Ohio | Environmental Protection Agency

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

1PA0002420101129

CLINTON CLARKSVILLE WWTP WALLER, MICHELLE 2010/11/29

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Ohio | Environmental Protection Agency

Ted Strickland, Governor
Lee Fisher, Lt. Governor
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November 24, 2010

Mayor and Council
Village of Clarksville
P.O. Box 167
Clarksville, Ohio 45113

RE: Clarksville WWTP/Compliance Evaluation Inspection, NPDES Permit No. OH0127124/ OEPA Permit No. 1PA00024*BD and **Notice of Violation**

Ladies and Gentlemen:

On November 4, 2010 I conducted an NPDES Compliance Evaluation Inspection at the Clarksville Wastewater Treatment Plant. David Reimer, Technical Supervisor and Operator, was present for the facility. The purpose of the inspection was to evaluate compliance with the terms and condition of the facility's NPDES permit.

The *Record/Reports* and *Self-Monitoring* sections of the evaluation received "Unsatisfactory" ratings, while the *Lab* received a "Marginal" rating. See the attached report for more information. **Please pay attention to the "Items Requiring Correction" (shown in bold type) within the report.**

My inspection included a close examination of the wastewater laboratory. A greater emphasis on following proper methods to ensure accurate and defensible sampling data is being undertaken by Ohio EPA. It should be noted that this initial laboratory evaluation is being conducted to provide the operators with an opportunity to make corrections rather than initiate any enforcement action. The initial laboratory review (attached) identifies a number of areas requiring improvement.

A copy of the inspection report is enclosed.

If you have any questions, please contact me by phone at (937) 285-6028 or by e-mail at michelle.waller@epa.state.oh.us.

Respectfully,

Michelle Waller

Michelle Waller
Environmental Specialist II
Division of Surface Water

Enclosures
Ec: David Reimer (w/enclosures)

Southwest District Office
401 East Fifth Street
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Permit # : 1PA00024*BD
NPDES #: OH0123124

OhioEPA

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**
1PA00024*BD	OH0123124	11/4/2010	C	S	1

Section B: Facility Data		
Name and Location of Facility Inspected	**Entry Time**	**Permit Effective Date**
Clarksville Wastewater Treatment Plant 160 Spring Hill Road Clarksville, Ohio 45113	10:00 AM	12/1/2005
	Exit Time	**Permit Expiration Date**
	11:30 AM	12/31/2010
Name(s) and Title(s) of On-Site Representatives	**Phone Number(s)**	
David Reimer - Technical Supervisor	(937) 289-1510	
Name, Address and Title of Responsible Official	**Phone Number**	
Mayor & Council Village of Clarksville P.O. Box 167 Clarksville, Ohio 45113	(937) 289-2652	

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

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

Please see attached report.

Inspector	Reviewer
Michelle Waller 11/29/10	Martyn Burt 11/29/10
Michelle Waller Division of Surface Water Southwest District Office Date	Martyn Burt Compliance & Enforcement Supervisor Division of Surface Water Southwest District Office Date

Permit # : 1PA00024*BD
NPDES #: OH0123124

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.....	Y

Comments/Status:

Permit renewal application submitted 6/30/2010.

Section F - Compliance

(a) Any significant violations since the last inspection.....	Y
(b) Appropriate Non-compliance notification of violations.....	N
(c) Permittee is taking actions to resolve violations.....	Y
(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:

Compliance was checked from 11/1/2009 to 10/1/2010. Three limit violations were reported.

Section G: Operation & Maintenance

Treatment Works:

Treatment facility properly operated and maintained

(a) Standby power available.....generator ☒ or dual feed ☐..... Y

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

Everything is powered by the generator.

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

Once or twice a year.

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

Lights, horns and buzzers are the alarm systems on the equipment. The facility does not have an auto-dialer.

(c) All treatment units in service other than backup units..... Y

(d) What method is used for scheduling routine & preventative maintenance (calendar, software, etc.).....

Nothing is currently put in writing. Operator is planning on using the CUPSS (Check Up Program for Small Systems) program from USEPA in 6 months to 1 year.

(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..... Y

Comments/Status:

e.) Equipment breakdowns - Blower number 3 and floating aerator.
h.) Ammonia violation in January.

Section G: Operation & Maintenance con't

Record Keeping/Operator of Record:

(a) Wastewater Treatment Works classification (OAC 3745-7)..... I
(b) Operator of Record holds unexpired license of class required by Permit..... Y
(c) Copy of certificate of Operator of Record displayed on-site..... N
(d) Has the Operator of Record submitted an ORC Notification form.. N
(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)

A combination of a three ring binder and a calendar is used.

(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)... N
  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..... N

Comments/Status:

k.) No Non-compliance notifications were sent for 3 limit violations in 2010.

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
(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.....

(e) How are CSOs monitored (chalk, block, level sensor, etc.).....

(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..... Y
(j) Is any portion of the collection system at or near dry weather capacity..... N

Comments/Status:

Section H: Sludge Management

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

(b) Has amount of sludge generated changed significantly since the last inspection..... N
(c) How much sludge storage is provided at the plant.....
178,000 gallons.
(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..... Y
If so, what is the name of the contractor.....

Borton Trucking.

Comments/Status:

Sludge was hauled out August 24, 2010 to October 8th, 2010. 183,000 gallons (29 loads) were hauled to the Wilmington WWTP. Operator stated interest in adding the ability to have the option to land apply sludge when permit is renewed.

Section I: Self-Monitoring Program

Flow Measurement:

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

V-notch wier with an ultrasonic. The influent meter is on a parshall flume.

(b) Flow meter calibrated annually ..... Y
(Date of last calibration: 8/2010)
(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:

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

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Comments/Status:

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..... N/A

- 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 know 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/A

(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. N (see score from GLC page)

(h) Commercial laboratory used..... Y

Parameters analyzed by commercial lab: TSS, Ammonia, Fecal Coliform, CBOD

Lab name: Belmont

Discharge Monitoring Report Quality Assurance (DMRQA)

(a) Participation in latest USEPA quality assurance performance sampling..... N
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: Clear

Receiving Stream: Todd Fork
Receiving Stream Description:

Comments/Status:

Section K: Multimedia Observations

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

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Notice of Violation

1. Limit Violations

Reporting Period	Parameter	Limit Type	Limit	Reported Value	Violation Date
January 2010	Nitrogen, Ammonia (NH3	30D Conc	3.0	3.16	1/1/2010
January 2010	Nitrogen, Ammonia (NH3	7D Conc	4.5	6.32	1/15/2010
March 2010	Total Suspended Solids	7D Conc	18	21.	3/8/2010

No Non-Compliance Notifications were received for the above reference violations as required in the NPDES permit. **Please inform this office, in writing by December 13, 2010 as to the reason(s) for the above referenced violation(s), as well as a description of the action(s) taken or proposed to prevent any further violation(s). Your response should include the dates, either actual or proposed, for completion of the action(s). Future violations must be reported as required by the NPDES Permit as detailed in Part III.12 titled "Noncompliance Notification."** Not turning in these Non-compliance Notifications resulted in the rating of "Unsatisfactory" for the Records/Reports section of the evaluation.

2. Frequency Violations

It was discovered during the inspection that the operator has not been sampling at the frequency required by the NPDES permit for the parameters of Water Temperature, Color, Odor and Turbidity. These parameters have a frequency requirement of once a day. The operator has been sampling these parameters only on the days he is at the plant, which averages 3 times/week. The other days of the week the operator has been using "AH" to code off on not taking the samples. This is an improper use of an "A" code. These parameters are to be sampled Monday through Friday, except on officially recognized municipal holidays. As the operator is not at the plant daily, another individual for the city may take these readings in his absence. **Clarksville must *immediately* begin sampling these parameters at the frequency required by their permit.** This deficiency led to the "Unsatisfactory" rating for the Self-Monitoring section of the evaluation.

Other Items Requiring Action

1. The Operator of Record does not have a copy of his certificate displayed on-site. **Please display a copy of this certificate.**

2. Operators Log Book - Currently all daily information by the operator is recorded on individual pieces of paper and kept in a three ring binder as well as on a calendar. Ohio Administrative Code 3745-7-09 requires hard bound books

General Lab Criteria

Criteria	Standard Methods Requirement			Rating
pH Meter		**Acceptable?**		
• Calibration Frequency / Documentation	• Calibration verification required for testing over long period of time (e.g. 12 hrs.), or after a large number of samples (every 10 samples)[3]	☐ Yes	☒ No	**NR**
	• Logbook maintained[2]	☒ Yes	☐ No	
• Minimum of 2 point calibration	• Calibration per manufacturer specification and calibration buffers must bracket anticipated result[7]	☒ Yes	☐ No	
• Slope Documentation / Acceptability	• Slope acceptable range indicated on benchsheet[2]	☐ Yes	☒ No	
• Buffer Expiration Date	• Buffers must not be expired	☒ Yes	☐ No	
• Other	• Instrument manual available	☒ Yes	☐ No	
	• Teflon covered magnetic stirrer or equivalent for mixing[8]	☐ Yes	☒ No	

Comments: : **Calibration is done monthly. Standard Methods requires daily calibration. All pH readings are field measurements.**

Criteria	Standard Methods Requirement			Rating
Dissolved Oxygen Meter		**Acceptable?**		
• Calibration Method	• Air or known DO calibration method[10]	☒ Yes	☐ No	**NR**
	• Calibration per manufacturer specification[10]	☒ Yes	☐ No	
• Calibration Frequency / Documentation	• Logbook maintained[2]	☒ Yes	☐ No	
	• Calibration verification required at least once each day the meter is used.[3]	☐ Yes	☒ No	
• Other	• Small to no bubble present under membrane (must be smaller than the lead in number 2 pencil)[11]	☒ Yes	☐ No	
	• Instrument manual available	☒ Yes	☐ No	

Comments: DO is calibrated monthly.

General Lab Criteria

Number of Criteria Rated:	Acceptable
	Marginal
	Unacceptable
	Total Number of Areas Rated

Acceptable Ratings – No action required (recommend SOP's written or updated, perform DMRQA's for all onsite analysis, recommend voluntary lab analyst certification, written response not required).

Marginal Ratings – Improvements required, written response required (recommend SOP's be written or updated, recommend they perform DMRQA's for all onsite analysis, recommend voluntary lab analyst certification, require deficiencies to be addressed in written response).

Unsatisfactory Rating - Improvements required, written response required, NOV issued (recommend SOP's be written or updated, recommend they perform DMRQA's for all onsite analysis, recommend voluntary lab analyst certification, require deficiencies to be addressed in written response to NOV).

Consider recommending PAI Audit from DES when:	>60% of ratings are Marginal >45% of ratings are a combination of Marginal or Unacceptable >30% of ratings are Unacceptable

Notation of Referenced Method

1 Method 9020-B, Item 3
2 Method 1020-A, Item 1
3 Method 1020-B, Item 10
4 Method 2540-B, Item 2
5 Method 2550-B, Item 1
6 Method 1020-A, Item 1
7 Method 4500-H B, Item 4
8 Method 4500-H B, Item 2
9 Method 1020-B, Item 2
10 Method 4500-O B, Item 3
11 Method 4500-O G, Item 3
12 Method 5210-B, Item 5
13 CFR 136.3, Table II
14 Method 1060A, Item 1
15 Method 4500-Cl I, Item 2
16 Method 4500-Cl I, Item 4
17 Method 4500-NH3 D, Item 4
18 Method 4500-NH3 D, Item 2
19 Method 1060-B, Item 2
20 Method 1060-B, Item 1
21 Method 9222D, Item 1
22 Method 9223 B, Item 2
23 Method 9223 B, Item 3
24 Method 1603, Item 2
25 Method 9030-B, Item 3
26 Method 9020 B, Table IV

Equipment Logbook Content - all maintenance performed on a piece of equipment should be documented in the logbook. This should include parts replacement and routine maintenance activities. Entries should include date, maintenance performed and initials of person making entry.

Preservation and Holding Times

Parameter	Container	Min. Sample Size (mL)	Sample Type	Preservation	Maximum Storage Time	
					Recommended	Regulatory
BOD / CBOD	P, G	1000	G, C	Refrigerate ≤6° C	6h	48h
TSS	P, G	200	G, C	Refrigerate ≤6° C	7 d	7 d
pH	P, G	50	G	Analyze immediately	0.25h	0.25 h
NH3-N	P, G	500	G, C	Analyze as soon as possible or add H_2SO_4 to pH <2, Refrigerate ≤6° C	7 d	28 d
TRC	P, G	500	G	Analyze immediately	0.25h	0.25 h
DO (electrode)	G, BOD Bottle	300	G	Analyze immediately	0.25h	0.25 h
Temperature	P, G	--	G	Analyze immediately	0.25h	0.25 h

General Lab Criteria

Metals, general	P, G	1000	G, C	For dissolved filter immediately and add HNO_3 to pH <2	6 months	6 months
Purgeables by purge and trap	G (PTFE lined lid)	40 (X2)	G	HCl to pH<2, Refrigerate ≤6° C	7 d	14 d
Base/Neutrals and acids	G (solvent rinsed or baked)	1000	C, G	Refrigerate ≤6° C	7 d	7 days until extraction 40 days after extraction
Pesticides	G (PTFE lined lid)	1000	C	Refrigerate ≤6° C	7 d	7 days until extraction 40 days after extraction
Fecal Coliform / E-Coli	G, P (Sterilized)	100	G	Refrigerate ≤10° C If chlorine present, add sodium thiosulfate tablet	6 hrs transport Start analysis within 2 hrs of receipt in lab.	
Oil and Grease	G	1000	G	HCl or H_2SO_4 to pH <2, Refrigerate ≤6° C	28 d	28 d

Approved Standard Methods	
CBOD / BOD 5 Day	Std Methods 5210-B
Ammonia, Selective Electrode Method	Std Methods 4500-NH3 D
Total Residual Chlorine, DPD Colorimetric Method	Std Methods 4500-Cl G
Total Suspended Solids, Dried at 103-105 °C	Std Methods 2540-D
Dissolved Oxygen, Membrane Electrode Method	Std Method 4500-O G
pH, Electrometric Method	Std Methods 4500-H+ B
Fecal Coliform, Membrane Filter Procedure	Std Methods 9222D
Escherichia Coli, Enzyme Substrate Test	Std Method 9223B
Escherichia Coli Membrane Filtration Procedure	EPA Method 1603
Oil and Grease	USEPA 1664A or Std Methods 5520B
Metals, general	USEPA 200, Std Methods 3111B or C, or 3120B
Volatiles (Purgeables by purge and trap)	USEPA 6210, Std Methods 624
Semi-Volatiles (Base/Neutrals and acids)	USEPA 6410, Std Methods 625
Pesticides	USEPA 6410 and 6630, Std Methods 608