EAST GOSHEN TOWNSHIP MUNICIPAL AUTHORITY MEETING MINUTES August 11, 2014

The East Goshen Township Municipal Authority held their regular public meeting on Monday, August 11, 2014 at 7:00 pm at the East Goshen Township building. Members in attendance were: Chairman Jack Yahraes, Kevin Cummings, Dana Pizarro, Ed McAssey and Fran Beck. Also in attendance were: Rick Smith (Township Manager), Bob Adams (Attorney), 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

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 Members' Reports

Jack attended the West Goshen meeting which was mostly about inspections of Goose Creek. Dana will attend the PMAA Conference at the end of the month.

Sewer Reports

1. Director of Public Works

Mark Miller reported for July 2014:

<u>Meters</u>: All meters were read on a daily basis. We were finally able to install the portable flow meters at the locations that Mike Ellis suggested.

<u>CC Collection</u>: We cleaned and televised 11,200 feet of sewer lines in July. The pumps that we pulled were rebuilt by Deckmen Electric and put back on the shelves. Pumping stations were visited on a daily basis with no problems to report.

<u>RC Collection</u>: The Hunt Country pump station was visited on a routine basis. We cleaned and televised 12,800 feet of pipe, several sags were found and two sections of pipe were crushed. We replaced 180 feet of 8" pipe.

<u>RC Plant</u>: The emergency generator was utilized several times this month at the plant and the pumping stations.

Alarms: We responded to 15 alarms for the month of July.

PA One Calls: We received 97 PA calls in July.

<u>Emergency Call</u>: 17 emergency call outs for the month of July, two were for lateral blockages, the rest were alarms due to the storms.

Rick added that they started the extension to Wylpen.

2. Pennoni Engineer's Report

Mike Ellis gave the following report:

Invoices: Invoices with summaries are provided under separate cover.

<u>Reservoir Rd Pump Station Act 537 Plan:</u> We prepared updated hard and electronic copies of the Act 537 plan for public review. The 30-day public comment period began on July 14 and will end on August 14.

We received Act 537 Plan review forms from the Chester Co. Planning Commission and an approval letter from the West Goshen Sewer Authority. The only outstanding agency consistency review is from West Goshen Township Planning Commission. Reviews were due by July 9.

It is our understanding that Conestoga-Rovers & Assocs. resubmitted revised plans to USFWS around July 10 to address their bog turtle protection comments at the Chester Creek crossing. We are awaiting USFWS approval.

We notified the Township of an open grant application from PA DCED that funds Act 537 Plans, for which this project would be eligible.

Tentative Act 537 Planning schedule:

End 30-day public comment period	August 12, 2014
USFWS Bog Turtle Habitat formal approval	by August 21,2014?
East Goshen Twp. Adoption	August 19, 2014
Submission to PADEP	August 22, 2014
PADEP Review and Approval (120 Days)	December 21, 2014

Reserve Pump Station Elimination – The contractor was notified that grass is not growing in well in the former driveway location. We are still awaiting resubmission of as-built plans with surveyed manhole elevations also. The contractor responded that as-built plans will be submitted and additional topsoil and seed will be placed by August 14.

New Sewer Connections

We reviewed the final revised design plans and report submission for a new private wastewater pump station for Acero Precision at 1340 Enterprise Dr and issued a final comment letter. We reviewed shop drawings for the sanitary sewer extension at Sunny Ridge Farm (Cornwallis Dr) and communicated comments and revisions with the developer's contractor. Rick added that Richard Jackson, resident, called with questions about the Reservoir Road Pump Station.

3. Big Fish Environmental Services – The following is Scott's report for June & July 2014: Treatment Process Operation June 2014- During May 2014, there were no exceedances of the final effluent discharge limitations for outfall 001 and no discharge from Outfall 002. The monthly average total phosphorus concentration was 0.26 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 0.20 mg/L to 0.32 mg/L with an average of 82.6 gallons per day of aluminum sulfate solution. There was no discharge to Applebrook, Outfall 002, during May 2014. During June 2014, 138,000 gallons were discharged 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

Estimated Date

collected from the influent flow meter located prior to the Screening Building, excluding the internal recycle flows.

Sequencing batch reactors (SBRs) 1, 3 and 4 were in service during the month of June. 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 June. Adjustments to the treatment process to maintain the MLSS concentrations and 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 removal continued. 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 a daily average of 82.6 gpd during May to 101 gpd during June to assist with total phosphorus removal. Increased aluminum sulfate dosages prior to filtration were increased during the month. The increase in alum addition resulted in an increase in soda ash addition. During May the daily average soda ash addition was 439 lbs/day as compared to the June daily average of 500 lbs/day. SBR #2 remains out of service as a treatment unit

Solids Dewatering and Disposal: May 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 7.44 feet and the level at the end of the month was 11.72 feet. The initial total solids concentration was 0.62% and ended the month as 0.73% total solids. The average pH concentration was 7.30 S.U. and total alkalinity of 386 mg/L. No supernatant was decanted during the month. A total of 1,000 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 14.39 feet and the level at the end of the month was 13.99 feet. The initial total solids concentration was 0.97% and ended the month as 0.80% total solids. The average pH concentration was 7.38 S.U. and total alkalinity of 490 mg/L. 83,626 gallons of supernatant were decanted during the month. A total of 100 pounds of soda ash were added during the month for pH adjustment.

<u>Significant storm/hydraulic Loading Events</u> – None were experienced past May 2, 2014. <u>Minor Repairs and Preventive Maintenance</u>

No minor repairs or preventative maintenance was performed during June 2014.

<u>Treatment Process Operation July 2014</u>- During June 2014, there were no exceedances of the final effluent discharge limitations for outfall 001 and no discharge from Outfall 002. The monthly average total phosphorus concentration was 0.28 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 0.56 mg/L to 0.10 mg/L with a daily average of 101 gallons as compared to the month of May daily average of 83 gallons per day of aluminum sulfate solution.

A total of 138,000 gallons of treated effluent were discharged to Applebrook, Outfall 002, on June 30, 2014. The influent loadings remained within the treatment facility design loadings. There are no anticipated exceedances of the permitted limitations for the month of July. Split sampling of the composite sample collected by Applied Laboratory Services (ALS) is ongoing for comparative analysis and daily results. The final effluent total phosphorus collected on July 22, 2014 appears to have a sampling or laboratory analysis error. The initial concentration reported is 2.1 mg/L, whereas, all process monitoring, final effluent quality and comparative

sample analysis indicates the concentration should be less than 0.5 mg/L. The laboratory was instructed to retest the sample as it remains within the 30 day holding period. 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.

Process monitoring of each SBR included ammonia as N, nitrite as N, Nitrate as N, COD, SSV, MLSS and total phosphorus. Foam concentrations remain stable at approximately 15 to 25% coverage of the surface area during the month of July. Increase sludge wasting rates ranged from 14 to 18 minutes per cycle to maintain the MLSS concentrations and F:M ratio within the desired goals. Aeration time was increased to a minimum of 210 minutes to provide for a total of approximately 58% of aeration during the 360 minute treatment cycle. The extended aeration period assists to offset the oxygen demand after extended periods of idle time between treatment cycles.

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 a daily average of 82.6 gpd during May to 101 gpd during June to assist with total phosphorus removal. The daily average for the month of July decreased slightly o approx. 93 gpd (as of 7/29/14). The aluminum sulfate dosages prior to filtration remained constant during June & July. The increase in alum addition, as well as the increased idle times, resulted in an increase in soda ash addition. During June the daily average soda ash addition was 500 lbs/day as compared to the May daily average of 439 lbs/day. During July, he soda ash addition average decreased slightly to approx. 466 lbs/day. Soda ash assists towards maintaining 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.

The decanter for SBR 3 was occasionally 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 SBR is planned for removal from service during mid-August for inspection.

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 11.69 feet and the level at the end of the month was 15.14 feet. The initial total solids concentration was 0.71% and ended the month as 0.64% total solids. The average pH concentration was 7.12 S.U. and total alkalinity of 254 mg/L. A total of 92,421 gallons of supernatant was decanted during the month. A total of 1,350 lbs. 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 15.21 feet and the level at the end of the month was undetermined due to a failed level transducer. A replacement transducer was obtained and is scheduled for delivery to the facility for installation during the week of Aug. 4, 2014. The initial total solids concentration was 0.81% and ended the

month as 1.04% total solids. The average pH concentration was 6.96 S.U. and total alkalinity of 381 mg/L. A total of 290,230 gallons of supernatant were decanted during the month. A total of 1,350 lbs. of soda ash were added during the month for pH adjustment.

Significant Storm/Hydraulic Loading Events – None during June 2014

Minor Repairs & Preventive Maintenance

- Gained approval to order replacement level transducers for post flow equalization tank #2 and sludge holding tank #2. Spare transducers were included for inventory.
- July 1 Township staff reinstalled influent pump #3. All three influent pumps were rebuilt by Deckman Electric during 2014.
- July 16 replaced failed UV ballast for bank #2, module 1-2.
- July 21 replaced final effluent sample suction tubing.
- July 23 replaced the oil in SBR blower #5. Blower hours are 9,676.2.
- July 23 trouble shoot influent pump controls. Influent pump control panel failed during routine generator exercising. Determined failed battery in the UPS surge protection device. Replaced surge protector device with unit from the laboratory.
- July 27 replaced the grease for the sludge holding tank and post flow equalization blower. The hours are listed: B1A 86.352.1 hrs

ours are listed: B1A – 86,352.1 hrs B1B – 72,962.3 hrs B1C – 12,655.7 hrs B2 – 54,983.5 hrs.

Dana commented about the TKN concentration in June & July. Rick will talk to Scott about it. Ed pointed out that putting zeroes in a spreadsheet changes the average number.

Approval of Minutes

Dana moved to accept the minutes of July 14, 2014 as corrected. Fran seconded the motion. The motion passed unanimously.

Dana moved to accept the minutes of the July 21, 2014 special meeting as corrected. Ed seconded the motion. The motion passed unanimously.

Approval of Invoices

- 1. Pennoni Supplemental Funds Request #2 For the Reservoir Road project, Pennoni is requesting an additional \$3,000.00 as a supplement to the approved Phase 3 budget. Dana moved to approve this supplement of \$3,000.00 to the Phase 3 Budget. Fran seconded the motion. The motion passed unanimously. Mike noted that \$878.08 of the supplement is included in Invoice #601105.
- 2. Dana moved to approve payment of the following Pennoni invoices:

a. Pennoni #599630 \$ 476.75
b. Pennoni #599632 \$ 141.25
c. Pennoni #599633 \$ 28.25
d. Pennoni #601105 \$ 1,208.75

Fran seconded the motion. The motion passed unanimously.

3. Kevin moved to approve payment of the Gawthrop invoice #122295 for \$80.00. Dana seconded the motion. The motion passed unanimously.

Financial Reports

1. The report was reviewed.

Goals

1. Ed will attend the West Goshen September meeting.

<u>Adjourment</u>

There being no further business, Kevin moved to adjourn the meeting. Dana seconded the motion. The motion passed unanimously. The meeting was adjourned at 7:22 pm.

Respectfully submitted,

Ruth Kiefer Recording Secretary