



## HANNIBAL BOARD OF PUBLIC WORKS

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**ELECTRIC, WATER AND WASTEWATER**

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**DATE:** December 14, 2017  
**TO:** Hannibal City Council  
**FROM:** Robert W. Stevenson, P.E.  
**Re:** Chloramine Replacement Project

A draft report has been submitted by Black & Veatch to the HBPW staff and will be forwarded to the MoDNR after incorporating Board comments, if any. A summary of that report will be presented to the Council during its regular meeting on Dec. 19<sup>th</sup>. By ordinance that report was due to be delivered to the MoDNR in March, 2018.

Once the report is submitted to MoDNR, the scope of the initial Black & Veatch contract will have been completed. I can tell you now that their recommended option to remove the ammonia from the drinking water continues to be Granular Activated Carbon. The RO option which has a higher capital cost but a lower annual operating cost is still too expensive in a 20 year present worth analysis. Another system using enhanced coagulation coupled with ozone oxidation has lower capital costs and lower operating costs but is fairly complicated to operate and has a higher probability of operator error or equipment failures leading to future water quality violations. More details will be available by meeting time on the 19<sup>th</sup>.

While the MoDNR is evaluating the report, the Board will be working on finance options for the GAC alternative. We may be ready to report some options or recommendations by early February.

Also, Black & Veatch has been invited to prepare a contract for Board approval for the detailed design and construction plans and specifications for the GAC alternative. Such contract would not be approved until we receive word from the MoDNR that they concur with the preliminary plans and study report.

HBPW staff will start soon to run additional pilot studies on other GAC products from other sources to try to optimize our GAC source. Some other products may perform better than our initial selection on which the study and report is based.

*"The mission of the Hannibal Board of Public Works is to provide safe, reliable utility products with excellent customer service at reasonable prices."*