

Response to Grand Jury Report "Santa Clara Valley Water District-Part – Part 2- New Water Quality Laboratory Building-Overbuilt and Underused?"

Finding 1

Building costs for the Water Quality Lab were initially estimated at \$8.1 million. When the bids were submitted by contractors in February 2004, the low bid was \$11,344,921. The District reported that the Water Quality Lab Building was completed November 2008 at a cost of \$ 17,895,000. When the cost figures for the District Labor Design Phase, Consultant Design Fees and Consultant Engineering Support during Construction and the actual lab construction contract costs are factored in, the total cost for the Water Quality Lab Building is \$ 21,195,666. The building was paid for through water sales and ground water replenishment taxes.

Response: Respondent partially disagrees with the finding

The estimate of \$8.1 million was made in 2002, and by February 2004, when the project was first advertised, the project estimate was \$9.6 million, reflecting a 9% annual escalation in construction costs over the previous two years. The low bid received in 2004 was \$11.3 million and due to the fact that the bid was about 18% higher than the engineer's estimate, the Board rejected all bids. During the next two years, staff conducted an engineering review to identify potential cost savings. However, during that same period, the cost of large public works construction projects increased by nearly 20% annually due to dramatically increased global demands for construction materials and services. On May 30, 2006, at the time of project advertisement the staff-estimated cost of the Project was between \$14 million and \$17 million. The bid proposal received was in the amount of \$17,540,329.29 which was 3.2% higher than the high end of the estimated range. The bid proposal was considered reasonable since the amount was not substantially more than the estimated range, and the project was awarded. It was completed for the original bid amount with no cost over-runs. The cost of design and construction administration of the project was an additional \$3.6 million, bringing the total cost of the project to \$21.2 million.

The increase in construction costs during the years between 2004 and 2006 were unprecedented and could not be predicted. All public agencies constructing large public works projects were caught by surprise, with Caltrans reporting annual increases of nearly 30% on their projects during that time. The City of Mountain View experienced an increase of 20% to 50% annual cost escalation on some projects. East Bay Municipal Utilities District reported that they experienced annual increases of 17.6%. Since then, the District has closely monitored factors affecting cost increases and now prepares annual estimates of future construction costs escalation rates as part of our CIP review process, to better predict future project costs.

Recommendation 1

Final Board approval before a project is put out for bidding must be based upon current independent cost justification.

Response: The recommendation has been implemented

Staff presents an estimated project cost range at the time the Board approves advertisement of the project and, at the time of opening bids, staff presents a project cost estimate that is used to compare the bids received and for the Board's consideration before awarding the project.

Finding 2

The Rinconada Water Treatment Plant short-term and long-term plans call for improvements amounting to \$81,816,000 (through 2013) and \$195,438,000 (through 2019), respectively, totaling \$ 277, 254,000.

Response: Respondent agrees with the finding

Recommendation 2

Retain the services of a qualified consultant to assess the proposed plans for any future major capital investments including, but not limited to, Rinconada Water Treatment Plant, to ensure they are necessary and are not over-designed. Solicit and follow the advice of independent experts regarding the costs and benefits of all substantial capital expenditures.

Response: The recommendation has been implemented

The planning of improvements at the District's three water treatment plants was completed several years ago with the services of a consultant with expertise in water treatment plants. The design of the improvements at two of the plants was conducted with the use of separate expert consultants. The short-term improvements over the next 5 years were planned with an expert panel of in-house and external stakeholders, including qualified experts from the District's largest water retailers. The upcoming long-term improvements at RWTP will also utilize the services of a consultant that will be selected using a competitive process based on qualifications. On large watershed projects, most of the planning work is conducted by in-house staff.

Finding 3a

The Water Quality Lab occupies the entire building but actually utilizes about half its square footage.

Response: Respondent disagrees wholly

The building was sized according to the laboratory equipment needed to perform analyses and support space for staff cubicles. The Lab Building is 97% utilized and is occupied by laboratory instrumentation and staff. The use of the building can be separated into these functions:

Lab Building Function	Area, square feet	Percent of Total
Analytical area	8,100	44%
Common area	7,640	42%
Office area	2,660	
Occupied cubicles	2,180	11%
Vacant cubicles	480	3%
Total	18,400	100%

The lab analytical area is for the collection of samples, preparation of samples, storage of chemical supplies, and sample testing and analysis. The common area is for the electrical and mechanical support systems, restroom/showers, data communications, conference room, stairway/lobby/aisles, lunch room, and related areas. The office area is for staff office areas.

Finding 3b

District interviewees have stated that due to its current layout, the excess lab office space could not be leased out to another county agency or governmental group. However, in the view of the Grand Jury, the office area, composed primarily of cubicles formed by movable partitions could easily be converted to other uses. Laboratory space is sufficiently large to accommodate individual staff offices.

Response: Respondent disagrees wholly

The building houses a highly sophisticated analytical laboratory. The analytical area (laboratory space) is not suitable as both lab and office space due to space needed to accommodate the analytical work undertaken in the lab. Due to the nature of the activities performed in the lab and the housing of various gases and chemicals, the lab has security features to control access. It would not be a suitable building for leasing space for non-District purposes. Additionally the available space (6 cubicles) represents only 3% of overall building square footage.

Finding 3c

Several members of the Board of Directors who were asked about the building were not able to justify the size of building and did not know that the building was constructed as an essential facility. The Board was remiss in its duty to oversee the scope and cost of the project.

Response: Respondent disagrees wholly

The Board of Directors was informed and approved the project, as follows:

- The Engineer's Report, approved by the Board in December 2001, states that the building will be designed as an Essential Services building.
- At a May 13, 2003 Board Meeting, staff made a presentation on the development of the project and informed the Board of the building size (18,500 sq.ft.) and that one of the sustainable design features was that is the building was designed as an "Essential Services Facility."

Recommendation 3

The excess lab office space could be shared with another county agency or governmental group that needs an essential service facility, including the District's own Emergency Service Group, or possibly as a back-up site for the County Office of Emergency Services. The District should investigate these options.

Response: The recommendation requires further analysis

The lab currently has 6 cubicles available as office work space. By December 2009, staff will examine whether other non-Lab District staff could utilize these cubicles and if so, will reallocate staff to these cubicles.

Finding 4

Most testing in the Water Quality Lab is for drinking water from water treatment plants. It occasionally provides free ground water testing to private well owners. The Water Quality Lab does not sample or test river, stream or creek waters which are subject to urban water contamination problems, particularly nitrates and mercury.

Response: Respondent partially disagrees with finding

No ground water testing for private well owners has been performed in this lab. Most testing in the Water Quality lab is for operational support of treatment plants and all compliance requirements for source and treated waters. However, the lab does support many other programs within the District; some of which include a comprehensive analysis of the South County Groundwater Basin for nitrates and other contaminants, as well as tributary monitoring of terminal source water reservoirs.

Recommendation 4

No recommendation

Finding 5

The Water Quality Lab has well documented processes and is audited regularly by the State of California. It has received positive comments in recent ISO assessments.

Response: Respondent agrees with the finding

The Water Quality Laboratory continues to maintain certifications in a wide range of analytical fields of testing through the California Department of Public Health's, Environmental Laboratory Accreditation Program, Environmental Testing Certificate No.1205, in the following areas:

- Microbiology of Drinking Water
- Inorganic Chemistry of Drinking Water
- Toxic Chemical Elements of Drinking Water
- Volatile Organic Chemistry of Drinking Water
- Microbiology of Recreational Water

The Laboratory also maintains Certificates of Registration in Quality Management System ISO 9001:2000, Certificate No. FS77212, and in Environmental Management System ISO 14001:2004, Certificate No.77213

Recommendation 5

No Recommendation

Finding 6

The Water Quality Lab is not operating at full capacity and is looking at the possibility of using its spare capacity by analyzing samples from various other sources to generate extra revenue. While the subject is still under discussion, District officials have noted that they may only be able to sell services to municipal retailers. The estimated additional revenue is in the range of \$500K-\$720K.

Response: Respondent partially disagrees with the finding

The laboratory is appropriately sized and staffed for its analytical needs. The District has conducted an analysis of the efficiency, in terms of both staff time and analytical equipment usage, to be achieved by batching samples and found that the laboratory may be able to process about 5% more samples. It is through this analysis that the District is considering offering lab services (at full cost recovery) to its water retailers.

Recommendation 6

No recommendation

Finding 7

Water Quality Lab staff acknowledged that salaries at the District may be too high to be price-competitive against private labs, and they believe that their quality level justifies it.

Response: Respondent disagrees wholly

To the best of our knowledge, no recent comparison study against private labs has been conducted from which the conclusion could be based.

Recommendation 7

No recommendation

Finding 8a

The new Water Quality Lab Building was constructed as an “essential facility” with extensive seismic reinforcements, including a failsafe power system for total uninterrupted power.

Response: Respondent agrees with the finding

Recommendation 8a

No Recommendation

Finding 8b

The District justifies building the Water Quality Lab Building as an essential facility by saying that “it is consistent with the design of water treatment plants and facilities that support their operation. The basis is that water facilities need to operate reliably on a continuous basis and need to be designed to withstand loss of power, earthquakes, and other hazards.”

Response: Respondent agrees with the finding

Recommendation 8b

No recommendation

Finding 8c

The Water Quality Lab building is not required by statute to be an essential service facility within the meaning of California Seismic Health and Safety Code §16007: *“Essential services building” means any building, including buildings designed and constructed, for public agencies used, or designed to be used, or any building a portion of which is used or designed to be used, as a fire station, police station, emergency operations center, California Highway Patrol office, sheriff's office, or emergency communication dispatch center.*”

Response: Respondent agrees with the finding

The District elected to design and construct the building as an essential services facility because of the value the District places on providing safe, reliable water to businesses and approximately 1.8 million people in the Santa Clara County. The District intends to deliver safe drinking water to the public during any emergency situation while meeting all drinking water standards on a continuous basis.

Recommendation 8c

No recommendation