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\*1PB0004520080225\*

MIAMI

LAURA WWTP

MILLER, JOSEPH

2008/02/25

Ted Strickland, Governor  
Lee Fisher, Lieutenant Governor  
Chris Korleski, Director

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Ted Strickland, Governor  
Lee Fisher, Lieutenant Governor  
Laura Powell, Acting Director

February 25, 2008

Mayor and Council  
Village of Laura  
P.O. Box 202  
Laura, OH 45337

**RE: NOTICE OF VIOLATION, Compliance Evaluation Investigation (CEI)  
Village of Laura Wastewater Treatment Plant  
Laura, Miami County**

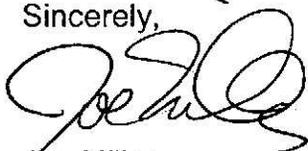
Mayor and Council:

On January 31, 2008, I conducted a Compliance Evaluation Investigation at the Village of Laura wastewater treatment works. This inspection was conducted to determine compliance with the NPDES discharge permit. Ted Wiant, wastewater operator, represented the Village.

Overall the wastewater facility was rated as marginal. Continued non-compliance was noted from previous inspections. While some items have been addressed, others have been largely ignored. Excessive infiltration and inflow continues to cause overflow conditions at the wastewater treatment plant as well as effluent limit violations. The unpermitted discharge from the water treatment has not been terminated. A detailed inspection report is attached.

Provide a response to the "Items Requiring a Response" section of the inspection report by **March 21, 2008**. Your response should include items completed or planned to be completed to address identified issues. If you have any questions, I can be reached at (937) 285-6109.

Sincerely,



Joe Miller  
Division of Surface Water  
Compliance and Enforcement

CC: Ted Wiant, Village of Laura  
Miami County Health Department





**Village of Laura Wastewater Treatment Plant  
Compliance Evaluation Investigation (CEI)  
January 31, 2008**

**Overview**

The Village of Laura wastewater treatment plant provides wastewater collection and treatment for approximately 500 residents. Properties have individual septic tanks which flow to a small diameter collection system. The collection system connects to a single influent lift station at the wastewater treatment plant. The wastewater treatment plant includes the following treatment units: bar screen, extended aeration, clarification, upflow media filters, slow surface sand filters, ultraviolet disinfection, post-aeration, sludge holding and sludge removal by "desludger". The treatment plant was installed in 1991. The ultraviolet disinfection system was added in May 2007.

**Infiltration and Inflow**

The following is from my January 2007 inspection report:

*"The treatment plant is designed to treat an average daily flow of 60,000 gallons per day (gpd). During dry weather the average flow rate is approximately 50,000 gpd. During storm events, flow to the wastewater plant exceeds the design capacity of the wastewater plant drastically. In January 2005, November 2005, and January 2006 the flows were estimated at 550,000 gpd, 810,000 gpd, and 3,600,000 gpd, respectively. Prior to the rehabilitation of the slow surface sand filters in March 2006, flow of this magnitude would wash out the activated sludge from the aeration and flow over the sand filters. Presently large storm flows wash out sludge to the sand filters. Ohio EPA's Compliance Assistance recommended the installation of a "storm mode" contact stabilization, which requires the installation of piping to be used to prevent "wash-out" during high flows. Currently, only one side of the aeration system is set up to be used in this manner."*

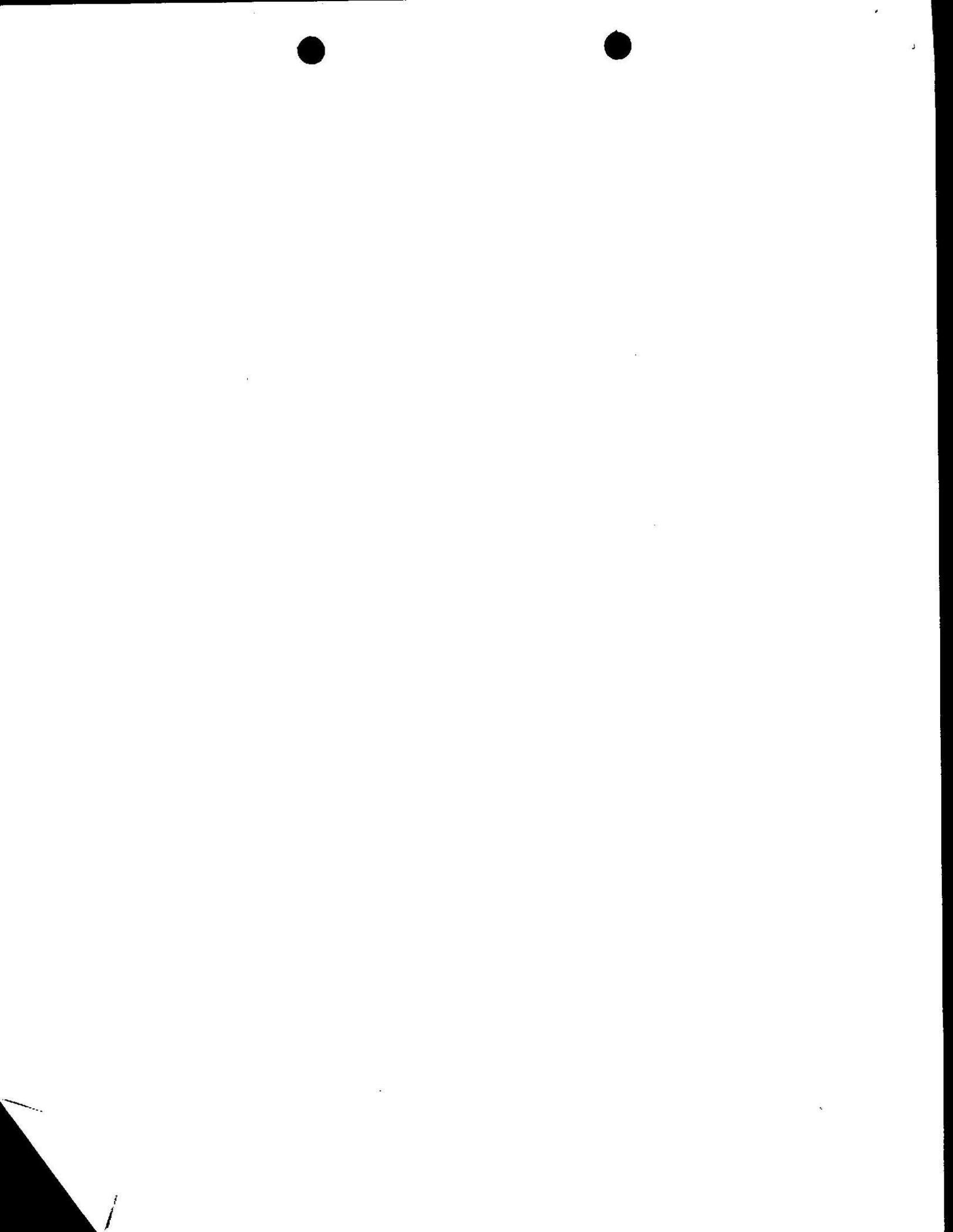
***2008 Update: Contact Stabilization mode cannot be utilized as the second pipe has still not been installed. Storm flows continue to overwhelm treatment plant. Treatment plant overflows occurred 15 March 2007, 16 March 2007, 24 March 2007, 25 March 2007, 9 January 2008, 10 January 2008, 11 January 2008, and 12 January 2008.***

Given the large volume of infiltration and inflow, multiple means for addressing this situation is necessary. Contact stabilization and continued aggressive removal of clean water inputs are two strategies that should be utilized. In addition, a means to equalize the volume of flow received during high flow events appears to be necessary. Installation of a equalization basin to lessen the impact of high storm flows and avoid illicit discharges from the treatment facility needs to be evaluated.

**Water Treatment Plant Discharge**

The following is from my January 2007 inspection report:

*"The backwash from the water treatment plant and softener recharge wastewater must be connected to the sanitary sewer. Currently wastewater from the water treatment plant is bypassing the red water filters and discharging to the surface of the ground towards Hog Run. This discharge is in violation of Ohio Revised Code 6111.04 and must be discontinued immediately."*



**2008 Update:** *The water plant filters have been replaced, but the discharge continues without an NPDES permit or pending application in violation of ORC 6111.04. Submit the enclosed NPDES application forms with a \$200 application fee. Until this discharge is eliminated, it is required to meet applicable effluent limits with appropriate monitoring.*

### Sludge Storage

Sludge storage continues to be an issue. Adequate storage is not available. Freezing has been an issue during cold weather.

### Effluent Violations

The following effluent limit violations occurred from January 2007 to December 2007:

Reporting Period	Parameter	Limit Type	Limit	Reported Value	Violation Date
March 2007	Dissolved Oxygen	1D Conc	5.0	2.42	3/23/2007
May 2007	CBOD 5 day	30D Conc	15.0	23.	5/1/2007
May 2007	CBOD 5 day	7D Conc	23.0	24.	5/1/2007
May 2007	CBOD 5 day	7D Conc	23.0	91.	5/15/2007
May 2007	CBOD 5 day	7D Qty	5.2	10.3330	5/15/2007

The following effluent frequency violations occurred from January 2007 to December 2007:

Reporting Period	Parameter	Sample Frequency	Expected	Reported	Violation Date
August 2007	Phosphorus, Total (P)	1/2Weeks	1	0	08/15/2007
September 2007	Phosphorus, Total (P)	1/2Weeks	1	0	09/15/2007
October 2007	Phosphorus, Total (P)	1/2Weeks	1	0	10/15/2007
November 2007	Phosphorus, Total (P)	1/2Weeks	1	0	11/15/2007
November 2007	pH	1/Week	1	0	11/22/2007

### Quality Assurance/Quality Control

The following is from my January 2007 inspection report:

*"As discussed the past inspection reports of January 21, 2004 and March 21, 2005, a Quality Assurance/Quality Control (QA/QC) Manual needs to be provided and updated for the Village of Laura wastewater laboratory. This manual needs to include all lab testing methods step-by-step as well as lab equipment testing methods. In a letter from Mayor Edward Guess dated February 18, 2004, this manual was to be provided "as soon as possible." "*

**2008 Update:** *This item still not completed.*

### Operations and Maintenance Manual

The following is from my January 2007 inspection report:

*The Operations and Maintenance (O&M) manual for the Village of Laura WWTP was last updated at the time of construction of the plant. The O&M manual needs to be updated to reflect changes to the treatment plant. Ted Wiant has started to put together a list of routine maintenance items which is an important component of any O&M manual.*

**2008 Update:** *This item still not completed.*

### Overall assessment



The Village has not been responsive in correcting the above outstanding issues. While replacement of the sand filter media and disinfection unit corrected other deficiencies, the above items have not been adequately addressed. Please note that Ohio EPA has provided some leniency in dealing with these issues, in order to bring this facility into compliance. Non-responsiveness in dealing with outstanding issues is not conducive to the use of enforcement discretion. Should the Village not aggressively deal with the below items, Ohio EPA will have no choice but to forward this case to our legal department for enforcement action, which may include fines and penalties.

### **Items Requiring a Response**

1. **Water Treatment Plant Discharge** – Submit NPDES application (enclosed) with fee. Eliminate discharge immediately. (OUTSTANDING ITEM)
2. **Equalization** - Efforts to address I/I are not sufficient to prevent overflows during storm events. Tom Yount, contract operator, and compliance assistance staff believe that a means to equalize this flow is necessary. Provide a plan for addressing equalization of storm flow.
3. **Infiltration and Inflow (I/I)** – Provide an update detailing work done to meet the requirements of the Schedule of Compliance to eliminate I/I in the collection system. Provide a plan and schedule for additional removal to address this requirement. (OUTSTANDING ITEM)
4. **Contact Stabilization** – Complete the installation of piping to provide contact stabilization “storm mode”. Provide the date of completion in your response. (OUTSTANDING ITEM)
5. **Effluent Violations** – Provide an explanation for effluent limit violations listed above and the plan for preventing these violations in the future.
6. **Sludge Processing, Storage, and Disposal** – An evaluation of sludge alternatives needs to be completed. Provide a plan for addressing sludge concerns. (OUTSTANDING ITEM)
7. **QA/QC** – Provide a QA/QC plan for the laboratory to ensure lab results are accurate, repeatable, and defensible. (OUTSTANDING ITEM)
8. **O&M Manual** – Update the O&M manual to include changes made to the treatment plant and to include a schedule for routine and preventative maintenance. (OUTSTANDING ITEM)
9. **Quarterly Reports** – Submit quarterly reports to Ohio EPA Southwest Office detailing improvements to reduce I & I. (OUTSTANDING ITEM)
10. **Sanitary sewer connection** – All residences and businesses within the Village of Laura Corporation Limit need to be connected to sanitary sewers. Notify the property owner(s) in Laura Circle of this requirement and provide a schedule for connection.
11. **Plastic Media Replacement** – The upflow filter media needs to be replaced. Provide a schedule for replacement.
12. **Log Book and Operator of Record requirements** – The Operator of Record must maintain a log book with the described information on-site as per Ohio Administrative Code 3745-7-09 (enclosed). Complete and submit the enclosed Operator of Record Notification form.



Permit #: 1PB00045\*CD  
 NPDES #: OH0112704



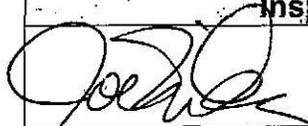
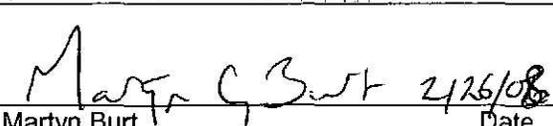
State of Ohio Environmental Protection Agency  
 Southwest District Office

NPDES Compliance Inspection Report

Section A: National Data System Coding					
Permit #	NPDES#	Month/Day/Year	Inspection Type	Inspector	Facility Type
1PB00045*CD	OH0112704	1/31/2008	C	S	1

Section B: Facility Data		
Name and Location of Facility Inspected	Entry Time	Permit Effective Date
Village of Laura WWTP 505 South Main Street Laura, Ohio 45337	1:00PM	7/1/2007
	Exit Time	Permit Expiration Date
	3:30PM	6/30/2012
Name(s) and Title(s) of On-Site Representatives	Phone Number(s)	
Ted Wiant, Operator	937-947-1050	
Name, Address and Title of Responsible Official	Phone Number	
Mayor and Council Village of Laura P.O. Box 202 Laura, OH 45337	937-947-1050	

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

Section D: Summary of Findings (Attach additional sheets if necessary)	
See attached.	
Inspector	Reviewer
 Joe Miller Division of Surface Water Southwest District Office	 Martyn Burt Compliance & Enforcement Supervisor Division of Surface Water Southwest District Office
2/25/08 Date	2/26/08 Date



Permit # : 1PB00045\*CD  
NPDES #: OH0112704

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 ..... N
- (b) Correct name and location of receiving waters ..... Y
- (c) Product(s) and production rates conform with permit application (Industries)..... N/A
- (d) Flows and loadings conform with NPDES permit..... N
- (e) Treatment processes are as described in permit application... Y
- (f) New treatment process(es) added since last inspection..... Y
- (g) Notification given to State of new, different or increased discharges..... N/A
- (h) All discharges are permitted..... N
- (i) Number and location of discharge points are as described in permit..... Y

**Comments/Status:**

Facility address should be 505 S. Main Street. Flows during storm events exceed design capacity of wastewater treatment plant. Outfall sign needs to be added.

Water treatment plant discharge not permitted.

**Section E: Permit Verification**

- (a) Any significant violations since the last inspection..... Y
- (b) Permittee is taking actions to resolve violations..... Y
- (c) Permittee has a compliance schedule..... Y
- (d) Compliance schedule contained in **NPDES PERMIT**
- (e) Permittee is meeting compliance schedule..... Y

**Comments/Status:**

NPDES permit includes a Schedule of Compliance for removal of Infiltration and Inflow (I&I). The Village has completed some of the requirements, however much work remains to be completed.

CBOD violations in May 2007.



**Section G: Operation & Maintenance**

**Treatment Works:**

Treatment facility properly operated and maintained

- (a) Standby power available.....generator  or dual feed ..... Y
- (b) Adequate alarm system available for power or equipment failures.. Y
- (c) All treatment units in service other than backup units..... Y
- (d) Operator holds unexpired license of class required by permit..... Y  
 Class: I (*Ted Wiant is currently attending Class I courses; Tom Yount, Class III Wastewater Operator currently signing reports.*)
- (f) Routine and preventative maintenance schedule/performed on time..... Y
- (g) Any major equipment breakdown since last inspection..... N
- (h) Operation and maintenance manual provided and maintained..... N\*
- (i) Any plant bypasses since last inspection..... N
- (j) Regulatory agency notified of bypasses..... N/A  
 On MORs  and/or Spill Hotline (1-800-282-9378)
- (k) Any hydraulic and/or organic overloads since last inspection..... Y

**Collection System:**

- (a) Percent combined system: 0%
- (b) Any collection system overflows since last inspection..... N
- (c) Regulatory agency notified of overflows (SSOs)..... N/A
- (d) CSO O&M plan provided and implemented..... N
- (e) CSOs monitored and reported in accordance with permit..... N/A
- (f) Portable pumps used to relieve system..... N/A
- (g) Lift station alarms provided and maintained..... Y
- (h) Are lift stations equipped with permanent standby power or equivalent..... Y
- (i) Is there an inflow/infiltration problem (separate sewer system), or were there any major repairs to collection system since last inspection..... Y
- (j) Any complaints received since last inspection of basement flooding N
- (k) Are any portions of the sewer system at or near capacity..... Y

**Comments/Status:**

O&M Manual needs to be updated, last updated in 1992. Compile and edit changes to treatment works. Hydraulic overloads occur during storm events. I & I reduction not sufficient to handle system flow, equalization recommended by advisors.



**Section H: Sludge Management**

- (a) Sludge management plan (SMP)  
Submitted date: 10/93      Approval #: 05301      Not submitted       N/A
- (b) Sludge management plan current..... N
- (c) Sludge adequately disposed..... N/E  
(Method:Land application)
- (d) If sludge is incinerated, where is ash disposed of      N/A
- (e) Is sludge disposal contracted..... Y  
(Name: Sludge hauled to Fairborn WWTP by Bob's Excavating)
- (f) Has amount of sludge generated changed significantly since  
last inspection..... Y
- (g) Adequate sludge storage provided at plant.....N
- (h) Land application sites monitored and inspected per SMP..... N/A
- (i) Records kept in accordance with State and Federal law..... Y
- (j) Any complaints received in last year regarding sludge..... N
- (k) Is sludge adequately processed (digestion, pathogen control)..... Y

**Comments/Status:**

"Desludger" from Geyser Pump Co. being used for processing. This involves filter bags with polymer addition. Sludge is hauled to Fairborn WWTP or Miami County Transfer Station. Adequate storage is unavailable. Grate added for storage of sludge bags, railing is needed for operator safety.

**Section I: Self-Monitoring Program**

**Flow Measurement:**

- (a) Primary flow measuring device operated and maintained..... Y  
Type of device: Ultrasonic & Parshall flume      Ultrasonic & Weir X      Weir   
Calculated from influent       Other  (Specify:Pressure transducer)
- (b) Calibration frequency adequate ..... Y  
(Date of last calibration: February 2008)
- (c) Secondary instruments operated and maintained.....Y
- (d) Flow measurement equipment adequate to handle full range  
of flows..... Y
- (e) Actual flow discharged is measured..... Y
- (f) Flow measuring equipment inspection frequency  
Daily    Weekly    monthly    other

**Comments/Status:**

Valve needed in UV disinfection chamber for any accumulated water.



**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
- (d) Sample collection procedures are adequate..... Y
  - (i) Samples refrigerated during compositing..... Y
  - (ii) Proper preservation techniques used..... Y
  - (iii) Containers and sample holding times prior to analysis conform with 40 CFR 136.3..... Y
- (e) 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
- (f) Adequate records maintained of sampling date, time, location, etc.. Y

**Laboratory:**

*General*

- (a) EPA approved analytical testing procedures used (40 CFR 136.3).. Y
  - (b) If alternate analytical procedures are used, proper approval has been obtained..... N/A
  - (c) Analyses being performed more frequently than required by permit. N
  - (d) If (c) is yes, are results in permittee's self-monitoring report..... N/A
  - (e) Commercial laboratory used..... Y
- Parameters analyzed by commercial lab: metals, CBOD5, TSS, Fecal

**Coliform**

Lab name: Belmonte Laboratories

*Quality Control/Quality Assurance*

- (f) Quality assurance manual provided and maintained..... N
- (g) Satisfactory calibration and maintenance of instruments/equipment. Y
- (h) Adequate records maintained..... N
- (i) Results of latest USEPA quality assurance performance sampling program:  Satisfactory  Marginal  Unsatisfactory

Date:

**Comments/Status:**

A QA/QC manual needs to be provided and maintained. A manual has not been provided.



**Section J: Effluent/Receiving Water Observations**

Outfall Number	Oil sheen	Grease	Turbidity	Visible Foam	Visible Floating Solids	Color	Other
001	no	no	no	no	no	no	

**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

