

**TO: Kurt Hodgen, City Manager**  
**FROM: Mike Collins, Public Utilities**  
**DATE: October 16, 2017**  
**RE: City Of Harrisonburg WTP Fluoride Project**

**Summary:**

As Director of Harrisonburg Public Utilities (HPU), I have on prior occasion addressed City Council regarding the suspension to adding fluoride to potable water at the Harrisonburg Water Treatment Plant. This presentation will address the opportunity to re-engage the addition of fluoride at the discretion of City Council.

**Background:**

- The addition of fluoride to water at less than 0.7 parts per million is ineffective and inefficient.
- The Center for Disease Control has declared the addition of fluoride to water at 0.7– 0.9 parts per million to be “A top ten health measure of the last century”.
- Drinking water standards define fluoride to be a “Primary Inorganic Contaminant” at greater than 4.0 parts per million.
  
- Seventy four percent (74%) of communities in United States practiced water fluoridation in 2014; up from thirty seven percent (37%) in 1964.
- Ninety Six percent (96%) of communities in Virginia practiced water fluoridation in 2016; up from seventy two percent (72%) in 1992.
- Harrisonburg has practiced water fluoridation since 1973 until repealed in 2016.
  
- The original PER level project capital costs were forecasted at \$190,000 for construction.
- The original PER level annual operation costs were forecasted at \$25,000 / year for chemicals.

The decision to practice fluoridation is totally discretionary to the choice by City Council; however, our water permit issuance agency, Virginia Department of Health, strongly supports the practice. These practices are not without strong opposition in some cases with reference to concerns for human health.

**Key Issues:**

- 1) Presentation of an ordinance to direct the Department of Public Utilities to re-engage in the practice of adding fluoride into potable water.
- 2) Presentation of a Memorandum of Understanding (MOU) with the Virginia Department of Health (VDH) that will allow the City to receive \$40,000 in funding support from VDH.
- 3) Presentation of total project activity milestones.

### **Environmental Impact:**

The project is endorsed by VDH and various other governmental agencies that are engaged with the support of human health. This topic, however, has its opposition in which some cases have led to a suspension of the practice.

A key element of this project was to protect workers and equipment from the effect of acid fumes that are inherent to the practice. This project moves all exposure into an isolated exterior and isolated “add on” room to the outside of the existing building. Mitigation of risk is inherent to this project.

### **Fiscal Impact:**

- Construction cost will approach \$270,000 less \$40,000 grant funding; the engineer is concerned with the significant amount of trades that are required in the small addition. The project has been scaled back and therefore gives indication that the PER cost may have been understated.
- The forecast for annual cost of operations remains \$25,000 / yr.

### **Prior Actions:**

- City Council repealed City Code of Ordinances Section 7-2-10 under City Council Agenda Item ORD 16-077 on August 9, 2016. City Attorney Chris Brown presented this request.
- HPU Director Mike Collins presented a Preliminary Engineering Report (PER) by Wiley & Wilson Engineer for fluoridation alternatives. HPU has proceeded with recommendation 3\$

### **Alternatives:**

- Discontinue adding fluoride

### **Community Engagement:**

- Open for discussion at City Council

**Recommendation:**

- City Council is recommended to review the draft ordinance as prepared by legal staff. When the draft ordinance is determined acceptable and when the fluoride project has been completed, City Council should be prepared to enact this ordinance.
- City Council is recommended to authorize the City Manager to sign the Memorandum of Understanding with the Virginia Department of Health and present the signed copy to VHD for formal recognition.
- City Council is an important project stakeholder in the Ordinance, the MOU and the construction project; therefore, opportunity for project and process input is herein provided.

**Attachments:**

- 1) Draft Ordinance by City Legal Staff
- 2) Memorandum of Understanding
- 3) Power Point for Project

**Review:**

*The initiating Department Director will place in Legistar, in sequence of transmittal, the names of each department that must initial their review in order for this item to be placed on the City Council agenda. The completion of review only addresses the readiness of the issue for Council consideration. This does not address the recommendation for approval or denial of the issue.*

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