



State of Ohio Environmental Protection Agency

Northwest District Office

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

Re: Richland County
City of Shelby WWTP
NPDES Permit

July 28, 2009

Charlton Brown, Superintendent
City of Shelby WWTP
3626 London West Road
Shelby, Ohio 44875

Dear Mr. Brown,

On July 16, 2009, an inspection was made of the City of Shelby's wastewater treatment plant (WWTP) located at 3626 London West Road, Shelby, Richland County. You were present to provide information on plant operations and answer any questions. At the time of the inspection all of the major treatment units were in operation and appeared to be working normally. A clear final effluent was being discharged to the receiving stream.

You indicated that the sludge wasting operation had recently been modified. Previously all of the waste sludge was settled in the south primary tank before being pumped to the digester. The plant staff has modified the piping to allow for some of this waste sludge to now be sent to the north primary tank as well. You indicated that this has helped improve the primary tank operation during wasting as well as increase your methane gas production in the sludge digester. We discussed the installation of a flow splitter box to allow for more even distribution of the sludge flow between the primary tanks.

A review of the discharge monitoring reports submitted to our office for the period of December 2008 through June 2009 revealed two violations of the limits contained in your NPDES permit. The violations were for exceeding the ammonia loadings for the March monthly average and the weekly average for March 15 through the 20. It appears that the treatment plant was receiving flows beyond the design capacity at this time which most likely contributed to these violations.

Sincerely,

Walter Ariss
Environmental Specialist II
Division of Surface Water

/lb

Enclosure

pc: ~~NYWDO-DSW file~~
Brad Harvey, City of Shelby

F. GUIDE - VISUAL OBSERVATION - UNIT PROCESS

RATING CODES: S = Satisfactory; U = Unsatisfactory; M = Marginal; IN = In Operation; OUT = Out of Operation

| CONDITION OR APPEARANCE | | RATING | COMMENTS |
|-------------------------------------|-----------------------------------|--|--|
| General | Grounds | S | |
| | Buildings | S | |
| | Potable Water Supply Protection | - | |
| | Safety Features | S | |
| | Equalization Diversion | OUT | |
| | Plant Bypass | OUT | |
| | Alternate Power Source | OUT | Generator |
| Preliminary | Maintenance of Collection Systems | M | Excessive I/I flows |
| | Pump Station | IN | 4 raw, only use 3 pumps |
| | Ventilation | S | |
| | Bar Screen | OUT | |
| | Disposal of Screenings | S | |
| | Comminutor | IN | |
| | Grit Chamber | IN | Aerated |
| | Disposal of Grit | S | Landfill |
| | | | |
| Primary | Old primary treatment tanks | OUT | Not used |
| | Settling Tanks | IN | 2 Tanks |
| | Scum Removal | OUT | scum skimmers drain to sludge digester so they are not used. Use VAC truck |
| | Sludge Removal | IN | |
| Sludge Disposal | Effluent | S | |
| | | | |
| | Digesters | IN | Anaerobic, 1 primary / 1 secondary |
| | Temperature and pH | S | |
| | Gas Production | IN | Used at plant, runs boilers almost 100% |
| | Heating Equipment | IN | heat exchanger |
| | Sludge Pumps | IN | 3 RAS, WAS |
| | Drying Beds | OUT | not used |
| | | - | |
| Disposal of Sludge | S | Land application | |
| Old plant aeration tanks | OUT | Used to store excess sludge during high production periods | |
| Storage Tank | IN | Stores digested sludge until it can be land applied | |
| Other | Flow Meter and Recorder | IN | Influent venturi meter after wet well pumps |
| | Records | S | |
| | Lab Controls | S | |
| | Chemical Treatment | | |
| Secondary-Tertiary List items as | | | |
| | Aeration Tanks | IN | 2 tanks, only use one tank |
| | Blowers | IN | 5 available |
| | Final Clarifiers | IN | 2 units |
| Disinfection | | | |
| | Effluent | S | |
| | Disinfection System | IN | use chlorine |
| | Effective Dosage | - | |
| | Contact Time | - | |
| | Contact Tank | IN | |
| Dechlorination | IN | | |
| Post Aeration | IN | | |