



Environmental
Protection Agency

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

FILE COPY

February 22, 2011

Mr. Ron Younkin
Greenlawn Mobile Homes
555 Greenlawn Avenue
Columbus, OH 43223

**Re: 4PH00005/OH0105902
Reconnaissance Inspection
Enchanted Acres MHP WWTP
Franklin County**

Dear Mr. Younkin:

On February 8, 2011, a Reconnaissance Inspection was conducted for the Enchanted Acres MHP wastewater treatment plant (WWTP) located at 4510 Parsons Avenue, Hamilton Township, Franklin County, Ohio. Present for the inspection were Chuck Coghlan of Bird and Bull, Joe Hickman, the Operator of Record, Mike Dunkle representing Enchanted Acres 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.

For the effluent violation review done between April 2010 and January 2011, the Enchanted Acres MHP was on our significant non-compliance list for chlorine violations. Significant non-compliance is obtained in a variety of ways, but Enchanted Acres MHP has had violations exceeding 40% of the permit level in at least 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. Enchanted Acres was removed from the list because chlorine is not used in winter months. Mr. Hickman also made modifications to the chlorine tab-feeder which should help with future violations.

Another issue discussed was the schedule of compliance contained within the permit relating to inflow and infiltration. Mr. Coghlan provided a revised schedule (see attached) which effectively proposes a one-year extension to the permit schedule. The schedule is acceptable and your permit will need to be modified to incorporate the revised schedule as soon as possible. The application to modify your permit is at:

http://www.epa.state.oh.us/portals/35/permits/NPDESMODForm_fis.pdf

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

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www.epa.ohio.gov

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and instructions are at:

http://www.epa.state.oh.us/portals/35/permits/NPDESMod_instructions.pdf

Note that the schedule of compliance also required a maintenance plan to upgrade the WWTP to ensure compliance with the NPDES permit. This was discussed neither discussed during the inspection or within the revised schedule of compliance. **Please include a maintenance plan with the response. The maintenance plan should likely include additional preliminary screening.**

Attached is the Reconnaissance Inspection Report. There are a few items which require a written response. **Please respond in writing within 30 days of the receipt of this letter.**

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

c: Charles Coghlan, Consultant

NPDES Compliance Inspection Report

SECTION A: NATIONAL DATA SYSTEM CODING

Permit #	NPDES#	Month/Day/Year	Inspection Type	Inspector	Facility Type
4PH00005	OH0105902	2/8/11	R	M	2

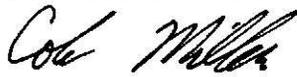
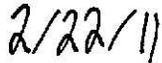
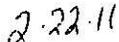
SECTION B: FACILITY DATA

Name and Location of Facility Inspected	Entry Time	Permit Effective Date
Enchanted Acres Mobile Home Park STP 4510 Parsons Avenue Hamilton Township, Franklin County, Ohio	10:15 AM	September 1, 2010
	Exit Time	Permit Expiration Date
	11:30 AM	August 31, 2015
Name(s) and Title(s) of On-Site Representatives	Phone Number(s)	
Michael Dunkle, Enchanted Acres Representative Charles Coghlan, of Bird & Bull Consultants Joseph Hickman, Operator of Record	(614) 443-7421 (614) 761-1661 (740) 814-7342	
Name and Title of Responsible Official	Phone Number	
Ron Younkin, Executive Vice President GTW Investment Co (Greenlawn Mobile Home Sales) 555 Greenlawn Ave. Columbus, Ohio 43223	(614) 443-7421	

SECTION C: AREAS EVALUATED DURING INSPECTION

Key: S = Satisfactory, M = Marginal, U = Unsatisfactory, N = Not Evaluated

S	Permit	
S	Records/Reports	
S*	Operations & Maintenance	There were rags in the equalization basin and the level float was stuck
S	Facility Site Review	
N	Collection System	
S	Flow Measurement	Scheduled to be calibrated February 12.
N	Laboratory	
U	Effluent/Receiving Waters	Five effluent violations since May 2010. On the significant non-compliance list
S	Sludge Storage/Disposal	
N	Pretreatment	
M*	Compliance Schedule	The permittee has proposed a new schedule which requests a year extension along with planned activities for I&I investigation. A permit modification has been proposed.
S	Self-Monitoring Program	

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

General

The Enchanted Acres HMP sewage treatment system consists of manual bar screens, a 36,000 gallon flow equalization tank, a 70,000 gallon tank with aeration but no return activated sludge, one large circular steel tank which is divided into separate zones for aeration, clarification, filtration (sand filter with backwash), and aerobic digestion for sludge. This is followed by tablet-fed chlorination and de-chlorination and post-aeration.

1. At the time of the inspection, the following general observations were made with the operation and maintenance at the plant:
 - a. The operator performed a settling test for the mixed liquor. The solids settled quickly but floc was still suspended.
 - b. The bar screens appear to not be adequate for preliminary treatment. The float for the equalization basin was stuck because of rags and the water level was beneath the diffusers. The lack of adequate screening is affecting the operations of the plant. **Please comment on this problem, in writing, on the steps being taken to resolve this problem.**
 - c. The function of the 70,000 gallon aeration tank is to provide initial treatment of the raw sewage and to increase the dissolved oxygen levels.
 - d. Dissolved oxygen, pH, and residual chlorine are all measured and calibrated on-site with standard procedures. Saturating water with air, standards with pH of 7 and 10, and a chlorine standard are used for the calibration of dissolved oxygen, pH, and residual chlorine, respectively.
2. The attached table contains a list of NPDES permit violations for the time period between April 2010 and February 2011 followed by a table summarizing flow since April 2010. The facility will likely benefit from I&I work.
3. As discussed during the inspection, there are typographical errors for the DMR for the flow rates of November 1, 2010, and November 13, 2010. Please revise the eDMR.

4. The following has changed since the last inspection:
 - a. A shed was built around the composite sampler.
 - b. A different inner-diameter tube was installed to feed the chlorine tablets.
5. The effluent from the post-aeration tank was clear during the inspection. The outfall was not inspected.

**NPDES Permit Violations for Enchanted Acres MHP WWTP
April 1, 2010 – January 1, 2011**

Reporting Period	Parameter	Limit Type	Limit	Reported Value	Violation Date
May 2010	pH	1D Conc	9.0	9.1	5/5/2010
August 2010	CBOD 5 day	7D Conc	15	17.	8/15/2010
August 2010	Chlorine, Total Residu	1D Conc	0.038	.07	8/29/2010
September 2010	Chlorine, Total Residu	1D Conc	0.038	.05	9/12/2010
October 2010	Chlorine, Total Residu	1D Conc	0.038	.05	10/17/2010

**Flow Information for Enchanted Acres MHP WWTP
April 1, 2010 – January 1, 2011**

	Flow (mgd)	Date Occurred
Highest since last inspection	0.187	9/1/2010
2nd highest	0.169	12/1/2010
Average since last inspection	0.063	

GTS Investment Companies
dba Enchanted Acres Mobile Home Park
Sewer System Evaluation Study (SSES) & Inflow/Infiltration Reduction Program
Description of Project

This project will help maintain compliance with the NPDES permit by reducing the amount of extraneous clean water entering the sanitary collection system which increases the daily flow to the WWTP and creates NPDES permit violation events.

A Compliance Evaluation Inspection was previously conducted by the Ohio EPA Central District Office. One of the primary concerns is the amount of inflow and infiltration in the sanitary collection system. Due to the impact the infiltration and inflow is having on the treatment process, a compliance schedule has been established in the interest of attaining compliance with the NPDES permit limits. This schedule was incorporated into the current NPDES permit which expires on August 31, 2015.

The scope of the project will be as follows:

Sewer System Evaluation Study (SSES) – 2 year plan

- **Sewer System Mapping** - GPS location of structures, identifying pipe sizes, identifying pipe invert elevations and corresponding pipe slopes, importing the data into a GIS format using ArcMap to illustrate the data in map form. The maps would be based on the state-plane coordinate system and would be overlaid onto other GIS data provided through OGRIP and the Franklin County Auditor. The maps would illustrate aerial photography, parcel boundaries, right-of-way boundaries, corporation limits, road names, sewer structures, sewer lines, flow direction, sewer sub-areas, and major waterways. **(Apr. 2011 – May 2011)**
- **Manhole Inspections** – Inspect and catalog the condition of the existing manholes on the system in accordance with recognized industry standards (PACP, NASSCO, etc.). **(May 2011 – June 2011)**
- **Flow Monitoring** – Conduct flow monitoring of the sanitary sewer to provide measurable data associated with dry periods and wet weather events. Each of the two sub-areas in the sanitary collection system would be monitored. In addition, the influent and effluent flows and rainfall events at the WWTP will be monitored and graphed. **(Mar. 2011 – Sept. 2011)**
- **Smoke Testing** – Conduct smoke testing of the sanitary collection system during dry periods to identify cross-connections with storm water infrastructure and other ‘clean’ water sources that contribute to infiltration and inflow. **(June 2011 – Oct. 2011)**
- **Televising** – Clean and televise select areas of the sanitary collection system based on information collected in earlier parts of the evaluation. Locate buried structures, verify sewer conditions, locate taps. Provide reports based on recognized industry standards (PACP, NASSCO, etc.). **(Nov. 2011 – Feb. 2012)**

- **SSES Report** – Prepare a report that summarizes the findings, identifies problem areas, proposes repairs to the collection system, provides cost estimates for the proposed repairs, identifies hydraulic deficiencies, provides a schedule of short term/long term improvements, and prioritizes the improvements. Submit to OEPA for endorsement. (Mar. 2012 – June 2012)
 - **Annual EPA Report** – Provide OEPA with an annual update to identify actions taken by GTS Financing Companies over the last 12 months, corrections made to the collection system, and identification of other areas of concern as it relates to infiltration and inflow. (Annually by March 31st)
-

Collection System Rehabilitation and Repair

(Design: Aug.-Sept. 2011; Construction: Mar.-June 2012)

- **Manhole Rehabilitation** – The interior of several manholes has deteriorated and is in need of lining to eliminate infiltration into the manhole. There are approximately 10 manholes (each approximately 15' deep) that would benefit from a cured-in-place lining.