

HEALTH & SANITATION COMMITTEE
JUNE 2, 2009

The Penn Township Health & Sanitation Committee met in public session on Tuesday, June 2, 2009 at 7:00 PM. Present were Chairman Rewa and Commissioners Goldsmith, Heilman, and Felix. Commissioner Prieber was absent with notice. Also present were Manager Garvick, WWTP Superintendent Mahone, Engineer Bortner, Highway Foreman Mahan and Administrative Assistant Rodgers. The following items were discussed.

ANNOUNCEMENTS: None

APPROVAL OF MEETING MINUTES: Minutes from the May 5, 2009 meeting were approved as presented.

CITIZENS REMARKS: None.

WASTEWATER TREATMENT PLANT UPGRADE: Joel Kostelac and Bill Ladieu from CET Engineers, Inc. presented a preview of the proposed wastewater treatment plant upgrades necessary to comply with the discharge limits imposed by the Chesapeake Bay Initiative. Joel began with a description of the existing plant and its various levels of operation. The facility is comprised of the “new” 1979 addition and the “old” 1963 original plant, which is not currently in operation. The PADEP regulatory requirements reduces the amount of nutrients allowed to be released into the receiving stream of Oil Creek. The Township currently releases about 16 mg/l of Total Nitrogen (TN) and 1.5 mg/l of Total Phosphorus (TP). The upgrade is also being driven by the expected growth in the Township, which could result in the plant not having sufficient hydraulic capacity to effectively operate. There currently is limited capability for nutrient removal and the upgrade will greatly improve the removal of the nutrients. Penn Township already knows that its discharge limits are going to be 6 mg/l TN and .8 mg/l TP. The total maximum daily load has not yet been established by DEP but it is possible that it will be as low as 3 mg/l TN and .03 to .1 mg/l TP. An upgrade of the headworks also needs to be constructed in order to be in compliance with the Consent Order and Agreement.

Joel then reviewed the design objectives. DEP has indicated that 2017 is when the total maximum daily load will be determined for “impaired waterways”, of which Oil Creek is one. There is a separate total maximum daily load for the Chesapeake Bay. The future build out capacity for the upgraded plant is five million gallons per day for the annual average. The instantaneous peak flow is projected to be around 14 million gallons per day. CET is proposing a Membrane BioReactor (MBR) system with biological nutrient removal (BNR) upgrades (Option A) or a Cloth filtration with BNR (Option B). Joel described the scope of the project that would need to be taken regardless of the option chosen. This included the headworks, external anoxic basins, conversion of digesters to post

anoxic basins, effluent filtration, process control system, and items at end of useful design life and replacement required. Option A would include the conversion of clarifiers to aeration tanks, external membrane bioreactor system, and UV disinfection. Option B includes rehab of existing clarifiers and the installation of cloth filters in existing sand filter area. He covered the advantages of Option A, which included the treatment to the current limit of technology; highly automated, efficient system; likely no need for major future capital projects; and minimal impact on current plant operations during construction. The disadvantages would be very high capital costs and maybe too much treatment in view of the uncertain regulatory environment. He reviewed a schematic that showed how the plant would be laid out and what would need to be replaced.

He reviewed Option B advantages and disadvantages and provide a schematic that showed the changes to the plant. The advantages are that treatment would be sufficient to meet the requirements of the Bay Strategy; the treatment might also be sufficient to comply with future TMDL; minimal impact on current plant operations during construction; lower capital costs; easily converted to Option A; allows Twp to take advantage of future technological advances if additional treatment is required to meet future TMDL. The disadvantages of Option B are that it may require another future upgrade pending regulation changes and some systems may not carry over. The construction documents will have to include a process to keep the current plant operating during construction and until the new processes are brought online, regardless which option is ultimately considered.

He then reviewed the projected costs associated with the project. The cost of the base upgrade to meet the Consent Order and Agreement is \$12,623,000. This is only an estimate and could range from twelve to fourteen million dollars. Option A, including the base grade option would be \$28,854,000. Option B, including the base upgrade is \$17,760,000. These costs do not include project contingency, design, and permitting. He then discussed the timing of the project in order to be in compliance. The NPDES Permit and the DEP Consent Order and agreement control the dates by which the project needs to be completed. Joel indicated that the state would be announcing PAH2O grant awards sometime in July. It is believed that most municipalities will not receive all the funds they have requesting through their grant applications. The DEP Part II permit needs to be submitted by October 31, 2009. The main interceptor Part II permit needs to be submitted by June 30, 2010. Bids for the project can begin to be released in September 2010. The award of the contract should be no later than January 31, 2011. It was noted that the contract should be awarded in 2010 between April and September because the plant needs to be completed by September 30, 2011. The compliance and report for the first year Annual Mass Load must be submitted by September 30, 2012.

The Committee expressed much concerned about the cost of the project. There was some discussion about future costs and technology and how they

might impact future improvements. The Township will need to consider an increase in sewer rates in order to help fund the project. The Committee felt at this time that Option B was the most beneficial but will discuss again at their next meeting.

DOCUMENT SHREDDING: Mr. Mahone reported that document shredding would be held on June 13 at the recycling center. This is for residents and businesses.

SAND FILTER PROCESS: Mahone reported on the repairs to the sand filters. The Township is making the repairs in house and they should be completed in about two weeks.

CITIZENS QUESTIONS TO THE COMMITTEE REGARDING DISCUSSION ITEMS: None.

There being no further business, the meeting adjourned at 7:55 P.M.

Respectfully Submitted,

Jeffrey R. Garvick, Manager