



Environmental
Protection Agency

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

FILE COPY

January 31, 2011

Union County Commissioners
County Office Building
233 W. Sixth Street
Marysville, OH 43040

**Re: NPDES / Public
Union County WWTPs
Compliance Inspections
Union County**

Dear Commissioners:

On November 9, 2010, Reconnaissance Inspections were conducted at the Tawa Estates and Parrott Village wastewater treatment plants (WWTP). Mill Creek Estates and Crottinger Estates WWTP were also inspected as all four plants are in the process of having their permits renewed. Present for the inspections were Mary Sampsel, Jeff Stauch, Bill Narducci, and Mike Galloway representing the Union County Commissioners, and Mike Sapp, Kelly Thiel, and myself of the Ohio EPA, Central District Office, Division of Surface Water. The purpose of the inspection was to evaluate compliance with the terms and conditions of the National Pollutant Discharge Elimination System (NPDES) permit.

At the time of the inspections, the overall operation and maintenance of the four facilities has improved since the last inspection; most notably, the tertiary sand filters, alarm systems and a decrease in the number of permit violations. There is room for improvement as the standard wet weather operating procedure for the Mill Creek Estates and Parrott Village WWTP is still unsatisfactory as the plant operator continues to temporarily shut off the air to the aerations tanks in order to help maintain solids inventories within the plant. This practice has been successful in minimizing the period of non-compliance following a rain event; however, it should not be considered a permanent solution to the inflow and infiltration problem in the collection system. As discussed during the inspections with Ms. Sampsel, I am recommending a compliance schedule for inflow and infiltration work at the Mill Creek Estates facility.

One general concern is that the County intends to install remote controls for the aeration blowers that will be used during rain events to turn off the blowers. As mentioned in previous inspection reports, this action should not be considered a permanent operational practice. The County must continue to focus on indentifying and eliminating sources of inflow from the collection systems serving these plants.

Central District Office
50 West Town Street, Suite 700
P.O. Box 1049
Columbus, OH 43216-1049

614 | 728 3778
614 | 728 3898 (fax)
www.epa.ohio.gov

The Parrott Village WWTP also has been in significant non-compliance habitually for ammonia violations. Significant non-compliance is obtained in a variety of ways, but Parrott Village WWTP has had violations exceeding 40% of the permit level in two months out of a six month period. Facilities in significant non-compliance are put on a list which is reviewed by Ohio EPA and U.S. EPA. If the facility is unable to meet its permit limits and if Ohio EPA does not take enforcement action, U.S. EPA can choose to issue its own enforcement action. A facility must achieve compliance with the permit limits for three consecutive months to be taken off the list, but because Parrott Village is chronically on the list during the winter months, improvements must be made to remedy the situation. **Within 30 days, please provide an explanation for these violations as well as a description of tasks or corrective actions that will be undertaken to prevent future violations.**

Enclosed is a copy of the NPDES Reconnaissance Inspection Reports and attachments detailing the inspections that were conducted at the Tawa Estates, Parrott Village, Mill Creek Estates, and Crottinger Estates plants. The attached identifies deficiencies and recommendations to improve the plants. Action and response is required for the removal of a sandfilter bypass at Mill Creek Estates. Therefore I request a written followup within 30 days of receipt of this letter summarizing how and when the deficiencies will be fixed.

If you have any questions or comments concerning the enclosed inspection report, please contact me at (614) 728-3846.

Sincerely,



Cole Miller
Environmental Specialist
Field Operations Unit
Division of Surface Water
Central District Office

Enclosures

c: Lloyd Hagerty w/ enclosures
Mary Sampsel w/ enclosures

SECTION A: NATIONAL DATA SYSTEM CODING					
Permit #	NPDES#	Month/Day/Year	Inspection Type	Inspector	Facility Type
4PG00003*FD	OH0039128	11/9/10	R	M	1

SECTION B: FACILITY DATA		
Name and Location of Facility Inspected	Entry Time	Permit Effective Date
Crottinger Estates 9089 U.S. Route 62 Arnold, Ohio	9:00 am	September 1, 2005
	Exit Time	Permit Expiration Date
	9:30 am	August 31, 2010
Name(s) and Title(s) of On-Site Representatives		
Mary Sampsel Assistant County Engineer (937) 645-3132	Mike Galloway Plant Operator (937) 645-3018	
Name and Title of Responsible Official		
Union County Commissioners 233 W. Sixth St. Marysville, OH 43040 (937) 645-3018		

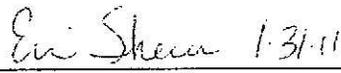
SECTION C: AREAS EVALUATED DURING INSPECTION		
Key: S = Satisfactory, M = Marginal, U = Unsatisfactory, N = Not Evaluated		
S	Permit	
S	Records/Reports	
S	Operations & Maintenance	
S	Facility Site Review	
M	Collection System	I&I problem.
S	Flow Measurement	
N	Laboratory	
S	Effluent/Receiving Waters	No effluent violations since May 2009
N	Sludge Storage/Disposal	
N	Pretreatment	
N	Compliance Schedule	
S	Self-Monitoring Program	

Signatures	
 Cole Miller, Inspector Compliance & Enforcement Division of Surface Water Central District Office	 Erin Sherer, Reviewer Compliance & Enforcement Supervisor Division of Surface Water Central District Office

SECTION A: NATIONAL DATA SYSTEM CODING					
Permit #	NPDES#	Month/Day/Year	Inspection Type	Inspector	Facility Type
4PG00003*FD	OH0039128	11/9/10	R	M	1

SECTION B: FACILITY DATA		
Name and Location of Facility Inspected	Entry Time	Permit Effective Date
Crottinger Estates 9089 U.S. Route 62 Arnold, Ohio	9:00 am	September 1, 2005
	Exit Time	Permit Expiration Date
	9:30 am	August 31, 2010
Name(s) and Title(s) of On-Site Representatives		
Mary Sampsel Assistant County Engineer (937) 645-3132	Mike Galloway Plant Operator (937) 645-3018	
Name and Title of Responsible Official		
Union County Commissioners 233 W. Sixth St. Marysville, OH 43040 (937) 645-3018		

SECTION C: AREAS EVALUATED DURING INSPECTION		
Key: S = Satisfactory, M = Marginal, U = Unsatisfactory, N = Not Evaluated		
S	Permit	
S	Records/Reports	
S	Operations & Maintenance	
S	Facility Site Review	
M	Collection System	I&I problem.
S	Flow Measurement	
N	Laboratory	
S	Effluent/Receiving Waters	No effluent violations since May 2009
N	Sludge Storage/Disposal	
N	Pretreatment	
N	Compliance Schedule	
S	Self-Monitoring Program	

Signatures:	
 Cole Miller, Inspector Compliance & Enforcement Division of Surface Water Central District Office	 Erin Sherer, Reviewer Compliance & Enforcement Supervisor Division of Surface Water Central District Office

Summary of Findings and Comments Crottinger Estates WWTP

1. At the time of the inspection, the plant appeared to be operating efficiently.
2. The attached table contains a list of NPDES permit violations for the time period between November 2004 and September 2010. The other table summarizes flow since November 2004. There appears to be some progress in eliminating I&I, but the peak flow rates are still six to seven times the design flow rate. The average flowrate is also above the design flow rate. It was indicated that cut laterals were recently repaired but it is likely that more I&I work is necessary.

**NPDES Permit Violations for Crottinger Estates WWTP
November 2004 – September 2010**

Reporting Period	Parameter	Units	Limit Type	Limit	Reported Value
November 2004	Total Suspended Solids	mg/L	30D Conc	12	17.
November 2004	Total Suspended Solids	mg/L	30D Qty	0.32	.52654
November 2004	Total Suspended Solids	mg/L	7D Qty	0.48	.52654
November 2004	Nitrogen, Ammonia (NH3)	mg/L	30D Conc	3.0	5.3
November 2004	Nitrogen, Ammonia (NH3)	mg/L	7D Conc	4.5	5.3
November 2004	Nitrogen, Ammonia (NH3)	mg/L	30D Qty	0.080	.16416
November 2004	Nitrogen, Ammonia (NH3)	mg/L	7D Qty	0.12	.16416
December 2004	Total Suspended Solids	mg/L	30D Qty	0.32	.6691
December 2004	Total Suspended Solids	mg/L	7D Qty	0.48	.6691
December 2004	CBOD 5 day	mg/L	30D Qty	0.27	.44607
December 2004	CBOD 5 day	mg/L	7D Qty	0.40	.44607
January 2005	Total Suspended Solids	mg/L	30D Conc	12	14.
January 2005	Nitrogen, Ammonia (NH3)	mg/L	30D Conc	3.0	5.
January 2005	Nitrogen, Ammonia (NH3)	mg/L	30D Qty	0.080	.09871
January 2005	Nitrogen, Ammonia (NH3)	mg/L	7D Conc	4.5	5.
March 2005	Total Suspended Solids	mg/L	30D Qty	0.32	.75403
April 2005	Nitrogen, Ammonia (NH3)	mg/L	30D Qty	0.080	.10163
April 2005	CBOD 5 day	mg/L	30D Qty	0.27	.50813
April 2005	CBOD 5 day	mg/L	7D Qty	0.40	.50813
August 2005	Chlorine, Total Residu	mg/L	1D Conc	0.019	7.5
August 2005	Chlorine, Total Residu	mg/L	1D Conc	0.019	7.3
June 2006	Dissolved Oxygen	mg/L	1D Conc	6.0	5.4
October 2006	Dissolved Oxygen	mg/L	1D Conc	6.0	5.2
December 2006	Dissolved Oxygen	mg/L	1D Conc	6.0	5.5
December 2006	Dissolved Oxygen	mg/L	1D Conc	6.0	5.1
February 2007	Nitrogen, Ammonia (NH3)	mg/L	30D Qty	0.080	.09077
April 2007	CBOD 5 day	mg/L	30D Qty	0.27	.34814
July 2007	Dissolved Oxygen	mg/L	1D Conc	6.0	5.2
January 2008	Nitrogen, Ammonia (NH3)	mg/L	30D Conc	3.0	6.025
January 2008	Nitrogen, Ammonia (NH3)	mg/L	7D Conc	4.5	8.7
January 2008	Nitrogen, Ammonia (NH3)	mg/L	30D Qty	0.080	.28689
January 2008	Nitrogen, Ammonia (NH3)	mg/L	7D Qty	0.12	.16435
January 2008	Nitrogen, Ammonia (NH3)	mg/L	7D Conc	4.5	7.7
January 2008	Nitrogen, Ammonia (NH3)	mg/L	7D Qty	0.12	.86664
January 2008	Nitrogen, Ammonia (NH3)	mg/L	7D Conc	4.5	7.7
March 2008	Dissolved Oxygen	mg/L	1D Conc	6.0	5.

April 2008	Nitrogen, Ammonia (NH3)	mg/L	30D Conc	3.0	8.8
April 2008	Nitrogen, Ammonia (NH3)	mg/L	30D Qty	0.080	.21164
April 2008	Nitrogen, Ammonia (NH3)	mg/L	7D Conc	4.5	8.8
April 2008	Nitrogen, Ammonia (NH3)	mg/L	7D Qty	0.12	.21164
May 2009	Fecal Coliform	#/100mL	7D Conc	2000	10000.

**Flow Information for Crottinger Estates WWTP
November 2004 – September 2010**

	Flow (gpd)	Date Occurred
Highest since last inspection	72039	3/5/2008
Highest in 2009	42483	2/11/2009
Highest in 2010	47183	3/10/2010
Average Nov '04-Sept '10	9010	
Average Jan '08 - Sept '10	7590	
Design Capacity	7000	