

MEMORANDUM

To: Jim Merciel, Jim Russo

From: Martin Hummel

March 10, 2005

EXHIBIT
FILED
August 2, 2007
Data Center
Missouri Public
Service Commission

RE: **SUBURBAN WATER COMPANY,**
Serving Bon Gor Lake Estates, Columbia, Mo.

Status of physical facilities and their operation as of Feb. 2005.

- Meters for customers- per field evaluation by PSC staff and Suburban staff there appears to be a meter to every building, house, duplex or fourplex. Thus, metered service with a meter for each building owner (customer) is feasible without major modifications. There is work needed toward verifying which meter serves which building, installing some new meters, and landscaping around some meter settings in order to facilitate efficient meter reading. This work apparently can be done as routine maintenance.
- Flushing capability- There is a need for a distribution system evaluation and improvements to make routine flushing workable. The extent of improvements necessary should be discovered with the evaluation, but must include at least verification that all existing valves work and the installation of whatever flush valves are necessary to flush all the mains.
- Operational problems- During the recent past, at least two years, there has not been adequate operations. The application of chlorine has not been properly controlled and monitored as evidenced by excessive corrosion in the well house and leaks on the lower half of the standpipe. Competent operations must be done on a going forward basis.
- Well condition - Notwithstanding severe corrosion to the casing pipe at the wellhead, the well is apparently a good well, 1050 feet deep, with a pressure grouted casing greater than 400 feet. The water produced is of similar quality and character as the water from the adjoining Public Water Supply District.
- Distribution piping - does not have a history of leaks and is therefore presumed to be sound.
- Standpipe condition- has some small leaks and has been patched many times. It should be replaced soon.
- Well head piping and the master meter- the master meter has recently failed and the adjoining piping is highly corroded. All of this should be replaced in conjunction with replacement of the standpipe.

In Summary, the immediate improvements necessary to provide safe and adequate service are:

1. Employ a technically trained operator that will be onsite at least three times a week and physically available on short notice. (A grandfathered certificate does not qualify)
2. Flushing capability of at least 3 feet per second in all mains verified in the field by DNR or PSC Staff.
3. Replacement of the standpipe with one that is at least 90 feet tall with an inlet high enough to provide adequate circulation and detention time.
4. Install meters for all customers/buildings, implement 10 year replacement of meters and reduce unaccounted for water to 10% or less.

These are minimum requirements and will cost between \$26,000 and \$80,000, as a rough estimate. Further engineering evaluation, project description, contract preparation and bidding is necessary.

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Co. Exhibit No. ~~53~~
Case No(s). WSC 2007 04
Date 7-26-07 Rptr PF