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State of Ohio Environmental Protection Agency

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December 29, 2008

Mr. Tom Schwing
Network Operations Superintendent
Ohio American Water
5481 Buenos Aires Boulevard
Westerville, OH 43081

**Re: Ohio American Blacklick Estates STP
NPDES: 4PU00002**

Dear Mr. Schwing:

Attached is the Compliance Evaluation Inspection Report for the Blacklick Estates Sewage Treatment Plant located at 4010 Signal Drive in Columbus, Ohio and operation under NPDES permit 4PU00002.

There are several items in the Attachment section of the report which **require a written response. Please respond in writing within 25 days of the receipt of this letter/report.**

Should you have any questions, please call me at 864-7691.

Sincerely,

Larry Korecko
Environmental Specialist
Compliance and Enforcement
Division of Surface Water
Central District Office

Enclosures

LK/nsm Blacklick Estates STP cover letter

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

NPDES Compliance Inspection Report

A. NATIONAL DATA SYSTEM CODING

Permit No. 4PU00002	NPDES No. OH0036021	Date 11-19-2008	Inspection Type C	Inspector S	Facility Type 2
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B. FACILITY DATA

Name and Location of Facility Inspected Blacklick Estates STP (Ohio American Water) 4010 Signal Drive Columbus, Ohio	Entry Time	Permit Effective Date 08/01/03
	Exit Time	Permit Expiration Date 07/31/08

Name(s) and Title(s) of On-Site Representative(s) Eric Diaz, Operations Supervisor and Tom Schwing (for inspection)	Phone Number(s) 837-8968
Name, Address and Title of Responsible Official Tom Schwing, Network Operations Supt., Ohio American Water, 5481 Buenos Aires Blvd., Westerville, OH 43081	Phone Number 614-882-6586

C. AREAS EVALUATED DURING INSPECTION

<u>S</u> Permit	<u>S</u> Flow Measurement	<u>N</u> Pretreatment
<u>S</u> Records/Reports	<u>M+*</u> Laboratory	<u>N/A</u> Compliance Schedules
<u>S/M*</u> Operations & Maintenance	<u>U*</u> Effluent/Receiving Waters	<u>S</u> Self-Monitoring Program
<u>S*</u> Facility Site Review	<u>S</u> Sludge Storage/Disposal	<u> </u> Other
<u>M*</u> Collection System		

(S = Satisfactory, M = Marginal, U = Unsatisfactory, N = Not Evaluated)

D. SUMMARY OF FINDINGS/COMMENTS (attach additional sheets if necessary)

- Effluent was rated "unsatisfactory" because of the great number of violations. It is noted that violations have decreased significantly over last several months as upgrades are completed.
- Respond to question regarding data from pump stations to indicate excessive I/I
- Respond to question as to when rewiring for generator(s) will enable all essential plant equipment to function.
- Respond to lab questions regarding DMRQA 28 and some incorrect transposed data.

Larry Korecko
Larry Korecko, Inspector, Ohio EPA, Central District Office

12-26-08
Date

Erin Sherer
Erin Sherer, Reviewer, Ohio EPA, Central District Office

12-26-08
Date

E. PERMIT VERIFICATION

Inspection Observations Verify the Permit	Yes	No	N/A	N/E
a. Correct name and mailing address of permittee	X			
b. Correct name and location of receiving waters	X			
c. Product(s) and production rates conform with permit application (industries)			X	
d. Flows and loadings conform with NPDES permit	X			
e. Treatment processes are as described in permit application/briefing memo	X			
f. New treatment process(es) added since last inspection		X		
g. Notification given to state of new, different, or increased discharges			X	
h. All discharges are permitted	X			
i. Number and location of discharge points are as described in permit	X			

Comments:

F. COMPLIANCE SCHEDULES/VIOLATIONS

	Yes	No	N/A	N/E
a. Any significant violations since the last inspection	X*			
b. Permittee is taking actions to resolve violations	X*			
c. Permittee has compliance schedule		X		
d. Compliance schedule contained in _____		X		
e. Permittee is meeting compliance schedule		X		

Comments:

G. OPERATION AND MAINTENANCE

Treatment Facility Properly Operated and Maintained	Yes	No	N/A	N/E
a. Standby power available: Generator <u>diesel</u> Dual Feed _____	X*			
b. Adequate alarm system available for power or equipment failures	X			
c. All treatment units in service other than backup units	X			
d. Sufficient operating staff provided: # of shifts _____ Days/Week _____	X			
e. Operator holds unexpired license of class required by permit Class: <u>3</u>	X			
f. Routine and preventive maintenance schedule/performed on time	X*			
g. Any major equipment breakdown since last inspection	X*			
h. Operation and maintenance manual provided and maintained	X			
i. Any plant bypasses since last inspection		X		
j. Regulatory agency notified of bypasses _____ on MORS _____ 800 Number _____			X	
k. Any hydraulic and/or organic overloads experienced since last inspection	X*			

Comments:

Part 3, Laboratory - Quality Control/Quality Assurance		Yes	No	N/A	N/E
f.	Quality assurance manual provided and maintained	X			
g.	Satisfactory calibration and maintenance of instruments and equipment	X			
h.	Adequate records maintained	X			
i. Results of latest U.S. EPA quality assurance performance sampling program: Date: _____ X* Satisfactory _____ Marginal _____ Unsatisfactory					

Comments:

J. EFFLUENT/RECEIVING WATER OBSERVATIONS

Outfall #	Oil Sheen	Grease	Turbidity	Visible Foam	Visible Float Solids	Color	Other
001	No	No	No	Very slight	No	clear	

Comments:

K. MULTIMEDIA OBSERVATIONS

	Yes	No	N/A	N/E
a. Are there indications of sloppy housekeeping or poor maintenance in work and storage areas or laboratories		X		
b. Do you notice staining or discoloration of soils, pavement, or floors		X		
c. Do you notice distressed (unhealthy, discolored, dead) vegetation		X		
d. Do you see unidentified dark smoke or dustclouds coming from sources		X		
e. Do you notice any unusual odors or strong chemical smells		X		
f. Do you see any open or unmarked drums, unsecured liquids, or damaged containment		X		

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

1. What is the cause of the conditions?
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:

L. SAMPLING PROCEDURES (FOR CSI'S)

- Grab samples obtained
- Composite obtained
- Compositing frequency _____ Preservation _____
- Flow proportioned sample obtained
- Automatic sampler used
- Sample split with permittee
- Chain of custody employed
- Sample obtained from facility sampling device
- Sample refrigerated during compositing: Yes No
- Sample representative of volume and nature of discharge _____

Comments:

ATTACHMENT

Operations and Maintenance

Many equipment upgrades and repairs have been made at the Ohio American Water's Blacklick Estates Sewage Treatment Plant (STP) within the last 12 to 15 months.

Some of these include: rebuilding of 3 influent pumps; influent fine screen has been repaired; rebuilt aerated grit removal unit; scum from secondary clarifiers now routed to digestors; new clarifier effluent weir troughs; return activated sludge troughs have been replaced; defective electrical wiring to the secondary clarifier drives replaced; clean-out of major sewer line from water plant to STP which had been full of septic solids; and manhole inspections and installation of manhole inserts where needed. A September 2008 electrical power outage for several days has instituted an electrical evaluation because the on-site generator could only run the influent pumps and fine screens. Ohio American Water is currently upgrading and rewiring to provide 100% on-site emergency power generation for all critical operating components and treatment systems. As of mid-December the upgrade was 80% complete and is scheduled to be completed by January 30, 2009. **Please inform Ohio EPA in writing when this is completed.**

A microscopic examination and polysaccharide results of sludge from Blacklick Estates STP was analyzed by Michael Richard, Ph.D of Michael Richard Wastewater Microbiology LLC in December 2007. Findings included some Nocardia which is usually caused by one of three things: grease and oil; long sludge age; and septicity. This caused Ohio American Water to examine its sewer lines and they found septic solids in the line from the water plant. They have now cleaned out this sewer line and expect that this will diminish any Nocardia problems along with the use of the new portable sludge press which will alleviate any solids build-up.

Effluent and Permit Violations

Ohio American Water's Blacklick Estates STP has had numerous NPDES permit violations going back to 2006. Violations since the last inspection are listed on separate pages. The company has taken many corrective actions to bring this facility into compliance many of which are mentioned above.

Facility had been operating in compliance with monthly average limits for four consecutive months for ammonia (May – August 2008) and five consecutive months (April – August 2008) for suspended solids until a wide-spread power outage in

September 2008. This power outage was caused by high winds from a Gulf of Mexico hurricane. The plant was without electrical power for several days. The facility's back-up generator only ran the influent pumps; and so the low dissolved oxygen and inability to effectively run clarifiers caused ammonia and suspended solids violations until another generator was brought in. The facility was back in compliance for monthly average limits for ammonia and suspended solids in October and November 2008 (information by fax or personal conversation).

Permit Renewal

The Total Maximum Daily Load (TMDL) study for Big Walnut Creek which includes Blacklick Creek called for phosphorus limits on Blacklick Creek sewage treatment plants. **Blacklick Estates STP will receive phosphorus limits with a compliance schedule for achieving those limits.**

Laboratory and Self-Monitoring

Spot checking of bench sheet results with results on the OEPA monthly report forms showed that most data was transposed correctly. However, on January 17, 2008 for outfall -001 at Blacklick STP bench sheet showed CBOD5 of 12.4 mg/l and monthly self-monitoring report had 9.3 mg/l. On January 24, 2008 the bench sheet for suspended solids at outfall -001 had a result of 12.26 mg/l and the self-monitoring report had a value of 13.3 mg/l. Also, some extra ammonia samples were apparently analyzed on September 15 and 16, 2008 during the power outage. These results 28.6 and 38.8 mg/l were not reported on the monthly self-monitoring report. **Please resubmit amended MORs for these instances; and explain in writing how these mistakes can be eliminated in the future.**

The results of the latest DMRQA 28 study showed that the Ohio American Water lab received an acceptable rating for all parameters which they run at their lab except for ammonia. **Please provide copies of any correspondence between Ohio EPA Lab and Ohio American Water as to reasons for "unacceptable" ammonia and what is being or was done to correct situation.**

The facility keeps daily logs of temperature for incubator, water bath, refrigerator, and oven. Scale was calibrated January 23, 2008. "Known" or "check" samples are obtained from an outside lab.

Monthly discharge reports have been late in submittal for the months of October and November 2008 because Ohio American Water has been having trouble obtaining a PIN #. Network Operations Manager has been working with OEPA Central Office (Jamie Roberts) to correct this.

Collection System

A new system of keeping track of sanitary sewer blockages has been worked into a Sewer Blockage Report Sheet which can be used for any Ohio American Water STP. The renewal NPDES permit will have a -300 station for tracking sanitary sewer overflows (SSOs).

Graphs of daily flows over the past two years show that there is still considerable inflow/infiltration in the collection system. **In a letter dated September 24, 2007 Ohio American Water stated that it was collecting data from its four lift stations to determine if any sub-drainage basin was contributing excessive inflow/infiltration. Has this data been evaluated and have any conclusions been reached? Please inform in writing.**

Sludge

The new portable sludge dewatering belt filter press which has been purchased over a year ago with its large capacity has been able to take care of any solids buildup in any of Ohio American Water's STPs in the area.

Sludge is still taken to the Franklin County Landfill.

BLACKLICK ESTATES STP

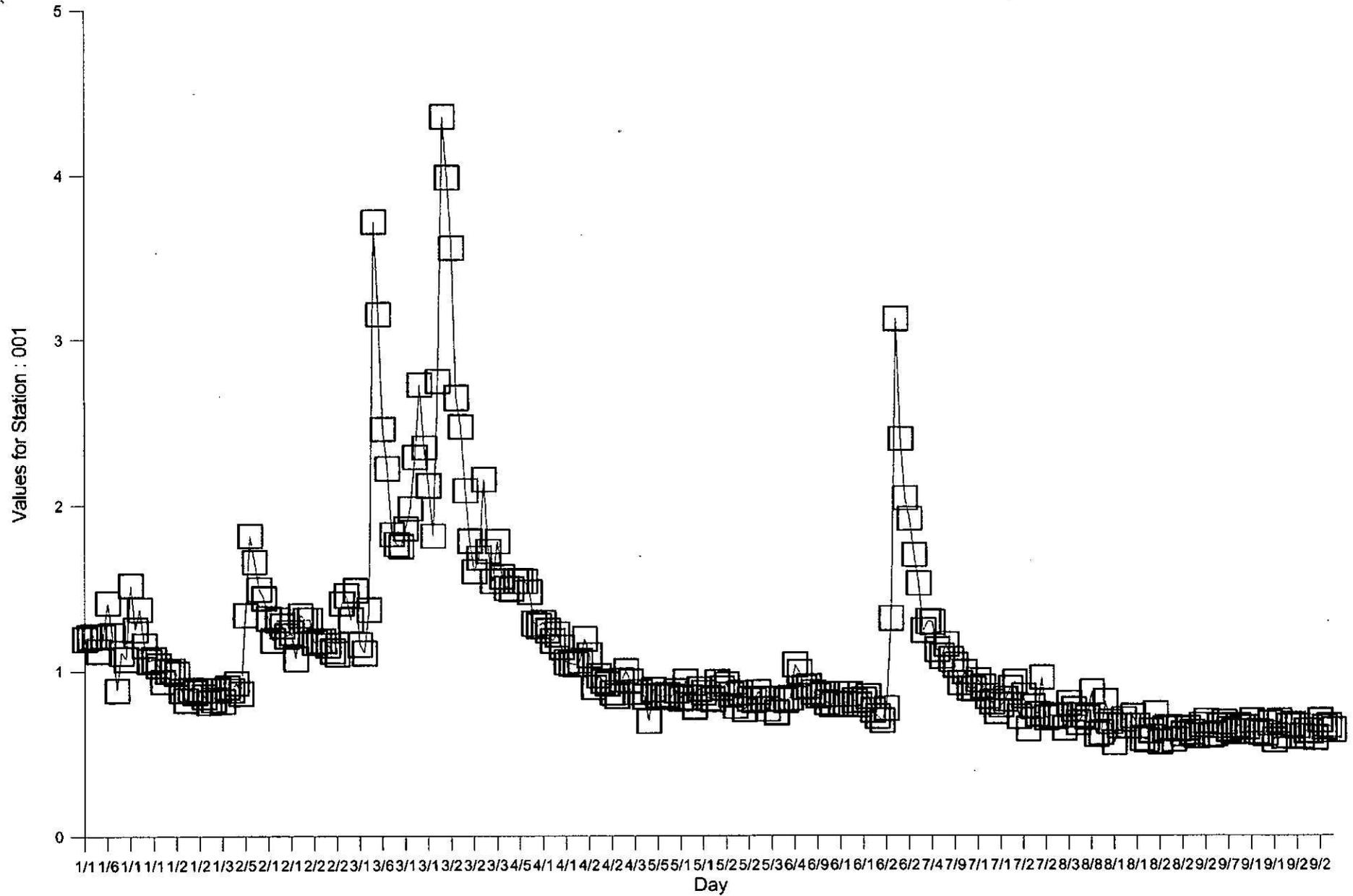
~~Get New Data~~

VIOLATIONS JULY 2007 THROUGH SEPT 2008

Permit No	Reporting Period	Station	Reporting Code	Parameter	Limit Type	Limit	Reported Value	Violation Date
4PU00002*HD	July 2008	001	00610	Nitrogen, Ammonia (NH3	7D Conc	2.3	3.15	7/1/2008
4PU00002*HD	July 2008	001	00610	Nitrogen, Ammonia (NH3	7D Qty	10.4	15.1024	7/1/2008
4PU00002*HD	July 2008	001	00300	Dissolved Oxygen	1D Conc	7.0	6.9	7/27/2008
4PU00002*HD	September 2008	001	00530	Total Suspended Solids	30D Conc	20	34.25	9/1/2008
4PU00002*HD	September 2008	001	00530	Total Suspended Solids	7D Conc	30	33.3333	9/1/2008
4PU00002*HD	September 2008	001	00530	Total Suspended Solids	7D Conc	30	67.	9/8/2008
4PU00002*HD	September 2008	001	00530	Total Suspended Solids	7D Qty	136.2	168.513	9/8/2008
4PU00002*HD	September 2008	001	00610	Nitrogen, Ammonia (NH3	30D Conc	1.5	4.6725	9/1/2008
4PU00002*HD	September 2008	001	00610	Nitrogen, Ammonia (NH3	7D Conc	2.3	17.6266	9/15/2008
4PU00002*HD	September 2008	001	00610	Nitrogen, Ammonia (NH3	30D Qty	6.8	10.7842	9/1/2008
4PU00002*HD	September 2008	001	00610	Nitrogen, Ammonia (NH3	7D Qty	10.4	40.5644	9/15/2008
4PU00002*HD	September 2008	001	80082	CBOD 5 day	30D Conc	10	13.99	9/1/2008
4PU00002*HD	September 2008	001	80082	CBOD 5 day	7D Conc	15	19.8	9/8/2008
4PU00002*HD	September 2008	001	80082	CBOD 5 day	7D Conc	15	17.95	9/15/2008
4PU00002*HD	September 2008	001	00300	Dissolved Oxygen	1D Conc	7.0	.7	9/15/2008
4PU00002*HD	September 2008	001	00300	Dissolved Oxygen	1D Conc	7.0	.8	9/16/2008
4PU00002*HD	September 2007	001	00530	Total Suspended Solids	30D Conc	20	24.7666	9/1/2007
4PU00002*HD	September 2007	001	00530	Total Suspended Solids	7D Conc	30	52.5333	9/22/2007
4PU00002*HD	September 2007	001	00530	Total Suspended Solids	7D Qty	136.2	153.956	9/22/2007
4PU00002*HD	September 2007	001	80082	CBOD 5 day	7D Conc	15	16.4333	9/22/2007
4PU00002*HD	September 2007	001	01119	Copper, Total Recovers	30D Conc	30	30.1	9/1/2007
4PU00002*HD	February 2008	001	00530	Total Suspended Solids	30D Conc	20	22.9846	2/1/2008
4PU00002*HD	February 2008	001	00530	Total Suspended Solids	7D Conc	30	72.3	2/22/2008
4PU00002*HD	February 2008	001	00530	Total Suspended Solids	30D Qty	90.8	120.611	2/1/2008
4PU00002*HD	February 2008	001	00530	Total Suspended Solids	7D Qty	136.2	389.050	2/22/2008
4PU00002*HD	June 2008	001	00610	Nitrogen, Ammonia (NH3	7D Conc	2.3	4.93	6/22/2008
4PU00002*HD	June 2008	001	00610	Nitrogen, Ammonia (NH3	7D Qty	10.4	24.4446	6/22/2008
4PU00002*HD	March 2008	001	00530	Total Suspended Solids	30D Conc	20	48.1683	3/1/2008
4PU00002*HD	March 2008	001	00530	Total Suspended Solids	7D Conc	30	86.4733	3/1/2008
4PU00002*HD	March 2008	001	00530	Total Suspended Solids	7D Conc	30	44.6333	3/8/2008
4PU00002*HD	March 2008	001	00530	Total Suspended Solids	7D Conc	30	46.9333	3/15/2008
4PU00002*HD	March 2008	001	00530	Total Suspended Solids	30D Qty	90.8	549.097	3/1/2008
4PU00002*HD	March 2008	001	00530	Total Suspended Solids	7D Qty	136.2	993.665	3/1/2008

4PU00002*HD	March 2008	001	00530	Total Suspended Solids	7D Qty	136.2	365.491	3/8/2008
4PU00002*HD	March 2008	001	00530	Total Suspended Solids	7D Qty	136.2	737.696	3/15/2008
4PU00002*HD	March 2008	001	00610	Nitrogen, Ammonia (NH3	30D Conc	4.75	5.57167	3/1/2008
4PU00002*HD	March 2008	001	00610	Nitrogen, Ammonia (NH3	7D Conc	7.13	7.18	3/22/2008
4PU00002*HD	March 2008	001	00610	Nitrogen, Ammonia (NH3	30D Qty	21.6	52.5194	3/1/2008
4PU00002*HD	March 2008	001	00610	Nitrogen, Ammonia (NH3	7D Qty	32.4	48.8875	3/1/2008
4PU00002*HD	March 2008	001	00610	Nitrogen, Ammonia (NH3	7D Qty	32.4	59.3234	3/8/2008
4PU00002*HD	March 2008	001	00610	Nitrogen, Ammonia (NH3	7D Qty	32.4	52.4069	3/15/2008
4PU00002*HD	March 2008	001	00610	Nitrogen, Ammonia (NH3	7D Qty	32.4	49.4597	3/22/2008
4PU00002*HD	March 2008	001	80082	CBOD 5 day	30D Qty	113.5	208.138	3/1/2008
4PU00002*HD	March 2008	001	80082	CBOD 5 day	7D Qty	181.6	237.056	3/8/2008
4PU00002*HD	March 2008	001	80082	CBOD 5 day	7D Qty	181.6	390.715	3/15/2008
4PU00002*HD	October 2007	001	00300	Dissolved Oxygen	1D Conc	7.0	6.5	10/23/2007
4PU00002*HD	April 2008	001	00610	Nitrogen, Ammonia (NH3	30D Conc	4.75	6.64308	4/1/2008
4PU00002*HD	April 2008	001	00610	Nitrogen, Ammonia (NH3	7D Conc	7.13	10.6333	4/15/2008
4PU00002*HD	April 2008	001	00610	Nitrogen, Ammonia (NH3	30D Qty	21.6	29.7518	4/1/2008
4PU00002*HD	April 2008	001	00610	Nitrogen, Ammonia (NH3	7D Qty	32.4	37.7499	4/1/2008
4PU00002*HD	April 2008	001	00610	Nitrogen, Ammonia (NH3	7D Qty	32.4	33.6667	4/8/2008
4PU00002*HD	April 2008	001	00610	Nitrogen, Ammonia (NH3	7D Qty	32.4	42.0737	4/15/2008
4PU00002*HD	November 2007	001	00610	Nitrogen, Ammonia (NH3	7D Conc	7.13	7.54667	11/8/2007
4PU00002*HD	January 2008	001	00530	Total Suspended Solids	30D Conc	20	31.2071	1/1/2008
4PU00002*HD	January 2008	001	00530	Total Suspended Solids	7D Conc	30	89.	1/8/2008
4PU00002*HD	January 2008	001	00530	Total Suspended Solids	30D Qty	90.8	142.647	1/1/2008
4PU00002*HD	January 2008	001	00530	Total Suspended Solids	7D Qty	136.2	451.307	1/8/2008
4PU00002*HD	August 2007	001	00530	Total Suspended Solids	30D Conc	20	28.0687	8/1/2007
4PU00002*HD	August 2007	001	00530	Total Suspended Solids	7D Conc	30	60.7666	8/15/2007
4PU00002*HD	August 2007	001	00530	Total Suspended Solids	7D Qty	136.2	147.798	8/15/2007
4PU00002*HD	August 2007	001	01119	Copper, Total Recovers	30D Conc	30	45.3	8/1/2007
4PU00002*HD	December 2007	001	00530	Total Suspended Solids	30D Conc	20	20.52	12/1/2007
4PU00002*HD	December 2007	001	00530	Total Suspended Solids	7D Conc	30	42.7333	12/22/2007
4PU00002*HD	December 2007	001	00530	Total Suspended Solids	7D Qty	136.2	166.962	12/22/2007

Ohio American Water Co Blacklick Ests WWTP 4PU00002*HD :
Period : 01/01/2008 to 09/30/2008 Parameter : Flow Rate (MGD)



Ohio American Water Co Blacklick Ests WWTP 4PU00002*HD :
Period : 01/01/2007 to 12/31/2007 Parameter : Flow Rate (MGD)

