



LEHIGH COUNTY AUTHORITY

July 18, 2011

BOARD MEETING AGENDA

1. Call to Order
2. Review of Agenda
 - *Public Participation Sign-In Request*
3. Executive Sessions
4. Approval of Minutes
 - *June 27, 2011 Regular Meeting Minutes*
5. Public Comments
6. Action / Discussion Items

FINANCE AND ADMINISTRATION

- *None*

WATER

- *Interconnection with City of Allentown, Phase 2 (Approval)*

WASTEWATER

- *None*

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

MARCH MEETINGS

Workshop Meeting
Board Meeting

August 8 – 12:00 p.m.
August 22 – 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.

REGULAR MEETING MINUTES
June 27, 2011

The Regular Meeting of the Lehigh County Authority was called to order at 12:19 p.m. on Monday, June 27, 2011, Chairman Asa Hughes presiding. Other Members present at the commencement of the meeting were: Richard Bohner, Brian Nagle, and Norma Cusick. Authority Staff present were: Aurel Arndt, Bradford Landon, Pat Mandes, Frank Leist, Douglas Young, Joseph McMahon, and Cristin Keppel.

Craig Murray from Malcolm Pirnie, Inc. (MPI) was in attendance. Gerald Fry and Bruce Gordon from Johnson, Mirmiran, & Thompson and Gary Birks from Senator Pat Browne's office were also in attendance. Jeanine Bauer, member of the public from Jordan Road, North Whitehall Township, was also present.

REVIEW OF AGENDA

Mr. Arndt stated there were no additional items following the scheduled agenda.

EXECUTIVE SESSION

Mr. Arndt stated there would be no executive sessions.

APPROVAL OF MINUTES

May 9, 2011 Workshop Meeting Minutes

On a motion by Mr. Bohner, seconded by Ms. Cusick, the Board unanimously approved the minutes of the May 9, 2011 Workshop Meeting (4-0).

May 23, 2011 Regular Meeting Minutes

On a motion by Mr. Bohner, seconded by Ms. Cusick, the Board unanimously approved the minutes of the May 23, 2011 Regular Meeting (4-0).

June 13, 2011 Workshop Meeting Minutes

On a motion by Mr. Bohner, seconded by Ms. Cusick, the Board unanimously approved the minutes of the June 13, 2011 Workshop Meeting (4-0).

PUBLIC COMMENTS

Ms. Bauer stated that she is a resident of North Whitehall Township, specifically residing on Jordan Road, and she was present to represent all residents of Jordan Road and the surrounding area around the proposed wastewater treatment plant on the KidsPeace property. She stated that all residents on Jordan Road are opposed to the proposed sewage plant. She added that it was her recommendation that the Board move the regional wastewater treatment plant to a different location along the Coplay Creek that had been discussed in previous reports.

Scott Bieber entered the meeting at 12:27 p.m.

ACTION AND DISCUSSION ITEMS

Lehigh Valley South Special Water System Capital Recovery Fees – Resolution 6-2011-3
(Approval)

Mr. Young explained that figures for Lehigh Valley South needed updating because the lots of that property were recently sold and rates have never been updated.

Mr. Hughes asked for an explanation regarding the accrued interest charge included in the fees.

Mr. Young explained the original agreement for the property was structured to include the accrued interest because the structure was built by the Authority using bond funds.

On a motion by Ms. Cusick, seconded by Mr. Nagle, the Board unanimously approved Resolution 6-2011-3, adopting new Capital Recovery Fees for Lehigh Valley South (5-0).

Wastewater Capital Recovery Fees – Resolution 6-2011-4 (Approval)

Mr. Young explained these fees are updated annually and noted that those fees highlighted on the attachment are the updated charges.

Mr. Bohner asked if the disputed City of Allentown billings were included in the fee schedule.

Mr. Young noted that there has not been any movement regarding the dispute at this time, but because the billings relate to operating expenses, they do not relate to capital recovery fees. After some brief discussion, Mr. Young noted that all charges stem from calculations based on growth and financial costs and projections.

On a motion from Mr. Bohner, seconded by Ms. Cusick, the Board unanimously approved Resolution 6-2011-4, adopting 2011 Wastewater Capital Recovery Fees (5-0).

Long-term Wastewater Capacity – Options Analysis (Presentation)

Ms. Mandes distributed a copy of the detailed spreadsheet included in the presentation comparing the four options being considered.. She and Craig Murray reviewed the attached presentation that included updated cost estimates for each option, social impacts, and environmental concerns. The presentation also provided details regarding how the need for 4 mgd (million gallons per day) of wastewater capacity was determined, the historical trend for the sale of allocation, current status of available Authority allocation, and how the wastewater capacity options compare. Ms. Mandes reviewed the Study Findings and Projects Recommendations comparison which analyzes each option for various financial, social, and environmental criteria reflecting a triple bottom line analysis. She explained that the spreadsheet is a living document and will be revised as new or updated information becomes available.

Mr. Murray stated that actual operations and maintenance costs are unknown until final numbers are provided by the City of Allentown regarding Kline's Island. Extensive discussion followed.

Mr. Nagle asked Mr. Murray and Ms. Mandes to clarify some points on the spreadsheet. Discussion followed.

After some further discussion, Ms. Mandes recommended that Option 3, which calls for upgrading the Authority WTP for direct discharge to the Lehigh River, should be eliminated as an option since it is substantially more costly than any of the other options to continue with Act 537 Planning processes.

There was no objection from Board members to eliminate Option 3.

SYSTEM OPERATIONS OVERVIEW

Mr. McMahon noted that water usage for June has been around 8 mgd.

Ms. Mandes stated that we received a fine from DEP for an incomplete storm water form at the WTP. OMI has paid the fine; the work had actually been performed, but the required form was not completed.

STAFF COMMENTS

None.

SOLICITOR'S COMMENTS

Mr. Landon asked the Board to adopt Resolution 6-2011-5 authorizing the Authority to accept a PennVEST loan for the Water Meter Replacement Project, Year 2. This is primarily the same as Resolution No. 6-2011-1, which the Board had passed at its June 13th meeting, but when the final figures were developed the amount of the loan was slightly higher than the amount the Board had previously authorized, thus the need for a revised resolution. He noted that a form must also be signed by the Officers.

On a motion from Ms. Cusick, seconded by Mr. Bieber, the Board unanimously adopted Resolution 6-2011-5 (5-0).

OTHER COMMENTS

Mr. Hughes asked guests of the meeting to introduce themselves. Messrs. Fry and Golden stated they were from Johnson, Mirmiran, and Thompson. The engineering firm has opened a field office in Allentown and they attended the meeting to gather information on current Authority projects.

EXECUTIVE SESSION

There were no executive sessions.

ADJOURNMENT

There being no further business, the Chairman adjourned the meeting at 1:54 p.m.

Richard H. Bohner
Secretary

FINANCE & ADMINISTRATION**ACTION ITEMS**

-
1. *None.*

DISCUSSION ITEMS

-
1. *None.*

INFORMATION ITEMS

-
1. **Customer Growth**

| | As of 12/31/10 | As of 6/30/11 | 2011 Additions | 2011 Projections | 2010 Additions |
|---------------------------------------|-------------------|-------------------|-------------------|---------------------|-------------------|
| <u>Water</u> | | | | | |
| <u>Central Lehigh (A)</u> | | | | | |
| Residential | 16,720 | 16,851 | 131 | 315 | 488 |
| Commercial/Industrial | 593 | 595 | 2 | 11 | 15 |
| <u>Emmaus</u> | | | | | |
| Residential | 409 | 409 | - | 1 | 1 |
| Commercial/Industrial | 9 | 9 | - | - | - |
| <u>North Whitehall</u> | | | | | |
| Residential | 1,078 | 1,078 | 1 | 4 | 3 |
| Commercial/Industrial | 53 | 53 | - | 2 | - |
| <u>Washington Twp</u> | | | | | |
| Residential | 425 | 427 | 2 | 3 | 2 |
| Commercial/Industrial | 15 | 15 | - | - | - |
| <u>Northampton County SA</u> | | | | | |
| Residential | 67 | 67 | - | - | - |
| <u>Lynn Twp</u> | | | | | |
| Residential | 176 | 176 | - | - | 116 |
| <u>Heidelberg Htgs</u> | | | | | |
| Residential | 191 | 191 | - | - | - |
| <u>Beverly Hills</u> | | | | | |
| Residential | 44 | 44 | - | - | - |
| Total Water | 19,780 | 19,915 | 136 | 336 | 625 |
| <u>Wastewater</u> | | | | | |
| <u>Upper Milford</u> | | | | | |
| Residential | 460 | 469 | 9 | 154 | 8 |
| Commercial/Industrial | 31 | 31 | - | 25 | - |
| <u>Weisenberg Twp</u> | | | | | |
| Residential | 146 | 146 | - | - | - |
| Commercial/Industrial | 14 | 14 | - | - | 3 |
| <u>Heidelberg Heights</u> | | | | | |
| Residential | 145 | 145 | - | - | - |
| <u>North Whitehall Twp</u> | | | | | |
| Residential | 465 | 465 | - | - | - |
| Commercial/Industrial | 11 | 11 | - | - | - |
| <u>Washington Twp</u> | | | | | |
| Residential | 551 | 551 | - | - | 2 |
| Commercial/Industrial | 24 | 24 | - | - | - |
| Total Wastewater | 1,847 | 1,856 | 9 | 179 | 13 |
| Wastewater Allocation (gals) * | 10,628,272 | 10,648,634 | 20,362 | 120,865 | 135,269 |

* Additions include allocation purchased net of allocation returned (600 gals) to the general pool.
(A) Includes Upper Milford Divisions, Arcadia and Buss Acres systems.

2. Recently Purchased Investments – Certificates of Deposit (CDs)

| Fund | Bank | Location | Gross Amount | Date of Purchase | Date Due | Net Rate % |
|---------|---------------------------|----------------|--------------|------------------|----------|------------|
| LLRI CR | Safra National Bank of NY | New York, NY | 147,000.00 | 7/6/11 | 7/6/12 | 0.350 |
| LLRI CR | Beal Bank Nevada | Las Vegas, Nv | 245,000.00 | 7/7/11 | 6/27/12 | 0.300 |
| LLRI CR | Live Oak Banking Company | Wilmington, NC | 200,000.00 | 7/8/11 | 10/9/12 | 0.650 |

Fund Descriptions for Investments:

LLRI CR Little Lehigh Relief Interceptor Capital Reserves

3. Knowledge Management (KM)

EMA and the internal KM Team are continuing to review needs assessment results to complete this phase of the project to develop a KM program. A knowledge map was created based on input from all employees' work catalogs and extensive validation by the KM Team. The map will be used to identify and prioritize critical knowledge to be addressed in the KM recommendations. EMA expects to present preliminary recommendations in July, with a final report presented to the Board in August.

WATER

ACTION ITEMS

1. **Interconnection with Allentown, Phase 2**

Livengood Excavators, Inc. has provided a signed agreement and acceptable bonds and insurance certificate, but access to certain portions of the project area has not yet been secured from the City of Allentown. We recommend that the Board amend its earlier action and authorize the staff to award the construction contract, limiting the work to the areas outside of City property and City street rights-of-way, and proceeding with the balance of the work as access is secured.

DISCUSSION ITEMS

1. *None.*

INFORMATION ITEMS

1. **Water Meter Replacement Project**

Phase 1 - We have completed QC checks of all work completed by Vanguard Utility Service, Inc. We are in the process of investigating nine non-read accounts that were identified during the check. We intend to bill Vanguard for our repairs, pending the outcome of the investigation. Vanguard has submitted supplemental data requested to complete our review of their final application for payment.

Phase 2 - TSE, Inc. plans to start work on July 18.

2. **Interconnection with Allentown**

Phase 1 - Connection at Schantz Spring – Testing of the emissions from the emergency generator engine proved compliance with EPA regulations. The third-party testing service sent their report to DEP for review. DEP has said that the report will probably be reviewed in July.

Phase 2 - Connection to City Transmission System at 26th and Chew Streets – Livengood Excavators has provided the necessary contract documents. However the City of Allentown has not approved the easement agreements. Also, the City has not yet agreed to waive its permit fees for work in City streets, as required by our service agreement. See Action Item #1.

3. **Water Main Replacement Project 2011 – Oakland Park (UMT)**

Due to changes in the NPDES permit requirements effective as of 2011, this project will require that we complete an E&S plan for review by the Lehigh County Conservation District and possibly apply for a NPDES permit prior to the start of construction. We have solicited proposals from engineering firms to complete this work for us. As NPDES approvals typically take multiple months, if a NPDES is required, we will have to delay the start of this project until we have a permit in hand. We anticipate a spring 2012 start date.

4. **Water Main Relocation Project – Slatedale**

Our water facilities on West Grant Street were successfully relocated in June. Work on Main Street has been scheduled for 2012. Our exposure, by PaDOT Agreement, is about \$25,000.

5. **CLD Water System Model**

Gannett Fleming has completed calibrating the model. They are completing the analyses required by the RFP, including interconnection with the City of Allentown, pressure deficiencies, fluoride and hardness concentrations, and water age.

6. **WL-1 Tank Replacement**

Additional, unplanned work at the facility has caused an increase beyond the approved project budget. Staff is reviewing expenses and time charged and will seek approval for the increase.

7. **Arcadia West Pumping Station Modifications**

A Request for Proposals (RFP) is being prepared for design, permitting and construction-related engineering services for improvements to the pumping station, including permitting as a community water system. The selected firm will investigate future growth and demands in the service area, design domestic and fire pumps to meet those demands, design improvements to the existing building to house future facilities, and design corrosion control, metering, additional emergency power and other improvements to the station as outlined in the RFP. We expect to receive proposals in September.

8. **Developments**

Water system construction is occurring at the following developments:

- Trexler Fields, Phases 2/3/7, 38 residential lot, UMT
- Valley West Estates, Phases 4, 5 & 6, 46 residential lots (sfd), UMT *(There has not been any construction activity at this development in over a year.)*

Water system plans are being reviewed for the following developments:

- Diocesan Pastoral Center, 2 commercial lots, 3 additional lots, & residual lot for existing cemetery, LMT
- Hamilton Crossings, 3 commercial lots, LMT
- 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), Water & Sewer, WeisT
- North Whitehall Commercial Center (Walmart), 5 commercial lots, NWT, water and sewer
- Rabenold Farms, 205 residential lots (sfd), (Portion south of I-78), UMT
- Rabenold Farms II, 288 apartment units and clubhouse, (Portion north of I-78), UMT
- Red Maple Acres Expansion, 29 units, LMT
- Shepherd's Corner, 1 commercial lot, LMT
- Spring Creek Properties Subdivision 1, 14 commercial and industrial lots, LMT
- Trexler Business Center, Lot 1, 1 commercial building, LMT
- Trexler Senior Living Center, 2 commercial lots, LMT *(In bankruptcy)*
- Weilers Road Twins, 82 residential lots (sfa), UMT
- West Hills Business Center, 5 industrial lots, WeisT
- Woodmere Estates, 60 residential units (sfd), UMT
- Wotring North Development, 20 residential units (sfd), UMT

WASTEWATER

ACTION ITEMS

1. *None.*

DISCUSSION ITEMS

1. *None.*

INFORMATION ITEMS

1. **Vera Cruz Area Sewer Project**

Work continues, with directional boring progressing within Vera Cruz Road. Progress has been slow due to rock in the area. However, the contractor is expected to remain on schedule, with the first milestone expected around August 1. Substantial Completion and Final Completion are December 30, 2011 and February 28, 2012, respectively.

2. **Infiltration and Inflow (I&I) Program Update**

The 537 plan revisions and SCARP submitted to the DEP in March of 2010 were approved in June including the revision to Chapter 4. How the allocation flow credits are handled is the subject matter in Chapter 4.

The WLI Optimization Study field trials are scheduled for the end of July. There is preparation work in the system being completed prior to the initiation of the field work. This includes cleaning of the four siphons and cleaning the interceptor at the four stream crossing.

The majority of the SSES field work has been completed in the Signatory municipalities including basement inspections. Malcolm Pirnie will soon begin the evaluation of the results.

3. **Wastewater Treatment Capacity**

The life cycle costs for the LCA options will be completed by Malcolm Pirnie and presented to LCA in the near future. The life cycle costs for the City have been provided to the LCA. A meeting will be planned between LCA and the City to discuss the cost estimates. The cost estimates will be presented to the Board once both parties agree with the estimates.

The Project Findings report will be presented to the WLI Advisory Committee in early August followed by the steering committee. Updates will be provided on the DRBC effluent standards, cost estimates, life cycle costs, Natural Treatment and Non-Stream Discharge Wastewater Alternatives Report and short term allocation leasing.

An RFP for completing the Act 537 Planning has been prepared by Malcolm Pirnie. It is expected that the RFP will be issued after the Steering Committee presentation.

4. **WTP Energy Audit**

Phase I of the study completed by CET Engineers was presented to the Board at the February workshop. The report included an economic evaluation of the excess biogas production including a comparison of selling the excess biogas to Kraft Foods or utilizing the biogas on-site at the WTP. Kraft indicated that they were no longer interested in purchasing the LCA biogas due to the project not being economically feasible for them.

The report pointed out a conflict between the calculated biogas production and the actual biogas production. In March, additional sampling and analysis of the digester waste streams was conducted to confirm the potential for gas production. CET Engineers has evaluated the data and this new data confirms that the calculated gas production is consistent with the actual gas production.

The conclusion of the report indicated that installation of the co generation equipment to utilize the biogas is economically viable if certain improvements to the plant result in increased gas production.

Phase II of the study looks at the potential for producing additional biogas and has been submitted to LCA. The Phase II study includes an evaluation of other energy improvement/energy efficiency measures and ways to optimize digester performance and the hauler waste program for increased biogas production. The LCA team is currently reviewing the draft report. It is expected that the recommendations will be presented to the Board in August.

The LCA package wastewater treatment plants were also evaluated in Phase III. It does not appear from the draft report that any energy improvements will be cost effective at the small plants.

5. Arcadia West Wastewater Treatment Plant Upgrade

Bids were received on March 17 for the General Construction, Electrical Construction and Mechanical and Plumbing Construction contracts. The General Construction bid was designed as a Base Bid with Add/Deduct Alternates. PaDEP concluded that the bid documents do not comply with PennVEST's "or-equal" policy. Although we responded with a detailed explanation, DEP will not reconsider their position. We are planning our approach to re-bidding.

6. Northern Lehigh Wastewater System

The project is proceeding in a number of areas:

Wastewater Treatment Plant (on a 5 acre tract at Kids Peace)

- (1) A Special Exception must be granted by the Zoning Hearing Board for the proposed property use. The hearing before the Zoning Hearing Board began on May 18, was continued on June 22, and July 7, but was not completed. The hearing will resume on August 31. Opponents of the WTP vow to oppose it every step of the way.
- (2) A meeting is scheduled with DEP on July 20th to discuss the Planning Module submittal. DRBC water quality modeling is complete, but we must apply for a Docket so that DRBC can weigh in on the effluent limits to be permitted

Barring any regulatory delays we expect to have the wastewater treatment plant operational by October 2013. The total cost of the WTP including soft costs and Kids-Peace acquisition costs is estimated at \$4.69 million.

Offsite Conveyance Facilities (OSCF)

- (1) Wal-Mart's engineer, the Newton Engineering Group is proceeding with the preliminary design of the necessary conveyance facilities, which includes gravity sewers, a pump station and force main to deliver the wastewater from their proposed development and other future wastewater customers to the wastewater treatment facilities. Wal-Mart at this late date has proposed that LCA assume the responsibility of designing, permitting and constructing the OSCF, which is a change from the previous plan where Wal-Mart had the responsibility. A cost-sharing agreement is still being negotiated with Wal-Mart.

The construction cost of the conveyance facilities is estimated at \$1.354 million.

- (2) An amendment to the agreement with KidsPeace is being negotiated to reflect the changed circumstances since the original agreement was signed in 2006.