



**Environmental
Protection Agency**

John R. Kasich, Governor
Mary Taylor, Lt. Governor
Scott J. Nally, Director

Re: Notice of Violation
Putnam County
Continental WWTP
NPDES Permit

June 22, 2011

Mayor and Council
Village of Continental
508 West Elm Street
Continental Ohio 45831

Dear Mayor and Council:

On June 13, 2011, Ryan Gierhart conducted an inspection of the Village of Continental's wastewater treatment plant (WWTP). Mr. Mike Leis, Mr. Nelson Bear, and Mr. Steve Aelker were present and provided information on the operation and maintenance of the plant. The WWTP discharge to County Ditch #332 was turbid with a visible mixing zone observed.

The trickling filter arms were not rotating during the inspection. From observations during previous inspections and discussions with the WWTP operators it is apparent that the trickling filter arms do not properly rotate unless high flows are coming to the plant. The trickling filter arms need to continuously rotate to allow the wastewater to be spread across the trickling filter media. This will allow for a biological growth on the media and an improvement in treatment. The operators believed that there is a spare bearing for the trickling filter arms but do not have the equipment to pull the arms off to perform the replacement. This repair needs to be completed to improve the operations of the plant. The repair should be completed as soon as possible but by no later than September 1, 2011.

A review of the discharge monitoring reports (DMRs) for April 2011 to June 2011 shows that there have been numerous permit limit violations. The specific instances of noncompliance are enclosed on a separate sheet. Further review of your self-monitoring reports for the previous six months, ending May 2011, indicates that you are in significant non-compliance (SNC) with several effluent limits contained in your NPDES permit. The specific instance of SNC is enclosed on a separate sheet. Until construction is completed, the Village must be diligent in operating the existing wastewater treatment plant. Although it may not be possible to consistently meet permit limits, it is vital that the plant achieve the highest level of treatment possible to minimize the pollutant load to the stream. Also, as discussed previously, the Village needs to submit monthly progress reports on the construction of the new wastewater treatment plant.

Mayor & Council
June 22, 2011
Page Two

If there are any questions please contact Ryan Gierhart at (419) 373-3053.

Sincerely,

Handwritten signature in cursive script that reads "alex a. Wick for".

Elizabeth A. Wick, P.E.
Water Quality Engineer/Unit Supervisor
Division of Surface Water

RG/cs

Enclosure

pc/w encl: Mike Leis
◀DSW: NWDO File▶



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
2PB00049	OH0021768	6/13/2011	C	S	1

Section B: Facility Data

Name and Location of Facility Inspected	Entry Time	Permit Effective Date
Village of Continental WWTP County Road E Continental OH 45831	10:00 am	7/1/2009
	Exit Time	Permit Expiration Date
	12:00 pm	8/31/2013
Name(s) and Title(s) of On-Site Representatives	Phone Number(s)	
Mike Leis, Operator Nelson Bear, Operator Steve Aelker, Maintenance	419-230-5257 continentalwater@bright.net	
Name, Address and Title of Responsible Official	Phone Number	
Mayor and Council 508 West Elm Street P.O. Box 429 Continental OH 45831		

Section C: Areas Evaluated During Inspection

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

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

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

Trickling Filter arms not rotating. The arms need to be repaired so that they move freely and spread the waste water over the trickling filter media. SOPs need to be developed for parameters analyzed in the lab. Records of temperatures and calibration of equipment needs to be kept in the lab.

Inspector	Reviewer
 Ryan Gierhart Environmental Specialist II Division of Surface Water Northwest District Office	 Elizabeth A. Wick, P.E. Water Quality Engineer Division of Surface Water Northwest District Office
6-20-11 Date	6/17/11 Date

Sections E thru K: Complete on all inspections as appropriate
Y – Yes, N – No, N/A – Not Applicable, N/E – Not Evaluated

Section E: Permit Verification

Inspection observations verify the permit

- (a) Correct name and mailing address of permittee Y
- (b) Flows and loadings conform with NPDES permit..... Y
- (c) Treatment processes are as described in permit application... Y
- (d) All discharges are permitted..... Y
- (e) Number and location of discharge points are as described
in permit..... Y
- (f) Storm water discharges properly permitted..... N/A

Section F: Compliance

- (a) Any significant violations since the last inspection..... Y
- (b) Appropriate Non-compliance notification of violations..... Y
- (c) Permittee is taking actions to resolve violations..... Y
- (d) Permittee has a compliance schedule..... Y
- (e) Compliance schedule contained in...NPDES permit
- (f) Permittee is in compliance with schedule..... N
- (g) Has biomonitoring shown toxicity in discharge since last inspection N/A

Comments/Status:

Permittee is behind on mercury variance in compliance schedule.

Section G: Operation & Maintenance

Treatment Works:

Treatment facility properly operated and maintained

- (a) Standby power available.....generator or dual feed N

- i. What does the back-up power source operate.....

- ii. How often is the generator tested under load.....

(b) Which components have an alarm system available for power or equipment failures.....

No alarms at treatment plant.

- (c) All treatment units in service other than backup units..... Y
- (d) What method is used for scheduling routine & preventative maintenance (calendar, software, etc.)..... N/A
- (e) Any major equipment breakdown since last inspection..... N
- (f) Operation and maintenance manual provided and maintained..... N
- (g) Any plant bypasses since last inspection..... N
- (h) Any plant upsets since last inspection..... N

Section G: Operation & Maintenance con't

Record Keeping/Operator of Record:

- (a) Wastewater Treatment Works classification (OAC 3745-7)..... Y
- (b) Operator of Record holds unexpired license of class required by Permit..... Y
- (c) Copy of certificate of Operator of Record displayed on-site..... Y
- (d) Has the Operator of Record submitted an ORC Notification form.. Y
- (e) Minimum operator staffing requirements fulfilled (OAC 3745-7.... Y
- (f) If a Staffing Reduction plan has been approved, are the stipulations of the plan being met..... N/A
- (g) Operator of Record log book provided..... Y
- (h) Format of log book (e.g. computer log, hard bound book)

Hardbound books

- (i) Log book kept onsite (in an area protected from weather)..... Y
- (j) Log book contains the following:
 - I. Identification of treatment works..... Y
 - II. Date/times of arrival/departure for Operator of Record and any other operator required by OAC 3745-7..... Y
 - iii. Daily record of operator and maintenance activities (including preventative maintenance, repairs and request for repairs, process control test results, etc.)..... Y
 - iv. Laboratory results (unless documented on bench sheets)... Y
 - v. Identification of person making entries..... Y
- (k) Has the Operator of Record submitted written notifications to the permittee, Ohio EPA and, if applicable, any local environmental agencies when a collection system overflow, treatment plant bypass or effluent limit violation has occurred..... Y

Comments/Status:

Have Maintenance schedule on board at water plant. Only have routine maintenance set up for grit and post air blower and comminutor.

Section G: Operation & Maintenance con't

Collection System:

- (a) Are there pump stations in the collection system..... Y
 - i. How many publicly-owned pump stations equipped with permanent standby power or equivalent.....0
 - ii. How many pump stations have telemetered alarms.....0
 - iii. How many pump stations have operable alarms.....3

- (b) Any chronic collection system overflows since last inspection..... N/A
- (c) Regulatory agency notified of all overflows..... N/A
- (d) CSOs in the collection system....if so, what is the LCTP status..... N

- (e) How are CSOs monitored (chalk, block, level sensor, etc.)..... N/A
- (f) Portable pumps available for collection system maintenance..... Y
- (g) RDII Program established and active..... N
- (h) Any WIB complaint received since last inspection..... N
- (i) Is there a WIB response plan..... N
- (j) Is any portion of the collection system at or near dry weather Capacity..... N

Comments/Status:

There is no written response plan for WIB. Will go out and investigate if a complaint is called in. Approximately 1700 lin. Feet of sewers were lined in the lake land subdivision.

Section H: Sludge Management

- (a) Method of Sludge Disposal... Land Application
 Haul to Another NPDES Permittee
 Haul to a Mixed Solid Waste Landfill

*if one of the selected methods is land application, complete applicable charts.

(b) Has amount of sludge generated changed significantly since the

Pathogen Reduction Alternative	84370 Vector Attraction Reduction Options									
	Option 1 -38% Volatile Solids Reduction	Option 2 -Anaerobic Bench Scale Analysis	Option 3 - Aerobic Bench Scale Analysis	Option 4 - Specific Oxygen Uptake Rate	Option 5 - Aerobic Time and Temperature	Option 6 - Alkali Addition	Option 7 - >75% Percent Solids without Unstabilized	Option 8 - >75% Percent Solids with Unstabilized	Option 9 - Land Injection	Option 10 - Immediate Incorporation
Alternative 1 - Geometric Mean of Seven Fecal Samples (84369)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Alternative 2 - Aerobic Digestion (46396)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Alternative 2 - Air Drying (46396)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Alternative 2 - Anaerobic Digestion (46396)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Alternative 2 - Composting (46396)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Alternative 2 - Lime Treatment (46396)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Alternative 3 - Approved Equivalent Process	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

last inspection..... N

(c) How much sludge storage is provided at the plant.....

N/A

(d) Records kept in accordance with State and Federal law (5 years according to OAC 3745-40-06)..... Y

(e) Any complaints received in last year regarding sludge..... N

(f) 5/8" screen at headworks for facilities that land apply sludge..... N

(g) Are sludge application sites inspected to verify compliance with NPDES permit..... N/A

Comments/Status:

Section I: Self-Monitoring Program

Flow Measurement:

- (a) Primary/Secondary flow measuring devices (e.g. weir with ultrasonic level sensor):

Ultrasonic and Weir

- (b) Flow meter calibrated annually N
(Date of last calibration:)
- (c) 24-hour recording instruments operated and maintained..... Y
- (d) Flow measurement equipment adequate to handle full range of flows..... Y
- (e) All discharged flow is measured..... Y

Section I: Self-Monitoring Program (con't)

Sampling:

- (a) Sampling location(s) are as specified by permit..... Y
- (b) Parameters and sampling frequency agree with permit..... Y
- (c) Permittee uses required sampling method..... Y
(see GLC page)
- (d) Monitoring records (i.e., flow, pH, DO) maintained for a minimum of three years including all original strip chart recordings (i.e, continuous monitoring instrumentation, calibration and maintenance records)..... Y

Section I: Self-Monitoring Program (con't)

Laboratory:

General

- (a) Does the Quality Assurance Manual contain written Standard Operating Procedures (SOP's) for all analysis performed onsite..... N
- (b) Do SOP's include the following if applicable:
 - Title
 - Scope and Application
 - Summary
 - Sample Handling and Preservation
 - Interferences
 - Apparatus and Materials
 - Reagents
 - Procedure
 - Calculations
 - Quality Control
 - Maintenance
 - Corrective Action
 - Reference (Parent Method)

Note: Standard Methods 1020A establishes that "Quality assurance (QA) is the definitive program for laboratory operation that specifies the measure required to

produce defensible data of known precision and accuracy. "Standard operating procedures are to be used in the laboratory in sufficient detail that a competent analyst unfamiliar with the method can conduct a reliable review and/or obtain acceptable results." SOPs should be developed for each analytical procedure.

- (c) EPA approved analytical testing procedures used (40 CFR 136.3).. Y
- (d) If alternate analytical procedures are used, proper approval has been obtained..... Y
- (e) Analyses being performed more frequently than required by permit. Y
- (f) If (e) is yes, are results in permittee's self-monitoring report..... Y
- (g) Satisfactory calibration and maintenance of instruments/equipment. Y (see score from GLC page)
- (h) Commercial laboratory used..... Y
Parameters analyzed by commercial lab: Metals, O&G, Nitrate + Nitrite, Phosphorus, Cyanide, Ammonia, CBOD.

Lab name: Alloway

Discharge Monitoring Report Quality Assurance (DMRQA)

- (a) Participation in latest USEPA quality assurance performance sampling..... N
Date: 8/2010
- (b) Were any parameters "Unsatisfactory"..... N/A
- (c) Reasons for "Unsatisfactory" parameters.....

Comments/Status:

Facility is only performing daily test for pH, D.O. and Temp at this time. The Lab fridge needs to have the thermometer calibrated annually. Logs should be kept for the calibration of the equipment and temperature logs should be kept for the fridge and incubator. SOPs need to be developed for all samples that are performed in the lab.

Section J: Effluent/Receiving Water Observations

Outfall # 2PD00028001

Outfall Description: Outfall observed was cloudy, turbid and had a visible mixing zone with the stream.

Receiving Stream: County Ditch #332

Receiving Stream Description: Clear with steady flow. Visible mixing zone where effluent was entering stream.

Get New Data

Permit No	Reporting Period	Station	Reporting Code	Parameter	Limit Type	Limit	Reported Value	Violated On Date
2PB00049*ED	April 2011	001	00530	Total Suspended Solids	30D Conc	12	22.625	4/1/2011
2PB00049*ED	April 2011	001	00530	Total Suspended Solids	7D Conc	18	26.	4/1/2011
2PB00049*ED	April 2011	001	00530	Total Suspended Solids	30D Qty	7.9	23.7433	4/1/2011
2PB00049*ED	April 2011	001	00530	Total Suspended Solids	7D Qty	12	15.3595	4/1/2011
2PB00049*ED	April 2011	001	00610	Nitrogen, Ammonia (NH3	30D Conc	6	9.835	4/1/2011
2PB00049*ED	April 2011	001	00610	Nitrogen, Ammonia (NH3	30D Qty	4	11.1823	4/1/2011
2PB00049*ED	April 2011	001	80082	CBOD 5 day	30D Conc	10	42.3333	4/1/2011
2PB00049*ED	April 2011	001	80082	CBOD 5 day	7D Conc	15	50.5	4/1/2011
2PB00049*ED	April 2011	001	80082	CBOD 5 day	30D Qty	6.5	26.5643	4/1/2011
2PB00049*ED	April 2011	001	80082	CBOD 5 day	7D Qty	9.8	29.7936	4/1/2011
2PB00049*ED	April 2011	001	00300	Dissolved Oxygen	1D Conc	5.0	4.36	4/4/2011
2PB00049*ED	April 2011	001	00530	Total Suspended Solids	7D Conc	18	26.	4/8/2011
2PB00049*ED	April 2011	001	80082	CBOD 5 day	7D Conc	15	59.5	4/8/2011
2PB00049*ED	April 2011	001	80082	CBOD 5 day	7D Qty	9.8	27.4658	4/8/2011
2PB00049*ED	April 2011	001	00530	Total Suspended Solids	7D Conc	18	18.5	4/15/2011
2PB00049*ED	April 2011	001	00530	Total Suspended Solids	7D Qty	12	25.3178	4/15/2011
2PB00049*ED	April 2011	001	00610	Nitrogen, Ammonia (NH3	7D Conc	9	15.7	4/15/2011
2PB00049*ED	April 2011	001	00610	Nitrogen, Ammonia (NH3	7D Qty	6	19.1941	4/15/2011
2PB00049*ED	April 2011	001	80082	CBOD 5 day	7D Conc	15	17.	4/15/2011
2PB00049*ED	April 2011	001	80082	CBOD 5 day	7D Qty	9.8	22.4337	4/15/2011
2PB00049*ED	April 2011	001	00530	Total Suspended Solids	7D Conc	18	20.	4/22/2011
2PB00049*ED	April 2011	001	00530	Total Suspended Solids	7D Qty	12	42.5547	4/22/2011
2PB00049*ED	May 2011	001	00530	Total Suspended Solids	30D Conc	12	16.375	5/1/2011
2PB00049*ED	May 2011	001	00530	Total Suspended Solids	30D Qty	7.9	15.9547	5/1/2011
2PB00049*ED	May 2011	001	00530	Total Suspended Solids	7D Qty	12	13.5275	5/1/2011
2PB00049*ED	May 2011	001	00610	Nitrogen, Ammonia (NH3	30D Conc	1.5	5.11	5/1/2011
2PB00049*ED	May 2011	001	00610	Nitrogen, Ammonia (NH3	30D Qty	1.0	6.70827	5/1/2011
2PB00049*ED	May 2011	001	00610	Nitrogen, Ammonia (NH3	7D Qty	1.5	3.46502	5/1/2011
2PB00049*ED	May 2011	001	31616	Fecal Coliform	7D Conc	2000	4400.	5/1/2011
2PB00049*ED	May 2011	001	80082	CBOD 5 day	30D Conc	10	18.4285	5/1/2011
2PB00049*ED	May 2011	001	80082	CBOD 5 day	30D Qty	6.5	14.5754	5/1/2011
2PB00049*ED	May 2011	001	80082	CBOD 5 day	7D Qty	9.8	10.3254	5/1/2011
2PB00049*ED	May 2011	001	00530	Total Suspended Solids	7D Conc	18	20.5	5/8/2011
2PB00049*ED	May 2011	001	80082	CBOD 5 day	7D Conc	15	32.5	5/8/2011
2PB00049*ED	May 2011	001	80082	CBOD 5 day	7D Qty	9.8	13.7546	5/8/2011
2PB00049*ED	May 2011	001	00530	Total Suspended Solids	7D Qty	12	15.5222	5/15/2011
2PB00049*ED	May 2011	001	00610	Nitrogen, Ammonia (NH3	7D Conc	2.3	8.4	5/15/2011
2PB00049*ED	May 2011	001	00610	Nitrogen, Ammonia (NH3	7D Qty	1.5	9.95152	5/15/2011
2PB00049*ED	May 2011	001	80082	CBOD 5 day	7D Conc	15	16.	5/15/2011
2PB00049*ED	May 2011	001	80082	CBOD 5 day	7D Qty	9.8	19.0612	5/15/2011
2PB00049*ED	May 2011	001	00530	Total Suspended Solids	7D Conc	18	19.	5/22/2011
2PB00049*ED	May 2011	001	00530	Total Suspended Solids	7D Qty	12	26.1467	5/22/2011
2PB00049*ED	May 2011	001	80082	CBOD 5 day	7D Qty	9.8	13.0355	5/22/2011
2PB00049*ED	May 2011	001	00300	Dissolved Oxygen	1D Conc	5.0	4.82	5/26/2011

Get New
Data

Get Detail
for Selected
Permit

Facilities in Significant Non-Compliance **

Period: Dec-10 May-11

County	Permit #	Facility Name	Major	Station Code	Param Code	Parameter Name	Max % Exceed	# Months Signif. Exceed (1)**	# Months Exceed (2)**
Putnam	2PB00049	Continental WWTP		1	00530	Total Suspended Solids	254.6	5	6
Putnam	2PB00049	Continental WWTP		1	00610	Nitrogen, Ammonia (NH3)	570.8	6	6
Putnam	2PB00049	Continental WWTP		1	80082	CBOD 5 day	750	6	6