

**EAST GOSHEN TOWNSHIP MUNICIPAL AUTHORITY  
MEETING MINUTES  
February 10, 2014**

The East Goshen Township Municipal Authority held their regular public meeting on Monday, February 10, 2014 at 7:00 pm at the East Goshen Township building. Members in attendance were: Chairman Jack Yahraes, Fran Beck, Dana Pizarro, and Kevin Cummings. Also in attendance were: Rick Smith (Township Manager), Bob Adams (Attorney), Scott Towler (BFES), Mike Ellis (Pennoni), and Walter Wujcik, Conservancy Board.

**COMMON ACRONYMS:**

<i>BFES – Big Fish Environmental Services</i>	<i>MA- Municipal Authority</i>
<i>BOS – Board of Supervisors</i>	<i>NPDES – National Pollutant Discharge Elimination System</i>
<i>CB – Conservancy Board</i>	<i>PC – Planning Commission</i>
<i>DEP – Department of Environmental Protection</i>	<i>PR – Park &amp; Recreation Board</i>
<i>EPA – Environmental protection Agency</i>	<i>RCSTP – Ridley Creek Sewer Treatment Plant</i>
<i>HC – Historical Commission</i>	<i>SBR – Sequencing Batch Reactor</i>
<i>I&amp;I – Inflow &amp; Infiltration</i>	<i>SSO – Sanitary System Overflow</i>
<i>LCSTP – Lockwood Chase Sewer Treatment Plant</i>	<i>WAS – Waste Activated Sludge</i>

**Call to Order & Pledge of Allegiance**

Jack called the meeting to order at 7:00 pm and led those present in the Pledge of Allegiance. There was a moment of silence to remember the troops and all veterans. Jack asked if anyone would be recording the meeting and there was no response.

**Chairman’s Report/Other Member’s Reports**

Dana reported that the Annual ABC Meeting went well. He talked about the projects that were completed on time and on budget in 2013, and about projects to be done in 2014. Jon Altshul explained the bond that the MA received and the excellent rating that the township received. Jack provided a picture of a bog turtle for the Authority members.

**Approval of Minutes**

Dana moved to accept the minutes of January 13, 2014. Fran seconded the motion. The motion passed unanimously.

**Approval of Invoices**

1. Kevin moved to approve payment of the following Pennoni invoices:
  - a. Pennoni #576758 \$ 1,355.00
  - b. Pennoni #576759 \$ 105.00
  - c. Pennoni #576760 \$10,582.50
  - d. Pennoni #576762 \$ 881.50

Fran seconded the motion. The motion passed unanimously.

**Liaison Reports**

**Conservancy Board** – Walter reported that the tree protectors arrived but because of the weather, the Board has not been able to install them. At their last meeting, the CB met with consultants who are working on the update to the Open Space and Recreation Plan.

**Financial Reports**

Jon Altshul's February 6, 2014 Financial Report for January 2014:

The Municipal Authority recorded \$33,737.91 in revenues and -\$395 in expenses in December, a difference of \$34,132.91. Expenses were negative due to a refund of \$1,845 from Pennoni for overpayment from December. Revenues include \$12,600 in tapping fees from Goshen Meadows and a \$21,000 transfer from the sewer operating fund. The fund balance is now \$1,632,403.33.

### **Old Business**

Odor Control Alternatives – Mike presented a report on odor control alternative and tank covers for the Ridley Creek Plant. The two most common methods of odor control are tank covers and chemical misters. The different types of covers are:

Solid, fixed cover – Fiberglass reinforced plastic (FRP) covers were included as an Add Alternative bid item in the RCSTP expansion in 2008. At that time the bids ranged from \$750,000 to \$810,000 for the covers. The cost today would probably be over \$1,000,000. Also, new structural support members would probably be needed on the walkways and carbon columns, and fans may need to be added to the interior.

Flexible covers, such as fabric, geomembrane or tarps, would need to be able to handle a rain and snow load, so some additional supports may be needed. Carbon columns and fans may be needed. Flexible covers are generally inflatable, arch/frame supporting or floating. They are expected to be less expensive than solid, fixed covers.

Floating Cover can be solid, flexible or balls. They may cause a conflict with the decanter.

Misters – There are two general types – odor neutralizing (removes odor) and odor masking (masks odor like a scented air freshener). Specific locations, typically around the site perimeter, would need to be determined. Misters are expected to have a significantly lower capital cost than covers but have an ongoing chemical supply cost and may not be as effective at odor control.

The Authority members asked Mike to provide the cost of the flexible cover and ongoing costs for the covers.

### **New Business**

1. DEP Letter – Patricia O'Neill Subdivision, 1637 Manley Road – A copy of the letter from PADEP to John Smirga, engineer for the O'Neill subdivision, granting exemption from Sewage Facilities Planning was reviewed. This sewage will be treated at the West Goshen Township facility.

2. Reservoir Road Pump Station – Rick provided the following data based on the December 2013 flows and 2013 expenses for West Goshen and Ridley Creek treatment facilities:

	<u>GPD(Dec)</u>	<u>GP Year</u>	<u>Cost</u>	<u>Cost/1,000</u>
West Goshen	896,870	327,357,550	\$983,039	\$3.00
Ridley Creek	398,404	145,417,460	\$597,337	\$4.11

He also provided a copy of the 2007 Wastewater Needs Analysis that recommended that the Alternative A2, which included expansion of the RCSTP to 750,000 GPD and construction of the Reservoir Rd Pump station, was the most cost effective alternative. The planning to expand RCSTP actually started in 1996. Rick mentioned that we pay West Goshen a fee on the flows

and a percentage of the operating costs. Kevin and Dana voiced concern about future costs. Dana feels a Lifecycle Cost Analysis should be done. Rick will provide a copy of the agreement with West Goshen to the MA members.

3. Goshen Meadows, 1325 West Chester Pk – The MA reviewed a memo from Mark Gordon, Township Zoning Officer, confirming that the Township received the 10% reservation fee for the 63 EDU's for this development. Fran moved to authorize the Municipal Authority Chairman to execute the Capacity Reservation Agreement for the Goshen Meadows project. Dana seconded the motion. The motion passed unanimously.

## **Sewer Reports**

**1. Mark Miller, Director of Public Works** - No report

**2. Pennoni** – Mike Ellis gave the following report for January:

RCSTP – Pennoni continues to provide operations assistance as needed. No issues were brought to our attention in January.

We gathered documentation requested by Miller Environmental's attorney and provided the documentation to the Township's attorney.

Reserve PS Elimination – We are still awaiting several contract closeout documents from the contractor before final payment will be made including as –built plans, a letter from the geotechnical engineer confirming adequate backfill compaction within the detention basin berm, written notification that they will return in the spring to remove the filter sock along the creek, contractor's release, statement of surety, and maintenance bond. The contractor has not indicated when these documents will be provided.

Chapter 94 Annual Reports – We collected and analyzed data and information for the Ridley Creek STP, West Goshen, and Westtown reports. A draft of the Westtown report was completed and forwarded to the Township for review. Preparation of the other two reports is ongoing.

Reservoir Road Pump Station Act 537 Plan – We conducted one complete PNDI Search for the maximum project impact area consisting of the proposed pump station site, Alternative 2A force main route, and construction access path from the end of the force main to the Ridley Creek STP. The results require that we perform a Phase 1 bog turtle habitat survey and also submit documentation to the PA Dept. of Conservation and Natural Resources (DCNR) for potential threats to 3 special concern plant species – the Tooth-cup, Heller's Witchgrass and Autumn Bluegrass. Two of these species are concerns that were not on prior PNDI results.

We made submissions to DCNR on January 16<sup>th</sup> for the special concern plant species, to PA Historical and Museum Commission (PHMC) on January 16 for a Cultural Resources Notice review, and to US Fish and Wildlife Service (F&W) on January 15 for a bog turtle habitat screening. F&W may require additional in-field wetlands delineation of the extended force main route prior to the bog turtle survey. However, we have not yet received feedback from any of the agencies.

We evaluated the feasibility of diverting all upstream flow (approx. 500,000 gpd) in the Chester Creek Interceptor through the new pump station and 8" force main in the future. Larger pumps and a larger force main would be needed to convey all upstream flow, assuming that the pump station would have to handle all upstream peak flows with no flow going to West Goshen. An email with further details was sent to the Township on January 30.

We also estimated the impact of the additional pollutant loadings on the Ridley Creek STP. The additional 300,000 gpd may cause the influent NH<sub>4</sub> daily load (in pounds/day) to exceed the plant's average design capacity. BOD<sub>5</sub>, TSS, TKN and Phosphorus influent loads are anticipated to remain within the plant's design capacities. A more accurate evaluation can be performed after an organic composite sample is taken from representative wastewater in the Chester Creek Interceptor.

As previously reported, the altered and additional force main routing will require additional field survey beyond our original scope; however, we do not recommend any further surveying be performed until the design phase, after the Act 537 Plan is approved by PADEP.

The next step in the Act 537 planning process is to submit the draft Act 537 Plan to the Chester County Planning Commission, Chester Co. Health Dept., East Goshen Township Planning Commission, West Goshen Planning Commission, and West Goshen's Treatment Plant operator for review. These agencies are allowed 60 days to provide comments. We recommend these submissions be made within the next few weeks, at least upon receipt of feedback from DCNR and PHMC, to keep the project moving forward.

The following is the tentative ACT 537 Planning schedule:

	<u>Estimated Date</u>
Submit to County & Township Agencies	March 3, 2014
60-day County & Township Review Period	May 3, 2014
Bog Turtle screening	May 3, 2014
Revisions per Agency Comments	May 15, 2014
30-day Public Comment Period	June 15, 2014
East Goshen & West Goshen Township Adoption	July 7, 2014
PADEP Review & Approval (120 days)	November 15, 2014

**3. Big Fish Environmental Services** – The following is a summary of Scott's report for January 2014:

Treatment Process Operation- During December 2013, there were no exceedances of the final effluent discharge limitations for Outfall 001 and Outfall 002.

The monthly average total phosphorus concentration was 0.24 mg/L as compared to the discharge limitation of 0.5 mg/L. During the month, the final effluent total phosphorus concentration discharged ranged from 0.18 mg/L to 0.38 mg/L.

There was no discharge to Applebrook, Outfall 002, during December 2013.

During the month of January 2014, there are no anticipated exceedances of the permitted effluent discharge limitations.

During January 2014, there was no discharge to Applebrook.

The influent wastewater pollutant concentrations and loading entering the wastewater treatment facility remained within the design concentrations and loadings. Composite samples are collected at the influent doghouse manhole and influent wet well. The influent flow meter reading is collected from the influent flow meter located prior to the Screening Building, excluding the internal recycle flows.

SBRs #1, 3 and 4 were in service during the month of January.

Process monitoring of each SBR included ammonia as N, Nitrite as N, Nitrate as N, COD, SSV, MLSS and total phosphorus. Foam concentrations remained around the same concentration as during December. Present surface area coverage during React Phase ranges from approximately 90 to 100%. The foam color changed to a light tan color and averages 3 to 4 inches in depth.

Daily monitoring of the influent and final effluent 24-hour composites samples for total phosphorus is ongoing. Daily analysis of the final effluent flow equalization grab sample total phosphorus is ongoing. Sample collection and analysis of the influent wastewater collected at the influent pump station wet well is ongoing.

Addition of aluminum sulfate solution to the SBRs to assist with phosphorus removal continued. The volume of aluminum sulfate solution to the SBRs was consistent during January. The addition of soda ash to the SBRs to assist with maintaining desired pH concentrations above 7.0 standard units continued during the month.

SBR #2 remains out of service as a treatment unit, however, partially filled with MLSS which continuously mixed and aerated.

During the month, the decanter for SBR 3 continued to be periodically observed as being extended above the water level. The effluent knife valve was routinely closed and the decanter filled with water to assist with lowering the decanter within the water level. The frequency of occurrence ranged from one to several occurrences during the month.

Process Monitoring On-Line Instrumentation: Representatives from the Hach Co. were on site on December 17, 2013 to discuss the proposed pilot study of the RTC online analyzer. A proposal for a real time monitoring and control system was received on January 30, 2013.

Solids Dewatering and Disposal: December 2013 & January 2014

During the month, sludge wasting to the sludge holding tanks and decanting of the sludge holding tanks was ongoing. Process monitoring included pH, total alkalinity and total solids. Sludge holding tank #1 was in service. The level at the beginning of the month was 9.31 feet and the level at the end of the month was 12.88 feet. The initial total solids concentration was 0.92% and ended the month as 0.97% total solids. 267,840 gallons of supernatant were decanted during the month. A total of 500 pounds of soda ash were added during the month for pH adjustment.

Sludge holding tank #2 was in service. The level at the beginning of the month was 14.82 feet and the level at the end of the month was 10.92 feet. The initial total solids concentration was 0.55% and ended the month as 0.91% total solids. 278,040 gallons of supernatant were decanted during the month. A total of 150 pounds of soda ash were added during the month for pH adjustment.

Significant storm/hydraulic Loading Events – On Monday January 6, 2014, excessive hydraulic loading to the wastewater treatment plant was experienced. The “high flow” event was managed utilizing manual diversion of flow to the offline SBR basin (SBR#2). No exceedances of the final effluent discharge limitations were experienced during this event, including the 24 hour composite sample collected on January 7, 2014 for NPDES compliance reporting. On Friday January 10, 2014 a second excessive hydraulic loading event to the SBRs was observed. This event included influent hydraulic flows rates in the range of 140% (112 x 1.25) to 157% (126 x 1.25) of the design hydraulic loadings. The duration of the event was approximately 6 hours. No exceedances of the permitted effluent discharge limitations were experienced during this event.

Minor Repairs and Preventive Maintenance

1. Influent pump #1 was rebuilt as scheduled preventative maintenance and returned to the wastewater treatment facility for reinstallation.
2. The UV lamp racks for banks number 1 & 2 were removed for cleaning. The channel was cleaned.
3. Replace 3 failed on UV bank #2. Ballast replaced were module 1, bank 2, module 2, bank 2 and module 4, bank 2.

4. Identified a failed level transducer for post flow equalization basin #1. A replacement transducer is in process.
  5. Replaced failed ballast on UB bank #1. Ballast replaced was module 3, bank 2.
  6. Adjusted belt on air compressor.
  7. Replaced failed ballast on UV bank #1. Ballast replaced was Module 3, bank #1.
  8. Drained and cleaned disc filters twice during the month. Scott mentioned that this is routine maintenance.
- Scott mentioned that about 5 dumpsters of sludge were removed during the month on January.

#### **Any Other Matter**

1. Control System Proposal – Scott presented a proposal from Hach Co. for a chemical feedback control system similar to ones being used in New England. Currently the time used is 1.5 hours. There may be a time savings. However, the estimated cost is \$40,000. They track the SBRs every day and see changes in alkalinity, pH, etc. every day. Kevin and Dana would fund instrumentation to make sampling more efficient. Kevin feels that they need to get the character of the waste. Dana asked Scott to get proposals for probes to monitor pH and temperature in the SBRs. Scott mentioned that they keep 2 logs – one for maintenance and one for operating.

#### **Adjournment**

There being no further business, Kevin moved to adjourn the meeting. Fran seconded the motion. The motion passed unanimously. The meeting was adjourned at 8:30 pm.

Respectfully submitted,

Ruth Kiefer  
Recording Secretary