

TYRONE BOROUGH COUNCIL MINUTES OF WORK SESSION MEETING

FEBRUARY 22, 2018 @ 6:00PM

Tyrone Borough Council held a Work Session on Thursday, February 22, 2018 at 6:00pm to discuss the potential Digester project at the Wastewater Treatment Plant.

Present were Councilmembers Sarah Jane Miller, Snyder, Dollar, Mills, Richardson and Mayor Latchford. Also present were Consulting Engineers Stan Chilson and Kevin Nester, both of GHD; Borough Manager Ardean Latchford, Sewer Superintendent Tim Nulton; and Finance Director Shannon Wilson.

Mayor Latchford turned the meeting over to GHD Consulting Engineers Kevin Nester and Stan Chilson.

Council was provided handouts. GHD began by discussing the Statement of Need portion of the handout. Specifically the following was discussed:

- DEP requires wastewater residuals to be stabilized prior to being applied to the land or placed in a landfill.
- Tyrone uses lime to stabilize the wastewater residuals presently at the Wastewater Treatment Plant. Currently Tyrone sends their sludge or bio solids as they are called, to a landfill in the form of dewatered cake. This means that Tyrone reduces the water in the sludge from roughly 2% solids (98% water) to somewhere in the range to 15% to 18% solids (82% to 85% water) prior to sending it to the landfill. This substantially reduces the volume of material that needs to be disposed of.
- Currently Tyrone pays \$45.48 per wet ton of sludge sent to the landfill. To give you an idea of the volume of material that Tyrone deals with each week, Tyrone presently sends three 30 cubic yard roll off boxes of sludge to the landfill four days a week and one to three 30 cubic yard roll of boxes to the landfill on Friday.
- Recent events have indicated that the cost to dispose of sludge in the landfill will be increasing. In addition, there is also concern that the capacity in the landfills are limited. When Tyrone updated their contract to dispose of bio solids earlier this year, they saw about a \$3.00 a ton increase in the cost to dispose of the sludge at the landfill. This is roughly an 8% increase.
- Some neighboring communities such as St. Mary's have been limited by landfills as to how much bio solids they can take to the landfill. In summary, it appears that it is a good time for Tyrone to be looking for alternate means of disposing of bio solids.

GHD discussed the history of the digester project, including:

- 2015 - Tyrone initiated discussions with Quasar an anaerobic digester system supplier regarding a project in Tyrone.
- 2015 - Stan Chilson and Tim Nulton met with Quasar and toured several operating digesters in Ohio.
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- 2016 - Tyrone authorized a study from Quasar addressing the digestion system equipment, the footprint of the facility, budgetary costs, a review of the potential for truck hauled waste to be brought to the proposed facility, and evaluating public and private partnership funding options.
- 2017 - Tyrone met with Pennvest to discuss the possible funding of the project. Pennvest indicated that they offer low interest loans for such projects but they would not fund a private public partnership. This means that a project funded through Pennvest would need to be done in the traditional design, bid, and build approach.
- 2017 - grant-funding possibilities were researched. The Pennsylvania Alternative and Clean Energy Grant Program is presently open to receive applications. Unfortunately, at this point and time Tyrone is not in a position to apply for this grant because the project has not been defined well enough yet. If Tyrone proceeds with looking further into a digester project, we would anticipate that within a few months we should have enough sufficient information to be able to make an application to the Pennsylvania Alternative and Clean Energy Grant Program.
- November 2017 - GHD submitted to Tyrone an economic evaluation of options of either constructing a digester by traditional bond issue verses a Pennvest low interest loan verses a Pennvest low interest loan with a PA Alternative and Clean Energy Grant. In that evaluation, it appeared that the low interest loan from Pennvest had the greatest impact in reducing the potential breakeven point for the project.
- January 2018 - Tyrone authorized GHD to reaffirm the findings of the Quasar study regarding the availability of truck hauled waste in the area, GHD and its consultant Material Matters, Inc. submitted the findings to Tyrone in January.

GHD reviewed how anaerobic digesters work, essentially taking in wastewater treatment plant sludge and other volatile materials (such as food waste or fat, oil, & grease), breaking them down in the absence of oxygen. As a result of the breakdown of the volatile solids (biodegradable solids) the amount of material placed in the digester is reduced by about 40% to 50%. Also, a by-product of anaerobic digestion is bio gas which is about 60% methane. The gas can be used in a variety of ways such as burning it to produce electricity, or cleaning in up so that it becomes pipeline quality natural gas which could then be sold.

A lengthy period of discussions and questions and answers resulted. Ultimately GHD presented the next step in the process which would be for the Borough to authorize a preliminary design evaluation. This report would size the facility and equipment, look at the siting of the facility, determine how to best use the gas that is produced, determine how the digested solids would ultimately be disposed of (make a Class A sludge vs. make a Class B sludge), develop a capital cost and annual operation and maintenance cost estimates, and evaluate the return on the Borough's investment. The overall goal of this report would be to define as well as possible the definable risk to Tyrone of proceeding with the project. This would provide Tyrone with the best information possible whereby they can then decide whether or not to move forward into the next stage which would be final design, permitting, funding application preparation, bidding, and construction. The cost of preparing this report would be \$85,000. After a lengthy discussion as

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to the pros and cons of moving forward. It was moved and seconded that Council authorize GHD to prepare the report of findings at their estimated cost of \$85,000. A roll call vote was taken. Ayes: Council members Snyder, Richardson, Dollar and Mayor Latchford. Nays: Council members Sarah Jane Miller. Council member Charlie Mills abstained from the vote. The motion carried.

Meeting Adjourned @ 7:55pm.

Respectfully Submitted,

Ardean C. Latchford
Borough Manager