

**Environmental
Protection Agency**

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

Re: Wyandot County
Upper Sandusky WWTP
NPDES Permit

December 29, 2010

Mayor and Council
City of Upper Sandusky
119 North Seventh Street
Upper Sandusky, Ohio 43351

Dear Mayor and Council:

This will acknowledge our December 15, 2010, compliance inspection at the Upper Sandusky Wastewater Treatment Plant (WWTP). This facility is located on Indian Mill Road in Upper Sandusky. Mr. Aaron Putnam, Superintendent, was present and provided information regarding the operation of the facility. This inspection was conducted as part of the facility's National Pollutant Discharge Elimination System (NPDES) permit No. 2PD00039.

At the time of the inspection, all major treatment components were in service and the plant effluent was clear. However, we did not collect effluent samples to determine the water quality of the discharge during our visit.

Your current NPDES permit will expire on April 30, 2015. Please note that this NPDES permit (Part I, Item C) requires the City to comply with two (2) implementation schedules with specific milestones as follows:

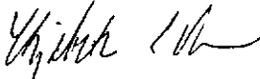
- (1) Mercury Schedule – requiring submittal of necessary documentation by September 2010 (completed)
- (2) Schedule to Eliminate Raw Bypass – requiring a status report submittal by 2/2011, a comprehensive analysis report by 4/2011, annual reports are due in 5/2012, 5/2013 and 5/2014 with the elimination of the raw bypass by 4/2015.

Our review of your discharge monitoring reports (11/2009 to 11/2010) indicated a few effluent violations. Please refer to the enclosed violation table. The U.S. EPA DMR-QA Study #30 indicated that all test parameters were rated acceptable. We encourage your continued participation in the QA Program to assure the accuracy and reliability of your monthly monitoring data.

Mayor and Council
December 29, 2010
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Our completed inspection report is included for your review. If you have any questions or comments, please call Mr. Jason Ko at 419-373-3021.

Yours truly,



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

pc: Aaron Putnam, Upper Sandusky WWTP
DSW:NWDO:File

NPDES COMPLIANCE INSPECTION REPORT

Section A: National Data System Coding

Permit #	NPDES	Yr/Mo/Day	Inspection Type	Inspector	FacType
2PD00039	OH0020001	2010/12/15	C	S	P

Section B: Facility Data

Name and Location of Facility Inspected Upper Sandusky WWTP Indian Mill Road Upper Sandusky, OH 43551	Entry Time 10:00 A.M.	Permit Effective Date 5/1/2010
	Exit Time 12:00 P.M.	Permit Expiration Date 4/30/2015

Name(s) and Title(s) of On-Site Representative(s)	Phone Number(s)
Mr. Aaron Putnam, Superintendent	(419) 294-2252

Name, Address and Title of Responsible Official	Phone Number
Mayor & Council City of Upper Sandusky 119 North Seventh Street Upper Sandusky, OH 43551	(419) 294-3863

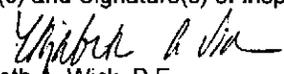
Section C: Areas Evaluated During Inspection

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

<u>S</u> Permit	<u>S</u> Flow Measurement	<u>--</u> Pretreatment
<u>S</u> Records/Reports	<u>S</u> Laboratory	<u>M</u> Compliance Schedules
<u>S</u> Operations & Maintenance	<u>S</u> Effluents	<u>S</u> Self-Monitoring Program
<u>S</u> Facility Site Review	<u>S</u> Sludge Storage/Disposal	<u>-</u> Other

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

- * Current NPDES permit became effective on 5/1/2010 and will expire on 4/30/2015
- * The Schedule of Compliance in the NPDES permit contained 2 items with specific time frames
 - 1) Mercury Schedule – Submit necessary documentation by 9/2010 (completed)
 - 2) Schedule to Eliminate Plant Bypass – Submit a status report by 2/2011 & a comprehensive analysis report by 4/2011 with annual reports due in 5/2012, 5/2013 & 5/2014, and elimination of the plant bypass by 4/2015
- * Submittal of NPDES Modification for the general mercury variance was received on 6/11/2010
- * The modified NPDES permit became effective on 12/1/2010
- * The U.S EPA DMR-QA Study #30 showed that all test parameters were rated accepted
- * Review of your Discharge Monitoring Reports (10/1/2009 to 11/30/2010) indicated a few effluent violations

 Jason Ko Name(s) and Signature(s) of Inspector(s)	12/23/10 Date	Ohio EPA, <u>Northwest</u> District Office
 Elizabeth A. Wick, P.E. Name and Signature of Reviewer	12/23/10 Date	Ohio EPA, <u>Northwest</u> District Office

Sections E thru K: Complete on all inspections as appropriate. N/A - Not Applicable N/E - Not Evaluated

Section E: Permit Verification

	Yes	No	N/A	N/E
INSPECTION OBSERVATIONS VERIFY THE PERMIT				
(a) CORRECT NAME AND MAILING ADDRESS OF PERMITTEE	<u>X</u>	___	___	___
(b) CORRECT NAME AND LOCATION OF RECEIVING WATERS	<u>X</u>	___	___	___
(c) PRODUCT(S) AND PRODUCTION RATES CONFORM WITH PERMIT APPLICATION (INDUSTRIES)	___	___	<u>X</u>	___
(d) FLOWS AND LOADINGS CONFORM WITH NPDES PERMIT PERMIT APPLICATION/BRIEFING MEMO	<u>X</u>	___	___	___
(e) TREAT PROCESSES ARE AS DESCRIBED IN PERMIT APPLICATION/BRIEFING MEMO	<u>X</u>	___	___	___
(f) NEW TREATMENT PROCESS(ES) ADDED SINCE LAST INSPECTION	___	<u>X</u>	___	___
(g) NOTIFICATION GIVEN TO STATE OF NEW, DIFFERENT OR INCREASED DISCHARGES	<u>X</u>	___	___	___
(h) ALL DISCHARGES ARE PERMITTED	<u>X</u>	___	___	___
(i) NUMBER AND LOCATION OF DISCHARGE POINTS ARE AS DESCRIBED IN PERMIT	<u>X</u>	___	___	___

COMMENTS/STATUS:

Section F: Compliance Schedules/Violations

	Yes	No	N/A	N/E
(a) ANY SIGNIFICANT VIOLATIONS SINCE THE LAST INSPECTION	___	<u>X</u>	___	___
(b) PERMITTEE IS TAKING ACTIONS TO RESOLVE VIOLATIONS	___	___	<u>X</u>	___
(c) PERMITTEE HAS COMPLIANCE SCHEDULE	<u>X</u>	___	___	___
(d) COMPLIANCE SCHEDULE CONTAINED IN <u>NPDES</u>	<u>X</u>	___	___	___

COMMENTS/STATUS:

(d) Elimination of the plant bypass by 4/2015

Section G: Operation and Maintenance

TREATMENT WORKS:

	Yes	No	N/A	N/E
TREATMENT FACILITY PROPERLY OPERATED AND MAINTAINED				
(a) STANDBY POWER AVAILABLE GENERATOR <u>X</u> DUAL FEED <u> </u>	<u>X</u>	<u> </u>	<u> </u>	<u> </u>
(b) ADEQUATE ALARM SYSTEM AVAILABLE FOR POWER OR EQUIPMENT FAILURES	<u>X</u>	<u> </u>	<u> </u>	<u> </u>
(c) ALL TREATMENT UNITS IN SERVICE OTHER THAN BACKUP UNITS	<u>X</u>	<u> </u>	<u> </u>	<u> </u>
(d) SUFFICIENT OPERATING STAFF PROVIDED # SHIFTS <u>1</u> DAYS/WEEK <u>5</u>	<u>X</u>	<u> </u>	<u> </u>	<u> </u>
(e) OPERATOR HOLDS UNEXPIRED LICENSE OF CLASS REQUIRED BY PERMIT CLASS: <u>III</u>	<u>X</u>	<u> </u>	<u> </u>	<u> </u>
(f) ROUTINE AND PREVENTIVE MAINTENANCE SCHEDULED/PERFORMED ON TIME	<u>X</u>	<u> </u>	<u> </u>	<u> </u>
(g) ANY MAJOR EQUIPMENT BREAKDOWN SINCE LAST INSPECTION	<u> </u>	<u>X</u>	<u> </u>	<u> </u>
(h) OPERATION AND MAINTENANCE MANUAL PROVIDED AND MAINTAINED	<u>X</u>	<u> </u>	<u> </u>	<u> </u>
(i) ANY PLANT BYPASSES SINCE LAST INSPECTION	<u>X</u>	<u> </u>	<u> </u>	<u> </u>
(j) REGULATORY AGENCY NOTIFIED OF BYPASSES <u> </u> ON MORS <u> </u> 800 NO.	<u>X</u>	<u> </u>	<u> </u>	<u> </u>
(k) ANY HYDRAULIC AND/OR ORGANIC OVERLOADS EXPERIENCED SINCE LAST INSPECTION	<u>X</u>	<u> </u>	<u> </u>	<u> </u>

COLLECTION SYSTEM:

	Yes	No	N/A	N/E
(a) PERCENT COMBINED SYSTEM <u>60%</u>				
(b) ANY COLLECTION SYSTEM OVERFLOWS SINCE LAST INSPECTION (CSO <u> </u> SSO <u> </u>)	<u>X</u>	<u> </u>	<u> </u>	<u> </u>
(c) REGULATORY AGENCY NOTIFIED OF OVERFLOWS (SSOs)	<u>X</u>	<u> </u>	<u> </u>	<u> </u>
(d) CSO O AND M PLAN PROVIDED AND IMPLEMENTED	<u>X</u>	<u> </u>	<u> </u>	<u> </u>
(e) CSOs MONITORED AND REPORTED IN ACCORDANCE WITH PERMIT	<u>X</u>	<u> </u>	<u> </u>	<u> </u>
(f) PORTABLE PUMPS USED TO RELIEVE SYSTEM	<u>X</u>	<u> </u>	<u> </u>	<u> </u>
(g) LIFT STATION ALARM SYSTEMS PROVIDED AND MAINTAINED	<u>X</u>	<u> </u>	<u> </u>	<u> </u>
(h) ARE LIFT STATIONS EQUIPPED WITH PERMANENT STANDBY POWER OR EQUIVALENT	<u> </u>	<u>X</u>	<u> </u>	<u> </u>
(i) IS THERE AN INFLOW INFILTRATION PROBLEM (SEPARATE SEWER SYSTEM) OR WERE THERE ANY MAJOR REPAIRS TO COLLECTION SYSTEM SINCE LAST INSPECTION	<u>X</u>	<u> </u>	<u> </u>	<u> </u>
(j) ANY COMPLAINTS RECEIVED SINCE LAST INSPECTION OF BASEMENT FLOODING	<u> </u>	<u>X</u>	<u> </u>	<u> </u>
(k) ARE ANY PORTIONS OF THE SEWER SYSTEM AT OR NEAR CAPACITY	<u> </u>	<u>X</u>	<u> </u>	<u> </u>

COMMENTS/STATUS:

Treatment Works:

- (a) test weekly
- (d) weekends on part-time basis

Collection System:

- (i) updating the 2004 Sanitary Sewer report and on-going rehabilitation of sewer collection system

Section H: Sludge Management

(a) SLUDGE MANAGEMENT PLAN (SMP)

SUBMITTED DATE 5/96 APPROVAL # _____ NOT SUBMITTED _____ N/A

	Yes	No	N/A	N/E
(b) SLUDGE MANAGEMENT PLAN CURRENT	<u>X</u>	___	___	___
(c) SLUDGE ADEQUATELY DISPOSED (METHOD: <u>Landfill</u>)	<u>X</u>	___	___	___
(d) IF SLUDGE IS INCINERATED, WHERE IS ASH DISPOSED OF _____	___	___	___	___
(e) IS SLUDGE DISPOSAL CONTRACTED (NAME: _____)	<u>X</u>	___	___	___
(f) HAS AMOUNT OF SLUDGE GENERATED CHANGED SIGNIFICANTLY SINCE LAST INSPECTION	___	<u>X</u>	___	___
(g) ADEQUATE SLUDGE STORAGE PROVIDED AT PLANT	<u>X</u>	___	___	___
(h) LAND APPLICATION SITES MONITORED AND INSPECTED PER SMP	___	___	<u>X</u>	___
(i) RECORDS KEPT IN ACCORDANCE WITH STATE AND FEDERAL LAW	<u>X</u>	___	___	___
(j) ANY COMPLAINTS RECEIVED IN LAST YEAR REGARDING SLUDGE	___	<u>X</u>	___	___
(k) IS SLUDGE ADEQUATELY PROCESSED (DIGESTION, DEWATERING, PATHOGEN CONTROL)	<u>X</u>	___	___	___

COMMENTS/STATUS:

Section I: Self-Monitoring Program

Part 1. Flow measurement

	Yes	No	N/A	N/E
(a) PRIMARY FLOW MEASURING DEVICE PROPERLY OPERATED & MAINTAINED	<u>X</u>	___	___	___
TYPE OF DEVICE: <u>X</u> PARSHALL FLUME ___ ULTRASONIC & WEIR ___ WEIR ___ CALCULATED FROM INFLUENT ___ OTHER (Specify _____)				
(b) CALIBRATION FREQUENCY ADEQUATE (Date of last calibration <u>4/2010</u>)	<u>X</u>	___	___	___
(c) SECONDARY INSTRUMENTS (totalizers, recorders, etc.) PROPERLY OPERATED AND MAINTAINED	<u>X</u>	___	___	___
(d) FLOW MEASUREMENT EQUIPMENT ADEQUATE TO HANDLE EXPECTED RANGES OF FLOWS	<u>X</u>	___	___	___
(e) ACTUAL FLOW DISCHARGED IS MEASURED	<u>X</u>	___	___	___
(f) FLOW MEASURING EQUIPMENT INSPECTION FREQUENCY: <u>X</u> DAILY ___ WEEKLY ___ MONTHLY ___ OTHER				

COMMENTS/STATUS:

Part 2. Sampling

	Yes	No	N/A	N/E
(a) SAMPLING LOCATION(S) ARE AS SPECIFIED BY PERMIT	<u>X</u>	___	___	___
(b) PARAMETERS AND SAMPLING FREQUENCY AGREE WITH PERMIT	<u>X</u>	___	___	___
(c) PERMITTEE USES REQUIRED SAMPLING METHOD	<u>X</u>	___	___	___
(d) SAMPLE COLLECTION PROCEDURES ARE ADEQUATE	<u>X</u>	___	___	___
(i) SAMPLES REFRIGERATED DURING COMPOSITING	<u>X</u>	___	___	___
(ii) PROPER PRESERVATION TECHNIQUES USED	<u>X</u>	___	___	___
(iii) CONTAINERS AND SAMPLE HOLDING TIMES PRIOR TO ANALYSES CONFORM WITH 40 CFR 136.3	<u>X</u>	___	___	___
(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 and maintenance records)	<u>X</u>	___	___	___
(f) ADEQUATE RECORDS MAINTAINED OF SAMPLING DATE, TIME, EXACT LOCATION, ETC.	<u>X</u>	___	___	___

COMMENTS/STATUS:

Part 3. Laboratory

	Yes	No	N/A	N/E
GENERAL				
(a) EPA APPROVED ANALYTICAL TESTING PROCEDURES USED (40 CFR 136.3)	<u>X</u>	___	___	___
(b) IF ALTERNATE ANALYTICAL PROCEDURES ARE USED, PROPER APPROVAL HAS BEEN OBTAINED	___	___	<u>X</u>	___
(c) ANALYSES BEING PERFORMED MORE FREQUENTLY THAN REQUIRED BY PERMIT	___	<u>X</u>	___	___
(d) IF (c) IS YES, ARE RESULTS REPORTED IN PERMITTEE'S SELF-MONITORING REPORT	___	___	<u>X</u>	___
(e) COMMERCIAL LABORATORY USED	<u>X</u>	___	___	___
(1) PARAMETERS ANALYZED BY COMMERCIAL LAB <u>oil & grease, Nitrates & Nitrite, P, metals, CN & Hex-Cr</u>				
(2) LAB NAME: <u>Ginosko</u>				
QUALITY CONTROL/QUALITY ASSURANCE				
(f) QUALITY ASSURANCE MANUAL PROVIDED AND MAINTAINED	<u>X</u>	___	___	___
(g) SATISFACTORY CALIBRATION AND MAINTENANCE OF INSTRUMENTS AND EQUIPMENT	<u>X</u>	___	___	___
(h) ADEQUATE RECORDS MAINTAINED	<u>X</u>	___	___	___
(i) RESULTS OF LATEST USEPA QUALITY ASSURANCE PERFORMANCE SAMPLING PROGRAM DATE : <u>2010</u> <u>X</u> SATISFACTORY <u>___</u> MARGINAL <u>___</u> UNSATISFACTORY				

COMMENTS/STATUS:

(i) All test parameters were rated acceptable

Section J: Effluent/Receiving Water Observations

OUTFALL NO.	OIL SHEEN	GREASE	TURBIDITY	VISIBLE FOAM	VISIBLE FLOAT SOLIDS	COLOR	OTHER
001	--	--	--	--	--	Clear	

COMMENTS/STATUS:

Section K: Multimedia Observations

	Yes	No	N/A	N/E
(a) ARE THERE INDICATIONS OF SLOPPY HOUSEKEEPING OR POOR MAINTENANCE IN WORK AND STORAGE AREAS OR LABORATORIES	___	<u>X</u>	___	___
(b) DO YOU NOTICE STAINING OR DISCOLORATION OF SOILS, PAVEMENT, OR FLOORS	___	<u>X</u>	___	___
(c) DO YOU NOTICE DISTRESSED (UNHEALTHY, DISCOLORED, DEAD) VEGETATION	___	<u>X</u>	___	___
(d) DO YOU SEE UNIDENTIFIED DARK SMOKE OR DUSTCLOUDS COMING FROM SOURCES OTHER THAN SMOKESTACKS	___	<u>X</u>	___	___
(e) DO YOU NOTICE ANY UNUSUAL ODORS OR STRONG CHEMICAL SMELLS	___	<u>X</u>	___	___
(f) DO YOU SEE ANY OPEN OR UNMARKED DRUMS, UNSECURED LIQUIDS, OR DAMAGED CONTAINMENT FACILITIES?	___	<u>X</u>	___	___

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:

F. GUIDE - VISUAL OBSERVATION - UNIT PROCESS

Form Approved
OMB No. 158-R0035

RATING CODES: S = Satisfactory; U = Unsatisfactory; M = Marginal; IN = In Operation; OUT = Out of Operation

CONDITION OR APPEARANCE		RATING	COMMENTS
General	Grounds	S	
	Buildings	S	
	Potable Water Supply Protection	S	
	Safety Features	S	Fenced
	Bypasses	OUT	Schedule to be eliminated by 4/2015
	Stormwater Overflows	-	
	Alternate Power Source	OUT	Standby generator - test weekly
Preliminary	Maintenance of Collection Systems	S	
	Pump Station	IN	1 unit of 50 hp pumps, 2 units are variable
	Ventilation	IN	
	Bar Screen	IN	
	Disposal of Screenings	S	Landfill
	Comminutor	OUT	Standby
	Grit Chamber	IN	1 aerated unit and ferrous chloride added
	Disposal of Grit	S	Landfill
Primary	Settling Tanks	-	
	Scum Removal	-	
	Sludge Removal	-	
	Effluent	-	
Sludge Disposal	Digesters (Aerobic)	IN	1 unit
	Temperature and pH	-	
	Gas Production	-	
	Heating Equipment	-	
	Sludge Pumps	IN	2 WAS & 2 RAS
	Drying Beds	IN	2 in use; 4 total
	Storage Pad	IN	Covered
	Disposal of Sludge	IN	Landfill
Other	Flow Meter and Recorder	IN	At effluent
	Records	S	
	Lab Controls	-	
	Chemical Treatment	IN	Ferrous chloride & polymer
Secondary-Tertiary <small>List items as</small>	Acration Tank	IN	2 units & brown
	Secondary Settling	IN	2 units
	Blowers	IN	3 units
	Effluent Pump	OUT	
Disinfection	Effluent	S	Clear discharge
	Disinfection System	OUT	UV
	Effective Dosage	-	
	Contact Time	-	
	Contact Tank	-	
	Dechlorination	-	

● General Lab Criteria ●

Criteria	Standard Methods Requirement	Acceptable?		Rating
Balance				
• Standard Weights	• Either NIST Class s or ASTM/ANSI Class 1 weights ^{1,2}	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	
• Calibration Frequency / Documentation	• Calibration verification required at least once each day the balance is used. ³	<input checked="" type="checkbox"/> Yes	<input 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: : Bench sheets were kept as log book

Criteria	Standard Methods Requirement	Acceptable?		Rating
Drying Oven (Suspended Solids)				
• Temperature Recordkeeping	• Temperature recorded with each use ⁴	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	
	• 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 checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	
• Other	• Thermometer temperature in 0.5° C increments ⁵	<input checked="" type="checkbox"/> Yes	<input 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: : Bench sheets were kept as log book

● General Lab Criteria ●

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	
	• Logbook maintained ²	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	
• 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: : Use 3 point calibration; Bench sheets were kept as log book

Criteria	Standard Methods Requirement	Acceptable?		Rating
Dissolved Oxygen Meter				
• 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 ²	<input checked="" type="checkbox"/> Yes	<input 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: Use Air as calibration method; Bench sheets were kept as log book

● General Lab Criteria ●

Criteria	Standard Methods Requirement		Rating
Incubator (CBOD/ E-Coli)			Acceptable?
• Temperature Recordkeeping	• Temperature checked / recorded twice daily for each shelf in use ¹ (E-Coli)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
	• Temperature checked / recorded daily ² (CBOD)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
	• Acceptable temperature range (CBOD) is 20° C ±1.0 ^{o 12}	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
	• Acceptable temperature range (E-Coli) is 35° C ±0.5 ^{o 22}	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
	• Logbook maintained ²	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
• Temperature Calibration / Documentation	• Thermometer calibrated annually with NIST traceable thermometer ^{1,2}	<input checked="" type="checkbox"/> Yes <input 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 ml), or mfg's multi-well tray	• E-coli Ultraviolet lamp (365 nm wave length, 6 W bulb) ²³	<input checked="" 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 0.5 Celsius). ¹	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	

Comments: : Bench sheets were kept as log book

Criteria	Standard Methods Requirement		Rating
Refrigerator			Acceptable?
• Temperature Recordkeeping	• Temperature Log (thermometer reads to 0.5 Celsius). ⁵	<input checked="" type="checkbox"/> Yes <input 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:

General Lab Criteria

Criteria	Standard Methods Requirement	Acceptable?		Rating
Chlorine Meter				
• Calibration Frequency / Documentation	• pH / millivolt meter read to 0.1 mV ¹⁵	<input 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 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 type="checkbox"/> Yes	<input type="checkbox"/> No	
	• Standards used for calibration not expired	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
• Slope Documentation / Acceptability	• Calibration curve (acceptable slope)	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
• Other	• Electrode free of deposits and foreign material	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
	• Log book being maintained. ²	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
	• Instrument manual available	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
Comments: : The WWTP uses UV				
Ammonia 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	
	• Log book being maintained ²	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	
• Slope acceptability	• Verify calibration slope is acceptable (per mfg. spec.).	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	
• Calibration Method	• 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 checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	
	• Standards used for calibration not expired	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	
• Other	• Electrode free of deposits and foreign material	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	
	• Teflon covered magnetic stirrer or equivalent for mixing ¹⁸	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	
	• Instrument manual available	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	
Comments: : 1 mg/l, 5mg/l and 10 mg/l are used as calibration standards; Bench sheets were kept as log book				

● General Lab Criteria ●

Criteria	Standard Methods Requirement	Acceptable?		Rating
Sample Collection/Handling				
• 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 checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	
	• SOP for cleaning of sampling equipment	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	
	• Logbook being maintained ²	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	

Comments: Bench sheets were kept as log book

Criteria	Standard Methods Requirement	Acceptable?		Rating
Desiccator:				
• General criteria	• Properly working seals.	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	
	• Desiccant fresh (blue color)	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	
• Documentation	• Log book being maintained ²	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	

Comments: Bench sheets were kept as log book

Criteria	Standard Methods Requirement	Acceptable?		Rating
Bench sheets				
• General criteria	• Date(s) ²	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	
	• 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:

General Lab Criteria

Criteria	Standard Methods Requirement	Acceptable?		Rating
Hot Water Bath (Fecal Coliform/E. Coli)				
• Temperature Recordkeeping	• Temperature Log (thermometer reads 0.2° C) ²¹	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	
	• Incubator temperature 44.5° C ± 0.2 ^{21/24}			
• 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 ²	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	
• 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				
• All apparatus utilized is adequately sterilized before use	• Sterilizing temperature 121° C ²⁵	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	
	• 10 to 30 minutes time based on material being sterilized ²⁶	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	
• 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	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	
• 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 ²	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	
• 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 type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	

Comments: Bench sheets were kept as log book

General Lab Criteria

Criteria	Standard Methods Requirement		Rating
Final Effluent Temperature Monitoring	Acceptable?		
• General Criteria	• Thermometer calibrated annually with NIST traceable thermometer ^{1,2}	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
	• Thermometer reads in increments of at least 0.1° C ⁵	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
	• Log book being maintained ²	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
Comments: Bench sheets were kept as log book			
Number of Criteria Rated:			<input checked="" type="checkbox"/> Acceptable <input type="checkbox"/> Marginal <input type="checkbox"/> Unacceptable
			Total Number of Areas Rated:
<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 they 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>			
<p>Consider recommending PAI Audit from DES when:</p> <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

- | | |
|----------------------------|------------------------------|
| 1 Method 9020-B, Item 3 | 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-A, 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 |

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

Get New Data

Permit No	Reporting Period	Station	Reporting Code	Parameter	Limit Type	Limit	Reported Value	Violation Date
2PD00039*ID	November 2009	001	00665	Phosphorus, Total (P)	7D Conc	1.5	2.874	11/15/2009
2PD00039*ID	December 2009	001	00665	Phosphorus, Total (P)	30D Conc	1.0	1.11382	12/1/2009
2PD00039*ID	December 2009	001	00665	Phosphorus, Total (P)	7D Conc	1.5	8.333	12/1/2009
2PD00039*ID	December 2009	001	00665	Phosphorus, Total (P)	7D Qty	11.4	41.0656	12/1/2009