LEHIGH COUNTY AUTHORITY
WORKSHOP AGENDA
Monday, October 19, 2015 – 12:00 PM

INITIAL ITEMS (Collectively 5 Minutes)

1. **Review of Agenda**
2. **Identify items for October Board Meeting**
   - Review Board Discussion Items, October 2015 – December 2015
3. **Public Comment**

ACTION/DISCUSSION ITEMS

1. **2016-2025 Capital Plans (Approval)**
   Board approval of the Administration, Suburban and Allentown Division Capital Plans are recommended by the Staff. Comments received from Lehigh Valley Planning Commission and the City of Allentown are attached (green).

2. **2016 Budget**
   An overview of the preliminary 2016 Budget will be presented. Subject to changes based on comments and further refinement, the Budget will be presented for approval at the October 26th Board meeting.

3. **Allentown Division - 2016 Rate Schedule**
   In accordance with the concession lease agreement with the City of Allentown, water and sewer rates for Allentown Division customers may be increased in January 2016 according to a formula that includes a factor for inflation plus a margin increase of 2.5 percent. This formula results in a total increase of 2.5 percent in 2016. A detailed schedule of rates will be available at the Workshop meeting, and Board approval is requested so that customers can be notified of the new rates in advance of the change in their water and sewer bills (yellow).

INFORMATION ITEMS

1. **None.**

OTHER ITEMS

1. **None.**
# BOARD ACTION/DISCUSSION ITEMS
## October 2015 – December 2015

<table>
<thead>
<tr>
<th>Priority*</th>
<th>Project/Issue</th>
<th>Type of Action</th>
<th>Timing**</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>H</strong></td>
<td>Acquisition/Growth Strategy Activities</td>
<td>Status Report</td>
<td>As needed</td>
</tr>
<tr>
<td><strong>L</strong></td>
<td>Jordan Creek Wastewater Plant</td>
<td>Status Report</td>
<td>As needed</td>
</tr>
<tr>
<td><strong>M</strong></td>
<td>Strawberry Acres – AARC - Sewer System</td>
<td>Status Report</td>
<td>As needed</td>
</tr>
<tr>
<td><strong>H</strong></td>
<td>Wastewater Capacity Program Update</td>
<td>Status Report</td>
<td>As needed</td>
</tr>
</tbody>
</table>

*As Needed*

<table>
<thead>
<tr>
<th>Priority*</th>
<th>Project/Issue</th>
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</tr>
</thead>
<tbody>
<tr>
<td><strong>H</strong></td>
<td>2016-2025 Allentown and Suburban Division Capital Plans</td>
<td>Approval</td>
<td>October (W)</td>
</tr>
<tr>
<td><strong>H</strong></td>
<td>Allentown Division – Wastewater Plant Stand-by Generator for Chlorine Building – Construction Phase</td>
<td>Approval</td>
<td>October (B)</td>
</tr>
<tr>
<td><strong>M</strong></td>
<td>Allentown Division – Water Filter Plant High Gallery Painting – Construction Phase</td>
<td>Approval</td>
<td>October (B)</td>
</tr>
<tr>
<td><strong>H</strong></td>
<td>2016 Budget</td>
<td>Approval</td>
<td>October (B)</td>
</tr>
</tbody>
</table>

*Within 45 Days*

<table>
<thead>
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<th>Project/Issue</th>
<th>Type of Action</th>
<th>Timing**</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>H</strong></td>
<td>Suburban Division- Lynn Township Wastewater Treatment Plant Upgrades, Phase 1 Construction Phase</td>
<td>Approval</td>
<td>November (W/B)</td>
</tr>
<tr>
<td><strong>H</strong></td>
<td>Allentown Division - WWTP Odor Control Tower Replacements - Construction Phase</td>
<td>Approval</td>
<td>November (B)</td>
</tr>
<tr>
<td><strong>M</strong></td>
<td>Allentown Division – Wastewater Plant Main Pump House Locker Room Renovations – Construction Phase</td>
<td>Approval</td>
<td>November (B)</td>
</tr>
</tbody>
</table>
September 25, 2015

Mr. Aurel Arndt, CEO
Lehigh County Authority
P.O. Box 3348
Allentown, Pennsylvania 18106-0348

Re: LCA Preliminary Capital Plans - Suburban and Allentown Divisions 2016-2025

Dear Mr. Arndt:

The Lehigh Valley Planning Commission (LVPC), at its regular monthly meeting on September 24, 2015, reviewed the above-referenced plans and would like to offer the following comments. The comments, as shown on the attached pages, are provided for water and wastewater projects appearing for the first time in the Capital Plans and significantly modified projects from previous Capital Plans. The Suburban Division Capital Plan includes six new projects and two significantly modified projects, and the Allentown Division Capital Plan includes one new project and two significantly modified projects for which comments are provided.

Please call me if you have any questions.

Sincerely,

Susan L. Rockwell
Senior Environmental Planner

cc: Lehigh County Commissioners
<table>
<thead>
<tr>
<th>Title</th>
<th>Brief Statement</th>
<th>LVPC Comment</th>
</tr>
</thead>
</table>
| 1. Lehigh County Authority (LCA) Preliminary Capital Plans (2016-2025) | **Allentown Division**  
New Project:  
- Various Wastewater System Related Studies  
Significantly Modified Projects:  
- Reservoir Rehabilitation/Maintenance  
- Various Water System Related Studies | Improvements/studies that will result in more efficient, safe and reliable sewer and water service are consistent with the County Comprehensive Plan. |
| **Suburban Division**                                                 | New Projects:  
- Main Office/Operations Center Improvements  
- Water Facility Condition Assessments and Improvements Implementation  
- Wastewater Facility Condition Assessments and Improvements Implementation  
- Western Weisenberg Wastewater Treatment Plant Improvements (Weisenberg Twp.)  
  - Includes various operational improvements. No increase in plant capacity proposed.  
- Wynnewood Terrace Wastewater Treatment Plant (WWTP) Remediation and Replacement (North Whitehall Twp.)  
  - Aging WWTP is at end of its useful life. Plant is proposed to be replaced within several years. No increase in plant capacity proposed. Development is not within proposed Northern Lehigh regional system service area. | Improvements/studies that will result in more efficient, safe and reliable sewer and water service are consistent with the County Comprehensive Plan. |
### Suburban Division

**New Project:**
- Sand Springs Wastewater Treatment Plant (WWTP) Remediation and Replacement (North Whitehall Twp.)
  - Aging WWTP is at end of its useful life. Plant is proposed to be replaced within several years. No increase in plant capacity is proposed.

**Significantly Modified Project:**
- Additional Water Supply – Small Satellite Divisions
  - Provision of backup water supply source for four satellite water systems (Clear View Farms-Moore Twp, Mill Creek-Washington Twp (L), Beverly Hills-Lower Milford Twp, Madison Park-Lynn Twp) that currently have only one source and upgrade of disinfection systems. LCA’s Upper Milford System is served by two wells, however, additional supply is needed to serve a proposed new development. Consideration being given to interconnect Upper Milford System to Central Lehigh Division.

| Improvements that will result in more efficient and reliable sewer service are consistent with the County Comprehensive Plan. Recommend the development connect to proposed Northern Lehigh regional system when available. |
| Redundancy in water supply sources for the four satellite systems is consistent with the County Comprehensive Plan. Connection of Upper Milford System to Central Lehigh Division is consistent - area is recommended for community water service. However, service to proposed new development, which is recommended for rural development with on-lot water supply, would be inconsistent unless connection is documented as more cost-effective than on-lot wells and lot sizes remain one acre or larger. |
October 13, 2015

Frank Leist
Chief Capital Works Officer
Lehigh County Authority
P.O. Box 3348
1053 Spruce Street
Allentown, PA 18106-0348

RE: Allentown Division, Proposed 2016-2020 Capital Plan

Dear Mr. Leist,

Pursuant to Article 4 of the Concession and Lease Agreement, the City of Allentown is responding to your letter of September 16, 2015 Allentown Division: Proposed 2016-2025 Capital Plan. Most of the comments are limited to capital projects, not previously approved or are in progress.

Debt Service line item in the Project Detail sheets
Several projects include a line item for “Debt Service”, the numerical entry for which is carried out to the last place as compared to other line items which are typically expressed in the thousands of dollars. Please provide the variables, inputs, and specific formulas used in calculating the Debt Service entries. The City notes that Debt Service is listed for other projects not just those for which the City or Allentown ratepayers are financially responsible.

AD-W-13 Schantz Spring Chlorine Booster Station
If LCA has not already provided the information, please indicate when the testing to determine the need for the static mixer will be concluded and therefore when the project may be completed.

AD-W-16 Pre-Lease Valve Replacement
Per prior agreement, the City will be paying $370,000 annually towards the completion of this project. The City requests that you note this agreement within the text of the Project Detail. Also request an explanation of the plans and time frames with locations (as soon as is available) for replacing/repairing the fifty-five valves. This request is in the spirit of both our organizations cooperative efforts to reduce the impact on businesses, citizens, and various community activities.
AD-W-18 Transmission Main Evaluation, Replacements, & Rehabilitation
The “Prior Years” expenditure coupled with the Project Description indicate that the leak detection studies are complete. The City would like to review the associated report(s) before providing further comment on this proposed project. Based strictly and solely on the one million dollar expense shown in the 2nd year (2017) this project would qualify as a Major Capital Improvement Project (MCIP). However, the City would like to review the report(s) prior to that determination. One particular question is whether the transmission mains evaluated are under the rating system utilized by your consulting engineer, Gannett Fleming.

AD-W-20 Badger Meter Replacements
Please refer to the comments on Project AD-W-21 Fixed Base Meter Reading Station, as AD-W-20 indicated being contingent upon the implementation of AD-W-21. In addition, the Capital Project AD-S-18 dispute will be proceeding to mediation and/or arbitration. The resultant determination may include aggregation, which will potentially influence whether this AD-W-20 will qualify as a MCIP.

AD-W-21- Fixed Base Meter Reading System
This City is strongly opposed to the development and implementation of this project within the time frames indicated. The Fixed Base Meter Reading Station (FBMRS) is not a mission critical project. There is no risk to water quality, water supply, personnel safety, nor are there regulatory requirements addressed. The project provides no real benefit to customers who would be paying the entire cost of the project. The only true beneficiary is LCA who would be paying nothing; yet would gain operational efficiencies and enjoy personnel and equipment savings. Further, the City has no report from LCA that the mobile collection system is malfunctioning; therefore, it is viable and providing satisfactory service to Allentown ratepayers. In several years from now, when the present mobile system has reached its life expectancy, this project will have merit. Therefore, due to the magnitude of the costs indicated, which will be borne solely by the ratepayers, this project is not acceptable under the time frames listed and is not in keeping with LCA’s Mission Statement.
A lesser issue is that the data depository is indicated to be a part of this project. Does this mean that the data depository, which is currently a part of the AMR project, can be removed?

AD-S-14- Sanitary Sewer Manhole Lining
The intent of this project is to continue as long as the benefits are justifiable in concert with the EPA Administrative Order. Accessible manholes identified by the SSES, historical, or empirical evidence as needing remediation have been addressed or will be addressed in 2016. Beginning in 2017, manhole rehabilitation under this program will be based on LCA inspections using NASSCO ratings until those manholes, which would be expected to contribute appreciable Inflow & Infiltration, have been addressed.

AD-S-15 - Sanitary Sewer Manhole Collars and Water Tight Covers
Similar to the AD-S-14 project, this Capital Project will be based on LCA inspections. As the program funding is being discontinued after 2017, is it LCA’s expectation that the manholes which typically surcharge to the point that the above ground portions of the manholes and manhole covers that might be adversely impacted will have been addressed at that point?
AD-S-18- Facility Roof Replacements (Water and Wastewater Facilities)
The qualification of this project as a MCIP is in dispute. Mediation and/or arbitration will be scheduled and a determination(s) rendered. Further City comment as might be appropriate will be made subsequent to the determination(s).

As prior practice, the City will anticipate LCA’s response to these comments, after receipt of which the City will schedule a meeting, if necessary, to review the comments and positions of LCA and the City.

Thank you for providing your proposed program and for your continued cooperation. If you have any questions or require additional information, please do not hesitate to contact the Office of Compliance.

Sincerely,

Craig Messinger
Interim Director of Public Works

CC: Aurel Arndt, Dan Koplish, Office of Compliance
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

<table>
<thead>
<tr>
<th>Meter Size</th>
<th>Monthly Fixed Charge**</th>
<th>2016 Monthly Charge</th>
<th>Quarterly Fixed Charge*</th>
<th>2016 Quarterly Charge</th>
</tr>
</thead>
<tbody>
<tr>
<td>5/8&quot; *</td>
<td>$ 17.21</td>
<td>n/a</td>
<td>$ 25.21</td>
<td>$ 25.84</td>
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<tr>
<td>3/4&quot; *</td>
<td>$ 19.09</td>
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<td>1&quot; *</td>
<td>$ 22.95</td>
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<td>$ 43.35</td>
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<td>1 1/2&quot;</td>
<td>$ 32.45</td>
<td>$ 33.26</td>
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<td>2&quot;</td>
<td>$ 43.83</td>
<td>$ 44.93</td>
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<td>3&quot;</td>
<td>$ 74.10</td>
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<td>4&quot;</td>
<td>$ 108.33</td>
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<td>6&quot;</td>
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<tr>
<td>8&quot;</td>
<td>$ 316.98</td>
<td>$ 324.90</td>
<td>$ 934.19</td>
<td>n/a</td>
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</table>

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

<table>
<thead>
<tr>
<th>Volume</th>
<th>Rate per 1,000 Gallons</th>
<th>2016 Rate:</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Volume</td>
<td>$ 3.10125</td>
<td>$3.17878</td>
</tr>
</tbody>
</table>

B. Capital Cost Recovery Charge

To be determined.

C. Private Fire Protection

Each Hydrant: $310 per year
(may be billed monthly or quarterly)

2016 Rate: $317.75

D. Tapping Fees

Part 1: $810.00 per Equivalent Dwelling Unit
Part 2: To be determined based on Capital Recovery Fee calculation
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

<table>
<thead>
<tr>
<th>Meter Size</th>
<th>2016 Monthly Charge**</th>
<th>Quarterly Fixed Charge*</th>
<th>2016 Quarterly Charge</th>
</tr>
</thead>
<tbody>
<tr>
<td>5/8&quot; *</td>
<td>$ 5.98</td>
<td>$ 8.75</td>
<td>$ 8.97</td>
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<tr>
<td>3/4&quot; *</td>
<td>$ 6.63</td>
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<td>$ 10.99</td>
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<td>1&quot; *</td>
<td>$ 7.93</td>
<td>$ 14.65</td>
<td>$ 15.02</td>
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<tr>
<td>1 1/2&quot;</td>
<td>$ 11.17</td>
<td>$ 24.49</td>
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<td>2&quot;</td>
<td>$ 15.07</td>
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<td>3&quot;</td>
<td>$ 25.52</td>
<td>$ 67.79</td>
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<td>4&quot;</td>
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<td>6&quot;</td>
<td>$ 69.71</td>
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<tr>
<td>8&quot;</td>
<td>$ 127.89</td>
<td>$ 320.35</td>
<td>n/a</td>
</tr>
</tbody>
</table>

*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

<table>
<thead>
<tr>
<th>All flow based on metered water usage***</th>
<th>Rate per 1,000 Gallons</th>
<th>2016 Rate:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$ 2.237638</td>
<td>$2.29358</td>
</tr>
</tbody>
</table>

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

### B. Capital Cost Recovery Charge

To be determined.

### C. Tapping Fees

- **Part 1** $680.00 per Equivalent Dwelling Unit
- **Part 2** To be determined based on Capital Recovery Fee calculation