

## Minutes

### Water Treatment Customer Advisory Committee

Tuesday March 11, 2008 11AM-1PM

#### Background

Brian Steglitz, project engineer for the City, welcomed the group, thanked them for their commitment of time on behalf of the City and fellow customers and reviewed the purpose of this project and the role of the Customer Advisory Committee.

Janice Skadsen, project manager for this effort from the engineering firm of CDM Michigan Inc. walked the group through a background of the project and the likely considerations for the Customer Advisory Committee. See the attached slides for details of her presentation. Fran Alexander of Alexander Resources facilitated the discussion of engaging the public, obtaining feedback from this meeting and establishing the next steps for the CAC.

Discussion items from the Customer Advisory Committee included the following:

#### Hardness

- Hardness varies by season with cold water being harder than warm water. This is due to the chemistry of the softening process, with slower reactions as the temperature decreases.
- Goal will be to manage the current hardness variability to achieve year round consistency.

#### Treatment Process

- The raw water used at the water treatment plant is typically a blend of 85% Huron River water and 15% groundwater.

#### Softeners

- It was noted that there are no data on the number of customers using softeners in their homes or businesses. It is assumed that most softener systems are used by businesses, specifically ones that use boilers. High pressure boilers require further softening than supplied by the City water softening process. This process adds chemicals to treat the water and creates a waste stream.

#### Distribution piping and corrosion

- Corrosion in distribution system piping is due to a complex relationship between water chemistry, pipe type, water velocity and water age. Softer water is generally more corrosive. Controlling the pH and alkalinity can help manage corrosivity.
- About 40% of the pipes in the system are unlined iron pipe. The rest are primarily ductile iron with a cement lining. The unlined pipes typically have iron corrosion resulting in loss of capacity (fire flow issue) and rusty water.
- Residences that have galvanized pipe (used primarily in the 1950's and 1960's) generally have already replaced most of these pipes with copper. A change in

water hardness therefore will not likely have a significant effect on the homeowners' galvanized piping.

- The city has a total of 493 miles of distribution pipes.

### Cost Implications

- Costs presented are from a previous study and will be reviewed/updated.
- Availability of sodium hydroxide has not been a problem.
- *Judy Tomer will provide the team with an example of a water bill from Village Homes as an example for calculating potential rate impacts from additional softening.*

### Treatment Plant staff

- Staff has been engaged in the project and will continue to be involved. Staff are interested in pursuing the additional softening because of anticipated water quality improvements.
- *Consider inviting a staff member (operations and maintenance) to join the CAC (Brian Steglitz).*

### Health Discussion

- The use of sodium hydroxide to reduce hardness releases sodium. Therefore, the primary concern is this increased sodium in the finished water.
- On project fact sheets, it was recommended that a comparison be made between expected increase in sodium consumption relative to the amounts expected from all sources, including food.
- Noted that for control of hypertension, the current recommendation is 1,800 mg/person/day of sodium.
- According to one report (National Institutes of Health) 19% of the population has high blood pressure

### Customer Engagement proposal

- Important to engage public early using the following mechanisms:
  1. Develop fact sheet
  2. Develop web site
  3. Hold two targeted focus groups: one of health interested customers and professionals and one of large customers (high water use)
  4. Perform a web survey of residential customers. Offer an option of a focus group of interested survey responders.

### Future meetings:

All meetings will take place from 11 PM-1 PM on the following dates:

- March 11

- April 15
- May 15
- June 5
- June 26
- and July 22

Dates were reviewed and none had more than one person unable to attend with the possible exception of July 22. The July 22 date is tentative depending on how work is progressing. The need for this meeting will be evaluated in the future and rescheduled if needed.

At the next meeting, an optional tour of the softening facilities and discussion of water softening chemistry will be offered by Larry Sanford, Assistant Plant Manager. This will take place after the CAC meeting.

*Note: Action items shown above in italics.*

Sign In CAC 3/11/08

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