

YPSILANTI COMMUNITY UTILITIES AUTHORITY

2777 STATE ROAD YPSILANTI, MICHIGAN 48198-9112 TELEPHONE: 734-484-4600

MDEQ - JACKSON

SEP 28 2021

September 21, 2021

AIR QUALITY DIVISION

VIA FIRST CLASS MAIL

Ms. Diane Kavanaugh Vetort
Senior Environmental Quality Analyst
MICHIGAN DEPARTMENT OF ENVIRONMENT, GREAT LAKES, AND ENERGY
Jackson District Office, Air Quality Division
301 E. Louis B. Glick Highway
Jackson, MI 49201-1556

Re: MI-ROP-B6237-2020 Violation Notice

Dear Ms. Vetort:

The Ypsilanti Community Utilities Authority (YCUA) is in receipt of the Violation Notice from Jackson District Office - Department of Environment, Great Lakes and Energy (EGLE) following exceedance of Polychlorinated Biphenyls (PCBs) emissions during the emissions testing conducted on May 26, 2021. As required by the Violation Notice, YCUA evaluated the emissions data, laboratory reports for the PCBs and investigated the probable causes of the exceedance. Please accept this letter and supporting information as YCUA's response to the Violation Notice.

YCUA's Renewable Operating Permit (ROP), MI-ROP-6237-20120 contains emission limits for Total PCB. The testing frequency for Total PCB is once every five years. Pursuant to this requirement, YCUA conducted the emissions testing on May 26, 2021. Prior to the May 26, 2021 emissions testing, YCUA conducted emissions test for PCBs on December 15- 16, 2015. Executive Summary of this test report is included in Attachment A. Testing for PCBs in the emissions was scheduled for December 2020. However due to a planned incinerator improvement project (August 2020-March 2021), testing for Total PCBs in the emissions was rescheduled and conducted on May 26, 2021.

<u>August 2020-March 2021 Incinerator Improvement Project:</u> YCUA has undertaken a planned improvement project which included replacement of primary heat exchanger, venturi scrubber and certain expansion joints in the duct work. Construction of this project commenced in August 2020 and concluded in March 2021. This project was intended to improve the emissions control in the flue gas from YCUA Fluid Bed Incinerator System (FBIS).

Granular Activated Carbon System: YCUA's FBIS includes a granular activated carbon system (Kombisorbon) designed for the removal of heavy metals, polychlorinated dioxins and furans and

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Ms. Diane Kavanaugh Vetort
Jackson District Office, Air Quality Division **DEPARTMENT OF ENVIRONMENT, GREAT LAKES, AND ENERGY**September 20, 2021
Page 2

other chlorinated, aromatic hydrocarbons. The granular activated carbon in this system was installed in February 2019 and has a design life of 3-5 years. YCUA believes the carbon system is functioning as designed for the removal of the pollutants.

May 26, 2021 Emissions Testing: Emissions testing included Mercury (Hg) and Total PCBs(PCB). Results of the test indicated Hg within the ROP limit. However, the result for the PCB emission was greater than the permit limit of 1.2 E-06 lb/dry ton sewage. Testing for PCB was conducted by Method 23 and included three test runs of 120 minutes each. While the operating conditions during the three runs and the quality of biosolids is the same for the three runs, the PCB result of the first run was greater than the ROP limit, the result for the second run was slightly elevated than the ROP limit and the result of the third run was compliant with the ROP limit. The downward trend in the results of the PCB in the three runs as the testing progressed suggests an anomaly in the testing.

<u>December 15-16, 2015 Testing</u>: Results of this testing for PCBs were well within the ROP limit for PCBs.

YCUA Monitoring: YCUA conducts analytical testing of biosolids, influent and effluent for PCBs. Results of these tests in 2021, 2020 and 2019 have not indicated the presence of PCBs above method detection limits (330 ug/Kg for biosolids, 0.2 ug/L for influent and effluent samples). Excerpts of the analytical reports are included in Attachment B. Additionally, YCUA also monitors septage receiving on a periodic basis. Results of the septage analysis did not indicate the presence of PCBs above method detection limit.

<u>YCUA Sewer Use Ordinance (SUO)</u>: YCUA's SUO requires that there shall be no detectable (<0.2 ug/L) amounts of PCBs to the YCUA sanitary system.

Industrial User Monitoring: As part of the Industrial Pretreatment Program (IPP), select industrial users which have the potential to discharge PCBs are required to self monitor for PCBs in their effluent and provide quarterly monitoring reports to YCUA. Additionally, YCUA conducts Control Authority Monitoring for PCBs at potential discharges. A review of the self-monitoring and Control Authority monitoring data for the industrial users for the years 2021, 2020 and 2019 has not indicated any exceedances of PCBs above the established method detection limit (0.2 ug/L) except for one instance on 8/25/20 in an industrial discharge. A summary of the analytical results from self-monitoring and Control Authority monitoring is included in Attachment C.

Findings and Conclusion:

1. The plant influent analysis and biosolids analysis for PCBs has not indicated any elevated levels and hence YCUA believes no additional industrial input of PCBs to the wastewater is indicated. YCUA monitors the industrial loading in the wastewater through Control Authority monitoring of industrial users as well the self-monitoring data collected by

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Ms. Diane Kavanaugh Vetort Jackson District Office, Air Quality Division DEPARTMENT OF ENVIRONMENT, GREAT LAKES, AND ENERGY September 20, 2021 Page 3

> industrial users. Review of this data did not suggest the likelihood of elevated PCBs in the biosolids which would result in PCBs in the emissions above the ROP limit.

2. With the recent improvements to YCUA FBIS and relatively new carbon media and plant influent and biosolids quality, YCUA believes that the PCB exceedance indicated in the emission testing of May 26, 2021 could be a testing anomaly.

Corrective Measures: Notwithstanding the foregone conclusions, YCUA intends to monitor the plant influent and biosolids for PCBs more frequently than currently established. Additionally, YCUA has initiated steps to reconduct the emissions test for PCBs. A test protocol would be submitted to EGLE as the testing date is scheduled by the testing company.

We hope the above responses and attached supporting documents provide adequate response to the violation notice. Should there be any questions, please do not hesitate to contact me by phone at (734) 484-4600 ext. 121 or by email at smullapudi@ycua.org.

Sincerely,

SREEDHAR MULLAPUDI, Director of Wastewater Operations/Compliance Ypsilanti Community Utilities Authority

Ms. Diane Kavanaugh Vetort, EGLE Cc:

Ms. Jenine Camilleri, EGLE Mr. Hamid Rahbarnoohi

Mr. Alan Schock Mr. Jeff Castro

YCUA File

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ATTACHMENT-A
EXCERPTS OF EMISSIONS TEST REPORT FOR PCBS
MAY 26, 2021
DECEMBER 15-16, 2015

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1.1 Summary of Test Program

Gammie Air Monitoring, LLC (GamAir) was retained by Ypsilanti Community Utilities Authority (YCUA) to perform an air emissions compliance test program on one fluidized bed sewage sludge incinerator (FBSSI). The purpose of this emission measurement test program was to quantify the controlled emissions of: mercury, polychlorinated biphenyls (PCB), carbon dioxide, and oxygen. The applicable Michigan Department of Environment, Great Lakes, & Energy (EGLE) and United States Environmental Protection Agency (USEPA) emission limits are as follows:

Table 1-1 Applicable Emission Limits Ypsilanti Community Utilities Authority Fluidized Bed Incinerator Ypsilanti, Michigan

Michigan EGLE/ USEPA Emission Limits Units **Emission Limit** Parameter Polychlorinated Biphenyls pound/dry ton sludge 1.2E-06 (PCB) mg/kg dry sludge (material limit) 3.7 Mercury 6.9E-04 pound/dry ton of sludge (emission limit) gram/24-hr 3200

Compliance emission tests were performed on the parameters listed above. The tests were conducted in accordance with the conditions and monitoring requirements for compliance testing as set forth with the EGLE/ USEPA guidelines for source emission testing. Compliance tests were conducted in accordance with USEPA Methods 1-5, 23, and 29, as published in Title 40, Code of Federal Regulations, Part 60 (40CFR60). Testing of the FBSSI occurred on 26 May 2021. Representatives from YCUA and GamAir were responsible for coordinating the testing with the EGLE. YCUA personnel was responsible for collecting all process data and biosolids samples; biosolids sample analysis was performed by contract labs, Brighton Analytical, LLC. Gammie Air Monitoring, LLC (GamAir) was responsible for collecting all air emission samples and their contract lab, Bureau Veritas Laboratories (BV Labs) was responsible for analysis of those samples.

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The EGLE has identified this source as the following:

State Registration Number: B6237

Permit Number: MI-ROP-B6237-2015

Section 2.0 of this report presents a description of the source, sampling locations, and summarizes the process operational parameters. Section 3.0 summarizes the test results. Sampling and analysis methodologies are presented in Section 4.0. Quality assurance and quality control (QA/QC) procedures specific to this test program are described in Section 5.0.

1.2 Test Program Organization

The following is a list of those individuals responsible for the organization of this test program.

Mr. Sree Mullapudi, PE Email: smullapudi@ycua.org	YCUA	(734) 484-4600
Mrs. Karen Kajiya-Mills Email: kajiya-millsk@michigan.go	Michigan EGLE v	(586) 753-3745
Mr. Leigh Gammie Email: lag@gamair.com	GamAir	(860) 757-3340
Mr. Clayton Johnson Email: clayton.johnson@bvlabs.com	BV Labs m	(905) 817-5769

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2.0 SOURCE SAMPLING AND PROCESS DESCRIPTION

2.1 Outlet Flue Gas Sampling Location

The inside diameter of the incinerator exhaust stack was 41.5 inches. The conventional EPA test ports are located after the induced draft fan and prior to the top of the exhaust stack. Two EPA test ports are spaced 90 degrees apart and are located 293 inches (7.0 duct diameters) from the nearest upstream disturbance and 173 inches (4.2 duct diameters) from the nearest downstream disturbance. Based on EPA Method 1 this location required twelve (12) traverse points, six (6) per each test port. A schematic diagram showing the sample port locations are shown below and again in the Appendix A.

Table 2-1 Wet Method Sample Traverse Points Ypsilanti Community Utilities Authority Fluidized Bed Sewage Sludge Incinerator			
Traverse Point	% of Stack Diameter	Distance (inches)	
1	0.044	1,63	
2	0.146	5.50	
3	0.296	11.13	
4	0.704	26.38	
5	0.854	32.00	
6	0.956	58.88	

2.1.1 Continuous Emissions Monitoring Sampling Location

Continuous emissions monitoring (CEM) sampling occurred at the same Venturi Scrubber outlet stated above in a separate port. CEM sampling took place through a single port. Prior to the start of the CEM sampling a three-point stratification check was performed. The individual traverse point locations are shown below and ductwork schematic are in the Appendix A.

Table 2-2 Gaseous Sample Traverse Points Ypsilanti Community Utilities Authority Fluidized Bed Sewage Sludge Incinerator				
Traverse Point	% of Stack Diameter	Distance (inches)		
1	0.167	6.93		
2	0.50	20.75		
3	0.833	34.57		

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2.2 Process and Air Pollution Control Description

YCUA operates a fluidized bed biosolids incinerator (FBI) which is rated at 6,300 dry pounds per hour (3.15 tons per hour) of biosolids. The FBI operated at 2.61 dry tons of sludge per hour which equates to 83.0% of the maximum capacity rating (MCR) which equates ≥4,699 pounds per hour. The fluidized bed temperature was 1346°F.

Air emissions from the FBI were controlled by a venturi/impingement tray scrubber operating at an average scrubber pressure drop range of 35.7" inches of water column (in. w.c.). Total water injection to the venturi scrubber was 336.2 gallons per minute (gpm); the water injection rate to the impingement tray was 585.7 gpm. Following the scrubber was a wet electrostatic precipitator (WESP) followed by a granular activated carbon (GAC) filter.

2.3 Process Monitoring

During the test program the incinerator operated at an optimized feed rate. The process parameters to be monitored during each test consisted of the following:

Hourly sludge tonnage input
Sludge moisture content (%)
Bed combustion temperatures
Incinerator oxygen content (% wet)
Scrubber water flowrates
Scrubber system pressure drop
Granular Activated Carbon Pressure Drop
Temperature Differential between GAC inlet and WESP outlet
WESP secondary voltage
WESP secondary amperage

Table 2-3summarizes the operational process parameters monitored during testing. Copies of YCUA's process monitoring can be found in Appendix D.

Table 2-3

Summary of Process Data

Compliance Test Program Ypsilanti Community Utilities Authority

Fluidized Bed Incinerator 26 May 2021

Ypsilanti, Michigan

Method/Component	Units	Run 1 0830-1034	Run 2 1110-1314	Run 3 1355-1600	Average
Biosolids Feed Rate	dry pounds/hour	4863	5385	5442	5206
Percent Blended Solids	%	1.67	1.83	1.63	1.71
Fluidized Bed Temperature	°F	1351	1342	1346	1346
Free Board Temperature	°F	1676	1672	1668	1672
Venturi Water Flow	gallon/minute	333.2	336.3	339.0	336.2
Venturi Pressure Drop	inches w.c.	36.0	36.2	35.0	35.7
Tray Scrubber Water Flow	gallon/minute	587.4	583.4	586.2	585.7
Tray Scrubber Pressure Drop	inches w.c.	9.28	9.32	8.96	9.19
GAC Pressure Drop	inches w.c.	4.5	4.4	4.3	4.4
WESP Secondary Voltage	kV	43.8	43.7	42.0	43.2
WESP Amperage	mA	42.2	41.5	18.4	34.0
Temperature Diff. GAC inlet WESP outlet	٥F	36	36	36	36
YCUA - Carbon Monoxide @ 7% Oxygen	ppmvd	0	0	0.42	0.14
YCUA - Sulfur Dioxide	ppmvd	6.46	6.15	5.33	5.98
Oxygen	%	6,28	6.47	6.70	6.48

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3.0 SUMMARY AND DISCUSSION OF RESULTS

3.1 Objectives and Test Matrix

The purpose of this test program was to measure air emissions from the FBSSI exhaust. Three emissions test runs were conducted for each parameter, with the average result of the three test runs reported. Table 3-1 lists the parameters that were measured along with their respective USEPA test method and sample time for each run for the FBSSI. Emissions testing was conducted in accordance with EPA approved test procedures to be used at the stack sampling location.

_	TABLE 3- Test Matri Community Ut Bed Sewage Slu	x ilities Auth				
Outlet Pollutant Sampling EPA Sample Analytical Number of Test Times Laboratory Runs Methods (min.)						
USI	EPA and ELGE C	Compliance				
Oxygen (O ₂)	Method 3A	120	GamAir	3		
Carbon Dioxide (CO ₂)	Method 3A	120	GamAir	3		
Polychlorinated Biphenyls (PCB)	Method 23	120	BV	3 + 1 blank		
Mercury (Hg)	Method 29	120	BV	3 + 1 blank		

3.2 Summary of Test Results

Table 3-2 presents the summary of emissions data for each pollutant tested.

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Table 3-2

Summary of Emissions Data

EGLE Compliance Test

Ypsilanti Community Utilities Authority

Fluidized Bed Incinerator 26 May 2021

Ypsilanti, Michigan

Method/ Component	Units	Run 1	Run 2	Run 3	Average	Limit	Percent of Limit
Method 23 – PCB	lb/ dry ton of sludge	3.66E-06	1.64E-06	1.02E-06	2.11E-06	1.20E-06	175.5
Method 29 – Mercury	mg/ dscm @ 7% O ₂	9.52E-03	6.40E-03	4.85E-03	6.92E-03	0.037	18.7
Method 29 – Mercury	lb/ dry ton of sludge	2.03E-04	1.22E-04	8.98E-05	1.38E-04	6.9E-04	20.1
Method 29 – Mercury	g/ 24-hr period	5.39	3.58	2.66	3.88	3200	0.12
SW846 7471A – Mercury	mg/kg dry sludge	NA	NA	NA	0.31	3.7	8.4

PCB - polychlorinated biphenyls

mg/dscm @ 7% O₂ - milligrams per dry standard cubic meter at seven percent oxygen

lb/ dry ton of sludge - pound per dry ton of sludge

g/24-hr period – gram per 24 hour period

mg/kg dry sludge - milligram per kilogram of dry sludge

SW846 7471A - EPA Method 7471B (SW-846): Mercury in Solid or Semisolid Wastes (Manual Cold-Vapor Technique)

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3.3 Field Test Changes

During the recovery of Method 23-1 the heated filter was removed from the filter housing and placed in its recovery sample jar. The recovery of the glass housing was rinsed with a small amount acetone into the filter recovery sample jar (M23-1-1). The EGLE representative noticed the mistake immediately. The filter housing was fully recovered into the proper sample recovery sample jar (M23-1-2, solvent rinses). All glassware was rinsed with acetone and toluene and all components were combined at the lab. The mistake in recovery should not have any effect on the validity of the PCB's reported by BV Labs as all components are combined together.

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Executive Summary

Ypsilanti Community Utilities Authority (YCUA) retained Bureau Veritas North America, Inc. to perform emission testing at the YCUA wastewater treatment plant in Ypsilanti, Michigan. Air emissions from the fluidized-bed sewage sludge incinerator (Emission Unit ID: EU-FBSSI) were tested at Exhaust Stack SV-001. The testing was performed to evaluate compliance with applicable emission limits in Michigan Department of Environmental Quality (MDEQ) Renewable Operating Permit (ROP) MI-ROP-B6237-2015, dated March 17, 2015, and Table 2 to Subpart MMMM of CFR 40 Part 60.

Bureau Veritas sampled the EU-FBSSI exhaust for the following analytes:

- Oxygen (O₂)
- Sulfur dioxide (SO₂)
- Oxides of nitrogen (NO_x)
- Carbon monoxide (CO)
- 2,3,7,8-Tetrachlorodibenzo-para-dioxin toxic equivalents (2,3,7,8-TCDD TEQ)
- Total dioxins and furans
- Total polychlorinated biphenyls (PCBs)
- Hydrogen chloride (HCl)
- Particulate matter (PM)
- Arsenic (As), beryllium (Be), cadmium (Cd), total chromium (Cr), lead (Pb), and mercury (Hg)

The testing followed United States Environmental Protection Agency (USEPA) Reference Methods 1, 2, 3A, 4, 5, 6C, 7E, 10, 23, 26A, 29, and 205 guidelines. Three 60-minute test runs were completed for each analyte at the EU-FBSSI source. Concentrations of oxygen in the exhaust gas were measured and averaged over the test period in order to correct the results to 7% oxygen.

Detailed results are presented in Tables 1 through 4 after the Tables Tab of this report. The following table summarizes the results of the testing conducted on December 15 and 16, 2015.

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	B-27 - 6-0-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-



Summary of EU-FBSSI Air Emission Test Results

	Average Result	EU-FBSSI Permit Limit		40 CFR Part 60 Subpart MMMM Emission Limits ^{1, 2}
ppmvd at 7% oxygen	7.4	****		15
ppmvd at 7% oxygen	52.2			150
ppmvd at 7% oxygen	45.0	100	3	64
lb/ton dry sewage sludge	8.9x10 ⁻¹²	1.4x10 ⁻⁹	-	
ng/dscm at 7% oxygen	0.045	and the second		1.2 Total mass basis
	0.00044			0.10 Toxic equivalency basis
lb/ton dry sewage sludge	2.7x10 ⁻⁷	1.2x10 ⁻⁶	4	
lb/ton dry sewage sludge	<0.038	0.8	5	
ppmvd at 7% oxygen	<1,473			0.51
lb/ton dry sewage sludge	0.06	0.35	3	
mg/dscm at 7% oxygen	3.3	******		18
lb/ton dry sewage sludge	2.0x10 ⁻⁵	1.3x10 ⁻³	3	gaments,
lb/ton dry sewage sludge	4.3x10 ⁻⁶	2.5x10 ⁻⁵	3	AMALAMA
lb/ton dry sewage sludge	4.3x10 ⁻⁶	8.5x10 ⁻³	3	_
mg/dscm at 7% oxygen	2.4x10 ⁻⁴			1.6x10 ⁻³
lb/ton dry sewage sludge	1.1x10 ⁻⁴	4.5x10 ⁻²	3	
mg/dscm at 7% oxygen	1.8x10 ⁻³			7.4x10 ⁻³
lb/ton dry sewage sludge	2.8x10 ⁻⁴	6.9x10 ⁻¹	3	
mg/dscm at 7% oxygen	1.5x10 ⁻²			3.7x10 ⁻²
	ppmvd at 7% oxygen ppmvd at 7% oxygen lb/ton dry sewage sludge lb/ton dry sewage sludge lb/ton dry sewage sludge ppmvd at 7% oxygen lb/ton dry sewage sludge ppmvd at 7% oxygen lb/ton dry sewage sludge mg/dscm at 7% oxygen lb/ton dry sewage sludge lb/ton dry sewage sludge lb/ton dry sewage sludge mg/dscm at 7% oxygen lb/ton dry sewage sludge mg/dscm at 7% oxygen lb/ton dry sewage sludge mg/dscm at 7% oxygen lb/ton dry sewage sludge	ppmvd at 7% oxygen 52.2 ppmvd at 7% oxygen 45.0 lb/ton dry sewage sludge 8.9x10 ⁻¹² ng/dscm at 7% oxygen 0.045 lb/ton dry sewage sludge 2.7x10 ⁻⁷ lb/ton dry sewage sludge <0.038 ppmvd at 7% oxygen <1.473 lb/ton dry sewage sludge 0.06 mg/dscm at 7% oxygen 3.3 lb/ton dry sewage sludge 2.0x10 ⁻⁵ lb/ton dry sewage sludge 4.3x10 ⁻⁶ lb/ton dry sewage sludge 4.3x10 ⁻⁶ lb/ton dry sewage sludge 1.1x10 ⁻⁴ mg/dscm at 7% oxygen 1.8x10 ⁻³ lb/ton dry sewage sludge 2.8x10 ⁻⁴ mg/dscm at 7% oxygen 1.5x10 ⁻²	ppmvd at 7% oxygen	ppmvd at 7% oxygen

ppmvd part per million by volume, dry lb/ton: pound per ton

mg/dscm: milligram per dry standard cubic meter ng/dscm: nanogram per dry standard cubic meter

Based on 60-minute averaging time Based on 240-minute averaging time

Based on 120-minute averaging time

Emission limits from Table 2 to Subpart MMMM of 40 CFR Part 60.

Table 2 to Subpart MMMM of 40 CFR Part 60 indicates that (1) all emission limits shall be measured at 7% oxygen, dry basis at standard conditions and (2) results shall be based on a three-run average collecting a minimum volume of 1 dry standard cubic meter per run with the exception of oxides of nitrogen, sulfur dioxide, and carbon monoxide for which sample duration shall be a minimum of 1 hour per run.

As noted in laboratory report, HCl samples were diluted due to matrix interference; sulfate peak was higher than expected.

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ATTACHMENT-B EXCERPTS OF ANALYTICAL REPORTS FOR BIOSOLIDS, PLANT INFLUENT, PLANT EFFLUENT FOR PCBS

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Brighton Analytical LLC

2105 Pless Drive Brighton, Michigan 48114 Phone: (810)229-7575 (810)229-8650 e-mail:bai-brighton@sbcglobal.net EGLE Certified #9404 NELAC Accredited #176507

Sample Date:

09/03/2021

Submit Date: Report Date: 09/03/2021 09/17/2021 To:

Ypsilanti Comm. Utilities Auth.

2777 State Rd. Ypsilanti, MI 48198

BA Report Number:

77132

Project Name:

YCUA Semi-Annual Biosolids Analysis

BA Sample ID:

CP05242

Project Number:

Biosolids-September 2021

	Sample ID:	Biosolids Con	lids Composite				
Parameters	Result	Units	DL	Method Reference	Analyst	Analysis Date	
Inorganic Analysis							
•	23000000	ualV a	200	EPA 365,2	MB	09/16/2021	
Phosphorus (total)	PENDING	ug/Kg	200	SW846 9012A	WIL	12/30/1899	
Total Cyanide	rending			3 11 040 70127		12/50/1077	
Organic Analysis							
Phenols 4AAP	8500	ug/Kg	500	EPA 420.1	RM	09/13/2021	
PCB Analysis							
ARO 1016	Not detected	ug/Kg	330	SW846 8082A	BY	09/08/2021	
ARO 1221	Not detected	ug/Kg	330	SW846 8082A	BY	09/08/2021	
ARO 1232	Not detected	ug/Kg	330	SW846 8082A	BY	09/08/2021	
ARO 1242	Not detected	ug/Kg	330	SW846 8082A	BY	09/08/2021	
ARO 1248	Not detected	ug/Kg	330	SW846 8082A	BY	09/08/2021	
ARO 1254	Not detected	ug/Kg	330	SW846 8082A	BY	09/08/2021	
ARO 1260	Not detected	ug/Kg	330	SW846 8082A	BY	09/08/2021	
ARO 1262	Not detected	ug/Kg	330	SW846 8082A	BY	09/08/2021	
ARO 1268	Not detected	ug/Kg	330	SW846 8082A	BY	09/08/2021	
Total PCB	Not detected	ug/Kg	330	SW846 8082A	BY	09/08/2021	
PCB soil extraction	Extracted			3510C/3545	MB	09/07/2021	
%Solid	21	%		ASTM D2216	MH	09/07/2021	

DL=Reported detection limit for analytical method requested. Some compounds require special analytical methods to achieve EGLE designated target detection limits (TDL).

All soil results based on dry weight.

Released by

Date

9/17/2021



Brighton Analytical LLC

2105 Pless Drive
Brighton, Michigan 48114
Phone: (810)229-7575 (810)229-8650
e-mail:bai-brighton@sbcglobal.net
EGLE Certified #9404
NELAC Accredited #176507

Sample Date:

07/05/2021

Submit Date: Report Date: 07/09/2021 07/27/2021 To:

Ypsilanti Comm. Utilities Auth.

2777 State Rd.

Ypsilanti, MI 48198

BA Report Number:

75786

Project Name:

NPDES Permit No. MI 0042676-Additional Testing

BA Sample ID:

CP00848

Project Number:

YCUA Plant Influent

	Sample ID:	Plant Influen	t Comp	Method Reference	Analyst	Analysis Date
Parameters	Result	Units	DL			
PCB Analysis						
ARO 1016	Not detected	ug/L	0,2	EPA 608/608.3	BY	07/15/2021
ARO 1221	Not detected	ug/L	0.2	EPA 608/608.3	BY	07/15/2021
ARO 1232	Not detected	ug/L	0.2	EPA 608/608.3	BY	07/15/2021
ARO 1242	Not detected	ug/L	0,2	EPA 608/608.3	BY	07/15/2021
ARO 1248	Not detected	ug/L	0.2	EPA 608/608.3	вү	07/15/2021
ARO 1254	Not detected	ug/L	0.2	EPA 608/608.3	BY	07/15/2021
ARO 1260	Not detected	ug/L	0.2	EPA 608/608.3	BY	07/15/2021
ARO 1262	Not detected	ug/L	0.2	EPA 608/608.3	BY	07/15/2021
ARO 1268	Not detected	ug/L	0.2	EPA 608/608.3	BY	07/15/2021
Total PCB	Not detected	ug/L	0.2	EPA 608/608.3	BY	07/15/2021
PCB liquid (extraction)	Extracted	-		3510C/3545	MB	07/12/2021

DL=Reported detection limit for analytical method requested. Some compounds require special analytical methods to achieve EGLE designated target detection limits (TDL).

Released by

Date

7/27/2021

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Brighton Analytical LLC

2105 Pless Drive
Brighton, Michigan 48114
Phone: (810)229-7575 (810)229-8650
e-mail:bai-brighton@sbcglobal.net
EGLE Certified #9404
NELAC Accredited #176507

Sample Date:

07/06/2021

Submit Date: Report Date: 07/09/2021 07/27/2021 To:

Ypsilanti Comm. Utilities Auth.

2777 State Rd.

Ypsilanti, MI 48198

BA Report Number:

75785

Project Name:

NPDES Permit No. MI 0042676-Additional Testing

BA Sample ID:

CP00842

Project Number:

YCUA Plant Effluent

	Sample ID:	Plant Effluent Comp				Analysis
Parameters	Result	Units	ÐL	Method Reference	Analyst	Date
PCB Analysis						
ARO 1016	Not detected	ug/L	0.2	EPA 608/608.3	BY	07/15/2021
ARO 1221	Not detected	ug/L	0.2	EPA 608/608.3	BY	07/15/2021
ARO 1232	Not detected	ug/L	0.2	EPA 608/608.3	BY	07/15/2021
ARO 1242	Not detected	ug/L	0.2	EPA 608/608.3	BY	07/15/2021
ARO 1248	Not detected	ug/L	0.2	EPA 608/608.3	BY	07/15/2021
ARO 1254	Not detected	ug/L	0.2	EPA 608/608.3	BY	07/15/2021
ARO 1260	Not detected	ug/L	0.2	EPA 608/608.3	BY	07/15/2021
	Not detected	ug/L	0.2	EPA 608/608.3	BY	07/15/2021
ARO 1262		-	0.2	EPA 608/608.3	BY	07/15/2021
ARO 1268	Not detected	ug/L			BY	07/15/2021
Total PCB	Not detected	ug/L	0.2	EPA 608/608.3		• • • • • • • • • • • • • • • • • • • •
PCB liquid (extraction)	Extracted			3510C/3545	MB	07/12/2021

DL=Reported detection limit for analytical method requested. Some compounds require special analytical methods to achieve EGLE designated target detection limits (TDL).

Released by

Date

7/27/2021

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2105 Pless Drive Brighton, Michigan 48114 Phone: (810)229-7575 (810)229-8650 e-mail;bai-brighton@sbcglobal.net MDNRE Certified #9404 NELAC Accredited #176507

Sample Date:

05/14/2019

Submit Date: Report Date:

05/17/2019 05/29/2019 To.

Ypsilanti Comm. Utilities Auth.

2777 State Rd.

Ypsilanti, MI 48198

BA Report Number:

58537

Project Name:

NPDES Permit No. MI 00042676

BA Sample ID:

PCB Analysis ARO 1016

ARO 1221

ARO 1232

ARO 1242

ARO 1248

ARO 1254

ARO 1260

ARO 1262

ARO 1268

Total PCB

PCB liquid (extraction)

Parameters

CK01687

Project Number:

YCUA PlntInfl Non-Routine

Sample ID:

Units

ug/L

Result

Not detected

Not detected

Not detected

Not detected

Not detected

Not detected

Not detected Not detected

Not detected

Not detected

Extracted

Plant Influ

Influent	Composite		Analysis
DL	Method Reference	Analyst	Date
0.2	EPA 608/608.3	BY	05/21/2019
0.2	EPA 608/608.3	BY	05/21/2019
0.2	EPA 608/608.3	BY	05/21/2019
0.2	EPA 608/608.3	BY	05/21/2019
0.2	EPA 608/608.3	BY	05/21/2019
0.2	EPA 608/608.3	BY	05/21/2019
0.2	EPA 608/608.3	BY	05/21/2019
0.2	EPA 608/608,3	BY	05/21/2019
0.2	EPA 608/608.3	BY	05/21/2019
0,2	EPA 608/608.3	BY	05/21/2019

DL=Reported detection limit for analytical method requested. Some compounds require special analytical methods to achieve MDNR designated target detection limits (TDL).

Released by

3510C/3545

Date

5/29/2019

MB

05/20/2019

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2105 Pless Drive Brighton, Michigan 48114 Phone: (810)229-7575 (810)229-8650 e-mail:bai-brighton@shcglobal.net EGLE Certified #9404 NELAC Accredited #176507

Sample Date:

10/02/2019

Submit Date: Report Date: 10/04/2019 10/15/2019

To:

Ypsilanti Comm. Utilities Auth.

2777 State Rd.

Ypsilanti, MI 48198

BA Report Number:

61476

Project Name:

NPDES Permit No. MI 00042676

BA Sample ID:

CL01719

Project Number:

YCUA PlantInf Non-Routine

	Sample ID: Plant Influent Comp					Analysis
Parameters	Result	Units	DL	Method Reference	Analyst	Date
PCB Analysis						
ARO 1016	Not detected	ug/L	0.2	EPA 608/608.3	BY	10/08/2019
ARO 1221	Not detected	ug/L	0.2	EPA 608/608.3	BY	10/08/2019
ARO 1232	Not detected	ug/L	0,2	EPA 608/608.3	BY	10/08/2019
ARO 1242	Not detected	ug/L	0.2	EPA 608/608.3	BY	10/08/2019
ARO 1248	Not detected	ug/L	0.2	EPA 608/608.3	BY	10/08/2019
ARO 1254	Not detected	ug/L	0.2	EPA 608/608.3	BY	10/08/2019
ARO 1260	Not detected	ug/L	0.2	EPA 608/608.3	BY	10/08/2019
ARO 1262	Not detected	ug/L	0.2	EPA 608/608.3	BY	10/08/2019
ARO 1268	Not detected	ug/L	0.2	EPA 608/608.3	BY	10/08/2019
Total PCB	Not detected	ug/L	0.2	EPA 608/608.3	BY	10/08/2019
PCB liquid (extraction)	Extracted			3510C/3545	MB	10/07/2019

DL=Reported detection limit for analytical method requested. Some compounds require special analytical methods to achieve EGLE designated target detection limits (TDL).

Released by

Date

10/15/2019

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2105 Pless Drive Brighton, Michigan 48114 Phone: (810)229-7575 (810)229-8650 e-mail:bai-brighton@sbcglobal.net MDNRE Certified #9404 NELAC Accredited #176507

Sample Date:

05/15/2019

Submit Date: Report Date: 05/17/2019 05/30/2019 To:

Ypsilanti Comm. Utilities Auth.

2777 State Rd.

Ypsilanti, MI 48198

BA Report Number:

58538

Project Name:

NPDES Permit No. MI 00042676

BA Sample ID:

CK01693

Project Number:

YCUA Pint Eff Add Testing

	S	ample ID:	Plant Effluent	Composite		Analysis
Parameters	Result	Units	DL	Method Reference	Analyst	Date
PCB Analysis						0.000.000.00
ARO 1016	Not detected	ug/L	0.2	EPA 608/608.3	BY	05/21/2019
ARO 1221	Not detected	ug/L	0.2	EPA 608/608.3	BY	05/21/2019
ARO 1232	Not detected	ug/L	0.2	EPA 608/608.3	BY	05/21/2019
ARO 1242	Not detected	ug/L	0.2	EPA 608/608.3	BY	05/21/2019
ARO 1248	Not detected	ug/L	0.2	EPA 608/608.3	BY	05/21/2019
ARO 1254	Not detected	ug/L	0.2	EPA 608/608.3	BY	05/21/2019
ARO 1260	Not detected	ug/L	0.2	EPA 608/608.3	BY	05/21/2019
ARO 1262	Not detected	ug/L	0.2	EPA 608/608.3	BY	05/21/2019
ARO 1268	Not detected	ug/L	0.2	EPA 608/608.3	BY	05/21/2019
Total PCB	Not detected	ug/L	0.2	EPA 608/608.3	BY	05/21/2019
PCB liquid (extraction)	Extracted	J		3510C/3545	MB	05/20/2019

DL=Reported detection limit for analytical method requested. Some compounds require special analytical methods to achieve MDNR designated target detection limits (TDL).

Released by

Date

5/30/2019

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2105 Pless Drive Brighton, Michigan 48114 Phone: (810)229-7575 (810)229-8650 e-mail:bai-brighton@sbcglobal.net EGLE Certified #9404 NELAC Accredited #176507

Sample Date:

10/03/2019

Submit Date: Report Date:

Parameters

10/04/2019 10/16/2019 To:

Ypsilanti Comm, Utilities Auth.

Method Reference

EPA 608/608.3

3510C/3545

2777 State Rd.

Ypsilanti, MI 48198

BA Report Number:

61477

Project Name:

NPDES Permit NO. MI00042676

BA Sample ID:

PCB Analysis

ARO 1016

ARO 1221

ARO 1232

ARO 1242

ARO 1248

ARO 1254

ARO 1260

ARO 1262

ARO 1268

Total PCB

PCB liquid (extraction)

CL01725

Project Number:

YCUA PlantEff Non-Routine

Sample ID:

Units

ug/L

Result

Not detected

Extracted

Plant Effluent Composite

0.2

0.2

0.2

0.2

0.2

0.2

0.2

0.2

0.2

0.2

DŁ

Analyst	Analysis Date				
BY	10/08/2019				
BY	10/08/2019				
BY	10/08/2019				
BY	10/08/2019				
BY	10/08/2019				
BY	10/08/2019				
BY	10/08/2019				
BY	10/08/2019				
BY	10/08/2019				
BY	10/08/2019				

10/07/2019

DL=Reported detection limit for analytical method requested. Some compounds require special analytical methods to achieve EGLE designated target detection limits (TDL).

Released by

Date

10/16/2019

MB

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ANALYTICAL RESULTS

Workorder: 356726 YCUA-090319

Lab ID:

3567260001

Date Received: 8/30/2019 13:33 Matrix:

Solid

Sample ID:

Date Collected: 8/29/2019 18:21

Sample Desc: Composite

Biosolids 2019 RATA

PO:

Parameters	Qualifier	Qualifier Result Units		Reporting Dilution		ualifier	Analyzed	Ву	
•			Ĺlmit	Factor	Min	Max			
Metals									
Analysis Desc: EPA 6020A	n Paragraphia			verskijn.					
Antimony		1300 µg/Kg-dry	500	1			9/10/2019 09:31	DTM	
Arsenic		8800 µg/Kg-dry	500	1			9/10/2019 09:31	DTM	
Barium		290000 µg/Kg-dry	500	1			9/10/2019 09:31	DTM	
Beryllium		<100 µg/Kg-dry	100	1			10/9/2019 11:06	VAH	
Boron		110000 µg/Kg-dry	500	1			9/10/2019 09:31	DTM	
Cadmium		2600 µg/Kg-dry	500	1			9/10/2019 09:31	DTM	
Chromium		22000 µg/Kg-dry	500	1			9/10/2019 09:31	DTM	
Cobalt		24000 µg/Kg-dry	500	1			9/10/2019 09:31	DTM	
Copper		250000 µg/Kg-dry	500	1			9/10/2019 09:31	DTM	
Lead		8700 μg/Kg-dry	500	1			9/10/2019 09:31	DTM	
Manganese		620000 µg/Kg-dry	500	1			9/10/2019 09:31	DTM	
Molybdenum		15000 µg/Kg-dry	500	1			9/10/2019 09:31	DTM	
Nickel		28000 µg/Kg-dry	500	1			9/10/2019 09:31	DTM	
Selenium		9100 μg/Kg-dry	500	1			9/10/2019 09:31	DTM	
Silver		1300 μg/Kg-dry	500	1			9/10/2019 09:31	DTM	
Thallium		<500 μg/Kg-dry	500	1			9/10/2019 09:31	DTM	
Zinc		900000 µg/Kg-dry	500	1			9/10/2019 09:31	DTM	
Polychlorinated Biphenyls(PC	(B)								
Analysis Desc: EPA 8082A									
PCB Aroclor 1016		<330 µg/Kg-dry	330	1			9/9/2019 22:01	GFM	
PCB Aroclor 1221		<330 µg/Kg-dry	330	1			9/9/2019 22:01	GFM	
PCB Aroclor 1232		<330 μg/Kg-dry	330	1			9/9/2019 22:01	GFM	
PCB Aroclor 1242		<330 μg/Kg-dry	330	1			9/9/2019 22:01	GFM	
PCB Aroclor 1248		<330 µg/Kg-dry	330	1			9/9/2019 22:01	GFM	
PCB Aroclor 1254		<330 μg/Kg-dry	330	1			9/9/2019 22:01	GFM	
PCB Aroclor 1260		<330 µg/Kg-dry	330	1			9/9/2019 22:01	GFM	
PCB Aroclar 1262		<330 μg/Kg-dry	330	1			9/9/2019 22:01	GFM	
PCB Aroclor 1268		<330 µg/Kg-dry	330	1			9/9/2019 22:01	GFM	
Total PCBs		<330 µg/Kg-dry	330	1			9/9/2019 22:01	GFM	
Sample Preparation									
Analysis Desc: EPA 3550C				ar jaski					
Ultrasonic Extraction, PCBs		Complete		1			9/6/2019 08:30	TSD	

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Generated: 10/9/2019 5:28:16 PM

Report ID: 356726 - 179612

Revised Report

Page 4 of 6

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2105 Pless Drive Brighton, Michigan 48114 Phone: (810)229-7575 (810)229-8650 e-mail:bai-brighton@sbcglobal.net EGLE Certified #9404

NELAC Accredited #176507

Sample Date: Submit Date:

Report Date:

03/02/2020 03/04/2020

03/16/2020

To:

Ypsilanti Comm. Utilities Auth.

2777 State Rd. Ypsilanti, MI 48198

BA Report Number:

64126

Project Name:

NPDES PERMIT #MI0042676

BA Sample ID:

CM02547

Project Number:

Mar Plant Inf Non Routine

. 011102517		•				
		Sample ID:	Plant Influent	Plant Influent Comp		
Parameters	Result	Units	DL Method Referen		Analyst	Date
PCB Analysis						
ARO 1016	Not detected	- 0	0.2	EPA 608/608.3	BY	03/09/2020
ARO 1221	Not detected		0.2	EPA 608/608.3	BY	03/09/2020
ARO 1232	Not detected		0.2	EPA 608/608,3	BY	03/09/2020
ARO 1242	Not detected	-	0.2	EPA 608/608.3	BY	03/09/2020
ARO 1248	Not detected	O .	0.2	EPA 608/608.3	BY	03/09/2020
ARO 1254	Not detected		0.2	EPA 608/608.3	BY	03/09/2020
ARO 1260	Not detected		0.2	EPA 608/608.3	BY	03/09/2020
ARO 1262	Not detected		0.2	EPA 608/608.3	BY	03/09/2020
ARO 1268	Not detected	ug/L	0.2	EPA 608/608.3	BY	03/09/2020
Total PCB	Not detected	ug/L	0.2	EPA 608/608.3	BY	03/09/2020
PCB liquid (extraction)	Extracted			3510C/3545	MB	03/05/2020
Chlorinated Hydrocarbon Analysis						
Hexachlorobenzene	Not detected	-	0.01	EPA 612	BY	03/06/2020
Hexachlorobutadiene	Not detected	ug/L	0.01	EPA 612	BY	03/06/2020
Hexachlorocyclopentadiene	Not detected	ug/L	0.01	EPA 612	BY	03/06/2020
Chlorinated Hydrocarbons 612 (ext)	Extracted			3510C/3545	MB	03/05/2020
Benzidines Analysis						
Benzidine	Not detected	ug/L	0.1	EPA 605	BY	03/11/2020
3,3-Dichlorobenzidine	Not detected	ug/L	1.5	EPA 605	BY	03/11/2020
605 liquid (extraction)	Extracted			3510C/3545	MB	03/05/2020
Semi-Volatile Analysis						
Acenaphthene	Not detected	ug/L	5	EPA 625/625.1	RG	03/06/2020
Acenaphthylene	Not detected	ug/L	5	EPA 625/625.1	RG	03/06/2020
Anthracene	Not detected	ug/L	5	EPA 625/625.1	RG	03/06/2020
Benzo(a)anthracene	Not detected	ug/L	1	EPA 625/625.1	RG	03/06/2020
Benzo(a)pyrene	Not detected	ug/L	0.2	EPA 625/625.1	RG	03/06/2020
Benzo(b)fluoranthene	Not detected	ug/L	1	EPA 625/625.1	RG	03/06/2020
Benzo(ghi)perylene	Not detected	ug/L	1	EPA 625/625.1	RG	03/06/2020
Benzo(k)fluoranthene	Not detected	ug/L	1	EPA 625/625.1	RG	03/06/2020
Bis(2-chloroethoxy)methane	Not detected	ug/L	5	EPA 625/625.1	RG	03/06/2020
Bis(2-chloroethyl)ether	Not detected	ug/L	ı	EPA 625/625.1	RG	03/06/2020
Bis(2-chloroisopropyl)ether	Not detected	ug/L	5	EPA 625/625.1	RG	03/06/2020
4-Bromophenyl phenyl ether	Not detected	ug/L	5	EPA 625/625.1	RG	03/06/2020
Butyl Benzyl Phthalate	Not detected	ug/L	5	EPA 625/625.1	RG	03/06/2020
2-Chloronaphthalene	Not detected	ug/L	5	EPA 625/625.1	RG	03/06/2020

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2105 Pless Drive Brighton, Michigan 48114 Phone: (810)229-7575 (810)229-8650 e-mail:bai-brighton@sbcglobal.net EGLE Certified #9404 NELAC Accredited #176507

Sample Date:

03/03/2020

Submit Date: Report Date: 03/04/2020 03/16/2020 To:

Ypsilanti Comm. Utilities Auth.

2777 State Rd. Ypsilanti, MI 48198

BA Report Number:

64128

Project Name:

NPDES Permit #MI0042676

BA Sample ID:

CM02561

Project Number:

Mar PlantEff Non Routine

Cia02501	,		(Hat K Modisoli 1			
	S	ample ID:	Plant Effluent	Comp		Analysis
Parameters	Result	Units	DL	Method Reference	teference Analyst	
PCB Analysis						
ARO 1016	Not detected	ug/L	0,2	EPA 608/608.3	BY	03/09/2020
ARO 1221	Not detected	ug/L	0.2	EPA 608/608.3	BY	03/09/2020
ARO 1232	Not detected	ug/L	0.2	EPA 608/608.3	BY	03/09/2020
ARO 1242	Not detected	ug/L	0,2	EPA 608/608,3	BY	03/09/2020
ARO 1248	Not detected	ug/L	0,2	EPA 608/608.3	BY	03/09/2020
ARO 1254	Not detected	ug/L	0.2	EPA 608/608.3	BY	03/09/2020
ARO 1260	Not detected	ug/L	0,2	EPA 608/608,3	BY	03/09/2020
ARO 1262	Not detected	ug/L	0.2	EPA 608/608.3	BY	03/09/2020
ARO 1268	Not detected	ug/L	0.2	EPA 608/608,3	BY	03/09/2020
Total PCB	Not detected	ug/L	0.2	EPA 608/608.3	BY	03/09/2020
PCB liquid (extraction)	Extracted	***		3510C/3545	MB	03/05/2020
Chlorinated Hydrocarbon Analysis						
Hexachlorobenzene	Not detected	ug/L	0.01	EPA 612	BY	03/06/2020
Hexachlorobutadiene	Not detected	ug/L	0.01	EPA 612	BY	03/06/2020
Hexachlorocyclopentadiene	Not detected	ug/L	0.01	EPA 612	BY	03/06/2020
Chlorinated Hydrocarbons 612 (ext)	Extracted	-		3510C/3545	MB	03/05/2020
Benzidines Analysis						
Benzidine	Not detected	ug/L	0.1	EPA 605	BY	03/11/2020
3,3-Dichlorobenzidine	Not detected	ug/L	1.5	EPA 605	BY	03/11/2020
605 liquid (extraction)	Extracted			3510C/3545	MB	03/05/2020
Semi-Voiatile Analysis						
Acenaphthene	Not detected	ug/L	5	EPA 625/625.1	RG	03/06/2020
Acenaphthylene	Not detected	ug/L	5	EPA 625/625.1	RG	03/06/2020
Anthracene	Not detected	ug/L	5	EPA 625/625.1	RG	03/06/2020
Benzo(a)anthracene	Not detected	ug/L	l	EPA 625/625.1	RG	03/06/2020
Benzo(a)pyrene	Not detected	ug/L	0.2	EPA 625/625.1	RG	03/06/2020
Benzo(b)fluoranthene	Not detected	ug/L	1	EPA 625/625.1	RG	03/06/2020
Benzo(ghi)perylene	Not detected	ug/L	1	EPA 625/625.1	RG	03/06/2020
Benzo(k)fluoranthene	Not detected	ug/L	1	EPA 625/625.1	RG	03/06/2020
Bis(2-chloroethoxy)methane	Not detected	ug/L	5	EPA 625/625, I	RG	03/06/2020
Bis(2-chloroethyl)ether	Not detected	ug/L	l	EPA 625/625.1	RG	03/06/2020
Bis(2-chloroisopropyl)ether	Not detected	ug/L	5	EPA 625/625.1	RG	03/06/2020
4-Bromophenyl phenyl ether	Not detected	ug/L	5	EPA 625/625.1	RG	03/06/2020
Butyl Benzyl Phthalate	Not detected	ug/L	5	EPA 625/625.1	RG	03/06/2020
2-Chloronaphthalene	Not detected	ug/L	5	EPA 625/625.1	RG	03/06/2020

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2105 Pless Drive Brighton, Michigan 48114 Phone: (810)229-7575 (810)229-8650 c-mail:bai-brighton@sbcglobal.net EGLE Certified #9404 NELAC Accredited #176507

Sample Date: Submit Date: 10/06/2020 10/07/2020

Report Date:

10/19/2020

To:

Ypsilanti Comm. Utilities Auth.

2777 State Rd. Ypsilanti, MI 48198

BA Report Number:

70854

Project Name:

NPDES Permit#:MI0042676 - Additional Testing

BA Sample ID:

CN04082

Project Number:

YCUA Plant Eff

Sample ID: YCUA Plant Eff. Comp. Analysis							
Parameters	Result	Units	DL	Method Reference	Analyst	Date	
non							
PCB Analysis		4	~ *	TT1 (00/(00 0	D	101101000	
ARO 1016	Not detected	ug/L	0.2	EPA 608/608.3	BY	10/12/2020	
ARO 1221	Not detected	ug/L	0.2	EPA 608/608.3	BY	10/12/2020	
ARO 1232	Not detected	ug/L	0.2	EPA 608/608.3	BY	10/12/2020	
ARO 1242	Not detected	ug/L	0.2	EPA 608/608.3	BY	10/12/2020	
ARO 1248	Not detected	ug/L	0.2	EPA 608/608,3	BA	10/12/2020	
ARO 1254	Not detected	ug/L	0.2	EPA 608/608.3	BY	10/12/2020	
ARO 1260	Not detected	ug/L	0.2	EPA 608/608.3	BY	10/12/2020	
ARO 1262	Not detected	ug/L	0.2	EPA 608/608.3	BY	10/12/2020	
ARO 1268	Not detected	ug/L	0,2	EPA 608/608.3	BY	10/12/2020	
Total PCB	Not detected	ug/L	0.2	EPA 608/608.3	BY	10/12/2020	
PCB liquid (extraction)	Extracted			3510C/3545	MB	10/08/2020	
Chiorinated Hydrocarbon Analysis							
Hexachlorobenzene	Not detected	ug/L	0.01	EPA 612	BY	10/09/2020	
Hexachlorobutadiene	Not detected	ug/L	10.0	EPA 612	BY	10/09/2020	
Hexachlorocyclopentadiene	Not detected	ug/L	0.01	EPA 612	BY	10/09/2020	
Chlorinated Hydrocarbons 8121/612 (ext)	Extracted			3510C/3545	MB	10/08/2020	
Benzidines Analysis							
Benzidine	Not detected	ug/L	0.1	EPA 605	BY	10/15/2020	
3,3-Dichlorobenzidine	Not detected	ug/L	1.5	EPA 605	BY	10/15/2020	
605 liquid (extraction)	Extracted	•		3510C/3545	MB	10/13/2020	
Semi-Volatile Analysis							
Acenaphthene	Not detected	ug/L	5	EPA 625/625,1	RG	10/08/2020	
Acenaphthylene	Not detected	ug/L	5	EPA 625/625.1	RG	10/08/2020	
Anthracene	Not detected	ug/L	5	EPA 625/625.1	RG	10/08/2020	
Benzo(a)anthracene	Not detected	ug/L	1	EPA 625/625.1	RG	10/08/2020	
Benzo(a)pyrene	Not detected	ug/L	0.2	EPA 625/625.1	RG	10/08/2020	
Benzo(b)fluoranthene	Not detected	ug/L	1	EPA 625/625.1	RG	10/08/2020	
Benzo(ghi)perylene	Not detected	ug/L	i	EPA 625/625.1	RG	10/08/2020	
Benzo(k)fluoranthene	Not detected	ug/L	l	EPA 625/625,1	RG	10/08/2020	
Bis(2-chloroethoxy)methane	Not detected	ug/L	5	EPA 625/625.1	RG	10/08/2020	
Bis(2-chloroethyl)ether	Not detected	ug/L	ì	EPA 625/625.1	RG	10/08/2020	
Bis(2-chloroisopropyl)ether	Not detected	ug/L	5	EPA 625/625.1	RG	10/08/2020	
4-Bromophenyl phenyl ether	Not detected	ug/L	5	EPA 625/625.1	RG	10/08/2020	
Butyl Benzyl Phthalate	Not detected	ug/L	5	EPA 625/625.1	RG	10/08/2020	
2-Chloronaphthalene	Not detected	ug/L	5	EPA 625/625.1	RG	10/08/2020	
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ATTACHMENT-C ANALYTICAL SUMMARY OF SELF MONITORING DATA, CONTROL AUTHORITY MONITORING DATA, SEPTAGE ANALYSIS

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Note - Analysis date values are ND (<0.2 ug/L) unless indicated ' Indicates No Analysis for PCBs Required SM- Self Monitoring Data by the Industrial User CA-Control Authority Monitoring

FACILITY NAME

INDUSTRIAL USERS	2021 SM	2021 CA	2020 SM	2020 CA	2019 SM	2019 CA
ARBOR HILLS ENERGY	1/25(ND); 4/26(ND)	3/17(ND); 6/24(ND)	1/28(ND); 4/22(ND); 7/29(ND); 10/30(ND)	7/16(ND); 10/22(ND); 11/20(ND)	2/27(ND); 4/25(ND); 7/30(ND); 10/28(ND)	4/12(ND); 8/8(ND)
CANTON RENEWABLES	1/27(ND); 2/4(ND); 3/3(ND); 4/12(ND); 5/13(ND); 6/11(ND)	1/22(ND); 3/ 21(ND); 5/21(ND); 8/20(ND)	1/14(ND); 2/6(ND); 3/5(ND); 4/7(ND); 5/7(ND); 6/3(ND); 7/8(ND); 8/5(ND); 9/18(ND);10/13(ND); 11/11(ND); 12/22(ND)	3/6(ND); 7/23(ND); 8/6(ND)	1/4(ND); 2/12(ND); 3/12(ND); 4/2(ND); 5/8(ND); 6/18(ND); 7/9(ND); 8/9(ND); 9/18(ND);10/8(ND); 11/12(ND); 12/03(ND)	12/6 (ND)
CROWN INDUSTRIAL SERVICES	*	-	•		-	
CYGNET AUTOMATED CLEANING (4/6/21 Termination)	*	-	٧	-		
CYGNET AUTOMATED CLEANING- General Drive	*	-			~	-
DNR PARTS CLEANING	-	2/3 (ND)	6/12(ND); 11/17(ND)	7/16 (ND)	6/14(ND); 12/19(ND)	6/20 (ND)
FINAL TOUCH	-	8/5 (ND)		8/19 (ND)		9/11 (ND)
FINISHING SERVICES	-	•		1/24 (ND)		5/23 (ND)
FORD RAWSONVILLE		•			•	
FORD - SHELDON	2/19(ND); 6/29(ND)	3/31 (ND)	1/13(ND); 4/8(ND); 7/15(ND); 12/15(ND)	9/23 (ND)	3/15(ND); 4/25(ND); 7/25(ND); 10/3(ND)	6/13 (ND)
FUEL SOURCE (formerly American Waste)	6/4 (ND)	1/21 (ND)	5/21(ND); 8/14(ND)	2/6(ND); 8/14(ND)	4/5(ND); 11/14(ND)	4/26/2021(ND)
GLF ENVIRONMENTAL (formerly Advanced Disposal)	1/5(ND); 2/2(ND); 3/2(ND); 4/2(ND); 5/4(ND); 5/2(ND)	6/24 (ND)	1/9(ND); 2/4(ND); 3/11(ND); 4/9(ND); 5/5(ND); 6/2(ND); 7/29(ND); 8/4(ND); 9/2(ND); 10/6(ND); 11/3(ND); 12/2(ND)	3/12(ND); 7/16(ND); 8/20(ND); 11/5(ND)	1/3(ND); 2/5(ND); 3/6(ND); 4/4(ND); 5/2(ND); 6/4(ND); 7/2(ND); 8/6(ND); 9/4(ND); 10/2(ND); 11/5(ND); 12/10(ND)	6/20(ND); 8/8(ND); 9/13(ND)
HYUNDAI-KIA	•	8/25 (ND)		10/15 (ND)		ч
ISS	-					٠
KEMIN	2/25 (ND)	2/3 (ND)	3/19 (ND)	7/9 (ND)	3/21 (ND)	4/4(ND)
KINGFA	5/27 (ND)	1/14(ND); 4/30(ND)	3/3 (ND)	1/3(ND); 7/2(ND); 9/9(ND)	3/26 (ND)	2/8(ND); 3/20(ND); 6/7(ND)
MARSH PLATING		1/8/2021 (ND)		1/15 (ND)	-	2/8 (ND)
MARSH PLATING - WILLOW RUN	1/25 (ND)	1/27(ND)	1/22(ND); 7/29(ND)	1/24 (ND)	1/17(ND); 7/19(ND)	3/7 (ND)
PLYMOUTH PLATING	*	5/5/2021 (ND)	•	3/12(ND); 7/16(ND)	-	4/12(ND); 6/21(ND)
PROQUEST	-				-	•
RACER TRUST	1/21(ND); 1/26(ND); 2/24(ND); 2/26(ND); 3/9(ND); 3/31(ND); 4/16(ND); 4/29(ND); 5/13(ND); 5/28(ND); 6/16(ND); 6/30(ND)	\$/5(ND); 7/8(ND; 9/2(ND)	1/3(ND); 1/31(ND); 2/21(ND); 2/26(ND); 3/2(ND) 3/5(ND); 4/7(ND); 4/23(ND); 5/22(ND); 6/18(ND); 6/26(ND); 7/14(ND); 7/21(ND); 8/11(ND); 8/19(ND); 9/2(ND); 9/18(ND); 10/7(ND); 10/9(ND); 11/4(ND); 11/6(ND); 12/4(ND); 12/10(ND)		1/17(ND); 1/26(ND); 2/14(ND); 2/27(ND); 3/7(ND); 3/28(ND); 4/3(ND); 4/24(ND); 5/16(ND); 5/23(ND); 6/4(ND); 6/6(ND); 7/10(ND); 7/11(ND); 8/27(ND); 8/29(ND); 9/4(ND); 9/11(ND); 10/16(ND); 10/16(ND); 11/21(ND); 11/25(ND); 12/13(ND); 12/17(ND)	3/29(ND); 6/26(ND); 11/20(ND); 11/26(ND)

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2021 FACILITY PCB ANALYTE SUMMARY

SAUK TRAIL	1/14(ND); 2/16(ND); 3/2(ND); 4/12(ND); 5/27(ND); 6/22(ND);	1/22(ND); 6/17(ND); 8/20(ND)	1/23(ND); 2/25(ND); 3/25(ND); 4/30(ND); 5/28(ND); 6/23(ND); 7/27(ND); 8/25(0.21 ug/L); 9/29(ND); 10/20(ND); 11/19(ND); 12/22(ND)	3/6(ND); 3/18(ND); 7/23(ND); 8/6(ND)	1/14(ND); 2/12(ND); 3/12(ND); 4/2(ND); 5/8(ND); 6/3(ND); 7/8(ND); 8/20(ND); 9/23(ND); 10/21(ND); 11/21(ND); 12/18(ND)	4/26(ND); 8/1(ND); 11/7(ND)
ST. JOSEPH MERCY HOSPITAL EAST Outfall 002	ė			•	-	,
ST. JOSEPH MERCY HOSPITAL West Outfall 001	in the second	**	•		•	
SUN PLASTIC	1/12 (ND)	5/5 (ND)	1/30(ND); 7/14(ND)	9/25 (ND)	2/8(ND); 7/12(ND)	4/4 (ND)
TOWER AUTOMOTIVE	ч	1/6 (ND)	1/22 (ND)	1/31 (ND)	1/23 (ND)	2/27 (ND)
VERSATRANZ	4/20 (ND)	2/3 (ND)	4/14 (ND)	2/6 (ND)	6/20(ND)	2/27 (ND)
YAZAKI	•	8/25 (ND)	-	10/15 (ND)	*	12/18 (ND)
SEPTAGE RECEIVING						
BOLLINGER						11/15(ND)
JACK SPACK		8/8 (ND)		9/9 (ND)		11/15 (ND)
KOVALAK		5/5 (ND)		5/6 (ND)		8/9 (ND)
PARKWAY				9/16 (ND)		
YCUA WWTP PLANT INFLUENT & EFFLUENT						
		9/03 (ND<0.33 mg/Kg)		2/12 (ND<0,33 mg/Kg)		8/29 (ND < 0,33 mg/Kg)
Biosolids Testing		07/05 (ND <0.2 ug/L)		03/02 (ND <0.2 ug/L)		05/14 (ND <0.2 ug/L) 10/02 (ND<0.2 ug/L)
YCUA WWTP Plant Influent		07/06 (ND <0.2 ug/L)		03/03 (ND <0.2 ug/L) 10/06 (ND<0.2 ug/L)		05/15 (ND <0.2 ug/L) 10/03 (ND<0,2 ug/L)
YCUA Plant Effluent						

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