



HANNIBAL BOARD OF PUBLIC WORKS

ELECTRIC, WATER AND WASTEWATER

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DATE: June 28, 2018
TO: Mayor Hark and Members of the City Council
FROM: Heath N. Hall, Board of Public Works General Manager

BPW Update to Council

Chloramine Alternative Project Update

I mentioned last month that we would be making a couple of significant decisions related to the new Granular Activated Carbon (GAC) treatment system. The installation of this additional filtration system to the drinking water treatment process will remove more organics from the water allowing for us to discontinue the use of ammonia for disinfection purposes. The quality of water delivered to customers will be improved and we will have a much better chance of meeting future regulations.

We finalized a location for the new building, just north of the existing Filter Building. This location is the most economical and allows for convenient operator access. There is also enough space to construct delivery driveways, and it does not violate any of the Riverview Park property rules. This location will also allow us to include the chemical storage of sodium hypochlorite to now be enclosed within the building.

We also settled on the number and size of pressure vessels to house the GAC. There will be eight 40,000 lb. pressure vessels. After about 2 days of conventional surface water treatment, filtered water will be pumped through the GAC pressure vessels allowing a second filtration of the water to be completed, prior to disinfection and delivery to customers.

The second round of pilot testing continues. We will be about 7 weeks into the testing period by the time of the Council meeting. Two of the four carbons are performing better than the others. One of them is the Calgon F400 bituminous carbon that we pilot tested last summer. The other is an enhanced coconut carbon manufactured by Evoqua. We will likely perform at least one more round of pilot testing before taking bids on carbon media.

We received some great news a couple of weeks ago. One of our carbon suppliers obtained MDNR approval to sell reactivated or regenerated carbon media. This should reduce the estimated \$691,000 per year operations and maintenance cost to run the GAC system and not hinder the treatment efficiency of the system.

Black & Veatch has about half of the design work complete on the new GAC facility, and they continue to be right on schedule. Our plan is to have the design completed and submitted to MDNR for review around the end of September. MDNR review can take up to 90 days. Afterwards the

project design can be finalized and construction bids can be taken. There are some items we are exploring that may be able to be completed while the MDNR review process takes place. Another pilot column test can be performed, and maybe longer lead time items (like the pressure vessels) can be ordered in advance to help ensure we meet the project completion deadline of March 31, 2020.

Rate Information

As I alluded to in May, the Board recently had a public hearing to adjust utility rates that will take affect July 1st. Electric rates will remain flat, mostly due to the self-managed purchase power method that began in June 2017. So far the cost savings from this method of purchasing power has more than offset the loss of larger industrial customers (Buckhorn and Cosmoflex). Sewer rates will increase 3.7% (approximately \$1.50/month for residential customers) for inflationary reasons. Water rates will also increase 3.7% (approximately \$2.50/month for residential customers) for inflationary reasons. The total impact on each residential customer is approximately \$4/month.

Longer term water rates will continue to rise to meet the recommendations of the recently completed Water Cost of Service (COS) study. The COS recommended a 54% increase (approximately \$19/month for residential customers) over the next 5 years to meet revenue requirements for the new GAC treatment process, the loss of Ralls County Water, and general inflationary items. Currently we are proposing to increase water rates each July 1 about 3.5% and each January 1 about 7.5% for four consecutive years. And followed by an approximate increase of 5% the fifth year.

Keep in mind these are rate estimates, as we have not received official bids on the GAC treatment process, and a lot can happen in a 5 year period. We will continue to review revenues and expenses before to ensure we are in line with the COS expectations. Also the Board is required by charter to have a public hearing between 15 and 30 days prior to any rate adjustment. This process will allow us to review and discuss the most up to date information prior to finalizing any adjustments.

Bond Ordinance

As I mentioned at the last couple of Council meetings, the Board has elected to fund the Chloramine Alternative Project by selling bonds. Council approved the bonding language and it will be on the August 7th ballot for voters to consider. It is titled proposition "A" and is for \$17.5 million dollars to cover the addition of a Granular Activated Carbon (GAC) filtration to the water treatment process.

Keep in mind; the Board has been advised that this is not a second vote on disinfecting the drinking water with ammonia. Instead this vote would exclusively be for voters to weigh in on whether the project is funded with bonds or not.

Even without voter approval to sell bonds to fund the project, the Board is still obligated under the current City Ordinance (no. 4759) to remove ammonia from the drinking water process by March 31, 2020. Another funding mechanism would be to lease finance the project, which is estimated to cost an additional \$1.4 million over the life of the debt payments.

I will be at the meeting to discuss these items and answer any questions you may have.