

**Lutes, Teresa****COPY**

**From:** Jennings, Bart  
**Sent:** Monday, May 10, 2004 2:32 PM  
**To:** Sharlene Collins (E-mail); David Malish (E-mail)  
**Cc:** Lutes, Teresa; Cantu, Reynaldo; Burazer, Jane; Greene, George; Gardner, Gene; Brooks-Newton, Georgi; Vlvona, John  
**Subject:** North Austin MUD Issues

Sharlene/David,

I met with Teresa and Gene on Friday to discuss any previous work initiated on your suggested option of providing higher pressure water to the North Austin MUD for its internal pressure problems through additional multiple connections of the City's water system to the MUD's distribution system. It seems that past work was mostly conceptual and modeling of such an option has not been thoroughly explored. Gene requested the following information in order for him to properly analyze such an option:

1. A map showing the boundaries of the areas that you wish to address with the proposed solution. The boundaries of the low pressure areas should follow property lines.
2. The number of connections within the identified areas (I am assuming they are all 5/8" connections. If not, please let us know.)
3. Indicate the peak hour flow and fire flow figures for the MUD in these low pressure areas.
4. Indicate where you propose additional master meters be located.

As soon as we receive the information, Gene will work on this model and provide you the results of his findings.

In terms of your suggestion regarding the re-chlorination of the Martin Hill Reservoir, the suggestion has been reviewed by various divisions of the Austin Water Utility. The Austin Water Utility is not interested in pursuing this option to address pressure issues for several reasons:

1. **Public Perception:** Because of the size of the facilities needed to store chemicals on site and the general public's concern of the storage of chemical (which has been expressed in the past of the Utility's existing water treatment plants), we believe that the public and the media would become alarmed at such a proposal and would create public relation issues for an area that the City wishes to promote economic development.
2. **Change in Safety Procedures:** By storing these chemicals on-site, the Utility's safety procedures, anti-terrorism procedures, vulnerability assessments, and security measures at the site would be required to be changed. As you know, such issues are regulated by State and Federal agencies and have been scrutinized since 9/11. The change in security measures would require additional funding for improvements and increased operating expenses. Such a change would also increase the Utility's overall risk and liability related to mechanical failures or accidents that could possibly occur at the site.
3. **Sizing of Facilities:** Re-chlorination in a other distribution systems has not encompassed a reservoir of the type of magnitude that the City operates. Most utilities shy away from feeding gas chemicals in their distribution systems due to safety and public perception of using gas chemicals and use liquid chemicals instead. This means using aqueous ammonia and sodium hypochlorite and would require large storage volumes. The sizing of the facilities only exacerbates the concerns listed.
4. **Potential Water Quality Problems:** Because our water source is surface water, the introduction of additional chemicals at the reservoir will increase the possibility of disinfectant byproducts. Most of our industrial customers manufacturing systems are highly sensitive to such byproducts and several industrial customers obtain their water through the Martin Hill Reservoir.
5. **Operating Flexibility:** The Austin Water Utility wishes to retain the greatest operational flexibility in operating the Martin Hill Reservoir and does not wish to limit the range of the reservoir level. The turnover in the reservoir is an important issue in order to ensure that bacteria re-growth due to nitrification does not occur. By operating the reservoir within the range that it is currently being operated at, the nitrification potential is addressed. Operating the reservoir at a higher level in order to increase psi within the distribution system would increase the possibility of nitrification and subsequent bacteria re-growth.

