Ohio Environmental Protection Agency
John R. Kasich, Governor
Mary Taylor, Lt. Governor
Scott J. Nally, Director

March 15, 2012

Re: Belmont County
Fox Shannon WWTP
Compliance Evaluation Inspection
NPDES Permit 0PG00063*DD
Correspondence (PWW)

Mark Esposito, Director
Belmont County Sanitary Sewer District
P.O. Box 457
St. Clairsville, Ohio 43956

Dear Mr. Esposito:

On February 23, 2012, I conducted a compliance evaluation inspection of the Fox Shannon Wastewater Treatment Plant. Jennifer Witte and Fred Snell also of Ohio EPA's Division of Surface Water accompanied me on the inspection. Ron Pacifico, Operator of Record, and Rich Maleski, Chief Plant Operator, represented the facility during the inspection.

The purpose of the inspection was to determine the facility's compliance status with the terms and conditions of the NPDES permit number 0PG00063*DD. A copy of the inspection form is attached.

As a result of the inspection and file review, I have the following comments:

1. **NPDES Permit Part I, A – Effluent Limitations:** A review of your self-monitoring reports covering the months of July 2009 through January 2012 indicates violations of the effluent limitations contained in your NPDES permit. The specific instances of noncompliance and/or deficiencies are outlined in the attached table.

   There is a chronic pattern of violations of ammonia at this wastewater treatment facility. Looking back over the data, ammonia has been violated every July since 2007, and during other months of each year. This chronic non-compliance must cease. Within 30 days, please submit a compliance plan indicating how this facility will return to consistent compliance with the effluent limitations. Provide a schedule including dates and steps to be taken to return to compliance.

Southeast District Office
2195 Front Street
Logan, OH 43138-8637

740 | 385 8501
740 | 385 6490 (fax)
www.epa.ohio.gov

2. **NPDES Permit Part I, A – Monitoring Requirements:** The permittee failed to comply with the monitoring requirements contained in the NPDES permit. Specific instances include: Failure to monitor for turbidity as required by the permit. However, OhioEPA has agreed to modify the permit to delete this requirement because it is believed the new sampling location will ensure representative and accurate samples are being taken.

3. **NPDES Permit Part I, C – Schedule of Compliance:** Your NPDES permit contains a schedule of compliance for installation of a turbidity meter. To date, you have not complied with the compliance schedule. As indicated above, OhioEPA has agreed to modify the permit to delete this requirement because it is believed the new sampling location will ensure representative and accurate samples are being taken.

4. **NPDES Permit Part III, Item 3 – Facility Operation and Quality Control:** All wastewater treatment works shall be operated in a manner consistent with the following: A) At all times, the permittee shall maintain in good working order and operate as efficiently as possible all treatment or control facilities or systems installed or used by the permittee necessary to achieve compliance with the terms and conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems which are installed by a permittee only when the operation is necessary to achieve compliance with conditions of the permit. B) The permittee shall effectively monitor the operation and efficiency of treatment and control facilities and the quantity and quality of the treated discharge.

    a. Sludge is not being managed properly. There is a very high sludge inventory in the plant. This affects effluent quality, and is probably contributing to the ammonia violations identified in Item 2 of this letter.

    b. The influent screening building is being severely damaged by hydrogen sulfide gas. The metal door has desintigrated, and the concrete influent sewage channel is severely eroded. Other items throughout the plant are in need of rust removal and need to be painted.

    Submit a compliance plan for sludge management improvements and upgrade/replacement of influent building problems within 30 days.

5. **NPDES Permit Part III, Item 11 – Unauthorized Discharges:** Bypass is prohibited, and the Director may take enforcement action against a permittee for bypass.

In the last year, The Fox Shannon sewer system illegally discharged sewage to the water of the state 11 times, through sewer overflows from the sewer system due to inflow and infiltration. These are violations of the NPDES permit and Ohio Revised Code Chapter 6111, both which prohibit unauthorized discharges (See attached list). Each violation is fineable up to $10,000 per day.

The BCSSD must provide a plan to eliminate sanitary sewer overflows within 30 days.

Please respond, in writing, within 15/30 days of receipt of this report, to the issues 1, 4, and 5 listed above. If you have any questions, please contact me at (740) 380-5284.

Sincerely,

Abbot Stevenson
Environmental Engineer
Division of Surface Water

AS/dh

Enclosure

c: Belmont County Commissioners

NPDES
Compliance Inspection Report

A. NATIONAL DATA SYSTEM CODING

Permit No.	NPDES No.	Date	Inspection Type	Inspector	Facility Type
0PG00063*DD	OH0107956	February 24, 2012	C	S	1

B. FACILITY DATA

Name & Location of Facility Inspected	Entry Time	Permit Effective Date
Fox Shannon WWTP 68750 Hammond Road St. Clairsville, Ohio 43950	1:30 p.m.	September 1, 2008
	Exit Time	**Permit Expiration Date**
	3:50 p.m.	August 31, 2013

Name(s) & Title(s) of On-Site Representative(s)	Phone Number(s)
Ron Pacifico, Operator of Record Rich Maleski, Operator	(740) 695-6669
Name, Address, & Title of Responsible Official	**Phone Number**
Mark Esposito, Director Belmont County Sanitary Sewer District P.O. Box 457 St. Clairsville, Ohio 43950	(740) 695-3144

C. AREAS EVALUATED DURING INSPECTION

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

(S = Satisfactory; M = Marginal; U = Unsatisfactory; N = Not Evaluated; N/A = Not Applicable)

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

1. Operations & Maintenance: Maintenance is not being kept up. See letter item 4.
2. Collection System: System has significant Inflow & Infiltration (I/I). See letter item 5.
3. Sludge: There is too much sludge in the plant. See letter item 4.
4. Compliance Schedules: Facility has not met any of the 3 compliance schedule items. See letter items 2&3.

Abbot Stevenson — 3/14/12

Abbot Stevenson, Inspector, Ohio EPA, Southeast District Office — Date

Jennifer M. Witte — 3/15/12

Jennifer M. Witte, Reviewer, Ohio EPA, Southeast District Office — Date

Sections E through K: Complete on all inspections as appropriate (N/A = Not Applicable; N/E = Not Evaluated)

E. PERMIT VERIFICATION

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

F. COMPLIANCE SCHEDULES/VIOLATIONS

	YES	NO	N/A	N/E
a. Any significant violations since the last inspection *	☒	☐	☐	☐
b. Permittee is taking actions to resolve violations *	☒	☐	☐	☐
c. Permittee has compliance schedule **	☒	☐	☐	☐
d. Compliance schedule contained in: Permit **	☒	☐	☐	☐
e. Permittee is meeting compliance schedule	☐	☒	☐	☐

Comments: * Facility routinely violates ammonia during the summer months.
** Permit contains schedule to install turbidity meter, which has not been done. Ohio EPA agrees to modify NPDES permit to delete requirement due to relocation of effluent sample, solving the problem of accuracy of samples.

G. OPERATION AND MAINTENANCE

Treatment Facility Properly Operated & Maintained	YES	NO	N/A	N/E
a. Standby power available: Generator: ☒ Dual Feed: ☐	☒	☐	☐	☐
b. Adequate alarm system available for power or equipment failures	☐	☒	☐	☐
c. All treatment units in service other than backup units	☒	☐	☐	☐
d. Sufficient operating staff provided: # of shifts: 2 Days/Week: 7	☐	☒	☐	☐
e. Operator holds unexpired license of class required by permit. Class: 3	☒	☐	☐	☐
f. Copy of certificate of Operator of Record displayed on-site	☒	☐	☐	☐
g. Minimum operator staffing requirements fulfilled (OAC 3745-7)	☒	☐	☐	☐
h. Routine & preventive maintenance schedule/performed on time	☐	☒	☐	☐
i. Any major equipment breakdown since last inspection	☐	☒	☐	☐
j. Operation & maintenance manual provided & maintained	☒	☐	☐	☐
k. Any plant bypasses since last inspection	☐	☒	☐	☐
l. Regulatory agency notified of bypasses: On MORS: ☒ 800 No.: ☒	☒	☐	☐	☐
m. Any hydraulic and/or organic overloads experienced since last inspection	☒	☐	☐	☐

Comments: b. There is no alarm system at the plant (used to have autodialer for high wet well level).
d. Staffing level is not adequate for the size and condition of the collection system.
j. Facility reports collection system bypasses. No plant bypasses have occurred.
k. The collection system and WWTP experience hydraulic overloads on a frequent basis.

Record Keeping	YES	NO	N/A	N/E
a. Log book provided	☒	☐	☐	☐
b. Log book kept on-site	☒	☐	☐	☐
c. Log book contains the following:	☒	☐	☐	☐
1. Identification of treatment works	☒	☐	☐	☐
2. Date/Time of arrival/departure of ORC	☒	☐	☐	☐
3. Daily record of operation and maintenance activities	☒	☐	☐	☐
4. Laboratory results (unless documented on bench sheets)	☒	☐	☐	☐
5. Identification of person making log entries	☒	☐	☐	☐
d. Is the ORC submitting written notification to Ohio EPA and permittee when a collection system overflow, treatment plant bypass or effluent limit violation has occurred.	☒	☐	☐	☐

Comments:

Collection System	YES	NO	N/A	N/E
a. Percent combined system. Percent: 0	☐	☒	☐	☐
b. Any collection system overflows since last inspection: CSO: ☐ SSO: ☒	☒	☐	☐	☐
c. Regulatory agency notified of overflow (SSOs)	☒	☐	☐	☐
d. CSO O&M plan provided and implemented	☐	☐	☒	☐
e. CSOs monitored and reported in accordance with permit	☐	☐	☒	☐
f. Portable pumps used to relieve system	☐	☒	☐	☐
g. Lift station alarm systems provided and maintained	☒	☐	☐	☐
h. Are lift stations equipped with permanent standby power or equivalent	☒	☐	☐	☐
i. Is there an inflow/infiltration problem (separate sewer system), or were there any major repairs to collection system since last inspection	☒	☐	☐	☐
j. Any complaints received since last inspection of basement flooding	☐	☒	☐	☐
k. Are any portions of the sewer system at or near capacity	☒	☐	☐	☐

Comments: j. There is severe I/I in Morristown, Pine Lake, and Barcamp Lake pump stations.

H. SLUDGE MANAGEMENT

	YES	NO	N/A	N/E
a. Sludge adequately disposed. Method: Land application	☒	☐	☐	☐
b. If sludge is incinerated, where is ash disposed of? _____	☐	☐	☒	☐
c. Is sludge disposal contracted? Name: Synagro	☒	☐	☐	☐
d. Has amount of sludge generated changed significantly since last inspection	☐	☒	☐	☐
e. Adequate sludge storage provided at facility	☐	☒	☐	☐
f. Land application sites monitored and inspected per state rules	☒	☐	☐	☐
g. Records kept in accordance with state rules	☒	☐	☐	☐
h. Any complaints received in last year regarding sludge	☐	☒	☐	☐
i. Is sludge adequately processed (digestion, dewatering, pathogen control) in accordance with Ohio EPA rules	☒	☐	☐	☐

Comments: Not enough sludge was removed from the plant last fall, causing a buildup of excessive levels of sludge in the plant.

I. SELF-MONITORING PROGRAM

Part 1 – Flow Measurement	YES	NO	N/A	N/E
a. Primary flow measuring device properly operated & maintained. Type of device: ☐ Ultrasonic & parshall flume ☐ Calculated from influent ☐ Weir ☒ Other ☐ Ultrasonic & weir specify: mag meter	☒	☐	☐	☐
b. Calibration frequency adequate. Date of last calibration: 8/8/07	☒	☐	☐	☐
c. Secondary instruments (totalizers, recorders, etc.) properly operated and maintained	☒	☐	☐	☐
d. Flow measurement equipment adequate to handle expected ranges of flows	☒	☐	☐	☐
e. Actual flow discharged is measured	☒	☐	☐	☐
f. Flow measuring equipment inspection frequency: ☒ Daily ☐ Monthly ☐ Weekly ☐ Other				

Comments:

Part 2 - Sampling	YES	NO	N/A	N/E
a. Sampling location(s) are as specified by permit	☒	☐	☐	☐
b. Parameters and sampling frequency agree with permit	☐	☒	☐	☐
c. Permittee uses required sampling method	☒	☐	☐	☐
d. Sample collection procedures are adequate	☒	☐	☐	☐
i. Samples refrigerated during compositing	☒	☐	☐	☐
ii. Proper preservation techniques used	☒	☐	☐	☐
Conform with 40 CFR 136.3	☒	☐	☐	☐
e. Monitoring records (e.g., flow, pH, D.O., etc.) maintained for a minimum of three years including all original strip chart recordings (e.g., continuous monitoring instrumentation, calibration, & maintenance records)	☒	☐	☐	☐
f. Adequate records maintained of sampling date, time, exact location, etc.	☒	☐	☐	☐

Comments:
NPDES permit requires turbidity monitoring. Ohio EPA agrees to modify permit to drop this requirement.

Part 3 – Laboratory, General	YES	NO	N/A	N/E
a. Written Standard Operating Procedures (SOPs) for all analysis performed on-site	☐	☒	☐	☐
b. EPA approved analytical testing procedures used (40 CFR 136.3)	☒	☐	☐	☐
c. If alternate analytical procedures are used, proper approval has been obtained	☐	☐	☒	☐
d. Analysis being performed more frequently than required by permit	☐	☒	☐	☐
e. If (c) is yes, are results reported in permittee's self-monitoring report	☐	☐	☒	☐
f. Commercial laboratory used: 1. Parameters analyzed by commercial lab: metals, mercury, oil & grease, TKN 2. Lab name: Ream and Hager				

Comments:
a. Facility needs to develop SOPs.

Part 3 – Laboratory, Quality Control/Quality Assurance	YES	NO	N/A	N/E
a. Quality assurance manual provided and maintained	☒	☐	☐	☐
b. Satisfactory calibration and maintenance of instruments and equipment	☒	☐	☐	☐
c. Adequate records maintained	☒	☐	☐	☐
d. Results of latest U.S. EPA quality assurance performance sampling program: Date: N/A ☐ Satisfactory ☐ Marginal ☐ Unsatisfactory				

Comments:

J. EFFLUENT/RECEIVING WATER OBSERVATIONS

Outfall #	Oil Sheen	Grease	Turbidity	Visible Foam	Visible Float Solids	Color	Other
001	None	NOne	None	None	None	Slight green	

Comments:

K. MULTIMEDIA OBSERVATIONS

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

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:

FOX SHANNON WWTP BYPASSES AND OVERFLOW OCCURRENCES 2011-2012

Facility	Permit No	Station	Parameter	Units	Date	Reported Value
Fox-Shannon WWTP	0PG00063*DD	300	Overflow Occurrence	No./Month	2/28/2011	2
Fox-Shannon WWTP	0PG00063*DD	300	Overflow Occurrence	No./Month	3/6/2011	1
Fox-Shannon WWTP	0PG00063*DD	300	Overflow Occurrence	No./Month	4/14/2011	1
Fox-Shannon WWTP	0PG00063*DD	300	Overflow Occurrence	No./Month	4/16/2011	2
Fox-Shannon WWTP	0PG00063*DD	300	Overflow Occurrence	No./Month	9/26/2011	1
Fox-Shannon WWTP	0PG00063*DD	300	Overflow Occurrence	No./Month	11/23/2011	1
Fox-Shannon WWTP	0PG00063*DD	300	Overflow Occurrence	No./Month	1/31/2012	1

FOX SHANNON WWTP EFFLUENT VIOLATIONS JULY 2009 – JANUARY 2012

Permit No	Reporting Period	Station	Parameter	Limit Type	Limit	Reported Value	Violation Date
0PG00063*DD	July 2009	001	Nitrogen, Ammonia	30D Conc	1.11	1.19484	7/1/2009
0PG00063*DD	July 2009	001	Nitrogen, Ammonia	7D Conc	1.67	2.00857	7/15/2009
0PG00063*DD	July 2009	001	Nitrogen, Ammonia	7D Conc	1.67	1.81857	7/22/2009
0PG00063*DD	September 2009	001	Chlorine, Total Residual	1D Conc	0.019	.05	9/23/2009
0PG00063*DD	May 2010	001	Nitrogen, Ammonia	30D Conc	1.11	1.39226	5/1/2010
0PG00063*DD	July 2010	001	Nitrogen, Ammonia	30D Conc	1.11	1.13452	7/1/2010
0PG00063*DD	July 2010	001	Chlorine, Total Residual	1D Conc	0.019	.05	7/19/2010
0PG00063*DD	July 2010	001	Chlorine, Total Residual	1D Conc	0.019	.05	7/20/2010
0PG00063*DD	July 2010	001	Chlorine, Total Residual	1D Conc	0.019	.05	7/26/2010
0PG00063*DD	August 2010	001	Nitrogen, Ammonia	30D Conc	1.11	1.4171	8/1/2010
0PG00063*DD	September 2010	001	Nitrogen, Ammonia	30D Conc	1.11	1.17967	9/1/2010
0PG00063*DD	June 2011	001	Nitrogen, Ammonia	30D Conc	1.11	1.24633	6/1/2011
0PG00063*DD	July 2011	001	Nitrogen, Ammonia	30D Conc	1.11	3.57419	7/1/2011
0PG00063*DD	July 2011	001	Nitrogen, Ammonia	30D Qty	3.15	5.29509	7/1/2011
0PG00063*DD	July 2011	001	Nitrogen, Ammonia	7D Conc	1.67	10.3714	7/15/2011
0PG00063*DD	July 2011	001	Nitrogen, Ammonia	7D Qty	4.74	15.3006	7/15/2011
0PG00063*DD	July 2011	001	Nitrogen, Ammonia	7D Conc	1.67	2.78	7/22/2011