



Environmental
Protection Agency

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

June 23, 2011

RE: SEBRING WASTEWATER
MAHONING COUNTY
NPDES PERMIT NO. 3PC00011
FFY 2011 CEI

Mayor and Council
Village of Sebring
135 E. Ohio Street
Sebring, OH 44672

Ladies and Gentlemen:

On May 27, 2011, this writer conducted an inspection of the Sebring POTW. The intent of the inspection was to evaluate operations and maintenance of the plant. A compliance review was also conducted as part of this inspection. Representing the village during the inspection was Doug Burchard and Lee Hatton.

Observations:

Following are observations made during the inspection.

1. The wastewater treatment plant appeared to be operated in a satisfactory manner at the time of the inspection. Treatment plant personnel appear to have a sound understanding of treatment processes.
2. All treatment processes were operational at the time of the inspection. The only item out of service at the time of the inspection was a sludge return pump. According to Mr. Hatton, debris passing through the wastewater treatment plant must be removed from the return pumps on a weekly basis. Equipment malfunction due to rags and other debris is typical of wastewater plants that do not have influent fine screens.
3. The treatment plant had good sludge formation in the aeration tank. The contents of the aeration tank and the return sludge were a medium brown color indicating a good population of microbes necessary to treat the wastewater.
4. Mr. Hatton indicated that the mixer for the west oxidation ditch is in need of repair to replace failing parts. However, he indicated that the repair would be delayed until the treatment system is evaluated for phosphorus removal. We agreed that this was appropriate as long as the mixer continues to provide adequate mixing of the wastewater.

5. The clarifiers were unsatisfactory at the time of the inspection for the following reasons.

a) Wastewater continues to leak from the effluent channel that receives treated wastewater from the clarifiers. Differential settling of the two clarifiers and the effluent channel has resulted in partial separation of the three structures. This failure permits wastewater to leak from the system into the surrounding ground. Be advised that the discharge of wastewater from the effluent chamber constitutes an unpermitted discharge and is possibly a violation of Ohio Revised Code (R.C.) 6111.04. The only permitted outfall for the Sebring wastewater treatment plant is through Outfall 001 as identified in the NPDES Permit No. 3PC00011.

This issue has been identified in two previous inspection reports and must be addressed by the village. The village must provide a response to this office indicating a plan to repair the clarifier system. A schedule for making the repairs must be included in the response.

- b) The weirs of the clarifiers are not adjustable. The weirs must be adjustable to enable an even flow of wastewater across the weirs. Uneven flow of wastewater over the weirs interrupts the hydraulic design of the clarifiers. The existing weirs must be replaced with adjustable weirs so that the effectiveness of the clarifiers can be maximized. This is especially critical during periods of high flow rate through the system.
- c) Corroded metal could be identified on nearly all exposed metal surfaces of the clarifiers. Corrosion may also be a concern for metal surfaces submerged under the surface of the clarifiers. In order to prevent extensive repairs in the future, all metal components should be inspected; and, where necessary, repairs must be made. Following completion of any repairs, all metal parts should be sand blasted and properly painted with an epoxy coating to prevent further corrosion.
- d) The surface sweeps are in need of replacement. The existing sweeps have sections that have broken off and are preventing debris from being effectively removed from the surface of the clarifiers. Other concerns may exist for the bottom sweeps as well. The bottom sweeps must also be inspected and repaired as needed.
- e) Cracks on the side walls of the clarifiers must be evaluated and repaired as needed.

The clarifiers must be thoroughly inspected. The clarifiers should be taken offline during periods of low flow through the plant. Each clarifier should be drained, inspected and repaired as needed. Doing the necessary and routine preventive maintenance saves money in the future.

Be advised that it is the experience of this writer that equipment failure can occur at the most inconvenient time, such as during the winter months when temperatures are near freezing. Repairing equipment under adverse conditions is more difficult and more expensive than during more convenient times chosen by the village.

6. The 30 ft. deep pump station at the plant that receives wastewater from the industrial park was inspected and found to be in need of attention. When asked by this writer, it was understood from Mr. Hatton that the resting platforms are corroded and in need of replacement. Faulty resting platforms can result in injury or death to workers entering the system for maintenance. A full safety check of the system needs to be completed within the next 30 days followed by timely repairs.

In addition, it was understood that contract workers do not practice safe procedures for confined space entry. This is unacceptable and is a liability for the village. Any workers entering the pump station must practice confined space entry procedures.

Finally, there appears to be fresh water intrusion through the walls and into the station. The station needs to be evaluated and procedures taken to eliminate the fresh water intrusion through the walls.

7. The wastewater treatment plant still experiences large swings in flow during periods of precipitation. This indicates that significant sources of inflow and infiltration (I/I) may remain in the collection system. It is understood that the village recently completed some sewer rehabilitation projects and construction of an equalization tank. It is also understood that it is not possible to eliminate all I/I from the system. However, the village should have an ongoing program of identifying and eliminating I/I from the system. Evaluating small portions of the village on an annual basis to identify and eliminate I/I will save the village money over time by eliminating the cost of treating clean storm water at the wastewater treatment plant. This has been the experience of other communities that carry out a routine program to eliminate I/I.

The village should have a plan to annually evaluate different sections of the village. Areas can be prioritized by measuring wastewater flow in trunk sewers

during periods of both dry and wet weather conditions to determine areas of the village where the I/I is most significant. Based on my questions regarding the industrial pump station, it appears that the station may receive significant I/I during precipitation events and should be evaluated for possible I/I work.

8. The Operations and Maintenance (O&M) Manual for the treatment plant is in need of updating. Many changes to the treatment system have been made since the last version of the manual was prepared. The O&M Manual must be updated following future upgrades for phosphorus removal.
9. The city will be required to provide screening of sludge in the very near future. It is the understanding of this writer that the screening requirement can be met by either screening the raw plant influent or by screening the sludge prior to land application. The city must begin to make provisions for meeting the screening requirements.
10. While passing the service building to the POTW, it was observed that material such as street sweepings, sewer jet material and possibly other solid waste material is being stored or disposed on the site. The deposition of the street sweepings and catch basin debris on the property is a violation of the following rules and regulations:

Ohio Revised Code (ORC) Section 3734.02(C) states, in part, that “...no person shall establish a new solid waste facility...without submitting an application for a permit with accompanying detail plans, specifications, and information regarding the facility and method of operation and receiving a permit issued by the director....”

ORC Section 3734.03 states, in part, that “No person shall dispose of solid wastes by open burning or open dumping, except as authorized by the director of environmental protection....”

ORC Section 3734.05(A)(1) states, in part, that “no person shall operate or maintain a solid waste facility without a license issued under this division by the board of health of the health district in which the facility is located or by the director of environmental protection when the health district in which the facility is located is not on the approved list under section 3734.08 of the Revised Code.”

Ohio Administrative Code (OAC) Rule 3745-37-01(A) states, in part, that “[n]o person shall conduct municipal solid waste landfill...facility operations without possessing a separate, valid license for each such operation, as required by Chapter 3734. of the Revised Code and the Administrative Code rules adopted

thereunder. Each license shall be obtained from the board of health in the health district in which the facility is located, or by the director, if the director has assumed the licensing function for that health district."

OAC Rule 3745-27-05(C): states that "[n]o person shall conduct, permit, or allow open dumping. In the event that open dumping is occurring or has occurred at a property, the person(s) responsible for the open dumping, the owner of the property, or the person(s) who allow or allowed open dumping to occur, shall promptly remove and dispose or otherwise manage the solid waste in accordance with Chapter 3734, of the Revised Code, and shall submit verification that the solid waste has been properly managed."

Any solid waste that may be stored or disposed on city property must be removed and properly disposed in the licensed solid waste landfill.

There may also be concerns regarding storm water contamination on the site of the maintenance building that need to be addressed by the village. The site should be evaluated by the village for these issues.

An inspection of the service building grounds will be scheduled in the near future to evaluate the site and to answer any questions.

Compliance Review:

NPDES Permit Limits

The compliance record for the Sebring wastewater treatment plant was reviewed as part of this inspection. The Period of review was March 2010 through April 2011. Following are violations identified throughout the review period.

Reporting Period	Parameter	Limit Type	Units	Limit	Reported Value	Violation Date
February 2011	Total Suspended Solids	30-Day Conc.	mg/l	12	13.75	2/1/2011
February 2011	Total Suspended Solids	30-Day Qty.	mg/l	68.2	88.6913	2/1/2011
February 2011	Total Suspended Solids	7-Day Conc.	mg/l	18	19.	2/22/2011
February 2011	Total Suspended Solids	7-Day Qty.	mg/l	103	217.952	2/22/2011
March 2011	Total Suspended Solids	30-Day Conc.	mg/l	12	16.8333	3/1/2011
March 2011	Total Suspended Solids	7-Day Conc.	mg/l	18	23.3333	3/1/2011
March 2011	Total Suspended Solids	30-Day Qty.	mg/l	68.2	93.2706	3/1/2011
March 2011	Mercury, Total	30-Day Conc.	ng/l	12.0	12.335	3/1/2011
March 2011	Total Suspended Solids	7-Day Conc.	mg/l	18	21.	3/8/2011
March 2011	Total Suspended Solids	7-Day Qty.	mg/l	103	187.439	3/8/2011
March 2011	CBOD 5 day	7-Day Qty.	mg/l	85.2	87.0017	3/8/2011

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As required by Part III, Items 11 and 12 of the NPDES Permit, the village has notified the Ohio EPA each time a violation has occurred and has followed up with the necessary written report.

Schedule of Compliance

The NPDES Permit includes a schedule of compliance to upgrade the Sebring POTW. The schedule requires the village to submit a Permit-to-Install application no later than September 1, 2011 and to initiate construction no later than May 1 2012. The village should review the schedule of compliance to ensure the required activities are completed in a timely manner.

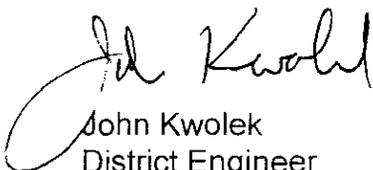
Conclusion:

The treatment plant is well operated and maintained. Most routine maintenance of the system is performed as needed. However, the clarifiers and the industrial pump station are in need of routine inspection and maintenance per Items 5 and 6 above. In addition, the village is having operational issues at the treatment plant during precipitation events. These operational issues are creating treatment problems and are costing the village unnecessary capital to treat clean water entering the sanitary sewer system.

Please provide a response to this inspection report indicating actions that will be taken to address comments 5 through 10 above. The response should include actions that will be taken to address the listed concerns and a schedule for completion. The response should be submitted to this office no later than July 15, 2011.

You may contact this writer at (330) 963-1251 or a john.kwolek@epa.state.oh.us to discuss any questions you may have regarding this inspection report.

Respectfully,



John Kwolek
District Engineer
Division of Surface Water

JK/mt

cc: Doug Burchard, Village Manager, Village of Sebring
Lee Hatton, Sebring POTW Superintendent
Mary Helen Smith, Mahoning County Department of Health