
(630)324-6855
arenner@teklabinc.com

Report Contents

Client: Environmental Operations, Inc.
Work Order: 22070650
Client Project: IDOT 68G74 / 22556
Report Date: 21-Jul-22

This reporting package includes the following:

Cover Letter	1
Report Contents	2
Definitions	3
Case Narrative	5
Accreditations	6
Laboratory Results	7
Quality Control Results	13
Receiving Check List	36
Chain of Custody	Appended

Client: Environmental Operations, Inc. **Work Order:** 22070650

Client Project: IDOT 68G74 / 22556 **Report Date:** 21-Jul-22

Abbr	Definition
*	Analytes on report marked with an asterisk are not NELAP accredited
CCV	Continuing calibration verification is a check of a standard to determine the state of calibration of an instrument between recalibration.
CRQL	A Client Requested Quantitation Limit is a reporting limit that varies according to customer request. The CRQL may not be less than the MDL.
DF	Dilution factor is the dilution performed during analysis only and does not take into account any dilutions made during sample preparation. The reported result is final and includes all dilution factors.
DNI	Did not ignite
DUP	Laboratory duplicate is a replicate aliquot prepared under the same laboratory conditions and independently analyzed to obtain a measure of precision.
ICV	Initial calibration verification is a check of a standard to determine the state of calibration of an instrument before sample analysis is initiated.
IDPH	IL Dept. of Public Health
LCS	Laboratory control sample is a sample matrix, free from the analytes of interest,spiked with verified known amounts of analytes and analyzed exactly like a sample to establish intra-laboratory or analyst specific precision and bias or to assess the performance of all or a portion of the measurement system.
LCSD	Laboratory control sample duplicate is a replicate laboratory control sample that is prepared and analyzed in order to determine the precision of the approved test method. The acceptable recovery range is listed in the QC Package (provided upon request).
MBLK	Method blank is a sample of a matrix similar to the batch of associated sample (when available) that is free from the analytes of interest and is processed simultaneously with and under the same conditions as samples through all steps of the analytical procedures, and in which no target analytes or interferences should present at concentrations that impact the analytical results for sample analyses.
MDL	"The method detection limit is defined as the minimum measured concentration of a substance that can be reported with 99% confidence that the measured concentration is distinguishable from method blank results."
MS	Matrix spike is an aliquot of matrix fortified (spiked) with known quantities of specific analytes that is subjected to the entire analytical procedures in order to determine the effect of the matrix on an approved test method's recovery system. The acceptable recovery range is listed in the QC Package (provided upon request).
MSD	Matrix spike duplicate means a replicate matrix spike that is prepared and analyzed in order to determine the precision of the approved test method. The acceptable recovery range is listed in the QC Package (provided upon request).
MW	Molecular weight
NC	Data is not acceptable for compliance purposes
ND	Not Detected at the Reporting Limit
NELAP	NELAP Accredited
PQL	Practical quantitation limit means the lowest level that can be reliably achieved within specified limits of precision and accuracy during routine laboratory operation conditions.
RL	The reporting limit the lowest level that the data is displayed in the final report. The reporting limit may vary according to customer request or sample dilution. The reporting limit may not be less than the MDL.
RPD	Relative percent difference is a calculated difference between two recoveries (ie. MS/MSD). The acceptable recovery limit is listed in the QC Package (provided upon request).
SPK	The spike is a known mass of target analyte added to a blank sample or sub-sample; used to determine recovery deficiency or for other quality control purposes.
Surr	Surrogates are compounds which are similar to the analytes of interest in chemical composition and behavior in the analytical process, but which are not normally found in environmental samples.
TIC	Tentatively identified compound: Analytes tentatively identified in the sample by using a library search. Only results not in the calibration standard will be reported as tentatively identified compounds. Results for tentatively identified compounds that are not present in the calibration standard, but are assigned a specific chemical name based upon the library search, are calculated using total peak areas from reconstructed ion chromatograms and a response factor of one. The nearest Internal Standard is used for the calculation. The results of any TICs must be considered estimated, and are flagged with a "T". If the estimated result is above the calibration range it is flagged "ET"
TNTC	Too numerous to count (> 200 CFU)

Definitions

Client: Environmental Operations, Inc. **Work Order:** 22070650

Client Project: IDOT 68G74 / 22556 **Report Date:** 21-Jul-22

Qualifiers

- # - Unknown hydrocarbon
- B - Analyte detected in associated Method Blank
- C - RL shown is a Client Requested Quantitation Limit
- E - Value above quantitation range
- H - Holding times exceeded
- I - Associated internal standard was outside method criteria
- J - Analyte detected below quantitation limits
- M - Manual Integration used to determine area response
- ND - Not Detected at the Reporting Limit
- R - RPD outside accepted recovery limits
- S - Spike Recovery outside recovery limits
- T - TIC(Tentatively identified compound)
- X - Value exceeds Maximum Contaminant Level

Case Narrative

http://www.teklabinc.com/

Client: Environmental Operations, Inc.

Client Project: IDOT 68G74 / 22556

Work Order: 22070650

Report Date: 21-Jul-22

Cooler Receipt Temp: 4.8 °C

Locations

Collinsville

Address 5445 Horseshoe Lake Road
Collinsville, IL 62234-7425
Phone (618) 344-1004
Fax (618) 344-1005
Email jhriley@teklabinc.com

Springfield

Address 3920 Pintail Dr
Springfield, IL 62711-9415
Phone (217) 698-1004
Fax (217) 698-1005
Email KKlostermann@teklabinc.com

Kansas City

Address 8421 Nieman Road
Lenexa, KS 66214
Phone (913) 541-1998
Fax (913) 541-1998
Email jhriley@teklabinc.com

Collinsville Air

Address 5445 Horseshoe Lake Road
Collinsville, IL 62234-7425
Phone (618) 344-1004
Fax (618) 344-1005
Email EHurley@teklabinc.com

Chicago

Address 1319 Butterfield Rd.
Downers Grove, IL 60515
Phone (630) 324-6855
Fax
Email arenner@teklabinc.com

Client: Environmental Operations, Inc. **Work Order:** 22070650

Client Project: IDOT 68G74 / 22556 **Report Date:** 21-Jul-22

State	Dept	Cert #	NELAP	Exp Date	Lab
Illinois	IEPA	100226	NELAP	1/31/2023	Collinsville
Kansas	KDHE	E-10374	NELAP	4/30/2023	Collinsville
Louisiana	LDEQ	05002	NELAP	6/30/2023	Collinsville
Louisiana	LDEQ	05003	NELAP	6/30/2023	Collinsville
Oklahoma	ODEQ	9978	NELAP	8/31/2022	Collinsville
Arkansas	ADEQ	88-0966		3/14/2023	Collinsville
Illinois	IDPH	17584		5/31/2023	Collinsville
Iowa	IDNR	430		6/1/2024	Collinsville
Kentucky	UST	0073		1/31/2023	Collinsville
Missouri	MDNR	00930		5/31/2023	Collinsville
Missouri	MDNR	930		1/31/2025	Collinsville

Client: Environmental Operations, Inc. **Work Order:** 22070650

Client Project: IDOT 68G74 / 22556 **Report Date:** 21-Jul-22

Lab ID: 22070650-001 **Client Sample ID:** SS-68G74-1

Matrix: SOLID **Collection Date:** 07/11/2022 18:44

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
ASTM D92								
Ignitability, Open Cup	*	60		**>200**	°F	1	07/18/2022 11:45	R314557
EPA SW846 3550B, 5035A, ASTM D2974								
Percent Moisture	*	0.1		**5.9**	%	1	07/14/2022 12:37	R314486
SW-846 9045C								
pH (1:1)	NELAP	1.00		**8.08**		1	07/14/2022 16:45	R314444
SW-846 9095								
Paint Filter	NELAP	0		**Pass**	Pass/Fail	1	07/15/2022 09:50	R314484
SW-846 1311, 3010A, 6010B, METALS IN TCLP EXTRACT BY ICP								
Arsenic	NELAP	0.250		**< 0.250**	mg/L	1	07/20/2022 12:35	194670
Barium	NELAP	0.450		**1.03**	mg/L	1	07/20/2022 12:35	194670
Cadmium	NELAP	0.0200		**< 0.0200**	mg/L	1	07/20/2022 12:35	194670
Chromium	NELAP	0.100		**< 0.100**	mg/L	1	07/20/2022 12:35	194670
Lead	NELAP	0.400		**< 0.400**	mg/L	1	07/20/2022 12:35	194670
Selenium	NELAP	0.500		**< 0.500**	mg/L	1	07/20/2022 12:35	194670
Silver	NELAP	0.0700		**< 0.0700**	mg/L	1	07/20/2022 12:35	194670
SW-846 1311, 7470A IN TCLP EXTRACT								
Mercury	NELAP	0.00020		**< 0.00020**	mg/L	1	07/18/2022 16:56	194586
SW-846 1311, 3510C, 8270C, SEMI-VOLATILES IN TCLP EXTRACT BY GC/MS								
2,4,5-Trichlorophenol	NELAP	0.100		**ND**	mg/L	1	07/19/2022 11:15	194585
2,4,6-Trichlorophenol	NELAP	0.100		**ND**	mg/L	1	07/19/2022 11:15	194585
2,4-Dinitrotoluene	NELAP	0.100		**ND**	mg/L	1	07/19/2022 11:15	194585
Cresols, Total	NELAP	0.200		**ND**	mg/L	1	07/19/2022 11:15	194585
Hexachlorobenzene	NELAP	0.100		**ND**	mg/L	1	07/19/2022 11:15	194585
Hexachlorobutadiene	NELAP	0.100		**ND**	mg/L	1	07/19/2022 11:15	194585
Hexachloroethane	NELAP	0.100		**ND**	mg/L	1	07/19/2022 11:15	194585
m,p-Cresol	NELAP	0.100		**ND**	mg/L	1	07/19/2022 11:15	194585
Nitrobenzene	NELAP	0.100		**ND**	mg/L	1	07/19/2022 11:15	194585
o-Cresol	NELAP	0.100		**ND**	mg/L	1	07/19/2022 11:15	194585
Pentachlorophenol	NELAP	0.200		**ND**	mg/L	1	07/19/2022 11:15	194585
Pyridine	NELAP	0.200		**ND**	mg/L	1	07/19/2022 11:15	194585
Surr: 2,4,6-Tribromophenol	*	50.5-124		**78.4**	%REC	1	07/19/2022 11:15	194585
Surr: 2-Fluorobiphenyl	*	44.3-104		**71.9**	%REC	1	07/19/2022 11:15	194585
Surr: 2-Fluorophenol	*	30.2-83.3		**55.3**	%REC	1	07/19/2022 11:15	194585
Surr: Nitrobenzene-d5	*	34-108		**65.3**	%REC	1	07/19/2022 11:15	194585
Surr: Phenol-d5	*	23.2-62.1		**42.3**	%REC	1	07/19/2022 11:15	194585
Surr: p-Terphenyl-d14	*	38.5-117		**88.5**	%REC	1	07/19/2022 11:15	194585
SW-846 3550B, 8082, POLYCHLORINATED BIPHENYLS (PCBS) BY GC/ECD								
Aroclor 1016	NELAP	39.6		**ND**	µg/Kg-dry	1	07/18/2022 17:08	194615
Aroclor 1221	NELAP	39.6		**ND**	µg/Kg-dry	1	07/18/2022 17:08	194615
Aroclor 1232	NELAP	39.6		**ND**	µg/Kg-dry	1	07/18/2022 17:08	194615
Aroclor 1242	NELAP	39.6		**ND**	µg/Kg-dry	1	07/18/2022 17:08	194615
Aroclor 1248	NELAP	39.6		**ND**	µg/Kg-dry	1	07/18/2022 17:08	194615
Aroclor 1254	NELAP	39.6		**ND**	µg/Kg-dry	1	07/18/2022 17:08	194615
Aroclor 1260	NELAP	39.6		**ND**	µg/Kg-dry	1	07/18/2022 17:08	194615
Surr: Decachlorobiphenyl	*	40.2-131		**88.5**	%REC	1	07/18/2022 17:08	194615
Surr: Tetrachloro-meta-xylene	*	39-122		**93.3**	%REC	1	07/18/2022 17:08	194615

Client: Environmental Operations, Inc. **Work Order:** 22070650

Client Project: IDOT 68G74 / 22556 **Report Date:** 21-Jul-22

Lab ID: 22070650-001 **Client Sample ID:** SS-68G74-1

Matrix: SOLID **Collection Date:** 07/11/2022 18:44

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 1311, 5030, 8260B, VOLATILE ORGANIC COMPOUNDS IN TCLP EXTRACT BY GC/MS								
1,1-Dichloroethene	NELAP	0.200		**ND**	mg/L	100	07/19/2022 12:35	194692
1,2-Dichloroethane	NELAP	0.200		**ND**	mg/L	100	07/19/2022 12:35	194692
1,4-Dichlorobenzene	NELAP	0.200		**ND**	mg/L	100	07/19/2022 12:35	194692
2-Butanone	NELAP	1.00		**ND**	mg/L	100	07/19/2022 12:35	194692
Benzene	NELAP	0.050		**ND**	mg/L	100	07/19/2022 12:35	194692
Carbon tetrachloride	NELAP	0.200		**ND**	mg/L	100	07/19/2022 12:35	194692
Chlorobenzene	NELAP	0.200		**ND**	mg/L	100	07/19/2022 12:35	194692
Chloroform	NELAP	0.200		**ND**	mg/L	100	07/19/2022 12:35	194692
Tetrachloroethene	NELAP	0.050		**ND**	mg/L	100	07/19/2022 12:35	194692
Trichloroethene	NELAP	0.200		**ND**	mg/L	100	07/19/2022 12:35	194692
Vinyl chloride	NELAP	0.200		**ND**	mg/L	100	07/19/2022 12:35	194692
Surr: 1,2-Dichloroethane-d4	*	80-120		**97.5**	%REC	100	07/19/2022 12:35	194692
Surr: 4-Bromofluorobenzene	*	80-120		**89.4**	%REC	100	07/19/2022 12:35	194692
Surr: Dibromofluoromethane	*	80-120		**106.6**	%REC	100	07/19/2022 12:35	194692
Surr: Toluene-d8	*	80-120		**92.3**	%REC	100	07/19/2022 12:35	194692

Client: Environmental Operations, Inc. **Work Order:** 22070650

Client Project: IDOT 68G74 / 22556 **Report Date:** 21-Jul-22

Lab ID: 22070650-002 **Client Sample ID:** SS-68G74-2

Matrix: SOLID **Collection Date:** 07/11/2022 19:33

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
ASTM D92								
Ignitability, Open Cup	*	60		**>200**	°F	1	07/15/2022 10:43	R314507
EPA SW846 3550B, 5035A, ASTM D2974								
Percent Moisture	*	0.1		**14.9**	%	1	07/14/2022 12:37	R314486
SW-846 9045C								
pH (1:1)	NELAP	1.00		**7.70**		1	07/14/2022 16:48	R314444
SW-846 9095								
Paint Filter	NELAP	0		**Pass**	Pass/Fail	1	07/15/2022 09:54	R314484
SW-846 1311, 3010A, 6010B, METALS IN TCLP EXTRACT BY ICP								
Arsenic	NELAP	0.250		**< 0.250**	mg/L	1	07/20/2022 12:49	194670
Barium	NELAP	0.450		**0.828**	mg/L	1	07/20/2022 12:49	194670
Cadmium	NELAP	0.0200		**< 0.0200**	mg/L	1	07/20/2022 12:49	194670
Chromium	NELAP	0.100		**< 0.100**	mg/L	1	07/20/2022 12:49	194670
Lead	NELAP	0.400		**< 0.400**	mg/L	1	07/20/2022 12:49	194670
Selenium	NELAP	0.500		**< 0.500**	mg/L	1	07/20/2022 12:49	194670
Silver	NELAP	0.0700		**< 0.0700**	mg/L	1	07/20/2022 12:49	194670
SW-846 1311, 7470A IN TCLP EXTRACT								
Mercury	NELAP	0.00020		**< 0.00020**	mg/L	1	07/18/2022 17:03	194586
SW-846 1311, 3510C, 8270C, SEMI-VOLATILES IN TCLP EXTRACT BY GC/MS								
2,4,5-Trichlorophenol	NELAP	0.100		**ND**	mg/L	1	07/19/2022 12:23	194585
2,4,6-Trichlorophenol	NELAP	0.100		**ND**	mg/L	1	07/19/2022 12:23	194585
2,4-Dinitrotoluene	NELAP	0.100		**ND**	mg/L	1	07/19/2022 12:23	194585
Cresols, Total	NELAP	0.200		**ND**	mg/L	1	07/19/2022 12:23	194585
Hexachlorobenzene	NELAP	0.100		**ND**	mg/L	1	07/19/2022 12:23	194585
Hexachlorobutadiene	NELAP	0.100		**ND**	mg/L	1	07/19/2022 12:23	194585
Hexachloroethane	NELAP	0.100		**ND**	mg/L	1	07/19/2022 12:23	194585
m,p-Cresol	NELAP	0.100		**ND**	mg/L	1	07/19/2022 12:23	194585
Nitrobenzene	NELAP	0.100		**ND**	mg/L	1	07/19/2022 12:23	194585
o-Cresol	NELAP	0.100		**ND**	mg/L	1	07/19/2022 12:23	194585
Pentachlorophenol	NELAP	0.200		**ND**	mg/L	1	07/19/2022 12:23	194585
Pyridine	NELAP	0.200		**ND**	mg/L	1	07/19/2022 12:23	194585
Surr: 2,4,6-Tribromophenol	*	50.5-124		**75.5**	%REC	1	07/19/2022 12:23	194585
Surr: 2-Fluorobiphenyl	*	44.3-104		**71.6**	%REC	1	07/19/2022 12:23	194585
Surr: 2-Fluorophenol	*	30.2-83.3		**49.0**	%REC	1	07/19/2022 12:23	194585
Surr: Nitrobenzene-d5	*	34-108		**65.2**	%REC	1	07/19/2022 12:23	194585
Surr: Phenol-d5	*	23.2-62.1		**39.1**	%REC	1	07/19/2022 12:23	194585
Surr: p-Terphenyl-d14	*	38.5-117		**66.8**	%REC	1	07/19/2022 12:23	194585
SW-846 3550B, 8082, POLYCHLORINATED BIPHENYLS (PCBS) BY GC/ECD								
Aroclor 1016	NELAP	43.7		**ND**	µg/Kg-dry	1	07/18/2022 17:25	194615
Aroclor 1221	NELAP	43.7		**ND**	µg/Kg-dry	1	07/18/2022 17:25	194615
Aroclor 1232	NELAP	43.7		**ND**	µg/Kg-dry	1	07/18/2022 17:25	194615
Aroclor 1242	NELAP	43.7		**ND**	µg/Kg-dry	1	07/18/2022 17:25	194615
Aroclor 1248	NELAP	43.7		**ND**	µg/Kg-dry	1	07/18/2022 17:25	194615
Aroclor 1254	NELAP	43.7		**ND**	µg/Kg-dry	1	07/18/2022 17:25	194615
Aroclor 1260	NELAP	43.7		**ND**	µg/Kg-dry	1	07/18/2022 17:25	194615
Surr: Decachlorobiphenyl	*	40.2-131		**78.1**	%REC	1	07/18/2022 17:25	194615
Surr: Tetrachloro-meta-xylene	*	39-122		**90.5**	%REC	1	07/18/2022 17:25	194615

Client: Environmental Operations, Inc. **Work Order:** 22070650

Client Project: IDOT 68G74 / 22556 **Report Date:** 21-Jul-22

Lab ID: 22070650-002 **Client Sample ID:** SS-68G74-2

Matrix: SOLID **Collection Date:** 07/11/2022 19:33

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 1311, 5030, 8260B, VOLATILE ORGANIC COMPOUNDS IN TCLP EXTRACT BY GC/MS								
1,1-Dichloroethene	NELAP	0.200		**ND**	mg/L	100	07/19/2022 13:02	194692
1,2-Dichloroethane	NELAP	0.200		**ND**	mg/L	100	07/19/2022 13:02	194692
1,4-Dichlorobenzene	NELAP	0.200		**ND**	mg/L	100	07/19/2022 13:02	194692
2-Butanone	NELAP	1.00		**ND**	mg/L	100	07/19/2022 13:02	194692
Benzene	NELAP	0.050		**ND**	mg/L	100	07/19/2022 13:02	194692
Carbon tetrachloride	NELAP	0.200		**ND**	mg/L	100	07/19/2022 13:02	194692
Chlorobenzene	NELAP	0.200		**ND**	mg/L	100	07/19/2022 13:02	194692
Chloroform	NELAP	0.200		**ND**	mg/L	100	07/19/2022 13:02	194692
Tetrachloroethene	NELAP	0.050		**ND**	mg/L	100	07/19/2022 13:02	194692
Trichloroethene	NELAP	0.200		**ND**	mg/L	100	07/19/2022 13:02	194692
Vinyl chloride	NELAP	0.200		**ND**	mg/L	100	07/19/2022 13:02	194692
Surr: 1,2-Dichloroethane-d4	*	80-120		**99.6**	%REC	100	07/19/2022 13:02	194692
Surr: 4-Bromofluorobenzene	*	80-120		**89.5**	%REC	100	07/19/2022 13:02	194692
Surr: Dibromofluoromethane	*	80-120		**105.7**	%REC	100	07/19/2022 13:02	194692
Surr: Toluene-d8	*	80-120		**92.7**	%REC	100	07/19/2022 13:02	194692

Client: Environmental Operations, Inc. **Work Order:** 22070650

Client Project: IDOT 68G74 / 22556 **Report Date:** 21-Jul-22

Lab ID: 22070650-003 **Client Sample ID:** SS-68G74-3

Matrix: SOLID **Collection Date:** 07/11/2022 19:45

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
ASTM D92								
Ignitability, Open Cup	*	60		**>200**	°F	1	07/18/2022 11:56	R314557
EPA SW846 3550B, 5035A, ASTM D2974								
Percent Moisture	*	0.1		**9.8**	%	1	07/14/2022 12:37	R314486
SW-846 9045C								
pH (1:1)	NELAP	1.00		**7.97**		1	07/14/2022 16:52	R314444
SW-846 9095								
Paint Filter	NELAP	0		**Pass**	Pass/Fail	1	07/15/2022 09:58	R314484
SW-846 1311, 3010A, 6010B, METALS IN TCLP EXTRACT BY ICP								
Arsenic	NELAP	0.250		**< 0.250**	mg/L	1	07/20/2022 12:50	194670
Barium	NELAP	0.450		**1.04**	mg/L	1	07/20/2022 12:50	194670
Cadmium	NELAP	0.0200		**< 0.0200**	mg/L	1	07/20/2022 12:50	194670
Chromium	NELAP	0.100		**< 0.100**	mg/L	1	07/20/2022 12:50	194670
Lead	NELAP	0.400		**< 0.400**	mg/L	1	07/20/2022 12:50	194670
Selenium	NELAP	0.500		**< 0.500**	mg/L	1	07/20/2022 12:50	194670
Silver	NELAP	0.0700		**< 0.0700**	mg/L	1	07/20/2022 12:50	194670
SW-846 1311, 7470A IN TCLP EXTRACT								
Mercury	NELAP	0.00020		**< 0.00020**	mg/L	1	07/18/2022 17:09	194586
SW-846 1311, 3510C, 8270C, SEMI-VOLATILES IN TCLP EXTRACT BY GC/MS								
2,4,5-Trichlorophenol	NELAP	0.100		**ND**	mg/L	1	07/19/2022 12:57	194585
2,4,6-Trichlorophenol	NELAP	0.100		**ND**	mg/L	1	07/19/2022 12:57	194585
2,4-Dinitrotoluene	NELAP	0.100		**ND**	mg/L	1	07/19/2022 12:57	194585
Cresols, Total	NELAP	0.200		**ND**	mg/L	1	07/19/2022 12:57	194585
Hexachlorobenzene	NELAP	0.100		**ND**	mg/L	1	07/19/2022 12:57	194585
Hexachlorobutadiene	NELAP	0.100		**ND**	mg/L	1	07/19/2022 12:57	194585
Hexachloroethane	NELAP	0.100		**ND**	mg/L	1	07/19/2022 12:57	194585
m,p-Cresol	NELAP	0.100		**ND**	mg/L	1	07/19/2022 12:57	194585
Nitrobenzene	NELAP	0.100		**ND**	mg/L	1	07/19/2022 12:57	194585
o-Cresol	NELAP	0.100		**ND**	mg/L	1	07/19/2022 12:57	194585
Pentachlorophenol	NELAP	0.200		**ND**	mg/L	1	07/19/2022 12:57	194585
Pyridine	NELAP	0.200		**ND**	mg/L	1	07/19/2022 12:57	194585
Surr: 2,4,6-Tribromophenol	*	50.5-124		**77.3**	%REC	1	07/19/2022 12:57	194585
Surr: 2-Fluorobiphenyl	*	44.3-104		**75.9**	%REC	1	07/19/2022 12:57	194585
Surr: 2-Fluorophenol	*	30.2-83.3		**54.8**	%REC	1	07/19/2022 12:57	194585
Surr: Nitrobenzene-d5	*	34-108		**68.3**	%REC	1	07/19/2022 12:57	194585
Surr: Phenol-d5	*	23.2-62.1		**43.2**	%REC	1	07/19/2022 12:57	194585
Surr: p-Terphenyl-d14	*	38.5-117		**69.0**	%REC	1	07/19/2022 12:57	194585
SW-846 3550B, 8082, POLYCHLORINATED BIPHENYLS (PCBS) BY GC/ECD								
Aroclor 1016	NELAP	41.8		**ND**	µg/Kg-dry	1	07/18/2022 17:42	194615
Aroclor 1221	NELAP	41.8		**ND**	µg/Kg-dry	1	07/18/2022 17:42	194615
Aroclor 1232	NELAP	41.8		**ND**	µg/Kg-dry	1	07/18/2022 17:42	194615
Aroclor 1242	NELAP	41.8		**ND**	µg/Kg-dry	1	07/18/2022 17:42	194615
Aroclor 1248	NELAP	41.8		**ND**	µg/Kg-dry	1	07/18/2022 17:42	194615
Aroclor 1254	NELAP	41.8		**ND**	µg/Kg-dry	1	07/18/2022 17:42	194615
Aroclor 1260	NELAP	41.8		**ND**	µg/Kg-dry	1	07/18/2022 17:42	194615
Surr: Decachlorobiphenyl	*	40.2-131		**79.7**	%REC	1	07/18/2022 17:42	194615
Surr: Tetrachloro-meta-xylene	*	39-122		**103.0**	%REC	1	07/18/2022 17:42	194615

Client: Environmental Operations, Inc. **Work Order:** 22070650

Client Project: IDOT 68G74 / 22556 **Report Date:** 21-Jul-22

Lab ID: 22070650-003 **Client Sample ID:** SS-68G74-3

Matrix: SOLID **Collection Date:** 07/11/2022 19:45

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 1311, 5030, 8260B, VOLATILE ORGANIC COMPOUNDS IN TCLP EXTRACT BY GC/MS								
1,1-Dichloroethene	NELAP	0.200		**ND**	mg/L	100	07/19/2022 13:28	194692
1,2-Dichloroethane	NELAP	0.200		**ND**	mg/L	100	07/19/2022 13:28	194692
1,4-Dichlorobenzene	NELAP	0.200		**ND**	mg/L	100	07/19/2022 13:28	194692
2-Butanone	NELAP	1.00		**ND**	mg/L	100	07/19/2022 13:28	194692
Benzene	NELAP	0.050		**ND**	mg/L	100	07/19/2022 13:28	194692
Carbon tetrachloride	NELAP	0.200		**ND**	mg/L	100	07/19/2022 13:28	194692
Chlorobenzene	NELAP	0.200		**ND**	mg/L	100	07/19/2022 13:28	194692
Chloroform	NELAP	0.200		**ND**	mg/L	100	07/19/2022 13:28	194692
Tetrachloroethene	NELAP	0.050		**ND**	mg/L	100	07/19/2022 13:28	194692
Trichloroethene	NELAP	0.200		**ND**	mg/L	100	07/19/2022 13:28	194692
Vinyl chloride	NELAP	0.200		**ND**	mg/L	100	07/19/2022 13:28	194692
Surr: 1,2-Dichloroethane-d4	*	80-120		**100.4**	%REC	100	07/19/2022 13:28	194692
Surr: 4-Bromofluorobenzene	*	80-120		**91.6**	%REC	100	07/19/2022 13:28	194692
Surr: Dibromofluoromethane	*	80-120		**106.9**	%REC	100	07/19/2022 13:28	194692
Surr: Toluene-d8	*	80-120		**92.7**	%REC	100	07/19/2022 13:28	194692

Client: Environmental Operations, Inc. **Work Order:** 22070650

Client Project: IDOT 68G74 / 22556 **Report Date:** 21-Jul-22

ASTM D92

Batch R314507 **SampType:** DUP Units °F RPD Limit 5

SampID: 22070649-003ADUP

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Ignitability, Open Cup	*	60		**>200**				0	0.00	07/15/2022

Batch R314507 **SampType:** DUP Units °F RPD Limit 5

SampID: 22070665-008ADUP

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Ignitability, Open Cup	*	60		**>200**				0	0.00	07/15/2022

Batch R314507 **SampType:** DUP Units °F RPD Limit 5

SampID: 22070930-001ADUP

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Ignitability, Open Cup	*	60		**>200**				0	0.00	07/15/2022

Batch R314557 **SampType:** DUP Units °F RPD Limit 5

SampID: 22070782-001CDUP

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Ignitability, Open Cup	*	60		**>200**				0	0.00	07/18/2022

Batch R314557 **SampType:** DUP Units °F RPD Limit 5

SampID: 22070932-002ADUP

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Ignitability, Open Cup	*	60		**>200**				0	0.00	07/18/2022

EPA SW846 3550B, 5035A, ASTM D2974

Batch R314486 **SampType:** LCS Units %

SampID: LCS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Percent Moisture	*	0.1		**99.0**	99.00	0	100.0	90	110	07/14/2022

Batch R314486 **SampType:** LCSQC Units %

SampID: LCSQC

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Percent Moisture	*	0.1		**99.0**	99.00	0	100.0	90	110	07/14/2022

Client: Environmental Operations, Inc. **Work Order:** 22070650

Client Project: IDOT 68G74 / 22556 **Report Date:** 21-Jul-22

SW-846 9045C

Batch R314444 **SampType:** LCS Units

SampID: LCS-R314444

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
pH (1:1)		1.00		**6.98**	7.000	0	99.7	99.1	100.8	07/14/2022

Batch R314444 **SampType:** DUP Units RPD Limit **10**

SampID: 22070650-001ADUP

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
pH (1:1)		1.00		**8.27**				8.080	2.32	07/14/2022

Batch R314444 **SampType:** DUP Units RPD Limit **10**

SampID: 22070650-002ADUP

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
pH (1:1)		1.00		**7.67**				7.700	0.39	07/14/2022

Batch R314444 **SampType:** DUP Units RPD Limit **10**

SampID: 22070650-003ADUP

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
pH (1:1)		1.00		**7.91**				7.970	0.76	07/14/2022

Batch R314444 **SampType:** DUP Units RPD Limit **10**

SampID: 22070649-001ADUP

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
pH (1:1)		1.00		**7.40**				7.760	4.75	07/14/2022

Batch R314444 **SampType:** DUP Units RPD Limit **10**

SampID: 22070649-002ADUP

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
pH (1:1)		1.00		**7.70**				7.640	0.78	07/14/2022

Batch R314444 **SampType:** DUP Units RPD Limit **10**

SampID: 22070649-003ADUP

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
pH (1:1)		1.00		**8.05**				7.960	1.12	07/14/2022

Batch R314444 **SampType:** DUP Units RPD Limit **10**

SampID: 22070649-004ADUP

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
pH (1:1)		1.00		**7.79**				7.940	1.91	07/14/2022

Client: Environmental Operations, Inc. **Work Order:** 22070650

Client Project: IDOT 68G74 / 22556 **Report Date:** 21-Jul-22

SW-846 9045C

Batch R314444 **SampType:** DUP Units RPD Limit **10**

SampID: 22070649-005ADUP

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
pH (1:1)		1.00		**8.45**				8.470	0.24	07/14/2022

Batch R314444 **SampType:** DUP Units RPD Limit **10**

SampID: 22070651-001ADUP

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
pH (1:1)		1.00		**8.60**				8.570	0.35	07/14/2022

Batch R314444 **SampType:** DUP Units RPD Limit **10**

SampID: 22070651-002ADUP

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
pH (1:1)		1.00		**8.37**				8.250	1.44	07/14/2022

Batch R314444 **SampType:** DUP Units RPD Limit **10**

SampID: 22070651-003ADUP

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
pH (1:1)		1.00		**8.39**				8.430	0.48	07/14/2022

Batch R314444 **SampType:** DUP Units RPD Limit **10**

SampID: 22070651-004ADUP

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
pH (1:1)		1.00		**8.42**				8.350	0.83	07/14/2022

Batch R314444 **SampType:** DUP Units RPD Limit **10**

SampID: 22070665-001ADUP

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
pH (1:1)		1.00		**7.56**				7.530	0.40	07/14/2022

Batch R314444 **SampType:** DUP Units RPD Limit **10**

SampID: 22070665-002ADUP

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
pH (1:1)		1.00		**8.41**				8.580	2.00	07/14/2022

Batch R314444 **SampType:** DUP Units RPD Limit **10**

SampID: 22070665-003ADUP

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
pH (1:1)		1.00		**8.67**				8.850	2.05	07/14/2022

Client: Environmental Operations, Inc. **Work Order:** 22070650

Client Project: IDOT 68G74 / 22556 **Report Date:** 21-Jul-22

SW-846 9045C

Batch R314444 **SampType:** DUP Units RPD Limit **10**

SampID: 22070665-004ADUP

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
pH (1:1)		1.00		**8.53**				8.700	1.97	07/14/2022

Batch R314444 **SampType:** DUP Units RPD Limit **10**

SampID: 22070665-005ADUP

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
pH (1:1)		1.00		**8.79**				8.720	0.80	07/14/2022

Batch R314444 **SampType:** DUP Units RPD Limit **10**

SampID: 22070665-006ADUP

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
pH (1:1)		1.00		**8.63**				8.460	1.99	07/14/2022

Batch R314444 **SampType:** DUP Units RPD Limit **10**

SampID: 22070665-007ADUP

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
pH (1:1)		1.00		**9.14**				9.180	0.44	07/14/2022

SW-846 9095

Batch R314484 **SampType:** DUP Units **Pass/Fail** RPD Limit **0**

SampID: 22070650-001ADUP

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Paint Filter		0		**Pass**				0	0.00	07/15/2022

Batch R314484 **SampType:** DUP Units **Pass/Fail** RPD Limit **0**

SampID: 22070650-002ADUP

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Paint Filter		0		**Pass**				0	0.00	07/15/2022

Batch R314484 **SampType:** DUP Units **Pass/Fail** RPD Limit **0**

SampID: 22070650-003ADUP

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Paint Filter		0		**Pass**				0	0.00	07/15/2022

Client: Environmental Operations, Inc. **Work Order:** 22070650

Client Project: IDOT 68G74 / 22556 **Report Date:** 21-Jul-22

SW-846 9095

Batch R314484 **SampType:** DUP Units **Pass/Fail** RPD Limit **0**

SampID: 22070622-001BDUP

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Paint Filter		0		**Pass**				0	0.00	07/15/2022

Batch R314484 **SampType:** DUP Units **Pass/Fail** RPD Limit **0**

SampID: 22070622-002BDUP

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Paint Filter		0		**Pass**				0	0.00	07/15/2022

Batch R314484 **SampType:** DUP Units **Pass/Fail** RPD Limit **0**

SampID: 22070622-003BDUP

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Paint Filter		0		**Pass**				0	0.00	07/15/2022

Batch R314484 **SampType:** DUP Units **Pass/Fail** RPD Limit **0**

SampID: 22070624-016ADUP

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Paint Filter		0		**Pass**				0	0.00	07/15/2022

Batch R314484 **SampType:** DUP Units **Pass/Fail** RPD Limit **0**

SampID: 22070649-001ADUP

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Paint Filter		0		**Pass**				0	0.00	07/15/2022

Batch R314484 **SampType:** DUP Units **Pass/Fail** RPD Limit **0**

SampID: 22070649-002ADUP

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Paint Filter		0		**Pass**				0	0.00	07/15/2022

Batch R314484 **SampType:** DUP Units **Pass/Fail** RPD Limit **0**

SampID: 22070649-003ADUP

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Paint Filter		0		**Pass**				0	0.00	07/15/2022

Batch R314484 **SampType:** DUP Units **Pass/Fail** RPD Limit **0**

SampID: 22070649-004ADUP

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Paint Filter		0		**Pass**				0	0.00	07/15/2022

Client: Environmental Operations, Inc. **Work Order:** 22070650

Client Project: IDOT 68G74 / 22556 **Report Date:** 21-Jul-22

SW-846 9095

Batch R314484 **SampType:** DUP Units **Pass/Fail** RPD Limit **0**

SampID: 22070649-005ADUP

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Paint Filter		0		**Pass**				0	0.00	07/15/2022

Batch R314484 **SampType:** DUP Units **Pass/Fail** RPD Limit **0**

SampID: 22070651-001ADUP

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Paint Filter		0		**Pass**				0	0.00	07/15/2022

Batch R314484 **SampType:** DUP Units **Pass/Fail** RPD Limit **0**

SampID: 22070651-002ADUP

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Paint Filter		0		**Pass**				0	0.00	07/15/2022

Batch R314484 **SampType:** DUP Units **Pass/Fail** RPD Limit **0**

SampID: 22070651-003ADUP

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Paint Filter		0		**Pass**				0	0.00	07/15/2022

Batch R314484 **SampType:** DUP Units **Pass/Fail** RPD Limit **0**

SampID: 22070651-004ADUP

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Paint Filter		0		**Pass**				0	0.00	07/15/2022

SW-846 1311, 3010A, 6010B, METALS IN TCLP EXTRACT BY ICP

Batch 194670 **SampType:** MBLK Units **mg/L**

SampID: MBLK-194670

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Arsenic		0.250		**< 0.250**	0.0870	0	0	-100	100	07/20/2022
Barium		0.450		**< 0.450**	0.1500	0	0	-100	100	07/20/2022
Cadmium		0.0200		**< 0.0200**	0.0050	0	0	-100	100	07/20/2022
Chromium		0.100		**< 0.100**	0.0340	0	0	-100	100	07/20/2022
Lead		0.400		**< 0.400**	0.0400	0	0	-100	100	07/20/2022
Selenium		0.500		**< 0.500**	0.1700	0	0	-100	100	07/20/2022
Silver		0.0700		**< 0.0700**	0.0270	0	0	-100	100	07/20/2022

Client: Environmental Operations, Inc. **Work Order:** 22070650

Client Project: IDOT 68G74 / 22556 **Report Date:** 21-Jul-22

SW-846 1311, 3010A, 6010B, METALS IN TCLP EXTRACT BY ICP

Batch 194670 **SampType:** LCS Units **mg/L**

SampID: LCS-194670

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Arsenic		0.250		**4.73**	5.000	0	94.5	85	115	07/20/2022
Barium		0.450		**17.9**	20.00	0	89.7	85	115	07/20/2022
Cadmium		0.0200		**0.467**	0.5000	0	93.4	85	115	07/20/2022
Chromium		0.100		**1.80**	2.000	0	89.8	85	115	07/20/2022
Lead		0.400		**4.56**	5.000	0	91.2	85	115	07/20/2022
Selenium		0.500		**4.51**	5.000	0	90.2	85	115	07/20/2022
Silver		0.0700		**0.449**	0.5000	0	89.8	85	115	07/20/2022

Batch 194670 **SampType:** MS Units **mg/L**

SampID: 22070649-003AMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Arsenic		0.250		**4.74**	5.000	0	94.7	75	125	07/20/2022
Barium		0.450		**18.3**	20.00	0.6160	88.6	75	125	07/20/2022
Cadmium		0.0200		**0.460**	0.5000	0	92.0	75	125	07/20/2022
Chromium		0.100		**1.79**	2.000	0	89.7	75	125	07/20/2022
Lead		0.400		**4.52**	5.000	0	90.3	75	125	07/20/2022
Selenium		0.500		**4.51**	5.000	0	90.3	75	125	07/20/2022
Silver		0.0700		**0.448**	0.5000	0	89.6	75	125	07/20/2022

Batch 194670 **SampType:** MSD Units **mg/L** RPD Limit **20**

SampID: 22070649-003AMSD

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Arsenic		0.250		**4.77**	5.000	0	95.4	4.735	0.69	07/20/2022
Barium		0.450		**18.2**	20.00	0.6160	88.0	18.33	0.59	07/20/2022
Cadmium		0.0200		**0.477**	0.5000	0	95.4	0.4600	3.63	07/20/2022
Chromium		0.100		**1.81**	2.000	0	90.4	1.793	0.83	07/20/2022
Lead		0.400		**4.54**	5.000	0	90.7	4.516	0.44	07/20/2022
Selenium		0.500		**4.47**	5.000	0	89.3	4.513	1.02	07/20/2022
Silver		0.0700		**0.453**	0.5000	0	90.6	0.4480	1.11	07/20/2022

Client: Environmental Operations, Inc. **Work Order:** 22070650

Client Project: IDOT 68G74 / 22556 **Report Date:** 21-Jul-22

SW-846 1311, 3010A, 6010B, METALS IN TCLP EXTRACT BY ICP

Batch 194670 **SampType:** MS Units **mg/L**

SampID: 22070650-001AMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Arsenic		0.250		**5.20**	5.000	0	104.0	75	125	07/20/2022
Barium		0.450		**21.3**	20.00	1.028	101.4	75	125	07/20/2022
Cadmium		0.0200		**0.523**	0.5000	0	104.6	75	125	07/20/2022
Chromium		0.100		**1.98**	2.000	0	99.0	75	125	07/20/2022
Lead		0.400		**5.00**	5.000	0	99.9	75	125	07/20/2022
Selenium		0.500		**4.87**	5.000	0	97.5	75	125	07/20/2022
Silver		0.0700		**0.484**	0.5000	0	96.8	75	125	07/20/2022

Batch 194670 **SampType:** MS Units **mg/L**

SampID: 22070651-003AMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Arsenic		0.250		**5.11**	5.000	0	102.2	75	125	07/20/2022
Barium		0.450		**20.9**	20.00	0.8820	100.1	75	125	07/20/2022
Cadmium		0.0200		**0.500**	0.5000	0	100.0	75	125	07/20/2022
Chromium		0.100		**1.95**	2.000	0	97.6	75	125	07/20/2022
Lead		0.400		**4.89**	5.000	0	97.9	75	125	07/20/2022
Selenium		0.500		**4.76**	5.000	0	95.3	75	125	07/20/2022
Silver		0.0700		**0.479**	0.5000	0	95.8	75	125	07/20/2022

Batch 194670 **SampType:** MS Units **mg/L**

SampID: 22070733-001AMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Arsenic		0.250		**5.03**	5.000	0	100.6	75	125	07/20/2022
Barium		0.450		**24.1**	20.00	4.062	100.2	75	125	07/20/2022
Cadmium		0.0200		**0.491**	0.5000	0	98.2	75	125	07/20/2022
Chromium		0.100		**2.00**	2.000	0.08500	95.6	75	125	07/20/2022
Lead		0.400		**4.82**	5.000	0	96.4	75	125	07/20/2022
Selenium		0.500		**4.78**	5.000	0	95.5	75	125	07/20/2022
Silver		0.0700		**0.466**	0.5000	0	93.2	75	125	07/20/2022

SW-846 1311, 7470A IN TCLP EXTRACT

Batch 194586 **SampType:** MBLK Units **mg/L**

SampID: MBLK-194586

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Mercury		0.00020		**< 0.00020**	0.0001	0	0	-100	100	07/18/2022

Client: Environmental Operations, Inc. **Work Order:** 22070650

Client Project: IDOT 68G74 / 22556 **Report Date:** 21-Jul-22

SW-846 1311, 7470A IN TCLP EXTRACT

Batch 194586 **SampType:** LCS Units **mg/L**
SampID: LCS-194586

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Mercury		0.00020		**0.00517**	0.0050	0	103.4	85	115	07/18/2022

Batch 194586 **SampType:** MS Units **mg/L**
SampID: 22070649-003AMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Mercury		0.00020		**0.00522**	0.0050	0	104.4	75	125	07/18/2022

Batch 194586 **SampType:** MS Units **mg/L**
SampID: 22070649-005AMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Mercury		0.00020		**0.00507**	0.0050	0	101.4	75	125	07/18/2022

Batch 194586 **SampType:** MS Units **mg/L**
SampID: 22070650-002AMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Mercury		0.00020		**0.00523**	0.0050	0	104.6	75	125	07/18/2022

Batch 194586 **SampType:** MSD Units **mg/L** RPD Limit **15**
SampID: 22070650-002AMSD

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Mercury		0.00020		**0.00519**	0.0050	0	103.8	0.005231	0.78	07/18/2022

Batch 194586 **SampType:** MS Units **mg/L**
SampID: 22070651-003AMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Mercury		0.00020		**0.00512**	0.0050	0	102.4	75	125	07/18/2022

Batch 194586 **SampType:** MSD Units **mg/L** RPD Limit **15**
SampID: 22070651-003AMSD

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Mercury		0.00020		**0.00516**	0.0050	0	103.2	0.005122	0.75	07/18/2022

Batch 194586 **SampType:** MS Units **mg/L**
SampID: 22070665-001AMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Mercury		0.00020		**0.00523**	0.0050	0	104.6	75	125	07/18/2022

Client: Environmental Operations, Inc. **Work Order:** 22070650

Client Project: IDOT 68G74 / 22556 **Report Date:** 21-Jul-22

SW-846 1311, 7470A IN TCLP EXTRACT

Batch 194586 **SampType:** MS Units **mg/L**

SampID: 22070665-002AMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Mercury		0.00020		**0.00531**	0.0050	0	106.2	75	125	07/18/2022

Batch 194586 **SampType:** MS Units **mg/L**

SampID: 22070733-001AMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Mercury		0.00020		**0.00530**	0.0050	0	106.1	75	125	07/18/2022

SW-846 1311, 3510C, 8270C, SEMI-VOLATILES IN TCLP EXTRACT BY GC/MS

Batch 194585 **SampType:** MBLK Units **mg/L**

SampID: MBLK-194585

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
2,4,5-Trichlorophenol		0.010		**ND**						07/15/2022
2,4,6-Trichlorophenol		0.010		**ND**						07/15/2022
2,4-Dinitrotoluene		0.010		**ND**						07/15/2022
Hexachlorobenzene		0.010		**ND**						07/15/2022
Hexachlorobutadiene		0.010		**ND**						07/15/2022
Hexachloroethane		0.010		**ND**						07/15/2022
m,p-Cresol		0.010		**ND**						07/15/2022
Nitrobenzene		0.010		**ND**						07/15/2022
o-Cresol		0.010		**ND**						07/15/2022
Pentachlorophenol		0.020		**ND**						07/15/2022
Pyridine		0.020		**ND**						07/15/2022
Surr: 2,4,6-Tribromophenol	*			**0.044**	0.0500		88.5	55.2	117	07/15/2022
Surr: 2-Fluorobiphenyl	*			**0.022**	0.0250		86.4	51.7	106	07/15/2022
Surr: 2-Fluorophenol	*			**0.033**	0.0500		65.2	37.9	84.1	07/15/2022
Surr: Nitrobenzene-d5	*			**0.019**	0.0250		77.4	45.6	104	07/15/2022
Surr: Phenol-d5	*			**0.025**	0.0500		50.5	24.3	66.8	07/15/2022
Surr: p-Terphenyl-d14	*			**0.025**	0.0250		101.0	44.2	118	07/15/2022

Client: Environmental Operations, Inc. **Work Order:** 22070650

Client Project: IDOT 68G74 / 22556 **Report Date:** 21-Jul-22

SW-846 1311, 3510C, 8270C, SEMI-VOLATILES IN TCLP EXTRACT BY GC/MS

Batch 194585 **SampType:** LCS Units **mg/L**

SampID: LCS-194585

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
2,4,5-Trichlorophenol		0.010		**0.042**	0.0500	0	84.3	58.3	107	07/15/2022
2,4,6-Trichlorophenol		0.010		**0.041**	0.0500	0	82.0	54.6	111	07/15/2022
2,4-Dinitrotoluene		0.010		**0.046**	0.0500	0	91.7	53.4	127	07/15/2022
Hexachlorobenzene		0.010		**0.044**	0.0500	0	88.1	49.9	125	07/15/2022
Hexachlorobutadiene		0.010		**0.035**	0.0500	0	70.3	47.5	113	07/15/2022
Hexachloroethane		0.010		**0.034**	0.0500	0	67.4	50	102	07/15/2022
m,p-Cresol		0.010		**0.039**	0.0500	0	78.4	41.8	97	07/15/2022
Nitrobenzene		0.010		**0.042**	0.0500	0	83.1	59.7	106	07/15/2022
o-Cresol		0.010		**0.042**	0.0500	0	84.1	48.8	104	07/15/2022
Pentachlorophenol		0.020		**0.031**	0.0500	0	61.1	48.9	89	07/15/2022
Pyridine		0.020		**ND**	0.0500	0	31.0	23.6	72.1	07/15/2022
Surr: 2,4,6-Tribromophenol	*			**0.042**	0.0500		84.8	55.2	117	07/15/2022
Surr: 2-Fluorobiphenyl	*			**0.020**	0.0250		81.6	51.7	106	07/15/2022
Surr: 2-Fluorophenol	*			**0.030**	0.0500		60.4	37.9	84.1	07/15/2022
Surr: Nitrobenzene-d5	*			**0.022**	0.0250		86.3	45.6	104	07/15/2022
Surr: Phenol-d5	*			**0.024**	0.0500		47.2	24.3	66.8	07/15/2022
Surr: p-Terphenyl-d14	*			**0.024**	0.0250		94.6	44.2	118	07/15/2022

Client: Environmental Operations, Inc. **Work Order:** 22070650

Client Project: IDOT 68G74 / 22556 **Report Date:** 21-Jul-22

SW-846 1311, 3510C, 8270C, SEMI-VOLATILES IN TCLP EXTRACT BY GC/MS

Batch 194585 **SampType:** LCSD Units **mg/L** RPD Limit **40**

SampID: LCSD-194585

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
2,4,5-Trichlorophenol		0.010		**0.046**	0.0500	0	92.6	0.04214	9.45	07/15/2022
2,4,6-Trichlorophenol		0.010		**0.045**	0.0500	0	89.4	0.04101	8.59	07/15/2022
2,4-Dinitrotoluene		0.010		**0.051**	0.0500	0	101.9	0.04584	10.56	07/15/2022
Hexachlorobenzene		0.010		**0.049**	0.0500	0	98.5	0.04405	11.13	07/15/2022
Hexachlorobutadiene		0.010		**0.043**	0.0500	0	86.9	0.03517	21.02	07/15/2022
Hexachloroethane		0.010		**0.041**	0.0500	0	82.5	0.03369	20.22	07/15/2022
m,p-Cresol		0.010		**0.044**	0.0500	0	88.6	0.03921	12.19	07/15/2022
Nitrobenzene		0.010		**0.046**	0.0500	0	92.8	0.04156	11.03	07/15/2022
o-Cresol		0.010		**0.047**	0.0500	0	94.9	0.04204	12.09	07/15/2022
Pentachlorophenol		0.020		**0.035**	0.0500	0	69.0	0.03057	12.14	07/15/2022
Pyridine		0.020	R	**0.031**	0.0500	0	62.4	0.01552	67.09	07/15/2022
Surr: 2,4,6-Tribromophenol	*			**0.045**	0.0500		90.5			07/15/2022
Surr: 2-Fluorobiphenyl	*			**0.022**	0.0250		88.4			07/15/2022
Surr: 2-Fluorophenol	*			**0.034**	0.0500		67.7			07/15/2022
Surr: Nitrobenzene-d5	*			**0.024**	0.0250		96.0			07/15/2022
Surr: Phenol-d5	*			**0.027**	0.0500		53.0			07/15/2022
Surr: p-Terphenyl-d14	*			**0.025**	0.0250		100.9			07/15/2022

Client: Environmental Operations, Inc. **Work Order:** 22070650

Client Project: IDOT 68G74 / 22556 **Report Date:** 21-Jul-22

SW-846 1311, 3510C, 8270C, SEMI-VOLATILES IN TCLP EXTRACT BY GC/MS

Batch 194585 **SampType:** MS Units **mg/L**

SampID: 22070649-002AMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
2,4,5-Trichlorophenol		0.100		**0.433**	0.5000	0	86.6	48.8	135	07/15/2022
2,4,6-Trichlorophenol		0.100		**0.418**	0.5000	0	83.5	49.1	133	07/15/2022
2,4-Dinitrotoluene		0.100		**0.473**	0.5000	0	94.6	57.2	125	07/15/2022
Hexachlorobenzene		0.100		**0.456**	0.5000	0	91.2	53.3	118	07/15/2022
Hexachlorobutadiene		0.100		**0.361**	0.5000	0	72.2	36.1	121	07/15/2022
Hexachloroethane		0.100		**0.347**	0.5000	0	69.3	39.9	102	07/15/2022
m,p-Cresol		0.100		**0.403**	0.5000	0	80.7	47.1	101	07/15/2022
Nitrobenzene		0.100		**0.434**	0.5000	0	86.9	48.5	108	07/15/2022
o-Cresol		0.100		**0.433**	0.5000	0	86.6	45.8	106	07/15/2022
Pentachlorophenol		0.200		**0.333**	0.5000	0	66.5	33.1	125	07/15/2022
Pyridine		0.200		**0.242**	0.5000	0	48.5	23.2	79.4	07/15/2022
Cresols, Total		0.200		**0.836**	1.000	0	83.6	45.8	104	07/15/2022
Surr: 2,4,6-Tribromophenol	*			**0.427**	0.5000		85.4	50.5	124	07/15/2022
Surr: 2-Fluorobiphenyl	*			**0.204**	0.2500		81.5	44.3	104	07/15/2022
Surr: 2-Fluorophenol	*			**0.309**	0.5000		61.8	30.2	83.3	07/15/2022
Surr: Nitrobenzene-d5	*			**0.220**	0.2500		87.9	34	108	07/15/2022
Surr: Phenol-d5	*			**0.242**	0.5000		48.3	23.2	62.1	07/15/2022
Surr: p-Terphenyl-d14	*			**0.226**	0.2500		90.4	38.5	117	07/15/2022

Client: Environmental Operations, Inc. **Work Order:** 22070650

Client Project: IDOT 68G74 / 22556 **Report Date:** 21-Jul-22

SW-846 1311, 3510C, 8270C, SEMI-VOLATILES IN TCLP EXTRACT BY GC/MS

Batch 194585 **SampType:** MSD Units **mg/L** RPD Limit **40**

SampID: 22070649-002AMSD

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
2,4,5-Trichlorophenol		0.100		**0.462**	0.5000	0	92.3	0.4330	6.42	07/15/2022
2,4,6-Trichlorophenol		0.100		**0.439**	0.5000	0	87.8	0.4176	4.95	07/15/2022
2,4-Dinitrotoluene		0.100		**0.493**	0.5000	0	98.7	0.4729	4.22	07/15/2022
Hexachlorobenzene		0.100		**0.466**	0.5000	0	93.1	0.4559	2.11	07/15/2022
Hexachlorobutadiene		0.100		**0.413**	0.5000	0	82.7	0.3610	13.51	07/15/2022
Hexachloroethane		0.100		**0.378**	0.5000	0	75.6	0.3467	8.69	07/15/2022
m,p-Cresol		0.100		**0.427**	0.5000	0	85.4	0.4033	5.76	07/15/2022
Nitrobenzene		0.100		**0.456**	0.5000	0	91.2	0.4345	4.78	07/15/2022
o-Cresol		0.100		**0.454**	0.5000	0	90.7	0.4331	4.62	07/15/2022
Pentachlorophenol		0.200		**0.343**	0.5000	0	68.6	0.3326	3.08	07/15/2022
Pyridine		0.200		**0.216**	0.5000	0	43.1	0.2424	11.75	07/15/2022
Cresols, Total		0.200		**0.881**	1.000	0	88.1	0.8364	5.17	07/15/2022
Surr: 2,4,6-Tribromophenol	*			**0.446**	0.5000		89.1			07/15/2022
Surr: 2-Fluorobiphenyl	*			**0.220**	0.2500		87.9			07/15/2022
Surr: 2-Fluorophenol	*			**0.327**	0.5000		65.3			07/15/2022
Surr: Nitrobenzene-d5	*			**0.235**	0.2500		94.0			07/15/2022
Surr: Phenol-d5	*			**0.260**	0.5000		52.1			07/15/2022
Surr: p-Terphenyl-d14	*			**0.223**	0.2500		89.1			07/15/2022

Client: Environmental Operations, Inc. **Work Order:** 22070650

Client Project: IDOT 68G74 / 22556 **Report Date:** 21-Jul-22

SW-846 1311, 3510C, 8270C, SEMI-VOLATILES IN TCLP EXTRACT BY GC/MS

Batch 194585 **SampType:** MS Units **mg/L**

SampID: 22070649-005AMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
2,4,5-Trichlorophenol		0.100		**0.429**	0.5000	0	85.7	48.8	135	07/16/2022
2,4,6-Trichlorophenol		0.100		**0.411**	0.5000	0	82.2	49.1	133	07/16/2022
2,4-Dinitrotoluene		0.100		**0.462**	0.5000	0	92.5	57.2	125	07/16/2022
Hexachlorobenzene		0.100		**0.441**	0.5000	0	88.1	53.3	118	07/16/2022
Hexachlorobutadiene		0.100		**0.381**	0.5000	0	76.3	36.1	121	07/16/2022
Hexachloroethane		0.100		**0.359**	0.5000	0	71.8	39.9	102	07/16/2022
m,p-Cresol		0.100		**0.400**	0.5000	0	80.0	47.1	101	07/16/2022
Nitrobenzene		0.100		**0.428**	0.5000	0	85.5	48.5	108	07/16/2022
o-Cresol		0.100		**0.428**	0.5000	0	85.7	45.8	106	07/16/2022
Pentachlorophenol		0.200		**0.318**	0.5000	0	63.5	33.1	125	07/16/2022
Pyridine		0.200		**ND**	0.5000	0	35.5	23.2	79.4	07/16/2022
Cresols, Total		0.200		**0.828**	1.000	0	82.8	45.8	104	07/16/2022
Surr: 2,4,6-Tribromophenol	*			**0.415**	0.5000		82.9	50.5	124	07/16/2022
Surr: 2-Fluorobiphenyl	*			**0.202**	0.2500		80.8	44.3	104	07/16/2022
Surr: 2-Fluorophenol	*			**0.303**	0.5000		60.7	30.2	83.3	07/16/2022
Surr: Nitrobenzene-d5	*			**0.218**	0.2500		87.2	34	108	07/16/2022
Surr: Phenol-d5	*			**0.238**	0.5000		47.7	23.2	62.1	07/16/2022
Surr: p-Terphenyl-d14	*			**0.209**	0.2500		83.6	38.5	117	07/16/2022

Client: Environmental Operations, Inc. **Work Order:** 22070650

Client Project: IDOT 68G74 / 22556 **Report Date:** 21-Jul-22

SW-846 1311, 3510C, 8270C, SEMI-VOLATILES IN TCLP EXTRACT BY GC/MS

Batch 194585 **SampType:** MS Units **mg/L**

SampID: 22070650-001AMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
2,4,5-Trichlorophenol		0.100		**0.418**	0.5000	0	83.6	51.8	109	07/19/2022
2,4,6-Trichlorophenol		0.100		**0.411**	0.5000	0	82.2	53.3	105	07/19/2022
2,4-Dinitrotoluene		0.100		**0.450**	0.5000	0	89.9	48.7	120	07/19/2022
Hexachlorobenzene		0.100		**0.427**	0.5000	0	85.4	53.1	114	07/19/2022
Hexachlorobutadiene		0.100		**0.372**	0.5000	0	74.4	40.9	106	07/19/2022
Hexachloroethane		0.100		**0.369**	0.5000	0	73.9	36.8	105	07/19/2022
m,p-Cresol		0.100		**0.394**	0.5000	0	78.7	42	99.3	07/19/2022
Nitrobenzene		0.100		**0.413**	0.5000	0	82.6	48.8	110	07/19/2022
o-Cresol		0.100		**0.424**	0.5000	0	84.7	47.2	105	07/19/2022
Pentachlorophenol		0.200		**0.298**	0.5000	0	59.7	40.3	91.7	07/19/2022
Pyridine		0.200		**ND**	0.5000	0	26.3	16	84.5	07/19/2022
Cresols, Total		0.200		**0.817**	1.000	0	81.7	45.7	102	07/19/2022
Surr: 2,4,6-Tribromophenol	*			**0.393**	0.5000		78.7	50.5	124	07/19/2022
Surr: 2-Fluorobiphenyl	*			**0.193**	0.2500		77.0	44.3	104	07/19/2022
Surr: 2-Fluorophenol	*			**0.296**	0.5000		59.2	30.2	83.3	07/19/2022
Surr: Nitrobenzene-d5	*			**0.208**	0.2500		83.2	34	108	07/19/2022
Surr: Phenol-d5	*			**0.231**	0.5000		46.3	23.2	62.1	07/19/2022
Surr: p-Terphenyl-d14	*			**0.211**	0.2500		84.3	38.5	117	07/19/2022

Client: Environmental Operations, Inc. **Work Order:** 22070650

Client Project: IDOT 68G74 / 22556 **Report Date:** 21-Jul-22

SW-846 1311, 3510C, 8270C, SEMI-VOLATILES IN TCLP EXTRACT BY GC/MS

Batch 194585 **SampType:** MS Units **mg/L**

SampID: 22070651-001AMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
2,4,5-Trichlorophenol		0.100		**0.397**	0.5000	0	79.4	51.8	109	07/19/2022
2,4,6-Trichlorophenol		0.100		**0.390**	0.5000	0	77.9	53.3	105	07/19/2022
2,4-Dinitrotoluene		0.100		**0.426**	0.5000	0	85.3	48.7	120	07/19/2022
Hexachlorobenzene		0.100		**0.404**	0.5000	0	80.7	53.1	114	07/19/2022
Hexachlorobutadiene		0.100		**0.364**	0.5000	0	72.7	40.9	106	07/19/2022
Hexachloroethane		0.100		**0.355**	0.5000	0	70.9	36.8	105	07/19/2022
m,p-Cresol		0.100		**0.384**	0.5000	0	76.8	42	99.3	07/19/2022
Nitrobenzene		0.100		**0.398**	0.5000	0	79.7	48.8	110	07/19/2022
o-Cresol		0.100		**0.412**	0.5000	0	82.4	47.2	105	07/19/2022
Pentachlorophenol		0.200		**0.282**	0.5000	0	56.5	40.3	91.7	07/19/2022
Pyridine		0.200		**0.269**	0.5000	0	53.8	16	84.5	07/19/2022
Cresols, Total		0.200		**0.796**	1.000	0	79.6	45.7	102	07/19/2022
Surr: 2,4,6-Tribromophenol	*			**0.380**	0.5000		76.0	50.5	124	07/19/2022
Surr: 2-Fluorobiphenyl	*			**0.190**	0.2500		76.0	44.3	104	07/19/2022
Surr: 2-Fluorophenol	*			**0.288**	0.5000		57.7	30.2	83.3	07/19/2022
Surr: Nitrobenzene-d5	*			**0.206**	0.2500		82.2	34	108	07/19/2022
Surr: Phenol-d5	*			**0.228**	0.5000		45.7	23.2	62.1	07/19/2022
Surr: p-Terphenyl-d14	*			**0.195**	0.2500		78.0	38.5	117	07/19/2022

SW-846 3550B, 8082, POLYCHLORINATED BIPHENYLS (PCBS) BY GC/ECD

Batch 194615 **SampType:** MBLK Units **µg/Kg**

SampID: MBLK-194615

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Aroclor 1016		37.5		**ND**						07/18/2022
Aroclor 1221		37.5		**ND**						07/18/2022
Aroclor 1232		37.5		**ND**						07/18/2022
Aroclor 1242		37.5		**ND**						07/18/2022
Aroclor 1248		37.5		**ND**						07/18/2022
Aroclor 1254		37.5		**ND**						07/18/2022
Aroclor 1260		37.5		**ND**						07/18/2022
Surr: Decachlorobiphenyl	*			**7.3**	8.300		88.0	77.5	146	07/18/2022
Surr: Tetrachloro-meta-xylene	*			**7.7**	8.300		92.3	64	120	07/18/2022

Client: Environmental Operations, Inc. **Work Order:** 22070650

Client Project: IDOT 68G74 / 22556 **Report Date:** 21-Jul-22

SW-846 3550B, 8082, POLYCHLORINATED BIPHENYLS (PCBS) BY GC/ECD

Batch 194615 **SampType:** LCS Units **µg/Kg**

SampID: LCSPCB-194615

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Aroclor 1016		37.5		**175**	166.7	0	105.2	75.8	122	07/18/2022
Aroclor 1260		37.5		**189**	166.7	0	113.6	79.7	132	07/18/2022
Surr: Decachlorobiphenyl	*			**8.0**	8.300		96.2	77.5	146	07/18/2022
Surr: Tetrachloro-meta-xylene	*			**8.3**	8.300		100.4	64	120	07/18/2022

Batch 194615 **SampType:** MS Units **µg/Kg-dry**

SampID: 22070727-005AMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Aroclor 1016		45.6		**187**	202.6	0	92.2	35.3	143	07/18/2022
Aroclor 1260		45.6		**213**	202.6	0	105.3	40.8	140	07/18/2022
Surr: Decachlorobiphenyl	*			**8.1**	10.09		80.1	40.2	131	07/18/2022
Surr: Tetrachloro-meta-xylene	*			**8.5**	10.09		84.6	39	122	07/18/2022

Batch 194615 **SampType:** MSD Units **µg/Kg-dry** RPD Limit **40**

SampID: 22070727-005AMSD

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Aroclor 1016		45.5		**166**	202.4	0	81.9	186.9	11.95	07/18/2022
Aroclor 1260		45.5		**193**	202.4	0	95.3	213.4	10.07	07/18/2022
Surr: Decachlorobiphenyl	*			**8.1**	10.08		80.4			07/18/2022
Surr: Tetrachloro-meta-xylene	*			**8.5**	10.08		84.0			07/18/2022

Client: Environmental Operations, Inc. **Work Order:** 22070650

Client Project: IDOT 68G74 / 22556 **Report Date:** 21-Jul-22

SW-846 1311, 5030, 8260B, VOLATILE ORGANIC COMPOUNDS IN TCLP EXTRACT BY GC/MS

Batch 194692 **SampType:** MBLK Units µg/L

SampID: MBLK-AE220719A-1

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
1,1-Dichloroethene	*	2.0		**ND**						07/19/2022
1,2-Dichloroethane	*	2.0		**ND**						07/19/2022
1,4-Dichlorobenzene	*	2.0		**ND**						07/19/2022
2-Butanone	*	10.0		**ND**						07/19/2022
Benzene	*	0.5		**ND**						07/19/2022
Carbon tetrachloride	*	2.0		**ND**						07/19/2022
Chlorobenzene	*	2.0		**ND**						07/19/2022
Chloroform	*	2.0		**ND**						07/19/2022
Tetrachloroethene	*	0.5		**ND**						07/19/2022
Trichloroethene	*	2.0		**ND**						07/19/2022
Vinyl chloride	*	2.0		**ND**						07/19/2022
Surr: 1,2-Dichloroethane-d4	*			**49.0**	50.00		98.0	80	120	07/19/2022
Surr: 4-Bromofluorobenzene	*			**45.6**	50.00		91.1	80	120	07/19/2022
Surr: Dibromofluoromethane	*			**52.8**	50.00		105.7	80	120	07/19/2022
Surr: Toluene-d8	*			**47.3**	50.00		94.6	80	120	07/19/2022

Batch 194692 **SampType:** LCS Units µg/L

SampID: LCS-AE220719A-1

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
1,1-Dichloroethene	*	2.0		**54.9**	50.00	0	109.7	69.4	127	07/19/2022
1,2-Dichloroethane	*	2.0		**54.2**	50.00	0	108.4	72.3	117	07/19/2022
1,4-Dichlorobenzene	*	2.0		**49.2**	50.00	0	98.4	73.9	112	07/19/2022
2-Butanone	*	10.0		**122**	125.0	0	97.5	68.8	134	07/19/2022
Benzene	*	0.5		**55.1**	50.00	0	110.1	78.5	119	07/19/2022
Carbon tetrachloride	*	2.0		**59.0**	50.00	0	117.9	70.9	127	07/19/2022
Chlorobenzene	*	2.0		**49.1**	50.00	0	98.2	80	111	07/19/2022
Chloroform	*	2.0		**55.7**	50.00	0	111.4	76.2	120	07/19/2022
Tetrachloroethene	*	0.5		**53.5**	50.00	0	106.9	70.1	120	07/19/2022
Trichloroethene	*	2.0		**57.0**	50.00	0	113.9	76.2	121	07/19/2022
Vinyl chloride	*	2.0		**52.0**	50.00	0	104.0	58.6	141	07/19/2022
Surr: 1,2-Dichloroethane-d4	*			**48.7**	50.00		97.5	80	120	07/19/2022
Surr: 4-Bromofluorobenzene	*			**45.7**	50.00		91.4	80	120	07/19/2022
Surr: Dibromofluoromethane	*			**52.8**	50.00		105.6	80	120	07/19/2022
Surr: Toluene-d8	*			**46.5**	50.00		92.9	80	120	07/19/2022

Client: Environmental Operations, Inc. **Work Order:** 22070650

Client Project: IDOT 68G74 / 22556 **Report Date:** 21-Jul-22

SW-846 1311, 5030, 8260B, VOLATILE ORGANIC COMPOUNDS IN TCLP EXTRACT BY GC/MS

Batch 194692 **SampType:** LCSD Units **µg/L** RPD Limit **30.5**

SampID: LCSD-AE220719A-1

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
1,1-Dichloroethene	*	2.0		**56.1**	50.00	0	112.2	54.86	2.24	07/19/2022
1,2-Dichloroethane	*	2.0		**54.0**	50.00	0	108.1	54.19	0.26	07/19/2022
1,4-Dichlorobenzene	*	2.0		**49.0**	50.00	0	97.9	49.22	0.51	07/19/2022
2-Butanone	*	10.0		**121**	125.0	0	96.5	121.9	0.99	07/19/2022
Benzene	*	0.5		**56.2**	50.00	0	112.5	55.06	2.12	07/19/2022
Carbon tetrachloride	*	2.0		**60.3**	50.00	0	120.6	58.95	2.25	07/19/2022
Chlorobenzene	*	2.0		**49.1**	50.00	0	98.2	49.10	0.00	07/19/2022
Chloroform	*	2.0		**56.8**	50.00	0	113.5	55.69	1.89	07/19/2022
Tetrachloroethene	*	0.5		**54.4**	50.00	0	108.8	53.46	1.74	07/19/2022
Trichloroethene	*	2.0		**57.8**	50.00	0	115.6	56.97	1.45	07/19/2022
Vinyl chloride	*	2.0		**54.4**	50.00	0	108.7	51.99	4.46	07/19/2022
Surr: 1,2-Dichloroethane-d4	*			**49.6**	50.00		99.3			07/19/2022
Surr: 4-Bromofluorobenzene	*			**45.9**	50.00		91.8			07/19/2022
Surr: Dibromofluoromethane	*			**53.5**	50.00		107.1			07/19/2022
Surr: Toluene-d8	*			**46.1**	50.00		92.3			07/19/2022

Batch 194692 **SampType:** MS Units **mg/L**

SampID: 22070649-004AMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
1,1-Dichloroethene		0.200		**4.46**	5.000	0	89.1	69.3	133	07/19/2022
1,2-Dichloroethane		0.200		**4.87**	5.000	0	97.4	79	117	07/19/2022
1,4-Dichlorobenzene		0.200		**4.38**	5.000	0	87.6	78.3	109	07/19/2022
2-Butanone		1.00		**4.36**	5.000	0	87.3	71.6	129	07/19/2022
Benzene		0.050		**5.00**	5.000	0	100.1	78.9	118	07/19/2022
Carbon tetrachloride		0.200		**5.33**	5.000	0	106.6	78.6	125	07/19/2022
Chlorobenzene		0.200		**4.48**	5.000	0	89.6	84.7	110	07/19/2022
Chloroform		0.200		**5.10**	5.000	0	102.1	80.9	117	07/19/2022
Tetrachloroethene		0.050		**4.67**	5.000	0	93.3	75.2	112	07/19/2022
Trichloroethene		0.200		**5.18**	5.000	0	103.6	80.4	121	07/19/2022
Vinyl chloride		0.200		**3.17**	5.000	0	63.4	44.3	144	07/19/2022
Surr: 1,2-Dichloroethane-d4	*			**5.04**	5.000		100.7	80	120	07/19/2022
Surr: 4-Bromofluorobenzene	*			**4.55**	5.000		90.9	80	120	07/19/2022
Surr: Dibromofluoromethane	*			**5.37**	5.000		107.3	80	120	07/19/2022
Surr: Toluene-d8	*			**4.61**	5.000		92.2	80	120	07/19/2022

Client: Environmental Operations, Inc. **Work Order:** 22070650

Client Project: IDOT 68G74 / 22556 **Report Date:** 21-Jul-22

SW-846 1311, 5030, 8260B, VOLATILE ORGANIC COMPOUNDS IN TCLP EXTRACT BY GC/MS

Batch 194692 **SampType:** MS Units **mg/L**

SampID: 22070649-005AMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
1,1-Dichloroethene		0.200		**4.44**	5.000	0	88.7	69.3	133	07/19/2022
1,2-Dichloroethane		0.200		**4.98**	5.000	0	99.6	79	117	07/19/2022
1,4-Dichlorobenzene		0.200		**4.47**	5.000	0	89.4	78.3	109	07/19/2022
2-Butanone		1.00		**4.47**	5.000	0	89.3	71.6	129	07/19/2022
Benzene		0.050		**5.05**	5.000	0	101.1	78.9	118	07/19/2022
Carbon tetrachloride		0.200		**5.30**	5.000	0	105.9	78.6	125	07/19/2022
Chlorobenzene		0.200		**4.56**	5.000	0	91.2	84.7	110	07/19/2022
Chloroform		0.200		**5.20**	5.000	0	103.9	80.9	117	07/19/2022
Tetrachloroethene		0.050		**4.67**	5.000	0	93.4	75.2	112	07/19/2022
Trichloroethene		0.200		**5.15**	5.000	0	103.1	80.4	121	07/19/2022
Vinyl chloride		0.200		**3.15**	5.000	0	62.9	44.3	144	07/19/2022
Surr: 1,2-Dichloroethane-d4	*			**4.94**	5.000		98.7	80	120	07/19/2022
Surr: 4-Bromofluorobenzene	*			**4.41**	5.000		88.2	80	120	07/19/2022
Surr: Dibromofluoromethane	*			**5.35**	5.000		107.0	80	120	07/19/2022
Surr: Toluene-d8	*			**4.58**	5.000		91.5	80	120	07/19/2022

Batch 194692 **SampType:** MS Units **mg/L**

SampID: 22070650-003AMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
1,1-Dichloroethene		0.200		**4.44**	5.000	0	88.9	69.3	133	07/19/2022
1,2-Dichloroethane		0.200		**4.90**	5.000	0	98.1	79	117	07/19/2022
1,4-Dichlorobenzene		0.200		**4.34**	5.000	0	86.9	78.3	109	07/19/2022
2-Butanone		1.00		**4.41**	5.000	0	88.1	71.6	129	07/19/2022
Benzene		0.050		**5.07**	5.000	0	101.4	78.9	118	07/19/2022
Carbon tetrachloride		0.200		**5.39**	5.000	0	107.9	78.6	125	07/19/2022
Chlorobenzene		0.200		**4.46**	5.000	0	89.2	84.7	110	07/19/2022
Chloroform		0.200		**5.14**	5.000	0	102.9	80.9	117	07/19/2022
Tetrachloroethene		0.050		**4.62**	5.000	0	92.5	75.2	112	07/19/2022
Trichloroethene		0.200		**5.20**	5.000	0	103.9	80.4	121	07/19/2022
Vinyl chloride		0.200		**3.12**	5.000	0	62.3	44.3	144	07/19/2022
Surr: 1,2-Dichloroethane-d4	*			**4.97**	5.000		99.5	80	120	07/19/2022
Surr: 4-Bromofluorobenzene	*			**4.50**	5.000		90.0	80	120	07/19/2022
Surr: Dibromofluoromethane	*			**5.29**	5.000		105.9	80	120	07/19/2022
Surr: Toluene-d8	*			**4.57**	5.000		91.4	80	120	07/19/2022

Client: Environmental Operations, Inc. **Work Order:** 22070650

Client Project: IDOT 68G74 / 22556 **Report Date:** 21-Jul-22

SW-846 1311, 5030, 8260B, VOLATILE ORGANIC COMPOUNDS IN TCLP EXTRACT BY GC/MS

Batch 194692 **SampType:** MS Units **mg/L**

SampID: 22070651-003AMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
1,1-Dichloroethene		0.200		**4.66**	5.000	0	93.3	69.3	133	07/19/2022
1,2-Dichloroethane		0.200		**5.11**	5.000	0	102.2	79	117	07/19/2022
1,4-Dichlorobenzene		0.200		**4.59**	5.000	0	91.8	78.3	109	07/19/2022
2-Butanone		1.00		**4.63**	5.000	0	92.6	71.6	129	07/19/2022
Benzene		0.050		**5.28**	5.000	0	105.5	78.9	118	07/19/2022
Carbon tetrachloride		0.200		**5.55**	5.000	0	111.0	78.6	125	07/19/2022
Chlorobenzene		0.200		**4.70**	5.000	0	94.1	84.7	110	07/19/2022
Chloroform		0.200		**5.37**	5.000	0.01800	107.0	80.9	117	07/19/2022
Tetrachloroethene		0.050		**4.91**	5.000	0	98.3	75.2	112	07/19/2022
Trichloroethene		0.200		**5.46**	5.000	0	109.2	80.4	121	07/19/2022
Vinyl chloride		0.200		**3.36**	5.000	0	67.1	44.3	144	07/19/2022
Surr: 1,2-Dichloroethane-d4	*			**4.99**	5.000		99.8	80	120	07/19/2022
Surr: 4-Bromofluorobenzene	*			**4.50**	5.000		90.0	80	120	07/19/2022
Surr: Dibromofluoromethane	*			**5.33**	5.000		106.6	80	120	07/19/2022
Surr: Toluene-d8	*			**4.56**	5.000		91.1	80	120	07/19/2022

Batch 194692 **SampType:** MS Units **mg/L**

SampID: 22070665-001AMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
1,1-Dichloroethene		0.200		**4.74**	5.000	0	94.8	69.3	133	07/19/2022
1,2-Dichloroethane		0.200		**5.24**	5.000	0	104.7	79	117	07/19/2022
1,4-Dichlorobenzene		0.200		**4.62**	5.000	0	92.5	78.3	109	07/19/2022
2-Butanone		1.00		**4.63**	5.000	0	92.6	71.6	129	07/19/2022
Benzene		0.050		**5.37**	5.000	0	107.4	78.9	118	07/19/2022
Carbon tetrachloride		0.200		**5.60**	5.000	0	112.1	78.6	125	07/19/2022
Chlorobenzene		0.200		**4.77**	5.000	0	95.4	84.7	110	07/19/2022
Chloroform		0.200		**5.44**	5.000	0	108.9	80.9	117	07/19/2022
Tetrachloroethene		0.050		**5.02**	5.000	0	100.3	75.2	112	07/19/2022
Trichloroethene		0.200		**5.54**	5.000	0	110.8	80.4	121	07/19/2022
Vinyl chloride		0.200		**3.33**	5.000	0	66.6	44.3	144	07/19/2022
Surr: 1,2-Dichloroethane-d4	*			**4.96**	5.000		99.3	80	120	07/19/2022
Surr: 4-Bromofluorobenzene	*			**4.47**	5.000		89.5	80	120	07/19/2022
Surr: Dibromofluoromethane	*			**5.36**	5.000		107.2	80	120	07/19/2022
Surr: Toluene-d8	*			**4.61**	5.000		92.2	80	120	07/19/2022

Client: Environmental Operations, Inc. **Work Order:** 22070650

Client Project: IDOT 68G74 / 22556 **Report Date:** 21-Jul-22

SW-846 1311, 5030, 8260B, VOLATILE ORGANIC COMPOUNDS IN TCLP EXTRACT BY GC/MS

Batch 194692 **SampType:** MSD Units **mg/L** RPD Limit **20**

SampID: 22070665-001AMSD

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
1,1-Dichloroethene		0.200		**4.14**	5.000	0	82.7	4.742	13.63	07/19/2022
1,2-Dichloroethane		0.200		**4.72**	5.000	0	94.3	5.235	10.41	07/19/2022
1,4-Dichlorobenzene		0.200		**4.18**	5.000	0	83.7	4.624	10.01	07/19/2022
2-Butanone		1.00		**4.22**	5.000	0	84.5	4.630	9.19	07/19/2022
Benzene		0.050		**4.77**	5.000	0	95.5	5.368	11.71	07/19/2022
Carbon tetrachloride		0.200		**4.95**	5.000	0	99.0	5.604	12.35	07/19/2022
Chlorobenzene		0.200		**4.27**	5.000	0	85.5	4.772	11.03	07/19/2022
Chloroform		0.200		**4.82**	5.000	0	96.5	5.445	12.07	07/19/2022
Tetrachloroethene		0.050		**4.42**	5.000	0	88.4	5.017	12.61	07/19/2022
Trichloroethene		0.200		**4.84**	5.000	0	96.8	5.541	13.53	07/19/2022
Vinyl chloride		0.200		**2.92**	5.000	0	58.4	3.328	13.06	07/19/2022
Surr: 1,2-Dichloroethane-d4	*			**4.93**	5.000		98.5			07/19/2022
Surr: 4-Bromofluorobenzene	*			**4.46**	5.000		89.2			07/19/2022
Surr: Dibromofluoromethane	*			**5.23**	5.000		104.5			07/19/2022
Surr: Toluene-d8	*			**4.61**	5.000		92.3			07/19/2022

Batch 194692 **SampType:** MS Units **mg/L**

SampID: 22070665-002AMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
1,1-Dichloroethene		0.200		**4.62**	5.000	0	92.3	69.3	133	07/19/2022
1,2-Dichloroethane		0.200		**5.00**	5.000	0	100.0	79	117	07/19/2022
1,4-Dichlorobenzene		0.200		**4.58**	5.000	0	91.6	78.3	109	07/19/2022
2-Butanone		1.00		**4.54**	5.000	0	90.9	71.6	129	07/19/2022
Benzene		0.050		**5.20**	5.000	0	103.9	78.9	118	07/19/2022
Carbon tetrachloride		0.200		**5.51**	5.000	0	110.3	78.6	125	07/19/2022
Chlorobenzene		0.200		**4.75**	5.000	0	95.1	84.7	110	07/19/2022
Chloroform		0.200		**5.32**	5.000	0.01400	106.0	80.9	117	07/19/2022
Tetrachloroethene		0.050		**4.97**	5.000	0	99.4	75.2	112	07/19/2022
Trichloroethene		0.200		**5.35**	5.000	0	106.9	80.4	121	07/19/2022
Vinyl chloride		0.200		**3.43**	5.000	0	68.7	44.3	144	07/19/2022
Surr: 1,2-Dichloroethane-d4	*			**4.91**	5.000		98.3	80	120	07/19/2022
Surr: 4-Bromofluorobenzene	*			**4.44**	5.000		88.8	80	120	07/19/2022
Surr: Dibromofluoromethane	*			**5.22**	5.000		104.3	80	120	07/19/2022
Surr: Toluene-d8	*			**4.62**	5.000		92.3	80	120	07/19/2022

Receiving Check List

http://www.teklabinc.com/

Client: Environmental Operations, Inc.
Work Order: 22070650
Client Project: IDOT 68G74 / 22556
Report Date: 21-Jul-22

Carrier: Employee
Received By: CET

Completed by: Payton Yoch
On: 14-Jul-22

Reviewed by: Elizabeth A. Hurley
On: 14-Jul-22

Pages to follow: Chain of custody 1 Extra pages included 0

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐	Temp °C 4.8
Type of thermal preservation?	None ☐	Ice ☑	Blue Ice ☐	Dry Ice ☐
Chain of custody present?	Yes ☑	No ☐		
Chain of custody signed when relinquished and received?	Yes ☑	No ☐		
Chain of custody agrees with sample labels?	Yes ☑	No ☐		
Samples in proper container/bottle?	Yes ☑	No ☐		
Sample containers intact?	Yes ☑	No ☐		
Sufficient sample volume for indicated test?	Yes ☑	No ☐		
All samples received within holding time?	Yes ☑	No ☐		
Reported field parameters measured:	Field ☐	Lab ☐	NA ☑	
Container/Temp Blank temperature in compliance?	Yes ☑	No ☐		
When thermal preservation is required, samples are compliant with a temperature between 0.1°C - 6.0°C, or when samples are received on ice the same day as collected.				
Water – at least one vial per sample has zero headspace?	Yes ☐	No ☐	No VOA vials ☑	
Water - TOX containers have zero headspace?	Yes ☐	No ☐	No TOX containers ☑	
Water - pH acceptable upon receipt?	Yes ☐	No ☐	NA ☑	
NPDES/CWA TCN interferences checked/treated in the field?	Yes ☐	No ☐	NA ☑	

Any No responses must be detailed below or on the COC.

Samples requiring pH should be analyzed as soon as possible after collection. Samples submitted for pH analysis are analyzed as soon as practicable upon arrival at the laboratory. - ehurley - 7/13/2022 10:53:14 AM

Print Form

Teklab Chain of Custody

Pg. 1 of 1 Workorder 2207005

5445 Horseshoe Lake Road ~ Collinsville, IL 62234 ~ Phone: (618)344-1004 ~ Fax:(618)344-1005

Environmental Operations, Inc.

7733 Forsyth Blvd., Ste. 1600

St. Louis | MO | 63105

Project Name/Number: IDOT 68G74 / 22556

Are the samples chilled? (X) Yes ( ) No with: (X) Ice ( ) Blue ice Preserved in ( ) Lab ( ) Field

Cooler Temp 4.8 LTGDS Sampler Matt Stockert

Comments

Contact Matt Stockert eMail matts@environmentalops.c Phone 618-581-4544 Requested Due Date STD Billing/PO 22556

Lab Use	Sample ID	Sample Date/Time	Preservative	Matrix	TCLP VOCs	TCLP SVOCs	TCLP 8 RCRA Metals	Total PCBs	pH	Paint Filter	Ignitability					
2207005-001	SS-68G74-1	7/11/22 1544	Unpres	Soil	X	X	X	X	X	X	X					
002	SS-68G74-2	1933	Unpres	Soil	X	X	X	X	X	X	X					
003	SS-68G74-3	1945	Unpres	Soil	X	X	X	X	X	X	X					
			Unpres	Soil	X	X	X	X	X	X	X					
			Unpres	Soil	X	X	X	X	X	X	X					
			Unpres	Soil	X	X	X	X	X	X	X					
			Unpres	Soil	X	X	X	X	X	X	X					
			Unpres	Soil	X	X	X	X	X	X	X					

Relinquished By *	Date/Time	Received By	Date/Time
[signature]	7/12/22 1600	[signature]	7-12-22 1605

* The individual signing this agreement on behalf of client acknowledges that they have read and understand the terms of this agreement and that they have the authority to sign on behalf of client.

CGT 7-13-22

Waste Profile 633057IL Lab Report

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

July 18, 2022

Workorder: 2206M58

Carol Rowe
CWM Company, Inc
701 West South Grand
Springfield, IL 62704

TEL: (217) 522-8001
FAX: (217) 522-8009
RE: Wyoming IDOT Yard

Dear Carol Rowe:

Suburban Laboratories, Inc. received 1 sample(s) on 6/27/2022 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,

Dan Galeher
Vice President of Sales and Service
708-544-3260 ext 216
dan@SuburbanLabs.com

Case Narrative

Client: CWM Company, Inc
Project: Wyoming IDOT Yard
WorkOrder: 2206M58
Temperature of samples upon receipt at SLI: C

Date: July 18, 2022
PO #:
QC Level:
Chain of Custody #:

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:
8270:
Sample 2206M58-001C: S=The LCS percent recoveries for the following analytes were outside laboratory control limits (50% - 150%):
3,3-Dichlorobenzidine; 45.38%
Dibenzo(a,h)anthracene; 49.51%

Suburban Laboratories, Inc.
1950 S. Batavia Ave., Suite 150, Geneva, IL 60134 (708) 544-3260

Laboratory Results

Client ID: CWM Company, Inc
Project Name: Wyoming IDOT Yard
Report Date: July 18, 2022
Workorder: 2206M58

Client Sample ID: WC 1
Lab ID: 2206M58-001
Date Received: 06/27/2022 12:28 PM
Matrix: SOIL
Collection Date: 06/24/2022 12:00 PM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
METALS BY ICP, TCLP LEACHED		Method: EPA-1311/6010B-Rev 2, Dec-96				Analyst: DKY	
Arsenic	ND	0.010		mg/L	1	07/01/2022 1:11 PM	83240
Barium	1.3	0.25		mg/L	1	07/01/2022 1:11 PM	83240
Cadmium	0.0057	0.0010		mg/L	1	07/01/2022 1:11 PM	83240
Chromium	0.093	0.025		mg/L	1	07/01/2022 1:11 PM	83240
Lead	0.042	0.0050		mg/L	1	07/01/2022 1:11 PM	83240
Selenium	ND	0.025		mg/L	1	07/01/2022 1:11 PM	83240
Silver	ND	0.025		mg/L	1	07/01/2022 1:11 PM	83240
PCBS		Method: EPA-8082-Rev 0, Dec-96				Analyst: RDM	
Aroclor 1016	ND	0.0193		mg/Kg-dry	1	07/01/2022 4:49 PM	83239
Aroclor 1221	ND	0.0193		mg/Kg-dry	1	07/01/2022 4:49 PM	83239
Aroclor 1232	ND	0.0193		mg/Kg-dry	1	07/01/2022 4:49 PM	83239
Aroclor 1242	ND	0.0193		mg/Kg-dry	1	07/01/2022 4:49 PM	83239
Aroclor 1248	ND	0.0193		mg/Kg-dry	1	07/01/2022 4:49 PM	83239
Aroclor 1254	ND	0.0193		mg/Kg-dry	1	07/01/2022 4:49 PM	83239
Aroclor 1260	ND	0.0193		mg/Kg-dry	1	07/01/2022 4:49 PM	83239
Internal Quality Control Compounds							
SS: Tetrachloro-m-xylene	72.9	33.7-156		%Rec	1	07/01/2022 4:49 PM	83239
VOLATILE ORGANIC COMPOUNDS		Method: EPA-8260B-Rev 2, Dec-96				Analyst: RWM	
Total 1,3-Dichloropropene	ND	0.00104		mg/Kg-dry	0.9	06/29/2022 6:21 PM	R150676
1,1,1-Trichloroethane	ND	0.00104		mg/Kg-dry	0.9	06/29/2022 6:21 PM	R150676
1,1,2,2-Tetrachloroethane	ND	0.00104		mg/Kg-dry	0.9	06/29/2022 6:21 PM	R150676
1,1,2-Trichloroethane	ND	0.00104		mg/Kg-dry	0.9	06/29/2022 6:21 PM	R150676
1,1-Dichloroethane	ND	0.00104		mg/Kg-dry	0.9	06/29/2022 6:21 PM	R150676
1,1-Dichloroethene	ND	0.00104		mg/Kg-dry	0.9	06/29/2022 6:21 PM	R150676
1,2-Dichloroethane	ND	0.00104		mg/Kg-dry	0.9	06/29/2022 6:21 PM	R150676
1,2-Dichloropropane	ND	0.00104		mg/Kg-dry	0.9	06/29/2022 6:21 PM	R150676
2-Butanone	ND	0.0104		mg/Kg-dry	0.9	06/29/2022 6:21 PM	R150676
2-Hexanone	ND	0.0260		mg/Kg-dry	0.9	06/29/2022 6:21 PM	R150676
4-Methyl-2-pentanone	ND	0.0260		mg/Kg-dry	0.9	06/29/2022 6:21 PM	R150676
Acetone	ND	0.0260		mg/Kg-dry	0.9	06/29/2022 6:21 PM	R150676
Benzene	ND	0.000260		mg/Kg-dry	0.9	06/29/2022 6:21 PM	R150676
Bromodichloromethane	ND	0.00104		mg/Kg-dry	0.9	06/29/2022 6:21 PM	R150676
Bromoform	ND	0.00104		mg/Kg-dry	0.9	06/29/2022 6:21 PM	R150676
Bromomethane	ND	0.00104		mg/Kg-dry	0.9	06/29/2022 6:21 PM	R150676

Created: 7/18/2022 4:42:32 PM

Suburban Laboratories, Inc.
1950 S. Batavia Ave., Suite 150, Geneva, IL 60134 (708) 544-3260

Laboratory Results

Client ID: CWM Company, Inc
Project Name: Wyoming IDOT Yard

Report Date: July 18, 2022
Workorder: 2206M58

Client Sample ID: WC 1
Lab ID: 2206M58-001
Date Received: 06/27/2022 12:28 PM
Matrix: SOIL
Collection Date: 06/24/2022 12:00 PM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
VOLATILE ORGANIC COMPOUNDS		Method: EPA-8260B-Rev 2, Dec-96				Analyst: RWM	
Carbon disulfide	ND	0.00104		mg/Kg-dry	0.9	06/29/2022 6:21 PM	R150676
Carbon tetrachloride	ND	0.00104		mg/Kg-dry	0.9	06/29/2022 6:21 PM	R150676
Chlorobenzene	ND	0.00104		mg/Kg-dry	0.9	06/29/2022 6:21 PM	R150676
Chloroethane	ND	0.0667		mg/Kg-dry	57.78	06/28/2022 5:53 PM	R150591
Chloroform	ND	0.00104		mg/Kg-dry	0.9	06/29/2022 6:21 PM	R150676
Chloromethane	ND	0.00104		mg/Kg-dry	0.9	06/29/2022 6:21 PM	R150676
cis-1,2-Dichloroethene	ND	0.00104		mg/Kg-dry	0.9	06/29/2022 6:21 PM	R150676
cis-1,3-Dichloropropene	ND	0.00104		mg/Kg-dry	0.9	06/29/2022 6:21 PM	R150676
Dibromochloromethane	ND	0.00104		mg/Kg-dry	0.9	06/29/2022 6:21 PM	R150676
Ethylbenzene	ND	0.00104		mg/Kg-dry	0.9	06/29/2022 6:21 PM	R150676
m,p-Xylene	ND	0.00208		mg/Kg-dry	0.9	06/29/2022 6:21 PM	R150676
Methyl tert-butyl ether	ND	0.00104		mg/Kg-dry	0.9	06/29/2022 6:21 PM	R150676
Methylene chloride	ND	0.00519		mg/Kg-dry	0.9	06/29/2022 6:21 PM	R150676
o-Xylene	ND	0.00104		mg/Kg-dry	0.9	06/29/2022 6:21 PM	R150676
Total Xylenes	ND	0.00208		mg/Kg-dry	0.9	06/29/2022 6:21 PM	R150676
Styrene	ND	0.00104		mg/Kg-dry	0.9	06/29/2022 6:21 PM	R150676
Tetrachloroethene	ND	0.00208		mg/Kg-dry	0.9	06/29/2022 6:21 PM	R150676
Toluene	ND	0.00104		mg/Kg-dry	0.9	06/29/2022 6:21 PM	R150676
trans-1,2-Dichloroethene	ND	0.00104		mg/Kg-dry	0.9	06/29/2022 6:21 PM	R150676
trans-1,3-Dichloropropene	ND	0.00104		mg/Kg-dry	0.9	06/29/2022 6:21 PM	R150676
Trichloroethene	ND	0.00104		mg/Kg-dry	0.9	06/29/2022 6:21 PM	R150676
Vinyl chloride	ND	0.00104		mg/Kg-dry	0.9	06/29/2022 6:21 PM	R150676
Internal Quality Control Compounds							
SS: 4-Bromofluorobenzene	99.8	80-130		%Rec	0.9	06/29/2022 6:21 PM	R150676
SS: Dibromofluoromethane	93.8	76.1-120		%Rec	0.9	06/29/2022 6:21 PM	R150676
SS: Toluene-d8	104	85-115		%Rec	0.9	06/29/2022 6:21 PM	R150676
SEMIVOLATILE ORGANICS (BNAS)		Method: EPA-8270C-Rev 3, Dec-96				Analyst: BM	
1,2,4-Trichlorobenzene	ND	0.289		mg/Kg-dry	1	06/30/2022 10:49 PM	83238
1,2-Dichlorobenzene	ND	0.289		mg/Kg-dry	1	06/30/2022 10:49 PM	83238
1,3-Dichlorobenzene	ND	0.289		mg/Kg-dry	1	06/30/2022 10:49 PM	83238
1,4-Dichlorobenzene	ND	0.289		mg/Kg-dry	1	06/30/2022 10:49 PM	83238
2,4,5-Trichlorophenol	ND	0.289		mg/Kg-dry	1	06/30/2022 10:49 PM	83238
2,4,6-Trichlorophenol	ND	0.289		mg/Kg-dry	1	06/30/2022 10:49 PM	83238
2,4-Dichlorophenol	ND	0.289		mg/Kg-dry	1	06/30/2022 10:49 PM	83238
2,4-Dimethylphenol	ND	0.289		mg/Kg-dry	1	06/30/2022 10:49 PM	83238
2,4-Dinitrophenol	ND	0.289		mg/Kg-dry	1	06/30/2022 10:49 PM	83238
2,4-Dinitrotoluene	ND	0.289		mg/Kg-dry	1	06/30/2022 10:49 PM	83238

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Suburban Laboratories, Inc.
1950 S. Batavia Ave., Suite 150, Geneva, IL 60134 (708) 544-3260

Laboratory Results

Client ID: CWM Company, Inc
Project Name: Wyoming IDOT Yard

Report Date: July 18, 2022
Workorder: 2206M58

Client Sample ID: WC 1
Lab ID: 2206M58-001
Date Received: 06/27/2022 12:28 PM

Matrix: SOIL
Collection Date: 06/24/2022 12:00 PM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
SEMIVOLATILE ORGANICS (BNAS)		Method: EPA-8270C-Rev 3, Dec-96				Analyst: BM	
2,6-Dinitrotoluene	ND	0.289		mg/Kg-dry	1	06/30/2022 10:49 PM	83238
2-Chloronaphthalene	ND	0.289		mg/Kg-dry	1	06/30/2022 10:49 PM	83238
2-Chlorophenol	ND	0.289		mg/Kg-dry	1	06/30/2022 10:49 PM	83238
2-Methylnaphthalene	ND	0.289		mg/Kg-dry	1	06/30/2022 10:49 PM	83238
2-Nitroaniline	ND	0.289		mg/Kg-dry	1	06/30/2022 10:49 PM	83238
2-Nitrophenol	ND	0.289		mg/Kg-dry	1	06/30/2022 10:49 PM	83238
3,3-Dichlorobenzidine	ND	0.289	S	mg/Kg-dry	1	06/30/2022 10:49 PM	83238
3-Nitroaniline	ND	0.289		mg/Kg-dry	1	06/30/2022 10:49 PM	83238
4,6-Dinitro-2-methylphenol	ND	0.289		mg/Kg-dry	1	06/30/2022 10:49 PM	83238
4-Bromophenyl phenyl ether	ND	0.289		mg/Kg-dry	1	06/30/2022 10:49 PM	83238
4-Chloro-3-methylphenol	ND	0.289		mg/Kg-dry	1	06/30/2022 10:49 PM	83238
4-Chloroaniline	ND	0.289		mg/Kg-dry	1	06/30/2022 10:49 PM	83238
4-Chlorophenyl phenyl ether	ND	0.289		mg/Kg-dry	1	06/30/2022 10:49 PM	83238
4-Nitroaniline	ND	0.289		mg/Kg-dry	1	06/30/2022 10:49 PM	83238
4-Nitrophenol	ND	0.289		mg/Kg-dry	1	06/30/2022 10:49 PM	83238
Acenaphthene	ND	0.0577		mg/Kg-dry	1	06/30/2022 10:49 PM	83238
Acenaphthylene	ND	0.0577		mg/Kg-dry	1	06/30/2022 10:49 PM	83238
Anthracene	ND	0.0577		mg/Kg-dry	1	06/30/2022 10:49 PM	83238
Benzo(a)anthracene	ND	0.0577		mg/Kg-dry	1	06/30/2022 10:49 PM	83238
Benzo(a)pyrene	ND	0.0577		mg/Kg-dry	1	06/30/2022 10:49 PM	83238
Benzo(b)fluoranthene	ND	0.0577		mg/Kg-dry	1	06/30/2022 10:49 PM	83238
Benzo(g,h,i)perylene	ND	0.0577		mg/Kg-dry	1	06/30/2022 10:49 PM	83238
Benzo(k)fluoranthene	ND	0.0577		mg/Kg-dry	1	06/30/2022 10:49 PM	83238
Bis(2-chloroethoxy)methane	ND	0.289		mg/Kg-dry	1	06/30/2022 10:49 PM	83238
Bis(2-chloroethyl)ether	ND	0.289		mg/Kg-dry	1	06/30/2022 10:49 PM	83238
Bis(2-chloroisopropyl)ether	ND	0.289		mg/Kg-dry	1	06/30/2022 10:49 PM	83238
Bis(2-ethylhexyl)phthalate	ND	0.289		mg/Kg-dry	1	06/30/2022 10:49 PM	83238
Butyl benzyl phthalate	ND	0.289		mg/Kg-dry	1	06/30/2022 10:49 PM	83238
Carbazole	ND	0.289		mg/Kg-dry	1	06/30/2022 10:49 PM	83238
Chrysene	ND	0.0577		mg/Kg-dry	1	06/30/2022 10:49 PM	83238
Dibenzo(a,h)anthracene	ND	0.0577	S	mg/Kg-dry	1	06/30/2022 10:49 PM	83238
Dibenzofuran	ND	0.289		mg/Kg-dry	1	06/30/2022 10:49 PM	83238
Diethyl phthalate	ND	0.289		mg/Kg-dry	1	06/30/2022 10:49 PM	83238
Dimethyl phthalate	ND	0.289		mg/Kg-dry	1	06/30/2022 10:49 PM	83238
Di-n-butyl phthalate	ND	0.289		mg/Kg-dry	1	06/30/2022 10:49 PM	83238
Di-n-octyl phthalate	ND	0.289		mg/Kg-dry	1	06/30/2022 10:49 PM	83238
Fluoranthene	ND	0.0577		mg/Kg-dry	1	06/30/2022 10:49 PM	83238
Fluorene	ND	0.0577		mg/Kg-dry	1	06/30/2022 10:49 PM	83238
Hexachlorobenzene	ND	0.289		mg/Kg-dry	1	06/30/2022 10:49 PM	83238

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Suburban Laboratories, Inc.
1950 S. Batavia Ave., Suite 150, Geneva, IL 60134 (708) 544-3260

Laboratory Results

Client ID: CWM Company, Inc
Project Name: Wyoming IDOT Yard

Report Date: July 18, 2022
Workorder: 2206M58

Client Sample ID: WC 1
Lab ID: 2206M58-001
Date Received: 06/27/2022 12:28 PM
Matrix: SOIL
Collection Date: 06/24/2022 12:00 PM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
SEMIVOLATILE ORGANICS (BNAS)		Method: EPA-8270C-Rev 3, Dec-96				Analyst: BM	
Hexachlorobutadiene	ND	0.289		mg/Kg-dry	1	06/30/2022 10:49 PM	83238
Hexachlorocyclopentadiene	ND	0.289		mg/Kg-dry	1	06/30/2022 10:49 PM	83238
Hexachloroethane	ND	0.289		mg/Kg-dry	1	06/30/2022 10:49 PM	83238
Indeno(1,2,3-cd)pyrene	ND	0.0577		mg/Kg-dry	1	06/30/2022 10:49 PM	83238
Isophorone	ND	0.289		mg/Kg-dry	1	06/30/2022 10:49 PM	83238
m,p-Cresol	ND	0.289		mg/Kg-dry	1	06/30/2022 10:49 PM	83238
Naphthalene	ND	0.0577		mg/Kg-dry	1	06/30/2022 10:49 PM	83238
Nitrobenzene	ND	0.289		mg/Kg-dry	1	06/30/2022 10:49 PM	83238
N-Nitroso-di-n-propylamine	ND	0.289		mg/Kg-dry	1	06/30/2022 10:49 PM	83238
N-Nitrosodiphenylamine	ND	0.289		mg/Kg-dry	1	06/30/2022 10:49 PM	83238
o-Cresol	ND	0.289		mg/Kg-dry	1	06/30/2022 10:49 PM	83238
Pentachlorophenol	ND	0.289		mg/Kg-dry	1	06/30/2022 10:49 PM	83238
Phenanthrene	ND	0.0577		mg/Kg-dry	1	06/30/2022 10:49 PM	83238
Phenol	ND	0.289		mg/Kg-dry	1	06/30/2022 10:49 PM	83238
Pyrene	ND	0.0577		mg/Kg-dry	1	06/30/2022 10:49 PM	83238
Pyridine	ND	0.289		mg/Kg-dry	1	06/30/2022 10:49 PM	83238
Internal Quality Control Compounds							
SS: 2,4,6-Tribromophenol	81.6	45-152		%Rec	1	06/30/2022 10:49 PM	83238
SS: 2-Fluorobiphenyl	75.4	58-141		%Rec	1	06/30/2022 10:49 PM	83238
SS: 2-Fluorophenol	78.7	45-164		%Rec	1	06/30/2022 10:49 PM	83238
SS: 4-Terphenyl-d14	106	10-243		%Rec	1	06/30/2022 10:49 PM	83238
SS: Nitrobenzene-d5	73.1	45-150		%Rec	1	06/30/2022 10:49 PM	83238
SS: Phenol-d6	78.9	57-141		%Rec	1	06/30/2022 10:49 PM	83238
FLASH POINT, OPEN CUP		Method: ASTM-D92-Rev 2002b				Analyst: CSS	
Flash Point	>212	0	c	°F	1	06/30/2022 9:51 AM	R150663
MERCURY BY CVAA, TCLP		Method: EPA-1311/7470A-Rev 1, Sep-94				Analyst: SCT	
Mercury	0.0003	0.0002	J	mg/L	1	06/29/2022 5:32 PM	83204
PAINT FILTER		Method: EPA-9095A-Rev 1, Dec-96				Analyst: MWG	
Free Liquids	PASS	0	c	Pass/Fail	1	06/28/2022 10:19 AM	R150530
PH (IN LABORATORY) <ATC>		Method: EPA-9045C-Rev 3, Jan-95				Analyst: CSS	
pH	7.21	1.00		pH Units	1	06/29/2022 3:18 PM	R150631
Temperature	22.6	0		°C	1	06/29/2022 3:18 PM	R150631

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Suburban Laboratories, Inc.
1950 S. Batavia Ave., Suite 150, Geneva, IL 60134 (708) 544-3260

Laboratory Results

Client ID: CWM Company, Inc
Project Name: Wyoming IDOT Yard

Report Date: July 18, 2022
Workorder: **2206M58**

Client Sample ID: **WC 1**
Lab ID: 2206M58-001 **Date Received:** 06/27/2022 12:28 PM

Matrix: SOIL
Collection Date: 06/24/2022 12:00 PM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
PHENOLICS		Method: EPA-9065-Rev 0, Sep-86				Analyst: AW	
Phenolics, Total Recoverable	0.289	0.283	J c	mg/kg-dry	49.1	07/15/2022 9:27 AM	R151210
PERCENT MOISTURE		Method: ASTM-D2216-Rev 2005				Analyst: JL	
Percent Moisture	13	1.0	c	wt%	1	06/30/2022 8:58 AM	R150650

Created: 7/18/2022 4:42:32 PM

Suburban Laboratories, Inc.
1950 S. Batavia Ave., Suite 150, Geneva, IL 60134 (708) 544-3260

PREP DATES REPORT

Client: CWM Company, Inc
Project: Wyoming IDOT Yard

Report Date: July 18, 2022
Lab Order: **2206M58**

Sample ID	Collection Date	Batch ID	Prep Test Name	TCLP Date	Prep Date
2206M58-001A	6/24/2022 12:00:00 PM	83196	CLOSED SYSTEM P&T VOC Prep		6/29/2022
2206M58-001C		83240	AQUEOUS PREP TOTAL METALS: ICP		6/29/2022
		83204	MERCURY PREP for TCLP / SPLP		6/29/2022
		83238	SOLID PREP SONICATION: BNA		6/30/2022
		83239	SOLID PREP SONICATION: PCB		6/30/2022
		83191	TCLP SAMPLE PREP (Metals)		6/28/2022

Created: 7/18/2022 4:42:33 PM

SUBURBAN LABORATORIES, Inc.

1950 S. Batavia Ave. Ste. 150 Geneva, IL 60134 Tel. 708.544.3260 login@suburbanlabs.com www.suburbanlabs.com

CHAIN OF CUSTODY RECORD

Page 1 of 1

Company Name	CW3M Company Inc
Company Address	701 S. Grand Ave West
City / State / Zip	Springfield / IL / 62704
Office / Mobile / Fax	217/522-8001
Email Address	cwm@cwmcompany.com
Project ID / Location	Wyoming IDOT Yard
Project Manager (Report to)	Carol Rowe
Sample Collector(s)	GTodRowe

TURNAROUND TIME REQUESTED

- [x] Normal
- [ ] RUSH*

* Must be pre-approved and surcharges apply. Checking this box indicates your approval of surcharges.

Date and Time Report Needed:

Specify Regulatory Program: [ ] None/Info Only

- [ ] LUST
- [ ] SRP
- [ ] SDWA
- [ ] 503 Sludge
- [ ] NPDES
- [ ] MWRDGC
- [x] Disposal
- [ ] CCDD
- [ ] OTHER - Specify Below

ANALYSIS & METHOD REQUESTED Enter an "X" in box below for request

PO #

Report Type [ ] Normal [ ] Special*

* Additional charges apply for QC reports and raw data. Specify in comments section

Shipping Method

LAB USE ONLY

Work Order # 220CM58

Temperature of Received Samples 6.0 °C

Received within 24 hours of collection? [ ] No [ ] Yes

	SAMPLE IDENTIFICATION (Use 1 line per container type)	COLLECTION DATE	COLLECTION TIME	MATRIX	GRAB/ COMP.	CONTAINERS Qty	CONTAINERS SIZE & TYPE	PRESERVATIVE	VOC's	SVOC's	8 TCLP RCRA Metals	Paint Filter	Flash Point	Total pH	Total Phenolics	PCB's	Lab Comment	LAB #
1	WC-1	6/27/22	1200	S	G	3	40 mL	MeOH	X	X	X	X	X	X	X	X		
2						3	40 mL	STIR										
3						3	9 oz	—										
4																		
5																		
6																		
7																		
8																		
9																		
10																		
11																		
12																		

MATRIX: Drinking Water (DW), Soil (S), Waste Water (WW), Surface Water(SW), Ground Water (GW), Solid Waste (WA), Sludge (U), Wipe (P) **CONTAINER:** 2oz, 4oz, 8oz, 40ml Vial, 500ml, Liter (L), Tube, Glass (G), Plastic (P) **PRESERVATIVE:** H_2SO_4, HCl, HNO_3, Methanol (MeOH) NaOH, Sodium Bisulfate (NaB), NaThio

COMMENTS & SPECIAL INSTRUCTIONS:

1. Relinquished By	Date	2. Relinquished By	Date	3. Relinquished By	Date	4. Relinquished By	Date
	6-27-22		6/27/22				
Received By	**Time**	**Received By**	**Time**	**Received By**	**Time**	**Received By**	**Time**
[x] Ice	915	[ ] Ice	1228	[ ] Ice		[ ] Ice	

THIS FORM MUST BE FILLED OUT COMPLETELY BY THE SAMPLE COLLECTOR OR SUBMITTER AND ORIGINAL FORM MUST ACCOMPANY SAMPLES AT ALL TIMES. Rev 2/17

REQUEST FOR DISCUSSION

To: **Peoria City/County Landfill Committee Members**

From: **Mark Williams and Adrian Caballero, P.E. Foth Infrastructure & Environment, LLC**

AGENDA DATE REQUESTED: August 24, 2022

ACTION REQUESTED: Pursue additional discussions with Energy Developers.

BACKGROUND: Foth Infrastructure & Environmental, LLC (Foth) has met with two (2) developers to discuss a brownfield photovoltaic (solar) project on Parcel ID 12-26-400-006, a 553.22 acre property jointly owned by the City/County of Peoria. Initial conversations with the developers, Ameresco and Engie, highlights the opportunity for the committee to partner with organizations that have aggressive goals focused on reducing carbon emissions.

Highlights from introductory call.

Ameresco

- Worked with several schools in the area to reduce energy consumption.
- One of two organizations that has been granted IL Brownfield Renewable Energy Credits (REC's) for DePue Solar.
- Experienced with landfill gas (LFG) and biogas energy facilities.
- Four (4) active LFG projects in the state of Illinois in development; Renewable Natural Gas (RNG) and Gas to Energy (GTE) projects.
- May not require Brownfield REC's to initiate the project.

Engie

- Strong infrastructure roots and in-house bench strength (dates back to Suez canal).
- Large renewable energy generator utilizing wind, solar, hydro, and biogas.
- Multiple solar projects currently in development in North-East IL.
- REC's, either Brownfield or Traditional, needed to move this forward.
- Promote sustainability and education (promote pollinator gardens at sites).

Next steps can include:

A. Continue discussions and invite Ameresco and Engie to visit the site.
B. Request an initial development/community plan from the developers.
C. Receive plans with the Committee at a future date.
D. Committee can solicit official proposal for large scale?

FINANCIAL IMPACT: The Committee could potentially receive considerable revenue for solar leases over a 20 to 30-year period.

REQUEST FOR DISCUSSION

To: **Peoria City/County Landfill Committee Members**

From: **Shaun Schoonover, Public Works Finance Manager**

AGENDA DATE REQUESTED: August 24, 2022

ACTION REQUESTED: RECEIVE AND FILE MONTHLY FINANCIAL REPORT

BACKGROUND: Attached is the unaudited revenue and expense financial report for financial transactions through July 2022. The report includes prior year actual and current year budget for comparability. The July 2022 cash flow statement is also provided.

LANDFILL FUND MONTHLY

REVENUE & EXPENSE BUDGET VS ACTUAL

FOR YEARS ENDING DECEMBER 31, 2021 & 2022

DESCRIPTION	JANUARY			FEBRUARY			MARCH			APRIL		
	2021 Actual	2022 Budget	2022 Actual	2021 Actual	2022 Budget	2022 Actual	2021 Actual	2022 Budget	2022 Actual	2021 Actual	2022 Budget	2022 Actual
REVENUES												
Host Fees	$ 31,898.72	$ 37,966.67	$ 38,683.18	$ 24,740.45	$ 37,966.67	$ 26,431.15	$ 22,625.70	$ 37,966.67	$ 22,840.33	$ 36,700.25	$ 37,966.67	$ 41,915.95
Leases	$ -	$ 1,854.17	$ -	$ 2,042.56	$ 1,854.17	$ 1,041.71	$ -	$ 1,854.17	$ 2,083.42	$ 2,042.56	$ 1,854.17	$ -
Interest Earned - On Cash Balance	$ 76.46	$ 208.33	$ 58.39	$ 63.74	$ 208.33	$ 56.81	$ 64.58	$ 208.33	$ 68.87	$ 56.78	$ 208.33	$ 96.84
TOTAL REVENUES	**$ 31,975.18**	**$ 40,029.17**	**$ 38,741.57**	**$ 26,846.75**	**$ 40,029.17**	**$ 27,529.67**	**$ 22,690.28**	**$ 40,029.17**	**$ 24,992.62**	**$ 38,799.59**	**$ 40,029.17**	**$ 42,012.79**
EXPENSES												
Municipal Reimbursements												
City Personnel	$ -	$ 6,333.33	$ -	$ -	$ 6,333.33	$ -	$ -	$ 6,333.33	$ -	$ -	$ 6,333.33	$ -
County Personnel	$ -	$ 708.33	$ -	$ -	$ 708.33	$ -	$ -	$ 708.33	$ -	$ -	$ 708.33	$ -
City Audit	$ -	$ 208.33	$ -	$ -	$ 208.33	$ -	$ -	$ 208.33	$ -	$ -	$ 208.33	$ -
Consultant Guidance and Operational Costs												
General Guidance & Compliance (Clean Air Act Permit Rpt)	$ -	$ 9,583.33	$ -	$ -	$ 9,583.33	$ -	$ 12,344.72	$ 9,583.33	$ -	$ 6,096.57	$ 9,583.33	$ 34,069.33
Groundwater Support/Reporting	$ -	$ 3,916.67	$ -	$ -	$ 3,916.67	$ -	$ 8,713.80	$ 3,916.67	$ -	$ 5,987.63	$ 3,916.67	$ 7,989.32
LF#1 Gas System & Leache Management Ops.	$ -	$ 9,833.33	$ -	$ -	$ 9,833.33	$ -	$ 8,834.34	$ 9,833.33	$ -	$ 8,053.81	$ 9,833.33	$ 53,983.73
IEPA Coordination / Reporting	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 5,256.61
LF#1 Construction Engineering	$ -	$ 416.67	$ -	$ -	$ 416.67	$ -	$ 4,339.29	$ 416.67	$ -	$ 6,943.64	$ 416.67	$ -
LF #2 to LF #3 Transition Activities	$ -	$ 1,666.67	$ -	$ -	$ 1,666.67	$ -	$ 3,689.46	$ 1,666.67	$ -	$ 373.38	$ 1,666.67	$ 2,898.42
Liquids & Gas Replacement Materials	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Offsite Liquids Disposal	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Contracted/Capital Improvements												
Post Closure Care	$ -	$ 416.67	$ -	$ -	$ 416.67	$ -	$ -	$ 416.67	$ -	$ -	$ 416.67	$ -
Leachate Extraction Improvements	$ -	$ 416.67	$ -	$ -	$ 416.67	$ -	$ -	$ 416.67	$ -	$ -	$ 416.67	$ -
GCCS Improvement Projects	$ -	$ 416.67	$ -	$ -	$ 416.67	$ -	$ -	$ 416.67	$ -	$ -	$ 416.67	$ -
Remediation Capital Project - $150,000 budget	$ -	$ -	$ -	$ -	$ -	$ 38,360.00	$ -	$ -	$ -	$ -	$ -	$ -
Committee's Operational Expenses												
Off-Site Liquids Disposal (Transport & Leachate Treatment)	$ -	$ 1,270.83	$ -	$ -	$ 1,270.83	$ -	$ 733.78	$ 1,270.83	$ 902.62	$ 139.32	$ 1,270.83	$ 1,778.92
Telephone	$ -	$ 41.67	$ -	$ -	$ 41.67	$ 36.03	$ 36.01	$ 41.67	$ 36.01	$ 36.01	$ 41.67	$ 36.01
Electricity	$ -	$ 500.00	$ 362.84	$ 414.15	$ 500.00	$ 385.50	$ 642.04	$ 500.00	$ 424.91	$ -	$ 500.00	$ 355.74
Unplanned/Contingency												
Groundwater Asssessments/Contingency	$ -	$ 666.67	$ -	$ -	$ 666.67	$ -	$ -	$ 666.67	$ -	$ -	$ 666.67	$ -
GCCS Contingency	$ -	$ 833.33	$ -	$ -	$ 833.33	$ -	$ 5,839.60	$ 833.33	$ -	$ 5,313.42	$ 833.33	$ -
Unplanned Services and Repairs	$ -	$ 1,666.67	$ -	$ -	$ 1,666.67	$ 223.50	$ 4,039.33	$ 1,666.67	$ -	$ -	$ 1,666.67	$ 714.07
TOTAL EXPENSES	**$ -**	**$ 38,895.83**	**$ 362.84**	**$ 414.15**	**$ 38,895.83**	**$ 39,005.03**	**$ 49,212.37**	**$ 38,895.83**	**$ 1,363.54**	**$ 32,943.78**	**$ 38,895.83**	**$ 107,082.15**
EXCESS REVENUES OVER EXPENSES	**$ 31,975.18**	**$ 1,133.33**	**$ 38,378.73**	**$ 26,432.60**	**$ 1,133.33**	**$ (11,475.36)**	**$ (26,522.09)**	**$ 1,133.33**	**$ 23,629.08**	**$ 5,855.81**	**$ 1,133.33**	**$ (65,069.36)**
BEGINNING FUND BALANCE	$ 399,984.02		$ 336,531.96	$ 431,959.20		$ 374,910.69	$ 458,391.80		$ 363,435.33	$ 431,869.71		$ 387,064.41
ENDING FUND BALANCE	$ 431,959.20		$ 374,910.69	$ 458,391.80		$ 363,435.33	$ 431,869.71		$ 387,064.41	$ 437,725.52		$ 321,995.05

LANDFILL FUND MONTHLY

REVENUE & EXPENSE BUDGET VS ACTUAL

FOR YEARS ENDING DECEMBER 31, 2021 & 2022

DESCRIPTION	MAY			JUNE			JULY			AUGUST		
	2021 Actual	2022 Budget	2022 Actual	2021 Actual	2022 Budget	2022 Actual	2021 Actual	2022 Budget	2022 Actual	2021 Actual	2022 Budget	2022 Actual
REVENUES												
Host Fees	$ 38,106.05	$ 37,966.67	$ 34,547.93	$ 35,430.28	$ 37,966.67	$ 39,825.44	$ 39,044.97	$ 37,966.67	$ 42,404.46	$ 36,672.61	$ 37,966.67	
Leases	$ -	$ 1,854.17	$ 2,104.25	$ 1,041.71	$ 1,854.17	$ 1,062.54	$ 4,862.16	$ 1,854.17	$ 6,042.22	$ 1,865.93	$ 1,854.17	
Interest Earned - On Cash Balance	$ 61.41	$ 208.33	$ 124.05	$ 57.19	$ 208.33	$ 175.46	$ 61.06	$ 208.33	$ 308.53	$ 72.02	$ 208.33	
TOTAL REVENUES	**$ 38,167.46**	**$ 40,029.17**	**$ 36,776.23**	**$ 36,529.18**	**$ 40,029.17**	**$ 41,063.44**	**$ 43,968.19**	**$ 40,029.17**	**$ 48,755.21**	**$ 38,610.56**	**$ 40,029.17**	**$ -**
EXPENSES												
Municipal Reimbursements												
City Personnel	$ -	$ 6,333.33	$ -	$ -	$ 6,333.33	$ -	$ -	$ 6,333.33	$ -	$ -	$ 6,333.33	
County Personnel	$ -	$ 708.33	$ -	$ 8,500.00	$ 708.33	$ -	$ -	$ 708.33	$ -	$ -	$ 708.33	
City Audit	$ -	$ 208.33	$ -	$ -	$ 208.33	$ -	$ -	$ 208.33	$ -	$ -	$ 208.33	
Consultant Guidance and Operational Costs												
General Guidance & Compliance (Clean Air Act Permit Rpt)	$ -	$ 9,583.33	$ 16,778.74	$ -	$ 9,583.33	$ 6,394.76	$ 34,245.10	$ 9,583.33	$ 9,569.22	$ 19,634.02	$ 9,583.33	
Groundwater Support/Reporting	$ -	$ 3,916.67	$ 4,872.35	$ -	$ 3,916.67	$ 514.72	$ 12,400.10	$ 3,916.67	$ 2,682.04	$ 5,022.31	$ 3,916.67	
LF#1 Gas System & Leache Management Ops.	$ -	$ 9,833.33	$ 9,145.14	$ -	$ 9,833.33	$ 7,349.70	$ 25,498.80	$ 9,833.33	$ 10,587.53	$ 23,688.05	$ 9,833.33	
IEPA Coordination / Reporting	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	
LF#1 Construction Engineering	$ -	$ 416.67	$ -	$ -	$ 416.67	$ -	$ 1,892.01	$ 416.67	$ -	$ 406.85	$ 416.67	
LF #2 to LF #3 Transition Activities	$ -	$ 1,666.67	$ 3,524.66	$ -	$ 1,666.67	$ 2,097.60	$ 4,614.41	$ 1,666.67	$ 1,622.25	$ 650.96	$ 1,666.67	
Liquids & Gas Replacement Materials	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	
Offsite Liquids Disposal	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	
Contracted/Capital Improvements												
Post Closure Care	$ -	$ 416.67	$ -	$ -	$ 416.67	$ -	$ -	$ 416.67	$ -	$ -	$ 416.67	
Leachate Extraction Improvements	$ -	$ 416.67	$ 150,900.90	$ -	$ 416.67	$ -	$ -	$ 416.67	$ -	$ -	$ 416.67	
GCCS Improvement Projects	$ -	$ 416.67	$ -	$ -	$ 416.67	$ -	$ -	$ 416.67	$ -	$ -	$ 416.67	
Remediation Capital Project - $150,000 budget	$ -	$ -	$ -	$ 16,502.71	$ -	$ -	$ -	$ -	$ -	$ -	$ -	
Committee's Operational Expenses												
Off-Site Liquids Disposal (Transport & Leachate Treatment)	$ -	$ 1,270.83	$ 169.22	$ 45.69	$ 1,270.83	$ 1,837.06	$ 2,270.74	$ 1,270.83	$ 131.39	$ 876.93	$ 1,270.83	
Telephone	$ 144.04	$ 41.67	$ -	$ -	$ 41.67	$ 72.02	$ 36.01	$ 41.67	$ 36.01	$ -	$ 41.67	
Electricity	$ 675.59	$ 500.00	$ 390.71	$ -	$ 500.00	$ 412.52	$ 354.82	$ 500.00	$ 698.57	$ 488.36	$ 500.00	
Unplanned/Contingency												
Groundwater Asssessments/Contingency	$ -	$ 666.67	$ -	$ -	$ 666.67	$ -	$ -	$ 666.67	$ -	$ -	$ 666.67	
GCCS Contingency	$ -	$ 833.33	$ -	$ -	$ 833.33	$ -	$ -	$ 833.33	$ -	$ -	$ 833.33	
Unplanned Services and Repairs	$ 6,050.00	$ 1,666.67	$ 5,119.10	$ -	$ 1,666.67	$ -	$ 3,452.56	$ 1,666.67	$ 492.34	$ 1,149.00	$ 1,666.67	
TOTAL EXPENSES	**$ 6,869.63**	**$ 38,895.83**	**$ 190,900.82**	**$ 25,048.40**	**$ 38,895.83**	**$ 18,678.38**	**$ 84,764.55**	**$ 38,895.83**	**$ 25,819.35**	**$ 51,916.48**	**$ 38,895.83**	**$ -**
EXCESS REVENUES OVER EXPENSES	**$ 31,297.83**	**$ 1,133.33**	**$ (154,124.59)**	**$ 11,480.78**	**$ 1,133.33**	**$ 22,385.06**	**$ (40,796.36)**	**$ 1,133.33**	**$ 22,935.86**	**$ (13,305.92)**	**$ 1,133.33**	**$ -**
BEGINNING FUND BALANCE	$ 437,725.52		$ 321,995.05	$ 469,023.35		$ 167,870.46	$ 480,504.13		$ 190,255.52	$ 439,707.77		$ 213,191.38
ENDING FUND BALANCE	$ 469,023.35		$ 167,870.46	$ 480,504.13		$ 190,255.52	$ 439,707.77		$ 213,191.38	$ 426,401.85		$ 213,191.38

LANDFILL FUND MONTHLY

REVENUE & EXPENSE BUDGET VS ACTUAL

FOR YEARS ENDING DECEMBER 31, 2021 & 2022

DESCRIPTION	SEPTEMBER			OCTOBER			NOVEMBER			DECEMBER		
	2021 Actual	2022 Budget	2022 Actual	2021 Actual	2022 Budget	2022 Actual	2021 Actual	2022 Budget	2022 Actual	2021 Actual	2022 Budget	2022 Actual
REVENUES												
Host Fees	$ 38,086.95	$ 37,966.67		$ 38,304.73	$ 37,966.67		$ 36,119.14	$ 37,966.67		$ 35,369.99	$ 37,966.67	
Leases	$ -	$ 1,854.17		$ 2,083.42	$ 1,854.17		$ 2,083.42	$ 1,854.17		$ 1,041.71	$ 1,854.17	
Interest Earned - On Cash Balance	$ 70.90	$ 208.33		$ 61.46	$ 208.33		$ 107.65	$ 208.33		$ 51.62	$ 208.33	
TOTAL REVENUES	**$ 38,157.85**	**$ 40,029.17**	**$ -**	**$ 40,449.61**	**$ 40,029.17**	**$ -**	**$ 38,310.21**	**$ 40,029.17**	**$ -**	**$ 36,463.32**	**$ 40,029.17**	**$ -**
EXPENSES												
Municipal Reimbursements												
City Personnel	$ -	$ 6,333.33		$ -	$ 6,333.33		$ 76,000.00	$ 6,333.33		$ -	$ 6,333.33	
County Personnel	$ -	$ 708.33		$ -	$ 708.33		$ -	$ 708.33		$ 8,500.00	$ 708.33	
City Audit	$ -	$ 208.33		$ -	$ 208.33		$ 2,500.00	$ 208.33		$ -	$ 208.33	
Consultant Guidance and Operational Costs												
General Guidance & Compliance (Clean Air Act Permit Rpt)	$ 6,149.62	$ 9,583.33		$ 11,818.12	$ 9,583.33		$ 13,933.02	$ 9,583.33		$ 20,096.97	$ 9,583.33	
Groundwater Support/Reporting	$ 1,390.70	$ 3,916.67		$ 2,441.90	$ 3,916.67		$ 2,952.38	$ 3,916.67		$ 8,012.85	$ 3,916.67	
LF#1 Gas System & Leache Management Ops.	$ 4,576.49	$ 9,833.33		$ 8,275.52	$ 9,833.33		$ 7,015.53	$ 9,833.33		$ 13,872.61	$ 9,833.33	
IEPA Coordination / Reporting	$ -	$ -		$ -	$ -		$ -	$ -		$ -	$ -	
LF#1 Construction Engineering	$ 509.13	$ 416.67		$ 6,348.81	$ 416.67		$ 8,353.40	$ 416.67		$ -	$ 416.67	
LF #2 to LF #3 Transition Activities	$ -	$ 1,666.67		$ 456.81	$ 1,666.67		$ 325.48	$ 1,666.67		$ 1,045.97	$ 1,666.67	
Liquids & Gas Replacement Materials	$ -	$ -		$ -	$ -		$ -	$ -		$ -	$ -	
Offsite Liquids Disposal	$ -	$ -		$ -	$ -		$ -	$ -		$ -	$ -	
Contracted/Capital Improvements												
Post Closure Care	$ -	$ 416.67		$ -	$ 416.67		$ -	$ 416.67		$ -	$ 416.67	
Leachate Extraction Improvements	$ -	$ 416.67		$ -	$ 416.67		$ -	$ 416.67		$ -	$ 416.67	
GCCS Improvement Projects	$ -	$ 416.67		$ -	$ 416.67		$ -	$ 416.67		$ -	$ 416.67	
Remediation Capital Project - $150,000 budget	$ -	$ -		$ -	$ -		$ 791.00	$ -		$ -	$ -	
Committee's Operational Expenses												
Off-Site Liquids Disposal (Transport & Leachate Treatment)	$ -	$ 1,270.83		$ -	$ 1,270.83		$ 770.42	$ 1,270.83		$ 929.70	$ 1,270.83	
Telephone	$ 36.01	$ 41.67		$ 36.01	$ 41.67		$ -	$ 41.67		$ 144.04	$ 41.67	
Electricity	$ 868.41	$ 500.00		$ 162.67	$ 500.00		$ 309.33	$ 500.00		$ 380.49	$ 500.00	
Unplanned/Contingency												
Groundwater Asssessments/Contingency	$ -	$ 666.67		$ -	$ 666.67		$ -	$ 666.67		$ -	$ 666.67	
GCCS Contingency	$ -	$ 833.33		$ -	$ 833.33		$ 14,139.55	$ 833.33		$ -	$ 833.33	
Unplanned Services and Repairs	$ -	$ 1,666.67		$ 7,218.66	$ 1,666.67		$ 2,828.14	$ 1,666.67		$ 10,061.14	$ 1,666.67	
TOTAL EXPENSES	**$ 13,530.36**	**$ 38,895.83**	**$ -**	**$ 36,758.50**	**$ 38,895.83**	**$ -**	**$ 129,918.25**	**$ 38,895.83**	**$ -**	**$ 63,043.77**	**$ 38,895.83**	**$ -**
EXCESS REVENUES OVER EXPENSES	**$ 24,627.49**	**$ 1,133.33**	**$ -**	**$ 3,691.11**	**$ 1,133.33**	**$ -**	**$ (91,608.04)**	**$ 1,133.33**	**$ -**	**$ (26,580.45)**	**$ 1,133.33**	**$ -**
BEGINNING FUND BALANCE	$ 426,401.85		$ 213,191.38	$ 451,029.34		$ 213,191.38	$ 454,720.45		$ 213,191.38	$ 363,112.41		$ 213,191.38
ENDING FUND BALANCE	$ 451,029.34		$ 213,191.38	$ 454,720.45		$ 213,191.38	$ 363,112.41		$ 213,191.38	$ 336,531.96		$ 213,191.38

LANDFILL FUND MONTHLY

REVENUE & EXPENSE BUDGET VS ACTUAL

FOR YEARS ENDING DECEMBER 31, 2021 & 2022

DESCRIPTION	FY2021 ACTUAL	FY2022 BUDGET	FY2022 YTD ACTUAL
REVENUES			
Host Fees	$ 413,099.84	$ 455,600.00	$ 246,648.44
Leases	$ 17,063.47	$ 22,250.00	$ 12,334.14
Interest Earned - On Cash Balance	$ 804.87	$ 2,500.00	$ 888.95
TOTAL REVENUES	**$ 430,968.18**	**$ 480,350.00**	**$ 259,871.53**
EXPENSES			
Municipal Reimbursements			
City Personnel	$ 76,000.00	$ 76,000.00	$ -
County Personnel	$ 17,000.00	$ 8,500.00	$ -
City Audit	$ 2,500.00	$ 2,500.00	$ -
Consultant Guidance and Operational Costs			
General Guidance & Compliance (Clean Air Act Permit Rpt)	$ 124,318.14	$ 115,000.00	$ 66,812.05
Groundwater Support/Reporting	$ 46,921.67	$ 47,000.00	$ 16,058.43
LF#1 Gas System & Leache Management Ops.	$ 99,815.15	$ 118,000.00	$ 81,066.10
IEPA Coordination / Reporting	$ -	$ -	$ 5,256.61
LF#1 Construction Engineering	$ 28,793.13	$ 5,000.00	$ -
LF #2 to LF #3 Transition Activities	$ 11,156.47	$ 20,000.00	$ 10,142.93
Liquids & Gas Replacement Materials	$ -	$ -	$ -
Offsite Liquids Disposal	$ -	$ -	$ -
Contracted/Capital Improvements			
Post Closure Care	$ -	$ 5,000.00	$ -
Leachate Extraction Improvements	$ -	$ 5,000.00	$ 150,900.90
GCCS Improvement Projects	$ -	$ 5,000.00	$ -
Remediation Capital Project - $150,000 budget	$ 17,293.71	$ -	$ 38,360.00
Committee's Operational Expenses			
Off-Site Liquids Disposal (Transport & Leachate Treatment)	$ 5,766.58	$ 15,250.00	$ 4,819.21
Telephone	$ 468.13	$ 500.00	$ 216.08
Electricity	$ 4,295.86	$ 6,000.00	$ 3,030.79
Unplanned/Contingency			
Groundwater Asssessments/Contingency	$ -	$ 8,000.00	$ -
GCCS Contingency	$ 25,292.57	$ 10,000.00	$ -
Unplanned Services and Repairs	$ 34,798.83	$ 20,000.00	$ 6,549.01
TOTAL EXPENSES	**$ 494,420.24**	**$ 466,750.00**	**$ 383,212.11**
EXCESS REVENUES OVER EXPENSES	**$ (63,452.06)**	**$ 13,600.00**	**$ (123,340.58)**
BEGINNING FUND BALANCE	**$ 399,984.02**		**$ 336,531.96**
ENDING FUND BALANCE	**$ 336,531.96**		**$ 213,191.38**

2020 Capital Project Landfill Remediation Project		
Budget	Spent	Avail Budget
$ 150,000.00	$ 55,653.71	$ 94,346.29

Peoria City/County Landfill
Cash Flow Statement - Cash Basis
July 2022

Beginning Balance July 1, 2022				$190,255.52
Plus Deposits:				
	7/15/2022	Waste Management - Host Fee	$42,404.46	
	7/15/2022	Phil Ehnle	$4,979.68	
	7/26/2022	SBA Steel	$1,062.54	
	7/31/2022	Interest - Not Posted Yet	$308.53	
				$48,755.21
Less Electronic Debits & A/P Checks				
	7/1/2022	GPSD	$131.39	
	7/15/2022	Foth Infrastructure & Environmental	$24,953.38	
	7/29/2022	Verizon Wireless	$36.01	
	7/29/2022	Ameren Illinois	$698.57	
				$25,819.35
Ending Cash Balance July 31, 2022				$213,191.38

REQUEST FOR DISCUSSION

To: **Peoria City/County Landfill Committee Members**

From: **Chris Peters & Ian Johnson, Waste Management**

AGENDA DATE REQUESTED: August 24, 2022

ACTION REQUESTED: Receive and File Monthly Reports. Obtain required signatures as specified below.

BACKGROUND: Attached is the monthly activity report through July 2022.

1. All weekly random load checks were completed and documented with no issues to report.

2. Beginning September 1, 2022, PCC#2 will only be accepting debit or credit cards for any citizen disposal transactions. No more cash transactions will be allowed.

3. To allow sufficient time to respond to short-term submittal requirements that may arise prior to the next Landfill Committee meeting, we respectfully request authorization for the Committee chairperson to sign such documents, subject to review and approval in advance by Foth.

FINANCIAL IMPACT: NA

Peoria City/County Landfill No. 2
Waste Management of Illinois, Inc.
Monthly Activity Report
July-2022

					Current Month		Landfill #2 Year to Date 2022	Landfill #2 Year to Date 2021
Tonnage:	**General Refuse**							
	Haulers				13,620.89		87,035.83	88,753.92
	County Res. Free Loads				294.28		1,387.96	1,419.68
	County Res. $5 Loads				0.00		0.79	5.53
	Roadside				77.88		236.11	9.31
	T O T A L				13,993.05		88,660.69	90,188.44
	Special Wastes							
	Industrial (Declassified)				291.33		4,475.37	922.42
	Industrial (Exempt)				0.00		0.00	0.00
	T O T A L				291.33		4,475.37	922.42
	TOTAL LANDFILL RECEIPTS				14,284.38		93,136.06	91,110.86
	Yard Waste Receipts							
	City Contract -				0.00		0.00	0.00
	All Other				0.00		0.00	0.00
	T O T A L				0.00		0.00	0.00
Payments:	**Payable to City/County Committee**							
	General Refuse	Tons	13,620.89					
		Rate	$ 2.68					
			$36,503.99		$36,503.99		$233,256.02	$231,647.73
	Special Waste - Ind.	Tons	291.33					
		Rate	$ 2.68					
			$780.76		$780.76		$11,993.99	$2,407.52
	T O T A L				$37,284.75		$245,250.02	$234,055.25
	Payable to County							
	General Refuse	Tons	13,620.89					
		Rate	$ 1.27					
			$17,298.53		$17,298.53		$110,535.50	$112,717.48
	Special Waste - Ind.	Tons	291.33					
		Rate	$ 1.27					
			$369.99		$369.99		$5,683.72	$1,171.47
	T O T A L				$17,668.52		$116,219.22	$113,888.95
	Payable to/Receivable From County							
	$5 Loads	Loads	10.00					
		Rate	$ 5.00					
			$50.00		$50.00		$155.00	$150.00
	Less:							
	State Fee on Free and $5 Loads	Tons	294.28					
		Rate	$ 2.22					
			($653.30)		($653.30)		($3,083.03)	($3,163.97)
	T O T A L				($603.30)		($2,928.03)	($3,013.97)
Tonnage:	**General Refuse & Special Waste**							
	In county				8,741.93	61.20%	56,505.79	52,175.63
	Out of county				5,542.45	38.80%	36,630.27	38,935.23
	Mixed				-	0.00%	-	-
	T O T A L				14,284.38	100.00%	93,136.06	91,110.86

REQUEST FOR DISCUSSION

To: **Peoria City/County Landfill Committee Members**

From: **Becca Cottrell, Peoria County**

AGENDA DATE REQUESTED: August 24, 2022

ACTION REQUESTED: Requested vote on approval of landfill property use.

BACKGROUND: Southern Illinois University at Carbondale is requesting permission to use Landfill property for bobcat research. They are specifically interested in the land south of Cottonwood Road, as well as the property north of the landfill. This project picks up where the Western Illinois University project of 2020 ended. The following information was provided by SIU to explain their objectives and methodology of the project. More information can be found at https://ncillinoisbobcats.siu.edu

Following discussion by the Landfill Committee in July, SIUC has been inundated with private property owners participating in their study. The intent of SIU is scouting this property late fall or next year. The waiver for property use follows and is the same as that used for the previous access to landfill for Western Illinois' bobcat project.

SIUC has their own memorandum of understanding to all property owners granting access to research. Once received, it will be reviewed by the Peoria County State's Attorney, before allowing access.

FINANCIAL IMPACT: none

North Central Illinois Bobcat Project

Need: Research on bobcat ecology necessary to inform management decisions in Illinois is largely based on research from southern and west-central portions of the state. Limited suitable habitat exists for bobcats in north-central Illinois and bobcats remain unstudied in this landscape consisting of a matrix of unsuitable habitat with likely different ecology than the rest of the state. We will study bobcat ecology on a 6-county study area in north-central Illinois and provide important information on population dynamics, spatial ecology, and genetics. Our research will provide information that biologists can use to manage and monitor bobcat populations in north-central Illinois and other similar landscapes in the Midwest.

Objectives: Specific objectives include: (1) estimate seasonal and annual survival of bobcats, (2) quantify dispersal movements of juvenile bobcats, (3) estimate reproductive parameters of bobcats, (4) quantify spatial ecology and habitat selection of bobcats, (5) evaluate genetic structure and natural recolonization of bobcats, and (6) provide 1 popular article about this project to the Illinois Department of Natural Resources.

Field Methodology:
We will first visit the property to determine if bobcats are present by deploying game cameras and allowing them to capture images for approximately one month.

If we determine bobcats are present on the property after game camera surveys, we will capture bobcats using wire cage traps or padded foothold traps. We will use both visual and scent-based attractants to lure bobcats to traps. Cage traps have a guillotine style door and will have a coroplast cubby for privacy and insulation for any trapped animal, and foothold traps will be padded, and have springs and swivels to protect bobcats and other animals from injury. Traplines won't be open if weather is not suitable (ie freezing rain), and traps will be checked at least once every 24hrs. Signs will be present on cage traps or near footholds to inform the public and will have a contact number if an off leash dog is trapped.

Upon capture, bobcats will be chemically immobilized using hydrochloride (10 mg/kg) and xylazine HCL (1.5 mg/kg). Temperature of anesthetized animals will be closely monitored with a rectal thermometer and kept warm via heating pad while under sedation. Animal will be monitored during the recovery period to ensure safety upon release. We will ear tag, sex, weigh, and estimate age of bobcats. Tissue samples (ear punch and/or blood) also will be collected. Adult bobcats will be fitted with GPS collars equipped with mortality sensors. Juveniles will be fitted with expandable or neoprene vinyl VHF collars equipped with mortality sensors. All capture, handling, and immobilization of bobcats will be carried out under a protocol designed by Dr. Clay Nielsen under the guidance of >20 years of experience and peer reviewed literature, and approved by the Southern Illinois University at Carbondale Institutional Animal Care and Use Committee (IACUC). All personnel working with animals will wear a N95 facemask and be vaccinated against rabies. By catch will be released immediately unless the animal has been injured, which is unlikely but possible. If injured, we will follow protocols to

immobilize and tend to wounds on the animal. If the animal's wounds cannot be treated and we determine it should be euthanized, we will follow strict procedures to do so and dispose of the remains securely off property. If a bobcat is found deceased, we will transport it back to SIUC for further analyses.

Records to be kept: Bobcat weight, sex, size, age, dentition, capture method, handling time, vitals, overall health (i.e., body condition, pelage, and parasites), blood/tissue samples, identifying information (i.e., collar number, ear tags), location of capture, COVID nose swab and buccal swab

WAIVER, RELEASE AND ASSUMPTION OF RISK

I, an employee, agent, volunteer, Wildlife Research Volunteer, affiliate, and/or guest of Southern Illinois University at Carbondale (the "Indemnitor"), acknowledge and agree to the following:

1. Entering onto the property (the "Landfill Property") owned and/or controlled by the Peoria City/County Landfill, the City of Peoria, and/or Peoria County (the "Indemnitees") may involve risk and understand that hazardous conditions may exist in performing these activities.
2. My participation in this activity is voluntary, and I chose to participate despite the risks. The Indemnitees nor their employees or agents requested that I perform any of these activities.
3. I expressly and voluntarily agree and promise to assume and accept all risks associated with and existing in any activities at the Landfill Property, whether such risks are known or unknown.
4. I hereby forever release, forever discharge, agree to indemnify the Indemnitees and their employees and officials as well as hold harmless the Indemnitees and their employees and officials from any and all liability, claims, demands, and causes of action that are in any way connected to my participation in the activities for which I am present at the Landfill Property, including any claims of personal injury, bodily injury, death, illness or damage to property, whether such claims arise now or in the future, and whether known or unknown, of whatsoever kind of nature, whether in law or in equity. I release the Indemnitees and their employees and officials from any and all liability, even if the Indemnitees' and/or their employees' and/or officials' negligence is the cause of any accident, injuries, damages or any other claims.
5. The Indemnitees do not assume any responsibility for or obligations to provide financial assistance or other assistance, including but not limited to medical, health, or disability insurance in the event of injury or illness.
6. Should the Indemnitees, their employees and officials, or anyone acting upon the Indemnitees' behalf incur attorneys' fees, court costs, or any other costs to enforce this agreement, I agree to indemnify and hold harmless the Indemnitees and their employees and officials for all such fees and costs. I further agree to defend and protect the Indemnitees and their employees and officials from any claims of liability related to this Waiver, Release and Assumption of Risk.
7. I agree with the validity and enforceability of this Waiver, Release and Assumption of Risk.
8. I agree that in the event that any clause or provision of this Waiver, Release and Assumption of Risk shall be held to be invalid by any court of competent jurisdiction, the invalidity of such clause or provision shall not otherwise affect the remaining provisions of this Waiver, Release and Assumption of Risk which shall continue to be enforceable.

I certify that I have read and understand the above terms and provisions.

Indemnitor Signature:_____ Date:_____

Printed Name:_____ Phone #:_____

Address: _____

I certify that I am over the age of eighteen (18): _____ Yes _____ No