

**REGULAR MEETING MINUTES**  
**May 27, 2014**

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The Regular Meeting of the Lehigh County Authority was called to order at 12:23 p.m. on Monday, May 27, 2014, Chairman Asa Hughes presiding. Other Members present at the commencement of the meeting were: Tom Muller, Brian Nagle, Richard Bohner, Emrich Stellar, and Norma Cusick. Authority Staff present were Aurel Arndt, Liesel Adam, Bradford Landon, Frank Leist, Bob Kerchusky, Dan Standish, Pat Mandes, John Parsons, Philip DePoe, and Cristin Keppel.

**REVIEW OF AGENDA**

Mr. Arndt stated there will be two additional items following the regular agenda, one of which will be discussed in Executive Session.

**PUBLIC COMMENTS**

None.

**EXECUTIVE SESSION**

Mr. Arndt stated there would be one Executive Session to discuss legal matters.

**APPROVAL OF MINUTES**

***April 28, 2014 Regular Meeting Minutes***

On a motion by Mr. Bohner, seconded by Mr. Nagle, the Board unanimously approved the minutes of the April 28, 2014 Regular Meeting, as amended (6-0).

***May 12, 2014 Workshop Meeting Minutes***

On a motion by Mr. Bohner, seconded by Ms. Cusick, the Board unanimously approved the minutes of the May 12, 2014 Regular Meeting, as amended (4-0). Messrs. Muller and Stellar abstained.

**ACTION AND DISCUSSION ITEMS**

***Allentown Division – Coagulation Chemical Conversion Study (Approval)***

Mr. Parsons referred to the attached memorandum, noting the current maximum design capacity of the water plant is 30 MGD and for the past 84, aluminum sulfate (alum) has been the only coagulant used. During the plant retrofit project of the 1990's, plate settlers were installed and overall clarifier settling times and efficiencies compared to previous times and efficiencies were reduced. Allentown never experienced the anticipated settled water turbidities that were put onto the filters, particularly during storm events. Near the end of the very long and expensive retrofit project, the design engineer suggested that we consider changing from our accepted coagulant to polyaluminum chloride (PACl). Upper management of the water plant at that time rejected the suggestion and the plant has continued using alum ever since. The water plant is currently permitted to use 9 MGD from Schantz Spring and 4 MGD from Crystal Spring. Neither of these sources flows through the chemical treatment portion of the water plant. This translates into the water plant being drastically oversized. With a daily water demand of approximately 16 MGD in 2012, and the springs accounting for 9.3 MGD of that amount, the treatment plant only produced a daily average of 6.6 MGD. With a small production demand combined with over 50 million gallons of storage in the distribution system, the water plant has been able to shut down during storm events. He continued to provide historical information, much of which is found in the attached memorandum. Mr. Parsons explained that a more reliable and effective coagulant which works under adverse conditions is needed to

improve day to day operations of the plant. The water plant is currently permitted to use polyaluminum chloride, and if the conversion from alum does not occur, the water plant must re-permit to continue using alum. Extensive discussion followed. Five engineering firms provided bids for this project; based on extensive review; the Staff recommends services of Gannett Fleming, Inc.

On a motion from Mr. Muller, seconded by Mr. Stellar, the Board unanimously approved a Professional Services Authorization in the amount of \$114,085 (6-0).

On a motion from Ms. Cusick, seconded by Mr. Bohner, the Board unanimously approved a Capital Project Authorization in the amount of \$304,085.

**Allentown 28<sup>th</sup> St. Elevated Tank Rehabilitation; & Multi-Division Steel Tank Reservoir Program**  
(Approval)

Mr. Leist referred to the previously distributed memorandum and explained the Authority has been using Utility Service Company, Inc. (USC) since 2005 and has been please with their work. The USC contract includes in addition to engineering services, but is not limited to:

- Annual tank inspections for safety, sanitation, structure, security and coatings;
- Scheduled periodic interior inspections executed by remotely operated vehicles (ROV) while the tank is full and physically when the tank is drained;
- Detailed inspection and maintenance reports covering safety, sanitation, structure, security and coatings;
- Engineering and permitting services as needed;
- Interior and exterior tank cleaning including chemical disinfection when required;
- All future interior and exterior coatings;
- Non foundation structural repairs;
- Preventive maintenance, and
- Standby emergency services.

The contracts automatically renew on an annual basis, but LCA has the ability to terminate the contract providing written notification is provided to USC 90-days prior to the renewal date. He stated three tanks in the City Division and one in the Suburban Division will be added to the current contract with USC for maintenance. Mr. Leist also explained that the City of Allentown will be covering the first rehabilitation costs by USC for the 28<sup>th</sup> Street elevated tank, as the City failed to finish this before the Concession; therefore reimbursing the Authority for the costs to manage the work. Some discussion followed.

On a motion from Ms. Cusick, seconded by Mr. Muller, the Board unanimously approved the Professional Services Authorization for Utility Service Company, Inc. in the amount of \$1, 295, 079; whereas the City of Allentown will reimburse the Authority \$363,524 (6-0).

**Allentown Wastewater Treatment Plant, Motor Control Center Replacements - Amendment**  
(Approval)

Mr. Parsons stated the project includes the replacement and relocation of five motor control centers (MCCs) for the wastewater treatment plant that have reached the end of their useful life and are all highly corroded due to the corrosive nature of the local environment. LCA desires to relocate the five (5) existing MCCs outside to a power zone house, anticipated to be a pre-engineered structure that is identical in nature to the one used to replace MCCs 1 and 1A. He noted that the only exception to the existing MCC is that the proposed unit will be stainless steel due the locally corrosive atmosphere and the proposed MCC may not be identical in size to the existing MCC based on the design. Mr. Parsons noted CDM Smith Inc. based their design proposal on a Preliminary Design report prepared by CMX, Inc. for the City of Allentown. Subsequent investigations by CDM during the design process has found that the CMX report was not exhaustive; therefore, CDM will provide additional design services to include removal and replacement of existing conduits for a negotiated fee of \$12,000. The CMX report also indicated that the roof was capable of handling the loads of the proposed stainless steel MCC housing unit, but further

structural analysis of the roof by CDM has indicated that small-scale structural reinforcements of the concrete cross-members are required, and their fee to design these changes is \$16,500. Mr. Parsons was employed by the City when the CMX report was completed and did add that the City had required a very limited scope to their work that may not have allowed for the detail that CDM performed. Some discussion followed.

On a motion from Mr. Muller, seconded by Mr. Nagle, the Board unanimously approved the Capital Project Authorization Amendment for Allentown Wastewater Treatment Plant Motor Control Center Replacements Design Phase in the amount of \$32,500, which includes a Professional Services Authorization Amendment for CDM Smith, Inc. for \$28,500 (6-0).

**Approval for Development of Test and Chemical Grouting Bid Documents for the WLI (Approval)**

Ms. Mandes referred to the previously distributed memorandum, explaining that based on the EPA Compliance Order and the PA-DEP 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 within a five year period (2014). She reminded members that the SCARP Program has been developed to investigate the sources of I & I and to remediate areas identified as having excessive I & I.

Ms. Mandes explained the Physical Condition Assessment (PCA) of the Western Lehigh Interceptor System (WLI) has been ongoing, consisting of various techniques for identifying sources of I & I and follow-up actions. The findings of the 2011 and 2012 PCA indicate that the WLI pipe is structurally sound but the joints leak during periods when the ground water levels are high. This has been further confirmed through a demonstration of the Electro Scan technology. The results of the scan indicated that nearly every joint leaked, some greater than others. Ms. Mandes stated this project is an amendment to the current Arcadis authorization for the WLI Infiltration and Inflow Project. The work covered by this amendment comprises rehabilitation work including testing and chemical grout sealing of 44,256 LF of pipe, close circuit television (CCTV) with Testing and Chemical Grout Sealing (T & S) of 24,139' of pipe adjacent to 20 WLI manholes, cleaning sections of pipe that have been found to have heavy debris, and five point repairs. The recommendation to rehabilitate the leaking joints by a T & S is based on the results of the CCTV work and further confirmation of the leaking joints by the Electro Scan. This is a very cost effective defense against infiltration of groundwater compared to other rehabilitation technologies. Discussion followed.

On a motion from Mr. Bohner, seconded by Mr. Nagle, the Board unanimously approved the Professional Services Authorization Amendment for Arcadis, Inc. in the amount of \$103,000 (6-0).

**Allentown Division – Sanitary Sewer Evaluation Study (SSES) Construction Phase (Approval)**

Mr. Leist introduced Phil DePoe, PE, a relatively recent new Authority employee, and noted that he was the engineer working on this project. He then referred to the memorandum, explaining the project involves field investigatory work to identify sources of inflow and infiltration (I/I) in the City's sanitary sewer system located in the Primary and Secondary basins as identified in a Whitman, Requardt & Associates (WR&A) Report dated January 2013. The work will include CCTV inspection of approximately 102,000 linear feet of sanitary sewer mains ranging in size from 8 to 36 inches in diameter. The work will include the inspection of approximately 550 manholes and sewer piping point repairs, joint repairs, smoke testing, and heavy cleaning. Upon completion of the SSES work, WR&A will summarize the findings and conclusions of the review in a technical memorandum. Mr. Leist noted that this project is identified as Administrative Order/Un-Completed Work and will be funded by the City of Allentown per the Lease Agreement. He stated that only two of the eight bidders that received the bid documents responded, and Video Pipe Services, Inc. was the lowest bidder. They have completed pipe cleaning, pipe inspection, joint grouting and trenchless spot repairs for Allentown and surrounding areas for over 15-years; therefore, the Authority recommends awarding the General Construction Contract to Video Pipe Services, Inc. subject to the receipt of the necessary bonds, Insurance and other required documentation.

On a motion from Mr. Muller, seconded by Mr. Stellar, the Board unanimously approved the Capital Project Authorization Amendment for the Construction Phase of the Allentown Division SSES Work in the amount of \$844,337 which includes a Professional Services Authorization for Whitman, Requardt and Associates, LLP for \$54,930 and Contract Award to Video Pipe Services, Inc in the amount of \$654,407 (6-0).

Mr. DePoe left the meeting at 1:20 p.m.

Joyce Marin and Michelle Diaz of Renew Lehigh Valley entered the meeting at 1:23 p.m.

### **SYSTEM OPERATIONS OVERVIEW**

Mr. Kerchusky stated that there were many power outages at Kline's Island Wastewater Treatment Plant during the storm events in the prior week and a tree fell on one of the power lines, contributing to the outages. Some discussion followed.

### **STAFF COMMENTS**

#### **Automated Meter Reading (AMR) Project – Allentown Division**

Mr. Arndt stated the AMR project in the City Division is mostly closed out. He reminded members the project was performed by iTron, Inc. and the Authority authorized a change order to finish out the project that the City had started. He noted there was a dispute of some charges throughout the contract and iTron was requesting more funds; however, the Authority settled with iTron to pay less than the disputed amount.

#### **Electricity Analysis and Purchase**

Mr. Bielarski informed the Board that our current electric contracts will be expiring in early 2015; therefore, the Authority's Purchasing Manager (John Chaya) has been tracking current rates and calculating savings each day for about 30 days. As of today, if we lock in to begin a new contract with Mid-American, the cost savings would be about \$250,000. Extension discussion followed.

Mr. Bielarski stated that the Authority would be taking advantage of this opportunity to contract with a new electric supplier, as there were no objections from Board members.

### **SOLICITOR'S COMMENTS**

None.

### **OTHER COMMENTS**

Mr. Nagle asked for an update on terminations of service.

Ms. Adam stated that this is currently the third billing cycle for terminations, noting there were about 300 terminations this week, but at a much lower dollar threshold than in the past. She stated that 1.5% of bills in the Allentown Division for 2013 remain uncollected.

### **EXECUTIVE SESSION**

The Chairman called for an Executive Session at 2:03 p.m. to discuss legal matters.

Messrs. Muller and Stellar left the meeting during Executive Session at 2:13 p.m. and 2:36 p.m., respectively.

The session ended at 2:50 p.m.

**ADJOURNMENT**

There being no further business, the Chairman adjourned the meeting at 2:51 p.m.

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Richard H. Bohner  
Secretary