

Report Title: BRIDGING TROUBLED WATERS – THE MARIN MUNICIPAL WATER AND LAS GALLINAS VALLEY SANITARY DISTRICTS

Report Date: April 19, 2002

Response by: Board, District Manager & District Consultants

Al Petrie is the District Manager, and Ed Nute of Nute Engineering and Ray Goebel of EOA, Inc. are the District Consultants involved in the response. LGVSD Board Members are Megan Clark, Doug Colbert, Russ Greenfield, Larry Loder and Dick Owens

FINDINGS

- I (we) agree with the findings numbered: 1, 2, 5, 8, 11, and 12
- I (we) disagree wholly or partially with the findings numbered: 3, 4, 6, 7, 9, 10, and 13

(Attach a statement specifying any portions of the findings that are disputed; include an explanation of the reasons therefor.)

RECOMMENDATIONS

- Recommendations numbered 1a, 2, 4, and 5 have been implemented.

(Attach a summary describing the implemented actions.)

- Recommendations numbered 1b, and 6 have not yet been implemented, but will be implemented in the future.

(Attach a timeframe for the implementation.)

- Recommendations numbered 3 require further analysis.

(Attach an explanation and the scope and parameters of an analysis or study, and a timeframe for the matter to be prepared for discussion by the officer or director of the agency or department being investigated or reviewed, including the governing body of the public agency when applicable. This timeframe shall not exceed six months from the date of publication of the grand jury report.)

- Recommendations numbered (none) will not be implemented because they are not warranted or are not reasonable.

(Attach an explanation.)

Date: _____ Signed: _____

Board President

Number of pages attached 5

FINDINGS

3. 3. LGVSD acknowledges that the change in Board membership may create an opportunity to improve communications and cooperation between LGVSD and MMWD. However, LGVSD has continually sought to communicate with MMWD in a cooperative manner.
4. The Nute Engineering authored CIP Report for LGVSD recommended that LGVSD “coordinate and gain input from” MMWD on the design and operation of new LGVSD facilities addressing the production of Title 22 water. We disagree with the Grand Jury’s representation that Nute recommended that LGVSD “cooperate with” MMWD since the ultimate responsibility for any new LGVSD facility rests with LGVSD and our ratepayers.
6. 6. a) The Grand Jury Report – page 14 is misleading and inaccurate. The revenue and operational costs of the recycling system show that MMWD makes a profit. The MMWD recycling water revenue exceeds \$400,000 per year and their operational costs are approximately \$300,000 per year. MMWD previously sold bonds to support their capital costs for the recycled water system. Then MMWD, in the current agreement between MMWD and LGVSD, agreed to totally accept the approximate \$1.3 million yearly bond debt expense. LGVSD, in the current agreement, agreed to participate in the amount of \$690,000 made up of cash and in kind services and has provided this funding. In addition, LGVSD has contributed heavily to capitalization costs by investing in excess of \$5 million in inflow/infiltration reduction improvements principally in the Santa Venetia area. These improvements eliminate salt water intrusion that could negate use of recycled water as irrigation water. LGVSD is currently planning to install dual dynasand filters and a UV disinfection system within the LGVSD treatment process which will both vastly expand the capacity to produce reclaimed water and virtually eliminate the need to operate the MMWD reclamation plant. These improvements will cost approximately \$8.5 million.

Furthermore, MMWD initially came to LGVSD for help to offset their customer’s use of potable water for irrigation purposes. MMWD asked and LGVSD agreed to provide LGVSD treated wastewater for the MMWD reclamation plant at no cost to MMWD. LGVSD, to this date, has not charged MMWD for the wastewater treatment provided by LGVSD prior to MMWD’s acceptance of the water. LGVSD, when initially approached by MMWD, was able to comply with LGVSD’s NPDES 3 month – no discharge permit requirement by utilizing LGVSD’s own pasture irrigation, and ponds for evaporation and storage.

Recently, LGVSD was approached by the Sonoma County Water Agency and others to participate in providing treated wastewater to the Napa Salt Pond Project. MMWD has responded by asking LGVSD not to ship all our treated wastewater to the salt pond project but to reserve enough for the existing and future recycled water system.

b) "Inconsistent effluent flow" is the incorrect way to express the basic difference between the two Districts. LGVSD treats wastewater at the same rate that the wastewater comes to the plant, whereas, MMWD prefers a constant flow treatment process. Unfortunately when the flow is at the lowest coming through the LGVSD treatment plant (nighttime), MMWD must begin maximum flow treatment to meet their early morning hour demand. The installation of dual dynasand filters by LGVSD may eliminate the MMWD constant flow process and allow both Districts to "get in phase flow-wise" with each other. The installation of a Title 22 treated wastewater 1 million-gallon reservoir just southwest of the LGVSD plant could, also, help MMWD treat in conjunction with LGVSD and, therefore, assist MMWD further in meeting their early morning hour demand. However, MMWD does not support this project.

LGVSD recently retained TelStar (Instrument Specialist) to improve the chemical feed equipment at the LGVSD plant. TelStar has virtually completed their work (cost of approximately \$60,000 to District) and provided the District with vastly improved controls for the District's chemical feed system. These improvements will improve the consistency of control of chlorine addition (hypochlorite).

The real issue before the two agencies is the expansion of the water recycling system. The different economic approaches taken by the two agencies to analyze past costs needs to be set aside in favor of a future costs versus future benefit analysis to determine an equitable sharing of costs.

7. 7. LGVSD did in the past and can operate consistent with the current LGVSD NPDES permit if the MMWD water recycling plant were to be "off line". LGVSD, through pasture irrigation, pond evaporation and pond storage has had the ability to stay in reclamation mode for 3+ months. The October 1998 revision of the LGVSD NPDES permit from 3 to 5 months reclamation was conditioned on continuing LGVSD-MMWD wastewater recycling-reuse efforts but includes a provision for SFRWQCB Executive Officer approval of early Bay discharge should the need present itself (see attachment "A" page 24 A. Discharge Prohibitions 4.).

MMWD has been and is currently dependent on the availability of LGVSD treated wastewater to continue the operation of a reclaimed water system that represents a substantial investment to their customers. The success of the reclaimed water supply ensures a continuing adequate potable water supply to MMWD customers. LGVSD is participating by providing the treated wastewater at no current cost to MMWD.

9. 9. LGVSD's installation of dual dynasand filters will immediately expand the capacity of the MMWD to produce recycled wastewater. While the current LGVSD plant has a capacity rating of 2.92 MGD for the total treatment process, the proposed dual dynasand filters, as a single process, should have a capacity rating in excess of 4 mgd. Therefore, upon installation of the dual dynasand filters, LGVSD-MMWD could have

the ability to both take the existing flow through the LGVSD treatment process (approximately 2.4 mgd) and draft from the LGVSD treated wastewater storage ponds any additional flow needed for treatment by the dual dynasand filters and thereby satisfy a recycle-reuse demand in excess of 4 mgd. LGVSD is currently conducting a dual dynasand filter pilot study that commenced on May 17, 2002 to validate the above treatment process along with other treatment parameters.

LGVSD, per former District Manager Peter Vine's letter of October 7, 1997 (see attachment "B"), has demonstrated that an expansion of up to 1500 acre-feet, which is more than two times the current recycle-reuse consumption of approximately 650 acre-feet per year, can be handled by the current LGVSD storage pond system.

10. 10. LGVSD has installed new influent screens, sludge ponds and our entire reclamation system since 1983. The LGVSD plant design only lacks improvements to meet current heavy metal requirements but otherwise is designed to meet the current requirements for a shallow water discharger. The Grand Jury 'Findings' do not address the recent change in State law (AB 709) that removed SFRWQCB discretion in assessing whether alleged violations were, in fact, true violations of the waters of the State and Federal government. In other words, prior to AB 709, certain plant "mishaps" were not judged by the SFRWQCB to cause violations of the State/Federal waters. Now, these same "mishaps" while still not scientifically violating the State/Federal waters are tabbed as legal violations and LGVSD is assessed monetary fines. The "ground rules" that were changed by State law are to the disadvantage of all sanitation agencies, not just LGVSD.
13. LGVSD agrees with the Finding except for the representation that MMWD "has told LGVSD that MMWD would consider trying other corrosion inhibitors if zinc is still a problem once LGVSD plant improvements are made". MMWD continues to take a position that zinc orthophosphate is their only solution for a corrosion inhibitor addition to the potable water supply and will not consider other viable alternatives.

RECOMMENDATIONS

- 1(a) Representatives of the LGVSD Board have participated with representatives of the MMWD Board in two Liaison Committee meetings since the issuance of the Grand Jury Report. The LGVSD representatives are encouraged with the progress made and wish to continue on an active basis to meet with the MMWD representatives.
- 1(b) The LGVSD Plant Manager (Plant Superintendent) is retiring in November of this year. Therefore, the LGVSD District Manager has been interacting with the MMWD Water Quality Manager until the new LGVSD Plant Manager comes on board.
2. 2. LGVSD – MMWD are currently putting together a joint grant application to expand the wastewater reclamation plant capacity, increase reclaimed water storage, expand the reclaimed water distribution system and improve the integration of water treatment process flow. The proposed project will represent an approximate 50% increase in use of reclaimed water.

The Liaison Committee, as of July 11, 2002, has discussed but not concluded an equitable sharing of costs for expanding the current recycled water system.

3. 3. LGVSD Board of Directors is currently reviewing both the proposed Capital Improvement Program and the CIP Financing Program. However, it would not be financially prudent for LGVSD to launch into implementation of capital improvements until the proposed dual dynasand pilot studies are complete, the October 2003 NPDES permit renewal conclusions are known, the EPA- California WQCB metal limits revisions are known, and the LGVSD-MMWD agreement is extended past the 12/2005 termination date. LGVSD has various activities in motion that will both keep the District in compliance with our current NPDES permit till October 2005 and bring about a better "fit" between LGVSD and MMWD. The plant flow treatment capacity is not an issue currently and will not be issue for at least ten years.
4. 4. LGVSD employs EOA, Inc., to interact with the Water Quality Control Board. EOA is a consulting firm made up primarily of former Water Quality Control Board staff members. EOA's principle direction from the District has been to both obtain less restrictive metal discharge limits and obtain relief for the District on the interim and ultimate zinc limits given the use of zinc orthophosphate by MMWD as a corrosion inhibitor.
5. 5. LGVSD was one of the founding members of the North Bay Watershed Association and is participating, both financially and otherwise, in both the NBWA mercury study and metal-binding properties study along with other dischargers north of Dumbarton Bridge. LGVSD is a member of and financially participates in BAAQMD, the lead agency bringing about transition of South Bay metal limit conclusions to the North Bay. EOA, Inc. is retained by and represents LGVSD on BAAQMD.
6. 6. MMWD has told LGVSD in Liaison Committee meetings that MMWD is not willing to consider alternative corrosion treatments to zinc orthophosphate. The results of the dual dynasand pilot study to date suggest but do not confirm that the installation of dual dynasand filters within the LGVSD treatment process may resolve zinc limit violation problems for LGVSD. If not resolved, the removal of zinc will continue to be one of LGVSD's most costly processes.