



State of Ohio Environmental Protection Agency

Northeast District Office

2110 East Aurora Rd.
Twinsburg, Ohio 44087

TELE: (330) 963-1200 FAX: (330) 487-0769
www.epa.state.oh.us

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

May 26, 2009

RE: WAYNE COUNTY
MILTON TWP
CROWN HILL MANOR
NPDES #3PW00037

NOTICE OF VIOLATION

CERTIFIED MAIL

Mr. Art Shoup
Crown Hill Manor
9652 Akron Road
Rittman, Ohio 44270

Dear Mr. Shoup:

On May 6, 2009 this writer met with you and Mr. Richard Jackson to conduct an inspection of the sewage treatment plant serving the above referenced facility. The intent of the inspection was to discuss the noncompliance with your NPDES permit and evaluate the operation and maintenance of the upgraded wastewater treatment plant. At the time of the inspection, the wastewater treatment plant was in good operation and maintenance condition.

Our records indicate the wastewater treatment plant was approved by Ohio EPA in August 1990 with upgrades installed around 2007. The existing wastewater treatment plant consists of a trash trap, followed by a 4,500 gallon extended aeration treatment plant, dosing chamber, surface sand filter, and a chlorine contact tank.

The upgrades consisted of a treatment system for the backwash water from the water treatment plant and a dechlorination unit after the chlorine contact tank. These upgrades are a 1,000 gallon trash trap (settling tank), 187 gallon dosing chamber, 400 square foot red water filter and a 1,000 gallon flow equalization tank. Below are the findings and recommendations from the inspection:

- 1) The 4,500 gallon extended aeration package plant contained mixed liquor that was a light chocolate brown color. The tank had good rollover with some areas of the tank in need of more air circulation. This is indicative there may be a slight imbalance in the diffuser line or the air line valves may need maintenance. The sludge return line was in operation. The clarifier portion of this system had floating solids on the surface and the weir and influent baffle were full of solids. The skimmer was visible but appeared to be plugged up with solids and the skimmer return line was not in operation. The clarifier must be cleaned and the sidewalls should be scraped down to ensure a proper balance of solids is maintained in the aeration system.

Mr. Art Shoup
Crown Hill Manor
May 26, 2009
Page 2

- 2) The dosing chamber was in good condition and the surface sand filters were in good condition with minor vegetative growth in some areas of the filters. The chlorinator and dechlorinator appeared to be in good working condition with no deficiencies noted. The final effluent located downstream from the dechlorination point was clear.
- 3) It is necessary to periodically remove sludge from the treatment system in order to balance the solids within the aeration system. It is not known what Publicly Owned Treatment Works accepts sludge removed from the system. Please submit information to this office regarding the sludge hauler used by your facility and what POTW accepts the sludge from your facility.
- 4) The inspection of the water treatment plant backwash treatment system revealed the following: The trash trap (settling tank) was recently pumped out in March 2009 and nearly 5 to 6 inches of iron, manganese and sediments was removed from the tank bottom. The dosing chamber and red water filter were in good maintenance condition. The flow equalization tank appeared to be in good condition with minimal sediment collection on the bottom of the tank.

The flow equalization tank effluent slowly feeds to the wastewater treatment plant at a point prior to the chlorination tank. The purpose of this design was to dilute the backwash water and prevent the softener backwash water from shocking the wastewater treatment plant.

- 5) The wastewater treatment plant is experiencing significant total dissolved residual effluent violations (see attached violation summary). This suggests the wastewater treatment plant is overloaded by the total dissolved residuals from the water treatment plant backwash water. As such, this office is concerned shock loading may be occurring from the flow equalization tank.

At the time of the inspection, we discussed some alternate plant operations that may be utilized to provide more dilution of the backwash water from the water treatment plant. This office has the following recommended alternatives for the facility:

- A) Alternate the backwash cycle of the water treatment plant softeners so that both are not backwashing at the same time. Please submit a follow up report to this office six weeks after initiating this alternative. The report should summarize the work completed and if there was a change in the effluent total dissolved residuals in response to the work completed.
- B) If recommended alternative (A) does not reduce the total dissolved residual problem, the next suggested alternative is to increase the orifice size of the flow equalization tank effluent from 5/8 inch to 1/4 inch (see enclosed drawing).

Mr. Art Shoup
Crown Hill Manor
May 26, 2009
Page 3

Please submit a follow up report to this office within six weeks of initiating this alternative. The report should summarize the work completed and if there was a change in the effluent total dissolved residuals in response to the work completed.

- 6) A summary of the wastewater treatment plant discharge violations for the period of August 1, 2008 to May 1, 2009 has been attached to this letter. Please review all plant data to determine which violations are accurate or if there was a reporting error by the lab or our data collection program. Any reporting errors or eDMR errors must be reported to this office so the error can be resolved. You may contact Mr. James Roberts of this Agency's Central Office at (614) 644-2054 to discuss this issue directly.

Should you have any comments or questions regarding this letter, please contact this office at (330) 963-1299.

Respectfully,



Laura A. Weber, P.E.
Environmental Engineer
Division of Surface Water

LAW/mt

Enclosures: Violation List
Flow Equalization Drawing

cc: Richard Jackson, Smithville Western, Ltd.
Wayne County Health Department

File: Semi-Public/Wayne/MiltonTwp/CrownHillManor

Get New Data

Reporting Period	Reporting Code	Parameter	Limit Type	Limit	Reported Value	Violation Date
August 2008	00515	Residue, Total Dissolv	1D Conc	1500	3180.	8/22/2008
October 2008	00515	Residue, Total Dissolv	1D Conc	1500	2820.	10/24/2008
November 2008	00515	Residue, Total Dissolv	1D Conc	1500	2330.	11/25/2008
December 2008	00515	Residue, Total Dissolv	1D Conc	1500	2730.	12/19/2008
January 2009	00515	Residue, Total Dissolv	1D Conc	1500	4610.	1/23/2009
February 2009	00515	Residue, Total Dissolv	1D Conc	1500	1770.	2/27/2009
March 2009	00515	Residue, Total Dissolv	1D Conc	1500	4840.	3/20/2009
April 2009	00515	Residue, Total Dissolv	1D Conc	1500	5450.	4/17/2009
March 2009	00530	Total Suspended Solids	30D Conc	12	14.	3/1/2009
March 2009	00530	Total Suspended Solids	30D Conc	30	48.	3/1/2009
March 2009	00530	Total Suspended Solids	1D Conc	45	48.	3/26/2009

SENDER COMPLETE THIS SECTION	COMPLETE THIS SECTION ON DELIVERY
<ul style="list-style-type: none"> Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired. Print your name and address on the reverse so that we can return the card to you. Attach this card to the back of the mailpiece, or on the front if space permits. 	<p>A. Signature <input type="checkbox"/> Agent <input checked="" type="checkbox"/> <i>Art Shoup</i> <input type="checkbox"/> Addressee</p> <p>B. Received by (Printed Name) C. Date of Delivery _____ 5-27-09</p>
<p>1. Article Addressed to:</p> <p>ART SHOUP CROWN HILL MANOR 9652 AKRON ROAD RITTMAN OH 44270</p>	<p>D. Is delivery address different from item 1? <input type="checkbox"/> Yes If YES, enter delivery address below: <input type="checkbox"/> No</p> <p>RECEIVED MAY 29 2009 OHIO DEPT.</p> <p>E. Service type <input checked="" type="checkbox"/> Certified Mail <input type="checkbox"/> Express Mail <input type="checkbox"/> Registered <input type="checkbox"/> Return Receipt for Merchandise <input type="checkbox"/> Insured Mail <input type="checkbox"/> C.O.D.</p> <p>4. Restricted Delivery? (Extra Fee) <input type="checkbox"/> Yes</p>

2. Article Number 7007 2680 0002 2986 7442 (WEBER 5/26/09)
 (Transfer from service label)

PS Form 3811, February 2004

Domestic Return Receipt

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PS Form 3800, August 2006 See Reverse for Instructions

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