



**Environmental
Protection Agency**

Ted Strickland, Governor
Lee Fisher, Lt. Governor
Chris Korleski, Director



1PK0001720090316

CLERMONT O'BANNON CREEK REGIONAL WWTP

ZIMMERMAN, MICH 2009/03/16



State of Ohio Environmental Protection Agency

Southwest District Office

401 E. Fifth St.
Dayton, Ohio 45402

TELE: (937) 285-6357 FAX: (937) 285-6249
www.epa.state.oh.us

Ted Strickland, Governor
Lee Fisher, Lieutenant Governor
Chris Korleski, Director

March 16, 2009

**Re: Clermont Co. O'Bannon Creek Reg WWTP
NPDES Permit No. 1PK00017*ID; OH0048089
NPDES Compliance Inspection and NOV**

Mr. Tom Yeager, Utilities Director
Clermont County Water and Sewer District
2379 Clermont Center Drive
Batavia, Ohio 45103

Dear Mr. Yeager:

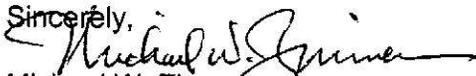
On February 27, 2009 I conducted a National Pollutant Discharge Elimination System (NPDES) permit compliance inspection at the above referenced facility. Bill Beyer, WSD Supervisor, and Doug Martin, Plant Manager, represented the County during the inspection. The purpose of the inspection was to evaluate several aspects of plant operation and performance, and to assess compliance with the facility's National Pollutant Discharge Elimination System (NPDES) permit.

The wastewater treatment plant was generally in compliance with its permit conditions and requirements. Observations and findings of the inspection are included in the attached report. As indicated in the report (Section C.), all areas evaluated during the inspection were rated Satisfactory. Several violations of final effluent limits have occurred over the last two years (January, 2007 through December, 2008). The majority of these (five) were 30-day average concentration exceedances for total recoverable copper. Reported values ranged from 18.4 to 23.3 ug/l, slightly exceeding the permit limit of 18 ug/l. The County continues to investigate the possible sources of copper in the system.

Renovation and upgrades to the original aeration treatment process units, which began in March, 2006, were completed in March, 2008. Significant improvements in plant conditions were evident, particularly in comparison to conditions observed by Ohio EPA inspectors in August and September, 2007. One item discussed during the inspection was toxicity bioassay results. The most recent bioassay conducted by Ohio EPA was in April, 2008. This was a 48-hour screening acute toxicity bioassay. The results indicated the final effluent was not acutely toxic to the test organisms (fathead minnow, *Pimephales promelas*, and cladoceran *Ceriodaphnia dubia*). A copy of the bioassay report is enclosed.

If you have any questions, don't hesitate to contact me at (937) 285-6102.

Sincerely,


Michael W. Zimmerman
Division of Surface Water

Enclosure

Copy: Bill Beyer/ Doug Martin, Clermont County Water and Sewer Department



State of Ohio Environmental Protection Agency
Southwest District Office

NPDES Compliance Inspection Report

Section A: National Data System Coding					
Permit #	NPDES#	Month/Day/Year	Inspection Type	Inspector	Facility Type
1PK00017*HD	OH0048089	2/27/2009	C	S	1

Section B: Facility Data		
Name and Location of Facility Inspected	Entry Time	Permit Effective Date
Clermont County O'Bannon Creek Regional WWTP 1270 Neale Lane Loveland, Ohio 45140 Mailing: 4386 Haskell Lane Batavia, Ohio 45103	10:45 am	5/1/2005
	Exit Time	Permit Expiration Date
	12:50 pm	1/31/2010
Name(s) and Title(s) of On-Site Representatives	Phone Number(s)	
William Beyer, WSD Supervisor Doug Martin, Plant Manager	(513) 677-0506 (513) 732-7047	
Name, Address and Title of Responsible Official	Phone Number	
Dave Spinney, County Administrator Tom Yeager, Director of Utilities Dwight Culbertson, Assistant Utilities Director	(513) 732-7047	

Section C: Areas Evaluated During Inspection					
(S = Satisfactory, M = Marginal, U = Unsatisfactory, N = Not Evaluated)					
S	Permit	S	Flow Measurement	N	Pretreatment
S	Records/Reports	N	Laboratory	S	Compliance Schedule
S	Operations & Maintenance	S	Effluent/Receiving Waters	S	Self-Monitoring Program
S	Facility Site Review	S	Sludge Storage/Disposal	N	Other
S	Collection System				

Section D: Summary of Findings (Attach additional sheets if necessary)

Refer to attached report.

Inspector	Reviewer
 Michael W. Zimmerman Division of Surface Water Southwest District Office	 Martyn Burt Compliance & Enforcement Supervisor Division of Surface Water Southwest District Office
3-12-09 Date	3/12/09 Date

Section J: Effluent/Receiving Water Observations

Outfall Number	Oil sheen	Grease	Turbidity	Visible Foam	Visible Floating Solids	Color	Other
001	None	None	Clear	None	None	Clear	---

Comments/Status:

Flow in O'Bannon Creek was significantly elevated due to recent rainfall (1.1 inches).

Final effluent: concrete headwall -24-inch effluent pipe -> concrete padl -> rip rap -> O'Bannon Creek (at RM 2.57) to Little Miami River (at RM 24.00)

Section K: Multimedia Observations

- (a) Are there indications of sloppy housekeeping or poor maintenance in work and storage areas or laboratories..... N
- (b) Do you notice staining or discoloration of soils, pavement or floors.. N
- (c) Do you notice distressed (unhealthy, discolored, dead) vegetation.. N
- (d) Do you see unidentified dark smoke or dust clouds coming from sources other than smokestacks..... N
- (e) Do you notice any unusual odors or strong chemical smells..... N
- (f) Do you see any open or unmarked drums, unsecured liquids, or damaged containment facilities..... N

If any of the above are observed, ask the following questions:

- (1) What is the cause of the condition?
- (2) Is the observed condition or source a waste product?
- (3) Where is the suspected contaminant normally disposed?
- (4) Is this disposal permitted?
- (5) How long has the condition existed and when did it begin?

Comments/Status:

Permit #: 1PK00017*LD
NPDES #: OH0048089

**Clermont County O'Bannon Creek Regional WWTP
Final Effluent Limitation Violations (Outfall 001)**

(Period of Record: January, 2007 – December, 2008)

Reporting Period	Station	Parameter	Limit Type	Limit	Reported Value	Violation Date
April 2007	001	Oil and Grease, Hexane	1D Conc	10	23.6	4/5/2007
June 2008	001	Copper, Total Recovera	30D Conc	18	21.3333	6/1/2008
July 2008	001	Nitrogen, Ammonia (NH3)	7D Conc	0.8	.88733	7/1/2008
August 2008	001	Copper, Total Recovera	30D Conc	18	18.3666	8/1/2008
September 2008	001	Copper, Total Recovera	30D Conc	18	21.4	9/1/2008
October 2008	001	Copper, Total Recovera	30D Conc	18	23.34	10/1/2008
November 2008	001	Copper, Total Recovera	30D Conc	18	22.45	11/1/2008

A Report on the Acute Toxicity of Clermont County - O'Bannon WWTP
Outfall 001 Effluents to *Pimephales promelas* and *Ceriodaphnia dubia*

Bioassay Report Number:
08-3774-SW

Reviewed By
Ohio EPA - DES
QA Staff

MAY 12 2008

Reviewer SR

Sample Number:
100144

Jonathan C. McLaughlin
G. Duane Davis

Bioassay Section
Division of Environmental Services
Ohio Environmental Protection Agency

INTRODUCTION

Two grab samples and a composite sample of Clermont County - O'Bannon WWTP outfall 001 effluents were collected by MaryAnne Mahr, DSW, SWDO, Ohio EPA for use in screening bioassays as part of a toxics evaluation in conjunction with permit reissuance. Grab samples were also collected from the receiving stream, O'Bannon Creek, upstream from the discharge and in the acute mixing zone. The effluent grab samples were collected on 28 April 2008 at 1130 hours and on 29 April 2008 at 1200 hours. The composite sample was collected on 28-29 April 2008 between 1130-1130 hours. The O'Bannon Creek water was collected on 28 April 2008: upstream at 1145 hours and from the acute mixing zone at 1140 hours. The fathead minnow, *Pimephales promelas*, and *Ceriodaphnia dubia* were used as test organisms in these 48-hour screening bioassays.

PREVIOUS RESULTS

Bioassays of Clermont County - O'Bannon WWTP outfall 001 effluents were previously conducted by the Ohio EPA within the last ten years in September 1998, October and November 2003, and January 2008 (Bioassay Numbers 98-2169-SW, 03-2886-SW, 03-2904-SW, and 08-3749-SW, respectively). The previously tested effluents were not acutely toxic to either *P. promelas* or *C. dubia* (Appendix 1).

RESULTS AND CONCLUSIONS

Details of the tests may be found on the attached bioassay report forms. The effluents were not acutely toxic. No mortality or other adverse effects were observed in the ambient waters and effluents for either *P. promelas* or *C. dubia*. Survival in the laboratory controls was 95 percent or greater for both species. Conductivity comparisons of the O'Bannon Creek upstream water, acute mixing zone, and 28 April 2008 effluent grab indicate the acute mixing zone sample contained approximately 68 percent by volume effluent.

Screening bioassays are utilized to determine if an effluent is acutely toxic to the test organisms and to indicate if more extensive bioassays should be conducted to estimate median lethal concentrations or persistence of toxicity. The results of these and previous bioassays indicate that Clermont County - O'Bannon WWTP outfall 001 effluents were not acutely toxic to either *P. promelas* or *C. dubia*. Additional bioassays should be conducted to further demonstrate the absence of unacceptable toxic conditions associated with this discharge.

These tests did not address the possibility of chronic toxicity. Discharge data for Clermont County - O'Bannon WWTP outfall 001 and the O'Bannon Creek should be evaluated to determine if chronic toxicity is of concern. Chronic tests may be required to adequately evaluate the possibility of toxicity in this discharge.

OHIO ENVIRONMENTAL PROTECTION AGENCY
Screening Bioassay Report Form

Report Date: 2 May 2008

Bioassay Report Number: 08-3774-SW

Investigators: Jonathan C. McLaughlin and G. Duane Davis

Effluent tested and source: Clermont County - O'Bannon WWTP, 1270 Neale Avenue, Loveland, Clermont County, Ohio, outfall 001

NPDES Number: OH0048089

Ohio EPA Permit Number: 1PK00017

Business/Process: Wastewater treatment facility

Collector(s): MaryAnne Mahr, DSW, SWDO, Ohio EPA

Test Organisms: Fathead minnow (*Pimephales promelas*) and *Ceriodaphnia dubia* from Ohio EPA Bioassay Section rearing units

Fathead Minnow Data: n = 20. Number of fish used in estimating mean standard length and mean weight

	Mean	Standard Deviation	Range
Standard Length (millimeters):	7.7	0.63	6.5-9.0
Weight (milligrams):	2.8	1.01	1.5-4.9

Hatched: 16-17 April 2008; 12-13 days old at test initiation

Rearing unit water and reconstituted water were used in the controls for this static bioassay. Adverse effects measured in the test are death, immotility, and loss of equilibrium. Death is the cessation of all visible movement with no response to gentle prodding (fish) or to gentle test container agitation (*Ceriodaphnia*). An immotile organism is paralyzed or stunned with only occasional slight movements and cannot maintain its normal position in the water column. Loss of equilibrium is the organism's inability to maintain normal swimming posture in the water column and may be characterized by periods of quiescence followed by bursts of uncontrolled swimming. The effluent is considered to be acutely toxic if 20 percent, or more, of either species of test organism exhibits any combination of the adverse effects in the 100 percent effluent. Test results are invalid if more than ten percent of either species of test organism exhibits the adverse effects in the control.

Results of screening bioassays of Clermont County - O'Bannon WWTP outfall 001 effluent

Bioassay Number: 08-3774-SW

Sample	Time Collected Date: Time: (hours)	Test Start Date: Time: (hours)	Cumulative percent mortality (plus/or exhibiting other adverse effects)			
			<i>P. promelas</i> Time (hours)		<i>C. dubia</i> Time (hours)	
			24	48	24	48
O'Bannon Creek upst.	28 April 2008 1145	29 April 2008 0952	0	0	0	0
Acute mixing zone	28 April 2008 1140	29 April 2008 0952	0	0	0	0
Grab 001	28 April 2008 1130	29 April 2008 0952	0	0	0	0
Rearing unit water control		29 April 2008 0952	0	0	-	-
Reconstituted water control		29 April 2008 0952	-	-	0	0
Grab 001	29 April 2008 1200	30 April 2008 1040	0	0	0	0
Composite 001	28-29 April 2008 1130-1130	30 April 2008 1040	0	0	0	0
Rearing unit water control		30 April 2008 1040	5	5	-	-
Reconstituted water control		30 April 2008 1040	-	-	5	5

Relevant information: The ambient waters and effluents were clear with a yellow tinge. The plant uses ultra-violet disinfection. After warming to the 25°C test temperature, the ambient waters and effluents were shaken vigorously for approximately 15 seconds to release supersaturated dissolved oxygen. Physicochemical parameters measured prior to test initiation and at test end are on the next page.

Results of screening bioassays of Clermont County - O'Bannon WWTP outfall 001 effluent

Bioassay Number: 08-3774-SW

Relevant information (cont.): Physicochemical parameters recorded prior to test initiation were:

Sample	Temperature (°C)		Dissolved Oxygen (mg/L) Initial-Adjusted	pH (S.U.)	Conductivity (µmhos/cm)
	Upon Rept.	Test Init.			
O'Bannon Creek upstream	1.8	25.0	10.3-8.0	7.63	569
Acute mixing zone	1.9	24.6	10.4-8.0	7.70	832
Grab 001, 28 April 2008	1.3	25.0	9.4-8.0	7.71	957
Grab 001, 29 April 2008	1.5	25.0	10.0-8.2	8.03	1002
Composite 001	1.1	25.4	11.2-8.1	7.92	1015
Rearing unit water control	23.2	24.9	8.0	8.05	363
Reconstituted water control	25.1	25.1	7.7	8.11	561

Physicochemical values for the laboratory controls are the averages of two measurements.

Physicochemical parameters recorded at *P. promelas* (FHM) and *C. dubia* (CDU) test end were:

Sample	Temperature (°C)		Dissolved Oxygen (mg/L)		pH (S.U.)		Conductivity (µmhos/cm)	
	FHM	CDU	FHM	CDU	FHM	CDU	FHM	CDU
O'Bannon Creek upstream	-	-	-	-	-	-	-	-
Acute mixing zone	-	-	-	-	-	-	-	-
Grab 001, 28 April 2008	-	-	-	-	-	-	-	-
Grab 001, 29 April 2008	-	-	-	-	-	-	-	-
Composite 001	-	-	-	-	-	-	-	-
Rearing unit water control	-	-	-	-	-	-	-	-
Reconstituted water control	-	-	-	-	-	-	-	-

Physicochemical values for the laboratory controls are the averages of two measurements.

Appendix 1.

Results of previous bioassays of Clermont County - O'Bannon WWTP outfall 001 effluent

Screening Results

Bioassay Number	Date (mm/yy)	Acutely Toxic (Y/N)	<i>Pimephales promelas</i> mortality (plus/or exhibiting other adverse effects)			<i>Ceriodaphnia dubia</i> mortality (plus/or exhibiting other adverse effects)		
			Day 1 Grab	Day 2 Grab	Composite	Day 1 Grab	Day 2 Grab	Composite
98-2169-SW	09/98	N	0	0	0	0	0	0
03-2886-SW	10/03	N	0	0	0	0	0	0
03-2904-SW	11/03	N	0	10	0	0	0	0
08-3749-SW	01/08	N	0	10	5	0	80 ¹	70 ¹

¹ *Ceriodaphnia* results for tests initiated on 9 January 2008 were invalid due to unacceptable mortality in the laboratory control (45 percent). The test was discontinued. Upon investigation it was observed that excessive mortality was also present in the culture dish used to harvest the daphnia for transfer to the test. Mortality of *C. dubia* was most likely the result of improperly cleaned glassware.

* All previous results are available electronically upon request.

Definitive Results

Bioassay Number	<i>Pimephales promelas</i>			<i>Ceriodaphnia dubia</i>		
	LC50 (95 percent confidence limits)	EC50 (95 percent confidence limits)	LC50 TUa (EC50 TUa)	LC50 (95 percent confidence limits)	EC50 (95 percent confidence limits)	LC50 TUa (EC50 TUa)
-	-	-	-	-	-	-
-	-	-	-	-	-	-

Definitions

- The LC50s and EC50s are reported as percent by volume effluent (%).
- The LC50 is the effluent concentration that is lethal to 50 percent of a species of test organism in a stated exposure period. The EC50 includes mortality plus data on other adverse effects. Both are usually obtained by statistical or graphical methods.
- The TUa is calculated by dividing 100 by the LC50 or EC50.

100144

OHIO EPA, DES, BIOASSAY SECTION, SAMPLE SUBMISSION FORM

Name of Entity and Outfall Tested: O'BARANON WWTP OEPA Permit #: 1PK00017
 Facility Address: 1270 HEALE AVE LAKELAND, OH NPDES#: OH0048089
 Receiving Stream (R.M.): O'Baranon CK County: CHELMUN
 Collector(s) (Print Full Name): MARYANNE MATTA
 Collector(s) Signature: *[Signature]*

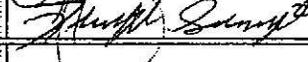
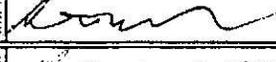
Upstream control samples shall be collected upstream from any discharge/receiving stream interactions. Generally, acute (near field) samples should be collected in the center of the effluent plume 5 times the stream depth downstream from the outfall and chronic (far field) samples should be collected midplume, or if a plume no longer exists midstream 5 times the stream width downstream from the outfall. If atypical mixing characteristics exist, samples can be collected at closer distances than the above guidelines to insure the samples are within the effluent plume. If a mixing zone sample cannot be safely collected, one can be prepared using equal aliquots of the day 1 effluent grab and upstream dilution water (be sure to write "manual" in the "Location of Sample Collection" space provided below).

Sample Identification	Effluent- Day 1 Grab	Effluent- Day 2 Grab	Effluent- Composite	Upstream/ Dilution-Grab	Acute Mixing Zone-Grab	Chronic Mixing Zone-Grab
Location of Sample Collection	FINAL EFFLUENT			R.R BRIDGE	~15' D/S OUTFALL	
If Composite, Sample Volume and Frequency						
Collection Containers, Types and Number	CUBITAINER 1			CUBITAINER 3	CUBITAINER	
Volume Collected	Gallon			Gallon	Gallon	
Date of Sample Collection	4-28-08			4-28-08	4-28-08	
Time of Sample Collection, beginning-Ending Time	1130			1145	1140	
Flow (in MGD)						
Temperature (°C)	15.14			15.91	15.40	
Dissolved Oxygen (mg/L)	9.44/9.42			10.6/10.8	10.89/10.91	
pH (S.U.)	7.77			7.95	8.03	
Conductivity (µmhos/cm)	0.930			0.645	0.527	
Total Residual Chlorine (mg/L)						

Place a check mark next to all the appropriate characteristics of the outfall/mixing zone:

- Turbulent Mixing
- Onshore Pipe
- Shore hugging Plume
- Flume
- Nonturbulent Mixing
- Offshore Pipe
- Rapid Complete Mixing
- Diffuser

Notes: _____

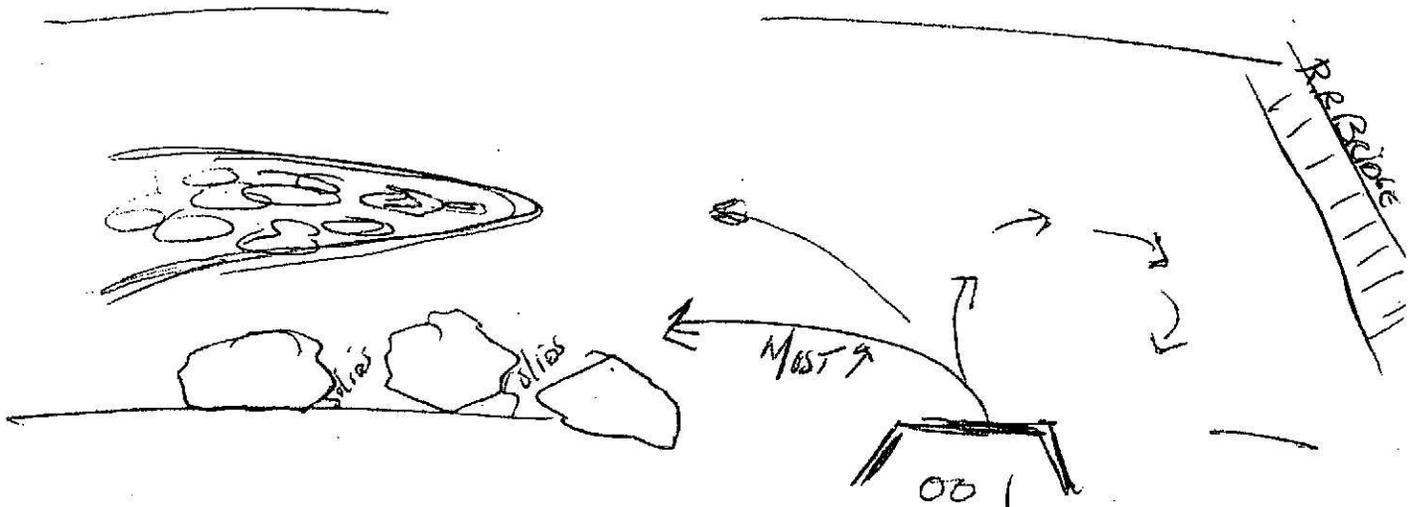
Name and Title	YEAR	MONTH	DAY	HOUR	MINUTE
Received from: 	08	04	28	14	30
Received by: 	08	04	29	09	00
Received from:					
Received by: 	08	04	29	09	00
Received from: 	08	04	29	09	00
Received by: 	08	04	29	09	00
Received from:					
Received by:					
Received from:					
Received by:					

In the vicinity of the discharge: Stream Depth ~2' Stream Width ~15'

CHEMISTRY SAMPLE NUMBERS
100140-142

Location Map Drawing

Describe and map the upstream control and any mixing zone sampling sites so someone else could sample at the exact same points (include landmarks if possible). Stream depth should be recorded for any acute (near field) mixing zone sample and stream width for any chronic (far field) mixing zone sample. For the mixing zone sample location, delineate the distance downstream from the outfall and map the effluent plume. Be specific on discharge and receiving stream characteristics.



OHIO EPA, DES, BIOASSAY SECTION, SAMPLE SUBMISSION FORM

Name of Entity and Outfall Tested: O'BANNON WWTP OEPA Permit #: 1PK00017
 Facility Address: 1270 NOBLE AVE LOVELAND OH NPDES#: OH0048099
 Receiving Stream (R.M.): O'BANNON CK County: CLEXMONT
 Collector(s) (Print Full Name): MARY ANN WEAVER
 Collector(s) Signature: [Signature]

Upstream control samples shall be collected upstream from any discharge/receiving stream interactions. Generally, acute (near field) samples should be collected in the center of the effluent plume 5 times the stream depth downstream from the outfall and chronic (far field) samples should be collected midplume, or if a plume no longer exists midstream 5 times the stream width downstream from the outfall. If atypical mixing characteristics exist, samples can be collected at closer distances than the above guidelines to insure the samples are within the effluent plume. If a mixing zone sample cannot be safely collected, one can be prepared using equal aliquots of the day 1 effluent grab and upstream dilution water (be sure to write "manual" in the "Location of Sample Collection" space provided below).

Sample Identification	Effluent- Day 1 Grab	Effluent- Day 2 Grab	Effluent- Composite	Upstream/ Dilution-Grab	Acute Mixing Zone-Grab	Chronic Mixing Zone-Grab
Location of Sample Collection		<u>FINN EFFLUENT</u>	<u>FINN/ EFFLUENT</u>			
If Composite, Sample Volume and Frequency						
Collection Containers, Types and Number		<u>CUBITAINER</u>	<u>CUBITAINER</u>			
Volume Collected		<u>Gallon</u>	<u>Gallon</u>			
Date of Sample Collection		<u>04-29-08</u>	<u>04-28-08</u>			
Time of Sample Collection, beginning-Ending Time		<u>12:00</u>	<u>11:30 - 11:30</u>			
Flow (in MGD)						
Temperature (°C)		<u>14.37</u>				
Dissolved Oxygen (mg/L)		<u>8.97</u>				
pH (S.U.)		<u>7.87</u>				
Conductivity (µmhos/cm)		<u>0.980</u>				
Total Residual Chlorine (mg/L)						

Place a check mark next to all the appropriate characteristics of the outfall/mixing zone:

- Turbulent Mixing
- Onshore Pipe
- Shore hugging Plume
- Flume
- Nonturbulent Mixing
- Offshore Pipe
- Rapid Complete Mixing
- Diffuser

Notes: Minor → V. MINOR SOLIDS IN TSCO CONTAINERS

Name and Title	YEAR	MONTH	DAY	HOUR	MINUTE
Received from: <i>[Signature]</i>	08	04	29	14	30
Received by: <i>[Signature]</i>	08	04	30	10	10
Received from: <i>[Signature]</i>	08	04	30	10	15
Received by: <i>[Signature]</i>	08	04	30	10	15
Received from:					
Received by:					
Received from:					
Received by:					
Received from:					
Received by:					

In the vicinity of the discharge: Stream Depth _____ Stream Width _____

CHEMISTRY SAMPLE NUMBERS
10019D-91

Location Map Drawing

Describe and map the upstream control and any mixing zone sampling sites so someone else could sample at the exact same points (include landmarks if possible). Stream depth should be recorded for any acute (near field) mixing zone sample and stream width for any chronic (far field) mixing zone sample. For the mixing zone sample location, delineate the distance downstream from the outfall and map the effluent plume. Be specific on discharge and receiving stream characteristics.

Laboratory Inorganic Analysis Data Report

Sample 100190		
Date Received 04/30/2008 11:35 AM	Matrix WW	Collected by MAHR, MARYANNE
Begin	End	Sample Type COMPLIANCE
Date Collected 04/28/2008 11:30 AM	04/29/2008 11:30 AM	Station ID MOSE01
Program SWDO-DSW		Customer ID MAM0429
Client DSW_C		External ID
OEPA Division DSW		
Location O'Bannon WWTP Final Effl		

Analysis	Parameter	Storet	Result	RL	Units	Date	Qualifier
CBOD-5	CBOD5	P80082	<2.0	2	mg/L	05/01/2008	
Solids_Diss	Total Dissolved Solids	P70300	620	10	mg/L	05/02/2008	
Solids_Susp	Total Suspended Solids	P530	<5	5	mg/L	05/02/2008	
ICPMS_(WAT)	Arsenic	P1002	<2.0	2	ug/L	05/09/2008	
ICPMS_(WAT)	Cadmium	P1027	<0.20	0.2	ug/L	05/09/2008	
ICPMS_(WAT)	Chromium	P1034	46.4	2	ug/L	05/09/2008	
ICPMS_(WAT)	Copper	P1042	18.1	2	ug/L	05/09/2008	
ICPMS_(WAT)	Lead	P1051	<2.0	2	ug/L	05/09/2008	
ICPMS_(WAT)	Nickel	P1067	23.8	2	ug/L	05/09/2008	
ICPMS_(WAT)	Selenium	P1147	<2.0	2	ug/L	05/09/2008	
ICP_(WAT)	Aluminum	P1105	<200	200	ug/L	05/12/2008	
ICP_(WAT)	Barium	P1007	20	15	ug/L	05/12/2008	
ICP_(WAT)	Calcium	P916	66	2	mg/L	05/12/2008	
ICP_(WAT)	Hardness, Total	P900	235	10	mg/L	05/12/2008	
ICP_(WAT)	Iron	P1045	170	50	ug/L	05/12/2008	
ICP_(WAT)	Magnesium	P927	17	1	mg/L	05/12/2008	
ICP_(WAT)	Manganese	P1055	14	10	ug/L	05/12/2008	
ICP_(WAT)	Potassium	P937	13	2	mg/L	05/12/2008	
ICP_(WAT)	Sodium	P929	105	5	mg/L	05/12/2008	
ICP_(WAT)	Strontium	P1082	256	30	ug/L	05/12/2008	
ICP_(WAT)	Zinc	P1092	100	10	ug/L	05/12/2008	
Alkalinity	Alkalinity	P410	101	5	mg/L	05/02/2008	
Ammonia	Ammonia	P610	0.056	0.05	mg/L	05/05/2008	
COD	COD	P340	27	10	mg/L	05/06/2008	
Chloride	Chloride	P940	124	5	mg/L	05/21/2008	
Conductivity	Conductivity	P95	929	1	umhos/cm	05/01/2008	
Nitrate	Nitrate+nitrite	P630	22.4	0.5	mg/L	05/05/2008	
TKN	TKN	P625	1.83	0.2	mg/L	05/02/2008	
TP	Total Phosphorus	P665	3.37	0.05	mg/L	05/02/2008	

Field Comments

Lab Comments

QC / Sample Comments

Approved By On

OhioEPA Division of Environmental Services
Laboratory Inorganic Analysis Data Report

Sample 100140			
Date Received 04/29/2008 9:26 AM	Matrix WW	Collected by MAHR, MARYANNE	
Begin	End	Sample Type COMPLIANCE	
Date Collected	04/28/2008 11:30 AM	Station ID M05E01	
Program SWDO-DSW		Customer ID MAM0428	
Client DSW_C		External ID	
OEPA Division DSW			
Location O'Bannon WWTP final effluent			

Analysis	Parameter	Storet	Result	RL	Units	Date	Qualifier
<i>Oil&Grease</i>	Oil & Grease	P556	<2.0	2	mg/L	05/15/2008	
<i>Cyanide_Free</i>	Cyanide, Free	P718	<5	5	ug/L	05/13/2008	PT
<i>Phenolics_MD</i>	Phenolics	P32730	<10.0	10	ug/L	04/30/2008	

Field Comments

Lab Comments

QC / Sample Comments

Cyanide past holding time due to analyst oversight.

Approved By SROBERTS On 05/21/2008

Laboratory Organic Analysis Data Report

Sample 100191			
Date Received 04/30/2008 11:35 AM	Matrix WW	Collected by MAHR, MARYANNE	
Begin	End	Sample Type COMPLIANCE	
Date Collected 04/28/2008 10:30 AM	04/29/2008 10:30 AM	Station ID M05E01	
Program SWDO-DSW		Customer ID MAM0429	
Client DSW_C		External ID	
OEPA Division DSW			
Location O'Bannon WWTP Final Effl			

EPA Method Parameter	Units	Cas Number	Result	RL	Analyzed	Qualifier
USEPA 625	ug/L					
Acenaphthene		000083-32-9	<5.1	5.1	05/08/2008	
Acenaphthylene		000208-96-8	<5.1	5.1	05/08/2008	
Anthracene		000120-12-7	<2.0	2	05/08/2008	
Benzo[a]anthracene		000056-55-3	<2.0	2	05/08/2008	
Benzo[a]pyrene		000050-32-8	<2.0	2	05/08/2008	
Benzo[b]fluoranthene		000205-99-2	<2.0	2	05/08/2008	
Benzo[g,h,i]perylene		000191-24-2	<2.0	2	05/08/2008	
Benzo[k]fluoranthene		000207-08-9	<2.0	2	05/08/2008	
bis(2-Chloroethoxy)methane		000111-91-1	<5.1	5.1	05/08/2008	
bis(2-Chloroethyl)ether		000111-44-4	<2.0	2	05/08/2008	
bis(2-Chloroisopropyl)ether		000108-60-1	<2.0	2	05/08/2008	
bis(2-Ethylhexyl)phthalate		000117-81-7	<10.2	10.2	05/08/2008	
4-Bromophenyl-phenylether		000101-55-3	<5.1	5.1	05/08/2008	
Butylbenzylphthalate		000085-68-7	<2.0	2	05/08/2008	
4-Chloro-3-methylphenol		000059-50-7	<10.2	10.2	05/08/2008	
2-Chloronaphthalene		000091-58-7	<5.1	5.1	05/08/2008	
2-Chlorophenol		000095-57-8	<2.0	2	05/08/2008	
4-Chlorophenyl-phenylether		007005-72-3	<2.0	2	05/08/2008	
Chrysene		000218-01-9	<2.0	2	05/08/2008	
Di-n-butylphthalate		000084-74-2	<5.1	5.1	05/08/2008	
Di-n-octylphthalate		000117-84-0	<2.0	2	05/08/2008	
Dibenz[a,h]anthracene		000053-70-3	<2.0	2	05/08/2008	
1,3-Dichlorobenzene		000541-73-1	<2.0	2	05/08/2008	
1,4-Dichlorobenzene		000106-46-7	<2.0	2	05/08/2008	
1,2-Dichlorobenzene		000095-50-1	<2.0	2	05/08/2008	
2,4-Dichlorophenol		000120-83-2	<2.0	2	05/08/2008	
Diethylphthalate		000084-66-2	<5.1	5.1	05/08/2008	
2,4-Dimethylphenol		000105-67-9	<10.2	10.2	05/08/2008	
Dimethylphthalate		000131-11-3	<5.1	5.1	05/08/2008	
4,6-Dinitro-2-methylphenol		000534-52-1	<5.1	5.1	05/08/2008	
2,4-Dinitrophenol		000051-28-5	<20.3	20.3	05/08/2008	
2,6-Dinitrotoluene		000606-20-2	<2.0	2	05/08/2008	
2,4-Dinitrotoluene		000121-14-2	<2.0	2	05/08/2008	
Fluoranthene		000206-44-0	<2.0	2	05/08/2008	
Fluorene		000086-73-7	<2.0	2	05/08/2008	
Hexachlorobenzene		000118-74-1	<2.0	2	05/08/2008	
Hexachlorobutadiene		000087-68-3	<2.0	2	05/08/2008	
Hexachlorocyclopentadiene		000077-47-4	<2.0	2	05/08/2008	
Hexachloroethane		000067-72-1	<5.1	5.1	05/08/2008	
Indeno[1,2,3-cd]pyrene		000193-39-5	<2.0	2	05/08/2008	
Isophorone		000078-59-1	<2.0	2	05/08/2008	
N-Nitroso-di-n-propylamine		000621-64-7	<2.0	2	05/08/2008	
N-Nitrosodiphenylamine		000086-30-6	<5.1	5.1	05/08/2008	
Naphthalene		000091-20-3	<2.0	2	05/08/2008	
Nitrobenzene		000098-95-3	<2.0	2	05/08/2008	
2-Nitrophenol		000088-75-5	<2.0	2	05/08/2008	
4-Nitrophenol		000100-02-7	<20.3	20.3	05/08/2008	
Pentachlorophenol		000087-86-5	<10.2	10.2	05/08/2008	
Phenanthrene		000085-01-8	<2.0	2	05/08/2008	
Phenol		000108-95-2	4.6	2	05/08/2008	
Pyrene		000129-00-0	<2.0	2	05/08/2008	

Laboratory Organic Analysis Data Report

Sample 100191			
Date Received 04/30/2008 11:35 AM	Matrix WW	Collected by MAHR, MARYANNE	
Begin	End	Sample Type COMPLIANCE	
Date Collected 04/28/2008 10:30 AM	04/29/2008 10:30 AM	Station ID M05E01	
Program SWDO-DSW		Customer ID MAM0429	
Client DSW_C		External ID	
OEPA Division DSW			
Location O'Bannon WWTP Final Effl			

EPA Method Parameter	Units	Cas Number	Result	RL	Analyzed	Qualifier
USEPA 625	ug/L					
1,2,4-Trichlorobenzene		000120-82-1	<2.0	2	05/08/2008	
2,4,6-Trichlorophenol		000088-06-2	<5.1	5.1	05/08/2008	

Field Comments

Lab Comments

QC / Sample Comments

Approved By **On**

Laboratory Organic Analysis Data Report

Sample 100141	Matrix WW	Collected by MAHR, MARYANNE
Date Received 04/29/2008 9:26 AM	Begin	Sample Type COMPLIANCE
Date Collected	End 04/28/2008 11:30 AM	Station ID M05E01
Program SWDO-DSW		Customer ID MAM0428
Client DSW_C		External ID
OEPA Division DSW		
Location O'Bannon WWTP final effluent		

EPA Method Parameter	Units	Cas Number	Result	RL	Analyzed	Qualifier
USEPA 624	ug/L					
Benzene		000071-43-2	<0.50	0.5	05/01/2008	
Bromobenzene		000108-86-1	<0.50	0.5	05/01/2008	
Bromochloromethane		000074-97-5	<0.50	0.5	05/01/2008	
Bromodichloromethane		000075-27-4	<0.50	0.5	05/01/2008	
Bromoform		000075-25-2	<0.50	0.5	05/01/2008	
Bromomethane		000074-83-9	<0.50	0.5	05/01/2008	
n-Butylbenzene		000104-51-8	<0.50	0.5	05/01/2008	
sec-Butylbenzene		000135-98-8	<0.50	0.5	05/01/2008	
tert-Butylbenzene		000098-06-6	<0.50	0.5	05/01/2008	
Carbon tetrachloride		000056-23-5	<0.50	0.5	05/01/2008	
Chlorobenzene		000108-90-7	<0.50	0.5	05/01/2008	
Chloroethane		000075-00-3	<0.50	0.5	05/01/2008	
Chloroform		000067-66-3	<0.50	0.5	05/01/2008	
Chloromethane		000074-87-3	<0.50	0.5	05/01/2008	
2-Chlorotoluene		000095-49-8	<0.50	0.5	05/01/2008	
4-Chlorotoluene		000106-43-4	<0.50	0.5	05/01/2008	
Dibromochloromethane		000124-48-1	<0.50	0.5	05/01/2008	
1,2-Dibromo-3-chloropropane		000096-12-8	<0.50	0.5	05/01/2008	
1,2-Dibromoethane		000106-93-4	<0.50	0.5	05/01/2008	
Dibromomethane		000074-95-3	<0.50	0.5	05/01/2008	
1,2-Dichlorobenzene		000095-50-1	<0.50	0.5	05/01/2008	
1,3-Dichlorobenzene		000541-73-1	<0.50	0.5	05/01/2008	
1,4-Dichlorobenzene		000106-46-7	<0.50	0.5	05/01/2008	
Dichlorodifluoromethane		000075-71-8	<0.50	0.5	05/01/2008	
1,1-Dichloroethane		000075-34-3	<0.50	0.5	05/01/2008	
1,2-Dichloroethane		000107-06-2	<0.50	0.5	05/01/2008	
1,1-Dichloroethene		000075-35-4	<0.50	0.5	05/01/2008	
cis-1,2-Dichloroethene		000156-59-2	<0.50	0.5	05/01/2008	
trans-1,2-Dichloroethene		000156-60-5	<0.50	0.5	05/01/2008	
1,2-Dichloropropane		000078-87-5	<0.50	0.5	05/01/2008	
1,3-Dichloropropane		000142-28-9	<0.50	0.5	05/01/2008	
2,2-Dichloropropane		000594-20-7	<0.50	0.5	05/01/2008	
1,1-Dichloropropene		000563-58-6	<0.50	0.5	05/01/2008	
cis-1,3-Dichloropropene		010061-01-5	<0.50	0.5	05/01/2008	
trans-1,3-Dichloropropene		010061-02-6	<0.50	0.5	05/01/2008	
Ethylbenzene		000100-41-4	<0.50	0.5	05/01/2008	
Hexachlorobutadiene		000087-68-3	<0.50	0.5	05/01/2008	
Isopropylbenzene		000098-82-8	<0.50	0.5	05/01/2008	
4-Isopropyltoluene		000099-87-6	<0.50	0.5	05/01/2008	
Methylene chloride		000075-09-2	<0.50	0.5	05/01/2008	
Naphthalene		000091-20-3	<0.50	0.5	05/01/2008	
n-Propylbenzene		000103-65-1	<0.50	0.5	05/01/2008	
Styrene		000100-42-5	<0.50	0.5	05/01/2008	
1,1,1,2-Tetrachloroethane		000630-20-6	<0.50	0.5	05/01/2008	
1,1,2,2-Tetrachloroethane		000079-34-5	<0.50	0.5	05/01/2008	
Tetrachloroethene		000127-18-4	<0.50	0.5	05/01/2008	
Toluene		000108-88-3	<0.50	0.5	05/01/2008	
1,2,3-Trichlorobenzene		000087-61-6	<0.50	0.5	05/01/2008	
1,2,4-Trichlorobenzene		000120-82-1	<0.50	0.5	05/01/2008	
1,1,1-Trichloroethane		000071-55-6	<0.50	0.5	05/01/2008	
1,1,2-Trichloroethane		000079-00-5	<0.50	0.5	05/01/2008	

Laboratory Organic Analysis Data Report

Sample 100141	Matrix WW	Collected by MAHR, MARYANNE
Date Received 04/29/2008 9:26 AM	Begin	Sample Type COMPLIANCE
Date Collected	04/28/2008 11:30 AM	Station ID M05E01
Program SWDO-DSW		Customer ID MAM0428
Client DSW_C		External ID
OEPA Division DSW		
Location O'Bannon WWTP final effluent		

EPA Method Parameter	Units	Cas Number	Result	RL	Analyzed	Qualifier
USEPA 624	ug/L					
Trichloroethene		000079-01-6	<0.50	0.5	05/01/2008	
Trichlorofluoromethane		000075-69-4	<0.50	0.5	05/01/2008	
1,2,3-Trichloropropane		000096-18-4	<0.50	0.5	05/01/2008	
1,2,4-Trimethylbenzene		000095-63-6	<0.50	0.5	05/01/2008	
1,3,5-Trimethylbenzene		000108-67-8	<0.50	0.5	05/01/2008	
Vinyl chloride		000075-01-4	<0.50	0.5	05/01/2008	
o-Xylene		000095-47-6	<0.50	0.5	05/01/2008	
Total m&p-xylenes		000108-38-3	<0.50	0.5	05/01/2008	

Field Comments

Lab Comments

QC / Sample Comments

Approved By **On**