

GLENBARD WASTEWATER AUTHORITY
Executive Oversight Committee
Agenda
January 18, 2024
8:00 a.m.
945 Bemis Road
Glen Ellyn, IL

1. Call to Order
2. Pledge of Allegiance
3. Roll Call
4. Public Comment
5. 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 months of October, November, December of 2023 and January 2024 payroll in the amount of \$1,335,888.05 (Trustee Christiansen).

5.1 Executive Oversight Committee Meeting Minutes:
October 12, 2023 EOC Meeting

5.2 Vouchers Previously Reviewed:
October, November, December 2023 and January Payroll 2024 –
Trustee Christiansen

5.3 RJN Flow Monitoring Agreement Renewal

In late 2022 the Authority requested and received a proposal for flow monitoring services for the installation, operation, maintenance, monitoring, and leasing of seventeen (17) flow meters and two (2) rain gauges located throughout the Authority’s service area. The main purpose of these meters is to determine the flow splits between the two owning Villages in order to properly bill each Village for the treatment of their wastewater.

After detailed analysis and evaluation, the EOC authorized the Authority to waive the competitive bidding process and award RJN Group of Wheaton, IL the Flow Services Contract in the amount not to exceed \$913,800 for the period of 2023-2028, as well as authorizing the Authority to enter into year one of six of the agreement in the amount of \$11,800 per month.

The Authority is requesting that the EOC authorize the Authority to enter into year two of six of this contract for the amount of \$11,800 per month, equaling

\$141,600 for CY2024. This shall be invoiced to CY2024 O&M account number 270-520981.

5.4 Sodium Hypochlorite Contract Extension

The Glenbard Wastewater Authority posted the bid notification publicly through an advertisement to bid that was published in the Daily Herald on December 5th, 2022. The deadline for receipt of the sealed bids was December 21st, 2022 at 10:00 a.m.

After opening the two bid documents received, reviewing the unit prices, and confirming that all required documentation was present, Rowell Chemical Corp. was the lowest responsive, responsible bidder. In an effort to reduce the increasing cost of Sodium Hypochlorite, the Authority has decided to decrease the contract length to 6 months. This contract reduction has led to a bid price of \$2.12/gallon, which is a 14.4% lower than the previous price of \$2.426/gallon.

After no price changes occurred, the term automatically renewed in July 2023. Moving forward to the next 6-month renewal due on January 12, 2024, the proposed price will actually decrease to \$1.95.

The Operations Staff requests the EOC to allow awarding Rowell Chemical Corp. the 6-month term Sodium Hypochlorite supply contract for a unit price of \$1.95 per gallon delivered. The cost of the Sodium Hypochlorite will be expensed to the Glenbard's Stormwater Plant CY2024 O&M budget line item 270-1 530440. The contract will be renewed again in July 2024 providing the price does not increase more than 5% over the original contract cost of \$2.12 per gallon delivered.

5.5 Request for Authorization to Enter into Year 3 of 5 of the Lease of Atmospheric Vaporizers and Airgas Liquid Oxygen Hauling Agreement

In February 2022, after detailed evaluation and analysis, as well as based on qualifications and price, the EOC approved to enter into a 5-year agreement with Airgas for the hauling of liquid oxygen and leasing of atmospheric vaporizers. GWA requests waiver of bids and authorization to continue into year two of the five-year contract for the leasing of atmospheric vaporizers and liquid oxygen hauling with Airgas in CY2024. Starting in April 2024 Liquid Oxygen hauling will be priced at \$0.3938/per 100 cubic feet, and invoiced to Fund 270-530443 in the CY2024 Budget. Atmospheric Vaporizers Leasing will be priced at \$1,500/month, and invoiced to Fund 40 Capital Plan in the CY2024 Budget.

This contract is set to expire in April 2027, and therefore both the supply of liquid oxygen and the atmospheric vaporizer leasing will be rebid out at that time to obtain competitive pricing.

5.6 Polymer Supply Award

Injecting polymer prior to the belt filter presses is vital to the dewatering process, it promotes the release of water from the biosolids, reducing overall volume. Correctly matching a specific polymer to the unique characteristics of GWA's Biosolids is extremely important to the effectiveness of the dewatering process. Properly reducing water from the biosolids will decrease the volume needed to be processed, therefore minimizing hauling costs. Prior to the Belt Filter Press Improvement Project, Polydyne's polymer was bench tested against GWA's biosolids and the results indicated it is an effective product. However, to ensure it is a cost-effective product, we requested quotes from multiple suppliers known to have been compatible with GWA's biosolids.

The Chemical Market can be volatile, evident in the price increases we saw these past few years. Considering Polydyne's price will increase by 0% from 2023's price, the effectiveness of their product and their ability to supply product, the Operations Department would like to retain Polydyne as GWA's polymer supplier.

The Operations Department would like to waive public bidding based on section "C.1.f Standardization Purchases." Due to the specificity of the polymer required for an effective dewatering process, bidding out this product on price alone could result in rewarding a supplier with an ineffective product.

If competitive bidding is waived, the Operations Department requests approval for purchasing polymer at \$1.68 per pound, a 0% increase over the amount that was approved by the EOC in 2023, from our current polymer supplier Polydyne for 1 year and future approval for an additional 2 years if the price does not increase more than 5%. Glenbard has used Polydyne for years without any major issues with their product or delivery services. The Authority spends nearly \$80,000 on polymer in any given year based on sludge production.

This purchase will be expensed to 270-530440 – Chemicals, which has \$85,000 budgeted for polymer.

5.7 CHP Media Purchase

Prior to digester gas being used in the CHP's, the gas needs to be "scrubbed" in order to remove siloxanes and hydrogen sulfide, in order to help preserve the life of the engines. Although the life of the media is tracked, due to varying usage and gas conditions, it is difficult to exactly predict when the media will reach its useful life. Since there is little expiration notice, and the media has a long shelf life, we prefer to have the media onsite and available to keep the down time of the engines to a minimum. Therefore, staff obtained pricing ahead of schedule so that the purchase can be made, and the media available for use when needed.

In the 2024 GWA budget, staff allocated \$100,000 for the purchase of this media in budget category Plant Equipment Rehabilitation account 40-580150. The budget

amount was taking into account at least two purchases of the hydrogen sulfide media (similar to current request), and one purchase of the siloxane media.

Therefore, we motion the EOC to authorize approval to purchase CHP media from Unison Solutions in the amount of \$28,950. This has been discussed with the TAC, and all are in agreement with the recommendation.

5.8 Ratification of Email Poll Items

5.8.1 Bridge Rehabilitation Construction Contract

As was discussed and approved at the October 12th EOC meeting, the Authority has moved forward with requests for direct quotes from a list of recommended bridge repair contractors for the rehabilitation work on the Authority's SRI bridge. Initial interest and feedback from the contractors are encouraging; but they have also highlighted concerns regarding the timeline for completion. Because of the imminent shutdown of local asphalt plants due to cold weather and the urgency of completing these repairs before winter, the RFP specified that contractors have approximately ten days to submit proposals and 15 calendar days to complete the work. While attainable, the timeline leaves little room between receipt of the quotes, approval to a contractor, and completion of the work.

The Authority is requesting the Executive Oversight Committee give pre-approved authorization for the Authority, upon receipt of at least three quotes, to award the lowest responsible bidder with a notice to proceed for the 2023 SRI Bridge Rehabilitation Project with a total project cost up to 25% above the engineer's estimated amount of \$46,000 (a max total cost of \$57,500) or any total cost below that amount. This project is budgeted for in the CY2024 Infrastructure Improvement Budget, Fund 40-580140.

5.8.2 Biosolids Hauling Contract Modification and Extension

In CY2021 the Authority placed an advertisement for bid for a three-year contract for the removal and disposal of municipal bio-solids from the main Glenbard plant. After the public bid opening, the Executive Oversight Committee authorized the Authority to enter into a 3-year contract with Synagro, LLC, for \$19.20 per cubic yard hauled/land applied. This contract will expire on April 20, 2024.

During previous budget discussions, the Executive Oversight Committee was made aware that Illinois House Bill 2845 was signed into law as Public Act 103-0327 on July 28, 2023, and now requires that Prevailing Wage rates be paid to transportation providers and hauling services for removal and transportation of Biosolids and Lime residuals. Although the Authority's contractors are required to pay prevailing wages, previously, biosolids haulers

were able to avoid that requirement due to a portion of their work being related to the agricultural sector. This new law will now impact the cost of business for biosolids contractors, including the Authority’s current contractor, Synagro, LLC.

On October 23rd, 2023, the Authority received the enclosed proposal from Synagro, stating that the new price beginning January 1, 2024 would be \$32.95 per cubic yard (CY), which is a 71.6% increase over the existing price. The proposal also included a one-year contract extension holding the \$32.95/CY price through December 31, 2024, and followed by a CPI increase through the remainder of the contract ending April 30, 2025.

Below is a spreadsheet showing recent prices and bid tabulations of similar services at other local facilities

Recent Bid Tabs/Prices for local biosolids hauling. All dollar amounts are per cubic yard (CY)

Agency Bid Date	Salt Creek Sanitary District Jun-22	Glendale Heights Jul-22	Elmhurst Aug-22	Wheaton Sanitary District Mar-23	Village of Huntley Oct-23	Village of Addison Oct-23
Synagro - Daily Haul	N/A	No-Bid	N/A	\$32.14	N/A	\$49.56
Synagro - Bulk Haul *	\$47.75	N/A	No-Bid	\$24.00	\$36.97	N/A
Stewart - Daily Haul	No-Bid	\$36.00	N/A	\$26.65	N/A	\$30.25
Stewart - Bulk Haul*	\$33.44	No-Bid	\$25.89	\$23.50	\$32.25	N/A
Dahm - Daily Haul	N/A	No-Bid	N/A	\$28.50	N/A	\$53.39
Dahm - Bulk Haul*	No-Bid	N/A	No-Bid	\$25.50	\$24.25	N/A

* - GWA cannot do bulk hauling due to neighbor complaints with stockpiling sludge on site

GWA - Existing Rate = \$19.20/CY

GWA CY2024 Budgeted Rate = \$33.50/CY

Average Daily Haul Rate = \$36.64

Proposed Daily Haul Rate = \$32.95

In the best interest of the Authority, the TAC recommends to allow the price modification from \$19.20/CY to \$32.95/CY beginning on January 1st, 2024,

and to recommend extending the contract with Synagro at the \$32.95/CY rate through December 31st, 2024. This would allow the Authority to utilize a rate that is demonstrated to be competitive, and aligns closely with the budgeted amount in the CY2024 Budget. The Authority would then intend to re-bid for these services in early fall 2024 in order to award a new contract that would take effect January 1st, 2025. The intent of rebidding in early fall would be so that a rate could be known and taken into account while developing the following years budget. This would also reset the contract cycle to be on a calendar basis, rather than the historical fiscal year it is currently on.

Therefore, the Authority is requesting the following two items from the EOC:

- Authorization to approve the price increase from \$19.20/CY to \$32.95/CY with Synagro, LLC, beginning January 1st, 2024.
- Authorization to extend the contract for removal and disposal of municipal biosolids with Syangro, LLC through December 31st, 2024 at a rate of \$32.95/CY

6. 2024 Facility Planning Study Award

Per the Intergovernmental Agreement that the Authority was formed by, “Every five (5) years, the Authority shall conduct a review of the capital plan; said review shall be performed by an outside consultant and be known as the facilities plan. The result shall be used as the basis for updating the Authority’s ten (10) year capital plan.” The last Facility Plan was completed in CY2019, and therefore, is due to be completed in CY2024.

In late September of 2023, formal requests for proposals (RFP) for the Facility Plan were sent to the Authority’s shortlisted consulting/engineering firms. For two main reasons, the RFP was structured differently than past years: (1) the 2019 Facility Plan was detailed and in-depth, and having been performed only five years ago, the majority of the Plan is still valid and applicable, and (2) the expected Phosphorus regulations on the Authority’s future permits warrant a closer look into the potential treatment options available to meet these regulations. Those new treatment processes will require significant reconstruction and upgrades to the Authority’s main facility, and this Facility Plan will serve as a roadmap to allow the Authority to plan and prepare for those significant changes.

Due to the size and complexity of the expected process changes, significant capital expenditures are likely as well. Funding from the low-interest Illinois State Revolving Fund (SRF) is still the Authority’s preferred method to be able to finance these future projects, and even though SRF funding has become harder to acquire in recent years, GWA would still intend to apply for those low-interest loans before seeking other methods of financing. To qualify for an SRF loan, an approved Facility Plan is required to be kept on file with the Illinois Environmental Protection Agency (IEPA), which is another important driver in performing the Authority’s 2024 Facility Planning Study.

The Authority received four sets of technical proposals in response to the RFP that was sent to the shortlisted firms. After the Authority’s Technical Review Committee (TRC)

scored the proposal, there was a clear leader, with nearly all of the committee members rating the Baxter & Woodman/Carollo proposal the strongest. That particular proposal was a combination of two of the Authority's shortlisted firms, with Baxter & Woodman having a strong local presence and a long history of working with facilities similar to the Authority, and Carollo having extensive experience with biological nutrient removal (BNR) and conversion of High Purity Oxygen Activated Sludge Plants (HPOAS), which is the process the Authority currently uses. Those two factors, along with other components of the proposal, resulted in the Authority selecting the B&W/Carollo team without moving onto an interview stage. If the TRC scoring yielded two or more front runners, the Authority would have moved on to an interview phase with an additional scoring process.

After the firm was selected, a cost proposal was requested from the B&W/Carollo team and costs were negotiated. Through those negotiations, the proposed scope was reduced from \$226,370 to \$217,784. The CY2024 budgeted amount for this study was \$200,000, putting this slightly over what was budgeted. While Authority staff diligently attempted to lower the cost to match the budgeted amount, it would have meant sacrificing further scope of the study, lowering the value of the study to the Authority. With the available cash on hand in the Fund 40 capital account and the potential for other capital expenditures to come in under budget in 2024, Authority staff is confident that Fund 40 will be able to cover the additional funds required.

Therefore, it is recommended the EOC authorize the Authority to award the Baxter & Woodman/Carollo team the 2024 Facility Plan study in the amount not to exceed \$217,784. This amount will be taken out of the designated account in the CY2024 Approved Budget, Fund 40-580180.

7. Retroactive Approval of Emergency Work on Combined Heat and Power Engines

In early November 2023, the Authority's Combined Heat and Power (CHP) #2 engine unexpectedly failed. The engine suffered a fairly significant increase in heat in a very short period of time, which was the result of valve and piston failures within two of the engines cylinders, ending up critically damaging the engine itself. After bringing Public Works Director Buckley up to speed, discussion was had on evaluating whether or not to simply replace the engine versus repairing it, as it was about 75% through its useful life (30,000 hours out of the 40,000 expected). More information was collected from the CHP manufacturer, Nissen Energy, and a high-level analysis was performed to determine the best direction.

With the engine inoperable, the Authority was losing on cost savings from energy generation, renewable energy credits sold based on the amount of energy generated, and revenue from tipping fees from fats, oils, and grease (FOG), meaning the sooner the engine could be running again, the sooner those savings/revenue will start to be realized again.

The analysis, which is detailed further in the memo for the agenda item, determined it was in the Authority's best interest to move forward with the repairs, and emergency approval was given.

Shortly after the emergency authorization was given to move forward with the repair of the engine on CHP 2, it had been determined that the engine on CHP 1 also needed significant repairs in order to keep functioning. Prior to the failure of CHP 2, CHP 1 was having issues as well, which were assumed to be less significant in nature. Since the engine still was not running properly, Nissen investigated it further while they were performing the repairs on CHP 2. Nissen started off with minor adjustments, and thought the issue was solved until it failed again. After further analysis, the engine had some significant wear similar to what lead to the issues experienced on CHP 2. Nissen advised that if repairs were not completed on CHP 1, another failure similar to what occurred in CHP 2 would also happen. The Authority's Maintenance Superintendent investigated these findings separately and agreed.

CHP 1 only has 10,466 hours on it, meaning it still has approximately 30,000 hours of useful life. After performing a similar cost/benefit analysis on CHP 1 as to what was performed for CHP 2, taking into account the much younger life of the engine, it was determined to be in the Authority's best interest to move forward with the repairs as soon as possible. Emergency approval was given again. Further discussion is being held with the Technical Advisory Committee as to the future of the CHP units, and other alternatives.

Unfortunately, after the repairs were completed on CHP 1, it began experiencing the same issues again. While Nissen is still investigating these issues the Authority intends to withhold any payment for the work completed on CHP 1 as there is concern the work may have not actually been needed. However, the Authority is still seeking approval from the EOC on the amount invoiced, in the event the problem is rectified and no additional fees are incurred.

Therefore, the Authority is seeking two separate requests;

- Retroactive approval for Nissen Energy to make the repairs to CHP 2 in the amount of \$44,000.
- Retroactive approval for Nissen Energy to make the repairs to CHP 1 in the amount of \$37,962.

The repair costs will be charged to CY2024's budget item 270-520976.

8. Financing Discussion

In continuation with the process of obtaining a bond to finance the Primary Clarifier and Gravity Thickener Improvements Project, in November 2023 the Authority worked with its financial advisor and bond council to obtain a confidential bond rating from Moody's. After going through the interview and application process, unfortunately, the bond rating given to the Authority was not desirable. Therefore, several options were evaluated

internally by Village Management, Finance staff, and the Authority. Two options other than having the Authority issue a bond are: to have the Authority exhaust its cash reserves and the Village's make a large contribution to cover the remaining capital cost of the project without financing, or to have the Village with the higher credit rating (Village of Glen Ellyn) issue the bond and transfer the bond funds to the Authority

With the latter of the two options being determined to be the most cost effective, the Authority's bond council authored an amendment to the existing Intergovernmental Agreement allowing the Village of Glen Ellyn to issue a bond for the Authority's use, with the intent to have the Authority pay back the Village of Glen Ellyn via a predetermined repayment schedule with the revenue generated from each member Village.

The Authority is requesting the Executive Oversight Committee to recommend to each respective Village board to amend the Intergovernmental Agreement to include the additional language enclosed within this packet.

9. Discussion
 - 9.1 CHP Replacement Planning and Alternatives
 - 9.1.1 CHP Replacement
 - 9.1.2 Renewable Natural Gas
 - 9.1.3 Steam Turbine Electric Generation
 - 9.1.4 Other Alternatives
10. Other Business
 - 10.1 Technical Advisory Committee Updates
11. ***Next EOC Meeting*** – The next regularly scheduled EOC Meeting is set for ***Thursday, February 8, 2024 at 8:00 a.m.***