REGULAR MEETING MINUTES February 14, 2022

The Regular Meeting of the Lehigh County Authority Board of Directors was called to order at 12:00 p.m. on Monday, February 14, 2022. Chairman Brian Nagle 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. Chairman Brian Nagle, Scott Bieber, Richard Bohner, Norma Cusick, Linda Rosenfeld, and Jeff Morgan were present for the duration of the meeting.

Solicitor Michael Gaul of KingSpry was present along with Authority Staff, Liesel Gross, Ed Klein, John Parsons, Chris Moughan, Chuck Volk, Susan Sampson, Andrew Moore, Phil DePoe, Lisa Miller, Amy Kunkel, and Bryan Geissel.

Chairman Nagle 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.

Kevin Baker joined the meeting at 12:02 p.m.

REVIEW OF AGENDA

Liesel Gross announced that there are no changes to the agenda. At the Board's discretion, an Executive Session may be necessary to discuss matters of potential litigation.

Ms. Gross also announced that Chris Moughan has accepted the position of Director of Service and Technology.

Chairman Nagle announced that Jeff Morgan and Linda Rosenfeld have been reappointed by the County of Lehigh to serve on the Lehigh County Authority Board of Directors for another 5 years with their terms ending December 31, 2026.

Amir Famili joined the meeting at 12:04 p.m.

APPROVAL OF MINUTES

January 10, 2022 Meeting Minutes

On a motion by Richard Bohner, seconded by Linda Rosenfeld, the Board approved the minutes of the January 10, 2022 Board meeting as written (8-0).

PUBLIC COMMENTS

2022 Suburban Water Rates - Public Comments Received

Liesel Gross noted that the Board received copies of written comments that Lehigh County Authority received from the public regarding the Suburban Division water rate increase. Two of the comments were submitted by email, and one by formal letter. The Authority's written response to the formal letter was also included in the Board's packet. Ms. Gross noted that the Authority's customer service

department also received some complaints via phone calls. Chris Moughan commented that, after some discussion about the costs needed to maintain and improve the water system, the customers seemed to understand the need for the rate increase.

ACTION AND DISCUSSION ITEMS

Nomination of Officers – Appointment of Nominating Committee

Chairman Nagle appointed Norma Cusick to serve as the Nominating Committee. Ms. Cusick will poll the Board members regarding their interest in being nominated to an officer position. Nominations will be finalized and officers will be elected at the Board's February 28 meeting.

<u>Suburban Division – Central Lehigh and North Whitehall Water Systems – Water Supply Study</u>

Phil DePoe gave an overview of the project, which is in alignment with the recently adopted Strategic Plan. The Water Supply Study objective is to identify and evaluate feasible means to address current and long-term water supply needs in the Central Lehigh Division (CLD) and the North Whitehall Division (NWD). Recently completed planning studies have identified the need for additional supply in the CLD and NWD systems. The need includes an acute, short-term need to enhance the reliability of supply in the CLD system due to recent and continued growth in system demand, particularly with the potential for large customers in the Upper System.

The project scope includes: reviewing existing studies and data pertaining to source water issues; establishing reasonable demand projections; assessing the existing supply and capacity of wells; establishing short-term and long-term system needs; and conducting a preliminary assessment of alternatives. The study will be complete by the third quarter 2022.

Jeff Morgan asked if the study will address water quality issues. Mr. DePoe said water quality issues are inherent to the study and will be evaluated as existing sources are reviewed and alternatives developed. Scott Bieber commented that is appears to be getting more difficult to drill new wells and asked if the Authority staff know more about this. Amy Kunkel responded that DEP regulations regarding developing new wells are stricter now than they were previously. Prolonged pump testing requirements have been instituted, and larger wellhead protection zones are now required. She noted that it is also more difficult to reactivate a well once it has been taken offline, which applies to several of the Authority's sources. Amir Famili asked Mr. DePoe to elaborate on the need for additional supply. Mr. DePoe explained that there is potential for industrial users to locate on property north of Interstate 78, which is in the Authority's supply-limited Upper System. In addition to the supply limitations in the Upper Systems, both the CLD and NWD rely on system interconnections with neighboring water systems, which must be evaluated for redundancy.

On a motion by Scott Bieber, seconded by Jeff Morgan the Board approved the Capital Plan Authorization for the CLD and NWD Water Supply Study in the amount of \$92,500.00 which includes the Professional Services Authorization to Gannett Fleming in the amount of \$77,500.00 (8-0).

A roll call vote was taken with the following votes cast:

Brian Nagle – yes Scott Bieber – yes Richard Bohner – yes Norma Cusick – yes Kevin Baker – yes Linda Rosenfeld – yes Jeff Morgan – yes Amir Famili – yes

<u>Suburban Division – Regional Sewer Capacity & Wet-Weather Planning: Engineering & Program Support</u>

Phil DePoe noted that this approval is specifically for the renewal of the contract with AECOM, who is serving as the program manager for the development of the regional Act 537 Plan. The Act 537 Plan is mandated by DEP to be completed by March 2025 and aligns with the Authority's newly adopted Strategic Plan. As part of the Act 537 Plan, the Authority's evaluation of the Pretreatment Plant (PTP) is ongoing, and the option to upgrade the PTP to a direct discharge facility is a major driver for this request. Mr. DePoe said that AECOM is critical to navigating the regulatory process associated with the PTP upgrade option and has intimate knowledge of the planning process. Most recently, AECOM's efforts have been focused on understanding how the PTP upgrade option would work within the Delaware River Basin Commission (DRBC) regulatory framework, including an evaluation of how the Kline's Island Wastewater Treatment Plant (KIWWTP) permit would be impacted.

Scott Bieber asked if the PTP upgrade option would result in a de-rate of the KIWWTP permit. Mr. DePoe explained that based on current understanding of DRBC regulations, flows and loads can be traded between wastewater facilities. If the PTP upgrade option is viable, then some of the KIWWTP permitted flows and loads could potentially be traded off to the upgraded PTP, Investigating this option is a primary component of AECOM's planned work in 2022. Amir Famili asked about the previous cost estimates related to the PTP option and how the Authority will determine if it is a good investment. Mr. DePoe said that there will need to be an investment into the PTP regardless of what option is selected, due the age and condition of the facility. A critical component in the alternatives analysis will be to review the full cost of all options, including system expansion and upgrades as well as the cost to repair and replace currently aging equipment. Mr. Famili asked what the specific deliverable is from AECOM that will allow the Authority to decide if the PTP upgrade option is viable. Liesel Gross explained that the determination of the viability of the PTP upgrade option will be determined based on analysis of regulatory, financial, political, and constructability aspects of the option, and AECOM is focusing on all of these areas. She also referred to the Act 537 Plan "Roles & Responsibilities" chart, which describes each entity's role in the process.

On a motion by Linda Rosenfeld, seconded by Jeff Morgan, the Board approved the Capital Plan Authorization for the Regional Act 537 Plan Program Management – Planning Phase in the amount of \$115,000.00 which includes the Professional Services Authorization to AECOM in the amount of \$100,000.00 (8-0).

A roll call vote was taken with the following votes cast:

Brian Nagle – yes Scott Bieber – yes Richard Bohner – yes Norma Cusick – yes Kevin Baker – yes Linda Rosenfeld – yes Jeff Morgan – yes Amir Famili – yes

Suburban Division - Upper Western Lehigh Pump Station and Force Main: Design Phase

Chuck Volk gave a brief overview of the project noting that that project is a recommendation from the Trexlertown area special study that was prepared to evaluate alternatives to resolve interceptor capacity deficiencies in the Trexlertown area, often referred to as the "Trexlertown bottleneck." The recommendation is to construct a pump station near the Pretreatment Plant (PTP) and force main connecting to the Upper Macungie Trunk Line to divert dry day flow from the Western Lehigh Interceptor. This project has been reviewed by Upper Macungie Township staff, who are supportive of this approach.

Amy Kunkel provided details of the project and recommended Entech Engineering for design phase services based on their prior performance and expertise with wastewater conveyance facilities. Some additional easements will be needed. Chuck Volk said the Authority already has an easement for the proposed pump station on the property adjacent to the PTP. The pump station would draw treated effluent from the PTP and pump it through the proposed force main to a connection to the Upper Macungie Trunk Line near the Township's park on Grange Road.

Chairman Nagle asked whether the Authority has explored the PennDOT right of ways in this area, since the force main appears to run parallel to the Route 222 bypass. Mr. Volk said this has been explored and the force main route will mainly stay on private property with the exception of crossing Ruppsville Road, which is a state road. Chairman Nagle also asked about the proposed route of the force main through the middle of the property the Authority owns that is adjacent to the PTP, and whether the force main would interfere with possible future plans to expand the PTP. Mr. Volk explained that there is a 150 foot power line right of way in this area. This would be utilized for the force main to minimize the disturbance and reduce the possibility of interfering with future treatment facilities, which cannot be constructed in the right of way. Scott Bieber asked about the sensor that will be placed in one of the downstream manholes and how it will be used to provide protection from overflows during a five-year storm. Mr. Volk explained that the system will use level sensors to measure the volume of sewage in the Township line so the pump station can be shut down in highflow periods. Kevin Baker noted that there is quite a bit of difference in proposal prices for design phase services, and asked if that was a result of manhours being estimated by each consultant. Amy Kunkel explained that the price differences among the proposals are due to each consultant's estimate of manhours. She reviewed with Entech its proposal, and said the Authority is confident in the completeness of Entech's proposal.

On a motion by Amir Famili, seconded by Linda Rosenfeld, the Board approved the Capital Plan Authorization for the Upper Western Lehigh Pump Stations and Force Main – Design Phase in the amount of \$468,600.00 which includes the Professional Services Authorization to Entech Engineering in the amount of \$248,600.00 (7-0, with Jeff Morgan abstaining).

A roll call vote was taken with the following votes cast:

Brian Nagle – yes Scott Bieber – yes Richard Bohner – yes Norma Cusick – yes Kevin Baker – yes Linda Rosenfeld – yes Jeff Morgan – abstained Amir Famili – yes

<u>Allentown Division – Kline's Island WWTP: Sludge Thickener Tank No. 3 Mechanical Upgrade – Construction</u>

Chuck Volk gave a background of Sludge Thickener Tank #3 at the Kline's Island Wastewater Treatment Plant (KIWWTP), which has been in service since 1984 and contains mechanical components that are now at the end of their useful life. The scope of the project consists of complete mechanical refurbishment of the tanks and demolition of existing mechanical equipment. Mr. Volk explained the project scope in detail and displayed interior and exterior photos of the tank components indicating their condition. He noted this project is included in the KIWWTP master plan as a near-term, high-priority project due to the age of the equipment. The tank will be down for several months and tanks #1 and #2 will have to press more sludge until the tank is back online.

Amir Famili commented about the project schedule and asked about the definition of "substantial completion." Mr. Volk explained the term "substantial completion" is used for construction projects to indicate when the project can be put into service to serve its primary function while some project components may remain outstanding, such as site restoration or other punch list items. Solicitor Mike Gaul also explained the legal background regarding the use of "substantial completion" as an indicator of project status.

On a motion by Amir Famili, seconded by Linda Rosenfeld, the Board approved the Capital Project Authorization for the Sludge Thickener Tank No. 3 Mechanical Upgrade – Construction Phase in the amount of \$594,000.00 which includes the Professional Services Authorization to D'Huy Engineering, Inc. in the amount of \$38,000.00 and includes the General Contract Award to JEV Construction LLC in the amount of \$511,000.00 (8-0).

A roll call vote was taken with the following votes cast:

Brian Nagle – yes Scott Bieber – yes Richard Bohner – yes Norma Cusick – yes Kevin Baker – yes Linda Rosenfeld – yes Jeff Morgan – yes Amir Famili – yes

MONTHLY PROJECT UPDATES / INFORMATION ITEMS

Liesel Gross reviewed the new report format, which is broken into three sections: Upcoming Agenda Items, Project Updates, and Open Project List. She noted that additional changes will be made next month as the report format is refined, and she requested any Board member feedback to be sent to her for inclusion in the next report

Ms. Gross highlighted items for the February 28th meeting and noted that the auditors will be attending the meeting via Zoom to present the 2020 Audit and Financial Statements.

Amir Famili asked how "project closeout" is defined. Chuck Volk explained that a project is considered to be in "project closeout" phase after a final inspection has occurred, all punch list items are addressed, and all contract and legal documents are complete, including final payment. Liesel Gross noted that projects shown in the report as being in project closeout phase will be removed from the report in the following month.

MONTHLY SYSTEM OPERATIONS OVERVIEW

John Parsons reviewed the December 2021 Monthly Systems Operations report, highlighting items of interest in the report. The manhole remediation project in Upper Milford Township was completed with 38 manholes lined. Three SSOs occurred in December 2021 including one in Allentown that resulted from a grease blockage, one in the Suburban Division that resulted from a grease and rag buildup, and one at the Lynn Township system. Mr. Parsons also noted that the final report was received from Arcadis pertaining to the condition assessment of the Park Pump Station Force Main. Arcadis recommends the condition assessment be repeated in 10 years or prior to the 50th anniversary of the station being put online.

Norma Cusick asked why the Authority has so many water shutoffs for non-payment when there are programs available to assist customers with payments. Chris Moughan responded that the Authority has seen an increase in applications for assistance. Liesel Gross added that the customer assistance programs are based on income level and the thresholds may be set too low for some customers to meet the threshold and receive assistance.

Andrew Moore reviewed the Notice of Violation regarding the Sand Spring Wastewater Treatment Plant. Most of the violations outlined in the NOV date back a few years, prior to the new plant being constructed in 2020 and 2021. However, some of the violations were attributed to start up of the new system. The system has experienced some high flows that affect the plant's performance, and the staff have been working to pinpoint where these additional flows are coming from. Amir Famili asked if this project is closed out. Chuck Volk said the project has been closed out and is currently under warranty. The contractor has corrected programming issues that were related to some of the plant start-up issues, but the continuing high-flow problem does not appear to be related to project construction.

1,4 Dioxane Discharge

A memorandum was included with the Monthly System Operations report regarding an issue with 1,4 Dioxane discharge from the Authority's regional wastewater system. Andrew Moore explained that in May 2021, DEP detected 1,4 dioxane in the outflow in the Kline's Island Wastewater Treatment plant (KIWWTP). Because the chemical is unregulated, the Authority had no previous wastewater data available, but pursued several different points of investigation. The conclusion was drawn that the 1,4 Dioxane was being discharged into the Pretreatment Plant, passing through the plant and traveling to the KIWWTP and being discharged to the Lehigh River. Additional sampling was conducted and the source of the material was discovered to be a specific waste discharger within the Authority's waste hauler program. When the industry was identified, Coim USA, Inc., the Authority immediately suspended their industrial waste permit so no additional discharges would occur. Liesel Gross recognized Mr. Moore's due diligence in finding and eliminating the source of the discharge.

Ms. Gross explained that the waste hauler program has been in existence since the 1990s and has been a positive and productive component of the Authority's program. However, there are risks inherent in a waste hauler program, and difficulties and costs associated with monitoring for unregulated contaminants or identifying unauthorized discharges. The Authority mitigates these risks through strict adherence to regulatory requirements.

Ms. Gross noted that some customer comments have been received following the news coverage of this incident. One customer raised the question about safety of the Authority's drinking water. She

explained that the discharge of 1,4 Dioxane was contained to the wastewater system, with the source of the chemical coming from a waste hauler from outside the area, so the Authority's drinking water supply was not affected. Ms. Gross commented that there is a dedicated page on the Authority's website that provides additional information on the topic of unregulated contaminants.

Amir Famili stated that Andrew Moore did a great job tracing this chemical back to Coim USA, Inc. He also asked if Mr. Moore keeps records and samples from the haulers, and how long the samples are kept. Mr. Moore explained that samples are taken from waste loads coming into the plant in accordance with the requirements of the permits and the hauler program protocols. Not every load is sampled, and samples are kept for a period of time but typically discarded after the laboratory analysis is complete. Chairman Nagle asked about the vetting that is done for haulers to use the Pretreatment Plant as a discharge location. Mr. Moore explained some details about the permitting process to properly categorize and vet the hauler, the waste generator, and any industrial waste generators. Linda Rosenfeld commented that a news article reported that Coim would normally send their waste to upstate New York but for some reason they brought it here to the Authority's facility. Mr. Moore said he cannot verify this because the Authority only has information on what Coim was bringing to the Authority's facility. Since Coim is no longer discharging to the Authority's system, Mr. Moore does not have additional information about Coim's continued operation.

Jeremy Thompson, a customer and resident of Fogelsville, commented that neighbors were alarmed by this incident when it was reported in the local news media and thanked Mr. Moore for his due diligence. He also asked about the \$2.8 million in revenue the Authority generates from the hauler program. He asked if this figure is net revenue or gross revenue, and what the margin is, after expenses. Ed Klein said he estimates the net revenue for the program, after expenses, to be approximately \$400,000. Mr. Thompson commented that if a hauler must come from so far away to discharge their waste to the Authority's facility, it should be a red flag. Mr. Thompson thanked the Board for their time and efforts to seriously consider the risks associated with this program. Jeff Morgan said he feels this was an isolated incident that was handled appropriately by the Authority staff. He reminded the Board that the Pretreatment Plant was designed to handle industrial wastes and the hauler program is an important program because the community needs a place to properly dispose of such wastes.

Emmaus Consecutive Division – PFAS Contamination

Liesel Gross reported a contamination incident affecting the Authority's Emmaus Consecutive Division water system. She explained that the Authority purchases water from the Borough of Emmaus to supply drinking water to 417 homes located outside the Borough boundaries in various locations of Upper Milford, Lower Macungie, and Salisbury townships. In December 2021 the Authority learned that two drinking water supply wells in the Borough had test results indicating levels of Perfluorooctane Sulfonate (PFOS) and Perfluorooctanoic Acid (PFOA) (collectively know as "PFAS") above the Lifetime Health Advisory level established by the EPA. Contaminants in the PFAS category are currently not regulated. One well was very high and taken off-line. PFAS are found in many household products as well as fire-fighting foam. The Borough has traced the contamination of their wells to leakage of fire-fighting chemicals stored at the Borough's fire training facility. Ms. Gross has discussed solutions with the Borough manager and offered the Authority's assistance to help resolve this. Chuck Volk and his team have provided a preliminary analysis of potential water system interconnections from the Authority's system that may be helpful to supplement or replace the Borough's well supplies. The Borough will be evaluating alternatives to address the problem.

Buss Acres Division - System Update

Chris Moughan provided an update on the Buss Acres water system, which has faced several boil water advisories in the past year. He explained that the boil advisories have not been related to the system upgrade project directly. The updated SCADA system was designed to shut the system down according to certain system triggers, and the system was working as designed. However, communication issues at the facility have triggered system shut-downs several times, which caused the need to issue boil advisories to the customers. The communication network issue has been addressed, which should provide a permanent solution to the problem. Chairman Nagle asked what the public reaction has been with this upgrade project. Liesel Gross noted that the primary customer interaction regarding the system upgrade has been related to construction impacts such as tree planting and presence of construction equipment.

Amir Famili asked about the two injuries on the Monthly Operations report. John Parsons reported that one injury was due to a spray of hypochlorite in the eye and another one was due to an electric shock received when a technician was cutting a service line. He reported that both incidents have undergone a root cause analysis and were avoidable through the use of proper safety equipment and protocols.

| STAFF COMMENTS | 3 |
|----------------|---|
|----------------|---|

None.

SOLICITOR'S COMMENTS

None.

PUBLIC COMMENTS / OTHER COMMENTS

None.

EXECUTIVE SESSION

Chairman Nagle announced there will be an Executive Session at 2:30 p.m. to discuss matters of potential litigation.

ADJOURNMENT

| - | | | 11 1 41 | |
|----------------|------------------------|---------------|------------------|----------------------|
| Thata haina na | a turthar huginagi | tha ("hairmai | n adiniirnad tha | meeting at 2:22 p.m. |
| | J IUI II ICI DUSII ICS | s. uie Onanna | n adiodined inc | |

| Rich | nard Bohner |
|------|-------------|
| Sec | retary |