OHIO ENVIRONMENTAL PROTECTION AGENCY
Division of Water Pollution Control

Pretreatment Priority Pollutant Reporting Form

POTW: Maumee River WWTP

LABORATORY: Jones & Henry Laboratories, Inc.

SAMPLING:	DATE	TIME
INFLUENT	03/04/14, 0305/14	1301, 0615
EFFLUENT	03/04/14, 03/05/14	1304, 0615
SLUDGE 1	03/04/14	1235, 1700
SLUDGE 2		

SAMPLING LOCATION:

INFLUENT	
EFFLUENT	
SLUDGE 1	Sludge Cake
SLUDGE 2	

TYPE OF SAMPLE : (be specific)

HEAVY METALS

ORGANICS
Volatiles:

Extractables:

OTHER:

PERCENT SLUDGE SOLIDS: SLUDGE 1 18.8, 17.4 SLUDGE 2

COMMENTS: The following compounds were analyzed by EPA Method 624:
1,2-DICHLOROBENZENE
1,3-DICHLOROBENZENE
1,4-DICHLOROBENZENE
Per Julia Zhang, OEPA, they will continue to be reported under the Base Neutral section of form 4221 until an updated form is available.

POTW PRETREATMENT CONTACT:

JASON COLLINS PRETREATMENT COORDINATOR
Name & title (please print)

Jason Collins
Signature

8/12/14
Date

FORM 4221

CAS #	POLLUTANT	INFLUENT ug/l	EFFLUENT ug/l	SLUDGE (1) mg/kg dry	SLUDGE (2) mg/kg dry
Heavy Metals (13)					
7440-36-0	Antimony	AA (8)	AA (8)	AA (5.0)	( )
7440-38-2	Arsenic	AA (8)	AA (8)	10.9 (2.0)	( )
7440-41-7	Beryllium	AA (1)	AA (1)	AA (1.0)	( )
7440-43-9	Cadmium	AA (1)	AA (1)	AA (1.0)	( )
7440-47-3	Chromium	12 (4)	AA (4)	113 (2.0)	( )
7440-50-8	Copper	26 (4)	AA (4)	268 (2.0)	( )
7439-92-1	Lead	AA (5)	AA (5)	16.3 (2.0)	( )
7439-97-6	Mercury	AA (0.2)	AA (0.2)	1.32 (0.50)	( )
7440-02-0	Nickel	6 (4)	4 (4)	27.1 (2.0)	( )
7782-49-2	Selenium	AA (8)	AA (8)	6.6 (2.0)	( )
7440-22-4	Silver	AA (4)	AA (4)	9.0 (2.0)	( )
7440-28-0	Thallium	AA (10)	AA (10)	AA (5.0)	( )
7440-66-6	Zinc	138 (10)	32 (10)	1040 (2.0)	( )
Volatiles (28)					
107-02-8	Acrolein	AA (25)	AA (25)	AA (0.62)	( )
107-13-1	Acrylonitrile	AA (2)	AA (2)	AA (0.05)	( )
71-43-2	Benzene	AA (1)	AA (1)	AA (0.03)	( )
75-25-2	Bromoform	AA (1)	AA (1)	AA (0.03)	( )
56-23-5	Carbon tetrachloride	AA (1)	AA (1)	AA (0.03)	( )
108-90-7	Chlorobenzene	AA (1)	AA (1)	0.05 (0.03)	( )
124-48-1	Chlorodibromomethane	AA (1)	AA (1)	AA (0.03)	( )
75-00-3	Chloroethane	AA (2)	AA (2)	AA (0.05)	( )
110-75-8	2-Chloroethyl vinyl ether	AA (2)	AA (2)	AA (0.05)	( )
67-66-3	Chloroform	3.2 (1)	AA (1)	AA (0.03)	( )
75-27-4	Dichlorobromomethane	AA (1)	AA (1)	AA (0.03)	( )
75-34-3	1,1-Dichloroethane	AA (1)	AA (1)	AA (0.03)	( )
107-06-2	1,2-Dichloroethane	AA (1)	AA (1)	AA (0.03)	( )
75-35-4	1,1-Dichloroethylene	AA (1)	AA (1)	AA (0.03)	( )
78-87-5	1,2-Dichloropropane	AA (1)	AA (1)	AA (0.03)	( )
542-75-6	1,3-Dichloropropylene	AA (1)	AA (1)	AA (0.03)	( )
100-41-4	Ethylbenzene	AA (1)	AA (1)	0.05 (0.03)	( )
74-83-9	Methyl bromide	AA (1)	AA (1)	AA (0.05)	( )
78-87-3	Methyl chloride	AA (1)	AA (1)	AA (0.05)	( )
75-09-2	Methylene chloride	AA (2)	2.0 (2)	0.08 (0.05)	( )
79-34-5	1,1,2,2-Tetrachloroethane	AA (1)	AA (1)	AA (0.03)	( )
127-18-4	Tetrachloroethylene	AA (1)	AA (1)	AA (0.03)	( )
108-88-3	Toluene	AA (1)	AA (1)	0.76 (0.03)	( )
156-60-5	1,2-trans-Dichloroethylene	AA (1)	AA (1)	AA (0.03)	( )
71-55-6	1,1,1-Trichloroethane	AA (1)	AA (1)	AA (0.03)	( )
79-00-5	1,1,2-Trichloroethane	AA (1)	AA (1)	AA (0.03)	( )
79-01-6	Trichloroethylene	AA (1)	AA (1)	AA (0.03)	( )
75-01-4	Vinyl chloride	AA (1)	AA (1)	AA (0.03)	( )
Base Neutrals (46)					
83-32-9	Acenaphthene	AA (5)	AA (5)	AA (2.7)	( )
208-96-8	Acenaphthylene	AA (5)	AA (5)	AA (2.7)	( )
120-12-7	Anthracene	AA (5)	AA (5)	AA (2.7)	( )
92-87-5	Benzidine	AA (5)	AA (5)	AA (2.7)	( )
56-55-3	Benzo(a)anthracene	AA (5)	AA (5)	AA (2.7)	( )
50-32-8	Benzo(a)pyrene	AA (5)	AA (5)	AA (2.7)	( )
205-99-2	3,4-Benzofluoranthene	AA (5)	AA (5)	AA (2.7)	( )

CAS #	POLLUTANT	INFLUENT ug/l	EFFLUENT ug/l	SLUDGE (1) mg/kg dry	SLUDGE (2) mg/kg dry
Base Neutrals (cont.)					
191-24-2	Benzo(ghi)perylene	AA (5)	AA (5)	AA (2.7)	( )
207-08-9	Benzo(k)fluoranthene	AA (5)	AA (5)	AA (2.7)	( )
111-91-1	Bis(2-chloroethoxy)methane	AA (5)	AA (5)	AA (2.7)	( )
111-44-4	Bis(2-chloroethyl)ether	AA (5)	AA (5)	AA (2.7)	( )
108-60-1	Bis(chloroisopropyl)ether	AA (5)	AA (5)	AA (2.7)	( )
117-81-7	Bis(2-ethylhexyl)phthalate	AA (5)	AA (5)	AA (2.7)	( )
101-55-3	4-Bromophenyl phenyl ether	AA (5)	AA (5)	AA (2.7)	( )
85-68-7	Butyl benzyl phthalate	AA (5)	AA (5)	AA (2.7)	( )
91-58-7	2-Chloronapthalene	AA (5)	AA (5)	AA (2.7)	( )
7005-72-3	4-Chlorophenyl phenyl ether	AA (5)	AA (5)	AA (2.7)	( )
218-01-9	Chrysene	AA (5)	AA (5)	AA (2.7)	( )
53-70-3	Dibenzo(a,h)anthracene	AA (1)	AA (1)	AA (0.03)	( )
95-50-1	1,2-Dichlorobenzene	AA (1)	AA (1)	AA (0.03)	( )
541-73-1	1,3-Dichlorobenzene	AA (1)	AA (1)	0.09 (0.03)	( )
106-46-7	1,4-Dichlorobenzene	AA (5)	AA (5)	AA (2.7)	( )
91-94-1	3,3'-dichlorobenzidine	AA (5)	AA (5)	AA (2.7)	( )
84-66-2	Diethyl phthalate	AA (5)	AA (5)	AA (2.7)	( )
131-11-3	Dimethyl phthalate	AA (5)	AA (5)	AA (2.7)	( )
84-74-2	Di-n-butyl phthalate	AA (5)	AA (5)	AA (2.7)	( )
121-14-2	2,4-Dinitrotoluene	AA (5)	AA (5)	AA (2.7)	( )
606-20-2	2,6-Dinitrotoluene	AA (5)	AA (5)	AA (2.7)	( )
117-84-0	Di-n-octyl phthalate	AA (5)	AA (5)	AA (2.7)	( )
122-66-7	1,2-Diphenylhydrazine	AA (5)	AA (5)	AA (2.7)	( )
206-44-0	Fluoranthene	AA (5)	AA (5)	AA (2.7)	( )
86-73-7	Fluorene	AA (5)	AA (5)	AA (2.7)	( )
118-74-1	Hexachlorobenzene	AA (5)	AA (5)	AA (2.7)	( )
87-68-3	Hexachlorobutadiene	AA (5)	AA (5)	AA (2.7)	( )
77-47-4	Hexa-chlorocyclopentadiene	AA (5)	AA (5)	AA (2.7)	( )
67-72-1	Hexachloroethane	AA (5)	AA (5)	AA (2.7)	( )
193-39-5	Indeno(1,2,3-cd)pyrene	AA (5)	AA (5)	AA (2.7)	( )
78-59-1	Isophorone	AA (5)	AA (5)	AA (2.7)	( )
91-20-3	Naphthalene	AA (5)	AA (5)	AA (2.7)	( )
98-95-3	Nitrobenzene	AA (5)	AA (5)	AA (2.7)	( )
62-75-9	N-nitrosodimethylamine	AA (5)	AA (5)	AA (2.7)	( )
621-64-7	N-nitrosodi-n-propylamine	AA (5)	AA (5)	AA (2.7)	( )
86-30-6	N-nitrosodiphenylamine	AA (5)	AA (5)	AA (2.7)	( )
85-01-9	Phenanthrene	AA (5)	AA (5)	AA (2.7)	( )
129-00-0	Pyrene	AA (5)	AA (5)	AA (2.7)	( )
120-82-1	1,2,4-Trichlorobenzene	AA (5)	AA (5)	AA (2.7)	( )
Acids (11)					
95-57-8	2-Chlorophenol	AA (5)	AA (5)	AA (2.7)	( )
120-83-2	2, 4-Dichlorophenol	AA (5)	AA (5)	AA (2.7)	( )
105-67-9	2, 4-Dimethylphenol	AA (5)	AA (5)	AA (2.7)	( )
534-52-1	4,6-Dinitro-o-cresol	AA (5)	AA (5)	AA (2.7)	( )
51-28-5	2,4-Dinitrophenol	AA (5)	AA (5)	AA (2.7)	( )
88-75-5	2-Nitrophenol	AA (5)	AA (5)	AA (2.7)	( )
100-02-7	4-Nitrophenol	AA (5)	AA (5)	AA (2.7)	( )
59-50-7	p-Chloro-m-cresol	AA (5)	AA (5)	AA (2.7)	( )
87-86-5	Pentachlorophenol	AA (5)	AA (5)	AA (2.7)	( )
108-95-2	Phenol	AA (5)	AA (5)	AA (2.7)	( )
88-06-2	2,4,6-Trichlorophenol	AA (5)	AA (5)	AA (2.7)	( )

CAS #	POLLUTANT	INFLUENT ug/l	EFFLUENT ug/l	SLUDGE (1) mg/kg dry	SLUDGE (2) mg/kg dry
Pesticides (26)					
309-00-2	Aldrin	AA (5)	AA (5)	AA (2.7)	( )
319-84-6	Alpha-BHC	AA (5)	AA (5)	AA (2.7)	( )
319-85-7	Beta-BHC	AA (5)	AA (5)	AA (2.7)	( )
319-86-8	Delta-BHC	AA (5)	AA (5)	AA (2.7)	( )
58-89-9	Gamma-BHC	AA (5)	AA (5)	AA (2.7)	( )
57-74-9	Chlordane	AA (10)	AA (10)	AA (5.5)	( )
50-29-3	4,4-DDT	AA (5)	AA (5)	AA (2.7)	( )
72-55-9	4,4-DDE	AA (5)	AA (5)	AA (2.7)	( )
72-54-8	4,4-DDD	AA (5)	AA (5)	AA (2.7)	( )
60-57-1	Dieldrin	AA (5)	AA (5)	AA (2.7)	( )
959-98-8	Alpha endosulfan	AA (5)	AA (5)	AA (2.7)	( )
33213-65-9	Beta endosulfan	AA (5)	AA (5)	AA (2.7)	( )
1031-07-8	Endosulfan sulfate	AA (5)	AA (5)	AA (2.7)	( )
72-20-8	Endrin	AA (5)	AA (5)	AA (2.7)	( )
7421-93-4	Endrin aldehyde	AA (5)	AA (5)	AA (2.7)	( )
76-44-8	Heptachlor	AA (5)	AA (5)	AA (2.7)	( )
1024-57-3	Heptachlor epoxide	AA (5)	AA (5)	AA (2.7)	( )
53469-21-9	PCB-1242	AA (10)	AA (10)	AA (5.5)	( )
11097-69-1	PCB-1254	AA (10)	AA (10)	AA (5.5)	( )
11104-28-2	PCB-1221	AA (10)	AA (10)	AA (5.5)	( )
11141-17-5	PCB-1232	AA (10)	AA (10)	AA (5.5)	( )
12672-29-6	PCB-1248	AA (10)	AA (10)	AA (5.5)	( )
11096-82-5	PCB-1260	AA (10)	AA (10)	AA (5.5)	( )
12674-11-2	PCB-1016	AA (10)	AA (10)	AA (5.5)	( )
8001-35-2	Toxaphene	AA (10)	AA (10)	AA (5.5)	( )
1764-01-6	2,3,7,8-Tetrachloro-dibenzo-p-dioxin				
Miscellaneous					
1332-21-4	Asbestos: (1)	( )	( )	( )	( )
	Chrysotile	( )	( )	( )	( )
	Amphibole	( )	( )	( )	( )
57-12-5	Cyanide, Total	AA (5)	AA (5)	3.9 (1.0)	( )

DATA SUBSTITUTION CODES

- AA Below detectable limit
- AB Analyical data lost
- AE Analytical data not valid-provide explanation
- AH Sample not taken-provide explanation
- AJ Above range of sampling equipment
- AP Laboratory accident
- AQ Sample too old to analyze
- AR Headspace in sample
- AS Broken/leaked in transit
- AT Improperly preserved
- AV Insufficient volume
- AW Other-explain

(1) REPORT ONLY IF REQUIRED BY NPDES PERMIT(S), PART II, OTHER REQUIREMENTS.

Ten Most Prominent Peaks On Ion Plots:

INFLUENT	CAS #	POLLUTANT	CONCENTRATION ug/l
1.		Acetone	290
2.		Methyl ethyl ketone	3.9
3.		p-Isopropyltoluene	1.3
4.		1,3-Butanediol	3
5.		Isopropyl alcohol	5
6.		Dimethyl disulfide	3
7.		Limonene	30
8.			
9.			
10.			

EFFLUENT	CAS #	POLLUTANT	CONCENTRATION ug/l
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			

SLUDGE 1	CAS #	POLLUTANT	CONCENTRATION mg/kg dry
1.		Acetone	2.4
2.		Carbon disulfide	0.39
3.		m & p-Xylene	0.10
4.		o-Xylene	0.05
5.		1,3,5-Trimethylbenzene	0.03
6.		1,2,4-Trimethylbenzene	0.11
7.		Methanethiol	0.08
8.		Trimethyl silanol	0.04
9.		Octamethyl cyclotetrasilozane	0.2
10.		1,4-Dimethyldamantane	0.5

SLUDGE 2	CAS #	POLLUTANT	CONCENTRATION mg/kg dry
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			

Ten Most Prominent Peaks On Ion Plots:

	INFLUENT CAS #	POLLUTANT	CONCENTRATION ug/l
1.		Cholesterol	80
2.		Methyltestosterone	30
3.		Unknown sterol	20
4.		Unknown #1	200
5.		Unknown #2	30
6.		1-Tridecanol	4
7.		Unknown #3	1
8.		Caffeine	1
9.		o-Acetaminophenol	1
10.		n-Butyl ether	10

	EFFLUENT CAS #	POLLUTANT	CONCENTRATION ug/l
1.		Cholesterol	4
2.		Unknown #1	2
3.		Unknown sterol	5
4.		Unknown #2	10
5.			
6.			
7.			
8.			
9.			
10.			

	SLUDGE 1 CAS #	POLLUTANT	CONCENTRATION mg/kg dry
1.		p-tert-Butylphenol	1
2.		Cholesterol	7
3.		Unknown sterol	100
4.		Caffeine	20
5.		Unknown sterol #2	200
6.		Unknown #1	10
7.		2,4-Diisopropylphenol	0.5
8.		Unknown #2	20
9.			
10.			

	SLUDGE 2 CAS #	POLLUTANT	CONCENTRATION mg/kg dry
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			