

BLACK & VEATCH CORPORATION

TECHNICAL MEMORANDUM

**Fountain Sanitation District
Master Plan Enhancement Study
Task 900 - Administrative and Operation Analysis**

**B&V Project 137033
November 22, 2004**

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Workshop

A workshop was held at the District to discuss current staffing, equipment, and duties. Prior to the workshop, Black & Veatch sent requests to the District for information on the District staff and equipment. The workshop was used to discuss questions and procedures with the District staff about the staff, equipment and duties. Following is a discussion of items discussed at the workshop and conclusions derived from the discussions.

Staff Overview

The District staff is currently comprised of 7 full time staff members and two part time staff members. The full time staff members are holding the following titles:

- District Manager
- Office Administrator
- Head of Operations
- Lead Wastewater Operator
- Wastewater Operator II
- Wastewater Operator I
- Collections Maintenance Worker I

The part time staff members are used for bio-solids and all around ground maintenance.

Staff Duties

The staff duties include but are not limited to the following:

- Operation and maintenance of the wastewater treatment plant. This includes all the plant operations, testing, and monitoring and facility maintenance.
- Daily visit to all three lift stations in the collection system.

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- Cleaning the entire system on a two-year cycle.
- Cleaning known problem areas more frequently.
- Inspecting approximately 20 manholes per week.
- Setting up asset management system for the collection system which includes a GIS component.
- Tracking major work tasks in asset management system.
- Tracking requests or complaints in asset management system.
- Running lift station failure exercises two times a year.
- Making minor collection system repairs including partial or full manhole replacements or repairs and point repairs on pipes.
- Maintaining operation of all District equipment including running all equipment at least once every three months.
- Maintaining billing and payment records for commercial customers.
- Maintaining compliance with applicable laws and regulations.

Job Descriptions

A review of the job descriptions indicates that the related duties are properly outlined to successfully operate and maintain the facilities. Most facilities in the District's size range are staffed in a similar manner. The O&M staff is responsible for the wastewater treatment plant, lift stations, and the collection system. The WWTP is attended 5 days a week Monday through Friday and visited twice daily on Saturday and Sunday. This is an effective staffing plan for a facility in the 1 to 3 mgd range. The collection system maintenance duties are typically tended to Monday through Friday.

Staff Increases

The staff is adequate for the District now and in the immediate future. The decision to increase the staff will be dependant on four factors as follows:

- An increased customer base that may require expansion of the administrative staff to handle the increased office workload.
- The District's desire to perform their own billing and collections work instead of continuing to pay others to perform these tasks.

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- Increased solids handling at the wastewater treatment plant. The staff is adequately sized for the liquids portion. Best operating practices indicates that the staff may handle up to 3 mgd of expansion capacity. The solids handling method will dictate the need to expand the staff. Initially the increase may be handled with part time or seasonal help but eventually another operator will have to be added.
- Collection system expansion will demand that the collection system staff be increased. The additional workload will be attributed to the lineal feet of new sewer lines and sewage pumping stations added to the system. Initially temporary help may be used but eventually the staff needs to be increased.

Equipment

The equipment inventory for the system also was reviewed. Most equipment is used for the collection system maintenance but the inventory is adequate for the typical duties performed by the District staff. The decision to increase the equipment in the inventory will be influenced by the adding of staff or an increase in staff duties. The replacement of an older piece of equipment in the inventory is typically completed when the costs to repair the piece of equipment exceeds the costs of replacing the piece of equipment. The decision to remove a piece of equipment from inventory will be influenced by the changing of staff duties that would cause the need for piece of equipment to be eliminated.

The 1972 tractor probably should be sold while the 1984 Jet-Vac is being sold because of the age of the tractor and during discussions with the District it was indicated that the tractor was not used much at all.

System Performance

Based on discussions with the District Staff, the number of complaints during the last year was minimal. The majority of the complaints were caused by the odor that is created at the treatment plant during the normal operations of the plant. During the last year there were few instances of system backups and the last time there was a sanitary sewer overflow was in 1999 when flood waters destroyed a section of the Little Ranches

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force main. Based on the duties performed by the District and the performance of the collection and treatment system it appears that the District is taking a proactive approach to keeping their system well maintained. It appears that the staff takes pride in the fact that they have very few problems with their collection and treatment system.