

**Environmental
Protection Agency**

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

February 17, 2011

Re: Washington County
City of Belpre
Compliance Evaluation Inspection (CEI)
Correspondence (PWW)

Mayor and Council
City of Belpre
P.O. Box 160
Belpre, Ohio 45714

Dear Mayor and Council:

On October 4 and 5, 2010, a Compliance Sampling Inspection (CSI) was conducted at the City of Belpre's wastewater treatment plant. The purpose of the inspection was to determine the City's compliance with its National Pollutant Discharge Elimination System (NPDES) Permit. Present for the inspection were Mike Betz and Denzil Ray representing the City of Belpre and Joann Montgomery and Stephen Wells representing Ohio EPA, Division of Surface Water, Southeast District Office. Wastewater samples were collected as part of the inspection. A copy of my inspection report is attached.

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

1. The City is using only one of the secondary clarifiers at the wastewater treatment plant. The plant is operating properly with only one clarifier in operation. The other clarifier has no problems and can be put into service if needed.
2. The treatment plant had a posting for an operator position which had been vacated. The City needs to make sure the plant is staffed adequately so proper operation and maintenance can be done.
3. The City is currently in the process of using a contractor to clean the collection system. The sewer cleaning work is being done in stages. The City needs to be working on removing inflow and infiltration (I/I) along with the sewer cleaning. Please inform this office on how much of the collection system has been cleaned and I/I work that is being completed.
4. The results of the sampling are attached. Ohio EPA's and City's analytical results are comparable for the parameters that were comparable. A copy of the toxicity results from the sampling have already been mailed.
5. A laboratory inspection was also conducted at the time of the inspection. A copy of the laboratory inspection report is also attached.

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.

In conclusion, the City of Belpre appeared to be in compliance with its NPDES Permit at the time of the inspection.

Please respond to above comment #2 in writing to this office within 20 days upon receipt of this letter.

If you have any questions, feel free to contact me (740) 380-5434.

Sincerely,



Stephen Wells
District Representative
Division of Surface Water

SW/dh

Enclosure

c: Mike Betz, City of Belpre
c: Denzil Ray, City of Belpre

NPDES Compliance Inspection Report

A. NATIONAL DATA SYSTEM CODING

| Permit No. | NPDES No. | Date | Inspection Type | Inspector | Facility Type |
|-------------|-----------|-------------------|-----------------|-----------|---------------|
| OPD00027*GD | OH0020621 | October 4&5, 2010 | S | S | 1 |

B. FACILITY DATA

| Name & Location of Facility Inspected | Entry Time | Permit Effective Date |
|--|------------|------------------------|
| City of Belpre Wastewater Treatment Plant 1500 Blennerhasset Avenue Belpre, Ohio | 10:15 a.m. | August 1, 2008 |
| | Exit Time | Permit Expiration Date |
| | 12:15 p.m. | January 31, 2013 |

| Name(s) & Title(s) of On-Site Representative(s) | Phone Number(s) |
|---|-----------------|
| Denzil Ray, Operator | (740) 423-9941 |
| Mike Betz, Public Works Superintendent | (740) 423-6485 |
| Name, Address, & Title of Responsible Official | Phone Number |
| Mayor and Council City of Belpre 715 Park Drive Belpre, Ohio 45714 | (740) 423-7592 |

C. AREAS EVALUATED DURING INSPECTION

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

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

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

See attached letter.



 Stephen Wells, Inspector, Ohio EPA, Southeast District Office

2/18/11

 Date



 Timothy M. Campbell, Reviewer, Ohio EPA, Southeast District Office

2/18/11

 Date

E. PERMIT VERIFICATION

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

Comments:

F. COMPLIANCE SCHEDULES/VIOLATIONS

| | YES | NO | N/A | N/E |
|---|-------------------------------------|-------------------------------------|-------------------------------------|--------------------------|
| a. Any significant violations since the last inspection | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| b. Permittee is taking actions to resolve violations | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| c. Permittee has compliance schedule | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| d. Compliance schedule contained in: _____ | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| e. Permittee is meeting compliance schedule | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

Comments:

G. OPERATION AND MAINTENANCE

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

Comments:

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

Comments:

Denzil Ray is the Operator of Record. Mike Betz, Public Works Superintendent is a Class IV Operator.

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

Comments:

The Degussa and O'Neil need telemetering. Shell lift station is not alarmed.

H. SLUDGE MANAGEMENT

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

Comments:

I. SELF-MONITORING PROGRAM

| Part 1 – Flow Measurement | YES | NO | N/A | N/E |
|---|-------------------------------------|--------------------------|--------------------------|--------------------------|
| a. Primary flow measuring device properly operated & maintained. Type of device: <input checked="" type="checkbox"/> Ultrasonic & parshall flume <input type="checkbox"/> Calculated from influent <input type="checkbox"/> Weir <input type="checkbox"/> Other <input type="checkbox"/> Ultrasonic & weir specify: _____ | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| b. Calibration frequency adequate. Date of last calibration: <u>May 25, 2010</u> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| c. Secondary instruments (totalizers, recorders, etc.) properly operated and maintained | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| d. Flow measurement equipment adequate to handle expected ranges of flows | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| e. Actual flow discharged is measured | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| f. Flow measuring equipment inspection frequency: <input checked="" type="checkbox"/> Daily <input type="checkbox"/> Monthly <input type="checkbox"/> Weekly <input type="checkbox"/> Other | | | | |

Comments:

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

Comments:

| Part 3 – Laboratory, General | YES | NO | N/A | N/E |
|--|-------------------------------------|-------------------------------------|-------------------------------------|--------------------------|
| a. Written Standard Operating Procedures (SOPs) for all analysis performed on-site | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| b. EPA approved analytical testing procedures used (40 CFR 136.3) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| c. If alternate analytical procedures are used, proper approval has been obtained | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| d. Analysis being performed more frequently than required by permit | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| e. If (c) is yes, are results reported in permittee's self-monitoring report | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| f. Commercial laboratory used: 1. Parameters analyzed by commercial lab: <u>Oil & Grease, Ammonia, Metals, TKN and Cyanide</u> 2. Lab name: <u>REIC Labs</u> | | | | |

Comments:

| Part 3 – Laboratory, Quality Control/Quality Assurance | YES | NO | N/A | N/E |
|--|-------------------------------------|--------------------------|--------------------------|--------------------------|
| a. Quality assurance manual provided and maintained | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| b. Satisfactory calibration and maintenance of instruments and equipment | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| c. Adequate records maintained | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| d. Results of latest U.S. EPA quality assurance performance sampling program: Date: _____ <input type="checkbox"/> Satisfactory <input type="checkbox"/> Marginal <input type="checkbox"/> Unsatisfactory | | | | |

Comments:

Had not received results of DMR-QA 30 at the time of the inspection.

J. EFFLUENT/RECEIVING WATER OBSERVATIONS

| Outfall # | Oil Sheen | Grease | Turbidity | Visible Foam | Visible Float Solids | Color | Other |
|-----------|-----------|--------|-----------|--------------|----------------------|-------|-------|
| 001 | None | None | None | None | None | Clear | |

Comments:

K. MULTIMEDIA OBSERVATIONS

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

If any of the above are observed, ask the following questions:

1. What is the cause of the conditions?
2. Is the observed condition or source a waste product?
3. Where is the suspected contaminant normally disposed?
4. Is this disposal permitted?
5. How long has the condition existed and when did it begin?

Comments:

L. SAMPLING PROCEDURES (FOR CSI'S)

- Grab samples obtained
- Composite obtained
- Compositing frequency: 4/hour
Preservation: _____
- Flow proportioned sample obtained
- Automatic sampler used
- Sample split with permittee
- Chain of custody employed
- Sample obtained from facility sampling device
- Sample refrigerated during compositing: Yes No
- Sample representative of volume & nature of discharge: Yes

Comments:

General Lab Criteria

Facility: City of Belpre

| Criteria | Standard Methods Requirement | Acceptable? | Rating |
|---|--|---|----------|
| Balance | | | |
| • 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 ⁶ | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | |
| Comments: Have external vendor calibrate, need to get standard weights and record in logbook. | | | |

| Criteria | Standard Methods Requirement | Acceptable? | Rating |
|--|---|---|----------|
| Drying Oven (Suspended Solids) | | | |
| • Temperature Recordkeeping | • Temperature recorded with each use ⁴ | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | M |
| | | • Log book maintained ⁶ | |
| • 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 in 0.1°C increments ⁵ | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | |
| | • Acceptable temperature range is 103° – 105°F ⁴ | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | |
| | • Instrument manual available | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | |
| Comments: | | | |

| Criteria | Standard Methods Requirement | Acceptable? | Rating |
|--|---|---|----------|
| pH Meter | | | |
| • 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 | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | A |
| | | • Log book maintained ⁹ | |
| • Minimum of 2 point calibration | • Calibration per manufacturer specification and calibration buffers must bracket anticipated result ⁷ | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | |
| • Slope Documentation/ Acceptability | • Slope acceptable range indicated on benchsheet ² | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | |
| • Buffer Expiration Date | • Buffers must not be expired | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | |
| • Other | • Instrument manual available | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | |
| | • Teflon covered magnetic stirrer or equivalent for mixing ⁸ | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | |
| Comments: | | | |

General Lab Criteria

| Criteria | Standard Methods Requirement | Acceptable? | Rating |
|---|--|---|----------|
| Dissolved Oxygen Meter | | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | A |
| • Calibration Method | • Air or known DO calibration method ¹⁰ | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | |
| | • Calibration per manufacturer specification ¹⁰ | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | |
| • Calibration Frequency/ Documentation | • Logbook maintained ⁹ | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | |
| | • Calibration verification required at least once each day the meter is used. ³ | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | |
| • Other | • 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 | |
| | • Instrument manual available | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | |
| Comments: | | | |

| Criteria | Standard Methods Requirement | Acceptable? | Rating |
|---|--|---|----------|
| Incubator (CBOD/E-Coli) | | <input type="checkbox"/> Yes <input type="checkbox"/> No | A |
| • Temperature Recordkeeping | • Temperature checked/recorded twice daily for each shelf in use ¹ | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | |
| | • Acceptable temperature range (CBOD) is 20°C ±1.0 ¹² | <input type="checkbox"/> Yes <input type="checkbox"/> No | |
| | • Acceptable temperature range (E-Coli) is 35°C ±0.5 ²² | <input type="checkbox"/> Yes <input type="checkbox"/> No | |
| | • Logbook maintained ⁹ | <input type="checkbox"/> Yes <input type="checkbox"/> No | |
| • Temperature Calibration/ Documentation | • Thermometer calibrated annually with NIST traceable thermometer ^{1,2} | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | |
| | • Temperature correction information posted on incubator ¹ | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | |
| • E-Coli can use multiple tubes (five 20 ml or ten 10 mg), or mfg's multi-well tray | • E-coli Ultraviolet lamp (365 nm wave length, 6 W bulb) ²³ | <input type="checkbox"/> Yes <input type="checkbox"/> No | |
| • Other | • Instrument manual available | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | |
| | • Temperature Log (thermometer reads to 0.1 Celsius) ⁵ | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | |
| Comments: | | | |

| Criteria | Standard Methods Requirement | Acceptable? | Rating |
|---|--|---|----------|
| Refrigerator | | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | A |
| • Temperature Recordkeeping | • Temperature Log (thermometer reads to 0.1 Celsius) ⁵ | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | |
| • Temperature Calibration/ Documentation | • Thermometer calibrated annually with NIST traceable thermometer ^{1,2} | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | |
| • Other | • Thermometer held in water bath ¹ | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | |
| | • Refrigerator temperature ≤6° 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: | | | |

| Criteria | Standard Methods Requirement | Acceptable? | Rating |
|---|---|---|----------|
| Chlorine Meter | | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | A |
| • Calibration Frequency/ Documentation | • pH/millivolt meter read to 0.1 mV ¹⁵ | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | |
| | • 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 | |
| • Calibration Method | • Calibration using three iodate solutions 0.2, 1.0, 5.0 milliliters or calibration per manufacturer specification ¹⁶ | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | |

General Lab Criteria

| | | | | |
|---|--|---|-----------------------------|--|
| | <ul style="list-style-type: none"> • Standards used for calibration not expired | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No | |
| • Slope Documentation/ Acceptability | <ul style="list-style-type: none"> • Calibration curve (acceptable slope) | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No | |
| • Other | <ul style="list-style-type: none"> • Electrode free of deposits and foreign material | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No | |
| | <ul style="list-style-type: none"> • Log book being maintained⁹ • Instrument manual available | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No | |
| Comments: | | | | |

| Criteria | Standard Methods Requirement | Acceptable? | | Rating |
|---|--|--|------------------------------|-----------|
| Ammonia Meter | | | | |
| • 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 type="checkbox"/> Yes | <input type="checkbox"/> No | NR |
| | | <ul style="list-style-type: none"> • Log book being maintained⁹ | <input type="checkbox"/> Yes | |
| • Slope Acceptability | <ul style="list-style-type: none"> • Verify calibration slope is acceptable (per mfg. spec.) | <input type="checkbox"/> Yes | <input type="checkbox"/> No | |
| • Calibration Method | <ul style="list-style-type: none"> • Standards used for calibration (3 ammonia solutions of 10 mg/l, 1 mg/l, and 0.1 mg/l) or per mfg. spec.¹⁷ | <input type="checkbox"/> Yes | <input type="checkbox"/> No | |
| | | <ul style="list-style-type: none"> • Standards used for calibration not expired | <input type="checkbox"/> Yes | |
| • Other | <ul style="list-style-type: none"> • Electrode free of deposits and foreign material | <input type="checkbox"/> Yes | <input type="checkbox"/> No | |
| | <ul style="list-style-type: none"> • Teflon covered magnetic stirrer or equivalent for mixing¹⁸ | <input type="checkbox"/> Yes | <input type="checkbox"/> No | |
| | <ul style="list-style-type: none"> • Instrument manual available | <input type="checkbox"/> Yes | <input type="checkbox"/> No | |
| Comments: | | | | |

| Criteria | Standard Methods Requirement | Acceptable? | | Rating |
|-----------------------------------|---|---|--|----------|
| Sample Collection/Handling | | | | |
| • Sample Labeling | <ul style="list-style-type: none"> • Samples container labeled (description, date, time, preservative added, initialed)¹⁹ | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No | A |
| • Chain of Custody | <ul style="list-style-type: none"> • Chain of custody (description, date, time, signature)¹⁹ | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No | |
| • Other | <ul style="list-style-type: none"> • Composite samples refrigerated during sample collection¹⁴ | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No | |
| | <ul style="list-style-type: none"> • Equipment blanks utilized¹⁴ | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No | |
| | <ul style="list-style-type: none"> • SOP for cleaning of sampling equipment • Log book being maintained⁹ | <input type="checkbox"/> Yes | <input checked="" type="checkbox"/> No | |
| Comments: | | | | |

| Criteria | Standard Methods Requirement | Acceptable? | | Rating |
|--------------------|---|--|---|----------|
| Desiccator | | | | |
| • General Criteria | <ul style="list-style-type: none"> • Properly working seals | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No | A |
| | | <ul style="list-style-type: none"> • Desiccant fresh (blue color) | <input checked="" type="checkbox"/> Yes | |
| • Documentation | <ul style="list-style-type: none"> • Log book being maintained⁹ | <input type="checkbox"/> Yes | <input checked="" type="checkbox"/> No | |
| Comments: | | | | |

General Lab Criteria

| Criteria | Standard Methods Requirement | Acceptable? | Rating |
|--|--|---|----------|
| Bench Sheets | | | |
| <ul style="list-style-type: none"> • General Criteria | • Date(s) ² | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | A |
| | • Analyst initials ² | <input checked="" type="checkbox"/> Yes <input 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: | | | |

| Criteria | Standard Methods Requirement | Acceptable? | Rating |
|--|---|---|----------|
| Hot Water Bath (Fecal Coliform/E. Coli) | | | |
| <ul style="list-style-type: none"> • Temperature Recordkeeping | • Temperature Log (thermometer reads 0.2° C) ²¹ | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | A |
| | | • Incubator temperature 44.5° C ±0.2° ^{21/24} | |
| <ul style="list-style-type: none"> • Temperature Calibration/ Documentation | • Thermometer calibrated annually with NIST traceable thermometer ^{1,2} | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | |
| | | • Log book being maintained ⁹ | |
| <ul style="list-style-type: none"> • Water Level | • Thermometer total immersion or partial (line on thermometer to ID immersion depth) ^{1,5} | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | |
| Comments: | | | |

| Criteria | Standard Methods Requirement | Acceptable? | Rating |
|--|--|---|----------|
| Autoclaves/Steam Sterilizers | | | |
| <ul style="list-style-type: none"> • All apparatus utilized is adequately sterilized before use | • Sterilizing temperature 121° C ²⁵ | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | A |
| | | • 10 to 30 minutes time based on material being sterilized ²⁶ | |
| <ul style="list-style-type: none"> • Documentation | • Verify the autoclave temperature weekly by using a maximum registering thermometer (MRT) to confirm that 121°C has been reached as measured in the exhaust ¹ | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | |
| | | • Date, contents, sterilization time and temperature, total time in autoclave, and analyst's initials should be recorded each time the autoclave is used ¹ | |
| <ul style="list-style-type: none"> • Temperature Calibration/ Documentation | • Thermometer calibrated annually with NIST traceable thermometer ^{1,2} | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | |
| | | • Log book being maintained ⁹ | |
| <ul style="list-style-type: none"> • Performance Checks | • Test monthly for efficacy using a biological such as commercially available <i>Geobacillus stearothermophilus</i> in spore strips, suspensions, or capsules ¹ | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | |
| Comments: | | | |

General Lab Criteria

| Criteria | Standard Methods Requirement | Acceptable? | Rating |
|--|---|---|----------|
| Final Effluent Temperature Monitoring | | | |
| <ul style="list-style-type: none"> • General Criteria | <ul style="list-style-type: none"> • Thermometer calibrated annually with NIST traceable thermometer^{1,2} | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | M |
| | <ul style="list-style-type: none"> • Thermometer reads in increments of at least 0.1°C⁵ | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | |
| | <ul style="list-style-type: none"> • Log book being maintained² | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | |
| Comments: | | | |

| | | |
|------------------------------------|---------------------|----|
| Number of Criteria Rated: | Acceptable | 10 |
| | Marginal | 3 |
| | Unacceptable | |
| Total Number of Areas Rated | | 13 |

| | | |
|---|---|---|
| <p>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).</p> | | |
| <p>Marginal Ratings – Improvements required, written response required (recommend SOP's be written or updated, recommend perform DMRQA's for all onsite analysis, recommend voluntary lab analyst certification, require deficiencies to be addressed in written response).</p> | | |
| <p>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).</p> | | |
| <table style="width: 100%; border: none;"> <tr> <td style="width: 60%; border: none; vertical-align: top;"> <p>Consider recommending PAI Audit from DES when:</p> </td> <td style="border: none; padding-left: 10px;"> <p>>60% of ratings are Marginal >45% of ratings are a combination of Marginal or Unacceptable >30% of ratings are Unacceptable</p> </td> </tr> </table> | <p>Consider recommending PAI Audit from DES when:</p> | <p>>60% of ratings are Marginal >45% of ratings are a combination of Marginal or Unacceptable >30% of ratings are Unacceptable</p> |
| <p>Consider recommending PAI Audit from DES when:</p> | <p>>60% of ratings are Marginal >45% of ratings are a combination of Marginal or Unacceptable >30% of ratings are Unacceptable</p> | |

General Lab Criteria

Notation of Referenced Method

| | | | |
|----|-------------------------|----|---------------------------|
| 1 | Method 9020-B, Item 4 | 14 | Method 1060A, Item 1 |
| 2 | Method 1020-A, Item 1 | 15 | Method 4500-CI I, Item 2 |
| 3 | Method 1020-B, Item 10 | 16 | Method 4500-CI I, Item 4 |
| 4 | Method 2540-B, Item 2 | 17 | Method 4500-NH3 D, Item 4 |
| 5 | Method 2550-B, Item 1 | 18 | Method 4500-NH3 D, Item 2 |
| 6 | Method 1020-B, Item 1 | 19 | Method 1060-B, Item 2 |
| 7 | Method 4500-H B, Item 4 | 20 | Method 1060-B, Item 1 |
| 8 | Method 4500-H B, Item 2 | 21 | Method 9222D, Item 1 |
| 9 | Method 1020-B, Item 2 | 22 | Method 9223 B, Item 2 |
| 10 | Method 4500-O B, Item 3 | 23 | Method 9223 B, Item 3 |
| 11 | Method 4500-O G, Item 3 | 24 | Method 1603, Item 2 |
| 12 | Method 5210-B, Item 5 | 25 | Method 9030-B, Item 3 |
| 13 | CFR 136.3, Table II | 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 $\leq 6^{\circ}\text{C}$ | 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 |
| NH3-N | P, G | 500 | G, C | Analyze as soon as possible or add H_2SO_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 | G, C | 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_2SO_4 to pH <2, Refrigerate $\leq 6^{\circ}\text{C}$ | 28 d | 28 d |

General Lab Criteria

| 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 Methods 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 |

TABLE I

OHIO EPA FIELD DATA

FACILITY: Belpre WWTP

DATES SAMPLED: October 4 & 5, 2010

| <u>Station</u> | <u>Date</u> | <u>Time</u> | <u>Parameter</u> | <u>Units</u> | <u>Value</u> | <u>Permit Limits</u> |
|----------------|-------------|-------------|-------------------|--------------|--------------|----------------------|
| 001 | 10/4 | 1000 | pH | S.U. | 7.12 | 6.5-9.0 |
| | | | Temperature | EC | 21.53 | - |
| | | | Dissolved oxygen | mg/l | 3.32 | - |
| | | | Conductivity | umhos/cm | 3244 | - |
| | | | Chlorine residual | mg/l | 0.005 | 0.38 |
| 001 | 10/5 | 0935 | pH | S.U. | 7.19 | 6.5-9.0 |
| | | | Temperature | EC | 21.50 | - |
| | | | Dissolved oxygen | mg/l | 3.46 | - |
| | | | Conductivity | umhos/cm | 3200 | - |
| | | | Chlorine residual | mg/l | 0.001 | 0.38 |

TABLE II

COMPLIANCE SAMPLING DATA

FACILITY: Belpre WWTP

DATES SAMPLED: October 4-5, 2010

| STATION | T* | PARAMETER | UNITS | <u>OHIO EPA</u> | | <u>ENTITY</u> | | <u>PERMIT LIMITS</u> | |
|---------|----|-------------------|----------|-----------------|-----------------|---------------|-----------------|----------------------|-----------------|
| | | | | CONC. | (KG/D) LOAD. | CONC. | (KG/D) LOAD. | CONC. | (KG/D) LOAD. |
| 001 | C | Susp. solids | mg/l | 6.0 | 18.2 | 13 | 39.4 | 45 | 256 |
| | C | CBOD ₅ | mg/l | 4.3 | 13.0 | 8 | 24.2 | 40 | 227 |
| | G | Cyanide, free | ug/l | 6 | 0.02 | - | - | 0.044 | 0.25 |
| | G | Cyanide, tot. | ug/l | 26 | - | - | - | - | - |
| | C | Ammonia | mg/l | 5.13 | - | 8.44 | - | - | - |
| | C | Nitrate-nitrite | mg/l | 14.1 | - | - | - | - | - |
| | C | Phosphorus | mg/l | 3.29 | - | - | - | - | - |
| | G | Oil & Grease | mg/l | <2.0 | - | <1.0 | - | 10 max. | - |
| | G | Fecal coliform | #/100 ml | 10 | - | 17 | - | 400 | - |
| | C | Nickel, tot. | ug/l | 4.5 | - | - | - | - | - |
| | C | Copper, tot. | ug/l | 19 | 0.06 | - | - | 33 | 0.19 |
| | C | Cadmium, tot. | ug/l | <1.0 | - | - | - | - | - |
| | C | Lead, tot. | ug/l | <2.0 | - | - | - | - | - |
| | C | Chromium, tot. | ug/l | <2.0 | - | - | - | - | - |
| | C | Mercury, tot. | ug/l | <0.2 | - | - | - | - | - |
| | C | Zinc, tot. | ug/l | 62 | - | - | - | - | - |
| | G | Chrom. hex. | ug/l | <10 | - | - | - | - | - |
| | | Flow, tot. | MGD | | | 0.800 | | | |

*SAMPLE TYPE: G:grab; C:composite; ND (or AA): non-detectable