EAST GOSHEN TOWNSHIP MUNICIPAL AUTHORITY MEETING MINUTES May 12, 2014

The East Goshen Township Municipal Authority held their regular public meeting on Monday, May 12, 2014 at 7:00 pm at the East Goshen Township building. Members in attendance were: Vice Chairman Kevin Cummings, Fran Beck, Dana Pizarro, and Ed McAssey. Also in attendance were: Rick Smith (Township Manager), Carmen Battavio (Supervisor), Patrick McKenna (Attorney), Scott Towler (BFES), and Mike Ellis (Pennoni).

COMMON ACRONYMS:

BFES – Big Fish Environmental Services MA- Municipal Authority

BOS – Board of Supervisors NPDES – National Pollutant Discharge Elimination System

CB – Conservancy Board PC – Planning Commission
DEP – Department of Environmental Protection PR – Park & Recreation Board

EPA – Environmental protection Agency RCSTP – Ridley Creek Sewer Treatment Plant

HC – Historical Commission

I&I – Inflow & Infiltration

LCSTP – Lockwood Chase Sewer Treatment Plant

SBR – Sequencing Batch Reactor

SSO – Sanitary System Overflow

WAS – Waste Activated Sludge

Call to Order & Pledge of Allegiance

Kevin 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. Kevin asked if anyone would be recording the meeting and there was no response.

Chairman's Report/Other Members' Reports

None

Sewer Reports

1. Director of Public Works

Mark Miller reported for April 2014:

<u>Meters</u>: All meters were read on a daily basis. After the heavy rain last week, we walked the interceptor line and pulled manholes to do a visual inspection. The new portable meters have been ordered and the others were sent for calibration.

<u>CC Collection</u>: All pumping stations were visited on a daily basis. We did not incur any problems during the month. We assisted West Goshen last Wednesday night into

Thursday morning. They had to shut down the Westtown Way Pump Station for repairs. We had to plug the interceptor line throughout the night to regulate the flow.

<u>RC Collection</u>: The pumping stations were visited on a routine basis with no problems to report. We have been repairing laterals on both systems from missing caps to broken stack pipes.

<u>RC Plant</u>: All the wet well pumps have been pulled out for routine maintenance. We will now begin to pull the SBR pumps for maintenance.

Alarms: We responded to 73 alarms for the month of April.

PA One Calls: We received 123 PA calls in April.

Rick added that the Falcon Lane Pump Station had to be taken out of service for 1 day last week.

2. Pennoni Engineer's Report

Mike Ellis presented the following report:

Invoices: Invoices with summaries are provided under separate cover.

Ridley creek Sewage treatment Plant (RCSTP): Pennoni continues to provide operations assistance as needed. No operational issues were brought to our attention in April.

Reserve Pump Station Elimination: The contractor has provided all of the required contract closeout documents; however, we have not yet reviewed the as-built plans as of the date of this memo (5/8). We intend to review the plans prior to the May 12 Municipal Authority meeting. There are 2 outstanding punchlist items that still need to be addressed: removal of the filter sock along the creek and re-seeding/re-topsoiling the lawn area at the old pump station driveway and building. We have reviewed the other submitted closeout documents and final payment request. We have certified the final payment request and forwarded it to the Township with a recommendation that payment be approved but the check not issued until the as-built plans have been reviewed and the punchlist work has been completed to the Township's satisfaction.

Reservoir Rd Pump Station Act 537 Plan: Conestoga-Rovers & Associates (CRA) finalized the Phase 1 bog turtle habitat assessment report and submitted it to the U.S. Fish & Wildlife Service

(USFWS) in late April
We finalized the Act 537 plan report and plot plans. The Act 537 Plan was submitted to the East
Goshen Township Planning Commission, West Goshen Township Planning Commission,
Chester County Planning Commission, Chester County Health Department, and West Goshen
Sewage Treatment Plant operator on May 8, 2014. The agencies are allotted 60 days to review

and provide comments per PADEP Act 537 guidelines. A copy was also submitted to the Municipal Authority to sign Section K of Component 3m.

As previously reported, the PA Dept. of Conservation and Natural Resources (DCNR) is requiring a field botanical survey of potential threats to four special concern plant species. We have discussed whether the survey is still required with DCNR given the revised force main routing and revised PNDI search that returned no DCNR conflicts. We have submitted documentation of the revised force main routing to DCNR, and we expect to receive feedback from them by May 12.

Tentative Act 537 Planning schedule (assuming no botanical survey or Phase 2 bog turtle screening):

Estimated Date

6/	
Submit to County & Township agencies	May 8, 2014
USFWS Bog Turtle Habitat Coordination	June 22, 2014
60-day County & Township Review Period	July 8, 2014
Revisions per agency comments	July 11, 2014
30-Day Public Comment Period	August 11, 2014
East Goshen & West Goshen Twp. Adoption	August 19, 2014
PADEP Review and Approval (120 Days)	December 20, 2014

New Sewer Connections

We reviewed a design plan and report submission for a new private wastewater pump station for Acero Precision at 1430 Enterprise Dr, discussed comments and questions with the PW Director and forwarded comments to the design consultant. This will go through West Goshen. Also, we received a plan from Sunny Ridge Farm for the Colonial Lane subdivision.

Fairway Village Manhole Lining

We coordinated scheduling of the SprayWall monolithic polyurethane interior manhole lining system with the contractor including attending a pre-construction field meeting. They tentatively plan to perform the work the week of June 10, 2014.

RCSTP Tank Covers

We continued the evaluation of flexible tank cover alternatives and forwarded a draft updated summary memo to the Township. We are still awaiting feedback and pricing from a couple of vendors before finalizing the memo. The memo will be finalized by the June Municipal Authority meeting.

<u>3. Big Fish Environmental Services</u> – The following is a summary of the report Scott presented for April 2014:

<u>Treatment Process Operation</u>- During February 2014, there were no exceedances of the final effluent discharge limitations for Outfall 001 and Outfall 002.

The monthly average total phosphorus concentration was 0.38 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 0.24 mg/L to 0.63 mg/L with an average of 44.4 gallons per day of aluminum sulfate solution.

There was no discharge to Applebrook, Outfall 002, during March 2014.

During the month of April 2014, the total phosphorus concentrations at the final effluent outfall 001 were slightly elevated at or above the permitted discharge limitation of 0.5 mg/L. Aluminum sulfate feed rates were increased as the month progressed to assist with total phosphorus removal. During April, especially during 3 of the 4 scheduled sampling events, the influent wastewater flow to the SBRs ranged from 12% to 43% above the March monthly average. Periodically, the influent flow rate and volume to the SBRs resulted in "Filled Decants." The Filled Decant condition results in diverting a mixture of influent wastewater and treated effluent directly to the post flow equalization basins, disc filters and disinfection prior to discharge through outfall 001. The preliminary data indicates that the final effluent total phosphorus concentration is likely to slightly exceed the permitted concentration of 0.50 mg/L.

The mass loading permit limitation is anticipated to remain below the monthly average of 3.0 lbs

Improvement management for total phosphorus during periods of elevated flow rates to the SBRs resulting in Filled Decant conditions, include the following actions:

• Utilize the polymer feed system which provided polymer prior to filtration to assist with coagulation/flocculation of solids and total phosphorus.

Coordination with Aqua Aerobics for a compatible product for the filter media is strongly recommended.

- •Provide for the capability of addition of aluminum sulfate to the influent wastewater during a Filled Decant condition.
- Evaluate utilizing poly aluminum chloride (PAC) solution prior to filtration in place of aluminum sulfate solution. High dosages of aluminum sulfate solution contribute to elevated TSS concentrations and turbidity whereas PAC has negligible impacts.
- Re-evaluate the use of real time control loop system for integrating aluminum sulfate feed rates with disc filter and/or SBR influent flow rates.

During March 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 April.

Process monitoring of each SBR included ammonia as N, Nitrite as N, Nitrate as N, COD, SSV, MLSS and total phosphorus. Foam concentrations remain reduced during the month of April. Increased sludge wasting was continued to maintain lower the MLSS concentrations. SBRs 3 & 4 were observed to have a maximum of approximately 5% of the surface area covered with a medium brown colored foam. Adjustments to the treatment process to lower the MLSS concentrations and raise the F:M ratio within the target range of 0.045 to 0.06 were ongoing during the month.

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 increased from 45 gpd to as high as 90 gpd during April to assist with total phosphorus removal. Increased aluminum sulfate dosages prior to filtration were increased during the month. Soda ash addition to the SBRs to assist with maintaining the desired pH concentrations above 7.0 standard units continued during the month. Soda ash addition to the SBRs during April averaged 308 pounds per day. SBR #2 remains out of service as a treatment unit, however, partially filled with MLSS which is continuously mixed and aerated. The majority of the contents were transferred to the sludge holding tanks. This SBR was periodically placed in service to assist with managing peak flows to reduce the impact of Filled Decant conditions.

The decanter for SBR 3 continued to be periodically observed as being slightly tilted within 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. The SBR is planned for removal from service during May for inspection.

Solids Dewatering and Disposal: April 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 13.55 feet and the level at the end of the month was 7.11 feet. The initial total solids concentration was 1.21% and ended the month as 0.625% total solids. The average pH concentration was 6.98 S.U. and total alkalinity of 325 mg/L. No supernatant was decanted during the month. A total of 650 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 5.81 feet and the level at the end of the month was 13.78 feet. The initial total solids concentration was 0.69% and ended the month as 0.85% total solids. The average pH concentration was 7.05 S.U. and total alkalinity of 319 mg/L. 207,013 gallons of supernatant were decanted during the month. A total of 400 pounds of soda ash were added during the month for pH adjustment.

<u>Significant storm/hydraulic Loading Events</u> – On April 15, 2014 the influent flows rate to the SBRs continuously exceeded 100% of the hydraulic design rate from 9:43 through 22:11 (approx. 13 hours). A total 7 Filled Decant and 1 Filled settle condition were observed for a total of 302 minutes (5.03 hours). The effluent clarity remained good with no bulking or excessive solids present within the discharge at outfall 001.

On April 30, 2014 through May 1, 2014, the influent flows rate to the SBRs continuously exceeded 233% of the hydraulic design rate from 13030 through 2:24 (approx.. 12 hours). A total of 11 Filled Decant and Filled settle conditions were observed for a total of 805 minutes (13.4 hours). The effluent clarity remained good with no bulking or excessive solids present within the discharge at outfall 001.

Minor Repairs and Preventive Maintenance

1. Replaced a ballast in UV bank #2

There were 7" of rain in the month of April.

Scott will write a letter for the compliance issue.

Approval of Minutes

Ed moved to accept the minutes of April 21, 2014 as corrected. Fran seconded the motion. The motion passed unanimously.

Approval of Invoices

1. Fran moved to approve payment of the following Pennoni invoices:

a. Pennoni #587993 \$ 197.25

b. Pennoni #587994 \$ 4,724.50

c. Pennoni #587995 \$ 992.00

d. Pennoni #587996 \$ 4,562.25

e. Pennoni #587997 \$ 644.25

Ed seconded the motion. The motion passed unanimously.

Liaison Reports

Board of Supervisors – Carmen reported that they are continuing to check on the Sunoco gas line project. Right now they have a certificate of Public Convenience. Phase 1 is to reactivate the current 8" line.

Financial Reports

1. Jon Altshul's May 5, 2014 Financial Report for April 2014:

The Municipal Authority recorded \$133 in revenues and \$15,677 in expenses in April, a difference of -\$15,545. The expenses were from payments to Pennoni and Gawthrop Greenwood. The fund balance is now \$1,598,005.

Old Business

1. Tank Covers - The Municipal Authority requested this feasibility report in order to be proactive and find out what alternatives are available if needed in the future. Mike presented his findings so far and provided pictures of the different types of covers.

Goals

- 1. Rick provided a draft mission statement. Review will be deferred to the June meeting.
- 2. Kevin will submit an article for the next newsletter which is due 7/1/14.
- 3. Act 537 Plan Revisions submitted to EGMA, EGPC, WGSTP, WGPC and CCPC.
- 4. Continue to implement I&I Plan April 14 status report received.

New Business

1. Kevin moved to authorize the Municipal Authority Chairman, Jack Yahres to sign the Reservoir Road Act 537 Revision. Ed seconded the motion. Mike explained how calculations were made. The motion passed unanimously.

Any Other Matter

- 1. Reserve Pump Station Sanitary Sewer Diversion In the May 9, 2014 memo Mike Ellis recommended that the MA conditionally approve Payment #3 (Final) to Ronald Smith Inc. for the subject project in the amount of \$7,316.82. The recommended condition is that payment not be physically made until the contractor addresses the following items to the satisfaction of the Authority Engineer, Township Manager and Township PW Director:
 - a. Remove the filter sock along the creek
 - b. Restore the constructed lawn area at the former location of the pump station building and driveway. Grass is not growing in well and the soil is rocky. Additional topsoil and seed is expected to be needed.
 - c. Submit a corrected Application and Certification form for Payment #3(Final). We've marked up the submitted application with required revisions and have attached it for your reference.
 - d. As-built plans have been submitted by the contractor directly to the Township. Pennoni needs to review the plans to confirm they are acceptable. Mike intends to perform the review prior to the May 12th MA meeting.

We have reviewed the following attached contract closeout documents and found them acceptable: Daily Field Report from Earth Engineering Inc. certifying the backfill compaction within the detention basin berm; contractor's release; consent of surety to final payment; contract bond (including the maintenance bond); and payroll certification #1-7 for Ronald Smith Inc. Ed made a motion to approve the payment of \$7,316.82 subject to referenced conditions and approval by the Township Manager. Fran seconded the motion. The motion passed unanimously.

Adjourment

There being no further business, Fran moved to adjourn the meeting. Dana seconded the motion. The motion passed unanimously. The meeting was adjourned at 8:00 pm.

Respectfully submitted,

Ruth Kiefer Recording Secretary