

EAST BRANDYWINE TOWNSHIP MUNICIPAL AUTHORITY
Tuesday, November 13, 2007
7:30 A.M.

Those in Attendance:

Michael Corbin, Chairman
Gerald Kirkpatrick, Vice-Chairman
David L. Summers
Joseph Anthony, Secretary
Sandra Moser, Member

Also in Attendance:

Scott T. Piersol, Township Manager
Matthew T. VanLew, Roadmaster
John Spangler, Esq., Municipal Authority Solicitor
Thomas Oeste, Esq.
Joseph Boldaz, Municipal Authority Engineer
Mary Beth Smedley, Secretary/Treasurer

The Municipal Authority met on Tuesday, November 13, 2007 at the East Brandywine Township Municipal Building. Mr. Corbin called the meeting to order at 7:30 A.M.

Minutes: October 9, 2007

Mr. Corbin asked if there were additions or corrections to the above minutes. There were none. Mr. Summers made a motion to approve the October, 9 2007 minutes as presented. Mr. Anthony seconded the motion, with all voting Aye.

Treasurer's Report

Mrs. Smedley reviewed the Treasurer's Report and Account Balance as of November 12, 2007. Mr. Anthony made a motion to approve the Treasurer's Report and authorize payment of bills. Mrs. Moser seconded the motion, with all voting Aye.

Sewer Connection Updates

Mrs. Smedley provided the following update on connections to the Guthriesville Sewer District.

Timothy Miller – Mr. Spangler sent Mr. Miller a letter dated October 3, 2007 reminding him that Resolution 01 of 2005 allows the Municipal Authority to make the sewer system connection on his behalf, bill him for the services, and file a municipal lien against the property if he does not arrange, and pay the connection services himself. Mr. Spangler also noted that the Resolution also provides for fines if there is a violation of the Resolution.

According to Mr. Spangler, to initiate such a fine, a complaint with District Court must be filed and the District Justice would then levy fines against the property owner. Mr. Summers suggested that the Authority might start charging Mr. Miller sewer fees regardless of whether or not he has actually connected to the system. Mr. Spangler will investigate whether the Resolution allows this. Mr. Spangler will send one final letter to let Mr. Miller know that unless he connects to the sewer system the Municipal Authority will initiate legal action.

Update on Delinquent User Fees

The Paynic property at 14 Kristin Circle went to settlement on October 15, 2007. The Municipal Authority received payment in the amount of \$1,539.27 to satisfy the two previously filed liens and bring the account for this address up-to-date. This item is satisfied.

2008 Budget

Mr. Summers provided a preliminary budget for the Municipal Authority to review.

At the July meeting, Mr. VanLew reported that the compressed air lines for the Keats Glen plant keep getting clogged with rust. Mr. Boldaz assembled a speculative budget to make the necessary improvements, along with other maintenance issues including recoating of the tanks at the Keats Glen Wastewater Treatment Plant, that should be considered in the budget. Mr. Corbin said that there may also be additional maintenance in addition to the piping that should be considered. It was suggested that possibly this work could be phased over several years. Mr. Boldaz will look at the viability of phasing the work and the cost implications.

Mr. Corbin wondered if there were warranties with the Keats Glen Plant that might cover some of this work. Mrs. Smedley will investigate this.

Sewer Odor Issues

Karen DeFazio from CMX, Alan Roth from Aqua Pennsylvania and Matthew VanLew from East Brandywine Township met to discuss the ongoing Little Washington treatment Plant odor issues. Mr. Roth has agreed to set up portable hydrogen peroxide unit, on a trial basis, at the Guthriesville pump station that doses the effluent several times a day. The Municipal Authority will purchase the hydrogen peroxide material and will re-install a hydrogen sulfide meter near the Little Washington Wastewater Treatment Plant to better assess if the peroxide addition is working to control odors. Ms. DeFazio is waiting to hear from Mr. Roth to see when the equipment will be installed.

There was some discussion on the best way to protect the unit from cold weather. One suggestion was to put in a shed; another suggestion was to use a heat wrapping material.

The unit could also be shut down in cold weather since the odor problems should diminish during the cold weather months. Whatever steps the Authority takes to resolve this problem must be with the knowledge and approval of Aqua Pennsylvania so that no problems or upsets are caused at the Little Washington plant. Mr. Corbin stated that the Authority needs to make sure that the equipment isn't damaged. Again, it was stated by the Authority engineer that even if the addition of hydrogen peroxide at the pumping station resolves the odor problem there is no definitive way to determine if this was Aqua Pennsylvania's operational issue, or if it was the Authority's problem since the effluent dumps into a common vault.

Mrs. Paula Noebes, a resident on Little Washington Road, stated that as soon as Rouse/Chamberlin installed the pipe and began pumping effluent to the Little Washington Plant the odor problems began. She has lived in her home since the early 1980's and this was never a problem in the past. She stated that this past August the odors were so bad that she couldn't leave her house. Mr. Boldaz stated that there are a lot of variables to consider when trying to solve this problem. Mr. Corbin stated that it has been trial and error process and the Authority is working through their options. Mr. Boldaz stated that hydrogen peroxide is known to reduce hydrogen sulfide generation, so the Authority hopes that this will remedy the situation if it is attributable to the pump station. However, he also noted that at the same time, the plant began treating the Rouse/Chamberlin influent, a number of basic operational changes were made at the plant as well. As a result of so many contemporaneous system changes, it is difficult to say definitively what is causing the odor.

Mrs. Noebes stated that the odor problems have been ongoing for the past several years and she would appreciate anything the Authority could do to solve the problems. She also stated that the odor problems mostly occur between 7:30 A.M. and 8:00 A.M. and 7:30 P.M. and 8:00 P.M. Mr. VanLew has been gathering data from the hydrogen sulfide meter that has been in place at the wet well so the Authority can compare that data to the readings once the hydrogen peroxide dosing takes place.

Applecross Development (AKA Overlook Road Farm)

The applicant is proposing to build a combination of single family homes, carriage homes, and townhouses for a total of 655 units on both the north and south side of East Reeceville Road. The plan also shows an 18-hole Jack Nicholas-designed golf course with a clubhouse. The property encompasses approximately 621.74 acres of land, comprised of 307.58 acres north of East Reeceville Road and 314.16 acres south of East Reeceville Road. The southern portion of the proposed development is a 310 acre tract located in the R-2 Zoning District and proposes single family homes on individual lots and approximately half of the golf course. The portion of the property north of East Reeceville Road was granted preliminary plan approval in March of 2004.

The "North Tract" is being reviewed under the "Clustered Residential Development" regulations of the R-3 Residential Zoning District in conjunction with the Settlement

Agreement dated April 1, 2004. The "South Tract" is being reviewed under the "Clustered Residential Development" regulations of the R-2 Residential Zoning District. The project is proposed to be constructed in five phases. The applicant received final plan approval, with conditions, for Phase 1 of the development on November 2, 2006.

October 29, 2007 CMX review letter – Pump Station "A" Wet Well

CMX has conducted a preliminary review of the shop drawings for the Applecross Wastewater Treatment Plant, Facility. The shop drawings were reviewed for conformance to the East Brandywine Township Municipal Authority Water and Sewer Specifications and Details.

Ms. DeFazio provided the following comments on Drawing No. SD-070807

1. The contractor should provide a concrete mix design for all precast structures including material specifications for the proposed ingredients. Upon delivery, the contractor should also provide concrete pour and curing dates. There was some discussion as to whether the applicant should use Type 1 or Type 2 concrete in order to prevent damage due to hydrogen sulfide. It was decided that the type of coating will be more important than the concrete. A two coat, 12 mil thick coating was discussed and it must be applied properly.
2. Prior to shipment to the job site, together with the certification required in Section 02595, G, 2 a., the contractor should provide the actual drying temperature, actual drying time, and actual application conditions for the epoxy coating.
3. The contractor should revise and resubmit the plans.

Mr. Boldaz commented that the resubmission procedure is now going smoothly.

November 5, 2007 CMX letter – Irrigation Pump Station

Ebert Engineering prepared Irrigation Pump Station drawings dated October 10, 2007. Since the irrigation pump station is not directly related to the wastewater treatment facilities, the shop drawings are being reviewed by Yerkes Associates, the Township Engineer.

November 5, 2007 letter – Review of DRBC Findings and Decision

The DRBC has commented that the treatment plant's discharge is limited to 137,690 gpd.

The Delaware River Basin Commission Decision (DRBC) noted that spray irrigation shall be restricted generally to April through November from 9 P.M. to 7 A.M., and when wind velocities are less than 15 mph. It appears that the DRBC decision could significantly reduce the design spray irrigation dosing times, and therefore would increase the dosing rate needed to utilize the WWTP effluent.

Mr. Boldaz was concerned this increased dosing rate was not considered during the facility design. Supplemental information has been requested from Pulte regarding the sizing of the spray irrigation pumps, spray heads and the hydraulic loading rates given the 10-hour spraying restriction.

Mr. Ebert stated that he has asked an irrigation consultant from Irrigation Services in Florida to provide an irrigation schedule and confirm the DRBC requirements will not adversely impact the proposed operations of the system. Mr. Corbin asked if the limited irrigation might cause a problem, especially during the green-in period for the golf course. He wondered whether this issue should be discussed with the DRBC. Mr. Ebert stated that he wouldn't be submitting comments at this time because operational items such as restrictions on irrigations times or wind velocity can't be appealed. Mr. Ebert went on to say that Mr. David Talley at PADEP said that once the golf course operator is in place they can discuss modifying certain conditions.

Mr. Kirkpatrick asked that Mr. Ebert send an email or letter to Mr. Talley outlining the salient points of this discussion (including that the DRBC restrictions are a drought-related requirement meant for irrigation systems using groundwater or water from a reservoir, not effluent water from a wastewater treatment system as is the case here) so that PA DEP, the Authority and the Golf Course owner have documentation for their files. Mr. Ebert agreed to do that.

The Authority was concerned that limiting the times of irrigation might increase operating costs. Mr. Curtin stated that any additional costs of operations will be the responsibility of the golf course operator.

Mr. Ebert was asked to clarify exactly what portions of the golf course would be irrigated. The golf course operator will irrigate the tees, greens, fairways, rough and some areas of the driving range. It will be mostly the playing area of the golf course.

Applecross Pump and Haul Security Bond

Mr. Spangler has reviewed the two security bonds for the Applecross Pump and Haul. One bond is to cover dismantling of the pump and haul related infrastructure and the other is to cover three months operation if the applicant defaults of paying those costs. Mr. Spangler stated that the applicant has provided a bond through Lexon, an insurance company, rather than the traditional Letter of Credit (LOC) through a bank. On further investigation, Mr. Spangler stated that Lexon Insurance Company is authorized to do business in the Commonwealth. Mr. Spangler's preference would be to deal with a bank since a demand on the bank for funding from the LOC funds is simpler to invoke. Mr. Spangler explained that when a bond is held by an insurance company, the Authority would likely be assigned an adjuster who will then need to determine that the developer defaulted or otherwise did not fulfill their obligations under the LOC/Bond. Mr. Curtin stated that Pulte's corporate office in Detroit decides on their bond providers. Mr.

Summers will look into this company (Lexon) and provide the Municipal Authority with additional information.

Intermunicipal Agreement, First Addendum and Second Addendum

Mr. Spangler has been communicating with Joseph Riper, Esq. (Pulte representative) regarding the draft Intermunicipal Agreement. Mr. Spangler, Mr. Boldaz, Mr. Riper and Mr. Curtin will continue discussions on this. The applicant would prefer that the Authority call a special meeting to discuss outstanding issues with the Agreement and the Addendums, but this will likely be discussed at the December 11th Authority meeting. Execution of the Intermunicipal Agreement is needed so that sewage in Pulte's West Brandywine Township development can be treated at the Applecross Wastewater Treatment Plant, on a temporary basis. Also, Pulte can't revise their Pulte West Sewage Facilities Planning Module (West Brandywine Township) until this agreement is in place. The applicant expects the treatment plant to begin construction during the third quarter of 2008. The Municipal Authority would like to see a master schedule outlining what still needs to be done.

Overlook Road Farm Pump and Haul Permit

Mr. Curtin reported that approval to implement the pump and haul plan was granted by PA DEP subject to certain conditions. The approval provides for storing, pumping, and hauling sewage flows of 12,025 gallons per day, associated with 61 homes (27 single-family units and 34 townhouses) from the areas tributary to the influent pump station and pump station "A" as shown on the Site Plans entitled "Applecross Country Club Pump and Haul System," as prepared by Ebert Engineering, Inc., dated June 29, 2007.

Mr. Curtin stated that the additional 116 dwelling units referenced in the application are not covered by this pump and haul approval. A pump and haul plan for these additional units will be addressed at a later date, probably when this permits expires, which is May 31, 2008. Mrs. Smedley asked that Mr. Curtin provide a spreadsheet of the units (identifying specific lot numbers) within each tributary to assist in tracking the specific units that are occupied and are covered under pump and haul plan.

Effluent Lagoon Lining System

Mr. Boldaz stated that he and representatives of Pulte have met with the manufacturer of the effluent lagoon lining system. He stated that the contractor has agreed on the installation details and approved shop drawings. Installation started on November 12th. There were two field meetings and there were discussions on how the lining was going to be anchored. Installation of Lagoon #1 should take 3 to 4 weeks and then they will install Lagoon #3. Mr. Boldaz was asked to obtain the manufacturer's warranty for the Authority's files.

Applecross Wastewater Treatment Plant – Standard Operating Procedures

Mr. Ebert plans to have Applecross Wastewater Treatment Plant, standard operating procedures available within the next two weeks.

K. Hovnanian

Sewer Connection and Reservation Agreement

Mr. Spangler reported that K. Hovnanian is reviewing the Sewer Connection and Reservation Agreement and Hovnanian's financial obligation with regard to allocating costs. Mr. Spangler and Mr. Boldaz will continue to analyze information provided by K. Hovnanian and will provide updates to the Municipal Authority as they are available.

CMX November 5, 2007 letter - Sanitary Sewer Design and Review

CMX completed their review relating to the gravity sewer collection system. The changes provided on the plans appear to be generally in accordance with the East Brandywine Township Municipal Authority standard specifications. Previous comments with respect to the gravity sewer line have been properly addressed with the exception of the submission of an electronic copy of the water and sewer maps. Mr. Boldaz recommends that the Authority approve the plans with respect to construction.

Hide-A-Way Farms

CMX November 2, 2007 letter – WQM Permit

Mr. Boldaz submitted the permit renewal application to PADEP on November 2nd. Due to the down-turn in the housing market, the permitted seepage beds have not been used to date, and it is unlikely that the seepage beds will be in use in the near future.

There are currently only six completed and occupied homes in the development. The sewage being generated is currently pumped and hauled.

Pump and Haul Permit Extension Request

On September 27, 2007, the Authority requested that the pump and haul permit be extended for an additional eight months. To date, a response has not been received.

Keats Glen Sewage Treatment Plant – NPDES Permit

PADEP prepared a draft National Pollutant Discharge Elimination System (NPDES) permit for the Authority's review and comment. A notice will be published in the Pennsylvania Bulletin. The permit has been posted at the Township building and at the sewage treatment plant for 30 days.

Effluent limitations in the draft permit take into consideration parameters and wasteload allocations from the Christina River Basin total maximum daily load (TMDL) under low-flow conditions as set and modeled by the Environmental Protection Agency (EPA). The limits in the draft permit continue many of the limits in the existing permit. Monitoring of Total Nitrogen is being added to the draft permit to be consistent with the TMDL requirements.

Phosphorus limitations in renewal permits are being applied year-round. The numerical phosphorus limits have been modified to be consistent with Department Chapter 96.5. Instantaneous maximum limits for fecal coliform are also being added, consistent with current Department guidance for application for water quality criteria.

Mr. Boldaz has several comments on the draft permit.

1. Proposed Phosphorus Limit – The existing permit contains seasonal limits from April 1st through October 31st of each year. The monthly average permit limit is 3.0 mg/l, and the instantaneous maximum limit is 6.0 mg/l.

The Draft Permit contains a year-round permit limit for phosphorus, with a monthly average limit of 2.0 mg/l, and an instantaneous maximum limit of 4.0 mg/l.

Since the Keats Glen Sewage Treatment Plant does not currently have year-round phosphorus limits, there is no data available to support whether phosphorus removal down to 2.0 mg/l monthly average is possible. The plant currently uses biological phosphorus removal with alum addition. Biological phosphorus removal is more difficult in cold temperatures due to process kinetics. The treatment plant may not be able to achieve the new phosphorus limits during the winter. Therefore, Mr. Boldaz requested that PADEP provide an extended compliance schedule for attaining the draft phosphorus limits. Mr. Boldaz does not believe that DEP would consider an argument to raise the proposed phosphorous limit since it is tied in to an overall basin plan for the Chesapeake Bay.

It will take at least one year to determine whether the plant can meet these limits with the existing process configuration and equipment. The compliance schedule should give a minimum of two years to comply with the draft limits. If this is not possible, the Authority will need time to evaluate the need to construct additional facilities to meet the proposed limits and add additional alum. If this is the case, a compliance schedule extension may be requested to allow for proper permitting and/or modification to the wastewater treatment facility, if needed. Any process upgrades and use of additional alum will increase costs at the plant, which would need to be factored into future budgets.

2. Total Residual Chlorine – The existing permit and draft permit both indicate a Total Residual Chlorine monthly average limit of 0.4 mg/l and an instantaneous maximum limit of 0.7 mg/l. However the Public Notice provided indicates monthly average and instantaneous limits of 0.03 and 0.07 mg/l, respectively. Discussions with PADEP staff indicated that the Public Notice limits are incorrect. If this is the case, the East Brandywine Township Municipal Authority does not object to the draft permit as written. However, if the Public Notice is correct East Brandywine Township Municipal Authority would like to offer further comment on these limits.
3. Instantaneous Maximum Limits – East Brandywine Township Municipal Authority requests that a note be added to the permit indicating which instantaneous limits are to be reported on the Discharge Monitoring Report. Currently, it is unclear whether instantaneous maximum fecal coliform should be reported.

Brandywine Wallace Request for Water and Sewer Capacity – Update

Mr. Piersol reported that he spoke to Bill McLaughlin, Acting Director of Facilities for the Downingtown Area School District regarding the District's request for public water and reservation of sewer capacity. Mr. McLaughlin indicated that the School District would likely use the existing well and septic system for this project and may make a request to the Authority for water and sewer services sometime in the future. Mr. Piersol sent the School District's Solicitor, Guy Donatelli, an email yesterday to confirm this. He hasn't heard from him yet. Construction will include squaring off the existing offices, removing the second grade modular. The School District also plans to renovate the existing bathrooms and HVAC system. They have submitted a stormwater management plan that is being reviewed by Yerkes Associates. The bids for this project are due back on December 18th. Construction is scheduled to begin in February in order for the school to reopen in September of 2008. Mr Piersol will provide additional information to the Authority as it becomes available. A possible meeting with the School and the Authority was discussed if it could be scheduled. Again, Mrs. Moser stressed the importance of communicating with the School District in writing so that there are no misunderstandings.

Request for Sewer Capacity for the Brandywine Baptist Church

Mr. Piersol stated that Tony DeLuca from Delaware County Community College has said that he expects the College to have an answer in the near future regarding providing a portion of their reserved sewer capacity to the East Brandywine Baptist Church. The College is considering a future renovation of the existing school, including expanding into the gymnasium for additional classrooms. The Church has submitted a formal request to tie into the sewer and has provided information for Mr. Boldaz to review. Once the Community College determines whether there is available capacity for the Church, Mr. Piersol and Mr. Boldaz will try to work out the tapping fee that will be paid by the Church. The Church will likely need 2 EDUs to be released by the College.

Hillendale

Wastewater Treatment Facility – Delaware River Basin Commission Project Review

Evans Mill Environmental has requested that the Authority sign the application for the Delaware River Basin Commission to review this project. The cost for the review is \$6,400 and will be paid by Southdown Homes. Mr. Summer made a motion to recommend the Mr. Corbin sign this form on behalf of the Authority. Mr. Kirkpatrick seconded the motion, with all voting Aye.

Operation and Maintenance Agreement

Mr. Spangler and Mr. Boldaz have received revised Operation and Maintenance Agreements. They will review the documents and pass along their comments to the Authority.

Guthriesville Sanitary Sewershed Inflow and Infiltration

In a letter dated November 1st, Justin Scarth from CMX provided his findings and recommendations.

There was a broken 8" PVC pipe protruding from the ground. The depth of the pipe was undetermined, but was estimated to be at least 5' deep. The pipe was full of water to within approximately 2 feet below the ground surface. Manhole #63 was opened and the pipe did not appear to be in line with either of the two sewer lines entering the manhole. It was speculated that this pipe was used during construction to dewater the excavation when the manhole was constructed. Although the pipe was not determined to be a source of inflow, this surface opening could cause physical injury if someone were to fall or step into the opening. Mr. VanLew stated that Rouse/Chamberlin was supposed to take care of this issue. Mr. VanLew will fill this in with gravel.

It was noted that there have been no flow spikes in recent months, even during heavy rain events. Mr. Boldaz suggested that for consistency readings at the pump station take place at the same time every day, preferably after 10:00 A.M. He and Mr. VanLew will discuss this.

Public Comment on Non-Agenda Items

Mr. Corbin asked if there were comments on non-agenda items. There were none.

East Brandywine Township Municipal Authority

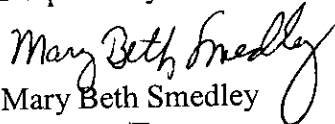
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Adjournment

There being no further business, Mrs. Moser moved to adjourn the meeting at 9:20 A.M.
Mr. Kirkpatrick seconded the motion, with all voting Aye.

Respectfully submitted,


Mary Beth Smedley
Secretary/Treasurer
East Brandywine Township

The Municipal Authority met in Executive Session with their Solicitor, John Spangler, Esq. to discuss the Pulte draft Intermunicipal Agreement, the Municipal Authority Engineer position and the Municipal Authority Solicitor position.