



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

April 19, 2013

Re: Guernsey County
Quaker City WWTP
Compliance Enforcement Inspection
0PA00003; OH0021351
Correspondence (PWW)
Certified Mail 70102780000197079628

Mayor and Council
Village of Quaker City
210 Smith Avenue
P.O. Box 156
Quaker City, Ohio 43773

Dear Mayor and Council:

On March 29, 2013, I conducted a Compliance Evaluation Inspection (CEI) of the Quaker City wastewater treatment plant operated. The purpose of the inspection was to determine the facility's compliance status with the terms and conditions of NPDES Permit Number 0PA00003*HD. Mayor Carpenter and Eric Phillips, operator of record, were present during the inspection.

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

1. A review of the facility's discharge monitoring reports (DMRs) from January 2010 through February 2013 showed 109 violations of permit effluent limits. The violations were for ammonia nitrogen, total suspended solids and CBOD₅ (see attached data). During that same time period, the facility has been in significant non-compliance for these parameters as well (see attached report for a discussion on significant non-compliance).

The facility is in violation of Part III, Item 15 of your NPDES permit, which states: "All discharges authorized herein shall be consistent with the terms and conditions of this permit. The discharge of any pollutant identified in this permit more frequently than, or at a level in excess of, that authorized by this permit shall constitute a violation of the terms and conditions of this permit. Such violations may result in the imposition of civil and/or criminal penalties as provided for in Section 309 of the Act and Ohio Revised Code Sections 6111.09 and 6111.99.

2. The treatment facility is well past its design life and is showing signs of excessive deterioration and improper upkeep. These signs include:
 - The original pump in the wet well is no longer operable and the bar rack is out of service
 - The primary clarifier is leaking significant amounts of sewage onto the ground, which is draining back into the wet well. The ground between the clarifier and wet well is saturated with sewage.
 - A portion of the primary clarifier wall on the west side is heavily corroded.
 - The skimmer on the primary clarifier is no longer functional.
 - There is sludge on the ground around the sludge drying beds.

The facility is in violation of Part III, Item 3 (A) of your NPDES permit, which states: "At all times, the permittee shall maintain in good working order and operate as efficiently as possibly 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."

3. Your NPDES permit for this facility expires on August 31, 2013. Page 1 of your NPDES application states "In order to receive authorization to discharge beyond the above date of expiration, the permittee shall submit such information and forms as required by the Ohio EPA no later than 180 days prior to the above date of expiration." A renewal application should have been submitted by March 4, 2013. Your renewal application was received on April 1, 2013.
4. Part II, Item P of your NPDES permit requires a sign to be posted at the outfall. No sign was present during the inspection. You must post a sign in accordance with Part II, Item P of you permit as soon as possible.

Please address and provide a response to item #4 within thirty (30) days upon receipt of this letter.

If the facility does not return to substantial compliance in a timely manner, the Village of Quaker City will be subject to enforcement action. **Within forty-five (45) days of receipt of this letter, you must submit a plan on how the plant will be returned to compliance.** This plan must describe the repair work, upgrades, or facility replacement that will be completed to achieve compliance, sources of funding that will be sought, and a schedule with fixed dates for completing interim steps and a final date for returning to full compliance.

The Ohio EPA strongly encourages pollution prevention as the preferred approach for waste management. The first priority of pollution prevention is to eliminate the generation of wastes and pollutants at the source (source reduction). For those wastes or pollutants that are generated, the second priority is to recycle or reuse them in an environmentally sound manner. You can benefit economically, help preserve the

environment, and improve your public image by implementing pollution prevention programs. For more information about pollution prevention, including fact sheets or U.S. EPA's "Facility Pollution Prevention Guide" (EPA/600/R-92.008), please contact the Ohio EPA Pollution Prevention Section at (614) 644-3469.

Attached is a copy of the inspection report. If you have any questions about my inspection, please feel free to contact me at (740) 380-5418 or by email at tim.fulks@epa.ohio.gov.

Sincerely,



Timothy A. Fulks
District Representative
Division of Surface Water

TF/dh

Enclosure

c: Eric Philips, Operator



State of Ohio Environmental Protection Agency
Southeast District Office

Municipal NPDES Compliance Inspection Report

Section A: National Data System Coding					
Permit #	NPDES #	Month/Day/Year	Inspection Type	Inspector	Facility Type
OPA00003*HD	OH0021351	March 29, 2013	C	S	1

Section B: Facility Data		
Name and Location of Facility Inspected	Entry Time	Permit Effective Date
Quaker City WWTP State Route 265 Quaker City, Ohio 43773	12:30 p.m.	September 1, 2008
	Exit Time	Permit Expiration Date
	1:30 p.m.	August 31, 2013
Name(s) and Title(s) of On-Site Representative(s)	Phone Number(s)	
Eric Phillips, Operator of Record Phillip Carpenter, Mayor	(740) 704-3872 (740) 679-2345	
Name, Address, and Title of Responsible Official	Phone Number	
Mayor and Council 210 Smith Avenue Quaker City, Ohio 43773	(740) 679-2345	

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

Section D: Summary of Findings (attach additional sheets if necessary)	
<p>Permit - Facility did not submit a timely renewal application.</p> <p>Operations & Maintenance/Facility Site Review - Much of the treatment system is showing signs of excessive deterioration and lack of proper upkeep.</p> <p>Effluent/Receiving Waters - Ongoing significant permit limit violations for NH3, TSS, CBOD5.</p> <p>Sludge Storage/Disposal - Sludge discharged to the drying beds is not contained in the drying beds and is covering the ground in front of the drying bed.</p> <p>See attached letter for further detail.</p>	
Inspector	Reviewer
 Timothy A. Fulks Division of Surface Water Southeast District Office	 Jennifer M. Witte Compliance & Enforcement Supervisor Division of Surface Water Southeast District Office
4/19/13 Date	4/19/13 Date

Sections E through 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

Comments/Status:

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..... N
- (d) Permittee has a compliance schedule..... N
- (e) Compliance schedule contained in..... N/A
- (f) Permittee is in compliance with schedule..... N/A
- (g) Has biomonitoring shown toxicity in discharge since last inspection..... N/A

Comments/Status:

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

Comments/Status:

Bar rack and primary clarifier skimmer are out of service

Record Keeping/Operator of Record:

- (a) Wastewater Treatment Works classification (OAC 3745-7) II
- (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) N/A
- (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)
 Y
- (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:

Collection System:

- (a) Are there pump stations in the collection system N
 - 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..... 0
- (b) Any chronic collection system overflows since last inspection N
- (c) Regulatory agency notified of all overflows N/A
- (d) Are there CSOs in the collection system N
If so, what is the LTCP status

N/A

- (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 Y
- (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:

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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.

Class A – Exception Quality Sewage Sludge (monitoring station 584)

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% Solids without Unstabilized Solids	Option 8 - >75% Solids with Unstabilized Solids
Alternative 1 – Time and Temperature Regime (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"/>
Alternative 2 – High pH and High Temperature (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"/>
Alternative 3 – Other Processes (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"/>
Alternative 4 – Unknown Processes (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"/>
Alternative 5 – Composting (84397)	<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 5 – Heat Drying (84397)	<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 5 – Heat Treatment (84397)	<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 5 – Thermophilic Aerobic Digestion (84397)	<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 5 – Beta Ray Irradiation (84397)	<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 5 – Gamma Ray Irradiation (84397)	<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 5 – Pasteurization (84397)	<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 6 – 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"/>

Class B – Sewage Sludge (monitoring station 581)

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% Solids without Unstabilized Solids	Option 8 - >75% Solids with Unstabilized Solids	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"/>

- (b) Has amount of sludge generated changed significantly since the last inspection N
- (c) How much sludge storage is provided at the plant
- (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/A
- (g) Are sludge application sites inspected to verify compliance with NPDES permit N/A
- (h) Is a contractor used for sludge disposal N
 If so, what is the name of the contractor

Comments/Status:

Section I: Self-Monitoring Program

Flow Measurement:

- (a) Primary/Secondary flow measuring devices (e.g. weir with ultrasonic level sensor)
- (b) Flow meter calibrated annually Y
 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

Comments/Status:

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 (see GLC page) Y
- (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

Comments/Status:

Laboratory:

General

- (a) Does the Quality Assurance Manual contain written Standard Operating Procedures (SOP's) for all analysis performed onsite..... Y
- (b) Do SOP's include the following if applicable Y
- Title
 - Scope and Application
 - Summary
 - Sample Handling & 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 N
- (e) Analyses being performed more frequently than required by permit..... N
- (f) If (e) is yes, are results in permittee's self-monitoring report..... N/A
- (g) Satisfactory calibration and maintenance of instruments/equipment (see score from GLC page) Y
- (h) Commercial laboratory used..... Y
- Parameters analyzed by commercial lab: TSS, NH3, Fecal Coliform, CBOD
- Lab name: Coshocton Environmental

Discharge Monitoring Report Quality Assurance (DMRQA)

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

Comments/Status:

Section J: Effluent/Receiving Water Observations

Outfall #: 001

Outfall Description: Final Outfall

Receiving Stream: Leatherwood Creek

Receiving Stream Description: No observable impacts to the receiving stream from discharge

Comments/Status:

Section K: Multimedia Observations

- | | |
|--|---|
| (a) Are there indications of sloppy housekeeping or poor maintenance in work & 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 No	Reporting Period	Station	Reporting Code	Parameter	Limit Type	Limit	Reported Value	Violation Date
0PA00003*HD	May 2010	001	00530	Total Suspended Solids	30D Conc	20	31.5	5/1/2010
0PA00003*HD	May 2010	001	00530	Total Suspended Solids	30D Qty	6	13.7764	5/1/2010
0PA00003*HD	May 2010	001	00530	Total Suspended Solids	7D Conc	30	54.	5/8/2010
0PA00003*HD	May 2010	001	00530	Total Suspended Solids	7D Qty	9	34.3375	5/8/2010
0PA00003*HD	May 2010	001	80082	CBOD 5 day	7D Qty	6	13.3534	5/8/2010
0PA00003*HD	May 2010	001	00530	Total Suspended Solids	7D Conc	30	35.	5/15/2010
0PA00003*HD	May 2010	001	00530	Total Suspended Solids	7D Qty	9	14.4397	5/15/2010
0PA00003*HD	June 2010	001	00530	Total Suspended Solids	30D Conc	20	26.2	6/1/2010
0PA00003*HD	June 2010	001	00530	Total Suspended Solids	30D Qty	6	10.7070	6/1/2010
0PA00003*HD	June 2010	001	00530	Total Suspended Solids	7D Conc	30	36.	6/8/2010
0PA00003*HD	June 2010	001	00530	Total Suspended Solids	7D Qty	9	19.3489	6/8/2010
0PA00003*HD	June 2010	001	00530	Total Suspended Solids	7D Conc	30	45.	6/15/2010
0PA00003*HD	June 2010	001	00530	Total Suspended Solids	7D Qty	9	20.3481	6/22/2010
0PA00003*HD	July 2010	001	00610	Nitrogen, Ammonia (NH3)	30D Conc	1.5	2.5	7/1/2010
0PA00003*HD	July 2010	001	00610	Nitrogen, Ammonia (NH3)	30D Qty	0.5	.55587	7/1/2010
0PA00003*HD	July 2010	001	00610	Nitrogen, Ammonia (NH3)	7D Conc	2.25	3.12	7/8/2010
0PA00003*HD	July 2010	001	00610	Nitrogen, Ammonia (NH3)	7D Qty	0.7	.72036	7/8/2010
0PA00003*HD	August 2010	001	00530	Total Suspended Solids	30D Conc	20	27.5	8/1/2010
0PA00003*HD	August 2010	001	00530	Total Suspended Solids	7D Conc	30	73.	8/8/2010
0PA00003*HD	August 2010	001	00530	Total Suspended Solids	7D Qty	9	12.1574	8/8/2010
0PA00003*HD	December 2010	001	00530	Total Suspended Solids	7D Conc	45	60.	12/1/2010
0PA00003*HD	December 2010	001	80082	CBOD 5 day	7D Conc	40	41.	12/22/2010
0PA00003*HD	May 2011	001	00530	Total Suspended Solids	30D Conc	20	23.6666	5/1/2011
0PA00003*HD	May 2011	001	00610	Nitrogen, Ammonia (NH3)	30D Conc	1.5	4.91	5/1/2011
0PA00003*HD	May 2011	001	00610	Nitrogen, Ammonia (NH3)	30D Qty	0.5	1.41241	5/1/2011
0PA00003*HD	May 2011	001	00530	Total Suspended Solids	7D Conc	30	35.	5/8/2011
0PA00003*HD	May 2011	001	00610	Nitrogen, Ammonia (NH3)	7D Conc	2.25	4.91	5/15/2011
0PA00003*HD	May 2011	001	00610	Nitrogen, Ammonia (NH3)	7D Qty	0.7	1.41241	5/15/2011
0PA00003*HD	June 2011	001	00530	Total Suspended Solids	30D Conc	20	30.75	6/1/2011
0PA00003*HD	June 2011	001	00530	Total Suspended Solids	30D Qty	6	10.9216	6/1/2011
0PA00003*HD	June 2011	001	00610	Nitrogen, Ammonia (NH3)	30D Conc	1.5	7.865	6/1/2011
0PA00003*HD	June 2011	001	00610	Nitrogen, Ammonia (NH3)	7D Conc	2.25	9.64	6/1/2011
0PA00003*HD	June 2011	001	00610	Nitrogen, Ammonia (NH3)	30D Qty	0.5	1.26182	6/1/2011
0PA00003*HD	June 2011	001	00610	Nitrogen, Ammonia (NH3)	7D Qty	0.7	1.53247	6/1/2011
0PA00003*HD	June 2011	001	00530	Total Suspended Solids	7D Conc	30	54.	6/8/2011
0PA00003*HD	June 2011	001	00530	Total Suspended Solids	7D Qty	9	32.0892	6/8/2011
0PA00003*HD	June 2011	001	80082	CBOD 5 day	7D Qty	6	10.1021	6/8/2011
0PA00003*HD	June 2011	001	00610	Nitrogen, Ammonia (NH3)	7D Conc	2.25	6.09	6/15/2011
0PA00003*HD	June 2011	001	00610	Nitrogen, Ammonia (NH3)	7D Qty	0.7	.99118	6/15/2011
0PA00003*HD	July 2011	001	00530	Total Suspended Solids	30D Conc	20	21.25	7/1/2011
0PA00003*HD	July 2011	001	00610	Nitrogen, Ammonia (NH3)	30D Conc	1.5	7.72433	7/1/2011
0PA00003*HD	July 2011	001	00610	Nitrogen, Ammonia (NH3)	7D Conc	2.25	6.88	7/1/2011
0PA00003*HD	July 2011	001	00610	Nitrogen, Ammonia (NH3)	30D Qty	0.5	1.34439	7/1/2011
0PA00003*HD	July 2011	001	00610	Nitrogen, Ammonia (NH3)	7D Qty	0.7	1.19788	7/1/2011
0PA00003*HD	July 2011	001	80082	CBOD 5 day	30D Conc	15	16.5	7/1/2011
0PA00003*HD	July 2011	001	00530	Total Suspended Solids	7D Conc	30	53.	7/8/2011
0PA00003*HD	July 2011	001	00530	Total Suspended Solids	7D Qty	9	9.22783	7/8/2011
0PA00003*HD	July 2011	001	00610	Nitrogen, Ammonia (NH3)	7D Conc	2.25	15.9	7/8/2011
0PA00003*HD	July 2011	001	00610	Nitrogen, Ammonia (NH3)	7D Qty	0.7	2.76835	7/8/2011
0PA00003*HD	July 2011	001	80082	CBOD 5 day	7D Conc	22	39.	7/8/2011
0PA00003*HD	July 2011	001	80082	CBOD 5 day	7D Qty	6	6.79029	7/8/2011
0PA00003*HD	July 2011	001	80082	CBOD 5 day	7D Qty	6	7.82738	7/15/2011
0PA00003*HD	August 2011	001	80082	CBOD 5 day	7D Qty	6	7.38832	8/22/2011
0PA00003*HD	October 2011	001	00610	Nitrogen, Ammonia (NH3)	30D Conc	1.5	4.625	10/1/2011
0PA00003*HD	October 2011	001	00610	Nitrogen, Ammonia (NH3)	7D Conc	2.25	4.95	10/1/2011
0PA00003*HD	October 2011	001	00610	Nitrogen, Ammonia (NH3)	30D Qty	0.5	2.49545	10/1/2011
0PA00003*HD	October 2011	001	00610	Nitrogen, Ammonia (NH3)	7D Qty	0.7	.82437	10/1/2011
0PA00003*HD	October 2011	001	00610	Nitrogen, Ammonia (NH3)	7D Conc	2.25	4.3	10/15/2011
0PA00003*HD	October 2011	001	00610	Nitrogen, Ammonia (NH3)	7D Qty	0.7	4.16653	10/15/2011
0PA00003*HD	November 2011	001	00530	Total Suspended Solids	7D Qty	14	19.0461	11/15/2011
0PA00003*HD	January 2012	001	00530	Total Suspended Solids	7D Conc	45	54.	1/15/2012
0PA00003*HD	February 2012	001	00530	Total Suspended Solids	30D Conc	30	34.	2/1/2012

Permit No	Reporting Period	Station	Reporting Code	Parameter	Limit Type	Limit	Reported Value	Violation Date
0PA00003*HD	February 2012	001	00530	Total Suspended Solids	30D Qty	9	11.0552	2/1/2012
0PA00003*HD	February 2012	001	80082	CBOD 5 day	30D Conc	25	26.	2/1/2012
0PA00003*HD	February 2012	001	80082	CBOD 5 day	30D Qty	8	9.82435	2/1/2012
0PA00003*HD	February 2012	001	00530	Total Suspended Solids	7D Conc	45	50.	2/22/2012
0PA00003*HD	March 2012	001	80082	CBOD 5 day	30D Conc	25	29.5	3/1/2012
0PA00003*HD	March 2012	001	80082	CBOD 5 day	7D Conc	40	60.	3/1/2012
0PA00003*HD	April 2012	001	80082	CBOD 5 day	7D Conc	40	41.	4/1/2012
0PA00003*HD	May 2012	001	00610	Nitrogen, Ammonia (NH3)	30D Conc	1.5	1.8975	5/1/2012
0PA00003*HD	May 2012	001	00610	Nitrogen, Ammonia (NH3)	7D Conc	2.25	2.83	5/22/2012
0PA00003*HD	June 2012	001	00530	Total Suspended Solids	30D Conc	30	37.	6/1/2012
0PA00003*HD	June 2012	001	00530	Total Suspended Solids	30D Conc	20	37.	6/1/2012
0PA00003*HD	June 2012	001	00530	Total Suspended Solids	7D Conc	30	35.	6/1/2012
0PA00003*HD	June 2012	001	00530	Total Suspended Solids	30D Qty	6	6.17712	6/1/2012
0PA00003*HD	June 2012	001	00610	Nitrogen, Ammonia (NH3)	30D Conc	1.5	3.14	6/1/2012
0PA00003*HD	June 2012	001	00610	Nitrogen, Ammonia (NH3)	30D Qty	0.5	.54671	6/1/2012
0PA00003*HD	June 2012	001	00530	Total Suspended Solids	7D Conc	30	39.	6/8/2012
0PA00003*HD	June 2012	001	00610	Nitrogen, Ammonia (NH3)	7D Conc	2.25	3.74	6/8/2012
0PA00003*HD	June 2012	001	00610	Nitrogen, Ammonia (NH3)	7D Conc	2.25	2.54	6/22/2012
0PA00003*HD	July 2012	001	80082	CBOD 5 day	30D Conc	15	20.3333	7/1/2012
0PA00003*HD	July 2012	001	80082	CBOD 5 day	30D Qty	5	6.82057	7/1/2012
0PA00003*HD	July 2012	001	00530	Total Suspended Solids	30D Conc	20	62.3333	7/1/2012
0PA00003*HD	July 2012	001	00530	Total Suspended Solids	30D Qty	6	32.1649	7/1/2012
0PA00003*HD	July 2012	001	00610	Nitrogen, Ammonia (NH3)	30D Conc	1.5	6.05	7/1/2012
0PA00003*HD	July 2012	001	00610	Nitrogen, Ammonia (NH3)	30D Qty	0.5	1.05632	7/1/2012
0PA00003*HD	July 2012	001	80082	CBOD 5 day	7D Conc	22	35.	7/8/2012
0PA00003*HD	July 2012	001	00530	Total Suspended Solids	7D Conc	30	78.	7/8/2012
0PA00003*HD	July 2012	001	00530	Total Suspended Solids	7D Qty	9	12.9901	7/8/2012
0PA00003*HD	July 2012	001	00610	Nitrogen, Ammonia (NH3)	7D Conc	2.25	5.66	7/8/2012
0PA00003*HD	July 2012	001	00610	Nitrogen, Ammonia (NH3)	7D Qty	0.7	.94262	7/8/2012
0PA00003*HD	July 2012	001	80082	CBOD 5 day	7D Qty	6	12.4526	7/15/2012
0PA00003*HD	July 2012	001	00530	Total Suspended Solids	7D Conc	30	90.	7/15/2012
0PA00003*HD	July 2012	001	00530	Total Suspended Solids	7D Qty	9	80.0527	7/15/2012
0PA00003*HD	July 2012	001	00610	Nitrogen, Ammonia (NH3)	7D Conc	2.25	6.44	7/22/2012
0PA00003*HD	July 2012	001	00610	Nitrogen, Ammonia (NH3)	7D Qty	0.7	1.17002	7/22/2012
0PA00003*HD	August 2012	001	00530	Total Suspended Solids	30D Conc	20	22.6	8/1/2012
0PA00003*HD	August 2012	001	00530	Total Suspended Solids	7D Conc	30	47.	8/1/2012
0PA00003*HD	August 2012	001	00610	Nitrogen, Ammonia (NH3)	30D Conc	1.5	2.237	8/1/2012
0PA00003*HD	September 2012	001	00610	Nitrogen, Ammonia (NH3)	30D Conc	1.5	4.4	9/1/2012
0PA00003*HD	September 2012	001	00610	Nitrogen, Ammonia (NH3)	30D Qty	0.5	2.08705	9/1/2012
0PA00003*HD	September 2012	001	00610	Nitrogen, Ammonia (NH3)	7D Conc	2.25	4.1	9/8/2012
0PA00003*HD	September 2012	001	00530	Total Suspended Solids	7D Qty	9	17.2368	9/22/2012
0PA00003*HD	September 2012	001	00610	Nitrogen, Ammonia (NH3)	7D Conc	2.25	4.7	9/22/2012
0PA00003*HD	September 2012	001	00610	Nitrogen, Ammonia (NH3)	7D Qty	0.7	3.52232	9/22/2012
0PA00003*HD	October 2012	001	00610	Nitrogen, Ammonia (NH3)	30D Conc	1.5	3.76	10/1/2012
0PA00003*HD	October 2012	001	00610	Nitrogen, Ammonia (NH3)	30D Qty	0.5	.65465	10/1/2012
0PA00003*HD	October 2012	001	00610	Nitrogen, Ammonia (NH3)	7D Conc	2.25	5.89	10/22/2012
0PA00003*HD	October 2012	001	00610	Nitrogen, Ammonia (NH3)	7D Qty	0.7	1.02551	10/22/2012

THE SIGNIFICANCE OF SIGNIFICANT NONCOMPLIANCE

by Elizabeth Wick, P.E.

Ohio EPA, Division of Surface Water Northwest District Office

Pursuant to the Code of Federal Regulations at 40CFR123.45, Ohio EPA is required to submit a quarterly report to U.S. EPA that identifies the major permitted facilities that are in significant noncompliance. The Quarterly Noncompliance Report (QNCR) summarizes certain types of noncompliance information for all major facilities violating the terms of their National Pollutant Discharge Elimination System (NPDES) permit, enforcement action, or pretreatment program. It is one of the tools used by U.S. EPA to evaluate Ohio's enforcement program. The information appearing on the QNCR includes the parameter violated, the violation date, violation status, and violation status date. Ohio EPA submits compliance data on minor facilities to U.S. EPA on an annual basis. Where does this violation information come from? A facility's self monitoring data as submitted in the monthly Discharge Monitoring Reports (DMR). Therefore, it is important for each entity to submit accurate and representative sample results.

What is Significant Noncompliance?

Reportable noncompliance (RNC) violations consist of effluent limit, compliance schedule, reporting, and enforcement order violations. Significant noncompliance (SNC) is a program definition used to identify those violations that EPA believes should receive priority enforcement attention.

There are six possible ways to be in SNC and listed on the QNCR.

- 1. Permit effluent limit violations.** The monthly average DMR data is compared to the monthly average limits in the NPDES permit over a six month period. The six month period consists of the current reporting quarter and the previous reporting quarter. These comparisons are made based on the same parameters and the same outfalls. Both magnitude and frequency of the violations are considered.

A violation is considered to be significant if it exceeds the product of the permit effluent limit multiplied by its respective Technical Review Criteria (TRC) value for any two months in the six month period. There is a TRC value for each regulatory grouping of pollutants. The TRC value for Group I pollutants (conventional pollutants) is 1.4, while the TRC value for Group II pollutants (generally toxic pollutants) is 1.2. Table III – A2 (on page 54) lists the Group I and Group II pollutants. For example, a facility with a CBOD5 monthly average loading limit of 150 lbs/day from outfall 001 would be in SNC when it has measurements greater than or equal to 210 lbs/day. (Permit limit (150) x TRC (1.4) = 210)

Effluent measurements that exceed the permit limit by any amount for four months of the six month period (same parameter, same outfall) are considered chronic violations and SNC. Chronic violations are based solely on the frequency of the violation.

- 2. Compliance Schedule Violations.** Failure to meet compliance schedule milestones for start construction, end

construction, attain final compliance, and all pretreatment milestones within 90 days of the schedule date contained in the NPDES permit are considered SNC.

- 3. Reporting violations.** Reports that are received 30 or more days after they are due place an entity in SNC. Late DMRs, pretreatment reports, and schedule final reports of compliance are all considered SNC. Reports that are incomplete or deficient 30 days after their due dates are also considered SNC.
- 4. Discretionary violations.** In addition to effluent limit, schedule, and reporting violations, there are other violations that can be considered SNC. These violations include those that are of concern to Ohio EPA's director and violations of other narrative requirements of the NPDES permit.
- 5. Violations of formal enforcement actions.** Failure to comply with the terms and conditions of an administrative or judicial order, including reporting, compliance schedule, interim effluent limits, or other requirements, are considered SNC.

The SNC definitions for violations of formal enforcement actions are the same as above for each type of violation, with the following exceptions:

- Any required report that is 30 or more days overdue, incomplete, or deficient is SNC;
 - Failure to achieve any compliance schedule milestone specified in an order is SNC;
 - Any one violation of any magnitude of an interim 30-day average effluent limit is SNC or any violation of discretionary or narrative requirements in an administrative or judicial order is SNC.
- 6. Violations for failure to implement a pretreatment program.** Some POTWs are required to implement pretreatment programs. Failure to implement a required pretreatment program constitutes SNC.

How does this information get to U.S. EPA?

Ohio EPA's computer generates the SNC data. Two to three weeks before the official QNCR is generated, the district staff review the preliminary data and make any corrections to inaccurate violations or enter compliance schedule milestones that have been achieved. Once the information is deemed to be accurate, the data is uploaded to the U.S. EPA computer system.

What does Ohio EPA do with entities on the QNCR?

Once an entity is on the QNCR, the district staff will investigate the reasons for the violations and may refer the entity for escalated enforcement action or work with the facility to return them to compliance. Facilities on the QNCR will appear on U.S. EPA's Watchlist. Once on the Watchlist, an entity may face increased scrutiny from U.S. EPA.

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Where can I find the QNCR?

The QNCR is posted on Ohio EPA's webpage at www.epa.ohio.gov/dsw/permits/qncr.aspx. U.S. EPA's website also contains compliance data on permitted majors. Keep in mind that the public can also view these lists which could lead to actions by citizens' groups.

What do I do if I'm heading towards SNC?

If you think that you are going to be in SNC, you should inform your superiors of the consequences and call your district office representative to discuss the steps being taken to return to compliance. Ohio EPA's goal is to address noncompliance before it escalates to SNC.

For more information contact Elizabeth Wick of the Ohio EPA, Elizabeth.Wick@epa.state.oh.us

Certification Corner

Kathy Cook, Chair

Please review the following information from Ohio EPA.

NPDES Inspections of Waste Water Labs in Ohio

Summary:

The Department of Surface Water (DSW) is introducing a protocol which will enable Compliance Evaluation Inspections (CEIs) to include basic inspections of wastewater plant laboratories sufficient to identify "red flag" issues. These are problems with laboratory practices which call into question the reliability and accuracy of data generated.

The protocol (General Lab criteria or GLC) is targeted at small to medium size waste water treatment plants but can be applied to any lab conducting wastewater analyses for National Pollutant Discharge Elimination System (NPDES) reporting purposes. This process uses a "broad strokes" approach and does not require inspectors to review details of analytical procedures. The intent is to help wastewater labs generate more defensible data. Deficiencies discovered in initial inspections will not generally be treated as violations.

We believe that implementation of this protocol on a full scale should include a widespread education effort. We recognize the majority of wastewater treatment plants have not had their laboratory scrutinized in this detail as part of CEI inspections for years. We also suggest that inspectors provide copies of the General Lab Criteria to the permittee at the time inspections are scheduled.

Protocol details

Parameters included are CBOD/BOD, TSS, pH, NH₃-N, fecal coliform, E coli, residual chlorine, DO, and temperature.

Reference materials are also provided for inspectors that include details of approved method numbers and sample collection, preservation and holding times for a wider range of parameters than the above list.

Instructions to the Inspectors

The inspection will follow the amended USEPA CEI form and be documented in the "Laboratory" section.

1. Ask which analyses the WWTP performs on site.
2. Ask if they have standard operating procedures (SOP) for each analysis performed in their lab.
3. If they have SOPs, pick the SOP for one analysis they do, read it through to check if it contains the parts needed. You are not necessarily verifying that what is included is correct in terms of calculations or procedures. The SOP should include a description of the approved method and the Quality Control procedures needed for that analysis.
4. Check the chains of custody for the samples being analyzed for the parameter chosen; look at 3 or 4 days at random.
5. Use the Broad Stroke Lab Criteria checklist (attached) to look at sample handling documentation and all the lab equipment used for the analysis you chose. For example, if you choose TSS then the inspector would look at the

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Table III-A2. Technical Review Criteria (TRC)
Pollutants from 40 CFR 123.45

Group I Pollutants (TRC = 1.4)

Oxygen Demand

Biochemical Oxygen Demand
Chemical Oxygen Demand
Total Oxygen Demands
Total Organic Carbon
Other

Solids

Total Suspended Solids (Residues)
Total Dissolved Solids (Residues)
Other

Nutrients

Inorganic Phosphorus Compounds
Inorganic Nitrogen Compounds
Other

Detergents and Oils

MBAS
NTA
Oil and Grease
Other Detergents or Algaecides

Minerals

Calcium
Chloride
Fluoride
Magnesium
Sodium
Potassium
Sulfur
Sulfate
Total Alkalinity
Total Hardness
Other Minerals

Metals

Aluminum
Cobalt
Vanadium
Iron

Group II Pollutants (TRC = 1.2)

Metals (All Forms)

Other metals not specifically listed under group I

Inorganic

Cyanide
Total Residue Chlorine

Organics

All organics are group II except those specifically listed under Group I