



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

January 17, 2013

Mr. James Holden
 Fayetteville-Perry Township RSD Board
 P. O. Box 294
 Fayetteville, Ohio 45118

**RE: Fayetteville-Perry Township Regional WWTW / CEI
 NPDES Permit No. OH0119041 / OEPA PERMIT No. 1PD00024*CD**

Ladies and Gentlemen:

On January 10, 2013, I conducted an NPDES Compliance Evaluation Inspection at the Fayetteville-Perry Township Regional Sewer District (FPTRSD) Wastewater Treatment Works (WWTW). Aaron Moore (ORC) with Environmental Engineering Services, represented the sewer district during the inspection process. Steve Canter, also with Environmental Engineering Services, provided follow-up information in the days following the inspection. The purpose of the inspection was to evaluate compliance with the terms and conditions of the NPDES Permit.

EFFLUENT LIMIT VIOLATIONS
 (Period of Review: January – November 2012)

7D = Weekly; 30D = Monthly; 1D = Daily
 Conc. = Concentration (mg/l) Qty.= Quantity (Kg/Day)

Reporting Period	Station	Parameter	Limit Type	Limit	Reported Value
January 2012	603	Fecal Coliform	1D Conc	1000	4300.
January 2012	603	Fecal Coliform	1D Conc	1000	48000.
January 2012	603	Fecal Coliform	1D Conc	1000	180000.
February 2012	603	Fecal Coliform	1D Conc	1000	23500.
February 2012	603	Fecal Coliform	1D Conc	1000	1350.
June 2012	001	Nitrogen, Ammonia (NH3	30D Conc	1.0	4.02
June 2012	001	Nitrogen, Ammonia (NH3	7D Conc	1.5	4.02

*Reasons for the violations listed above are described in the report.

Items Observed During the Inspection



Effluent holding pond was discharging into the East Fork of the Little Miami River at the time of the inspection.





Effluent sign was in place and maintained.

Stream Flow Monitoring

In order to verify that a 5:1 dilution of stream flow: effluent pond flow is being achieved, FPTRSD is required to monitor stream flow in the East Fork of the Little Miami River. Mr. Canter stated that they use the USGS stream gauge at the Williamsburg station to calculate the stream flow at the discharge. The drainage area upstream of 001 is approximately 40.5% of the drainage area at the Williamsburg station. With this in mind, Mr. Canter uses 40.5% of the stream flow at the Williamsburg station to report stream flows at 001.

Between January and November of 2012, there were 44 days in which there was a discharge from the effluent holding pond. A total of 26.841 million gallons of treated WWTW effluent was discharged to the East Fork of the Little Miami River. Over 334 days, the average flow to the pond was ~80,000 gallons/day (average daily design flow of the WWTW is 180,000 gallons/day).

Of the days in which there was a discharge from the holding pond, a stream flow: effluent holding pond flow of less than 5:1 was reported on two days. This is a violation of Part II, Item M. of the NPDES permit. The operations staff should monitor these flows more closely to ensure there are no repeat occurrences.

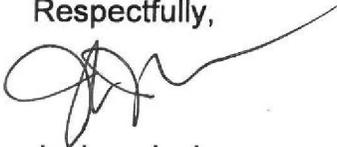
It is worth noting that no wastewater effluent was land applied to the adjacent fields during 2012.

Laboratory Standard Operating Procedures

As indicated by the attached General Lab Criteria, several laboratory practices will need to be modified to conform to Standard Methods. A review was conducted of the sewer district's Standard Operating Procedures (SOP) for dissolved oxygen, pH, and suspended solids monitoring. All of the SOPs are in need of modification in order to reflect the format prescribed by Standard Methods 1020A. Example SOPs have been forwarded to Mr. Moore in order to provide a basic framework. **FPTRSD shall update the SOPs by no later than April, 8 2013. SOPs shall be completed for every test method conducted at the Facility and shall be method/instrument-specific. Ohio EPA will be available for technical assistance and feedback during this time.**

If you should have any questions, feel free to contact me by telephone at (937) 285-6029 or by electronic mail at joshua.jackson@epa.ohio.gov.

Respectfully,



Joshua Jackson
Environmental Specialist II
Division of Surface Water

Enclosure

JJ/tb

cc: Steve Canter, EES
Aaron Moore, EES



Environmental Protection Agency

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

Division of Surface Water-Southwest District Office

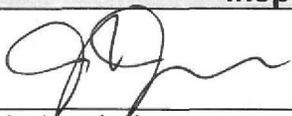
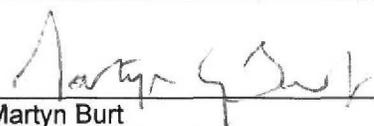
NPDES Compliance Inspection Report

Section A: National Data System Coding					
Permit #	NPDES#	Month/Day/Year	Inspection Type	Inspector	Facility Type
1PD00024*CD	OH0119041	1/10/2013	C	S	1

Section B: Facility Data		
Name and Location of Facility Inspected	Entry Time	Permit Effective Date
Fayetteville-Perry Township Regional Sewer District WWTW 4132 Snowhill Road Fayetteville, OH Brown County	9:20 a.m.	6/1/2008
	Exit Time	Permit Expiration Date
	1:00 p.m.	5/31/2013
Name(s) and Title(s) of On-Site Representatives	Phone Number(s)	
Aaron Moore and Steve Canter, Contract ORCs (Environmental Engineering Services) David Cline, WW 1 Operator	513-383-6047 (Mr. Moore's cell #) 513-934-1512 (EES Office)	
Name, Address and Title of Responsible Official	Phone Number	
Fayetteville-Perry Township RSD Board Attn: Mr. James Holden P.O. Box 294 Fayetteville, OH 45118		

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	S	Compliance Schedule
S	Operations & Maintenance	S	Effluent/Receiving Waters	S	Self-Monitoring Program
S	Facility Site Review	S	Sludge Storage/Disposal	N	Other
S	Collection System				

Section D: Summary of Findings (Attach additional sheets if necessary)
See Attached Report.

Inspector	Reviewer
 Joshua Jackson Division of Surface Water Southwest District Office	 Martyn Burt Compliance & Enforcement Supervisor Division of Surface Water Southwest District Office
Date	Date
1-18-2013	

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

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..... 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:

Significant violations for fecal coliform at monitoring station 603 (discharge from the mechanical WWTW to the holding pond) and nitrogen-ammonia at monitoring station 001 (discharge from holding pond to the East Fork of the Little Miami River).

Mr. Canter attributed the bacteria violations at monitoring station 603 to faulty UV disinfection components. Although exact dates when the UV system was out of service were not provided, it appears the system was down in January and early February. For future wastewater treatment unit malfunctions, WWTW staff should document important date/times during the course of the maintenance-related project. The ammonia violations were attributed to high flows received from the Village of St. Martin (insufficient treatment).

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.....

The generator has an auto-transfer switch and will operate the entire facility during a power outage. The generator is rated for 230 kw.
 - ii. How often is the generator tested under load.....

1/week.

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

Blower outage and high lever for RAS wet well.

- (c) All treatment units in service other than backup units..... Y
- (d) What method is used for scheduling routine & preventative maintenance (calendar, software, etc.).....

Proprietary PM software "Master Maintenance" has been purchased and is being utilized.
- (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:

Intially, Mr. Moore could not locate a copy of the operation & maintenance manual. On January 16, 2013, Mr. Canter provided an electronic copy of the O&M manual. In the future, all operation staff shall have knowledge of the O&M manual location so that it can be readily referenced.

Section G: Operation & Maintenance con't

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).... 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)

Hard bound.
- (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:

James Spargur and Dave Mathews were also listed as ORCs. They have been removed from the list. As it stands now, Aaron Moore and Steve Canter are listed as ORCs. Since it appears that David Cline (WW 1) spends more than 20 hours/week at the WWTW, FPTRSD should consider submitting a staffing reduction plan as defined in Ohio Administrative Code 3745-7-04. An approved plan would reduce the time needed for ORC presence on the WWTW grounds and, in turn, providing more flexibility.

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.....3
 - ii. How many pump stations have telemetered alarms.....3
 - 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..... Y
- (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..... Y
- (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:

The village of St. Martin, customer of FPTRSD, has an active wet weather sanitary sewer overflow located at the main pump station (located at Chatfield College). The inflow and infiltration problem in the village is also contributing wet weather flows to the FPTRSD WWTW. Ohio EPA has approved a new low pressure force main system (grinder pumps) for the village and it is expected that construction will begin in March of 2013 and be completed by the summer. This project is designed to eliminate the SSO and the wet weather problems.

The collection system served by the FPTRSD consists of mostly gravity sewers within the village of Fayetteville and approximately 1,000 grinder pumps in the Lake Lorelei area and in the township.

Grinder pump overflows (and any other sanitary sewer overflows) and water-in-basement incidences shall be reported according to the instructions provided in Ohio EPA's 5-day SSO report and the SSO annual report form. These forms were provided to Mr. Canter in an electronic mail.

Section H: Sludge Management

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

80,000 gallons (aerobic digester)

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

EES owns the truck used to haul sludge to the Rocky Fork WWTW.
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Comments/Status:

Records are kept at the Rocky Fork WWTW. At least 5 years of sludge records should be stored at the FPTRSD WWTW.
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Section I: Self-Monitoring Program

Flow Measurement:

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

Mag meter on effluent pond pump station force main. Magnetic meters are utilized for influent force mains and for the RAS.
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- (b) Flow meter calibrated annually N
(Date of last calibration: 2010.
- (c) 24-hour recording instruments operated and maintained..... N/A
- (d) Flow measurement equipment adequate to handle full range of flows..... Y
- (e) All discharged flow is measured..... Y

Comments/Status:

No 24-hour flow recorders (totalizer only). On January 16, 2013, Mr. Canter provided documentation stating that all flow meters and the laboratory balance will be calibrated this month. It is required that effluent flow meters are calibrated on an annual basis.

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

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..... Y
- (b) Do SOP's include the following if applicable..... N
 - 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..... N/A
- (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. N
(see score from GLC page)
- (h) Commercial laboratory used..... Y
Parameters analyzed by commercial lab:
Rocky Fork Lab – CBOD5, bacteria, nitrogen-ammonia and TP
Belmont Lab – nitrogen-ammonia (dups), metals, bacteria (dups), TIN

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: Discharge from effluent holding pond. No objectionable solids or odors in the effluent.

Receiving Stream: East Fork Little Miami River

Receiving Stream Description: Stream levels up due to snow melt.

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

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 # : 1PD00024*CD
NPDES # : OH0119041

FPTRSD WWTW Location and Discharge Location



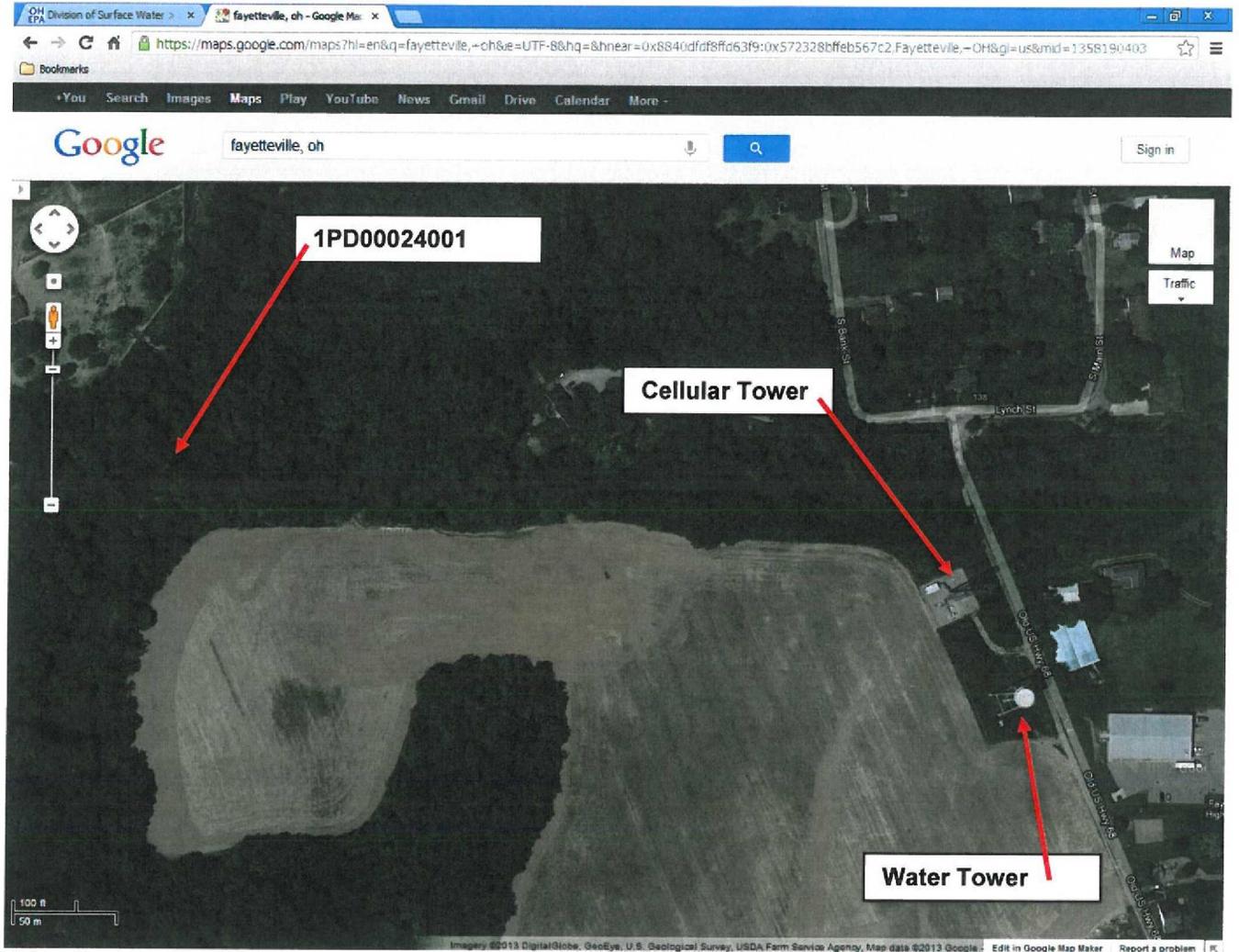
Permit # : 1PD00024*CD
NPDES # : OH0119041

FPTRSD WWTW



Permit # : 1PD00024*CD
NPDES # : OH0119041

Final Effluent to the East Fork of the Little Miami River (1PD00024001)



General Lab Criteria

Criteria	Standard Methods Requirement		Rating
Balance	Acceptable?		
• Standard Weights	• Either NIST Class s or ASTM/ANSI Class 1 weights ^{1,2}	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	M
• Calibration Frequency / Documentation	• Calibration verification required at least once each day the balance is used. ³	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
• Cleanliness, air movement, vibration	• Cleanliness of balance is a must and air movement and vibration needs to be kept to a minimum ¹	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
• Other	• Service and recalibrate annually (manufacturer representative or comparable) ¹	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
	• Must be able to measure to 0.1 grams ⁴	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
	• Instrument manual available	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
	• Log book maintained ²	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	

Comments: : SOP for suspended solids should be updated by the date indicated in the cover letter.
Regular Calibrations should be performed and recorded.

Criteria	Standard Methods Requirement		Rating
Drying Oven (Suspended Solids)	Acceptable?		
• Temperature Recordkeeping	• Temperature recorded with each use ⁴	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	M
	• Log book maintained ²	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
• Calibration Frequency / Documentation	• Thermometer calibrated annually with NIST traceable thermometer ^{1,2} . Correction factor posted on thermometer / equipment ¹	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
• Other	• Thermometer temperature accurate to 0.5° Celsius ⁵	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
	• Acceptable temperature range is 103° – 105° C ⁴	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
	• Instrument manual available	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	

Comments: Sop for suspended solids should be updated by the date indicated in the cover letter.

The existing thermometer should be replaced with a thermometer marked with a maximum of 0.5° C graduations.

General Lab Criteria

Criteria	Standard Methods Requirement		Rating
pH Meter			
	Acceptable?		
<ul style="list-style-type: none"> • Calibration Frequency / Documentation 	<ul style="list-style-type: none"> • 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 	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
	<ul style="list-style-type: none"> • Logbook maintained² 	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
<ul style="list-style-type: none"> • Minimum of 2 point calibration 	<ul style="list-style-type: none"> • Calibration per manufacturer specification and calibration buffers must bracket anticipated result⁷ 	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
<ul style="list-style-type: none"> • Slope Documentation / Acceptability 	<ul style="list-style-type: none"> • Slope acceptable range indicated on benchsheet² 	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
<ul style="list-style-type: none"> • Buffer Expiration Date 	<ul style="list-style-type: none"> • Buffers must not be expired 	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
<ul style="list-style-type: none"> • Other 	<ul style="list-style-type: none"> • Instrument manual available 	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
	<ul style="list-style-type: none"> • Teflon covered magnetic stirrer or equivalent for mixing⁸ 	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Comments: SOP should be updated to reflect site-specific equipment.			
Criteria	Standard Methods Requirement		Rating
Dissolved Oxygen Meter			
	Acceptable?		
<ul style="list-style-type: none"> • Calibration Method 	<ul style="list-style-type: none"> • Air or known DO calibration method¹⁰ 	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
	<ul style="list-style-type: none"> • Calibration per manufacturer specification¹⁰ 	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
<ul style="list-style-type: none"> • Calibration Frequency / Documentation 	<ul style="list-style-type: none"> • Logbook maintained² 	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
	<ul style="list-style-type: none"> • Calibration verification required at least once each day the meter is used.³ 	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
<ul style="list-style-type: none"> • Other 	<ul style="list-style-type: none"> • Small to no bubble present under membrane (must be smaller than the lead in number 2 pencil)¹¹ 	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
	<ul style="list-style-type: none"> • Instrument manual available 	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Comments: SOP should be updated to reflect site-specific equipment.			

General Lab Criteria

Criteria	Standard Methods Requirement	Acceptable?		Rating
Refrigerator				
• Temperature Recordkeeping	• Temperature Log (thermometer accurate to 0.5 Celsius). ⁵	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	M
• Temperature Calibration / Documentation	• Thermometer calibrated annually with NIST traceable thermometer ^{1,2}	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	
• Other	• Thermometer held in water bath. ¹	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	
	• Refrigerator temperature $\leq 6^{\circ}$ Celsius. ¹³	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	
	• Do not store volatile solvents, food, or beverages. ¹⁴	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	
Comments: Thermometer should be calibrated annually with an NIST thermometer.				

General Lab Criteria

Criteria	Standard Methods Requirement		Rating
Sample Collection/Handling		Acceptable?	
• Sample Labeling	• Samples container labeled (description, date, time, preservative added, initialed). ¹⁹	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
• Chain of Custody	• Chain of custody (description, date, time, signature). ¹⁹	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
• Other	• Composite samples refrigerated during sample collection ¹⁴	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
	• Equipment blanks utilized ¹⁴	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
	• SOP for cleaning of sampling equipment	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
	• Logbook being maintained ²	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Comments: Facility should begin using chain-of-custody forms when transporting samples to the Rocky Fork WWTW for testing.			
Bench sheets		Acceptable?	
• General criteria	• Date(s) ²	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
	• Analyst initials ²	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
	• Blue or black ink pen ²	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
	• Calibration information ²	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
	• Equations, calculations, units for all measurements, notations, and results present ²	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
	• Corrections, single line through, initialed and dated ²	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Comments: The analyst who performs the daily testing should identify himself with his initials on the bench sheet.			

General Lab Criteria

Criteria	Standard Methods Requirement		Rating
Final Effluent Temperature Monitoring		Acceptable?	
<ul style="list-style-type: none"> • General Criteria 	<ul style="list-style-type: none"> • Thermometer calibrated annually with NIST traceable thermometer ^{1,2} 	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
	<ul style="list-style-type: none"> • Thermometer scaled to 0.1° Celsius and accurate to 0.5° C ⁵ 	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
	<ul style="list-style-type: none"> • Log book being maintained ² 	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Comments: Thermometer should be calibrated annually with an NIST thermometer.			
<h2 style="margin: 0;">Number of Criteria Rated:</h2>			
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:	<ul style="list-style-type: none"> >60% of ratings are Marginal >45% of ratings are a combination of Marginal or Unacceptable >30% of ratings are Unacceptable 		

Notation of Referenced Method

- | | |
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| <ul style="list-style-type: none"> 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 | <ul style="list-style-type: none"> 14 Method 1060A, Item 1 15 Method 4500-CI I, Item 2 16 Method 4500-CI 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 |
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General Lab Criteria

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 $\leq 6^{\circ}\text{C}$	6h	48h
TSS	P, G	200	G, C	Refrigerate $\leq 6^{\circ}\text{C}$	7 d	7 d
pH	P, G	50	G	Analyze immediately	0.25h	0.25 h
NH ₃ -N	P, G	500	G, C	Analyze as soon as possible or add H ₂ SO ₄ to pH <2, Refrigerate $\leq 6^{\circ}\text{C}$	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
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 $\leq 6^{\circ}\text{C}$	7 d	14 d
Base/Neutrals and acids	G (solvent rinsed or baked)	1000	C, G	Refrigerate $\leq 6^{\circ}\text{C}$	7 d	7 days until extraction 40 days after extraction
Pesticides	G (PTFE lined lid)	1000	C	Refrigerate $\leq 6^{\circ}\text{C}$	7 d	7 days until extraction 40 days after extraction
Fecal Coliform / E-Coli	G, P (Sterilized)	100	G	Refrigerate $\leq 10^{\circ}\text{C}$ 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 ₂ SO ₄ to pH <2, Refrigerate $\leq 6^{\circ}\text{C}$	28 d	28 d

Approved Standard Methods

CBOD / BOD 5 Day	Std Methods 5210-B
Ammonia, Selective Electrode Method	Std Methods 4500-NH ₃ 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