



Environmental  
Protection Agency

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

May 29, 2012

Mary A. Sampsel  
Assistant County Engineer  
Mill Creek Estates WWTP  
233 West 6th Street  
Marysville, OH 43040

Re: **Mill Creek Estates WWTP**  
**NPDES Permit 4PG00036/ OH0070815**  
**Semi-Public CEI**  
**Union County**

Dear Ms. Sampsel:

On May 23, 2012, a Semi-Public CEI was conducted at the Mill Creek Estates WWTP. Present for the inspection were Bill Narducci and Mike Galloway, of Union County Engineers, 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 your NPDES permit and to evaluate the operation and maintenance of the plant.

**Findings:**

1. Attached are compliance and flow tables between November 2010 and May 2012. The facility has had multiple violations likely due to high inflow and infiltration (I&I). The flows averaged 129,000 GPD with a peak of 633,000 GPD during the period investigated. The design flow is based on 105,000 GPD. The County has the capability of remotely shutting off blowers which was installed in late 2010.

The County has televised the collection system in wet and dry conditions. Most of the repairs made have been made within the Mill Creek subdivision. Some repair work requires outside contractors. **Please contact me when the contractors commence construction.**

Mr. Narducci and Mr. Galloway indicated that the two other subdivisions tributary to the plant will be investigated in the future.

2. The clarifier baffle recently was replaced. The clarifier had a layer of algae and scum on top which was attributed to the repair work. The skimmers are being used when possible to remove the scum layer.

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Mill Creek Estates WWTP  
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3. There was no effluent calibration sticker on the flow meter. I was informed that the last time it was serviced would be at the County offices. **Please contact me with the last time the effluent meter was calibrated.**
4. The effluent appeared to be a well-treated effluent.

Attached is the Inspection Report. **A response is requested for when additional I&I work is commenced and the date that the effluent flow meter was last calibrated.** If you have any questions or comments concerning the enclosed inspection report, please contact me at (614) 728-3846 or e-mail at [cole.miller@epa.ohio.gov](mailto:cole.miller@epa.ohio.gov).

Sincerely,

A handwritten signature in cursive script that reads "Cole Miller".

Cole Miller  
Environmental Specialist  
Compliance and Enforcement Unit  
Division of Surface Water  
Central District Office

ec: Cole Miller

NPDES Compliance Inspection Report

SECTION A: NATIONAL DATA SYSTEM CODING				
Permit #	NPDES #	Inspection Type	Inspector	Facility Type
4PG00036	OH0070815	CEI	S	1
Inspection Date	Entry Time	Exit Time	Notice of Violation	Significant Non-Compliance
5/23/2012	11:00 AM	11:45 AM	No	No

SECTION B: FACILITY DATA	
Name and Location of Facility Inspected	Permit Effective Date
Mill Creek Estates WWTP	3/1/2011
	Permit Expiration Date
	2/29/2016
Name(s) and Title(s) of On-Site Representatives	Phone Numbers
Mike Galloway, Operator of Record Bill Narducci, Project Engineer	
Name and Title of Responsible Official	Phone Number
Mary A. Sampsel, Assistant County Engineer	(937) 645-3018

SECTION C: AREAS EVALUATED DURING INSPECTION		
Key: S = Satisfactory, M = Marginal, U = Unsatisfactory, N = Not Evaluated		
M	NPDES Compliance	Many effluent violations have occurred due to I&I.
M	Operations & Maintenance	Some scum/algae buildup on the clarifier
S	Facility Site Review	
U	Collection System	I&I reduction work is being done by the County to reduce I&I.
M*	Flow Measurement	The last day the meter was calibrated is requested.
S	Receiving Waters	
S	Laboratory	

Comments:

Signatures	
 5/25/12	 5/25/12
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

## Compliance Data for Mill Creek Estates WWTP between 11/1/2010 to 5/1/2012

### Summary

Permit Effluent Limit Violations: 58

Permit Effluent Code Violations: 5

Permit Effluent Frequency Violations: 0

Upcoming Compliance Schedule Milestones: 3

Limit Violations						
Reporting Period	Station	Parameter	Limit Type	Limit	Reported Value	Violation Date
December 2010	001	Nitrogen, Ammonia (NH3)	30D Conc	6.0	11.5	12/1/2010
December 2010	001	Nitrogen, Ammonia (NH3)	30D Qty	2.39	3.03841	12/1/2010
December 2010	001	Nitrogen, Ammonia (NH3)	7D Conc	9.0	18.5	12/22/2010
December 2010	001	Nitrogen, Ammonia (NH3)	7D Qty	3.58	4.27137	12/22/2010
January 2011	001	Nitrogen, Ammonia (NH3)	30D Conc	6.0	14.	1/1/2011
January 2011	001	Nitrogen, Ammonia (NH3)	30D Qty	2.39	4.40744	1/1/2011
January 2011	001	Nitrogen, Ammonia (NH3)	7D Conc	9.0	11.9	1/8/2011
January 2011	001	Nitrogen, Ammonia (NH3)	7D Conc	9.0	16.1	1/22/2011
January 2011	001	Nitrogen, Ammonia (NH3)	7D Qty	3.58	5.30165	1/22/2011
February 2011	001	Nitrogen, Ammonia (NH3)	30D Conc	6.0	6.95	2/1/2011
February 2011	001	Nitrogen, Ammonia	7D Conc	9.0	13.9	2/8/2011

		(NH3				
February 2011	001	Nitrogen, Ammonia (NH3	7D Qty	3.58	4.5772	2/8/2011
February 2011	001	Total Suspended Solids	7D Qty	7.16	10.3311	2/15/2011
March 2011	001	Nitrogen, Ammonia (NH3	30D Conc	6.0	7.05	3/1/2011
March 2011	001	Nitrogen, Ammonia (NH3	30D Qty	2.39	3.90726	3/1/2011
March 2011	001	Nitrogen, Ammonia (NH3	7D Qty	3.58	5.02648	3/8/2011
April 2011	001	Total Suspended Solids	30D Conc	12	15.7142	4/1/2011
April 2011	001	Total Suspended Solids	30D Qty	4.78	12.9895	4/1/2011
April 2011	001	Nitrogen, Ammonia (NH3	30D Conc	6.0	8.7	4/1/2011
April 2011	001	Nitrogen, Ammonia (NH3	30D Qty	2.39	4.73844	4/1/2011
April 2011	001	CBOD 5 day	30D Conc	10	10.1428	4/1/2011
April 2011	001	CBOD 5 day	30D Qty	3.98	9.03263	4/1/2011
April 2011	001	Total Suspended Solids	7D Conc	18	21.	4/8/2011
April 2011	001	Total Suspended Solids	7D Qty	7.16	12.1441	4/8/2011
April 2011	001	Nitrogen, Ammonia (NH3	7D Conc	9.0	11.5	4/8/2011
April 2011	001	Nitrogen, Ammonia (NH3	7D Qty	3.58	6.52913	4/8/2011
April 2011	001	CBOD 5 day	7D Qty	5.97	7.41671	4/8/2011
April 2011	001	Total Suspended Solids	7D Conc	18	21.5	4/15/2011
April 2011	001	Total Suspended Solids	7D Qty	7.16	26.0010	4/15/2011
April 2011	001	CBOD 5 day	7D Qty	5.97	19.3735	4/15/2011
May 2011	001	Total Suspended Solids	30D Conc	12	12.4285	5/1/2011
May 2011	001	Total Suspended Solids	30D Qty	4.78	12.1985	5/1/2011
May 2011	001	Total Suspended Solids	7D Qty	7.16	14.7539	5/1/2011
May 2011	001	Nitrogen, Ammonia (NH3	30D Qty	1.19	1.94435	5/1/2011

May 2011	001	CBOD 5 day	30D Qty	3.98	4.37925	5/1/2011
May 2011	001	Total Suspended Solids	7D Qty	7.16	8.28158	5/8/2011
May 2011	001	E. coli	7D Conc	362	800.	5/8/2011
May 2011	001	Total Suspended Solids	7D Qty	7.16	9.25811	5/15/2011
May 2011	001	CBOD 5 day	7D Qty	5.97	6.80732	5/15/2011
May 2011	001	Total Suspended Solids	7D Qty	7.16	20.8023	5/22/2011
May 2011	001	Nitrogen, Ammonia (NH3)	7D Qty	1.99	2.25359	5/22/2011
June 2011	001	Nitrogen, Ammonia (NH3)	30D Conc	3.0	7.7	6/1/2011
June 2011	001	Nitrogen, Ammonia (NH3)	30D Qty	1.19	2.73807	6/1/2011
June 2011	001	Nitrogen, Ammonia (NH3)	7D Conc	5.0	9.7	6/8/2011
June 2011	001	Nitrogen, Ammonia (NH3)	7D Qty	1.99	2.60673	6/8/2011
June 2011	001	CBOD 5 day	7D Qty	5.97	9.26379	6/15/2011
June 2011	001	pH	1D Conc	9.0	9.3	6/20/2011
June 2011	001	pH	1D Conc	9.0	9.3	6/21/2011
June 2011	001	Nitrogen, Ammonia (NH3)	7D Conc	5.0	5.7	6/22/2011
June 2011	001	Nitrogen, Ammonia (NH3)	7D Qty	1.99	2.86941	6/22/2011
June 2011	001	pH	1D Conc	9.0	9.1	6/22/2011
July 2011	001	E. coli	7D Conc	362	1100.	7/1/2011
July 2011	001	E. coli	7D Conc	362	2400.	7/8/2011
July 2011	001	pH	1D Conc	9.0	12.3	7/27/2011
July 2011	001	pH	1D Conc	9.0	12.	7/28/2011
July 2011	001	pH	1D Conc	9.0	12.1	7/29/2011
December 2011	001	Total Suspended Solids	30D Qty	4.78	4.94983	12/1/2011
December 2011	001	Total Suspended Solids	7D Qty	7.16	12.3656	12/1/2011

Code Violations				
Reporting Period	Station	Parameter	Reported Value	Violation Date
May 2011	001	E. coli	AK	5/6/2011
May 2011	001	E. coli	AK	5/20/2011
May 2011	001	E. coli	AK	5/27/2011
June 2011	001	E. coli	AK	6/14/2011
June 2011	001	E. coli	AK	6/15/2011

Upcoming Compliance Schedule Milestones				
Schedule Due Date	Completion Date	Event Code	Schedule Type	Schedule Milestone
April 2012		1899	Construction	Advertise For Bids
June 2012		3099	Construction	Begin Construction
August 2012		95999	Other	Status Report

Flow Data for Mill Creek Estates WWTP between 11/1/2010 and 5/1/2012

	Date	Flows (MGD)
Ten Highest Flows	3/10/2011	0.633
	12/6/2011	0.545
	12/7/2011	0.545
	12/8/2011	0.545
	1/8/2011	0.503
	1/9/2011	0.503
	1/10/2011	0.503
	1/11/2011	0.503
	11/29/2011	0.468
	3/1/2011	0.466
<b>Average Flow Rate</b>		0.129

<b>Method of flow monitoring:</b>	Ultrasonic
<b>Type of alarms for plant:</b>	Internet based text messaging system

**SECTION D: PRETREATMENT**

Type of Pretreatment: Automated barscreen  
 Does the Trash Trap need pumped: N/A  
 Maintenance of pretreatment components is: Acceptable

Comments/Status: The County is reconfiguring how water is pumped from the storm tank to the aeration tanks. New piping will pump from a smaller, deeper connect tank to better capture the entirety of the storm tank.

**SECTION E: Aeration**

Color of sludge: Brown  
 Quality of Sludge: Good  
 Foam: Some  
 Odor: None

	Yes	No		Yes	No
Aeration is taking place	X	<input type="checkbox"/>	Plant is septic	<input type="checkbox"/>	X
Blowers are operating	X	<input type="checkbox"/>	Blowers are on a timer	X	<input type="checkbox"/>
Skimmers are operating	X	<input type="checkbox"/>	Plant is flooded	<input type="checkbox"/>	X
Diffusers are operating	X	<input type="checkbox"/>	Grating is present	<input type="checkbox"/>	X
Sludge return is operating	X	<input type="checkbox"/>			

Maintenance of aerating equipment is adequate.

Comments/Status: The blowers are set for an hour on and a half hour off.

**SECTION F: Clarifiers**

Clarity: Some algae/scum growth on top  
 Condition of Weir: Acceptable  
 Weir is level: Yes  
 Effluent in weir: Clear  
 Clarifier walls need scraped: N  
 Pin floc observed: N  
 Sludge blanket visible: N

Overall maintenance of settling components needs some improvement.

Comments/Status: The baffles recently were replaced which allowed some scum to escape to the main surface of the clarifier. The operator is working towards removing the scum.

**SECTION G: TERTIARY TREATMENT**

	Yes	No		Yes	No
Surface sand Filters:	X	<input type="checkbox"/>	Subsurface/Upflow	X	<input type="checkbox"/>
Distribution box operating	X	<input type="checkbox"/>	Beds alternated	X	<input type="checkbox"/>
Are filters ponding/flooding	<input type="checkbox"/>	X	Beds raked	X	<input type="checkbox"/>
Sand filters overgrown	<input type="checkbox"/>	X	Chlorination present	<input type="checkbox"/>	X
UV present	X	<input type="checkbox"/>	Dechlorination present	<input type="checkbox"/>	X

Frequency of cleaning: Twice a month  
 Fixed media upkeep: Weekly  
 Overall maintenance of components is: Acceptable

Comments/Status:

**SECTION H: SLUDGE HANDING / STORAGE DISPOSAL**

Hauler name: Chris Warner, Warner liquid waste hauling  
 Disposal Site: Marysville  
 Sludge wasted from: Sludge holding  
 How often is sludge wasted: Weekly to bi-weekly  
 Sludge drying beds: No                      Sludge holding tank: Yes

Overall maintenance of components is: Acceptable

Comments/Status:

**SECTION I: RECORD KEEPING / OPERATOR OF RECORD**

- (a) Wastewater Treatment Works classification (OAC 3745-7).....I
- (b) Operator of Record holds unexpired license of class required by Permit.....Y
- (c) Copy of certificate of Operator of Record displayed on-site.....N/E
- (d) Has the Operator of Record submitted an ORC Notification form..Y
- (e) Minimum operator staffing requirements fulfilled (OAC 3745-7)....Y
- (f) If a Staffing Reduction plan has been approved, are the stipulations of the plan being met.....N/A
- (g) Operator of Record log book provided.....Y
- (h) Format of log book (e.g. computer log, hard bound book)

**Hard bound**

- (i) Log book kept onsite (in an area protected from weather).....Y
- (j) Log book contains the following:
  - I. Identification of treatment works.....Y
  - II. Date/times of arrival/departure for Operator of Record and any other operator required by OAC 3745-7.....Y
    - i. Daily record of operator and maintenance activities (including preventative maintenance, repairs and request for repairs, process control test results, etc.).....Y
    - ii. Laboratory results (unless documented on bench sheets)...Y
    - iii. Identification of person making entries.....Y
- (k) Has the Operator of Record submitted written notifications 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

Comments/Status:

**SECTION J: PLANT DISCHARGE**

Discharge point is a: Outfall with riprap  
Name of discharge point: Mill Creek  
Discharge is visible: Y

Quality of Effluent: Clear