



## LEHIGH COUNTY AUTHORITY

December 14, 2015

### BOARD MEETING AGENDA

1. Call to Order
2. Review of Agenda
  - *Public Participation Sign-In Request*
3. Executive Sessions
4. Approval of Minutes
  - *September 28, 2015 Board Meeting Minutes (tabled from October 26, 2015 meeting)*
  - *October 19, 2015 Workshop Meeting Minutes*
  - *November 23, 2015 Board Meeting Minutes*
  - *December 9, 2015 Board Meeting Minutes*
5. Public Comments
6. Action / Discussion Items

#### **FINANCE AND ADMINISTRATION**

- *Water & Sewer Rate Schedules*
- *Resolutions – Management Staff Changes*
- *2016-2025 Capital Plan – City Concerns*

#### **WATER**

- *Allentown Division – Water Main Replacement Program Design Phase Cycles 1 – 3*

#### **WASTEWATER**

- *SCARP Program Management*
- *Allentown Division – Roof Replacements Phase II*

7. System Operations Overview
8. Staff Comments
9. Solicitor's Comments
10. Other Comments
11. Adjournment

#### **JANUARY MEETINGS**

Workshop Meeting  
Board Meeting

January 11 – 12:00 p.m.  
January 25 – 12:00 p.m.

#### **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. 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.

## FINANCE & ADMINISTRATION

### ACTION ITEMS

#### 1. Water & Sewer Rate Schedules

An update of the Authority's water and sewer rates schedules is attached for Board review and consideration for approval. A Resolution (12-15-01) will also be presented as required for Board adoption of the capital recovery fees outlined in the rate schedules (**yellow**). In connection with these rate changes, the Board should also approve the enclosed 2016 Report on Wastewater Charges (attached) which reflect charges that have arisen since the Preliminary Report was approved in connection with the 2016 Budget approval in October.

#### 2. Resolutions – Management Staff Changes

With changes in position titles and responsibilities, as well as Liesel Gross becoming the CEO, there are some resolutions necessary to reflect these changes for executing documents, financial matters, etc. Resolution (12-15-02) will be distributed prior to the Board meeting. Primarily, this confirms these authorizations with our new organizational structure and position titles.

### DISCUSSION ITEMS

### INFORMATION ITEMS

#### 1. Recently Purchased Investments – Certificates of Deposit (CDs)

CERTIFICATES OF DEPOSIT						
Fund	Bank	Location	Gross Amount	Date of Purchase	Date Due	Net Rate %
WW Capac	Everbank	Jacksonville, FL	249,000.00	10/16/15	1/17/17	0.75
WW Capac	All America Bank	Oklahoma City, OK	200,000.00	10/16/15	4/15/16	0.3
WW Capac	Dubuque Bank and Trust Co	Dubuque, IA	200,000.00	10/16/15	4/15/16	0.3
Cons Wtr (2)	Security State Bank	Sutherland, IA	249,000.00	10/16/15	1/16/18	1.0
Cons Wtr (2)	Synovus Bank	Columbus, Ga	248,000.00	10/16/15	10/16/17	1.0
Cons Wtr (2)	Pacific Premier Bank	Irvine, CA	249,000.00	10/21/15	4/21/17	0.7
WW Capac	Security Federal Bank	Aiken, SC	249,000.00	10/26/15	4/26/17	0.7

Fund Descriptions for Investments:

Cons Wtr (2)	Consolidated Water (2)
LLRI CR	Little Lehigh Relief Interceptor Capital Reserves
Cons LL2 (314)	Consolidated Little Lehigh Relief Interceptor 2
WW Capac	Wastewater Capacity
2010 Wtr Cons A	2010 Water Construction, Series A Bond
Wtr R&R	Renewal and Replacement

## WATER

### **ACTION ITEMS**

---

1. **Allentown Division – Water Main Replacement Program Design Phase Cycles 1 – 3 (Amendment(s) Approval)**

The Board authorized the design phase for five- miles of main replacement in October 2013 which included a Professional Service Authorization awarded to Gannett Fleming, Inc. The Lease required the replacement of one mile of main cycle 1 (year-1) and two- miles in each cycle 2 and 3(years 2 & 3) for a total of five-miles. In reality because of the necessity to replace water mains between intersections thus allowing future replacements to be easily extended without interruptions in service to customers in the area; and the internal decision to replace four- miles of main in cycle -3 (*rather than the required two- miles*); an additional 2.78 miles of water main replacements were added to the initial project scope. Board approval is requested for the applicable amendments to the Professional Services and Capital Project Authorizations for the added design phase work (*tan*).

### **DISCUSSION ITEMS**

---

### **INFORMATION ITEMS**

---

1. **Suburban Division - Water Main Replacement Program Cycle 1**

The project consists of the replacement of 1.73 miles of aged and/or failing Cast Iron water main. Design is currently under way.

2. **Suburban Division - Water Main Replacement Program Cycle 2**

The project consists of the replacement of 1.5 miles of aged and/or failing Cast Iron water main. Design is currently under way.

3. **Suburban Division – Pumping Station Projects**

This project will involve upgrades at two existing small system booster stations and the installation of one new major booster station in the Central Lehigh Division (CLD). The Pine Lakes Project will feature the conversion of the existing hydro-pneumatic station to a variable frequency drive controlled double pumping system (along with other miscellaneous improvements). The Crestwood Project consists of abandonment of existing wells and storage tank currently serving higher elevation customers and a connection of the pumping station to the main North Whitehall Division System. The CLD Auxiliary Pump Station Project will feature the installation of a new booster station and main extension to pump water from the Lower to the Upper System. The projects will also involve upgrade/installation to a SCADA system at each of the sites. The design for all three projects commenced in June. The PADEP Public Water Supply (PWS) Permit applications were reviewed for the Pine Lakes and Crestwood Projects. The PWS permit application for the CLD Project is being reviewed.

4. **Suburban Division – Capece Tract, WL#20 and Res #3 Improvements**

Professional Services contracts have been awarded to begin design, permitting and bidding of system improvements. WL#20 will be switched over to a variable frequency drive motor, to better control power usage and maintain steady output. Reservoir #3 will receive a motor activated butterfly valve, to maintain filling capabilities and chlorine contact levels. Both facilities will receive an upgrade to their SCADA systems.

5. **Suburban Division – Rt. 309 Crossing @ Sand Spring Road**

Professional Services contracts have been awarded to complete design and begin permitting and bidding of a 12" carrier pipe across Rt. 309. Previously, a 24" casing was installed at this location. Completion of this line will bring public water to the property line of Lehigh Carbon Community College.

6. **Allentown Division- Schantz Spring Chlorination Issue**

The project is to design and construct a facility or improvements that assure continuous chlorination of the Schantz Spring water supply. PADEP permit applications have been prepared and all materials have been ordered so installations may begin. Chlorine injection point has been moved back to the bypass line, and the new chlorine analyzer is on-line. Peristaltic chemical pumps have been installed. Correlation of chlorine levels between the spring and the water plant have begun in order to determine if a static mixer is required. Preliminary correlation data indicates that a static mixer is not required. Follow-up reports will be issued. A full-scale test of the emergency power system has been executed and everything functioned properly and according to design. This Project is identified as Un-Completed Work and will be funded by the City.

7. **Allentown Division – Prelease Valve Replacements**

The project is the replacement of approximately 55 inoperable valves in multiple locations throughout the City that existed prior to the lease settlement. Design is currently under way. This project is identified as Un-Completed Work and will be funded by the City.

8. **Allentown Division – Water Main Replacement Program- Cycle 2**

The project is the replacement of 2-miles of aged and/or failing Cast Iron water main in multiple locations throughout the City. Construction is currently complete and project close out is under way. This Project is identified as Schedule-7 Work and will be funded by LCA Allentown Division.

9. **Allentown Division – Water Main Replacement Program- Cycle 3**

The project is the replacement of 4-miles of aged and/or failing Cast Iron water main in multiple locations throughout the City. Design is currently under way. This Project is identified as Schedule-7 Work and will be funded by LCA Allentown Division.

10. **Allentown Division – Transmission Main – Leak Detection Survey**

The Project includes the use of a non-invasive leak detection methodology to find any leaks that may exist in approximately 33,000 linear-feet of large transmission mains ranging from 16 thru 36 inches in diameter. Both steel and cast iron pipes will be evaluated, with a majority of these mains over 65 years old. Effective non-invasive leak detection on mains of these sizes is a specialized service which requires sophisticated equipment and a high level of expertise. To facilitate the transmission main leak detection survey for this year and to be utilized for future surveys, this project includes the installation by hydro-excavation (*to minimize road damage and restoration costs*) of 21 permanent roadway monitoring points. The Lease Operating Standards requires 110 miles of water mains be surveyed annually. Excepting for the large transmission mains, this work is executed by the Allentown Division Distribution & Collection Department. The leak detection survey footage from this project will count towards the 110

mile annual requirement. The survey work is completed and the project report is expected in December. The project will be funded by the LCA Allentown Division.

**11. Allentown Division - Miscellaneous Water Filtration Plant / Water Distribution**

One project consists of upgrading the existing stormwater pump/control at Water Distribution. Design is currently underway with a likely spring construction start date. This will be a capital project funded by the LCA Allentown Division. Another project consists of repainting the finished water gallery piping. Construction started in mid-November and will be complete before 2016.

**12. Allentown Division – Water System Master Plan**

This project involves the creation of a Master Plan for the Allentown Water Plant, water storage tanks, water storage reservoirs, pressure booster stations, raw water springs, and surface water intakes. The Master Plan will involve several key sections including, but not limited to: full-scale condition assessments, treatment process optimization, and development of short term/long term capital plans. The Master Plan is a requirement included within the City of Allentown lease. RFPs are anticipated to be distributed to consultants in December 2015. Board approval to award the professional services contract is planned for February 2016. The project will be funded by the LCA Allentown Division.

**13. Developments**

Water system construction is occurring in the following developments:

- Hamilton Crossings, 2 commercial lots with 20 buildings having retail, financial, convenience and restaurant uses, LMT
- Highgate, Phase 3 (Dunbar Tract), 63 residential lots (sfa), UMT
- Liberty at Mill Creek, 2 industrial lots, UMT
- Spring Creek Settlement Properties, 14 commercial/industrial lots, LMT
- Valley West Estates, Phases 4, 5 & 6, 46 residential lots (sfd), UMT (currently on hold)

Water system plans are being reviewed for the following developments:

- Bortz Tract, 14 commercial units, UMT/SWT
- Diocesan Pastoral Center, 2 commercial lots, 3 additional lots and residual lot for existing cemetery, LMT
- Farr Tract, 94 residential lots (sfd), LMT
- Fields at Indian Creek, 218 residential lots (sfd) & community center, LMT/UMiIT/Emmaus, water and sewer
- Grandview, 6 commercial units and 204 apartment units, LMT
- Grant Street Townes, 18 residential lots (sfa), WashT
- Hickory Park Estates, 3 residential lots (sfd), UMT
- Hillview Farms, 31 residential lots (sfd), LMT/SWT
- Indian Creek Industrial Park, 6 commercial lots, UMiIT, water and sewer
- Lehigh Hills, 247 residential lots (sfa/sfd), UMT
- Morgan Hills, 40 residential lots (sfd), WeisT, water and sewer
- North Whitehall Commercial Center (Walmart), 5 commercial lots, NWT, water and sewer
- Shepherd's Corner, 1 commercial lot, LMT
- Trexler Business Center, Lot 1, 1 commercial building, LMT
- Weilers Road Twins, 82 residential lots (sfa), UMT
- Woodmere Estates, 60 residential units (sfd), UMT

## WASTEWATER

### ACTION ITEMS

---

1. **SCARP Program Management**

A Professional Services Authorization and Capital Project Amendment is being presented to the Board for consideration for Arcadis (Malcom Pirnie) for work related to the I & I SCARP Program. The work includes Program Management for 2016. Attached is a Professional Services Authorization, Capital Project Amendment, and Arcadis scope of work (**green**).

2. **Allentown Division – Roof Replacements Phase II**

The Project consists of replacing the remaining 13 facility roofs that were identified as Phase II Replacements in the Roof Evaluation report performed by D’Huy Engineering. The design of these replacements should be complete in January 2016 with construction starting in May of 2016. The project will be funded by the LCA Allentown Division. Board approval is requested for the design phase (**blue**)

### DISCUSSION ITEMS

---

### INFORMATION ITEMS

---

1. **Wastewater Treatment Capacity**

Meetings to present the findings of the 537 planning evaluations have been held or are being scheduled with the City 537 team, LCA Signatory Representatives, City Signatory Representatives.

2. **Suburban Division -Wynnewood Terrace Pump Station and Force Main Replacement**

Work started on April 13, 2015, and was Substantially Complete on October 12, 2015. Contractors are working towards final completion with punch lists and restoration.

3. **Suburban Division -Lynn Township – WWTP Improvements, Phases 1 & 2**

The project will upgrade the WWTP head works. Gannett Fleming has submitted 100% design specifications for our review.

4. **Allentown Division – Sanitary Sewer Manhole Lining, Cycle 2**

This annual project will install a lining system (to eliminate infiltration) in approximately 85 aged brick manholes identified by LCA staff. The design phase has been administratively approved. Board approval of the construction phase was granted at the July Workshop Meeting and construction was completed in October. The project is identified as Administrative Order Work and will be funded by the City.

5. **Allentown Division – Manhole Collars with Water Tight Frame and Covers, Cycle 2**

This three year project will permanently secure the frame and cover of approximately 87 aged brick manholes identified by current LCA staff. This work will eliminate inflow from entering these manholes and eliminate the potential for sanitary sewer overflows (SSO's) from these manholes. Board approval of the construction phase was granted at the July Workshop

Meeting and construction was completed in October. The project is identified as Administrative Order and will be funded by the City.

**6. Allentown Division – Sanitary Sewer Manhole Lining, Cycle 3**

This annual project will install a lining system (to eliminate infiltration) in approximately 70 aged brick manholes identified by LCA staff. The design phase will be administratively approved. Board approval of the construction phase will be requested in the Spring of 2016. The project is identified as Administrative Order Work and will be funded by the City.

**7. Allentown Division – Manhole Collars with Water Tight Frame and Covers, Cycle 3**

This three year project will permanently secure the frame and cover of approximately 65 aged brick manholes identified by current LCA staff. This work will eliminate inflow from entering these manholes and eliminate the potential for sanitary sewer overflows (SSO's) from these manholes. Board approval of the construction phase will be requested in the Spring of 2016. The project is identified as Administrative Order and will be funded by the City.

**8. Allentown Division - WWTP-Replacement of Motor Control Centers**

This Project will replace five aged motor control centers that provide power on a 24/7 basis to various parts of the WWTP. The project has been approved by the City as a Major Capital Improvement (MCI). The project completion is still expected by the end of February 2016. This Project is identified in the Lease as Schedule 7 (required) project and will be funded the LCA Allentown Division.

**9. Allentown Division – Roof Rehabilitation and Replacements- Phase 1**

The Project consists of replacing 26 facility roofs that were identified as in need of immediate replacement in the Roof Evaluation report performed by D'Huy Engineering. The design of these replacements are proceeding. The project was presented to the City for review/approval as a Major Capital Improvement (MCI), but the city rejected it as such. Construction began in October and should be complete before 2016. The project will be funded by the LCA Allentown Division.

**10. Allentown Division- SCADA System Installation –Wastewater Treatment Plant:**

Existing network equipment was transferred to new rack system. PLC panel factory acceptance testing is tentatively scheduled for the week of January 11, 2016. Graphic display screens have been received for comment. Configuration of historical data, trending and reports are progressing.

**11. Allentown Division–Wastewater Treatment Plant- Digester Cover Replacements:**

This project involves the cover replacement of both the Primary Digester No. 1 and the Secondary Digester (the cover for Primary Digester No. 2 was previously replaced in 2010). A Major Capital Improvement (MCI) Conceptual Design has been submitted to the City for review and approval. A request for Board approval of the construction phase is anticipated in January 2016. This Project is identified in the Lease as Schedule 7 (required) project and will be funded by the LCA Allentown Division.

**12. Consolidated Systems- SharePoint:**

SharePoint application is up and available. Administrator training was held on December 1, 2015. Workshop topics will be Team sites – Plant services, customer service; Workflow – Board/Staff notes, New employee orientation; KPI/Dashboard – Employee safety, Bond coverage. GHD is developing SharePoint sites for these applications.

13. **Suburban Division – Western Weisenberg Wastewater Treatment Plant Improvements**

This project includes; (1) the improvements necessary to rectify the cold weather nitrification issue at the WWTP; and (2) the installation of additional equipment to enhance operation. This project will be funded by the LCA Suburban Western Weissenberg Division. The design phase was approved administratively. .

14. **Suburban Division – SCARP**

The Round 2 final alternatives modeling has been completed. An internal meeting was held to discuss the recommended path forward.

The “Order Extension on Consent” was executed by LCA and sent to EPA. South Whitehall Township did not sign the Order. It is unsure what this means for the other City Signatories who signed the Order.

A meeting has been scheduled for December at the DEP office to provide them with an update on the SCARP program.

The test and seal project for a portion of the Western Lehigh Interceptor will be bid in the near future.

15. **Lowhill Township – Sewer System Acquisition**

The Board approved this acquisition earlier in the year, but there are a number of items that need to be completed before settlement can take place, which originally was scheduled for October 1<sup>st</sup>. It does not appear at this point as though that date will be met, particularly since there is an agreement with Upper Macungie Township Authority that needs to be revised or assigned.



**REGULAR MEETING MINUTES**  
**September 28, 2015**

---

The Regular Meeting of the Lehigh County Authority was called to order at 12:18 p.m., on Monday, September 28, 2015, Chairman Brian Nagle presiding. Other Members present at the commencement of the meeting were: Linda Rosenfeld, Emrich Stellar, Tom Muller, Richard Bohner, Norma Cusick, Scott Bieber and Deana Zosky. Authority Staff present were Aurel Arndt, Liesel Adam, Ed Klein, Frank Leist, Brad Landon, John Parsons, Chuck Volk, Bob Kerchusky and Lisa Miller.

**PUBLIC COMMENTS**

None.

**REVIEW OF AGENDA**

Aurel Arndt stated there would be an Executive Session following the regular meeting regarding a personnel issue.

**APPROVAL OF MINUTES**

None.

**ACTION AND DISCUSSION ITEMS**

**Pension Plan Minimum Municipal Obligation (MMO) for 2016**

Liesel Adam presented the 2016 Minimum Municipal Obligation (MMO) for the Lehigh County Authority Pension Plan to the Board as required by Act 205. The 2016 estimate is lower than last year because of employee departures. An Actuarial study, done every two years, will be performed next year. That study will include Allentown Division employees. Some discussion followed.

**Well WL-20 and Reservoir-3 – Coordinated Capital and Operational Changes**

Frank Leist gave a history and an overview of the project which will result in the installation of a Variable Frequency Drive (VFD) at WL#20, a 16" motor operated valve at Reservoir #3, and include updated SCADA control. He is asking for approval of the Capital Project Authorization in the amount of \$88,846 for the design phase of the project and approval of the Professional Services Authorization in the amount of \$34,300 to ARRO Consulting, Inc. to provide bidding and design services and approval of the Professional Services Authorization in the amount of \$42,046 to Aptus Control Systems, Inc. to provide equipment, installation and programming for the modification of SCADA systems. Some discussion followed.

On a motion by Emrich Stellar, seconded by Norma Cusick, the Board unanimously approved the Capital Project Authorization in the amount of \$88,846 for the design phase of the project and approval of the Professional Services Authorization in the amount of \$34,300 to ARRO Consulting, Inc. to provide bidding and design services and approval of the Professional Services Authorization in the amount of \$42,046 to Aptus Control Systems, Inc. to provide equipment, installation and programming for the modification of SCADA systems (9-0).

The September Board Notes were reviewed. Liesel Adam was asked to explain the Microsoft SharePoint 2013 program that was installed on our server. The program is an employee knowledge and document sharing program.

Brad Landon stated that settlement on the Lowhill Township Sewer System Acquisition will not take place on October 1<sup>st</sup> because of incomplete items between Lowhill Township and Upper Macungie Township.

**SYSTEM OPERATIONS OVERVIEW**

Bob Kerchusky presented a PowerPoint presentation to the Board regarding flow and operations at the Wastewater Treatment Plant and Water Filtration Plant, with an emphasis on the work being done with No. 6 Filter at the water plant. The No. 6 Filter is one of eight filters that needs work and was repaired as an

experiment to see what may be involved with repairing the remaining filters. These repairs will be part of the plant Master Plan.

**STAFF COMMENTS**

None.

**SOLICITOR'S COMMENTS**

None.

**OTHER COMMENTS**

None.

**EXECUTIVE SESSION**

The Chairman called an Executive Session at 12:55 p.m. to discuss a personnel matter.

**ADJOURNMENT**

There being no further business, the Chairman adjourned the meeting at 1:55 p.m.

---

Richard H. Bohner  
Secretary

**WORKSHOP MEETING MINUTES**  
**October 19, 2015**

---

The Workshop Meeting of the Lehigh County Authority was called to order at 12:21 p.m., on Monday, October 19, 2015, Chairman Brian Nagle presiding. Other Members present at the commencement of the meeting were: Linda Rosenfeld, Tom Muller, Richard Bohner, Norma Cusick, Scott Bieber, Ted Lyons and Deana Zosky. Authority Staff present were Aurel Arndt, Liesel Adam, Ed Klein, Pat Mandes, Frank Leist, Brad Landon, John Parsons, Chuck Volk and Lisa Miller.

**REVIEW OF AGENDA**

Aurel Arndt stated that there will be two items under Information Items, and the Executive Committee will have an Executive Session.

**Public Comment**

None.

**ACTION AND DISCUSSION ITEMS**

**2016-2025 Capital Plans**

Frank Leist stated that LCA has received comments on the 2016-2025 Suburban Division, Allentown Division and Administration Capital Plans from the Lehigh Valley Planning Commission as well as comments from the City of Allentown on the Allentown Division Capital Plan. LVPC commented on the additional water supply capacity to LCA's Upper Milford Township system with regard to a proposed new development. Frank Leist clarified the comment. He also addressed the comments made by the City regarding various capital projects. Some discussion followed. Aurel Arndt updated the Board on the status of AD-S-18 Facility Roof Replacements. LCA discussed the Capital Plans with Boston Beer addressing their concerns for how the plan would affect them. They had no opposition to the Capital Plans.

On a motion made by Richard Bohner, seconded by Norma Cusick, the Board unanimously approved the 2016-2025 Capital Plans (8-0).

**2016 Budget**

Aurel Arndt noted that the bond coverage requirement for the City Division has improved at the end of the 3<sup>rd</sup> quarter 2015. Ed Klein presented the 2016 Budget with a Powerpoint presentation that featured the budget highlights. The Board requested detailed budget summaries and a copy of the Powerpoint presentation. Aurel Arndt stated that LCA's biggest concern is that the estimated revenues for the City Division were below those anticipated based on City budgets presented as part of the Concession process.. He explained debt retirement and debt refinancing. Discussion followed. He also explained that under the Concession Agreement, LCA is entitled to establish capital recovery fees. If LCA can establish a capital recovery fee based on LCA's capital expenditures, we can increase the revenue stream. The Budget will be presented at the October 26 Board meeting for approval.

**Allentown Division – 2016 Rate Schedule**

Liesel Adam presented the 2016 Rate Schedule. The only change for 2016 is that the monthly fixed charges for meters sizes 1" and smaller are being removed. She also explained that according to the concession lease agreement, the water and sewer rates for the Allentown Division customers may increase in January 2016. LCA's rates in both the Allentown and Suburban Division are the lowest in the Lehigh Valley.

On a motion made by Scott Bieber, seconded by Norma Cusick, the Board unanimously approved the Allentown Division 2016 Rate Schedule (8-0).

**INFORMATION ITEMS**

Aurel Arndt stated that there will be a set of additional rates presented to the Board at the December meeting. Part of the package will be the Western Lehigh Interceptor rates and the Capital Recovery fees. There was some discussion on forecasting. Pat Mandes explained that LCA bases its rates on actual flows and lows and not a fixed rate. Some discussion followed.

Aurel Arndt informed the Board that on October 29, LCA will have settlement on the 2015 A Bond sale. This is the bank note we awarded to National Penn Bank.

Pat Mandes gave an update to the EPA Administrative Order. The EPA has responded to LCA and is giving LCA an Order Extension on Consent until 12-31-17. Pat said that LCA is in discussion with the City. There was some discussion on SSO's. Aurel Arndt said that meeting the plan requirement does not necessarily mean plan approval. Affordability is a big issue.

**SYSTEM OPERATIONS OVERVIEW**

None.

**STAFF COMMENTS**

None.

**SOLICITOR'S COMMENTS**

None.

**OTHER COMMENTS**

None.

**EXECUTIVE SESSION**

The Chairman called an Executive Session at 2 PM to discuss the Concession.  
The session ended at 2:10 PM.

The Chairman called an Executive Session at 2:10 PM for an Executive Committee discussion.  
The session ended at 2:20 PM.

**ADJOURNMENT**

There being no further business, the Chairman adjourned the meeting at 2:20 p.m.

---

Richard H. Bohner, Secretary

**REGULAR MEETING MINUTES**  
**November 23, 2015**

---

The Regular Meeting of the Lehigh County Authority was called to order at 12:15 p.m., on Monday, November 23, 2015, Acting Chairman Richard Bohner presiding. Other Members present at the commencement of the meeting were: Linda Rosenfeld, Norma Cusick, Ted Lyons and Deana Zosky. Authority Staff present were Aurel Arndt, Liesel Adam, Ed Klein, Pat Mandes, Frank Leist, Brad Landon, John Parsons, Chuck Volk, Bob Kerchusky, Phil DePoe and Lisa Miller.

**REVIEW OF AGENDA**

Pat Mandes stated that she will have an update regarding the EPA Administrative order.

**EXECUTIVE SESSION**

None.

**APPROVAL OF MINUTES**

**August 31, 2015 Regular Meeting Minutes**

On a motion by Norma Cusick, seconded by Linda Rosenfeld, the Board unanimously approved the Minutes of August 31, 2015 (3-0). Richard Bohner abstained.

**PUBLIC COMMENTS**

Liesel Adam introduced Steve Lettko, Mike Cawley and Dale Swoyer Jr. to the Board. They are LCA employees and are also part of the Union. Dale Swoyer Jr. asked the Board why the meetings are held at noon instead of in the evening. Richard Bohner replied that the afternoon meetings are Board tradition for as long as he could recall. Brad Landon stated that the Board tried having the meetings in the evening but few additional people attended.

**ACTION AND DISCUSSION ITEMS**

**Allentown Division – Wastewater Treatment Plant – Odor Control Tower Replacements/Repairs – Approval**

Frank Leist gave an overview of the project. The Board asked what the odor control towers do. Robert Kerchusky explained how they break down the hydrogen sulfide gas. Mr. Leist is asking for approval of the Capital Project Authorization – Construction Phase in the amount of \$486,300 which includes the Professional Services Authorization to D'Huy Engineering and the General Contract Award to Blooming Glen Contractors.

On a motion by Norma Cusick, seconded by Linda Rosenfeld, the Board unanimously approved the Capital Project Authorization – Construction Phase in the amount of \$486,300 which includes the Professional Services Authorization to D'Huy Engineering and the General Contract Award to Blooming Glen Contractors (5-0).

**Allentown Division – Wastewater Treatment Plant – Main Pump House Locker Room Renovations – Construction Phase Approval**

Frank Leist gave an overview of the project. The locker room was last updated in the 1970's. Risk Management requested that it be repaired. Mr. Leist is seeking approval for the Capital Project Authorization – Construction Phase in the amount of \$277,500 which includes the Professional Services Authorization to D'Huy Engineering and the General Contract Award to CMG of Easton, Inc.

On a motion by Norma Cusick, seconded by Linda Rosenfeld, the Board unanimously approved the Capital Project Authorization – Construction Phase in the amount of \$277,500 which includes the Professional Services Authorization to D'Huy Engineering and the General Contract Award to CMG of Easton, Inc. (5-0).

### **EPA Administrative Order**

Pat Mandes reported on the letter received from EPA stating that they will not change the administrative order to use LCA's requested language.

### **SYSTEM OPERATIONS OVERVIEW**

Robert Kerchusky reported that during October, the output at the water filtration plant in Allentown averaged approximately 19.44 million gallons per day. Kline's Island Wastewater Treatment Plant received an average of 29.56 million gallons per day. Diefenderfer performed a lot of work at the plant in the past month. The power zone house is now set and all the major cabling has been pulled through the conduit. The roof project is making good progress. There was some discussion on the historical background of the Kline's Island plant.

### **STAFF COMMENTS**

Aurel Arndt stated that the letter received from Dan Koplisch regarding the 2016-2025 Capital Plans will be discussed at the December 14 meeting of which Mr. Koplisch plans to attend.

Norma Cusick asked if the emergency backup generators are now all in place. Aurel Arndt said that they are in the Suburban Division but not all of them are in the City Division.

### **SOLICITOR'S COMMENTS**

Brad Landon updated the Board on the Lowhill Township sewer system acquisition agreement. Since the discharges from the Lowhill system are transported through the Upper Macungie Township system to get to the Western Lehigh Interceptor, he said that Upper Macungie Township is negotiating a new agreement which he expects will be ready for the Board to review either at the December or January meeting.

### **OTHER COMMENTS**

None.

### **ADJOURNMENT**

There being no further business, the Acting Chairman adjourned the meeting at 12:37 p.m.

---

Norma Cusick  
Secretary

**BOARD MEETING MINUTES**  
**December 9, 2015**

---

An Executive Board Meeting of the Lehigh County Authority was called to order at 1:03 p.m., on Wednesday, December 9, 2015, Chairman Brian Nagle presiding. Other Members present at the commencement of the meeting were: Linda Rosenfeld, Emrich Stellar, Richard Bohner, Norma Cusick, Scott Bieber, Ted Lyons, Deana Zosky and Tom Muller. Authority Staff present were Aurel Arndt, Liesel Adam, Ed Klein and Brad Landon.

Also present were James Dougherty, Timothy Horstmann and Ali Hylander of McNees, Wallace and Nurick, LLC.

**EXECUTIVE SESSION**

The Chairman called an Executive Session at 1:05 p.m. to discuss potential litigation. The session ended at 2:14 p.m.

Messrs. Arndt, Landon and Klein left the meeting at that time.

The Chairman called an Executive Session at 2:33 p.m. to discuss litigation personnel matter.

Deana Zosky left the meeting at 3:00 p.m.

The session ended at 3:14 p.m.

**ADJOURNMENT**

There being no further business, the Chairman adjourned the meeting at 3:14 p.m.

---

Richard H. Bohner  
Secretary

**LEHIGH COUNTY AUTHORITY  
SCHEDULE OF WATER RATES AND CHARGES**

**CENTRAL LEHIGH, NORTH WHITEHALL, WASHINGTON TOWNSHIP,  
HEIDELBERG HEIGHTS, ARCADIA, PINE LAKES, MILL CREEK, BEVERLY HILLS,  
CLEARVIEW FARM ESTATES, UPPER MILFORD CENTRAL, EMMAUS CONSECUTIVE,  
AND MADISON PARK NORTH DIVISIONS**

**I. Schedule of Water Rates**

**A. Metered Water Use**

**Central Lehigh, North Whitehall, Washington Township, Heidelberg Heights,  
Arcadia, Pine Lakes, Mill Creek, Beverly Hills, Emmaus Consecutive  
Divisions & Clearview Farm Estates**

(adopted 1/28/13; effective 4/1/13); (Mill Creek added 4/1/05); (Beverly Hills added 3/1/09);  
(Emmaus added 3/1/09); (Clearview Farm Estates added 5/1/09)

<b>Fixed Charges</b>	
<b>Meter Size</b>	<b>Fixed Charge</b>
<i>Quarterly</i>	
5/8" & 3/4" *	\$ 11.70
1"	21.60
<i>Monthly</i>	
1-1/2"	14.10
2"	21.00
3"	43.80
4"	64.20
6"	120.30
8"	186.90
10"	263.10

\*Typical residential.

<b>Volume Charges</b>		
<b>Quarterly Usage (gal.)</b>	<b>Monthly Usage (gal.)</b>	<b>Rate per 1,000 Gal.</b>
First 120,000	First 0 - 40,000	\$ 2.25
Next 2,880,000	Next 960,000	2.06
Next 24,000,000	Next 8,000,000	1.70
Next 147,000,000	Next 49,000,000	1.47
Over 174,000,000	Over 58,000,000	1.26

**Welshtown Road (Washington Township Division)**

(adopted 9/19/95; effective 10/1/95)

<b>Volume</b>	<b>Rate per 1,000 Gal.</b>
First 8,000 gal./qtr.	*Minimum Charge/Quarter
All over 8,000 gal./qtr.	\$ 5.50
<b>Meter Size</b>	<b>*Minimum Charge/Quarter</b>
5/8" & 3/4"	\$ 60.00
1"	72.00
1-1/4"	84.00
1-1/2"	108.00
2"	133.00
3"	169.00
4"	266.00
6"	459.00



**LEHIGH COUNTY AUTHORITY  
SCHEDULE OF WATER RATES AND CHARGES (cont'd)**

---

**I. Schedule of Water Rates (cont'd)**

**A. Metered Water Use (cont'd)**

**Upper Milford Central Division**

(adopted 3/26/07; effective 4/1/07)

Fixed Charge
Quarterly – All Meter Sizes \$21.00

Volume	Rate per 1,000 Gallons
All Volume	\$ 5.47

**Madison Park North Division**

(adopted 7/12/10; effective 7/8/10)

Fixed Charge
Quarterly – (5/8" & 3/4" meter) \$11.70

Volume	Rate per 1,000 Gallons
All Volume	\$ 7.50

**B. Public Fire Protection**

**Central Lehigh, North Whitehall & Washington Township Divisions**

(adopted 2/13/06; effective 4/1/06)

Each Public Fire Hydrant (O&M Charge)	\$7.87/month
Each Inch-Squared Foot (System Charge)	\$0.00152/year

**C. Private Fire Protection**

**Central Lehigh, North Whitehall & Washington Township Divisions**

(adopted 7/12/10; effective 7/12/10)

Fire Line Size	Charge per Month
Single Family Residential	\$ 5.00
2"	13.61
2-1/2"	21.26
3"	30.62
4"	54.43
6"	122.47
8"	217.72
10"	340.18
12"	489.87

**LEHIGH COUNTY AUTHORITY  
SCHEDULE OF WATER RATES AND CHARGES (cont'd)**

---

**Arcadia Division**

(adopted 5/12/03; effective 5/12/03)

	<b>Charge per Sq. Ft. of Building Space</b>
<b>Monthly</b>	\$.00321
<b>Quarterly</b>	.00963

**II. Meter Test Fee**

(adopted 12/15/14; effective 1/1/15)

<b>Meter Size</b>	<b>Fee</b>
5/8", 3/4", 1"	\$50.00
Larger than 1"	Actual Cost if >\$50

**III. Meter Inspection Fee**

(adopted 12/15/14; effective 1/1/15)

**\$50.00**

**IV. Service Order / Site Visit Fees**

(adopted 12/15/14; effective 1/1/15)

Business Hours – 7:00 a.m. and 4:45 p.m.,  
Monday through Friday (except holidays)

**\$50.00**

After Hours

**\$150.00**

Service Termination & Restoration Charge

**\$100.00**

**V. Site Revisitation Charge**

(adopted 12/15/14; effective 1/1/15)

**\$100.00**

**VI. Lien Administration Fee**

(adopted 12/13/04; effective 01/1/05)

**\$56.50 + Current Lehigh County Clerk of Court's Filing Fee**

**VII. Hydrant Security Device Fee**

**Central Lehigh Division**

(adopted 06/27/05; effective 07/1/05)

**\$115.00**

**VIII. Fire Flow Test Charge**

(adopted 12/07/11; effective 01/01/12)

**\$180.00**

**IX. Use of Easement Preparation Fee**

(adopted 12/07/11; effective 01/01/12)

**\$90.00**

**X. Backflow Prevention Non-compliance Charge**

(adopted 12/07/11; effective 01/01/12)

**\$50.00**

**LEHIGH COUNTY AUTHORITY**  
**SCHEDULE OF WATER RATES AND CHARGES (cont'd)**

**IX. Tapping, Connection and Customer Facilities Fees**

**Central Lehigh Division**

(adopted 8/27/12; effective 10/1/12)

Size of Service Line	Tapping Fee			Connection Fee	Customer Facilities Fee
	Distribution		Capacity		
	Type 1	Type 2			
MFR*	\$ 1,150	\$ 150	\$ 340	*	*
3/4"	1,880	300	605	*	*
1"	3,000	480	1,085	*	*
1-1/2"	4,350	705	2,420	*	*
2"	6,350	1,035	4,280	*	*
3"	10,190	1,690	9,675	*	*
4"	13,940	2,350	17,165	*	*
6"	20,050	3,520	38,695	*	*
8"	26,000	4,750	68,805	*	*
10"	30,700	5,865	107,500	*	*
12"	35,600	N/A	154,790	*	*

(\* See Notes on page 8) N/A – Not Available

**Washington Township Division – Excluding Welshtown Road**

(adopted 8/27/12; effective 10/1/12)

Size of Service Line	Tapping Fee		Connection Fees	Customer Facilities Fees
	Distribution	Capacity		
MFR*	\$ 855	\$ 430	*	*
3/4"	1,550	1,000	*	*
1"	2,400	1,800	*	*
1-1/2"	3,470	4,000	*	*
2"	5,100	7,100	*	*
3"	8,320	16,000	*	*
4"	11,580	28,400	*	*
6"	17,350	64,000	*	*
8"	23,420	113,800	*	*
10"	28,930	177,800	*	*
12"	35,075	256,000	*	*

(\* See Notes on page 8) N/A – Not Available

**Central Lehigh Division – Lehigh Valley South Industrial Park**

(adopted 07/25/05; effective 07/1/11)

Special Tapping Fee - \$2,095.37 per equivalent dwelling unit (EDU)

EDU = 220 gallons per day

*Central Lehigh Division fees also apply*

**LEHIGH COUNTY AUTHORITY  
SCHEDULE OF WATER RATES AND CHARGES (cont'd)**

**IX. Tapping, Connection and Customer Facilities Fees (cont'd)**

**North Whitehall Township Division**

(adopted 8/27/12; effective 10/1/12)

Size of Service Line	Tapping Fee			Connection Fee	Customer Facilities Fee
	Distribution		Capacity		
	Type 1	Type 2			
MFR*	\$ 1,030	N/A	\$ 295	*	*
3/4"	2,000	N/A	575	*	*
1"	3,200	N/A	1,035	*	*
1-1/2"	4,700	N/A	2,300	*	*
2"	6,900	N/A	4,080	*	*
3"	11,250	N/A	9,200	*	*
4"	15,650	N/A	16,330	*	*
6"	23,450	N/A	36,800	*	*
8"	31,650	N/A	65,435	*	*
10"	39,100	N/A	102,235	*	*
12"	47,400	N/A	147,200	*	*

(\* See Notes on page 8)      N/A - Not Available (Type 2 Fee has not been established)

**Arcadia Division**

(adopted 8/27/12; effective 10/1/12)

Tapping Fee		
Part	Amount	Units
Capacity	\$ 1.55	Per Gallon per day
Distribution	0.67	Per Gallon per day
Special Purpose		
Fire Service	0.12	Per Square Foot of Building Space

**Mill Creek Division**

(adopted 8/27/12; effective 10/1/12)

Size of Service Line	Tapping Fee			Connection Fee	Customer Facilities Fee
	Distribution		Capacity		
	Type 1	Type 2			
MFR*	\$ 1,130	N/A	\$ 109	*	*
3/4"	2,000	N/A	192	*	*
1"	2,360	N/A	N/A	*	*
1-1/2"	3,470	N/A	N/A	*	*
2"	5,100	N/A	N/A	*	*
3"	8,320	N/A	N/A	*	*
4"	11,580	N/A	N/A	*	*
6"	17,350	N/A	N/A	*	*
8"	23,420	N/A	N/A	*	*
10"	28,930	N/A	N/A	*	*
12"	35,075	N/A	N/A	*	*

(\* See Notes on page 8)      N/A - Not Available (Type 2 Fee has not been established)

**LEHIGH COUNTY AUTHORITY**  
**SCHEDULE OF WATER RATES AND CHARGES (cont'd)**

**IX. Tapping, Connection and Customer Facilities Fees (cont'd)**

**Pine Lakes Division**

(adopted 8/27/12; effective 10/1/12)

Size of Service Line	Tapping Fee			Connection Fee	Customer Facilities Fee
	Distribution		Capacity		
	Type 1	Type 2			
MFR*	\$ 1,130	N/A	\$ 109	*	*
3/4"	2,000	N/A	192	*	*
1"	2,360	N/A	N/A	*	*
1-1/2"	3,470	N/A	N/A	*	*
2"	5,100	N/A	N/A	*	*
3"	8,320	N/A	N/A	*	*
4"	11,580	N/A	N/A	*	*
6"	17,350	N/A	N/A	*	*
8"	23,420	N/A	N/A	*	*
10"	28,930	N/A	N/A	*	*
12"	35,075	N/A	N/A	*	*

(\* See Notes on page 8) N/A - Not Available (Type 2 Fee has not been established)

**Beverly Hills Division**

(adopted 8/27/12; effective 10/1/12)

Size of Service Line	Tapping Fee			Connection Fee	Customer Facilities Fee
	Distribution		Capacity		
	Type 1	Type 2			
MFR*	\$ 1,130	N/A	\$ 109	*	*
3/4"	2,000	N/A	192	*	*
1"	2,360	N/A	N/A	*	*
1-1/2"	3,470	N/A	N/A	*	*
2"	5,100	N/A	N/A	*	*
3"	8,320	N/A	N/A	*	*
4"	11,580	N/A	N/A	*	*
6"	17,350	N/A	N/A	*	*
8"	23,420	N/A	N/A	*	*
10"	28,930	N/A	N/A	*	*
12"	35,075	N/A	N/A	*	*

(\* See Notes on page 8) N/A - Not Available (Type 2 Fee has not been established)

**Heidelberg Heights Division**

(adopted 8/27/12; effective 10/1/12)

Size of Service Line	Tapping Fee			Connection Fee	Customer Facilities Fee
	Distribution		Capacity		
	Type 1	Type 2			
MFR*	\$ 1,030	N/A	\$ 364	*	*
3/4"	2,000	N/A	708	*	*
1"	2,360	N/A	1,490	*	*
1-1/2"	3,470	N/A	3,320	*	*
2"	5,100	N/A	5,890	*	*
3"	8,320	N/A	13,280	*	*
4"	11,580	N/A	23,570	*	*
6"	17,350	N/A	53,120	*	*
8"	23,420	N/A	94,950	*	*
10"	28,930	N/A	147,570	*	*
12"	35,075	N/A	N/A	*	*

N/A - Not Available (Type 2 Fee has not been established)

**LEHIGH COUNTY AUTHORITY**  
**SCHEDULE OF WATER RATES AND CHARGES (cont'd)**

**IX. Tapping, Connection and Customer Facilities Fees (cont'd)**

**Emmaus Consecutive Division**

(adopted 08/13/07; effective 08/13/07)

Size of Service Line	Tapping Fee			Connection Fee	Customer Facilities Fee
	Distribution		Capacity		
	Type 1	Type 2			
MFR*	\$ 1,000	N/A	\$200	*	*
3/4"	1,480	N/A	400	*	*
1"	2,360	N/A	580	*	*
1-1/2"	3,470	N/A	1,600	*	*
2"	5,100	N/A	2,840	*	*
3"	8,320	N/A	6,400	*	*
4"	11,580	N/A	11,360	*	*
6"	17,350	N/A	25,600	*	*
8"	23,420	N/A	45,520	*	*

N/A - Not Available (Type 2 Fee has not been established)

**Buss Acres Division**

(adopted 8/27/12; effective 10/1/12)

Size of Service Line	Tapping Fee	
	Distribution	Capacity
3/4"	\$ 2,000	\$ 235

**Notes:**

**MFR** - Applicable to each dwelling unit in a mobile home park or multi-family dwelling with individual service and individually metered.

**Connection Fee** is based on actual cost of connecting to the Authority water line, extending the service line to the property line, and inspecting the Customer Service Line.

**LEHIGH COUNTY AUTHORITY**  
**SCHEDULE OF WATER RATES AND CHARGES (cont'd)**

**NEW RATE**

**Customer Facilities Fee** (adopted 12/14/15; effective 1/1/16)

This fee includes the supply and installation of a water meter and a backflow protection device for residential facilities (meter component). The fee can also include, at the customer's option and based on actual cost, installation of a service line from the property line to the customer's facility by the Authority.

All service lines must have an approved backflow protection device installed. The Authority will furnish a DC (dual check) device for residential facilities.

Meter Size	Meter Fee - With DC Backflow	Meter Fee - With No Backflow
5/8"	\$ 357	\$ 320
5/8" Pit	\$ 383	\$ 346
3/4"	\$ 363	\$ 326
3/4" Pit	\$ 389	\$ 352
1"		\$ 386
1" Pit		\$ 412
1 1/2" Displacement *		\$ 651
1 1/2" Turbine *		\$ 913
1 1/2" Compound *		\$ 1,261
2" Displacement *		\$ 844
2" Turbine *		\$ 1,042
2" Compound *		\$ 1,401

Meter Size	Meter Fee - With DC Backflow	Meter Fee - With No Backflow
5/8"	\$ 370	\$ 342
5/8" Pit	\$ 389	\$ 361
3/4"	\$ 376	\$ 348
3/4" Pit	\$ 395	\$ 367
1"		\$ 406
1" Pit		\$ 426
1 1/2" Displacement *		\$ 739
1 1/2" Turbine *		\$ 972
1 1/2" Compound *		\$ 1,304
2" Displacement *		\$ 949
2" Turbine *		\$ 1,156
2" Compound *		\$ 1,529

\* LCA will install all meters 1" or smaller. Larger meters may be purchased from LCA at the prices listed above, which includes a \$50 inspection fee. If LCA installation of a larger meter is requested, the customer will pay actual costs, on a time and materials basis.

**Notes:**

**LEHIGH COUNTY AUTHORITY**  
**SCHEDULE OF WATER RATES AND CHARGES (cont'd)**

---

Backflow protection devices for commercial/industrial facilities shall be approved by the Authority, and supplied, installed and tested by the applicant. Meters larger than 2" shall be approved by the Authority, supplied and installed by the applicant, and inspected by the Authority at the applicant's expense.

**X. Non-Sufficient Funds (NSF) Fee**

<b><u>All Divisions</u></b>	<b>\$25.00</b>
(adopted 9/24/01, effective 1/1/02)	

**XI. Service Initiation Fee**

<b><u>All Divisions</u></b>	<b>\$15.00</b>
(adopted 9/24/01, effective 1/1/02)	

---



**LEHIGH COUNTY AUTHORITY  
SCHEDULE OF WATER RATES AND CHARGES (cont'd)**

**CITY OF ALLENTOWN**

Adopted 10/19/2015 & 12/14/15; Effective 1/1/2016

**NOTE:** Unless expressed specifically in this Schedule of Rates and Charges, customers of the City of Allentown water system are subject to any and all additional charges, fees, penalties and policies stated in Lehigh County Authority's Rules & Regulations for Water Service and its Schedule of Water Rates and Charges duly adopted for its non-City systems.

**A. Metered Water Use**

<b>Meter Size</b>	<b>Monthly Charge</b>	<b>Quarterly Charge</b>
5/8" *	n/a	\$ 25.84
3/4" *	n/a	\$ 31.68
1" *	n/a	\$ 43.35
1 1/2"	\$ 33.26	n/a
2"	\$ 44.93	n/a
3"	\$ 75.95	n/a
4"	\$ 111.04	n/a
6"	\$ 208.19	n/a
8"	\$ 324.90	n/a

Typical residential meter sizes (5/8", 3/4" and 1") are billed Quarterly.  
Larger meters sized 1 1/2" and larger are billed Monthly.

<b>Volume</b>	<b>Rate per 1,000 Gallons</b>
All Volume	\$ 3.17878

**NEW RATE**

**B. Capital Cost Recovery Charge **\$0.04617 per 1000 gallons****

**C. Private Fire Protection**

<b>Each Hydrant</b>	<b>\$317.75 per year</b> (may be billed monthly or quarterly)
---------------------	--

**NEW RATE**

**D. Tapping Fees**

**Part 1 – Pre-Concession Rate for Pre-Concession Capital Cost Recovery**  
\$5.08 per gallon **2016 Rate: \$5.21 per gallon**

**Part 2 – Post-Concession Rate for LCA Capital Cost Recovery**  
**Capacity Part** **\$0.00016 per gallon**  
**Distribution Part** **\$0.00328 per gallon**

**LEHIGH COUNTY AUTHORITY  
SCHEDULE OF WATER RATES AND CHARGES (cont'd)**

**NEW RATE**

**E. Customer Facilities Fees**

Fees includes the supply and installation of a water meter and associated components.

<b>Meter Size</b>	<b>With LCA Installation*</b>	<b>Without LCA Installation*</b>
5/8"	\$258	
3/4"	\$280	
1"	\$308	
1 1/2"	\$487	
2"	\$602	
3" Compound		\$1,318
3" Turbine		\$1,317
4" Compound		\$1,594
4" Turbine		\$1,594
6" Compound		\$2,764
6" Turbine		\$2,764
8" Compound		\$7,404
8" Turbine		\$7,404

**2016 Fees**

<b>Meter Size</b>	<b>With LCA Installation*</b>	<b>Without LCA Installation*</b>
5/8"	\$272	
3/4"	\$294	
1"	\$313	
1 1/2"	\$489	
2"	\$613	
3" Compound		\$1,572
3" Turbine		\$1,134
4" Compound		\$2,622
4" Turbine		\$2,068
6" Compound		\$4,424
6" Turbine		\$3,606
8" Compound		\$7,053
8" Turbine		\$6,013

\* LCA will install all meters 2" or smaller. Larger meters may be purchased from LCA at the prices listed above, which includes a \$50 inspection fee. If LCA installation of a larger meter is requested, the customer will pay actual costs, on a time and materials basis.

<b>Other Components</b>	<b>Price</b>	<b>2016 Price</b>
5/8" Meter Horn	\$49.00	\$41.00
3/4" Meter Horn	\$59.00	\$59.00
Curb Box	\$53.33	\$53.33

**LEHIGH COUNTY AUTHORITY**  
**SCHEDULE OF WATER RATES AND CHARGES (cont'd)**

---

<b>NEW RATE</b>
-----------------

**F. Connection Fee**

Actual cost of connecting to the Authority water line, completed by Authority personnel. Additional fees may apply for service line inspection, plan review, construction permits and/or capital recovery charges. Please contact the Authority's Capital Works department for more information.

<b>Tap Size</b>	<b>Connection Fee</b>	<b>2016 Fee</b>
3/4"	\$248	\$314
1"	\$270	\$336
1 1/2"	\$429	\$493
2"	\$564	\$609
4" x 4"	\$1,622	\$1,860
6" x 4"	\$1,655	\$1,830
6" x 6"	\$1,832	\$2,009
8" x 4"	\$1,651	\$1,845
8" x 6"	\$1,832	\$2,019
8" x 8"	\$2,322	\$2,521
12" x 4"	\$1,776	\$1,980
12" x 6"	\$1,964	\$2,184
12" x 8"	\$2,459	\$2,606
12" x 12"	\$3,897	\$3,863

**LEHIGH COUNTY AUTHORITY  
SCHEDULE OF WASTEWATER RATES AND CHARGES**

---

**UPPER MILFORD TOWNSHIP, WEISENBERG TOWNSHIP,  
HEIDELBERG HEIGHTS, WYNNEWOOD, SAND SPRING, WASHINGTON  
TOWNSHIP, WESTERN LEHIGH INTERCEPTOR & LITTLE LEHIGH  
RELIEF INTERCEPTOR SYSTEMS**

**I. Schedule of Wastewater Rates**

**A. Upper Milford Township System**

(adopted 12/10/12; effective 01/01/13)

<b>Flow Charge</b>	<b><u>\$/1,000 gals</u></b>
All Flow	4.53
<b>Fixed Charge per Quarter</b>	<b><u>\$ per Equivalent Dwelling Unit (EDU)</u></b>
- Multi-Family Residential	10.50
- All Other Accounts	21.00

**B. Weisenberg Township System**

(adopted 12/10/12; effective 01/01/13)

<b>Flow Charge</b>	<b><u>\$/1,000 gals</u></b>
All Flow	4.53
<b>Fixed Charge per Quarter</b>	<b><u>\$ per Equivalent Dwelling Unit (EDU)</u></b>
- Multi-Family Residential	10.50
- All Other Accounts	21.00

**Weisenberg Township System (Arcadia West)**

(adopted 12/11/06; effective 01/01/07)

<b>Quarterly Flow Charge</b>	<b><u>\$/1,000 gals</u></b> 58.00
<b>Quarterly Fixed Charge</b>	<b><u>\$/1000 gals of Allocation per day</u></b> 7.55

**LEHIGH COUNTY AUTHORITY  
SCHEDULE OF WASTEWATER RATES AND CHARGES**

---

**C. Heidelberg Heights System**

(adopted 12/10/12; effective 01/01/13)

<b>Flow Charge</b>	<b><u>\$/1,000 gals</u></b>
All Flow	9.53
<b>Fixed Charge per Quarter</b>	<b><u>\$ per Equivalent Dwelling Unit (EDU)</u></b>
- Multi-Family Residential	10.50
- All Other Accounts	21.00

**D. Wynnewood System**

(adopted 12/10/12; effective 01/01/13)

<b>Flow Charge</b>	<b><u>\$/1,000 gals</u></b>
All Flow	9.53
<b>Fixed Charge per Quarter</b>	<b><u>\$ per Equivalent Dwelling Unit (EDU)</u></b>
- Multi-Family Residential	10.50
- All Other Accounts	21.00

**E. Sand Spring System**

(adopted 12/10/12; effective 01/01/13)

<b>Flow Charge</b>	<b><u>\$/1,000 gals</u></b>
All Flow	9.53
<b>Fixed Charge per Quarter</b>	<b><u>\$ per Equivalent Dwelling Unit (EDU)</u></b>
- Multi-Family Residential	10.50
- All Other Accounts	21.00

**F. Wastewater Treatment Plant Direct Customer**

(adopted 12/10/12; effective 01/01/13)

<b>Flow Charge</b>	<b><u>\$/1,000 gals</u></b>
All Flow	4.53
<b>Fixed Charge per Quarter</b>	<b><u>\$21.00*</u></b>

\* Per Equivalent Dwelling Unit (EDU)

**LEHIGH COUNTY AUTHORITY  
SCHEDULE OF WASTEWATER RATES AND CHARGES**

---

**G. Washington Township System**

(adopted by resolution of Washington Township Board of Supervisors 12/2/08; effective 1/1/09 – Administered by Lehigh County Authority per agreement, as operator, approved 4/13/09; effective 1/1/09. Current rate adopted by LCA 12/10/12; effective 01/01/13). All other Authority administrative fees shall apply to these customers, including those set forth in the Metering Fees and Other Charges categories of this schedule.

<b>Fixed Charge</b>	<b>\$/qtr</b>
All customers	\$124.00

<b>Flow Charge</b>	<b>\$/1,000 gals</b>
All flow	\$5.00

**H. Lynn Township**

(adopted 12/07/11; effective 01/01/12)

<b>Flow Charge</b>	<b>\$/1,000 gals</b>
Commercial accounts, flow in excess of 15,000 gallons per quarter	7.20
<b>Fixed Charge per EDU per Quarter</b>	<b>\$158.98</b>

**II. Metering Fees**

<b>NEW RATE</b>
-----------------

**A. Meter Purchase/Installation Fee**

(adopted 12/14/16; effective 1/1/16)

Meter Size	Purchase & Inspection *	2016 Fees
5/8"	\$ 277	\$ 305
5/8" Pit	303	324
3/4"	283	311
3/4" Pit	309	330
1"	343	370
1" Pit	369	390
1-1/2"	651	739
1-1/2" Pit	913	972
2" Displacement	1,261	1,304
2" Displacement Pit	844	949
2" Turbine	1,042	1,156
2" Compound	1,401	1,529

\* Prices include ECR meter with touchpad, radio read unit and installation wire, plus \$50 inspection fee. Plumber shall install all components and call for meter inspection by LCA personnel.

**LEHIGH COUNTY AUTHORITY  
SCHEDULE OF WASTEWATER RATES AND CHARGES**

---

**B. Meter Inspection Fee** **\$50.00**  
(adopted 12/15/14; effective 1/1/15)

**C. Meter Test Fee**  
(adopted 12/15/14; effective 1/1/15)

Meter Size	Fee
5/8", 3/4", 1"	\$50.00
Larger than 1"	Actual Cost if >\$50

**III. Other Charges**

**A. Service Order / Site Visit Fee**  
(adopted 12/15/14; effective 1/1/15)

Business Hours – 7:00 a.m. and 4:45 p.m.,  
Monday through Friday (except holidays) **\$50.00**

After Hours **\$150.00**

**B. Site Revisitation Charge** **\$100.00**  
(adopted 12/15/14; effective 1/1/15)

**C. Lien Administration Fee**  
(adopted 12/13/04; effective 01/01/05)

**\$56.50 + Current Lehigh County Clerk of Court's Filing Fee**

**D. Non-Sufficient Funds (NSF) Fee** **\$25.00**  
(adopted 9/24/01, effective 1/01/02)

**E. Service Initiation Fee** **\$15.00**  
(adopted 9/24/01, effective 1/01/02)

**F. Sampling and Testing Charges** **\$170.00/day**  
(adopted 12/18/00; effective 1/1/01)  
(Commercial & Industrial)

**Fats-Oils-Greases Analysis** **\$36.00/sample**  
(adopted 7/27/09; effective 8/1/09)

**LEHIGH COUNTY AUTHORITY  
SCHEDULE OF WASTEWATER RATES AND CHARGES**

---

**G. Exceptional Strength Charges**  
(adopted 12/14/15; effective 1/1/16)

**NEW RATE**

(Commercial & Industrial)	<u>\$/pound</u>	<u>2016 Rate</u>
BOD	0.22	0.23
TSS	0.20	0.21
TKN	0.29	0.31

**H. Use of Easement Preparation Fee** **\$90.00**  
(adopted 12/07/11; effective 01/01/12)



**LEHIGH COUNTY AUTHORITY  
SCHEDULE OF WASTEWATER RATES AND CHARGES**

**IV. Capital Recovery Charges**

System	Tapping Fee \$/gallon/day	Tapping Fee \$/EDU	Connection Fee	Customer Facilities Fee
<b>Upper Milford System</b> (adopted 7/13/15; effective 7/15/15)			Actual Cost Trended*	Actual Cost Trended*
Route 29 Service Area				
Contributed Area (includes Western Lehigh fees plus UMiT Capacity Part)	11.71	2,635.00		
LCA-Installed Area (includes Contributed Area fees plus UMiT Collection Part)	20.87	4,788.00		
Lower Macungie Twp. Customer	2.37	565.00		
Other Service Areas				
Contributed Area (includes Western Lehigh fees plus UMiT Capacity Part- Other)	10.00	2,234.00		
Non-Contributed Area (includes Contributed Area fees plus UMiT Collection Part)	19.16	4,387.00		
<b>Western Weisenberg Twp System</b> (adopted 7/13/15; effective 7/15/15)				
LCA Planning – Collection Fee	2.44	640.50	Historical Cost plus Financing Actual Cost Trended	
Wastewater Treatment Plant	37.40	9,817.50		
<b>Arcadia West Only:</b>				
Reimbursement Fee – Collection Part	47.64	12,505.50	Actual Cost Trended	
Reimbursement Fee – Capacity Part	31.49	8,266.13	Actual Cost Trended	
<b>Wynnewood System</b> (adopted 6/18/12; effective 7/1/12)				
Collection	9.38	2,260.58	Actual Cost	Actual Cost
Capacity	5.71	1,376.11		
<b>Heidelberg Heights System</b> (adopted 6/18/12; effective 7/1/12)				
Collection	1.49	359.09	Actual Cost	Actual Cost
Capacity	9.45	2,227.45		
<b>Sand Spring System</b> (adopted 6/18/12; effective 7/1/12)				
Collection	2.30	554.30	Actual Cost	Actual Cost
Capacity	3.43	826.63		

\*If constructed by Authority; if constructed by property owner, a \$90 inspection fee applies.

The capital recovery fees set forth in this schedule do not apply to the Washington Township sewer system since the Washington Township Board of Supervisors establishes such fees and administers capital recovery fees directly.

**LEHIGH COUNTY AUTHORITY  
SCHEDULE OF WASTEWATER RATES AND CHARGES**

**NEW RATE**

**WESTERN LEHIGH INTERCEPTOR SYSTEM**

**I. Schedule of Wastewater Rates**

(adopted 12/14/15; effective 1/1/16)

<b>LCA Signatories</b>	<b>Rate (\$)</b>	<b>2016 Rate</b>
Flow (per 1,000 gallons)	1.26	1.28
BOD (per pound)	0.22	0.23
TSS (per pound)	0.20	0.21
TKN (per pound)	0.29	0.31
Allocation (per 1,000 gallons per day)	0.21	0.22
<b>Emmaus</b>		
Flow (per 1,000 gallons)	0.74	0.73

**II. Tapping Fee**

(adopted 7/13/15; effective 7/15/15)

<b>System</b>	<b>Tapping Fee \$/gal/day</b>	<b>Tapping Fee \$/EDU</b>	<b>Costing Method</b>
Treatment Allocation	5.67	1,264.00	Actual Cost Trended
Western Lehigh Interceptor	2.80	623.00	

**NEW RATE**

**LITTLE LEHIGH RELIEF INTERCEPTOR SYSTEM**

**I. Schedule of Wastewater Rates**

(adopted 12/14/15; effective 1/1/16)

	<b>Rate (\$)</b>	<b>2016 Rate</b>
<b>LCA Signatories – Phase 1</b>	0.12	No change
Flow (per 1,000 gallons)		
<b>Other Users – Lower Macungie Phase 2 &amp; Brookside Road, Salisbury, and So. Whitehall Townships</b>		No change
Flow (per 1,000 gallons)	0.09	
<b>LCA Signatories – Phase 2 Flow (per 1,000 gallons)</b>	0.03	No change

**II. Tapping Fee**

(adopted 7/13/15; effective 7/15/15)

<b>System</b>	<b>Tapping Fee \$/gal/day</b>	<b>Tapping Fee \$/EDU</b>	<b>Costing Method</b>
Little Lehigh Relief Interceptor	0.97	215.00	Actual Cost Trended

**LEHIGH COUNTY AUTHORITY  
SCHEDULE OF WASTEWATER RATES AND CHARGES**

---

**LINE INSPECTION AND CLEANING SERVICES**

(adopted 7/27/09; effective 8/1/09)

<b><u>Crew Size</u></b>	<b><u>TV Inspection (\$/hr)</u></b>	<b><u>Sewer Cleaning (\$/hr)</u></b>	<b><u>Flow Monitoring (\$/hr)</u></b>
One Technician			
Regular Rate	\$111	\$116	\$68
Overtime Rate	\$140	\$144	\$96
Two Technicians			
Regular Rate	\$168	\$173	\$125
Overtime Rate	\$226	\$230	\$182
Three Technicians			
Regular Rate	\$226	\$230	N/A
Overtime Rate	\$311	\$316	N/A

**LEHIGH COUNTY AUTHORITY  
SCHEDULE OF WASTEWATER RATES AND CHARGES**

**CITY OF ALLENTOWN**

Adopted 10/19/2015 & 12/14/15; Effective 1/1/2016

**NOTE:** Unless expressed specifically in this Schedule of Rates and Charges, customers of the City of Allentown wastewater system are subject to any and all additional charges, fees, penalties and policies stated in Lehigh County Authority's Rules & Regulations for Sewerage Service and its Schedule of Wastewater Rates and Charges duly adopted for its non-City systems.

**A. Sewer Usage Charges**

Meter Size	Monthly Charge	Quarterly Charge
5/8" *	n/a	\$ 8.97
3/4" *	n/a	\$ 10.99
1" *	n/a	\$ 15.02
1 1/2"	\$ 11.45	n/a
2"	\$ 15.45	n/a
3"	\$ 26.16	n/a
4"	\$ 38.13	n/a
6"	\$ 71.45	n/a
8"	\$131.09	n/a

Typical residential meter sizes (5/8", 3/4" and 1") are billed Quarterly.  
Larger meters sized 1 1/2" and larger are billed Monthly.

Flow Charge	Rate per 1,000 Gallons
All flow based on metered water usage***	\$ 2.29358

\*\*\* Unmetered residential accounts will be charged for flow based on an average usage of 180 gallons per day.

**NEW RATE** B. **Capital Cost Recovery Charge** **\$0.02272 per 1000 gallons**

**NEW RATE** C. **Administrative Order Fee** **\$0.13074 per 1000 gallons**  
Administrative Order Fee is collected to reimburse the City of Allentown for expenses associated with complying with the USEPA Administrative Order to correct / eliminate sanitary sewer system overflows.

**NEW RATE** D. **Tapping Fees**

**Part 1 – Pre-Concession Rate for Pre-Concession Capital Cost Recovery**  
**\$3.87 per gallon                      2016 Rate: \$3.91 per gallon**

**Part 2 – Post-Concession Rate for LCA Capital Cost Recovery**  
**Capacity Part                      \$0.00242 per gallon**  
**Collection Part                    \$0.00010 per gallon**

**LEHIGH COUNTY AUTHORITY  
SCHEDULE OF WASTEWATER RATES AND CHARGES**

---

**NEW RATE****E. Exceptional Strength Charges**

(Commercial & Industrial)	<b><u>\$/pound</u></b>
BOD	0.226
TSS	0.192
TKN	0.336

**NEW RATE****F. Industrial Pretreatment Program Fees**

Issue Initial Two (2) Year Permit	\$1,200.00
Renewal Fee	\$575.00
Review of Monitoring Reports Required by Federal Regulations	\$275.00
Single Occurrence Review	\$350.00
Site Visitations and Inspection	\$130.00
Monitoring Reports Preparation	\$135.00
Placement of Chemical Samplers	\$105.00
Sample Collection and Preparation	\$52.50
Biochemical Oxygen Demand	\$27.50
Cyanide, Total	\$43.00
Oil & Grease	\$48.50
pH	\$12.00
Phenols	\$42.50
Solids, Total Dissolved	\$14.50
Solids, Total Suspended	\$17.50
Solids, Total	\$14.50
Sulfides	\$25.50
Total Kjeldahl Nitrogen (TKN)	\$28.50
Total Petroleum Hydrocarbons	\$40.00
Total Phosphorous as P	\$21.00
Cadmium	\$15.00
Chromium	\$15.00
Copper	\$15.00
Lead	\$15.00
Molybdenum	\$15.00
Nickel	\$15.00
Silver	\$15.00
Selenium	\$15.00
Zinc	\$15.00
Mercury	\$23.00
Cobalt	\$15.00
Lithium	\$15.00

---

## MEMORANDUM

---

DATE: 11 December 2015

TO: Lehigh County Authority Board of Directors

COPY: Management Staff

FROM: Bradford E. Landon, Solicitor

SUBJECT: December Board Meeting Management Staff Changes Resolutions

The Board notes mention a resolution reflecting management staff changes. As I tried to draft that resolution, it became apparent there were a number things at play that needed to be address that made the use of a series of resolutions easier to understand. Therefore, I have prepared a separate resolution to deal specifically with the elimination of the Chief Administrative Officer position and redistribution of responsibilities attributed to that position in Authority actions, guidelines, rules, policies, etc. (Resolution No. 12-2015-2).

Financial institutions each have a multitude of signature cards that need to be completed to reflect different persons having the ability to sign on behalf of the Authority with financial matters. The requirements here have become much more stringent since the financial crisis of 2008, with banks being unwilling to bend in their requirements even a little bit, citing the Patriot Act. These cards will all have to be changed and often Banks request a specific resolution on their form. We are trying to see if we can pass a resolution that will be able to be used generically across the Board (Resolution No. 12-2015-3). This resolution does not increase the previous abilities and authorizations to certain management staff on financial matters and reflects provisions in other resolutions the Board has passed in the past in this regard. Also some financial institutions are requiring a specific person to be mentioned rather than just a staff position, so we have included the third resolution to provide that if it is necessary (Resolution No. 12-2015-4).

# RESOLUTION No. 12-2015-2

(Duly adopted 14 December 2015)

**A RESOLUTION REFLECTING THE ELIMINATION OF THE CHIEF ADMINISTRATIVE OFFICER POSITION AND EFFECTUATING THE REASSIGNMENT OF RESPONSIBILITIES TO NEWLY CREATED OR EXISTING POSITIONS.**

WHEREAS, Lehigh County Authority (hereinafter the "Authority") Board of Directors (the "Board") periodically takes action designating particular staff positions to fulfill certain responsibilities under Authority policies, procedures, rules, etc.; and

WHEREAS, there has been a reorganization of management staff as a result of the retirement of Aurel M. Arndt as Chief Executive Officer and appointment of Liesel M. Gross as the new Chief Executive Officer as well as the elimination of the position of Chief Administrative Officer and the establishment of numerous new positions;

NOW THEREFORE, it shall be resolved that

1. It is the intent of this resolution to be interpreted as broadly as possible and cover all Board actions, policies, guidelines, statements, procedures, etc. in which the specific Authority staff position of Chief Administrative Officer has been cited. Such Chief Administrative Officer references shall be replaced by the respective *Now Authorized to Act* position and title in the table below as though it had been used in the original authorization. All prior Board resolutions and motions referencing the Chief Administrative Officer are hereby amended to reflect the respective current position titles cited herein; however, if such an action, policy, guideline, statement, procedure, etc. has not been specifically cited in this resolution, the previous Chief Administrative Officer responsibility shall be assigned by the Chief Executive Officer to an appropriate person. Additionally, the following list is not intended to be all inclusive so that this resolution shall apply whether or not an action, policy, guideline, statement, procedure, etc. is cited below.

<i>POLICY/GUIDELINE/STATEMENT/PROCEDURE</i>	<i>NOW AUTHORIZED TO ACT</i>
Cash & Investment Financial Guideline	Accounting Supervisor
Customer Identity Theft Prevention Program	Director of Customer Services
Debt Management Financial Guideline	Accounting Supervisor
Employee Manual (Workplace Searches section)	Human Resources Manager
Internet Use Policy	Chief Financial Officer
Purchasing & Accounts Receivable Financial Guideline	Accounting Supervisor

2. Board actions that have indicated that the Chief Administrative Officer has authority to attest to the signatures of Authority signers, shall hereby be revised to indicate that the Human Resources Manager shall have the ability and responsibility in place of the Chief Administrative Officer, in addition to the Solicitor independently also having that ability and responsibility.

3. This resolution hereby supersedes and amends, as of 19 December 2015, all previous actions taken by the Authority appointing the Chief Administrative Officer to transact its matters.

On motion of \_\_\_\_\_, seconded by \_\_\_\_\_,  
this resolution was adopted the 14<sup>th</sup> day of December 2015.



# **RESOLUTION No. 12-2015-3**

(Duly adopted 14 December 2015)

## ***A RESOLUTION DESIGNATING STAFF POSITIONS TO EXECUTE AND PERFORM AUTHORITY FINANCIAL TRANSACTIONS FUNCTIONS***

WHEREAS, Lehigh County Authority (hereinafter the "Authority") Board of Directors (the "Board") periodically takes action designating particular staff positions to fulfill certain responsibilities under Authority policies, procedures, rules, etc.; and

WHEREAS, there has been a reorganization of management staff as a result of the retirement of Aurel M. Arndt as Chief Executive Officer and appointment of Liesel M. Gross as the new Chief Executive Officer, as well as the elimination of the position of Chief Administrative Officer and the establishment of numerous new positions; and

WHEREAS, the Authority has established and will continue to establish accounts with various financial, banking, investment and lending institutions (the "Bank"); and

WHEREAS, the Bank desires to establish the designated persons to perform functions related to respective accounts and transactions with the Bank; and

NOW THEREFORE, it shall be resolved that:

1. The Authority hereby names the Chief Executive Officer as the primary contact name for all accounts and transactions with the Bank and authorizes the Chief Executive Officer to designate specific persons to perform transactions, including signing signature cards, if such authorization is not contained in existing Authority resolutions, actions, policies, guidelines, statements, procedures, etc.

2. In accordance with the Authority's Financial Guidelines the following persons are authorized to sign on behalf of the Authority as set forth in this resolution ("Authorized Person"):

- (a) Chief Executive Officer
- (b) Chief Financial Officer
- (c) Accounting Supervisor
- (d) Chief Capital Works Officer
- (e) Chief Operations Officer

3. The Authorized Persons are authorized and empowered to perform any one or more of the following actions for and on behalf of the Authority and on such terms and conditions as such Authorized Person may deem advisable in his/her sole discretion,

all in accordance with Authority resolutions, actions, policies, guidelines, statements, procedures, etc., with signatures required by two of the Authorized Persons:

- (a) Open and maintain any safe deposit boxes, lockboxes and escrow, savings, checking, depository, or other accounts with the Bank;
- (b) Withdraw any funds or draw, sign and deliver in the name of the Authority any check or draft against funds of the Authority accounts in such boxes or accounts;
- (c) Implement additional depository and funds transfer services (including, but not limited to, facsimile signature authorizations, wire transfer agreements, night depository agreements, automated clearinghouse agreements, and payroll deposit programs);
- (d) Appoint the Bank as attorney-in-fact for any purpose (including, but not limited to, endorsing any checks, drafts, notes or other instruments payable to the Authority);
- (e) Execute any document (including, but not limited to, facsimile signature, authorization agreements, wire transfer agreements, automated clearinghouse agreements, powers of attorney, and waivers) and take any action on behalf of the Authority;
- (f) Designate from time to time the person or persons to receive from the Bank any and all cancelled checks and/or statements of account;
- (g) Purchase, hold, finance, pledge, exercise, convert, tender, redeem, exchange, transfer, assign, sell, enter into, write, issue, terminate, amend and otherwise deal and trade, singly or in combination, in the manner and with the types of investments set forth in the Authority's then-current Financial Guideline on Cash & Investment Management;
- (h) Give to and receive from the Bank oral, written or electronic instructions, confirmations, notices or demands with respect to any account, activity or transaction;
- (i) Bind the Authority to enter into and perform any transaction or agreement, amendment or modification thereof, relating to any account, activity or transaction involving the Authority;
- (j) Pay in cash or by check or by credit or debit card or draft drawn upon the funds of the Authority any sums required to be paid in connection with any account, activity or transaction;
- (k) Execute or otherwise assent to or enter into on behalf of the Authority all agreements, confirmations, releases, assignments, powers of attorney or other documents in connection with any account, activity or transaction; and
- (l) Establish and maintain an asset management account with debit card, check writing and margin privileges, from which account funds are directly spent.

4. The Authorized Persons are authorized and empowered to perform any one or more of the following actions for and on behalf of the Authority and on such terms and conditions as such Authorized Person may deem advisable in his/her sole discretion, all in accordance with Authority resolutions, actions, policies, guidelines, statements, procedures, etc., with a signature required by one of the Authorized Persons:

- (a) Assign, negotiate, endorse and deposit in and to such boxes and accounts any checks, drafts, notes, and other instruments and funds payable to or belonging to the Authority;
- (b) Endorse to the Bank any checks, drafts, notes, or other instruments payable to the Authority; and
- (c) Order the transfer of record of any securities, funds or other property to any name and to accept delivery of any securities, funds or other property or direct the sale or exercise of any rights with respect to any securities or other property;

5. The endorsement of items for deposit may be by the written or stamped endorsement of the Authority without designation of the person making endorsement.

6. The authority and power of any Authorized Person as provided in this resolution will continue in full force and effect until the Board of Directors adopts a resolution or takes other action amending, modifying or revoking one or more of the preceding resolutions and a certified copy of the properly executed resolution is actually received by the Bank.

7. The Secretary, Assistant Secretary, Solicitor or Human Resources Manager of the Authority is authorized to attest to the signatures of any of the Authorizing Parties.

8. The Secretary, Assistant Secretary or Solicitor of the Authority is authorized from time to time to certify the adoption of the foregoing resolutions to the Bank, the continuing effect of these resolutions, and the incumbency of the various parties authorized to exercise the rights in these resolutions.

On motion of \_\_\_\_\_, seconded by \_\_\_\_\_, this Resolution was adopted the 14<sup>th</sup> day of December 2015.

# RESOLUTION No. 12-2015-4

(Duly adopted 14 December 2015)

## **A RESOLUTION SPECIFYING PARTICULAR EMPLOYEES AS AUTHORIZED PERSONS TO PERFORM AUTHORITY FINANCIAL TRANSACTIONS FUNCTIONS**

WHEREAS, Lehigh County Authority (hereinafter the "Authority") Board of Directors (the "Board") periodically takes action designating particular staff positions to fulfill certain responsibilities under Authority policies, procedures, rules, etc.; and

WHEREAS, to reflect a reorganization of management staff as a result of the retirement of Aurel M. Arndt as Chief Executive Officer and appointment of Liesel M. Gross as the new Chief Executive Officer, as well as the elimination of the position of Chief Administrative Officer and the establishment of numerous new positions, the Board approved Resolution No. 12-2015-3 outlining various management positions to perform financial transactions for the Authority ("Authorized Persons"); and

WHEREAS, some financial and lending institutions (the "Bank) require Board action naming specific persons as the Authorized Persons;

NOW THEREFORE, it shall be resolved that the following persons are duly appointed Authorized Persons or otherwise authorized to act on behalf of the Authority in the capacities set forth below and that the following original signatures are genuine in all respects:

### AUTHORIZED PERSONS

<i>Name of Authority Employee</i>	<i>Title/Position</i>	<i>Specimen Signature</i>
Liesel M. Gross	Chief Executive Officer	
Edward C. Klein	Chief Financial Officer	
Linda M. Eberhardt	Accounting Supervisor	
Frank J. Leist	Chief Capital Works Officer	
John W. Parsons	Chief Operations Officer	

On motion of \_\_\_\_\_, seconded by \_\_\_\_\_, this Resolution was adopted the 14<sup>th</sup> day of December 2015.

# MEMORANDUM

**Date:** December 7, 2015

**To:** Authority Board  
**From:** Jason Peters, Frank Leist  
**Subject:** Allentown Division- Water Main Replacement Program  
 Amendment to Design Phase - Cycles 1-3

**MOTIONS / APPROVALS REQUESTED:**

No.	Item	Amount
1	Capital Project Authorization – (Amendment) Design Phase Cycles 1-3	\$115,000
2	Professional Services Authorization – Gannett Fleming, Inc. (1), (2)	\$115,000

- (1) *Included in the Capital Project Authorization.*
- (2) *Does not include Construction phase related engineering services.*

**THIS APPROVAL- AMENDMENT TO DESIGN PHASE- CYCLES 1 -3**

The Board authorized the design phase for five- miles of main replacement in October 2013 which included a Professional Service Authorization awarded to Gannett Fleming, Inc. The Lease required the replacement of one mile of main cycle 1 (year-1) and two–miles in each cycle 2 and 3(years 2 & 3) for a total of five-miles. In reality because of the necessity to replace water mains between intersections thus allowing future replacements to be easily extended without interruptions in service to customers in the area; and the internal decision replace at minimum four- miles of main in cycle -3 (*rather than the required two-miles*); an additional 2.69 miles of water main replacements were added to the initial project scope along with other minor items. The other minor items which included the research and delineation of easements for right of ways that have been vacated and the design of a pressure reducing vault that was part of a main being replaced that had reached it end of useful life. Board approval is requested for the applicable amendments to the Professional Services and Capital Project Authorizations for the added design phase work. The following table summarizes the additional design lengths for cycles 1-3.

Cycle	Distance (Miles)		
	Required	Actual	Additional
1	1	1.28	.28
2	2	2.01	.01
3	2	4.40	2.4
Total	5	7.69	2.69

**FUTURE AUTHORIZATIONS:** Capital Project Authorization (CPA) Amendment(s) will be presented to the Board at a later date for:

Construction Phase – Cycle 3: Request for Board approval in late March or early April after bids are received.

# CAPITAL PROJECT AUTHORIZATION

**PROJECT NO.:** AD-W-15-1 **BUDGET FUND:** Allentown Div\Water\Capital

**PROJECT TITLE:** Allentown Division -Water Main Replacement Program Cycles 1-3

- PROJECT TYPE:**
- Construction
  - Engineering Study
  - Equipment Purchase
  - Amendment No.3

**THIS AUTHORIZATION TO DATE (W/ABOVE)** \$ 115,000  
\$ 5,796,960

**DESCRIPTION AND BENEFITS:**

The Operating Standards of the Lease Agreement (Agreement) requires Lehigh County Authority to replace one mile of main cycle 1 (year-1) and two-miles in each cycle 2 and 3(years 2 & 3) for a total of five-miles. In reality because of the necessity to replace water mains between intersections thus allowing future replacements to be easily extended without interruptions in service to customers in the area; and the internal decision replace at minimum four- miles of main in cycle - 3 an additional 2.69 miles of water main replacements were added to the initial project scope. The additional 2.69 miles of water mains replaced during these three cycles will be credited to future cycles.

**THIS AMENDMENT -Design Phase, Cycles 1-3**

Please reference the cover Memo for additional information.

REQUESTED THIS AUTHORIZATION (Amendment) Design Phase - Cycles 1-3			
Phase/Item	Authorizations		
	Previous	This	Total
<i>Design Phase Cycles 1-3</i>			
Staff	\$ 190,000	\$ -	\$ 190,000
Professional Services	467,952	115,000	582,952
Miscellaneous	150,000	-	150,000
Contingencies	80,000	-	80,000
<b>Sub-total</b>	<b>\$ 887,952</b>	<b>\$ 115,000</b>	<b>\$ 1,002,952</b>
<i>Construction Phase Cycles 1 &amp; 2</i>			
Staff	\$ 87,500	\$ -	\$ 87,500
Professional Services	292,283	-	292,283
Construction Contracts	3,965,955	-	3,965,955
LCA Procured Materials	45,770	-	45,770
Miscellaneous	52,500	-	52,500
Contingencies	350,000	-	350,000
<b>Sub-total</b>	<b>\$ 4,794,008</b>	<b>\$ -</b>	<b>\$ 4,794,008</b>
<b>Totals</b>	<b>\$ 5,681,960</b>	<b>\$ 115,000</b>	<b>\$ 5,796,960</b>

Future Authorization- Construction Phase Cycle-3	\$ 3,800,000
--	--------------

Total Estimated Project Cost	\$ 9,596,960
------------------------------	--------------

**REVIEW AND APPROVALS:**

Project Manager	Date	Chief Executive Officer	Date
Chief Capital Works Officer	Date	Chairman	Date



**Lehigh County Authority**

1053 Spruce Street \* P.O. Box 3348 \* Allentown, PA 18106-0348  
(610)398-2503 \* FAX (610)398-8413 \* Email: service@lehighcountyauthority.org

**PROFESSIONAL SERVICES AUTHORIZATION  
Amendment No. 3**

**Professional:** GANNETT FLEMING, INC.  
P.O. Box 67100  
Harrisburg, PA 17106

**Date:** December 7, 2015

**Requested By:** Jason Peters

**Approvals**  
**Department Head:** \_\_\_\_\_  
**General Manager:** \_\_\_\_\_

**Description of Services (Work Scope, Steps, Check Points, etc.):**

**Allentown Division – Water Main Replacement Program Cycles 1-3**

*Previous Authorizations- Design Phase, Cycles 1-3: \$467,952  
Construction Phase, Cycle 1: \$152,862  
Construction Phase, Cycle 2: \$57,221*

**This Authorization- Amendment to Design phase Cycles 1-3: \$115,000**

Gannett Fleming, Inc. will perform the design related for the additional 2.69 miles of main replacement in Cycles 1-3.

**Design Phase:**

**Cost Estimate (not to be exceeded without further authorization): \$793,035**

(For Authority Use Only)

**Authorization Completion:**

**Approval:** \_\_\_\_\_ **Actual Cost:** \_\_\_\_\_ **Date:** \_\_\_\_\_



Lehigh County Authority

1053 Spruce Street \* P.O. Box 3348 \* Allentown, PA 18106-0348  
(610)398-2503 \* FAX (610)398-8413

**PROFESSIONAL SERVICES AUTHORIZATION**

**AMENDMENT NUMBER 22**

**Professional:**

Arcadis  
Jim Shelton  
640 Freedom Business Center  
King of Prussia, PA 19406

**Date:** 12/4/15

**Requested By:** Pat Mandes *Pat Mandes*

**Approvals**

**Department Head:** \_\_\_\_\_

**Chief Executive**

**Officer:** \_\_\_\_\_

**Description of Services (Work Scope, Steps, Check Points, etc.):**

This is an amendment to the current Arcadis authorization for the WLI Infiltration and Inflow Project: The work covered by this amendment includes Program Management for 2016.

Program Management includes work that is not defined by other approved tasks. The work will include on-call services, EPA semi-annual report, annual DEP report, attending meetings with DEP and EPA, the LCA I & I committee and the City I & I Committee, technical evaluations as needed and other coordination or services as needed. The total "Not to Exceed" cost is \$100,000 for the period ending December 2016.

The scope of work is described in more detail in the proposal dated December 03, 2015.

**Cost Estimate (not to be exceeded without further authorization):** This amendment is not to exceed \$50,000 for Program Management. With this amendment the total authorization for the I&I Program consulting will be \$2,054,000.

**Time Table and Completion Deadline:**

January 2016 through December 2016.

**(For Authority Use Only)**

**Authorization Completion:**

**Approval:** \_\_\_\_\_ **Actual Cost:** \_\_\_\_\_ **Date:** \_\_\_\_\_

Capital Project S-08-05, Signatory I & I Investigation/Remediation Program



**CAPITAL PROJECT AUTHORIZATION  
AMENDMENT NUMBER 23**

PROJECT NO.: S-08-5 BUDGET FUND: WLI Sewer Capital

PROJECT TITLE: Signatory I & I Investigation/Remediation Program PROJECT TYPE:

TOTAL PROJECT **Prior: \$4,115,831**  
THIS AUTHORIZATION **Current: \$100,000**

Construction  
 Engineering Study  
 Equipment Purchase  
 Amendment

**DESCRIPTION AND BENEFITS:**

**Full Project Overview:**

Based on the EPA Compliance Order and the PADEP Chapter 94 requirements, LCA and the LCA Signatories are required to reduce infiltration and inflow from the system and eliminate SSOs from the LCA and Signatory sewer systems. The SCARP Program has been developed to investigate the sources of I & I and to remediate areas identified as having excessive I & I. The SCARP Program consists of engineering tasks necessary to define and quantify the problems, to evaluate methods of redress and to determine the corrective actions required to meet the regulatory requirements.

**2016 Program Management:**

The work will include on-call services, preparation of the EPA semi-annual report and annual DEP report, attending meetings with DEP and EPA, the Partner I & I committee, Partner Engineer's Subcommittee and the City I & I Committee, technical evaluations as needed, tracking the program progress schedule and other coordination or services as needed. In 2016 there will be significant time meeting with the Signatories to develop a Memo of Understanding related to the capital improvements.

Program Management for previous years:

2009 - \$30,000  
2010 - \$20,000  
2011 - \$25,000  
2012 - \$50,000  
2013 - \$50,000  
2014 - \$50,000  
2015 - \$100,000

Previously Approved		This Amendment	Total Approval
Flow Monitoring ADS (thru 2014)	\$1,775,031		\$ 1,775,031
Flow Monitoring TFE			
Engineering Consulting	\$2,030,800	\$100,000	\$2,130,800
Rehabilitation			
Staff	\$300,000		\$300,000
Contingencies	\$10,000		\$10,000
<b>Totals</b>	<b>\$ 4,115,831</b>	<b>\$100,000</b>	<b>\$4,215,831</b>

**REVIEW AND APPROVALS:**

Pat Mandes



12/07/2015

Project Manager

Date

Chief Executive Officer

Date

Capital Works Manager

Date

Chairman

Date

Arcadis U.S., Inc.  
1128 Walnut St., 4<sup>th</sup> Floor  
Philadelphia  
Pennsylvania 19107  
Tel 215.931.4372  
[www.arcadis-us.com](http://www.arcadis-us.com)

Ms. Pat Mandes  
Compliance Director  
Lehigh County Authority  
P.O. Box 3348  
Allentown, PA 18106

Subject:

Sewer Capacity Assurance and Rehabilitation Program  
Scope and Budget for SCARP Program Management through 2016

Dear Ms. Mandes:

Date:  
12/3/2015

Arcadis is pleased to offer this scope and budget proposal for program management services related to the Sewer Capacity Assurance and Rehabilitation Program (SCARP).

Contact:  
Anthony J. Dill

PROPOSED SCOPE OF SERVICES

Phone:  
215.931.4372

ARCADIS will provide coordination and on-call services to LCA and the Western Lehigh SCARP Partnership (Partnership) to facilitate implementation of the SCARP. These program management services will be for tasks not defined in other project specific authorizations. Historically, these services have included:

Email:  
[Anthony.Dill@arcadis.com](mailto:Anthony.Dill@arcadis.com)

- Meetings and responses to USEPA regarding the Order of Compliance
- Preparation of PADEP Annual report and EPA Semiannual Reports
- Meetings with Partnership Engineering team, Partnership Municipal Leaders, Program Management Team meetings with COA
- Status meetings with LCA for the overall program
- Technical evaluations and data reviews
- Other on-call services as requested by LCA

Our ref:  
66000247.0060

We anticipate that the services required through 2016 will be similar to those listed above. Additionally, 2016 will require significantly more meetings and workshops than the last few years as we support LCA in negotiating a new Memorandum of Understanding with the Partnership members, negotiating capital cost splits with City of Allentown, and positioning with the non-aligned signatories for fair allocations of existing pipe capacities. We anticipate 30 meetings in 2016, based on the

*This proposal and its contents shall not be duplicated, used or disclosed — in whole or in part — for any purpose other than to evaluate the proposal. This proposal is not intended to be binding or form the terms of a contract. The scope and price of this proposal will be superseded by the contract. If this proposal is accepted and a contract is awarded to Arcadis as a result of — or in connection with — the submission of this proposal, Arcadis and/or the client shall have the right to make appropriate revisions of its terms, including scope and price, for purposes of the contract. Further, client shall have the right to duplicate, use or disclose the data contained in this proposal only to the extent provided in the resulting contract.*

Ms. Pat Mandes  
December 3, 2015

Administrative Order program Gantt chart provided to USEPA and PADEP earlier this year and the anticipated program development schedule discussed at the latest program managers caucuses.

DELIVERABLES AND SCHEDULE

Deliverables and schedule for delivery will be determined on an assignment by assignment basis.

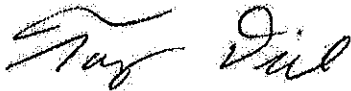
BUDGET

As this is undefined work, we recommend allocating \$100,000 for this work through the end of 2016. We propose to complete these services on a time and materials basis in accordance with the Agreement between LCA and Malcolm Pirnie, Inc. and the current Summary of Standard Charges for Lehigh County Authority. We will track the costs associated with this work and report them to LCA monthly throughout the program. We will not exceed the authorized budget without written professional services authorization from LCA.

Please contact me with your authorization to proceed if this scope and budget are acceptable to you. If you have any questions please do not hesitate to call me at 215-931-4372 or 610-761-3253 (mobile).

Sincerely,

ARCADIS U.S., Inc.



Tony Dill, PE, BCEE  
Program Manager – Buried Infrastructure Team

Cc: Jim Shelton, Arcadis

Use or disclosure of information contained on this sheet is subject to the restriction and disclaimer located on the signature page of this document.

---

## MEMORANDUM

---

**Date:** December 14, 2015

**To:** Authority Board  
**From:** Phil DePoe  
**Subject:** Allentown Division: Roof Replacements Phase II

**MOTIONS / APPROVALS REQUESTED:**

No.	Item	Amount
1	Capital Project Authorization – Design Phase	\$78,500
2 <sup>(1), (2)</sup>	Professional Services Authorization – D’Huy Engineering	\$48,500

- (1) Included in the Capital Project Authorization.*
- (2) Does not include Construction Phase related engineering services.*

**PROJECT OVERVIEW:**

In accordance with the Trust Indenture securing Lehigh County Authority’s Series 2013 Bonds, Arcadis was hired to prepare an Independence Engineer’s Report for the Allentown Water and Sewer Utility Concession. This overall condition assessment included the Allentown Division Water Filtration Plant, Wastewater Treatment Plant, water booster stations, and reservoirs. This Report identified numerous roofs as in need of immediate repair.

D’Huy Engineer prepared a Roof Conditions Assessment Report in July 2014 to assist LCA with establishing a priority list for the roof replacements on the various buildings. Roof replacements identified in the Phase I Roof Replacement Project are currently ongoing. The remainder of the roofs (Phase II) are planned for replacement in 2016.

**FINANCIAL:**

This Project will be funded by the LCA Allentown Division.

**PROJECT STATUS:**

D'Huy has evaluated 43 separate roof systems at the wastewater plant, water plant, distribution & collection (D&C) building and the remote water system stations for existing conditions and an overall assessment. In their report, 24 roofs were listed as Priority I which needed immediate replacement. This project will include the design of 13 roofs listed as Priority II.

**THIS APPROVAL – DESIGN PHASE:**

This authorization will allow D'Huy Engineers to complete the design of the remaining (13) roofs that were listed as Priority II in their assessment report.

**CONSULTANT SELECTION PROCESS:**

D'Huy Engineers specializes in the design of new and replacement roofs for public clients. In recent years, they have completed the designs of the replacement roof at the Allentown Water Plant's Chemical Storage Room, and the replacement roof of the Solids Building at LCA's Industrial Pretreatment Plant. In addition, Phase I of this roof replacement project is currently underway.

In July 2014, D'Huy Engineers completed the condition assessment of 43 separate roof systems at the Allentown Water and Wastewater Plants. It is our recommendation that it is in LCA's best interest to continue using D'Huy for the remaining roof designs as they have successfully completed other roof projects for us in the recent past.

**PROJECT SCHEDULE:**

Construction bid specifications will be completed by the end of January 2016. Construction bids will be advertised and contracts will be awarded early in March 2016 so work may begin in the May of 2016. All 13 roof systems that are included as Priority II are to be replaced by the end of September 2016.

**FUTURE AUTHORIZATIONS:**

Construction Phase.

## CAPITAL PROJECT AUTHORIZATION

<b>PROJECT NO.:</b>	AD-S-15-6	<b>BUDGET FUND:</b>	Allentown Div\Wastewater\Capital
<b>PROJECT TITLE:</b>	Allentown Division: Roof Replacements Phase II	<b>PROJECT TYPE:</b>	<input checked="" type="checkbox"/> Construction <input type="checkbox"/> Engineering Study <input type="checkbox"/> Equipment Purchase <input type="checkbox"/> Amendment No. 1
<b>THIS AUTHORIZATION:</b>	<b>\$78,500</b>		
<b>TO DATE (W/ ABOVE)</b>	<b>\$78,500</b>		

**DESCRIPTION AND BENEFITS:**

D'Huy Engineering prepared a Roof Conditions Assessment Report in July 2014 to assist LCA with establishing a priority list for the roof replacements on buildings located at the Wastewater Treatment Plant, Water Distribution & Filtration Plant, Wastewater Pretreatment Plant and various satellite gate and pump houses. Roof replacements for the building identified in the Phase I Roof Replacement Project are currently ongoing. The remainder of the roofs (Phase II) are planned for 2016.

See Board Memorandum for further project details.

**Authorization Status:**

Requested This Authorization	
<i>Design Phase</i>	
Staff	<b>\$10,000</b>
Engineering Consultant	<b>\$48,500</b>
Miscellaneous	<b>10,000</b>
Contingency	<b>10,000</b>
<b>Total This Authorization</b>	<b>\$78,500</b>

Future Authorizations	
Construction Phase	\$171,500
<b>Total Estimated Project</b>	<b>\$250,000</b>

**REVIEW AND APPROVALS:**

Project Manager	Date	Chief Executive Officer	Date
Chief Capital Works Officer	Date	Chairman	Date



**Lehigh County Authority**

1053 Spruce Street \* P.O. Box 3348 \* Allentown, PA 18106-0348  
(610)398-2503 \* FAX (610)398-8413 \* Email: service@lehighcountyauthority.org

**PROFESSIONAL SERVICES AUTHORIZATION**

**Professional:** D'HUY ENGINEERING, INC.  
One East Broad Street, Suite 310  
Bethlehem, PA 18018

**Date:** December 14, 2015  
**Requested By:** Phil DePoe

**Approvals**

**Department Head:** \_\_\_\_\_  
**Chief Executive Officer:** \_\_\_\_\_

**Allentown Division: Roof Replacements Phase II <sup>(1)</sup>**

D'Huy Engineering will design the replacement systems for the remaining thirteen (13) roofs listed as Phase II in the evaluation report. The work consists of the following tasks:

<b>Professional Services</b>
1. Provide bid specifications for WFP and WWTP replacement roofs
2. Prepare front-end specifications for construction bidding
3. Coordinate and chair the pre-bid meeting
4. Assist in construction bid tabulation and award

(1) Reference Memo for additional information

**Cost Estimate (not to exceed without further authorization):**                      **\$48,500**

**Time Table and Completion Deadline:** Construction bid specifications will be completed by the end of January 2016. Construction bids will be advertised and contracts will be awarded early in March 2016 so work may begin in May 2016. All 13 roof systems shall be replaced by September 2016.

---

---

**(For Authority Use Only)**

**Authorization Completion:**

**Approval:** \_\_\_\_\_ **Actual Cost:** \_\_\_\_\_ **Date:** \_\_\_\_\_