

GLENBARD WASTEWATER AUTHORITY
Executive Oversight Committee
Agenda

April 13, 2017

7:30 a.m.

Meeting will be held at the Glenbard Wastewater Plant
21 W 551 Bemis Rd, Glen Ellyn, IL

1. Call to Order
2. Roll Call
3. Pledge of Allegiance
4. Public Comment
5. Presentation of Service Awards to President Alex Demos and Trustee Dean Clark
6. Consent Agenda – The following items are considered to be routine by the Executive Oversight Committee and will be approved with a single vote in the form listed below:

Motion the EOC to approve the following items including Payroll and Vouchers for the Month of March 2017 totaling \$376,514.85 (Trustee Clark)

- 6.1 Executive Oversight Committee Meeting Minutes:
March 9, 2017 EOC Meeting
- 6.2 Vouchers Previously Reviewed by Trustee Clark:
March 2017
- 6.3 Budgeted Progressive Cavity Pump Parts Budgeted \$50,000 Purchase Order Request.

The approved CY2017 Budget under 40-580150 – Plant Equipment Rehabilitation includes a line item of \$50,000 for Moyno Pumps Spare Parts.

The Authority staff requests waiving of competitive bidding requirements per the Village of Glen Ellyn code, 1-10-2: EXCEPTIONS TO COMPETITIVE BIDDING. Per Administrative Order No. 3, Section C, 1, f – Standardization purchases. To compliment this approval process, request for proposals were solicited for the pump components.

The following will be purchased upon approval:

1. Gear joints and kits in the amount of \$5,724.00 billed to 40-580150.
2. Rotor and stator in the amount of \$6,463.00 billed to

40-580150. The combined total is \$12,187.00 of the budgeted \$50,000. Please note:

- The Authority has 10 of these pumps in service and 4 of the 10 operate 24-7-365.
- These pumps handle sludge and high strength waste which is an aggressive product to pump. While preventative maintenance enhances reliability, predicting when this type of equipment could fail due the variability of the product being pumped is extremely difficult. It is best having a conservative approach with these types of pumps.
- The remaining budgeted funds would be utilized to purchase hardware parts only as needed or should the need arise to replace a rotor and stator in inventory.

The Authority staff requests the EOC to approve an open purchase order for a not to exceed amount of \$50,000 to be allocated to capital account 40-580150.

7. Polymer Activation System Replacement Purchase Request-
Presented by - Operations Superintendent, David Goodalis

The Operations team is schedule to replace the more than 20-year-old polymer activation units. One unit was budgeted for replacement in CY2016 and the other is budgeted in the current CY2017 budget. After evaluating purchasing one unit in CY2016 and planning to purchase the other unit in CY2017 it made sense to wait until the CY2017 budget year to purchase both as an economy of scale. This savings is demonstrated by an \$8,000 savings per unit identified by the Norchem quote.

The CY2016 Capital Budget had an approved line item in Infrastructure Improvements as identified on page 77 of the CY2016 budget in the amount of \$40,000. The approved CY2017 Capital Budget also allocates \$40,000 in the Infrastructure Improvements as identified on page 84 of the CY2017 budget. Collectively we have budgeted \$80,000 and are requesting to spend \$57,588 of the allocated amount. While Norchem is, the highest proposal received, they are also the best performing activation units based on site visits along with our current experience and performance of our existing Norchem polymer units. Based on previous testing done in 2010 along with field verification done in 2016/2017 the Norchem activation units demonstrate that they are capable of a polymer cost savings of 25% or approximately \$12,000 per year. This savings is due to a hot water mixing system developed by Norchem that capitalizes on using less polymer per volume of biosolids dewatered. From the information that we have been provided with the technology is only available on the Norchem activation unit.

Listed below are the proposals from each company. The USGI proposal does not meet specifications required by the Authority.

Company	Cost for Two Units
Norchem (Meets Specs)	\$57,588
Velodyne (Partially Meets Specs)	\$46,887
UGSI (Does Not Meet Specs)	\$36,374

Motion the EOC to waive competitive bidding requirements per the Village of Glen Ellyn Code, Chapter 10 Village Contracts, Section 1-10-2: EXCEPTIONS TO COMPETITIVE BIDDING. This request is made due to the specific nature of the polymer blending units, which is based on performance evaluations along with respective utilization within the industry.

Motion the EOC to approve the budgeted purchase of the polymer activation units from Norchem Industries in the amount of \$57,588 (plus any additional freight charges that may apply) to be invoiced to Capital Account 40-580140.

8. Pure Oxygen System Instrument Air Compressor Purchase Request
Presented by – Assistant Executive Director/Civil Engineer Matt Streicher

The Authority uses a high purity oxygen treatment process, in which pure oxygen is created on plant site through a cryogenic process. The Authority is currently working towards abandoning the cryogenic plant, and instead simply hauling in liquid oxygen from Airgas, which will then be vaporized to use as pure oxygen in the treatment process. All of the instruments in relation to the high purity oxygen treatment process, including the UNOX deck (which is remaining in service) are air actuated with compressed air from the 700 HP main air compressor (MAC) in the cryogenic plant. However, if either the cryogenic plant and MAC fail, there is currently a backup instrument air compressor to supply air to the rest of the instruments in the process. There are air actuated instruments in both the cryogenic plant that is being shut down, as well as in the remaining portions of the high purity oxygen treatment process that is staying active. Therefore, when the cryogenic plant is abandoned (MAC is included with the abandonment) and liquid oxygen will start being hauled in, the backup instrument air compressor would become the main air compressor for the remaining instruments related to the high purity oxygen treatment. The existing backup air compressor that would now become the main full-time compressor (operating 24/7/365) is nearing 40 years old in age, and is not a true “oil-less” compressor as needed for the instrument air (the existing MAC that currently supplies air to the instruments 24/7/365 is a true “oil-less” compressor), instead it has oil separation devices which are prone to failure. If the air compressor were to fail under future conditions, the Authority would lose the ability to supply oxygen to our aeration process, and would be unable to effectively treat the wastewater – which could result in permit violations.

Therefore, in order to keep a level of redundancy, the Authority is required to purchase a new instrument air compressor. Since the existing backup instrument air compressor is aging, not truly oil-less, and oversized (it was sized to handle all of the cryogenic plant,

UNOX deck, the now abandoned aerobic digestion facility, and all associated instruments) would remain in service simply as a redundant unit.

The new air compressor is a unique item with its technical nature, as this air compressor is more complex than a typical unit due to the requirements to be oil-less, remove all of the moisture, particulates, and other impurities from the air to eliminate the risk of damaging the instruments it controls.

Based on the lowest price and meeting of required specifications, I recommend the purchase of the new instrument air compressor from Zorn Compressor & Equipment for the amount of \$37,410.64. The Authority had originally budgeted \$100,000 in CY2016 for maintenance on the Cryogenic Plant, which was reduced to \$50,000 due to the impending shutdown of the Cryogenic plant. The CY2017 budget estimates that \$50,000 was spent on Maintenance of the Cryogenic Plant in CY2016, however only \$10,472.70 was spent, leaving \$39,527.30. Therefore, it is recommended to invoice this item to the Fund 40 Capital Plan, specifically 40-580150.

Motion the EOC to waive competitive bidding under Section C.1.f of the Village of Glen Ellyn's Purchasing Policy, which states; "Standardization Purchases, as defined as technical in nature of certain items or services may result in the standardization of a particular supplier's specifications being necessary or desirable to Village operations. Competitive bidding may be waived if the Village requires compatibility with existing software, machinery or other existing equipment."

Motion the EOC to Approve the purchase of the new oil-less air compressor from Zorn Compressor & Equipment in the amount of \$37,410.64 to be invoiced to Capital Account Fund 40-580150.

9. Discussion
 - 9.1 Facilities Improvement Project - Update
 - 9.2 10,000cy of fill available to the Authority at \$15/cy
 - 9.3 Com-Ed Billing Refund as a Result of Estimating During CHP Utilization

10. Other Business
 - 10.1 Technical Advisory Committee Updates
 - 10.2 Pending Agenda Items

11. ***Next EOC Meeting*** – The next regularly scheduled EOC Meeting is set for ***Thursday, May 11, 2017 at 7:30 a.m. at the Glenbard Facility.***