



**LCA Main Office:**  
1053 Spruce Road  
Wescosville, PA 18106  
610-398-2503

**Agendas & Minutes Posted:**  
[www.lehighcountyauthority.org](http://www.lehighcountyauthority.org)

## LEHIGH COUNTY AUTHORITY

Published: January 17, 2023

### BOARD MEETING AGENDA – January 23, 2023 – 12:00 p.m.

**In-Person or Virtual Meeting Attendance Options Available:** Meetings of the LCA Board of Directors will be held at LCA's Main Office as well as online using the Zoom Meetings application, which includes a telephone option. Public participation is welcomed both in-person or virtually. Instructions for joining the meeting online or by phone are posted on the LCA website in the morning on the day of the meeting, prior to the start of each meeting. You may also issue comment to LCA via email to [LCABoard@lehighcountyauthority.org](mailto:LCABoard@lehighcountyauthority.org) in advance of any meeting or view the meeting at a later time by visiting the LCA website. Please visit <https://www.lehighcountyauthority.org/about/lca-board-meeting-videos/> for specific instructions to join the meeting if you are attending virtually. If attending in-person at LCA's Main Office, please follow all safety and sanitation protocols posted.

#### 1. Call to Order

- **NOTICE OF MEETING RECORDINGS**

Meetings of Lehigh County Authority's Board of Directors that are held at LCA's Main Office at 1053 Spruce Road, Wescosville, PA, may be recorded for viewing online at [lehighcountauthority.org](http://lehighcountauthority.org). Recordings of LCA meetings are for public convenience and internal use only and are not considered as minutes for the meeting being recorded, nor are they part of public record. Recordings may be retained or destroyed at LCA's discretion.

- *Public Participation Sign-In Request*

#### 2. Review of Agenda / Executive Sessions

- Additions to Agenda (vote required if action will be taken)

#### 3. Approval of Minutes

- *December 12, 2022 Board meeting minutes*

#### 4. Public Comments

#### 5. Action / Discussion Items:

#### **FINANCE AND ADMINISTRATION**

- *LCA Pension Plan – Updated Mandatory Municipal Obligation (Information) **(blue)** (digital Board packet, pages 9-10)*
- *LCA Strategic Plan - 2022 Quarterly Progress Reporting (Discussion) **(yellow)** (digital Board packet, pages 11-16)*
- *Resolution 1-2023-1: Re-authorizing the Authority's Application for Pennvest Funding (Approval) **(pink)** (digital Board packet, pages 17-27)*
- *Resolution 1-2023-2: Authorizing the Authority's Application for Pennvest Funding (Approval) **(green)** (digital Board packet, pages 28-29)*

#### **WATER**

- *Allentown Division - Emergency Declaration - Water Main Break at Mosser Road (Approval) **(purple)** (digital Board packet, pages 30-31)*
- *Suburban Division - Emergency Declaration - Realignment of Exposed Water Main in Heidelberg Heights (Approval) **(salmon)** (digital Board packet, page 32)*

## **WASTEWATER**

6. Monthly Project Updates / Information Items (1<sup>st</sup> Board meeting per month) (digital Board packet, pages 33-38) – **January 2023 report attached**
7. Monthly Financial Review (2<sup>nd</sup> Board meeting per month) - **December 2022 and January 2023 reports will be presented in February**
8. Monthly System Operations Overview (2<sup>nd</sup> Board meeting per month) (digital Board packet, pages 39-45) – **December 2022 report attached**
9. Staff Comments
10. Solicitor's Comments
11. Public Comments / Other Comments
12. Board Member Comments
13. Executive Sessions
14. Adjournment

### **UPCOMING BOARD MEETINGS**

February 13, 2023

February 27, 2023

March 13, 2023

### **PUBLIC PARTICIPATION POLICY**

In accordance with Authority policy, members of the public shall record their name, address, and discussion item on the sign-in sheet at the start of each meeting; this information shall also be stated when addressing the meeting. During the Public Comment portions of the meeting, members of the public will be allowed 5 minutes to make comments/ask questions regarding non-agenda items, but time may be extended at the discretion of the Chair; comments/questions regarding agenda items may be addressed after the presentation of the agenda item. Members of the public may not request that specific items or language be included in the meeting minutes.

## **REGULAR MEETING MINUTES**

### **December 12, 2022**

*Notice of Preparation of Authority Meeting Minutes: Authority staff who are in attendance at each Authority Board meeting prepare a draft of the Minutes, which are subsequently distributed to all Board members for review. Board members may offer corrections prior to a vote of the full Board of Directors to approve the Minutes.*

The Regular Meeting of the Lehigh County Authority Board of Directors was called to order at 12:01 p.m. on Monday, December 12, 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. Brian Nagle, Scott Bieber, Richard Bohner, Norma Cusick, Ted Lyons, Kevin Baker, Linda Rosenfeld, Jeff Morgan, and Amir Famili were present for the duration of the meeting.

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

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. He also announced that an Executive Session was held prior to the meeting to discuss personnel matters.

Liesel Gross noted that there were two items emailed to the Board after the packet was mailed: the 2021 Audit & Financial Statements and the SMART Union 2023-2025 contract changes. These items are also posted on the website.

### **REVIEW OF AGENDA**

Liesel Gross announced that there are no changes or additions to the agenda. She also noted that this is the only Board meeting in December.

### **APPROVAL OF MINUTES**

#### **November 14, 2022 Meeting Minutes**

On a motion by Richard Bohner, seconded by Amir Famili, the Board approved the minutes of the November 14, 2022, Board meeting as written (9-0).

### **PUBLIC COMMENTS**

None.

#### **Special Recognition – Richard Bohner**

The Board recognized and thanked Mr. Bohner for his 50 years of dedicated volunteer service on the Lehigh County Authority Board of Directors. A video excerpt from the Lehigh County Board of Commissioners' November 22, 2022 meeting was shown. In the video, the Commissioners and County Executive honored Mr. Bohner with a Proclamation and Resolution to honor his 50 years of service to the Authority. Chairman Nagle presented Mr. Bohner with both the Proclamation and Resolution. Mr. Bohner thanked the Authority Board and staff stating that he enjoyed his time serving.

Jennifer McKenna from the City of Allentown Office of Compliance commented on behalf of the City of Allentown, thanking Mr. Bohner for his service.

### **2023 Board Meeting Schedule**

Liesel Gross noted that the draft 2023 meeting schedule has been reviewed by the staff and Board for any conflicts.

On a motion by Linda Rosenfeld, seconded by Ted Lyons, the Board approved the 2023 Board meeting schedule as presented (9-0).

### **2021 Audit & Financial Statements**

Ed Klein introduced Nate Swartz from Zelenkofske Axelrod LLC who was present to give an overview of the financial statements and auditor's report for years ending 2020 and 2021. Mr. Swartz explained that the statements from the Pennsylvania Municipal Retirement System (PMRS) were very delayed. Because the PMRS statements are a major component of the Authority's audit, the completion of the Authority's audit was also delayed. Mr. Swartz thanked Ed Klein and his staff for providing the information to him in a timely manner. Mr. Swartz stated that the Authority was given an unqualified, or clean, opinion on the Authority's basic financial statements, which is the highest level of assurance provided. He also noted there were no uncorrected misstatements, no disagreements with management, no consulting with other accounting firms, and no control issues that needed to be brought before the Board.

Mr. Swartz highlighted key schedules included in the report, such as the statement of net position which shows the assets and liabilities, the cash flow statement, and the notes to the financial statements related to other post-employment benefits (OPEB) and the pension fund.

There were some comments and discussion regarding the pension plan and OPEB funds.

On a motion by Ted Lyons, seconded by Amir Famili, the Board accepted the 2021 Audit & Financial statements (9-0).

### **Resolution 12-2022-1: Customer Facility Fees & Connection Fees**

Liesel Gross provided an overview of the connection fees that are required to be adopted by Resolution every year for the City Division Water System, the Customer Facilities fees for the City Division Water and Wastewater system, and the Suburban Division Water and Wastewater systems.

On a motion by Linda Rosenfeld, seconded by Jeff Morgan, the Board approved Resolution No. 12-2022-1 establishing the various components of the Authority's Capital Recovery fees for the City Division water system connection fees and the customer facilities fees for the City Division water system and the Suburban Division Water and Wastewater systems (9-0).

### **Resolution 12-2022-2 & 12-2022-3: Authorizing the Authority's Applications for Grant Funding**

Liesel Gross reviewed the project summary that was provided to the Board for the grant application resolutions for the Upper Western Lehigh Pump Station Project and the Heidelberg Heights Sanitary Sewer Replacement project. The grant program is available through the Department of Community and Economic Development using the American Rescue Plan Act (ARPA) funds that were held by the state to support water and sewer utility projects.

Scott Bieber asked about support from the County of Lehigh regarding the Trexlertown interceptor project. Liesel Gross said that the County had previously declined to support this project with an allocation of their ARPA funds, but have provided their support for the Authority's grant application.

On a motion by Linda Rosenfeld, seconded by Amir Famili, the Board approved Resolution No. 12-2022-2 authorizing the submission of a H2O PA Water Supply Sanitary Sewer and Storm Water projects grant request (9-0).

On a motion by Scott Bieber, seconded by Jeff Morgan, the Board approved Resolution No. 12-2022-3 authorizing the submission of a PA Small Water and Sewer program grant request (9-0).

### **SMART Union Contract Changes – 2023-2025**

Liesel Gross stated that the Authority's contract with the Sheet Metal, Air, Rail and Transportation Workers (SMART) Local 19 union will expire on December 31, 2022. She reviewed the key contract provisions that had been negotiated to be changed for a new contract to go into effect for the years of 2023 through 2025.

On a motion by Linda Rosenfeld, seconded by Kevin Baker, the Board approved an amended contract with the SMART Local 19 union for the years 2023-2025 with the amendments contained in the detailed report provided with the agenda, and authorized the CEO to execute the final form of the amended contract, with any incidental modifications necessary, in consultation with the Solicitor (9-0).

Liesel Gross commented that during the development of the 2023 Budget, which was approved in October, an additional sum of \$110,000 was added to the personnel budget to accommodate expected changes in the SMART contract as well as to provide additional support to employees in a difficult economic climate over the past year. She requested the Board authorize the release of this funding to be distributed to all employees in January 2023.

On a motion by Amir Famili, seconded by Ted Lyons, the Board authorized the release of \$110,000 from the budgeted pool for 2023 salary adjustments to be awarded in January to members of the SMART union in accordance with the 2023-2025 contract and to other Authority employees at the discretion of the CEO, for purposes of recognizing employee dedication during difficult economic times over the past year (9-0).

### **Capital Works Plan Room – Storage and Scanning**

Chris Moughan explained that this project would digitize approximately 18,000 plan sheets that are currently stored in a room in the Capital Works department. After scanning, the plans would be available via the Geographic Information System for easy access to view in the field. He would like to engage Reynolds Business Systems because of their secure storage, data security protocols, close proximity to the Authority offices, and ability to work within the expected schedule. As the plan room is cleared out, the space will be converted to additional office space. The plans will remain offsite until a more suitable storage location is determined.

Amir Famili asked how long the paperwork needs to be maintained. Mr. Moughan explained that the records are kept in accordance with the Pennsylvania Municipal Records Manual. Jeff Morgan commented that the drawings are invaluable and should be maintained.

On a motion by Jeff Morgan, seconded by Scott Bieber, the Board approved the Professional Services Authorization to Reynolds Business Systems in the amount of \$79,640.93 (9-0).

**Contract Laboratory Analysis for Water and Wastewater Samples**

Andrew Moore explained that the current contract for laboratory services will expire at the end of 2022. A Request for Proposal was issued to solicit pricing for laboratory services to meet the needs of the Allentown Division, Suburban Division, and the Pretreatment Plant. Over 8,000 water, wastewater and biosolids analyses are conducted yearly for the Authority by the contract laboratory, and more than 30,000 additional analyses are conducted in the Authority's in-house laboratories. He is recommending Suburban Testing Labs for the one-year contract with the option to extend for two additional one-year periods.

On a motion by Amir Famili, seconded by Linda Rosenfeld, the Board approved the Professional Services Authorization to Suburban Testing Labs in the amount of \$204,323.00, including the option to extend the contract for two additional one-year periods (9-0).

**KISS Act 537 Planning – Financial & Institutional Evaluation, Phase 1**

Liesel Gross explained the need for the financial and institutional evaluations and noted they are requirements of the Pa. Department of Environmental Protection (DEP) and the Act 537 Plan checklist. DEP has expressed preference for the municipalities and the Authority to look at the Kline's Island Sewer System (KISS) on a more regional basis. Key components of the first phase of this evaluation are to compile financial information from each KISS municipality and to complete a preliminary analysis of system costs and rates across the system for each municipality and the system as a whole. The future phases will work parallel with the engineering work that is also being completed for the Act 537 Plan development.

Ms. Gross reviewed the proposals received for this work and noted that the Authority is working in collaboration with the City of Allentown on this phase. Raftelis provided the lowest cost proposal and was the most responsive to the needs identified. She noted that Raftelis has strong experience working with regional systems similar to the Authority, including working on Act 537 Plans in Pennsylvania.

There was some Board discussion regarding the current intermunicipal agreements and whether they will be relevant moving forward. There was also some discussion regarding community impacts and rate affordability as the projects that will be outlined in Act 537 Plan move forward.

On a motion by Linda Rosenfeld, seconded by Ted Lyons, the Board approved the Capital Project Authorization – KISS Act 537 Plan Financial & Institutional Evaluation – Phase 1 in the amount of \$90,925.00 which includes the Professional Services Authorization: Financial & Institutional Evaluation Services to Raftelis in the amount of \$70,925.00 (9-0).

**Sanitary Sewer Collection System: City of Allentown Manhole Inspections**

Phil DePoe provided an overview of the project to create a sanitary sewer manhole rehabilitation program within the Allentown Division sewer system. The 10-year program is necessary to remove inflow from the system and reduce peak flows during wet-weather events. In 2023, the first year of the program, 900 manholes will be inspected and a rehabilitation plan developed for those manholes. Thereafter, each year's scope of work will include both inspection work and manhole rehabilitation until all of the Allentown Division manholes have been addressed. The Authority intends to retain the services of Arcadis to provide the manhole inspection services in 2023. Following the initial inspections, the Authority will determine if the work can be done using existing staff or with additional consultant support.

Scott Bieber commented that Portland Cement should not be used for sewer work because it does not hold up. Mr. DePoe said he will look into why that is being recommended as the manhole lining material. There was additional Board discussion regarding the prioritization of the manhole work. Amir Famili stated his concern regarding the possibility of a cost increase over what is being approved in this authorization, and expressed his preference for good project controls to ensure the inspections are completed on time and on budget.

On a motion by Linda Rosenfeld, seconded by Ted Lyons, the Board approved the Capital Project Authorization: Allentown Division: 2023 Manhole Inspections in the amount of \$239,000.00 which includes the Professional Services Authorization to Arcadis – 2023 Manhole Inspections in the amount of \$199,000.00 (9-0).

### **Sanitary Sewer Collection System: City of Allentown Interceptor Inspections**

Phil DePoe explained that the purpose of this project is to determine the condition of the Allentown Division interceptors, some of which were constructed in the 1930s. It is important as part of the regional Act 537 Plan development process to determine whether this aging infrastructure will be able to continue serving the City of Allentown through the planning period of 2050. Since the interceptors cannot be taken out of service for the inspection, this program will need to be well coordinated so the selected consultant, Arcadis, can enter the interceptor safely and efficiently. The project will be funded by the City of Allentown's Administrative Order fund.

Scott Bieber asked if this project and the manhole inspections will be conducted simultaneously to address the same areas at the same time. Mr. DePoe said both inspection projects will be coordinated as much as possible.

On a motion by Scott Bieber, seconded by Jeff Morgan, the Board approved the Capital Project Authorization: Allentown Division: 2023 Interceptor Inspections in the amount of \$88,000.00 which includes the Professional Services Authorization: Arcadis – 2023 Interceptor Inspections in the amount of \$53,000.00 (9-0).

### **MONTHLY PROJECT UPDATES / INFORMATION ITEMS**

Liesel Gross noted that all items for December have been addressed at today's meeting with the exception of the monthly financial and operations reports, which will be sent out separately by the end of the month.

### **STAFF COMMENTS**

Liesel Gross wished everyone a wonderful holiday season and thanked everyone for the support in 2022.

### **SOLICITOR'S COMMENTS**

Solicitor Gaul wished everyone a Merry Christmas.

### **PUBLIC COMMENTS / OTHER COMMENTS**

None.

### **BOARD MEMBER COMMENTS**

Scott Bieber announced that his term is ending at the end of December 2022 and he will not be seeking another term. Mr. Bieber thanked everyone for the opportunity to serve on the Board. Liesel Gross stated that both Mr. Bohner and Mr. Bieber will be considered as current members of the Board until their replacements have been appointed by the County of Lehigh.

**EXECUTIVE SESSION**

An Executive Session was held at 11:00 a.m. to discuss personnel matters.

**ADJOURNMENT**

There being no further business, the Chairman adjourned the meeting at 1:42 p.m.

---

Norma Cusick  
Assistant Secretary





1053 SPRUCE ROAD, PO BOX 3348, ALLENTOWN, PA 18106  
Phone: (610-398-2503); FAX (610-351-8363)

---

## MEMORANDUM

---

**Date Presented:** January 23, 2023  
**To:** Lehigh County Authority Board of Directors  
**From:** Edward Klein, Chief Financial Officer  
**Subject:** 2023 Minimum Municipal Obligation (MMO) for the Lehigh County Authority Pension Plan (39-100-8N)

Act 205 of 1984, as amended, governs the funding requirements for all municipal pension plans. The law requires the Chief Administrative Officer of each pension plan to inform the governing board of the municipality of the plan's expected financial obligation for the coming year. This must be done by the last business day in September.

At the Board on September 19, 2022, as required, the Board was informed of the MMO that calculated to \$1,807,143. PMRS sent notification that the Normal Cost Rate provided by PMRS was in error. The Normal cost rate was revised and the subsequent re-calculation resulted in an MMO of \$1,812,390, an increase of \$5,247.

The MMO is the municipality's 2023 bill for this pension plan and must be paid by December 31, 2023. The obligation must be met with general fund monies or with any General State Aid to Municipal Pensions to which we may be entitled to under Act 205.

Edward Klein  
Chief Financial Officer  
[edwardklein@lehighcountyauthority.org](mailto:edwardklein@lehighcountyauthority.org)  
(610) 398-2503, extension 160

Attachment: 2023 **MMO** Worksheet (Revised)

# The Minimum Municipal Obligation Worksheet (MMO) Lehigh County Authority Pension Plan (39-100-8 N)

for Plan Year 2023

## CHARGES

Estimated 2022 W-2 Payroll

For Covered Plan Members:

(A) 10,492,927.00

PMRS Determined Normal Cost

Expressed as a Decimal:

(B) 0.1295

RESULT: (A) \* (B) =

(C) 1,358,834.00

Administrative Charge (PMRS Determined)

# of Plan Members times \$20:

(D) 4,400.00

Amortization of Unfunded Liability

(PMRS Determined)

(E) 554,085.00

TOTAL CHARGES: (C) + (D) + (E) =

(F) 1,917,319.00

## CREDITS

Repeat Estimated 2022 W-2 Payroll

For Covered Plan Members:

(A) 10,492,927.00

Employee Contribution Rate

Expressed as a Decimal:

(G) 0.0100

RESULT: (A) \* (G) =

(H) 104,929.00

Amortization of the Actuarial Surplus

(PMRS Determined)

(I) 0.00

TOTAL CREDITS: (H) + (I) =

(J) 104,929.00

## MINIMUM MUNICIPAL OBLIGATION

(Based on 1/1/2021 Actuarial Valuation)

(MMO) 1,812,390.00

Equals TOTAL CHARGES Minus

TOTAL CREDITS (F) - (J) = **(Please round numbers to dollars)**

Prepared By: Kathy A. Martin (Name) Kathy A. Martin (Signature)

Human Resources Manager (Title) ( 610 ) 351 - 6322 (Telephone #)

Please note that PMRS discovered an error in your MMO Worksheet. The Normal Cost rate on your original worksheet did not include the disability cost rate. The correct Normal Cost rate was used when filing your Act 205 Report. If you already submitted your MMO Worksheet to PMRS, we prepopulated that data in this form for your convenience. Please review this form and return a signed copy to [ra-rscompletedforms@pa.gov](mailto:ra-rscompletedforms@pa.gov) at your earliest convenience, but no later than December 15, 2022.

Phone: (717) 787-2065

(800) 622-7968

Fax: (717) 783-8363

**Our Vision:** To be Pennsylvania local governments' administrator *of choice*.

# **LCA Strategic Plan (2022-2027)**

## **2022 Quarterly Progress Report: January 2023**

---

### **Overview**

Lehigh County Authority (LCA) adopted an updated Strategic Plan in December 2021, which included a refreshed look at our Mission, Vision, Values and Priorities. An ambitious list of strategies, activities, and tasks were developed to support the achievement of LCA's plan over the next five years. This progress report was developed to help our employees and Board of Directors keep a sharp focus on the plan and, specifically, the work we plan to achieve in the current year. While not all inclusive, milestones outlined in this report describe the breadth of activities LCA focused on in 2022, and will continued to focus on in 2023. A dashboard of key performance indicators is included on the last page of this report. Any questions about this report should be directed to LCA's Chief Executive Officer, Liesel Gross.

### **Asset Management**

#### **2022-2023 Focus:**

1. Develop multi-year approach / roadmap to developing LCA's Asset Management (AM) program
2. Track all maintenance activities in a standard Computerized Maintenance Management System (CMMS) platform

#### **2022 Milestones & Activities (completed):**

- ✓ Conduct staffing assessment & develop organization structure for AM
- ✓ Define consultant work scope for the development of an AM roadmap
- ✓ Recruit and hire a Director of Engineering & Asset Management
- ✓ Director of Engineering & Asset Management onboarded
- ✓ Conduct trial period for capital project management using MS Project to define/document LCA project management standard approaches
- ✓ Kick-off identification and definition of Preventive Maintenance (PM) and Corrective Maintenance (CM) programs within CMMS

#### **2023 Milestones & Activities:**

- Develop new Board report on capital program progress (on time / on budget)
  - Determine future use of MS Project or other project management system (e.g. ProCore)
- Strategic AM Plan (SAMP) documented including multi-year AM program roadmap
  - Define what an "asset" is for purposes of the AM program & document these standards
  - Update Asset Registry in accordance with definition of asset
- Identify and define all Preventive Maintenance (PM) and Corrective Maintenance (CM) programs within CMMS

#### **FUTURE Milestones & Activities (and lower priority items):**

- One quick win / facility AM plan
- Complete key technology integrations outlined in AM technology roadmap
- Materials & parts inventory system defined / implemented via MUNIS reimplementation (see Process Improvement section below)
- Initiate level-of-service and/or condition assessment evaluations as determined by the SAMP

# Process Improvement

## 2022-2023 Focus:

1. Evaluate long-term viability of current Enterprise Resource Planning (ERP), Munis, and implement next steps for enhancement
2. Process improvements in Customer Care and Finance/Accounting areas

## 2022 Milestones & Activities (completed):

- ✓ Conduct ERP needs assessment & road map, and initiate next steps as determined
- ✓ Review and document current processes for capturing various delinquency types (e.g. waste haulers, sewer-only customers)
- ✓ Upgrade to MUNIS version 2021.3 if/when all technical barriers are removed

## 2023 Milestones & Activities:

- Implement Customer Self Service / Paymentus upgrade
- Adopt updated Board resolution for delegation of duties and purchasing authorizations
- Complete MUNIS Reimplementation Project
- Implement universal ACH payments for accounts payable

## FUTURE Milestones & Activities (and lower priority items):

- Implement alternative billing reconciliation process for Western Lehigh signatories
- Create and implement monthly closing checklist
- Delinquency process improvement for utility billing and general billing
- Accounts payable process improvement

# Water & Wastewater Capacity

## 2022-2023 Focus:

1. Advancing regional Act 537 Plan development for regulatory submission in 2025
2. Improve water supply resiliency for Central Lehigh Division (CLD) & North Whitehall Division (NWD)

## 2022 Milestones & Activities (completed):

- ✓ Complete CLD & NWD water supply study
- ✓ Kickoff of specific water projects (system interconnection, storage evaluation)
- ✓ Complete Water Filtration Plant master plan update
- ✓ Complete Pretreatment Plant (PTP) master plan
- ✓ Develop inflow & infiltration source removal plan for the Allentown Division collection system, the Western Lehigh Interceptor, and three collection systems owned and operated by LCA (Upper Milford, Weisenberg, and Lowhill Township)
- ✓ Complete preliminary design of pumping improvement projects at KIWWTP
- ✓ Initiate financial / institutional evaluation required for Act 537 Plan

## 2023 Milestones & Activities:

- Commence construction phase of Upper Western Lehigh Pump Station & Force Main project
- Initiate additional CLD / NWD water supply evaluations and/or projects (scope TBD)
- Complete design phase of pumping improvement projects at KIWWTP
- Act 537 Plan analysis narrowed down to three final alternatives

## FUTURE Milestones & Activities (and lower priority items):

- Conduct pilot of BioActiflo technology for high-rate wet-weather treatment at Kline's Island Wastewater Treatment Plant (KIWWTP)
- Develop near-term PTP capacity plan to address future industrial / Boston Beer needs
- Act 537 Plan financial / institutional evaluation
- Complete KIWWTP master plan update

# Employee Engagement & Safety

## 2022 & 2023 Focus:

1. Employee & supervisory onboarding and ongoing development
2. Safety program enhancements

## 2022 Milestones & Activities (completed):

- ✓ Develop remote work / flexible work arrangements policy and procedures
- ✓ Hire human resources staff member to support employee development / succession planning
- ✓ Create Environmental, Health & Safety (EHS) Steering Committee

## 2023 Milestones & Activities:

- Standardize employee onboarding: develop standard human resources processes, work with managers on department-specific processes
  - Standardize onboarding process for new supervisors
  - Roll out stay interview and new-employee check-in / mentoring processes
  - Update LCA retirement risk profile / near-term succession plan
- 
- Evaluate needs for external support for standardizing / improvement of EHS program
  - Improve root cause analysis process to enhance understanding and tracking of safety incidents
  - Enhance safety metrics
  - Create standardized safety training requirements for new employees

## FUTURE Milestones & Activities (and lower priority items):

- Develop internal / external training resources for new leaders
  - Define LCA diversity, equity & inclusion (DEI) policy and program
  - Develop job-specific performance measures
  - Conduct comprehensive performance program review and improvement
  - Develop mentoring program(s) for new leaders (other employee categories TBD)
- 
- Complete security review of LCA facilities, with immediate needs addressed immediately
  - Expand train-the-trainer program for new employee safety training program
  - Increase field visits for safety and job site security reviews, with results documented
  - Develop protocols and schedule for drills / practicing specific EHS procedures

# Operational Excellence

## 2022-2023 Focus:

1. Completion of specific operational projects/programs that support Operational Excellence goals
2. Small systems compliance review and operational enhancements to achieve compliance

## 2022 Milestones & Activities (completed):

- ✓ Large diameter valve maintenance & replacement program development
- ✓ Suburban Water Supervisory Control and Data Acquisition (SCADA) upgrade, 2022 work scope
- ✓ Small systems process control & instrumentation plan development
- ✓ Develop root cause analysis and reporting process for compliance excursion events
- ✓ Regulatory and water quality monitoring program for PFAS (will be ongoing)
- ✓ Standardize Field Services resource sharing protocols (equipment, emergency response, other)
- ✓ Kline's Island Wastewater Treatment Plant (KIWWTP) belt filter press optimization program
- ✓ Initiate Heidelberg Heights private-side sewer system inspection program (will be ongoing into 2023)

## 2023 Milestones & Activities:

- Achieve Sand Springs WWTP permit compliance
- Implement small systems process control & instrumentation plan
- Lead service line replacement program kickoff (contingent on grant funding)
  - Develop lead and copper rule revision (LCRR) compliance plan and funding approach
- Other operational projects as determined by staff
  - Large diameter valve replacement program construction kick-off
  - Suburban Water Supervisory Control and Data Acquisition (SCADA) upgrade, 2023 work scope

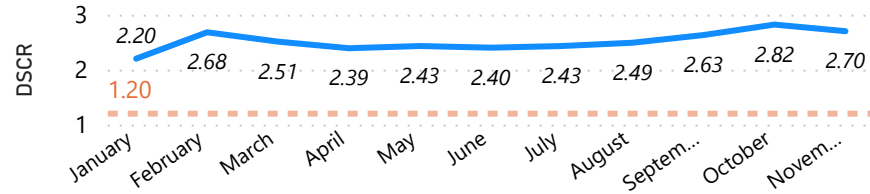
## FUTURE Milestones & Activities (and lower priority items):

- Develop Lynn Township sewer system capacity plan (contingent on township planning)
- Comprehensive review and update of LCA Emergency Response Plan (ERP)
- Response to specific municipal service requests (Parkland WWTP, Emmaus PFAS response, etc.)
- Real-time sewer flow monitoring program (Smart Covers)

# LCA Strategic Plan Metrics

## Financial

### 2022 Debt Service Coverage Ratio - Total LCA



### Debt Service Coverage Ratio - Current

City Division	Suburban Wastewater	Suburban Water
2.30	11.22	2.60

### Unrestricted Days Cash On Hand

City Division	Suburban Wastewater	Suburban Water
191	260	208

\* Target of 180 days.

## Customer Care

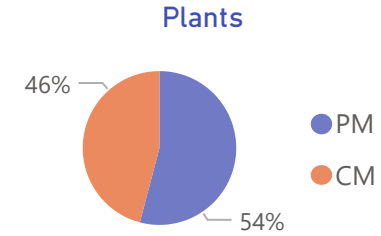
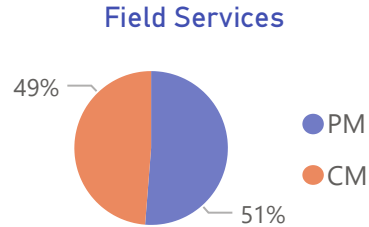
DEVELOPING  
METRIC

## Capital Program

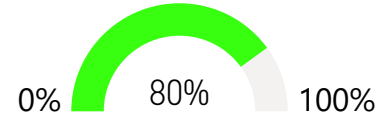
DEVELOPING  
METRIC

## Asset Management

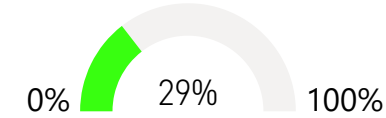
### 2022 Corrective Maintenance vs. Preventive Maintenance Hours



### Field Services Program Design

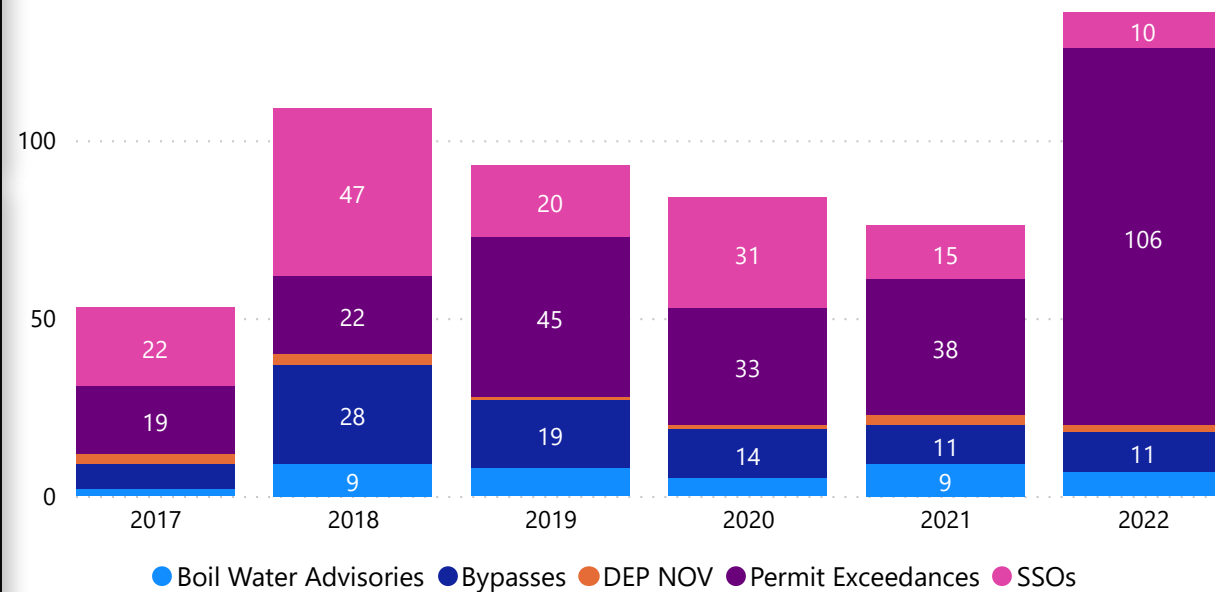


### Plant Program Design



\* Metric to show 2022 progress on preventive program redesign and implementation.

## Environmental Compliance



## Safety

# Days No Vehicle Accident

116

# Days No Lost Time

41

# Of Recordable Injuries YTD

6

## Employees

Total Employees

160

Average Age

46.4

Average Yrs of Service

12.1

Total Vacancies

12



# RESOLUTION NO. 1-2023-1

## Updated Borrower Resolution

(Duly adopted 23 January, 2023)

***RE-AUTHORIZING AND CONFIRMING THE SECURING OF FUNDING FROM THE PENNSYLVANIA INFRASTRUCTURE INVESTMENT AUTHORITY IN THE MAXIMUM PRINCIPAL AMOUNT OF \$2,000,000 FOR THE PURPOSE OF PROVIDING FUNDS TO FINANCE THE REPLACEMENT OF EQUIPMENT USED IN THE HIGH SERVICE WATER PUMP SYSTEM OF THE ALLENTOWN WATER PLANT AND DISTRIBUTION SYSTEM AND TO PAY COSTS AND EXPENSES OF SECURING SUCH FUNDING; AND PROVIDING FOR OTHER MISCELLANEOUS ITEMS.***

**WHEREAS**, the Lehigh County Authority (the “Authority”) is a body corporate and politic organized by the Board of County Commissioners of the County of Lehigh, Pennsylvania (the “County”) under the provisions of the Pennsylvania Municipality Authorities Act, 53 Pa. C.S. §5601 et seq., as amended (the “Act”); and

**WHEREAS**, the City of Allentown, Pennsylvania (the “City”) owns the Allentown Sewer Utility System and the Allentown Water Plant and Distribution System; and

**WHEREAS**, pursuant to the terms and conditions of the Allentown Water and Sewer Utility System Concession and Lease Agreement dated as of May 1, 2013, as amended, including by that Allentown Water and Sewer Utility System Amended and Restated Concession and Lease Agreement dated as of September 1, 2020, and effective as of September 17, 2020 (the “Concession Agreement”), by and between the City and the Authority, the City leased the System (as defined in the Concession Agreement) to the Authority, as concessionaire, and granted to the Authority the right to operate the System in order to provide utility services and collect revenues therefrom and in connection therewith, all in accordance with the provisions of the Existing Concession Agreement (as defined in the Concession Agreement); and

**WHEREAS**, the Authority, in connection with the lease and operation of the System pursuant to the Concession Agreement, has from time to time issued bonds under and pursuant to a Trust Indenture dated as of August 1, 2013, as supplemented by a First Supplemental Trust Indenture dated as of August 1, 2015, a Second Supplemental Trust Indenture dated as of October 1, 2018, a 2020-1 Supplemental Trust Indenture dated as of September 1, 2020, and a 2020-2 Supplemental Trust Indenture dated as of September 1, 2020, and as amended and restated by that Amended and Restated Trust Indenture between the Authority and Manufacturers and Traders Trust Company (the “Trustee”),

dated as of September 1, 2020, and effective as of September 17, 2020 (collectively, the “Existing Indenture”); and

**WHEREAS**, the Existing Indenture provides that the Authority, under certain conditions, may incur Subordinated Indebtedness from time to time for any lawful purpose of the Authority; and

**WHEREAS**, in accordance with the Act and pursuant to the Existing Indenture, the Board of the Authority previously adopted on April 12, 2021, its Resolution No. 04-2021-01 (the “Original Borrower Resolution”), a copy of which is attached hereto as Exhibit “A” and incorporated by reference, authorizing the Authority, inter alia, to secure from the Pennsylvania Infrastructure Investment Authority (“PENNVEST”) a loan in the maximum principal amount of \$2,000,000 (the “PENNVEST Funding”), and incur Subordinate Indebtedness under the Existing Indenture, in order to undertake a project (the “Project”) consisting of (i) the replacement of equipment used in the high service water pump system of the Allentown Water Plant and Distribution System and (ii) the payment of the cost of issuing the Debt Obligation (defined therein); and

**WHEREAS**, on the same date, the Board of the Authority adopted its Resolution No. 04-2021-02 (the “Original Reimbursement Resolution”), a copy of which is attached hereto as Exhibit “B” and incorporated by reference, declaring its official intention to reimburse its General Fund for Project costs incurred by the Authority with the proceeds of the PENNVEST Debt Obligation up to the maximum principal amount of \$2,000,000; and

**WHEREAS**, due to PENNVEST Funding requirements, closing on the PENNVEST Funding has been delayed until construction of the Project can be completed, which is expected to occur in the early part of calendar year 2023; and

**WHEREAS**, to date, the Authority has paid the Project’s costs from its General Fund with the expectation that the General Fund will be reimbursed through the proceeds of the PENNVEST Funding; and

**WHEREAS**, due to the passage of time, and for clarity and convenience, the Authority desires to update the Original Borrower Resolution through the adoption of this Resolution (the “Updated Borrower Resolution”); and

**NOW, THEREFORE**, the Board of the Lehigh County Authority hereby resolves as follows:

**SECTION 1.** The PENNVEST Funding is re-authorized, and confirmed, as contained in the Original Borrower Resolution, in its entirety, excepted as provided herein. For the purpose of providing funds to finance the cost of the Project and to pay costs and expenses in connection with the PENNVEST Funding, the Authority hereby authorizes the execution of all Funding Documents and the taking of all actions necessary and required by PENNVEST to obtain the PENNVEST Funding in the maximum principal amount of \$2,000,000, pursuant to the provisions of the Act and the Funding Documents. Words and phrases contained in this Updated Borrower Resolution shall

have the same meaning as those contained in the Original Borrower Resolution, except as noted herein, or if the context clearly indicates otherwise.

**SECTION 2.** The designation of Authority's Debt Obligation shall be changed to "Subordinate Lien Water and Sewer Revenue Bond (City of Allentown Concession), Series of 2023 (Pennsylvania Infrastructure Investment Authority)". The designation of the Supplemental Indenture authorizing the Debt Obligation shall be changed to the Authority's "2023-1 Supplemental Trust Indenture, dated as of February 1, 2023, between the Authority and the Trustee (the "2023-1 Supplemental Indenture"). The Chief Executive Officer or the Chief Financial Officer of the Authority are authorized to further change the designations, in consultation with the Authority Solicitor and Bond Counsel, as she or he may deem convenient or necessary, or to comply with any closing requirements of PENNVEST.

**SECTION 3.** The authorizations contained in the Original Borrower Resolution continue in effect, except as noted herein.

**SECTION 4.** The proceeds of the PENNVEST Funding shall be used to reimburse the Authority's General Fund for any Project costs paid from the General Fund, or to pay any Project costs not previously paid, subject to the terms and conditions set forth in the Funding Documents. The Authority's Original Reimbursement Resolution is confirmed.

**SECTION 5.** The Authority hereby ratifies and confirms the prior actions of its proper officers in furtherance of completion of the PENNVEST Funding.

**SECTION 6.** The proper officers of the Authority are hereby authorized, empowered and directed on behalf of the Authority to execute any and all papers and documents, to pay all expenses incurred by the Authority in connection herewith, and to do and cause to be done any and all acts and things necessary or proper for the execution or carrying out of this Resolution and the Funding Documents.

**SECTION 7.** All resolutions or parts of resolutions inconsistent herewith shall be, and the same are, hereby rescinded, cancelled and annulled, but only insofar as to the extent inconsistent.

**NOW THEREFORE, BE IT RESOLVED that the Lehigh County Authority Board hereby approves Resolution No. 1-2023-1.**

On motion of \_\_\_\_\_, seconded by \_\_\_\_\_  
\_\_\_\_\_, this resolution was adopted the 23<sup>rd</sup> day of January 2023.

Tally of Votes:                      Yeas \_\_\_\_\_ Nays \_\_\_\_\_

§ 3

I, Michael A. Gaul, of the law firm of King, Spry, Herman, Freund & Faul, LLC, Solicitor to the Lehigh County Authority, do hereby certify that the foregoing is a true, correct and complete copy of a resolution which was duly adopted by the Authority Board at a public meeting of the Authority Board held on 23 January 2023, after notice thereof had been duly given as required by law, at which meeting a quorum was present and voting and which resolution No. 1-2023-1 is now in full force and effect on the date of this certification.

\_\_\_\_\_  
Michael A. Gaul, Esquire                      Date  
King, Spry, Herman, Freund & Faul, LLC  
Lehigh County Authority Solicitor

Attest:

\_\_\_\_\_  
Lisa J. Miller                      Date  
Executive Administrative Support Specialist

# EXHIBIT A

## RESOLUTION No. 04-2021-01

### Borrower Resolution

(Duly adopted 12 April, 2021)

**AUTHORIZING THE SECURING OF FUNDING FROM THE PENNSYLVANIA INFRASTRUCTURE INVESTMENT AUTHORITY IN THE MAXIMUM PRINCIPAL AMOUNT OF \$2,000,000 FOR THE PURPOSE OF PROVIDING FUNDS TO FINANCE THE REPLACEMENT OF EQUIPMENT USED IN THE HIGH SERVICE WATER PUMP SYSTEM OF THE ALLENTOWN WATER PLANT AND DISTRIBUTION SYSTEM AND TO PAY COSTS AND EXPENSES OF SECURING SUCH FUNDING; AUTHORIZING THE EXECUTION AND DELIVERY OF A DEBT OBLIGATION OF THE AUTHORITY IN CONNECTION WITH SUCH FUNDING SECURED BY THE INDENTURE DEFINED HEREIN; APPROVING THE FORM OF AND AUTHORIZING AND DIRECTING THE EXECUTION AND DELIVERY OF A 2021-1 SUPPLEMENTAL TRUST INDENTURE; AUTHORIZING THE EXECUTION OF THE FUNDING DOCUMENTS, AND PROVIDING FOR THE AUTHENTICATION AND DELIVERY THEREOF; AUTHORIZING THE DISPOSITION OF THE FUNDING PROCEEDS RECEIVED OR TO BE RECEIVED FROM PENNVEST; AUTHORIZING AND DIRECTING THE PROPER OFFICERS OF THE AUTHORITY TO DO ALL THINGS NECESSARY TO CARRY OUT THIS RESOLUTION; AND RESCINDING ALL INCONSISTENT RESOLUTIONS.**

**WHEREAS**, the Lehigh County Authority (the "Authority") is a body corporate and politic organized by the Board of County Commissioners of the County of Lehigh, Pennsylvania (the "County") under the provisions of the Pennsylvania Municipality Authorities Act, 53 Pa. C.S. §5601 et seq., as amended (the "Act"); and

**WHEREAS**, the City of Allentown, Pennsylvania (the "City") owns the Allentown Sewer Utility System and the Allentown Water Plant and Distribution System; and

**WHEREAS**, pursuant to the terms and conditions of the Allentown Water and Sewer Utility System Concession and Lease Agreement dated as of May 1, 2013, as amended, including by that Allentown Water and Sewer Utility System Amended and Restated Concession and Lease Agreement dated as of September 1, 2020, and effective as of September 17, 2020 (the "Concession Agreement"), by and between the City and the Authority, the City leased the Concessioned System (as defined in the Concession Agreement) to the Authority, as concessionaire, and granted to the Authority the right to



operate the Concessioned System in order to provide utility services and collect revenues therefrom and in connection therewith, all in accordance with the provisions of the Existing Concession Agreement (as defined in the Concession Agreement); and

**WHEREAS**, the Authority, in connection with the lease and operation of the Concessioned System pursuant to the Concession Agreement, has from time to time issued bonds under and pursuant to a Trust Indenture dated as of August 1, 2013, as supplemented by a First Supplemental Trust Indenture dated as of August 1, 2015, a Second Supplemental Trust Indenture dated as of October 1, 2018, a 2020-1 Supplemental Trust Indenture dated as of September 1, 2020, and a 2020-2 Supplemental Trust Indenture dated as of September 1, 2020, and as amended and restated by that Amended and Restated Trust Indenture between the Authority and Manufacturers and Traders Trust Company (the "Trustee"), dated as of September 1, 2020, and effective as of September 17, 2020 (collectively, the "Existing Indenture"); and

**WHEREAS**, the Existing Indenture provides that the Authority, under certain conditions, may incur Subordinated Indebtedness from time to time for any lawful purpose of the Authority; and

**WHEREAS**, in accordance with the Act and pursuant to the Existing Indenture, the Authority desires to incur Subordinate Indebtedness to undertake a project (the "Project") consisting of (i) the replacement of equipment used in the high service water pump system of the Allentown Water Plant and Distribution System and (ii) the payment of the cost of issuing the Debt Obligation (hereinafter defined); and

**WHEREAS**, in order to finance the Project, the Authority intends to secure from the Pennsylvania Infrastructure Investment Authority ("PENNVEST") a loan in the maximum principal amount of \$2,000,000 (the "PENNVEST Funding") to be evidenced by a Subordinate Lien Water and Sewer Revenue Bond (City of Allentown Concession), Series of 2021 (Pennsylvania Infrastructure Investment Authority) (the "Debt Obligation"); and

**WHEREAS**, as required by the Existing Indenture, prior to the issuance of the Debt Obligation, the Authority shall execute and deliver a 2021-1 Supplemental Trust Indenture, dated as of May 1, 2021, between the Authority and the Trustee (the "2021-1 Supplemental Indenture," and together with the Existing Indenture, the "Indenture"); and

**WHEREAS**, the Debt Obligation will be issued under and secured by the Indenture; and

**WHEREAS**, as provided for in the Indenture, the Debt Obligation shall be secured by a lien on the Concession Revenues, as defined therein (known herein as the "Project Collateral") that is by its terms expressly subordinated to the lien of the Existing Indenture and the Concession Revenues, and therefore constitutes "Subordinate Indebtedness" of the Authority, in accordance with Section 3.05 of the Existing Indenture; and

**WHEREAS**, in addition to the security provided for in the Indenture, the Debt Obligation shall be secured by any other agreements granting and creating security interests, all as more particularly set forth in the funding agreement between the Authority and PENNVEST (the "Funding Agreement") and the funding offer from PENNVEST (the Debt Obligation, Project Collateral, other security agreements, the funding offer, the Funding Agreement, and all other agreements, documents, certificates and instruments described in or contemplated by the Funding Agreement are collectively referred to as the "Funding Documents"); and

**WHEREAS**, in connection with the Debt Obligation, the Authority desires and intends to take all necessary and proper actions to execute the 2021-1 Supplemental Indenture and all documents required by PENNVEST to be executed to obtain the PENNVEST Funding and assure its proper repayment; and

**NOW, THEREFORE**, the Board of the Lehigh County Authority hereby resolves as follows:

**SECTION 1.** For the purpose of providing funds to finance the cost of the Project and to pay costs and expenses in connection with the PENNVEST Funding, the Authority hereby authorizes the execution of all Funding Documents and the taking of all actions necessary and required by PENNVEST to obtain the PENNVEST Funding in the maximum principal amount of \$2,000,000, pursuant to the provisions of the Act and the Funding Documents.

**SECTION 2.** The PENNVEST Funding shall be secured by the Indenture and the Funding Documents from the Authority to PENNVEST, and to the extent and in the manner therein set forth, the Project Collateral and other agreements granting and creating certain security interests in favor of PENNVEST.

Neither the Debt Obligation nor the Funding Documents shall in any manner pledge the full faith and credit or taxing power of the Commonwealth of Pennsylvania, the County or any political subdivision thereof, nor shall it be deemed to be an obligation of the Commonwealth of Pennsylvania, the County or any political subdivision thereof, nor shall the Commonwealth of Pennsylvania, the County or any political subdivision thereof be liable for the payment of the principal of, or interest on, such obligation, but it shall be secured upon and payable as provided for in the Indenture and from such other moneys as may be made available for the purpose of repaying the Debt Obligation.

**SECTION 3.** The form, terms and conditions of the 2021-1 Supplemental Indenture prepared by McNees Wallace & Nurick LLC ("Bond Counsel"), to be substantially in the form as submitted to this meeting, are hereby approved. The Chief Executive Officer or the Chief Financial Officer of the Authority are hereby authorized and directed to execute the 2021-1 Supplemental Indenture in such form on behalf of the Authority, with the advice of the Authority Solicitor and Bond Counsel, subject to such changes and modifications, if any, as may be approved by the Chief Executive Officer or the Chief Financial Officer of the Authority, the execution of the 2021-1 Supplemental



Indenture to be conclusive evidence of such approval, and, if required, the Authority Solicitor is hereby authorized to cause the corporate seal of the Authority to be affixed thereto and to attest the same. The Chief Executive Officer and the Chief Financial Officer of the Authority are further authorized and directed to acknowledge the same on behalf of the Authority and to deliver the 2020-1 Supplemental Indenture to the Trustee.

**SECTION 4.** The form, terms and conditions of the Funding Documents to be prepared by Bond Counsel and PENNVEST, in such forms as shall be acceptable to the Chief Executive Officer or the Chief Financial Officer of the Authority with the advice of the Authority Solicitor and Bond Counsel, are hereby approved. The Chief Executive Officer or the Chief Financial Officer of the Authority are hereby authorized and directed to execute the Funding Documents in such forms on behalf of the Authority, with the advice of the Authority Solicitor and Bond Counsel, subject to such changes and modifications, if any, as may be approved by the Chief Executive Officer or the Chief Financial Officer of the Authority, the execution of the Funding Documents to be conclusive evidence of such approval, and, if required, the Authority Solicitor is hereby authorized to cause the corporate seal of the Authority to be affixed thereto and to attest the same. The Chief Executive Officer and the Chief Financial Officer of the Authority are further authorized to acknowledge the same on behalf of the Authority and to deliver said Funding Documents to PENNVEST.

**SECTION 5.** The PENNVEST Funding shall be repaid in the amounts and on certain dates, all as set forth in the Funding Documents as submitted to this meeting. The PENNVEST Funding is also subject to early repayment as provided in the Funding Documents.

**SECTION 6.** Upon receipt, the proceeds from the PENNVEST Funding authorized to be secured in this Resolution, shall be applied by the Authority under the terms and conditions set forth in the Funding Documents.

**SECTION 7.** The Authority hereby ratifies and confirms the appointment of McNees Wallace & Nurick LLC, Harrisburg, Pennsylvania, as bond counsel for the Authority in connection with the PENNVEST funding. Such firm shall work in cooperation with the Authority's solicitor.

**SECTION 8.** The proper officers of the Authority are hereby authorized, empowered and directed on behalf of the Authority to execute any and all papers and documents, to pay all expenses incurred by the Authority in connection herewith, and to do and cause to be done any and all acts and things necessary or proper for the execution or carrying out of this Resolution and the Funding Documents.

**SECTION 9.** All resolutions or parts of resolutions inconsistent herewith shall be, and the same are, hereby rescinded, cancelled and annulled.



NOW THEREFORE, BE IT RESOLVED that the Lehigh County Authority Board hereby approves Resolution No. 04-2021-01.

On motion of Linda Rosenfeld, seconded by Norma Cusick, this resolution was adopted the 12<sup>th</sup> day of April 2021.

Tally of Votes: Yeas 9 Nays 0

∞ ∞

I, Michael A. Gaul, of the law firm of King, Spry, Herman, Freund & Faul, LLC, Solicitor to the Lehigh County Authority, do hereby certify that the foregoing is a true, correct and complete copy of a resolution which was duly adopted by the Authority Board at a public meeting of the Authority Board held on 12 April 2021, after notice thereof had been duly given as required by law, at which meeting a quorum was present and voting and which resolution No. 04-2021-01 is now in full force and effect on the date of this certification.

Michael A. Gaul 4/21/2021  
Michael A. Gaul, Esquire Date  
King, Spry, Herman, Freund & Faul, LLC  
Lehigh County Authority Solicitor

Attest:

Lisa J. Miller 4.21.21  
Lisa J. Miller Date  
Executive Administrative Support Specialist

# EXHIBIT B

## RESOLUTION No. 04-2021-02

### Reimbursement Resolution

(Duly adopted 12 April, 2021)

***DECLARATION OF OFFICIAL INTENT TO REIMBURSE ITS GENERAL FUNDS USED TO CONSTRUCT THE REPLACEMENT OF EQUIPMENT USED IN THE HIGH SERVICE WATER PUMP SYSTEM OF THE ALLENTOWN WATER PLANT AND DISTRIBUTION SYSTEM WITH FUNDS RECEIVED FROM THE PENNSYLVANIA INFRASTRUCTURE INVESTMENT AUTHORITY.***

**WHEREAS**, Lehigh County Authority, Lehigh County, Pennsylvania (the "Authority"), has determined that it is necessary to undertake a capital project (the "Project") consisting of the construction of the replacement of equipment used in the high service water pump system of the Allentown Water plant and distribution system;

**WHEREAS**, in order to finance the costs of the Project, the Authority has issued or intends to issue its Subordinate Lien Water and Sewer Revenue Bond (City of Allentown Concession), Series of 2021 (Pennsylvania Infrastructure Investment Authority), to be purchased by the Pennsylvania Infrastructure Investment Authority ("PENNVEST") in the maximum principal amount of \$2,000,000 (the "PENNVEST Debt Obligation");

**WHEREAS**, the Authority will be the "Issuer" of the PENNVEST Debt Obligation as that term is defined in 26 C.F.R. §1.150-2(c); and

**WHEREAS**, the Authority intends to pay certain costs and expenses of the Project, on an interim basis, using funds from its General Fund until the proceeds of the PENNVEST Debt Obligation are received.

**NOW, THEREFORE**, the Authority hereby declares as follows:

Pursuant to federal requirements set forth at 26 C.F.R. § 1.150-2, the Authority officially intends to reimburse its General Fund for Project costs incurred by the Authority with the proceeds of the PENNVEST Debt Obligation up to the maximum principal amount of \$2,000,000.

NOW THEREFORE, BE IT RESOLVED that the Lehigh County Authority Board hereby approves Resolution No. 04-2021-02.

On motion of Linda Rosenfeld, seconded by Scott Bieber, this resolution was adopted the 12<sup>th</sup> day of April 2021.

Tally of Votes: Yeas 9 Nays 0

DO

I, Michael A. Gaul, of the law firm of King, Spry, Herman, Freund & Faul, LLC, Solicitor to the Lehigh County Authority, do hereby certify that the foregoing is a true, correct and complete copy of a resolution which was duly adopted by the Authority Board at a public meeting of the Authority Board held on 12 April 2021, after notice thereof had been duly given as required by law, at which meeting a quorum was present and voting and which resolution No. 04-2021-02 is now in full force and effect on the date of this certification.

Michael A. Gaul 4/21/2021  
Michael A. Gaul, Esquire Date  
King, Spry, Herman, Freund & Faul, LLC  
Lehigh County Authority Solicitor

Attest:

Lisa J. Miller 4.21.21  
Lisa J. Miller Date  
Executive Administrative Support Specialist

# RESOLUTION NO. 1-2023-2

(Duly adopted 23 January 2023)

***A RESOLUTION OF LEHIGH COUNTY AUTHORITY APPROVING THE SUBMISSION OF A FINANCIAL ASSISTANCE APPLICATION TO THE PENNSYLVANIA INFRASTRUCTURE INVESTMENT AUTHORITY (PENNVEST) FOR FUNDING FOR THE REPLACEMENT OF PUBLIC AND PRIVATE LEAD SERVICE LINES AND SERVICE LINES OF OTHER MATERIALS REQUIRING REPLACEMENT IN THE AUTHORITY'S ALLENTOWN DIVISION WATER SYSTEM IN ORDER TO MEET FUTURE REQUIREMENTS OF THE U.S. ENVIRONMENTAL PROTECTION AGENCY'S LEAD AND COPPER RULE REVISION ENACTED IN 2021, AND PROVIDING FOR OTHER MISCELLANEOUS MATTERS.***

WHEREAS, the Lehigh County Authority (the "Authority") is a body corporate and politic organized by the Board of County Commissioners of the County of Lehigh, Pennsylvania under the provisions of the Pennsylvania Municipality Authorities Act, 53 Pa. C.S. §5601 *et seq.*, as amended (the "Act"); and

WHEREAS, the powers of the Authority are exercised by its Board of Directors, who have full authority to manage the properties and business of the Authority, *inter alia*; and

WHEREAS, the City of Allentown, Pennsylvania (the "City") owns the Allentown Sewer Utility System and the Allentown Water Utility System (the "System"); and

WHEREAS, pursuant to the terms and conditions of the Allentown Water and Sewer Utility System Concession and Lease Agreement, dated initially as of May 1, 2013, as amended, supplemented and restated from time to time (collectively, the "Concession Agreement"), by and between the City and the Authority, the City leased to the Authority, and the Authority leased from the City, the System, upon the terms and conditions set forth therein; and

WHEREAS, the Authority Board desires to undertake a project (the "Project") in the Allentown Water Utility System consisting of the replacement of public and private lead service lines and service lines of other materials requiring replacement in order to meet future requirements of the U.S. Environmental Protection Agency's Lead and Copper Rule Revision enacted in 2021; and

WHEREAS, the Authority Board desires to apply to the Pennsylvania Infrastructure Investment Authority (PENNVEST) for financial assistance in paying the Project's costs.

NOW THEREFORE, be it resolved by the Board of this Authority, as follows:

Section 1. The Authority shall be, and is hereby, authorized to submit a Financial Assistance Application (the "Application") to the Pennsylvania Infrastructure Investment Authority (PENNVEST), for the purpose of financing/partially financing the construction, rehabilitation and/or extension of the Authority's Allentown Water Utility System, including the Project.

Section 2. The Chair, Vice Chair of the Board, or the Chief Executive Officer or Chief Financial Officer of the Authority (the "Authority Officials") are hereby authorized, collectively and individually, to execute all certifications and documentation required in connection with the

Application. Further, any of the Authority Officials, or the Board Secretary or Assistant Secretary, Solicitor of the Authority, Executive Administrative Support Specialist, or Human Resources Manager of the Authority (the "Attesting Officials"), are authorized, collectively and individually, to attest to or witness the execution of such documentation on behalf of the Authority whenever such is necessary.

Section 3. The Authority Officials and Attesting Officials are authorized to take such further action as may be necessary or convenient to effectuate the provisions of this Resolution.

Section 4. All Resolutions, or parts of Resolutions, inconsistent with this Resolution are hereby repealed insofar, but only, insofar, as the same are inconsistent herewith.

Section 5. If any section, subsection, sentence, clause or phrase of this Resolution is, for any reason, held to be illegal or unconstitutional, such decision shall not affect the validity of the remaining portions of this Resolution.

On motion of \_\_\_\_\_, seconded by \_\_\_\_\_,  
this Resolution was adopted the 23<sup>rd</sup> day of January 2023.

Tally of Votes:          Yeas \_\_\_\_\_    Nays \_\_\_\_\_



I, Michael A. Gaul, Esquire, of King, Spry, Herman Freund & Faul, LLC, Solicitor of Lehigh County Authority, do hereby certify that the foregoing is a true, correct and complete copy of a resolution which was duly adopted by the Authority at a public meeting of the Authority held on 23 January 2023, after notice thereof had been duly given as required by law, at which meeting a quorum was present and voting and which resolution No. 1-2023-2 is now in full force and effect on the date of this certification.

_____ Michael A. Gaul, Esquire King, Spry, Herman Freund & Faul, LLC Lehigh County Authority Solicitor	_____ Date
---	---------------

Attest:

_____ Lisa J. Miller Executive Administrative Support Specialist	_____ Date
--	---------------





1053 SPRUCE RD \* P.O. BOX 3348 \* ALLENTOWN, PA 18106-0348  
610-398-2503 \* email: [service@lehighcountyauthority.org](mailto:service@lehighcountyauthority.org)  
[www.lehighcountyauthority.org](http://www.lehighcountyauthority.org)

## MEMORANDUM

---

**TO: LCA Board of Directors**  
**FROM: Christopher Moughan, Director of Service and Technology**  
**DATE: 1/23/2023**  
**RE: Emergency Main Replacement on Mosser Street from South 23rd to South Leh Street**

Lehigh County Authority was dispatched to an open sinkhole call at the intersection of Mosser and Fox Meadow Drive, in Allentown on December 8, 2022. LCA operation technicians quickly responded to the area and thoroughly examined both the water and sewer main infrastructure. Crews quickly realized that the 12-inch, cast iron water main was leaking and was likely the cause of the sinkhole in the street and sidewalk area. LCA emergency crews isolated the section and replaced six feet of pipe by removing the cracked bell. Water service was quickly restored by midafternoon to the affected customers on the block. Unfortunately, part of the roadway, sidewalk, and curbing damage had occurred from the subsidence of the ground. Crews injected over 10 yards of flow fill to fill in any voids and stabilize the area.

The existing water main was installed in 1951 and is 12-inch spun cast grey iron. Over the past 12 months, we have had 4 additional bell breaks on the block. Plans for replacement in the Cycle 7 Main Replacement Project were initiated and scheduled for this particular line. However, due to recent issues, it is my professional recommendation that we move forward with replacement as soon as possible. Completing this work now will also allow LCA to explore more of the subbase and verify if any other voids are present.

The emergency material from Ferguson Waterworks totals \$39,807.43. Our emergency contractor, Joao & Bradley Construction Company, estimates the total to be \$87,425.00. Final course paving and sidewalk restoration will be subcontracted in the spring of 2023 when temperatures permit.

<b>Vendor</b>	<b>Service/Materials</b>	<b>Cost</b>
Ferguson Waterworks	Materials	\$39,807.43
JOAO Bradley	Main Replacement	\$87,425.00
<b>TOTAL</b>		<b>\$127,232.43</b>

Because this section of pipe was already included in the Cycle 7 pipe prioritization for main replacements to be completed in 2023, LCA staff discussed this emergency repair with the City of Allentown and will coordinate its inclusion in the project for cost-recovery, final paving/restoration, and lease compliance purposes. Based on the above factors, the emergency work was approved administratively by the CEO and completed on 12/29/2022.

The Board is asked to approve the emergency declaration retroactively to cover the expense as noted above, as standard purchasing guidelines were not followed due to the situation.



1053 SPRUCE RD \* P.O. BOX 3348 \* ALLENTOWN, PA 18106-0348  
610-398-2503 \* email: [service@lehighcountyauthority.org](mailto:service@lehighcountyauthority.org)  
[www.lehighcountyauthority.org](http://www.lehighcountyauthority.org)

## MEMORANDUM

---

**TO: LCA Board of Directors**  
**FROM: Christopher Moughan, Director of Service and Technology**  
**DATE: 1/23/2023**  
**RE: Emergency Declaration Main Repair on Heidelberg Heights Road**

Lehigh County Authority was notified of a water main exposed in an active flowing culvert at 5314 Heidelberg Heights Road in Heidelberg Township on 12/16/2022. LCA technicians were immediately dispatched and confirmed the 8-inch cast iron water main was exposed. It appears that recent storm events eroded the culvert bed and washed away the support and earth cover. Due to the lack of ground cover support and the risk of damage and freezing, LCA field services recommended installing a new 8-inch water main in the roadway under the existing storm sewer pipe as soon as possible. This will eliminate the open water crossing and risk of failure to the existing exposed pipe. The new line will proceed west from the intersection of Glen Court and Heidelberg Heights Road traveling approximately 250 feet.

Our emergency contractor, Joao & Bradley Construction Company, completed all work at an estimated total cost of \$75,137.50. Final course paving will be subcontracted in the spring of 2023 when temperatures permit.

Vendor	Service/Materials	Cost
JOAO Bradley	Pipe Materials and Replacement	\$75,137.50

Based on the above factors, the emergency work was approved administratively by the CEO and completed on 1/18/2023.

The Board is asked to approve the emergency declaration retroactively to cover the expense as noted above, as standard purchasing guidelines were not followed due to the situation.



# Lehigh County Authority – Monthly Report to Board of Directors

## Upcoming Board Agenda Items & Project Updates – January 2023

Published: January 17, 2023

### ***PART 1 – Upcoming Agenda Items – Action & Discussion Items***

#### **FINANCE & ADMINISTRATION**

**Project Title: LCA Pension Plan – Updated Mandatory Municipal Obligation**

Division / Funding: All Divisions

Board Action Date: 1/23/2023

Status or Action Desired: Information

Project Phase: n/a

Project Notes: An updated MMO worksheet is provided to the LCA Board of Directors to reflect a correction by PMRS. The normal cost multiplier increased .0005, which resulted in additional cost of \$5,246. The MMO worksheet is required to be provided to the Board as an informational item. Staff Responsibility: Ed Klein

**Project Title: LCA Strategic Plan - 2022 Quarterly Progress Reporting**

Division / Funding: All Divisions

Board Action Date: 1/23/2023

Status or Action Desired: Discussion

Project Phase: n/a

Project Notes: A quarterly report of staff progress on key initiatives outlined in LCA's Strategic Plan will be presented for Board review and discussion. Staff Responsibility: Liesel Gross

**Project Title: Resolution 1-2023-1: Re-authorizing the Authority's Application for Pennvest Funding**

Division / Funding: Allentown Division

Board Action Date: 1/23/2023

Status or Action Desired: Approval

Project Phase: n/a

Project Notes: In April 2021, the Board approved Resolution 04-2021-01, authorizing the financing of the Allentown Division Water Filtration Plant High Lift Pump VFD Upgrade project through Pennvest. Due to the Allentown Water & Sewer Lease bond structure, closing on the Pennvest loan has been delayed to follow the completion of the project, which is scheduled for February 2023. To ensure the proper authorization is in place, an updated Resolution is recommended by the Solicitor to re-authorize the funding application to Pennvest. The Board will be asked to approve Resolution 1-2023-1 at the January 23, 2023 Board meeting. Staff Responsibility: Liesel Gross

**Project Title: Resolution 1-2023-2: Authorizing the Authority's Application for Pennvest Funding**

Division / Funding: Allentown Division

Board Action Date: 1/23/2023

Status or Action Desired: Approval

Project Phase: n/a

Project Notes: Through the Pennvest program and the Infrastructure Investment and Jobs Act, grant funding is available to municipalities and municipal authorities for a variety of project types that serve the public's interest, including lead service line replacements. The replacement of lead service lines is a national priority that will become a required component of all water systems' regulatory compliance program under the Lead and Copper Rule Revision of 2021. LCA will seek grant funding to support an initial phase of a lead service line replacement program in the City of Allentown. A Resolution authorizing the funding application to Pennvest is required, and the Board will be asked to approve Resolution 1-2023-2 at the January 23, 2023 Board meeting. Staff Responsibility: Liesel Gross

**Project Title: Monthly Financial Review**Division / Funding: n/aStatus or Action Desired: DiscussionBoard Action Date: 2/27/2023Project Phase: n/a

Project Notes: December 2022 and January 2023 monthly financial reports will be presented in February to allow for closing of the books for 2022. Staff Responsibility: Ed Klein

**SYSTEM OPERATIONS****Project Title: Monthly Operations Report**Division / Funding: n/aStatus or Action Desired: DiscussionBoard Action Date: 1/23/2023Project Phase: n/a

Project Notes: December 2022 monthly operations report will be presented. Staff Responsibility: Andrew Moore & Chris Moughan

**WATER PROJECTS – ALLENTOWN DIVISION****Project Title: Allentown Division - Emergency Declaration - Water Main Break at Mosser Road**Division / Funding: Allentown DivisionStatus or Action Desired: ApprovalBoard Action Date: 1/23/2023Project Phase: n/a

Project Notes: On 12/8/22 LCA crews were dispatched to Mosser St and Fox Meadow drive for open sinkhole. The crews quickly examined the water and sewer infrastructure and found a 12" cast iron water main leaking. They were able to quickly repair the section, but as this was the 4th break in this area in 12 months it was decided to expedite this section as it was part of the Cycle 7 Main Replacement program. Staff Responsibility: Chris Moughan

**Project Title: Suburban Division - Emergency Declaration - Realignment of Exposed Water Main in Heidelberg Heights**Division / Funding: Allentown DivisionStatus or Action Desired: ApprovalBoard Action Date: 1/23/2023Project Phase: n/a

Project Notes: LCA crews were dispatched to the Heidelberg Heights division responding to a customer call of exposed main. Recent storms had eroded the culvert bed and removed support exposing the main to the elements. Due to the current location and path of the main LCA determined it would be best to reroute the main in the roadway eliminating risk of exposure. The new reroute is approximately 250 feet. Staff Responsibility: Chris Moughan

## ***PART 2 – Project Updates – Information Items***

---

**Project Title: Central Lehigh and North Whitehall Systems – Water Supply Study**

Division / Funding: Suburban Division

Board Action Date: n/a

Status or Action Desired: Updated

Project Phase: Planning Phase

Project Notes: This project involves the preparation of a water supply study (the “Study”) to identify and evaluate feasible means to address current and long-term water supply needs in the Central Lehigh Division (CLD) and North Whitehall Division (NWD). Recently completed planning studies have identified the need for additional supply in these two systems. Authorization was granted at the February 14, 2022 Board meeting and the draft Study will be completed in early 2023. The final study and Board presentation will follow shortly after in February or March of 2023. From this study, additional engineering work will be initiated to develop water supply projects that enhance the region's water system resiliency and redundancy. This water supply study will serve as the backbone for the future development of a comprehensive Master Plan update for the entire LCA Suburban Division Water System. Staff Responsibility: Phil DePoe

### ***PART 3 – Open Project List – No Updates***

<b>Project Category</b>	<b>Project Title</b>	<b>Division / Funding</b>	<b>Project Phase</b>	<b>Staff Responsibility</b>
Finance & Administration	Asset Management Roadmap & Strategic Asset Management Plan (SAMP)	All Divisions	Planning Phase	Albert Capuzzi
Finance & Administration	LCA Munis ERP System Planning & Re-Implementation	All Divisions	Planning Phase	Brooke Neve
System Operations	Large Diameter Valve Prioritization Program	Allentown Division	Planning Phase	Chris Moughan
System Operations	SmartBall Inspection - 30" and 36" Transmission Main - East Side	Allentown Division	Planning Phase	Chris Moughan
System Operations	Suburban Water Facilities - SCADA System Upgrade	Suburban Division	Construction Phase	Chris Moughan
System Operations	Watershed Monitoring Program	Suburban Division	Ongoing	Andrew Moore
Water - Suburban	2022 Commercial Meter Replacement Project	Suburban Division	Construction Phase	Amy Kunkel
Water - Suburban	Water Main Replacement Program Cycle 6	Suburban Division	Construction Phase	Jason Peters
Water - Suburban	I-78 Water Main Crossing	Suburban Division	Construction Phase	Amy Kunkel
Water - Suburban	Fixed Base Meter Reading Stations	Suburban Division	Planning Phase	Amy Kunkel
Water - Suburban	Upper System Pump Station and Main Extension	Suburban Division	Design Phase	Amy Kunkel
Water - Allentown	Lead Service Line Replacement Program Planning	Allentown Division	Planning Phase	Andrew Moore
Water - Allentown	Water Filtration Plant & System Master Plan	Allentown Division	Planning Phase	Phil DePoe
Water - Allentown	Water Main Replacement Program Cycles 7 & 8	Allentown Division	Design	Jason Peters
Water - Allentown	Water Main Replacement Program Cycle 6	Allentown Division	Construction Phase	Jason Peters

<b>Project Category</b>	<b>Project Title</b>	<b>Division / Funding</b>	<b>Project Phase</b>	<b>Staff Responsibility</b>
Water - Allentown	Water Filtration Plant: Filter Upgrade Project	Allentown Division	Design Phase	Chuck Volk
Water - Allentown	Water Filtration Plant: 2022-2023 Indenture Upgrades	Allentown Division	Construction Phase	Bryan Geissel
Water - Allentown	Water Filtration Plant: High Lift Pump VFD Replacements	Allentown Division	Construction Phase	Chuck Volk
Sewer - Act 537	Sanitary Sewer Collection System: City of Allentown Manhole Inspections	Allentown Division	Planning Phase	Phil DePoe
Sewer - Act 537	Kline's Island WWTP - High-Rate Wet-Weather Treatment Pilot Study	Allentown Division	Planning Phase	Phil DePoe
Sewer - Act 537	KISS Act 537 Planning - Financial & Institutional Evaluation, Phase 1	City of Allentown (AO)	Planning Phase	Liesel Gross
Sewer - Act 537	Sanitary Sewer Collection System: City of Allentown Interceptor Inspections	City of Allentown (AO)	Planning Phase	Phil DePoe
Sewer - Act 537	Regional Sewer Capacity & Wet-Weather Planning - Regional Act 537 Plan Preparation	City of Allentown (AO)	Planning Phase	Phil DePoe
Sewer - Act 537	Kline's Island WWTP: Phase 1 AO Design Improvements	City of Allentown (AO)	On Hold	Phil DePoe
Sewer - Act 537	KISS System Modeling - Sewage Billing Meter QA/QC Data Analytics and 2021 Flow Metering Preparation	City of Allentown (AO)	Planning Phase	Phil DePoe
Sewer - Act 537	KISS System Modeling - Preliminary Screening of Alternatives (PSOA)	City of Allentown (AO)	Planning Phase	Phil DePoe
Sewer - Act 537	Upper Western Lehigh Pump Station and Force Main	Suburban Division	Design Phase	Amy Kunkel
Sewer - Act 537	Resolution 6-2022-1: Trexlertown Act 537 Special Study	Suburban Division	Planning Phase	Phil DePoe
Sewer - Act 537	Regional Sewer Capacity & Wet-Weather Planning: Engineering & Program Support	Suburban Division	Planning Phase	Phil DePoe
Sewer - Act 537	Western Lehigh Service Area - Engineering & Program Support	Suburban Division	Planning Phase	Phil DePoe
Sewer - Act 537	Industrial Pretreatment Plant Master Plan	Suburban Division	Planning Phase	Phil DePoe

<b>Project Category</b>	<b>Project Title</b>	<b>Division / Funding</b>	<b>Project Phase</b>	<b>Staff Responsibility</b>
Sewer - Suburban	Western Lehigh Manhole Rehabilitation Project - Phase 3	Suburban Division	Construction Phase	Jason Peters
Sewer - Suburban	Heidelberg Heights 2021 and 2022 Sanitary Sewer Replacement Project	Suburban Division	Construction Phase	Jason Peters
Sewer - Suburban	Heidelberg Heights Wastewater Treatment Plant - Mechanical Screen Project	Suburban Division	Design Phase	Chuck Volk
Sewer - Suburban	Heidelberg Heights Sanitary Sewer Consent Order & Agreement	Suburban Division	Planning Phase	Chuck Volk
Sewer - Suburban	Lynn Township Corrective Action Plan	Suburban Division	Ongoing	Jason Peters
Sewer - Suburban	Park Pump Station Phase 2 Upgrade	Suburban Division	Construction Phase	Amy Kunkel
Sewer - Allentown	Kline's Island WWTP: Substation No. 1 and Switchgear Replacement	Allentown Division	Design Phase	Bryan Geissel
Sewer - Allentown	Kline's Island WWTP: Effluent Disinfection and Dechlorination System Improvements	Allentown Division	Construction Phase	Bryan Geissel
Sewer - Allentown	Kline's Island WWTP: Solids Process Boiler and HVAC System Upgrade Project	Allentown Division	Construction Phase	Bryan Geissel
Sewer - Allentown	Kline's Island WWTP: Wet Weather Capacity Enhancements	Allentown Division	Preliminary Design	Bryan Geissel
Sewer - Allentown	Kline's Island WWTP: 2022 Indenture Upgrades	Allentown Division	Construction Phase	Bryan Geissel
Sewer - Allentown	Kline's Island WWTP: Sludge Thickener Tank No. 3 Mechanical Upgrade	Allentown Division	Construction Phase	Bryan Geissel
Sewer - Allentown	Kline's Island WWTP: Main and Auxiliary Pump Station Improvements	Allentown Division	Preliminary Design	Chuck Volk
Sewer - Allentown	Kline's Island WWTP: Intermediate Pump Station Improvements	Allentown Division	Preliminary Design	Chuck Volk
Sewer - Allentown	Lehigh Street (Rte. 145) Water and Sewer Main Relocation Project	Allentown Division	Construction Phase	Jason Peters
Sewer - Allentown	Sanitary Sewer Collection System: I&I Source Reduction Program Plan (Year 3 and 4)	City of Allentown (AO)	Construction Phase	Phil DePoe

Presented: January 23, 2023

<p><b><u>Significant Repairs/Upgrades:</u></b></p> <p>Two emergency declarations occurred in December. One was for an emergency repair of an exposed water main in the Heidelberg Heights Division. The other occurred in the Allentown Division on Mosser Street due to a main leak.</p>
<p><b><u>Description of NOVs and/or SSOs:</u></b></p> <p>Two bypasses occurred at Heidelberg Heights WWTP due to storms exceeding 1" of rainfall. The first bypass occurred from 12/16 to 12/19 and discharged 34,824 gallons. The second bypass occurred from 12/23 to 12/26 and discharged 99,696 gallons. A NOV from the PA DEP was received on 12/13 in regards to the Sand Spring WWTP.</p>
<p><b><u>Other Highlights:</u></b></p> <p>A boil water notice was issued for a limited number of customers in the City of Allentown. The BWA was issued due to a line break on 12/21 and was lifted after two days of coliform testing on 12/23.</p>

---

## MEMORANDUM

---

**Date:** January 17, 2023

**To:** Lehigh County Authority Board of Directors

**From:** Andrew Moore, Director of Plant Operations

**Subject:** Sand Spring Wastewater Treatment Plant PA DEP Notice of Violation

The attached Notice of Violation (NOV) was issued by the Pennsylvania Department of Environmental Protection (DEP) on December 13, 2022. The NOV is for permit exceedances incurred at the Sand Spring Wastewater Treatment Plant from November 2021 to October 2022. DEP scheduled a meeting for January 12, 2023, in which the plant performance and action plans moving forward were discussed. The plant continues to struggle with high influent flows, which has been impacting treatment performance. Efforts to address the influent flow with a specific commercial user in the service area are ongoing, along with other investigations into the source of the high flows. A compliance plan is under development by Lehigh County Authority staff for submission to DEP, and the plan will be presented to the Board at a later date.



December 13, 2022

## **NOTICE OF VIOLATION**

### **Delivered via email**

Lehigh County Authority  
PO Box 3348  
1053 Spruce Street  
Allentown, PA 18106

Attention: Andrew Moore, Director of Plant Operations

RE: Sewage  
Sand Spring Wastewater Treatment Plant (WWTP)  
NPDES Permit No. PA0034029  
North Whitehall Township, Lehigh County

Dear Mr. Moore,

A review of the Department of Environmental Protection's ("Department") records has indicated that Lehigh County Authority has not been in compliance with the monitoring and reporting requirements for the Sand Spring WWTP, set forth in NPDES Permit No. PA0034029.

Review of Lehigh County Authority's monthly Discharge Monitoring Reports ("DMR") for the Sand Spring WWTP has indicated a pattern of effluent violations with respect to the limitations set forth in NPDES Permit No. PA0034029. Specifically, the violations are as follows:

<b><u>Monitoring Period</u></b>	<b><u>Parameter</u></b>	<b><u>Permit Limit</u></b>	<b><u>Reported Value</u></b>
November 2021	Total Phosphorus <i>Monthly Average</i>	0.57 lbs/day	0.7 lbs/day
December 2021	Ammonia-Nitrogen <i>Monthly Average</i>	1.1 lbs/day	1.9 lbs/day
	Ammonia-Nitrogen <i>Monthly Average</i>	9.0 mg/L	9.35 mg/L
January 2022	Ammonia-Nitrogen <i>Monthly Average</i>	1.1 lbs/day	9.1 lbs/day
	Ammonia-Nitrogen <i>Monthly Average</i>	9.0 mg/L	32.9 mg/L
	Total Suspended Solids <i>Monthly Average</i>	2.9 lbs/day	5.4 lbs/day
	Total Suspended Solids <i>Weekly Average</i>	4.4 lbs/day	8.0 lbs/day
	Total Suspended Solids <i>Monthly Average</i>	10.0 mg/L	21.3 mg/L

	Total Suspended Solids	15.0 mg/L	31.5 mg/L
	<i>Weekly Average</i>		
	Fecal Coliform	2,000/100 m/L	>1,061/100 m/L
	<i>Geometric Mean</i>		
	Fecal Coliform	10,000/100 m/L	>12,100 m/L
	<i>Instantaneous Maximum</i>		
February 2022	Total Suspended Solids	2.9 lbs/day	4.5 lbs/day
	<i>Weekly Average</i>		
	Total Suspended Solids	10.0 mg/L	15.6 mg/L
	<i>Monthly Average</i>		
	Ammonia-Nitrogen	1.1 lbs/day	7.2 lbs/day
	<i>Monthly Average</i>		
	Ammonia-Nitrogen	9.0 mg/L	25.2 mg/L
	<i>Monthly Average</i>		
	CBOD <sub>5</sub>	5.8 lbs/day	6.7 lbs/day
	<i>Monthly Average</i>		
	CBOD <sub>5</sub>	20.0 mg/L	23.1 mg/L
	<i>Monthly Average</i>		
	Total Nitrogen	5.4 lbs/day	8.9 lbs/day
	<i>Monthly Average</i>		
	Fecal Coliform	2,000/100 mL	>905/100 mL
	<i>Geometric Mean</i>		
February 7, 2022	Fecal Coliform	10,000/100 mL	>12,100/100 mL
	<i>Instantaneous Maximum</i>		
February 22, 2022	Fecal Coliform	10,000/100 mL	>48,392/100mL
	<i>Instantaneous Maximum</i>		
February 25, 2022	Fecal Coliform	10,000/100 mL	>12,000/100 mL
	<i>Instantaneous Maximum</i>		
March 2022	Ammonia-Nitrogen	1.1 lbs/day	9.8 lbs/day
	<i>Monthly Average</i>		
	Ammonia-Nitrogen	9.0 mg/L	32.5 mg/L
	<i>Monthly Average</i>		
	Total Suspended Solids	4.4 lbs/day	13.8 lbs/day
	<i>Weekly Average</i>		
	Total Suspended Solids	2.9 lbs/day	9.9 lbs/day
	<i>Monthly Average</i>		
	Total Suspended Solids	10.0 mg/L	31.3 mg/L
	<i>Monthly Average</i>		
	Total Suspended Solids	15.0 mg/L	40.5 mg/L
	<i>Weekly Average</i>		
	CBOD <sub>5</sub>	5.8 lbs/day	9.1 lbs/day
	<i>Monthly Average</i>		
	CBOD <sub>5</sub>	8.8 lbs/day	13.0 lbs/day
	<i>Weekly Average</i>		
	CBOD <sub>5</sub>	20.0 mg/L	30.4 mg/L
	<i>Monthly Average</i>		
	CBOD <sub>5</sub>	30.0 mg/L	44.0 mg/L
	<i>Weekly Average</i>		
	Total Nitrogen	5.4 lbs/day	25.1 lbs/day
	<i>Monthly Average</i>		
April 2022	Ammonia-Nitrogen	1.1 lbs/day	10.6 lbs/day
	<i>Monthly Average</i>		
	Ammonia-Nitrogen	9.0 mg/L	32.3 mg/L
	<i>Monthly Average</i>		
	Total Suspended Solids	4.4 lbs/day	15.9 lbs/day
	<i>Weekly Average</i>		

May 2022	Total Suspended Solids	2.9 lbs/day	9.4 lbs/day
	<i>Monthly Average</i>		
	Total Suspended Solids	10.0 mg/L	25.6 mg/L
	<i>Monthly Average</i>		
	Total Suspended Solids	15.0 mg/L	43.0 mg/L
	<i>Weekly Average</i>		
	CBOD <sub>5</sub>	5.8 lbs/day	6.9 lbs/day
	<i>Monthly Average</i>		
	CBOD <sub>5</sub>	8.8 lbs/day	9.6 lbs/day
	<i>Weekly Average</i>		
	Total Nitrogen	5.4 lbs/day	16.9 lbs/day
	<i>Monthly Average</i>		
	Total Phosphorus	0.57 lbs/day	0.8 lbs/day
	<i>Monthly Average</i>		
	Ammonia-Nitrogen	0.36 lbs/day	<3.5 lbs/day
	<i>Monthly Average</i>		
	Ammonia-Nitrogen	3.0 mg/L	<10.98 mg/L
	<i>Monthly Average</i>		
June 2022	Total Suspended Solids	4.4 lbs/day	8.8 lbs/day
	<i>Weekly Average</i>		
	Total Suspended Solids	10.0 mg/L	12.6 mg/L
	<i>Monthly Average</i>		
	Total Suspended Solids	15.0 mg/L	25.0 mg/L
	<i>Weekly Average</i>		
	Total Suspended Solids	10.0 mg/L	31.3 mg/L
	<i>Monthly Average</i>		
	Fecal Coliform	1,000/100 mL	1,733/100 mL
	<i>Instantaneous Maximum</i>		
July 2022	Total Nitrogen	5.4 lbs/day	8.6 lbs/day
	<i>Monthly Average</i>		
	Ammonia-Nitrogen	0.36 lbs/day	3.3 lbs/day
	<i>Monthly Average</i>		
	Ammonia-Nitrogen	3.0 mg/L	9.49 mg/L
	<i>Monthly Average</i>		
	Total Suspended Solids	2.9 lbs/day	4.3 lbs/day
	<i>Monthly Average</i>		
	Total Suspended Solids	4.4 lbs/day	7.6 lbs/day
	<i>Weekly Average</i>		
	Total Suspended Solids	15.0 mg/L	16.0 mg/L
	<i>Weekly Average</i>		
	Total Suspended Solids	10.0 mg/L	12.4 mg/L
	<i>Monthly Average</i>		
	CBOD <sub>5</sub>	2.9 lbs/day	3.4 lbs/day
	<i>Monthly Average</i>		
	CBOD <sub>5</sub>	10.0 mg/L	10.4 mg/L
	<i>Monthly Average</i>		
	Ammonia-Nitrogen	0.36 lbs/day	0.7 lbs/day
	<i>Monthly Average</i>		
	CBOD <sub>5</sub>	4.4 lbs/day	9.9 lbs/day
	<i>Weekly Average</i>		
	CBOD <sub>5</sub>	10.0 mg/L	10.2 mg/L
	<i>Monthly Average</i>		
	CBOD <sub>5</sub>	15.0 mg/L	39.0 mg/L
	<i>Weekly Average</i>		
	Fecal Coliform	200/100 mL	>143/100 mL
	<i>Geometric Mean</i>		

July 5, 2022	Fecal Coliform <i>Instantaneous Maximum</i>	1,000/100 mL	>2,420/100 mL
July 11, 2022	Fecal Coliform <i>Instantaneous Maximum</i>	1,000/100 mL	1,203/100 mL
August 2022	Ammonia-Nitrogen <i>Monthly Average</i>	0.36 lbs/day	<0.6 lbs/day
	CBOD <sub>5</sub> <i>Weekly Average</i>	4.4 lbs/day	7.5 lbs/day
	CBOD <sub>5</sub> <i>Weekly Average</i>	15.0 mg/L	29.0 mg/L
	Total Phosphorus <i>Monthly Average</i>	0.57 lbs/day	1.11 lbs/day
	Fecal Coliform <i>Geometric Mean</i>	200/100 mL	>110/100 mL
	Fecal Coliform <i>Instantaneous Maximum</i>	1,000/100 mL	>2,420/100 mL
September 2022	Ammonia-Nitrogen <i>Monthly Average</i>	0.36 lbs/day	0.8 lbs/day
	Total Nitrogen <i>Monthly Average</i>	5.4 lbs/day	5.6 lbs/day
	Total Phosphorus <i>Monthly Average</i>	0.57 lbs/day	1.02 lbs/day
October 2022	Total Suspended Solids <i>Monthly Average</i>	2.9 lbs/day	4.5 lbs/day
	Total Suspended Solids <i>Weekly Average</i>	4.4 lbs/day	9.4 lbs/day
	Total Suspended Solids <i>Monthly Average</i>	10.0 mg/L	15.7 mg/L
	Total Suspended Solids <i>Weekly Average</i>	15.0 mg/L	30.5 mg/L
	Total Phosphorus <i>Monthly Average</i>	0.57 lbs/day	0.8 lbs/day

The Department sent Lehigh County Authority a previous Notice of Violation on December 9, 2021 for similar violations.

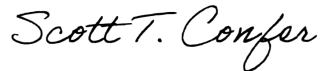
Please be advised that failure to comply with the terms and conditions of your NPDES Permit is a violation of said Permit and the Clean Streams Law of Pennsylvania, Act of June 22, 1937, P.L. 1987, as amended, 35 P.S. Section 691.1 et seq. ("The Clean Streams Law") and subjects Lehigh County Authority to appropriate enforcement action including, but not limited to, civil penalty assessment.

Due to the recurrent nature of the violations and to discuss their resolutions further, the Department has scheduled an enforcement conference for **Thursday, January 12, 2023 at 10:00 a.m.** in the Department's Northeast Regional Office, 2 Public Square, Wilkes-Barre, PA. **The Department requests that you personally attend this meeting along with your certified operator** and anyone else you deem necessary. Please come to this meeting prepared to discuss the cause of these violations, the steps that have been taken to correct them, and a schedule of compliance. **The Department requests that you contact Ms. Kelsey Glavich, Compliance Specialist, at (570) 826-2367, on or before December 28, 2022 to confirm your attendance and inform the Department who will be attending the meeting in addition to yourself.**

This Notice of Violation is neither an order nor any other final action of the Department. It neither imposes nor waives any enforcement action available to the Department under any of its statutes. If the Department determines that an enforcement action is appropriate, you will be notified of the action.

If you have any questions concerning this correspondence, you may contact me at 610-861-2135.

Sincerely,

A handwritten signature in cursive script that reads "Scott T. Confer".

Scott T. Confer  
Water Quality Specialist  
Clean Water Program

cc: North Whitehall Township