

**EAST GOSHEN TOWNSHIP MUNICIPAL AUTHORITY
MEETING MINUTES
December 8, 2014**

The East Goshen Township Municipal Authority held their regular public meeting on Monday, December 8, 2014 at 7:00 pm at the East Goshen Township building. Members in attendance were: Vice Chairman Kevin Cummings, Dana Pizarro, Ed McAssey and Fran Beck. Also in attendance were: Rick Smith (Township Manager), Carmen Battavio (Township Supervisor), Mark Miller (Director of Public Works), Scott Towler (Big Fish), Mike Ellis (Pennoni), and Walter Wujik (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>PM – Prevention Maintenance</i>
<i>EPA – Environmental protection Agency</i>	<i>PR – Park & Recreation Board</i>
<i>HC – Historical Commission</i>	<i>RCSTP – Ridley Creek Sewer Treatment Plant</i>
<i>I&I – Inflow & Infiltration</i>	<i>SBR – Sequencing Batch Reactor</i>
<i>LCSTP – Lockwood Chase Sewer Treatment Plant</i>	<i>SSO – Sanitary System Overflow</i>
	<i>WAS – Waste Activated Sludge</i>

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

Ed attended the West Goshen meeting. They continued testing on Goose Creek. They will open bids for methane burner construction on 12/23/14. The Sunoco pipeline was discussed.

Sewer Reports

1. Director of Public Works

Mark Miller reported for November 2014:

Meters: There were problems with meters including portable meters. Allied Control was called to make repairs. The meter on Wilson Dr. had meter flows that were climbing. We found that the transducer was failing. Allied installed a spare transducer that we had in stock. Two of the portable meters failed when the band holding the metering probe broke away and flowed down stream. Fortunately, we were able to retrieve the probe.

CC Collection: While reviewing PA One Calls, we saw that Battavio Plumbing was doing a lateral repair. I called Carmen to see what the problem was. He stated that when his employee was on site, they found sewage coming from the stand pipe at the street. We went out and ran the camera from the stand pipe to the main. We found that the pipe had dropped. We excavated the lateral and verified that the lateral did not have enough fall. After some discussion, we decided to abandon the existing lateral and install a new lateral about 20 feet further down the main. This required the removal of a large Ash tree and a hedge row of brush. The pump stations were visited on a routine basis. The pumps that were pulled last month were repaired and picked up at Deckmen Electric.

RC Collection: The Hunt country Pump Station was visited on a daily basis with no problems to report.

RC Plant: On November 20, I received a call from the plant operator who reported that the generators came on to run as they do on a weekly basis. Then he heard a boom and the power went out. When I got to the plant and opened the transfer switch door, I saw that the switch had blown apart. I called our contractor who responded. Due to the age of the transfer switch which is no longer made, it was decided to purchase a new transfer switch out of Texas. Between Paul Siddell and Leni Electric they were able to put a piece of wood in the old transfer switch to allow street power and get the lift station and forward feed pumps operational. Due to the outage, we flooded out the screen with 9 feet of sewage. However, we never overflowed into the meadow. We were not able to get the transfer switch operational until Monday. On November 28 the operator called to report that he heard a bang in the MCC#2 and lost power to the lift station pump #2 and the heat in the sludge room. I contacted Lenni who responded. However, it was decided that as long as the other two pumps were working, we would not touch anything until Monday.

Lateral repairs: 1631 Still Lane

Alarms: We responded to 28 alarms for the month of November.

PA One Calls: We received 120 PA One Calls in November.

2. Pennoni Engineer's Report

Mike Ellis gave the following report:

Invoices: Invoices with summaries are provided under separate cover.

Reservoir Rd Pump Station Act 537 Plan: The Act 537 Plan Update was submitted to PADEP on August 25, 2014. PADEP has reviewed the Plan Update and they provided two comments which we have addressed:

1. We submitted revised Plan Update pages to address a project scheduling comment on October 16.
2. U.S. Fish & Wildlife Service (USFWS) provided approval of the bog turtle habitat survey and proposed construction avoidance measures on November 14. The approval letter was forwarded to PADEP on November 17. The approval letter includes 12 conditions for construction including a requirement that the pipe construction in the vicinity of the Chester Creek only be performed between April 1 and October 31.

We have requested feedback from PADEP to confirm all comments are satisfactorily addressed, but we have not received a response. Per PADEP guidelines, approval should be issued by December 23, 2014 (within 120 days of the original submission).

Mike added that in phase 2, we will need to have a bog turtle expert present while work is being done.

Sewer Ordinance Updates

We finalized proposed revisions to the "Building Sewer" and "Grinder Pump" sections of the Township's Sewer Ordinance and forwarded to the Township for consideration of enactment via ordinance amendment by the Board of Supervisors.

3. Big Fish Environmental Services – The full report for November is attached at the end of these minutes.

Minor Repairs & Preventative Maintenance:

November 10: Located broken wire for #1 post flow equalization tank.

November 11: Replaced the intake filters for the SBR blowers

November 12: Repaired wire for #1 post flow equalization basin. Level sensor functioning as intended.

November 14: Siemens panel alarm for alum pump MP-31 failure. Troubleshooting pump and controls indicated a potential issue with the control logic. Contacted ICI to provide drawing and assist with correcting the problem. Problem corrected on December 1st.

November 19: Initiated procurement of the Mpulse CMMS. Initiated procurement for replacement cloth media for disc filter #2.

November 20: Temporary electric service shut down to allow for electricians to finalize electrical connections for automatic transfer switch for emergency power generator.

November 24: Installation of the emergency generator automatic transfer switch is complete and returned to service.

November 26: Emergency generator routine exercise completed with no problems.

November 28: Influent pump #2 failed. Lenni Electric was on site on Monday, December 1. Replaced blown fuses in Flygt pump control panel.

Approval of Minutes

Dana moved to accept the minutes of November 10, 2014 as corrected. Fran seconded the motion. The motion passed unanimously.

Approval of Invoices

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

- | | | | |
|----|-----------------|----|--------|
| a. | Pennoni #615122 | \$ | 852.50 |
| b. | Pennoni #615123 | \$ | 536.75 |
| c. | Pennoni #615124 | \$ | 103.25 |

Dana seconded the motion. The motion passed unanimously.

Liaison Reports

Board of Supervisors – Carmen reported that they reviewed the police merger study, need to finalize the police budget and discussed Sunoco.

Conservancy Board – Walter reported that, with assistance from Mark Miller, they planted a bald cypress tree on E. Boot Road. There will be a plaque in honor of Bryan DelMonte for his years of service. Keep East Goshen Beautiful Day will be the 2nd Saturday in April 2015.

Financial Reports

Jon Altshul provided the following report:

The Municipal Authority recorded \$2,130 in revenues, including 1 tap-in fee, and \$4,813 in engineering and legal expenses in November, a difference of -\$2,683. The fund balance is now \$1,603,120.

Goals

The goals for 2014 are complete. Need to set goals for 2015.

The Comprehensive Plan representative will be Dana. Alternate will be Jack.

New Business

1. Reservoir Rd Pump Station Design & Permitting.

Pennoni Proposal & addendum – Mike explained this is for a concept design to submit to the DEP. After that another proposal will be presented. Rick explained that after 2 consecutive quarters at 950,000 gallons, this project will go out for bid. Mike explained the permits and how long they will be in effect. Dana moved to approve the proposal and addendum not to exceed the maximum without approval of the Municipal Authority. Fran seconded the motion. The motion passed unanimously.

2. Software for Maintenance of the Plant – Training was done today. It will track all equipment, work orders, and costs. Ed moved to approve the invoice of \$3,500.00 for this software. Fran seconded the motion. The motion passed unanimously.

3. Charter Chase – Rick reported that a vacant lot in Charter Chase was purchased by the township for \$4,000.00 to be available for a possible pump station.

4. January Meeting – Rick explained that the CPTF will have its first meeting at 7 PM on Monday January 12, the same night as the Municipal Authority meeting. He asked to have the MA meeting start at 6 pm. All agreed.

Adjournment

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

Respectfully submitted,

Ruth Kiefer
Recording Secretary



Monthly Operations Report: November 2014

Treatment Process Operation

During October 2014, there were no exceedances of the final effluent discharge limitations for outfall 001 and discharge from Outfall 002. The total phosphorus monthly average concentration of 0.18 mg/L as compared to the permitted limitation of 0.50 mg/L. Table 1 illustrates the final effluent composite sample data reported for the October 2014 eDMR. During the month, the final effluent total phosphorus concentration discharged ranged from 0.10 mg/L to 0.24 mg/L. A daily average of 70.5 gpd of aluminum sulfate solution was used as compared to the 99 gpd average for September.

Table 1

October 2014 - Final Effluent - Out Fall 001											
NPDES Permit Discharge Limitations	Flow	CBOD ₅		TSS		NH ₄ -N		Phosphorus, Total , mg/L		Fecal Coliform	
	MGD Average	mg/L	lbs/ month	mg/L	lbs/ month	mg/L	lbs/ month	mg/L	lbs/ month	Geo Mean	Geo Mean
	0.75	20	125	21	131	7	44	0.5	3	200	1,000
	Instantaneous Maximum	40		42							
Sample Date											
October 7, 2014	0.144	2.8	3.4	5	6	0.227	0.27	0.21	0.25	1	0.0000
October 14, 2014	0.152	3.1	3.9	4	5	0.116	0.15	0.18	0.23	1	0.0000
October 21, 2014	0.262	2.0	4.4	3	7	0.100	0.22	0.24	0.52	1	0.0000
October 28, 2014	0.257	2.0	4.3	2	4	0.100	0.21	0.10	0.21	1	0.0000
Average	0.204	2.5	4.0	4	5	0.136	0.21	0.18	0.30	1	0.0000
Minimum	0.144	2.0	3.4	2	4	0.100	0.15	0.10	0.21	1	0.0000
Maximum	0.262	3.1	4.4	5	7	0.227	0.27	0.24	0.52	1	0.0000

A total of 2,001,900 gallons, which represented a daily average of 133,460 gpd, of treated effluent was discharged to Applebrook, Outfall 002, for a period of 15 days. Table 2 represents the final effluent water quality data used to prepare the DMR for outfall 002.



Table 2

October 2014 - Applebrook - Out Fall 002											
NPDES Permit Discharge Limitations	Flow	CBOD ₅		TSS		NH ₄ -N		Phosphorus, Total , mg/L		Fecal Coliform	
	MGD Average	mg/L	lbs/ month	mg/L	lbs/ month	mg/L	lbs/ month	mg/L	lbs/ month	Geo Mean	Geo Mean
	0.75	20	125	21	131	7	44	0.5	3	200	1,000
Instantaneous Maximum	40		42								
Sample Date											
October 7, 2014	0.1308	2.8	3.1	5	5	0.227	0.25	0.21	0.23	1	0.0000
October 14, 2014	0.1208	3.1	3.1	4	4	0.116	0.12	0.18	0.18	1	0.0000
October 21, 2014	0.0000	No Discharge									
October 28, 2014	0.0000										
Average	0.0629	0.0	3.1	5	5	0.172	0.18	0.20	0.21	1	0.0000
Minimum	0.0000	2.8	3.1	4	4	0.116	0.12	0.18	0.18	1	0.0000
Maximum	0.1308	3.1	3.1	5	5	0.227	0.25	0.21	0.23	1	0.0000

Table 3 illustrates the influent wastewater pollutant loadings for October 2014. The influent loadings remained within the treatment facility design loadings.

Table 3

October 2014 - Influent Wastewater											
Design Basis	Flow	BOD ₅		TSS		NH ₄ -N		TKN, mg/L		Phosphorus, Total, mg/L	
		mg/L	lbs/day	mg/L	lbs/day	mg/L	lbs/day	mg/L	lbs/day	mg/L	lbs/day
	MGD Average		335	2,098	320	2,001	32	200	48	301	9.1
Sample Date											
October 7, 2014	0.281	265	621	262	614	39.7	93	58.8	138	8.2	19
October 14, 2014	0.297	156	366	169	396	36.5	86	51.4	120	5.4	13
October 21, 2014	0.334	324	759	329	771	45.0	105	54.2	127	5.7	13
October 28, 2014	0.308	280	656	268	628	38.8	91	50.0	117	5.9	14
Average	0.305	256	601	257	602	40.0	94	53.6	126	6.3	15
Minimum	0.281	156	366	169	396	36.5	86	50.0	117	5.4	13
Maximum	0.334	324	759	329	771	45.0	105	58.8	138	8.2	19



Table 4 presents the available Outfall 001 final effluent data for the month of November 2014. There are no anticipated exceedances of the permitted limitations for the month of November. Split sampling of the composite sample collected by Applied Laboratory Services (ALS) is ongoing for comparative analysis and daily results.

Table 4

November 2014 - Final Effluent - Out Fall 001											
NPDES Permit Discharge Limitations	Flow	CBOD ₅		TSS		NH ₄ -N		Phosphorus, Total , mg/L		Fecal Coliform	
	MGD Average	mg/L	lbs/ month	mg/L	lbs/ month	mg/L	lbs/ month	mg/L	lbs/ month	Geo Mean	Geo Mean
	0.75	20	125	21	131	7	44	0.5	3	200	1,000
	Instantaneous Maximum	40		42							
Sample Date											
November 4, 2014	0.277	2.0	4.6	4	9	0.200	0.46	0.12	0.28	1	0.0000
November 11, 2014	0.301	2.0	5.0	7	18	0.136	0.34	0.32	0.80	1	0.0000
November 18, 2014	0.335	2.0	5.6	3	8	0.120	0.34	0.21	0.59	1	0.0000
November 25, 2014	0.307	2.0	5.1	3	8	0.100	0.26			1	0.0000
Average	0.305	2.0	5.1	4	11	0.139	0.35	0.22	0.56	1	0.0000
Minimum	0.277	2.0	4.6	3	8	0.100	0.26	0.12	0.28	1	0.0000
Maximum	0.335	2.0	5.6	7	18	0.200	0.46	0.32	0.80	1	0.0000

During November 2014, there was no discharge of treated effluent to Applebrook. The pump has been placed in the off mode during the winter months and will resume in the year 2015 as required.

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.

Table 5 presents the available pollutant data for the influent wastewater collected at the doghouse manhole during November.



Table 5

November 2014 - Influent Wastewater											
Design Basis	Flow	BOD ₅		TSS		NH ₄ -N		TKN, mg/L		Phosphorus, Total, mg/L	
		mg/L	lbs/day	mg/L	lbs/day	mg/L	lbs/day	mg/L	lbs/day	mg/L	lbs/day
	MGD Average		335	2,098	320	2,001	32	200	48	301	9.1
Sample Date											
November 4, 2014	0.353	258	760	222	654	34.4	101	40.1	118	6.4	19
November 11, 2014	0.396	278	819	380	1,120	34.1	100	48	141	6.6	19
November 18, 2014	0.385	216	636	288	849	30.9	91	42.8	126	5.8	17
November 25, 2014	0.366	140	413	282	831	29.9	88	46.9	138		
Average	0.375	223	657	293	863	32.3	95	44.5	131	6.3	18
Minimum	0.353	140	413	222	654	29.9	88	40.1	118	5.8	17
Maximum	0.396	278	819	380	1120	34.4	101	48.0	141	6.6	19

On November 10, 2015 at 3:05 PM, a grab sample was collected at the manhole located at the intersection of Strasburg and Reservoir Roads. The results of the sample are as follows:

Influent Wastewater: Strasburg & Reservoir Roads					
SBR Influent	Ammonia as N, mg/L	BOD, mg/L	Phosphorus, Total, mg/L	TKN, mg/L	TSS, mg/L
Average Daily Design Value	32	335	9.1	48	320
Nov. 10, 2014	43.3	228	9.1	67.3	190

Sequencing batch reactors (SBRs) numbered 1, 3 and 4 were in service during October and November.

Process monitoring of each SBR included ammonia as N, nitrite as N, Nitrate as N, COD, SSV, MLSS and total phosphorus. Foam concentrations decreased slightly during September to as low as 40% coverage of the surface area. Increased sludge wasting rates were maintained to manage the MLSS concentrations and F:M ratio within the desired goals. 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 is total phosphorus is ongoing. Sample