

REGULAR MEETING MINUTES

March 27, 2023

The Regular Meeting of the Lehigh County Authority Board of Directors was called to order at 12:01 p.m. on Monday, March 27, 2023, Vice Chairman Amir Famili presiding. The meeting was hybrid via in-person and video and audio advanced communication technology (“ACT”), using the Zoom internet application, including telephone option. Each Board member and other attendees of the meeting were able to hear each other attendee and be heard by each other attendee. The public could also participate in the meeting in-person or via ACT, using the Zoom internet application, including telephone option. A Roll Call of Board members present was taken. Amir Famili, Ted Lyons, Linda Rosenfeld, Norma Cusick, Kevin Baker, Jeff Morgan, and Sean Ziller were present for Roll Call, and remained for the duration of the meeting.

Solicitor Michael Gaul of KingSpry was present along with Authority Staff, Liesel Gross, Ed Klein, Chuck Volk, Phil DePoe, Susan Sampson, Albert Capuzzi, and Lisa Miller.

Vice Chairman Famili announced that the Board received their electronic and hard copies of the Board packet in advance and asked if anyone did not receive their copy of the packet. A copy of the packet is also available online.

REVIEW OF AGENDA

Liesel Gross announced that there are no changes or additions to the agenda; however, she requested that the Monthly Systems Operations Review be presented first on the agenda, followed by the Staff Comments, because some employees need to leave early to travel to a conference. No Executive Session is planned.

APPROVAL OF MINUTES

February 27, 2023 Meeting Minutes

Norma Cusick noted a grammatical error. On a motion by Linda Rosenfeld, seconded Norma Cusick, the Board approved the minutes of the February 27, 2023, Board meeting as corrected (7-0).

PUBLIC COMMENTS

None.

MONTHLY SYSTEM OPERATIONS REVIEW

Andrew Moore reviewed the February 2023 Operations report and noted that water production is in line for this time of the year. Wastewater treatment was a little lower than normal due to the low level of rainfall received in February. He reported on the sanitary sewer overflows that occurred mostly due to grease and rags. However, one was caused by a failed lining. Two injuries occurred in February: a neck injury, and an allergic reaction. Brief Board discussion followed.

STAFF COMMENTS

Liesel Gross highlighted an article in the February issue of The Authority magazine regarding Source Water Protection that was written by Susan Sampson. Ms. Gross also reported that she attended the AWWA Water Matters Fly-In in Washington DC last week to meet with members of Congress to discuss infrastructure funding, PFAS, and cybersecurity topics. The Board thanked Ms. Gross for her efforts.

Allentown Division – Large Diameter Valve Rehabilitation & Replacement Program

Chuck Volk introduced the Phase 1 design project to replace large diameter valves that are inoperable or in poor condition, as outlined in the recent study to review the condition of the valves. Jason Peters elaborated on the project stating that part of the Authority's asset management strategy is to prioritize the replacement of large diameter valves throughout the Allentown Division. Over the past few years, large water main breaks have highlighted the need for this program in order to better control the system during emergencies. This initial project will include the replacement or repair of three 36-inch diameter valves, two of which are located on the Schantz Spring line, and one valve on the 12th Street line. There was some Board discussion regarding the number of valves in need of replacement and their condition.

On a motion by Ted Lyons, seconded by Linda Rosenfeld, the Board approved the Capital Project Authorization for the Allentown Division Large Diameter Valve Replacement Program, Phase 1 Design in the amount of \$74,400.00 which includes the Professional Services Authorization to Gannett Fleming in the amount of \$59,300.00 (7-0).

Suburban Division – Industrial Pretreatment Plant Master Plan

Liesel Gross introduced Diana Heimbach, John Tobia, Tom Johnson, and Kevin Dahl from Jacobs, the engineering and contract operations firm that currently operates the Authority's industrial pretreatment plant (PTP) located in Fogelsville. Jacobs completed the master plan for the PTP, with results to be incorporated into the regional Act 537 Plan that is currently under development.

A detailed presentation was provided to review the background of the plant and discuss the scope, key findings, and recommendations of the master plan. John Tobia facilitated the presentation and discussion with support from the additional Jacobs team members in attendance.

The PTP is designed to treat high-strength waste and uses a high purity oxygen system to break down the high organic loading entering the facility. The PTP was constructed approximately 30 years ago and many components are reaching the end of their useful life. At the same time, the PTP is at full capacity already, and expansion will be required to meet future projected flows and loads. To determine future flows and loads, Jacobs used historical plant data, historical peaking factors, and future planning flows and loads provided by some industries and municipal partners. There was some discussion regarding industrial permits and regulations.

Jacobs reviewed the alternatives related to capacity expansion at the PTP to address future industrial needs. The recommended approach is to install two anaerobic pretreatment basins that would receive waste directly from the largest customer, Boston Beer Company. By separating the largest source of flow and organic loading into dedicated new pretreatment facilities, the existing plant would remain in place and required asset renewal projects can be phased more easily. This approach will have additional benefits of lowering the demand for oxygen in the treatment process, and reduction of biosolids production.

Jacobs then reviewed capital improvements that are required throughout the PTP as part of the ongoing rehabilitation and replacement process for aging system components. Jacobs completed a condition assessment on the entire plant, including the treatment systems and other components such as roofs, HVAC, and electrical systems. Key findings were summarized including the need to plan out the replacement of the PTP's mechanical, electrical, and cryogenic (oxygen generation) systems. It was noted that the capital improvements could be phased in parallel with the capacity expansion projects to reduce overall costs. Jacobs also reviewed the need to increase the annual budget for smaller repairs and replacements that could assist with the phasing of larger projects. This annual budget would be used for additional condition evaluations, purchasing of spare parts, smaller repair projects, and establishment of a contingency fund for emergency repairs.

As part of the master plan, Jacobs also reviewed opportunity for on-site cogeneration, using biogas produced from the treatment process in a combined heat and power system. However, due to the upfront expense and ongoing operating and maintenance costs, this option does not appear to be viable for the PTP. Some additional exploration of this topic is necessary.

Jacobs reviewed high level cost estimates for the work described in the master plan: \$222 million for the plant expansion projects, which capture the majority of additional capital improvements; \$25.5 million for additional capital improvements that are not part of the plant expansion approach, which could be phased over time to follow the plant expansion projects; and \$1.6 million additional annual funding for smaller repairs, purchase of spare parts, and establishment of contingency funds for emergencies. The next steps include a deeper review of the electrical system and high purity oxygen system requirements, confirmation of future flows and loads, identification of opportunities to reduce capital costs and maximize energy efficiency, and evaluation of opportunities to segregate additional commercial flows into the new pretreatment facilities.

Liesel Gross thanked Jacobs for the presentation and explained how the PTP fits in with the regional Act 537 Plan that is being developed. Flows from the PTP flow into the Kline's Island Sewer System, and effective treatment of industrial waste at the PTP impacts the flows and loads being discharged to the Kline's Island Wastewater Treatment Plant. Additionally, the municipalities have been working collaboratively on the regional Act 537 Plan and detailing their anticipated future needs for sewage treatment. The PTP master plan results will be incorporated into the overall regional approach being considered. Some Board discussion followed regarding how the costs from the PTP master plan would be shared with the industries and the communities, and ways to protect the Authority from the cost burden if the industrial development does not occur.

City of Allentown – KISS System Modeling – Preliminary Screening of Alternatives (PSOA)

Phil DePoe gave a detailed presentation of the results of the preliminary screening of the alternative (PSOA) work completed since its authorization in October 2022. The PSOA work is intended to provide preliminary review of alternatives for the regional Act 537 Plan, which would then be narrowed down into a final set of alternatives that would be reviewed in greater detail in the months ahead. Mr. DePoe provided background on the Act 537 Plan development process, requirements of the Pa. Department of Environmental Protection, schedule for completion of the plan, and Kline's Island Sewer System (KISS) goals for this planning effort.

Mr. DePoe reviewed the results of the PSOA work, stating that several projects have been identified as being required for inclusion in the final Act 537 Plan, while other projects will be contingent upon additional study. The required projects include: upgrades at the Kline's Island Wastewater Treatment Plant (KIWWTP) to address peak wet-weather flows, required capital projects from the KIWWTP master plan, an upgrade to the Little Lehigh Interceptor via gravity and/or pumping options, and upgrade to the Western Lehigh Interceptor via gravity and/or pumping options, and municipal signatory projects to eliminate the sources of inflow and infiltration (I&I). Projects that are still being reviewed for inclusion in the Act 537 Plan include additional KIWWTP upgrades, upgrades to additional regional interceptors and trunkline, and upgrades to various municipal signatories' interceptors and trunklines. The need for these additional projects will be determined primarily by the effectiveness of the municipalities' efforts to eliminate I&I from the system. Mr. DePoe provided additional details about the KIWWTP upgrades to address peak wet-weather flows, since some of those projects are already in design phase.

Liesel Gross commented that on the discussion regarding the Act 537 Plan to date has been focused on the engineering tasks to determine the physical needs of the system and scope of projects that must be completed. However, overall cost and affordability are critical factors that will shape the decision about what projects will be included in the Act 537 Plan. The plan approval

process requires adoption by all municipalities in the KISS system, and so the array of projects and rate impact of the work will need to be acceptable both financially and politically for each community. She noted the ability to implement the projects, in terms of available funding, staff resources, contractors, and materials, will also need to be considered in the decision-making process.

Mr. DePoe explained the next steps in the planning process leading up to a final draft of the plan being prepared for the public review and approval process in September 2024.

Suburban Division – Heidelberg Heights Wastewater Treatment Plant – Mechanical Screen Project

Chuck Volk provided background of the Heidelberg Heights wastewater system that was acquired by the Authority in 1998. A new wastewater treatment plant was constructed in 2000 using a Sequencing Batch Reactor (SBR) to address major environmental noncompliance. The comminutor placed in service at that time is now obsolete. A replacement is needed to improve performance and reduce operations and maintenance issues.

Bidding for the project was competitive with JEV Construction, LLC being the low bidder. JEV has successfully completed several projects for the Authority in the past five years and their bid came in under the engineer's estimate of \$368,000.00. There was some discussion regarding bid requirements.

On a motion by Norma Cusick, seconded by Ted Lyons, the Board approved the Capital Project Authorization for Heidelberg Heights Wastewater Treatment Plant Mechanical Screen Installation Project for the Construction Phase in the amount of \$415,000.00, which includes the General Construction Contract to JEV Construction, LLC in the amount of \$354,600.00 and the Professional Services Authorization for the Construction Phase Engineering Services to D'Huy Engineering in the amount of \$35,400.00 (7-0).

MONTHLY FINANCIAL REVIEW

Ed Klein gave an overview of the February 2023 financial statements, highlighting variances between actual expenses and budgeted or forecasted expenses. Mr. Klein reported that all three funds are positive against the forecast. He reported that some forecast refining will take place in the second quarter.

SOLICITOR'S COMMENTS

None.

PUBLIC COMMENTS / OTHER COMMENTS

None.

BOARD MEMBER COMMENTS

None.

EXECUTIVE SESSION

None.

ADJOURNMENT

There being no further business, the Vice Chairman adjourned the meeting at 2:07 p.m.

Linda Rosenfeld
Secretary