



Environmental
Protection Agency

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

December 8, 2011

Tiffany Jenkins, P.E.,
Director of Environmental Services
50 Channing Street
Delaware, OH 43015

**Re: County Home WWTP
NPDES Permit 4PG00033/ OH0055212
Reconnaissance Inspection
Delaware County**

Dear Ms. Jenkins:

On November 23, 2011, a Reconnaissance Inspection was conducted at the Delaware County Home WWTP. Present for the inspection were Cory Smith and Brian Keener representing Delaware County, Paul Vandermeer 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.

If you have any questions or comments concerning the enclosed inspection report, please contact me at (614) 728-3848 or e-mail at Mike.Sapp@epa.ohio.gov.

Sincerely,

Michael Sapp
Environmental Specialist
Field Operations Unit
Division of Surface Water
Central District Office

c: Cory Smith w/attachments

ec: Michael Sapp

NPDES Compliance Inspection Report

SECTION A: NATIONAL DATA SYSTEM CODING				
Permit #	NPDES #	Inspection Type	Inspector	Facility Type
4PG00033	OH0055212	RI	S	
Inspection Date	Entry Time	Exit Time	Notice of Violation	Significant Non-Compliance
11/23/2011	9:00 AM	9:40 AM	No	No

SECTION B: FACILITY DATA	
Name and Location of Facility Inspected	Permit Effective Date
Delaware County Home WWTP 4781 County Home Road Delaware, Ohio 43015	3/1/2011
	Permit Expiration Date
	2/29/2016
Name(s) and Title(s) of On-Site Representatives	Phone Numbers
Cory Smith, Operations Supervisor Brian Keener, Operator of Record	(740) 549-1906
Name and Title of Responsible Official	Phone Number
Tiffany Jenkins, Director of Environmental Services	(740) 833-2240

SECTION C: AREAS EVALUATED DURING INSPECTION	
Key: S = Satisfactory, M = Marginal, U = Unsatisfactory, N = Not Evaluated	
S	NPDES Compliance
S	Operations & Maintenance
S	Facility Site Review
S	Collection System
S	Flow Measurement
S	Receiving Waters
S	Laboratory

Comments:

Signatures	
 12/2/11	 12/5/11
Michael Sapp, Inspector Compliance & Enforcement Division of Surface Water Central District Office	Erin Sherer, Reviewer Compliance & Enforcement Supervisor Division of Surface Water Central District Office

ADDITIONAL INFORMATION

Delaware County Home WWTP
4PG00033 - OH0055212

General

The Delaware County Home WWTP has a design treatment capacity of 20,000 gpd with a discharge to an unnamed tributary to Alum Creek. Wet stream process provided at the facility include a trash trap, 20,000 gallons of extended aeration with clarification divided into two treatment trains, a dosing tank, four tertiary sand filters and ultraviolet disinfection. Solids handling consist of a sludge holding tank with decant capabilities and sludge drying beds which are no longer used. Liquid sludge is hauled to the Alum Creek plant for further processing.

1. At the time of the inspection, the following general observations were made with respect to the operational practices at the plant;
 - The County Home facility is no longer in operation and the Hickory Knolls School, which is part of the Buckeye Valley system, is only utilized intermittently for delinquent students.
 - The average daily flow is 1,000-2,000 gpd. Higher flows (30,000 – 40,000 gpd) are experienced during rain events due to the age and condition of the collection system serving the home.
 - The trash trap has not been pumped-out since the previous inspection due to low flows at this facility.
 - A splitter box downstream of the trash trap is being used to restrict flow to half of the plant.
 - A heater is placed in the clarifier during the winter months to keep it from freezing.
 - The mixed liquor suspended solids concentration under aeration is generally maintained around 2000 mg/l. MLSS tests are performed monthly and 30-minute settleability tests are performed weekly to monitor solids inventories.
 - Effluent flows are measured using time elapsed meters on the pumps to the tertiary sand filters. Calibration of the dosing pumps is performed twice a year.

- The traveling sludge return unit is no longer used due to problems with excessive agitation. The operator manually scrapes the clarifier walls.
 - Brian Keener, the operator of record, is at the plant 5 days/week for approximately an hour each day.
 - Brian Keener monitors for DO and pH on-site. The remaining parameters are analyzed at the Alum Creek plant.
 - One of the two tertiary dosing pumps was out for repair.
 - The County placed fill into several low lying areas around the plant to preclude standing water from infiltration into tank joints.
2. The County is currently evaluating the feasibility of eliminating the plant through the installation of a non-discharging, soil based treatment system. Please be advised that a PTI must be submitted to this office if the average daily flow for the proposed system exceeds 1000 gpd. If the average daily flow for the proposed system is less than 1000 gpd then the proposed system would be evaluated by the Delaware General Health District.

Compliance Data for County Home WWTP between 1/1/2005 to 10/30/2011

Summary

Permit Effluent Limit Violations: 2

Permit Effluent Code Violations: 3

Permit Effluent Frequency Violations: * 10

Compliance Schedule Violations: 0

Limit Violations						
Reporting Period	Station	Parameter	Limit Type	Limit	Reported Value	Violation Date
March 2007	001	Total Suspended Solids	30D Conc	12	19.5	3/1/2007
March 2007	001	Total Suspended Solids	7D Conc	18	19.5	3/1/2007

Code Violations				
Reporting Period	Station	Parameter	Reported Value	Violation Date
March 2007	001	Water Temperature	AB	3/26/2007
March 2007	001	pH	AB	3/26/2007
March 2007	001	Dissolved Oxygen	AB	3/26/2007

*The facility has 2 missing data reports.

Station	Required Report Period	DMR Received
001	November 2007	No
588	November 2007	No

Flow Data for County Home WWTP between 1/1/2005 and 10/30/2011

	Date	Flows (MGD)
Ten Highest Flows	6/2/2006	0.041
	6/3/2006	0.041
	6/4/2006	0.041
	7/22/2011	0.032
	7/23/2011	0.032
	7/24/2011	0.032
	4/30/2009	0.028
	3/18/2008	0.026
	2/11/2009	0.026
	3/2/2009	0.026
Average Flow Rate		0.003