



**Environmental
Protection Agency**

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



1PB0003120090731

DARKE

UNION CITY STP

MILLER, JOSEPH

2009/07/31



State of Ohio Environmental Protection Agency

Southwest District Office

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

July 31, 2009

Mayor and Council
Village of Union City
401 East Elm Street
Union City, OH 45390

**RE: Compliance Evaluation Investigation (CEI)
Village of Union City Treatment Plant
1PB00031*DD/OH0022454, Union City, Darke County**

Mayor and Council:

On July 7, 2009, Kacey Adams, Danielle Liebig, and I conducted a Compliance Evaluation Investigation at the Village of Union City wastewater treatment works. This inspection was conducted to determine compliance with the NPDES discharge permit. Rick Snyder, Operator of Record, and John Dull, Wastewater Superintendent, represented the Village during this inspection.

Overall the wastewater facility was rated as "Satisfactory". A detailed inspection report is attached.

No response to this inspection is required at this time. If you have any questions, I can be reached at (937) 285-6109.

Sincerely,

Joe Miller
Division of Surface Water

Enclosures

CC: Rick Snyder, Operator of Record
Darke County Health Department



**Village of Union City Treatment Facility
Compliance Evaluation Investigation (CEI)
July 7, 2009**

Overview

The Village of Union City wastewater treatment facility is designed for an average flow of 400,000 gallons per day. Treatment is provided by wastewater lagoons (1 aerated, 2 facultative/storage). Wastewater from the storage lagoons is irrigated using fixed sprayers on about 115 acres in 15 zones on surrounding farm fields. The treatment components preceding the lagoons are: influent pumping, bar screen, comminution, and grit removal.

Excessive infiltration and inflow (I/I) in the collection system during storm events has resulted in sanitary sewer overflows. The Village has proposed to address I/I by five projects over fifteen years. The new superintendent, John Dull, and operator of record, Rick Snyder, believe that overflow occurrences will be decreased due to repairs made to the influent pumping capabilities of the treatment facility. If these predictions are correct, this timeline for I/I projects seems reasonable. If frequent overflows continue, however, completion of these projects needs to be expedited to prevent discharge of untreated wastewater.

Items needing attention

The influent flow meter was inoperable at the time of inspection. In order to monitor flows and to determine improvements from I/I removal, a functional influent flow meter is important.

Problems with the screening and grit removal components of the treatment system were reported. Measures to correct problems with these components should be undertaken.

The upstream sample location is currently designated in a catch basin on a tile that leads to the tile that collects any flow to underdrains in the land application area. This catch basin is typically stagnant and non-flowing. There is no open stream prior to the exit of the tile carrying any underdrain collected wastewater. During conditions when there is no flow in the upstream catch basin, use the reporting code "AH" with the description "no flow".

Operator log requirements need to be completed as per *OAC 3745-7*. These requirements can be found at http://www.epa.state.oh.us/ddagw/Documents/rules/Final/3745-07-09_effective_12-21-06.pdf.

Repairs to a portion of the damaged lagoon levee is planned to be repaired during August 2009.

Permit #: 1PB00031*DD
 NPDES #: OH0022454



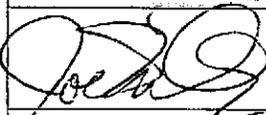
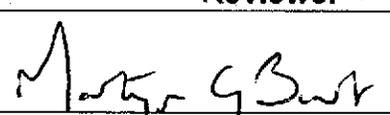
State of Ohio Environmental Protection Agency
 Southwest District Office

NPDES Compliance Inspection Report

Section A: National Data System Coding					
Permit #	NPDES#	Month/Day/Year	Inspection Type	Inspector	Facility Type
1PB00031*DD	OH0022454	7/7/09	C	S	1

Section B: Facility Data		
Name and Location of Facility Inspected	Entry Time	Permit Effective Date
Village of Union City WWTP Beamsville-Union City Road Union City, OH 45390	9:40 AM	3/1/2005
	Exit Time	Permit Expiration Date
	12:05 PM	2/28/2010
Name(s) and Title(s) of On-Site Representatives	Phone Number(s)	
John Dull, Superintendent Rick Snyder, Operator of Record	937-968-4305	
Name, Address and Title of Responsible Official	Phone Number	
Mayor James T. Nelson Village of Union City 419 East Elm Street Union City, OH 45390	937-968-6664	

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

Section D: Summary of Findings (Attach additional sheets if necessary)	
<p>Collection system was rated as marginal due to the volume of infiltration and inflow exceeding the WWTP capacity during wet weather.</p> <p>Operator log book needs to be initiated as per OAC 3745-7.</p> <p>Facility will be designated as a Class II facility as per OAC 3745-7-04 in the next permit.</p>	
Inspector	Reviewer
 Joseph Miller Division of Surface Water Southwest District Office Date: 7/31/09	 Martyn Burt Compliance & Enforcement Supervisor Division of Surface Water Southwest District Office Date: 7/31/09

Sections E thru K: Complete on all inspections as appropriate
Y – Yes, N – No, N/A – Not Applicable, N/E – Not Evaluated

Section E: Permit Verification

Inspection observations verify the permit

- (a) Correct name and mailing address of permittee Y
- (b) 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..... N
- (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:

Sanitary sewer overflows occurrences and water in basement incidences reported. All sanitary sewer overflows are prohibited except under emergency conditions where the overflow occurs in full compliance with all of the provisions of 40 CFR 122.41(m) and Part III Item 11 of the NPDES permit.

Section F: Compliance Schedule

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

Comments/Status:

Compliance schedule for delineation of land irrigation area with appropriate setbacks has been completed.
Sanitary sewer overflows reported on Bon Bon Drive (MH#E10) and South Division (MH#H1) since last inspection.
In order to affect excessive sanitary overflows, an infiltration and inflow reduction program has been proposed to address the biggest areas of concern. The proposed reduction program is budgeted to start in 2011 and to continue for 15 years.

Section G: Operation & Maintenance

Treatment Works:

Treatment facility properly operated and maintained

- (a) Standby power available.....generator X 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) Wastewater Treatment Works classification (OAC 3745-7)..... II
- (e) Operator of Record holds unexpired license of class required by permit..... Y
 Class: I (currently) Class II, next NPDES permit
- (f) Copy of certificate of Operator of Record displayed on-site..... Y
- (g) Minimum operator staffing requirements fulfilled (OAC 3745-7)... Y
- (h) Routine and preventative maintenance scheduled/performed... Y
- (i) Any major equipment breakdown since last inspection..... N
- (j) Operation and maintenance manual provided and maintained.... Y
- (k) Any plant bypasses since last inspection..... Y
- (l) Regulatory agency notified of bypasses..... Y
 On eDMRs and/or Spill Hotline (1-800-282-9378)
- (m) Any hydraulic and/or organic overloads since last inspection..... Y

Comments/Status:

New superintendent Dull has switched to using 3 pumps for land irrigation versus the 2 pumps previously used. This change results in increased flows to irrigation (approximately 1.1 MGD during application periods April and May 2009 versus 0.392 MGD from May 2008 to November 2008), however, more areas are being applied concurrently, typically 4 zones.

Rick Snyder is the Operator of Record until John Dull can obtain certification. Rick meets the minimum time requirements of 3 times a week for 1.5 hours a day for a Class I facility.

Record Keeping:

- (a) Log book provided..... N
- (b) Format of log book (i.e. computer log, hard bound book) N

Need to establish log book record keeping program. Program specifics forwarded separately.
- (c) Log book(s) kept onsite (in an area protected from weather)..... N
- (d) Log book contains the following: N
 - I. Identification of treatment works.....
 - II. Date/times of arrival/departure for Operator of Record and

- any other operator required by OAC 3745-7..... N
- III. Daily record of operation and maintenance activities
 (including preventative maintenance, repairs and request
 for repairs)..... N
- IV. Laboratory results (unless documented on bench sheets)... N
- V. Identification of person making log entries..... N
- (d) Has the operator of record submitted written notification to the
 permittee, Ohio EPA and (if applicable) any local environmental
 agencies when a collection system overflow, treatment plant
 bypass or effluent limit violation has occurred..... Y

Collection System:

- (a) Percent combined system: 0%
- (b) Any collection system overflows since last inspection..... Y
 (CSO and/or SSO X)
- (c) Regulatory agency notified of overflows (SSOs)..... Y
- (d) CSO O&M plan provided and implemented..... N/A
- (e) CSOs monitored and reported in accordance with permit..... N/A
- (f) Portable pumps used to relieve system..... Y
- (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 Y
- (k) Are any portions of the sewer system at or near capacity..... Y

Comments/Status:

Sanitary sewer overflows at South Division Street and Bon Bon Drive. An overflow pipe from MH#E7 on first street has been cemented permanently shut. Some smoke testing and camera-work has been done on sewers. The collection system was cleaned and televised in 2002.

John Dull and Rick Snyder believe that by bringing the full complement of influent pumps online (one of three had been out of service), that the likelihood of sanitary sewer overflows has been seriously decreased. During a recent 2.2 inch rainfall, there were no overflows from the manholes on South Division or Bon Bon.

In response to my 2008 inspection, Key Engineering and the Village proposed a 15 year infiltration and inflow rehabilitation program. If overflows continue at the frequency observed in 2008, this timeline is too lengthy and needs to be expedited. If repairs to the influent pumping prevent overflow frequency as predicted, the proposed I/I schedule is adequate.

Section H: Sludge Management

- (a) Sludge management plan (SMP)
Submitted date: Approval #: Not submitted N/A
- (b) Sludge management plan current..... N
(c) Sludge adequately disposed..... N/A
(Method: never removed)
(d) If sludge is incinerated, where is ash disposed of
(e) Is sludge disposal contracted..... N
(Name:)
(f) Has amount of sludge generated changed significantly since
last inspection..... NA
(g) Adequate sludge storage provided at plant..... NA
(h) Land application sites monitored and inspected per SMP..... NA
(i) Records kept in accordance with State and Federal law..... NA
(j) Any complaints received in last year regarding sludge..... NA
(k) Is sludge adequately processed (digestion, pathogen control)..... NA

Comments/Status:

Sludge has never been removed from lagoons. Average depth in lagoons is 18 inches. Village considering use of microorganisms to reduce sludge volume.

Section I: Self-Monitoring Program

Flow Measurement:

- (a) Primary flow measuring device operated and maintained..... Y
Type of device: Ultrasonic & Parshall flume Ultrasonic & Weir Weir
Calculated from influent Other (Specify:)
- (b) Calibration frequency adequate Y
(Date of last calibration: 1/year)
(c) Secondary instruments operated and maintained..... N
(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: Ultrasonic flow meter on influent not working, orifice flow meter on discharge to land application. The raw pit is nearly half full during some storm events.

In order to monitor changes in flow and the effectiveness of I/I reduction, it is important to have an operational influent flow meter.

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. Y
- (d) If (c) is yes, are results in permittee's self-monitoring report..... N
- (e) Commercial laboratory used..... Y

Parameters analyzed by commercial lab: fecal coliform, O&G, NH3, CBOD5, TSS, metals

Lab name: MASI Laboratories

Quality Control/Quality Assurance

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

Date:

Comments/Status:

Currently updating QA/QC manual. The pH meter should be calibrated daily. Follow required calibration frequency for testing equipment.