



# City of Columbia, Missouri

## Meeting Minutes

### Drinking Water Planning Work Group

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Monday, November 13, 2017  
5:30 PM

Pairwise Comparison and Preliminary Ranking

701 E Broadway  
Conference Rooms 1A  
& 1B

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#### I. CALL TO ORDER

Ms. Julie Ryan called the meeting to order at 5:31 p.m.

Staff: Ryan Williams, Assistant City Utilities Director of Water & Light; David Storvick, Engineering Manager; Deidra McClendon, Lab Supervisor; Shawn Carrico, Engineer; Ed Fisher, Water Production Manager; Ryan Thomas, Water Quality Control Officer; Chris Kisch, Senior Administrative Support Assistant

Consultants: Tom Crowley, Carollo Engineers; Ben Haecherl, Carollo Engineers; Andrew Hansen, Black & Veatch

Public: Marie Brown, CoMo Safe Water Coalition; Trent Stober, HDR Engineering; Dick Parker, Citizen; Wayne Hawks, Citizen; Holly Burton-Aro, Citizen, Ivy Boley, Citizen, Cody Luebbering, Citizen

**Present:** 8 - Karl Skala, Julie Ryan, Matt Off, Ron Pruett, Michael Szewczyk, Kim Fallis, John Conway and Eric Hempel

**Absent:** 2 - Terry Merritt and Randy Jackson

#### II. INTRODUCTIONS

Ms. Ryan did a round robin for introductions as it was a large group.

#### III. APPROVAL OF AGENDA

Mr. Karl Skala made a motion to approve the agenda as submitted with a second by Mr. Michael Szewczyk. Motion passed unanimously.

#### IV. APPROVAL OF MINUTES

The September 11, 2017 meeting minutes were approved with changes with a motion by Mr. Karl Skala and a second by Mr. Ron Pruett. Motion passed unanimously.

**Attachments:** [Meeting Minutes Draft 10 10 17](#)

#### V. FINALIZE MISSION STATEMENT

Mr. Crowley told the group there were some small edits that were made. He stated the only thing left was to vote and hopefully accept the mission statement. Ms. Ryan asked if there was any discussion for the mission statement or goals. There was no discussion.

**Mr. Karl Skala made a motion to approve and accept the mission statement as presented at this meeting with a second by Mr. Ron Pruett. Motion passed unanimously.**

## **VI. REVIEW PAIRWISE COMPARISON RESULT (J Rehling via webex)**

Mr. Crowley stated this was not a lot to work with. He reviewed the criteria weighting results saying the group could accept the alternatives as they were or they could potentially delay the schedule to incorporate pairwise comparisons from this workshop. Mr. Crowley said he and Mr. Carrico had gotten together and created the proposed final schedule. The proposed final schedule included the following:

- December 11, 2017 - Alternatives Screening Workshop
- January 8, 2018 - Final Screening and Process Selection
- January 15 - 26, 2018 - Presentation of Results (Public Comment Meeting)
- February 12, 2018 - Final Workgroup Meeting (Review and Approval of Advisory Board Presentation)
- April 4, 2018 - Bond Recommendation to Advisory Board

Mr. Crowley encouraged the group to complete the comparisons worksheet. Mr. Carrico noted the advisory board should see the information by March, 2018 to allow sufficient time to incorporate. He added he felt it was better to take a small step back to get feedback from everyone. Ms. Fallis asked about the significance of April 4, 2018. Mr. Carrico explained that date was tied to the bond proposal. He added the recommendations from the group impact the final proposal. Ms. Ryan asked if the group needed to cast votes. Mr. Crowley advised the group would only need to be in agreement as this would be the most important task. Mr. Crowley went through the examples beginning with the “Constructability” comparison meaning the ease of construction. Mr. Crowley stated there were several aspects with the first being to Maintain Plant Operations. He added the contractor would not have to do much here. Second was schedule; meaning how long it would take. Third was space requirements; Mr. Crowley stated the space was very tight. Last was permitting. Mr. Szewczyk stated he struggled with construction and asked if the group could rank these. Mr. Crowley advised this way should be easier for the group to do. He stated in the end the group would be making comparisons and the group would need to know how important each was to them. Next Mr. Crowley reviewed the operability comparison. He stated what was wanted here was for the group to decide which was more important; was it complexity, staff knowledge, residuals production, etc. Mr. Szewczyk asked if the group were to say residuals versus staffing if that would mean they would be saying low or high residuals. Mr. Crowley answered if he felt low

residuals was more important the best choice would be staffing. Mr. Crowley stated there had been a long discussion on cost therefore cost was included in the comparisons. Mr. Crowley advised it was the group's responsibility to tell what was most important to them. Ms. Ryan asked if Mr. Crowley wanted the members to make these decisions now. Mr. Crowley advised these would be collected at the end.

## **VII. REVIEW PROJECT BOUNDARIES**

Mr. Crowley reviewed for the group the treatment alternatives that included the "Must Include List", and the "May Include List". He explained the Fatal Flaw and Must Include lists would eliminate potential alternatives from consideration. Mr. Crowley discussed and explained the Fatal Flaw Analysis Base Treatment Trains for the group. Mr. Crowley stated a cost estimate had been done for each alternative. He noted that at the beginning the cost is high but with more detail the cost estimate becomes clear.

## **VIII. DISCUSS/REVIEW ALTERNATIVES AND CAROLLO SHORTLIST**

Mr. Crowley discussed the different alternatives, saying all the alternatives provide a plant capacity of 48 million gallons per day (mgd). Mr. Crowley stated it was recommended that Alternative B4 and B5 be eliminated from the alternatives, and focus on keeping UV Disinfection and Ozone Contactor. He stated the ozone contactor gives additional benefits in helping with disinfection. Mr. Crowley stated MIEX should also be eliminated due to permitting, operability, and constructability.

## **IX. SDA MODEL (J Rehiring via webex)**

Mr. Crowley said prior to December 11, 2017, the group should rank each alternative. On December 11, 2017 the group would screen the alternatives and shortlist. Prior to January 8, 2018, the group would identify relevant data and on January 8, 2018, the group would re-rank the alternatives and select the best fit.

## **X. DISCUSS AND RANK SHORTLISTED ALTERNATIVES (J Rehiring via webex)**

Tabled.

## **XI. REVIEW DATA GAPS**

Mr. Crowley stated some have already been identified and costs updated.

## **XII. REVIEW ACTION/DECISION LOGS**

Mr. Crowley stated the next step would be to go back and rank each alternative and screen each, then come back to discuss. Mr. Szewczyk asked about the operations

and maintenance expense. Mr. Crowley explained operations expense is the operation of the plant. Maintenance expense is the expense it cost for parts and equipment. Mr. Szewczyk asked if rate impact could be included. Mr. Crowley stated it could. Mr. Carrico advised it was difficult to provide the hard cost now but something could be provided. Mr. Szewczyk said it would be beneficial to know where the City of Columbia stands in comparison to other communities. Mr. Skala explained that in most cases, the City of Columbia was in the middle when compared to other communities. Mr. Szewczyk asked if the group could make a decision after Mr. Crowley comes back with the alternatives with lifecycle costs, and the impact on rates. Mr. Crowley answered yes, they would go through and make eliminations then go through another pairwise comparison to decide the best technology.

### **XIII. REVIEW NEXT STEPS**

Mr. Crowley stated the next steps for Carollo would be ranking the remaining preliminary alternatives, identifying data gaps and resolve, and update costs and rankings based on data gaps. For the group, they would review the preliminary ranking of remaining alternatives and develop a list of questions and concerns one week prior to the next meeting. Mr. Crowley said at the December 11, 2017 and the January 8, 2018 meetings the group would review the final shortlist and criteria ranking, conduct a sensitivity analysis, and determine final recommendations and draft summary.

### **XIV. GENERAL COMMENTS BY PUBLIC, MEMBERS AND STAFF**

Mr. Wayne Hawks provided three pictures taken from the McBaine Bottoms. He suggested an analysis on the water source being used. He stated the wells there now were duck flood wells were only 120 feet deep and would suck up anything including sand. Mr. Hawks stated the group did not understand the chemistry and chlorine would have to be dealt with. He stated the source should be the focus. Mr. Hawks said the reality is when pumps get going they pull more than just water. He referred to a lawsuit by the City of Hannibal and how they have taken chloramine out of the water. Mr. Hawks stated the Hannibal citizens voted out the use of chloramine. Mr. Hawks said the reality of the cost is \$100 million. He stated there was lots of research with chlorine and what was done in the municipalities. Mr. Hawks advised more research should be done. Mr. Hawks said he was a concerned citizen and being a Dentist, he was looking for perfect wells. He said he has traveled and he found that Germany attacks the source before the source gets to the plant. He stated this was an ingenious process and the City of Columbia could benefit from this type process.

Mr. Dick Parker introduced himself, saying he has been an environmental activist for a number of years. He started teaching about the issues in 1969. He said after he had presented information on the smoke particulate pollution impact on laundry costs, a

student had pointed out that in East St. Louis where smoke was a big problem and where many of the students lived, the major problem was lack of a local hospital. Students often educate their professors and he made Mr. Parker recognize the need to address a wider range of problems and a need to consider the impact of solutions on a wider range of citizens. Mr. Parker stated Columbia has a large number of citizens with low incomes. He said 17 percent of Columbia citizens are housing stressed and 44 percent of students receive free and reduced lunches to make sure they get an adequate amount of food so they can learn. Mr. Parker said typically people try to pay rent and utilities before food. He said a couple of years back, of the 43,000 Columbia Water and Light's (CWL's) residential customers, about 5,000 (12 percent) had their utilities turned off as a result of non-payment. Mr. Parker stated most of these were due to lack of cash. Mr. Parker said drinking and cooking water is about two gallons per day per person of the treatment plants production. He said if you throw in a daily shower that rises to about 3 percent. Mr. Parker said he believes that along with the cost of centrally treated water, the cost of individually treated water needs to be an option which is considered. He said some people like himself would treat their kitchen water, others would also want the bathing water to be treated but felt few would intentionally treat the water to make sure their garden and lawn water is higher quality. Mr. Parker said a significant issue is how many dollars per month is it appropriate for the City to burden the citizens who have lower incomes in order to save money for those of us who consider water quality to be a problem. Mr. Parker stated the final report from this committee should include the percentage cost increase for the recommended treatment to achieve higher quality water and the dollar impact of that on low water use and low income households.

## **XV. NEXT MEETING DATE**

**December 11, 2017; 5:30 P.M. - Final SDA Decision Making Analysis Workshop**

## **XVI. ADJOURNMENT**

The meeting adjourned at 7:30 p.m.

Members of the public may attend any open meeting. For requests for accommodations related to disability, please call 573-874-7214. In order to assist staff in making the appropriate arrangements for your accommodation, please make your request as far in advance of the posted meeting date as possible.