

Appendix D-2

State Department of Health Services letter and resolution approving a capacity increase in the WFA Plant based on approval of increased filtration rates

**DEPARTMENT OF HEALTH SERVICES
DRINKING WATER FIELD OPERATIONS BRANCH**

Government Center
464 West 4th Street, Suite 437
San Bernardino, CA 92401
GEN (909) 383-4328
FAX (909) 383-4745



August 16, 1999

Eric Fraser, P.E.
Plant Manager, Agua de Lejos Water Filtration Plant
Water Facilities Authority
1775 N. Benson Avenue
Upland, CA 91784

Subject: Permit Amendment-Increased Filtration Rate (System No. 3610006)

Dear Mr. Fraser:

This is in reference to a permit amendment application dated March 30, 1999, submitted with your letter dated May 18, 1999. Supporting documentation was initially submitted with your letter dated March 30, 1999. Our letter to you dated April 19, 1999, provided our comments. Your letter dated May 18, 1999, addressed some of our comments. In order to resolve other issues, a meeting was held with you on June 24, 1999, at which remaining issues were also addressed. As a result of the meeting, you submitted additional information on the pretreatment results with your letter dated July 1, 1999.

Currently the approved capacity of the Agua de Lejos water filtration plant (Plant), based on the previous studies, is 68 MGD in contrast to the design capacity of 77 MGD (8.4 gpm/ft²). Your permit amendment application requested that the Plant capacity be increased from the current 77 MGD to 81 MGD. During a three week study in November 1998 the Plant was operated with one of the four sedimentation basins and equivalent of four of 16 filters in service, at an average flow of 20.25 MGD (range of 19.7 to 20.7 MGD). Actually five filters were in rotation with only four filters in service at any one time. Typical filter run lengths were 10 hours each. The filtration rate achieved was 8.8 gpm/ft² under these operating conditions. Based on the readings of the individual filter effluent turbidities, the following range of results were reported for the three week study period:

Water Facilities Authority-Increased Filtration Rate
August 16, 1999
Page 2

Filter No.	TURBIDITY, NTU		
	Average	Minimum	Maximum
2	0.05-0.07	0.04-0.06	0.09-0.28
4	0.04-0.04	0.02-0.04	0.07-0.26
5	0.05-0.07	0.03-0.03	0.09-0.24
6	0.05-0.07	0.03-0.04	0.09-0.26
8	0.04-0.05	0.03-0.04	0.09-0.31

The individual filter effluent turbidity results complied with SWTR requirements. Further, the combined filter effluent turbidities ranged between 0.04 and 0.09 NTU with an average of 0.046 NTU which is also in compliance with SWTR requirements.

The settled water turbidities (range of 3.0 to 4.9 NTU) during the study period, however, were generally similar to, and often marginally higher than, the raw water turbidities (range of 2.5 to 3.3 NTU). Also, the settled water turbidities were significantly higher than the goal of 1 to 2 NTU referenced in the Department's Cryptosporidium Action Plan (CAP), dated April 1995. It is recognized that low turbidity raw waters are more difficult to pretreat. It is nevertheless important to explore all options of optimization.

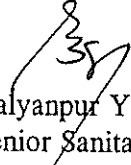
The current Water Supply Permit for Water Facilities Authority was issued on July 22, 1987, before the construction of the facilities was complete. A new full permit will be issued in the near future that documents the Plant's current facilities. Therefore, this letter serves to communicate the decision of the Department on the increased filtration rate prior to issuance of the new full permit.

The Department approves the increased filtration rate of Agua de Lejos water filtration plant from 8.4 gpm/ft² to 8.8 gpm/ft². However, the length of filter runs cannot exceed a maximum of 10 hours based on the filter runs during the studies. If you wish to operate the filters with longer filter runs, please submit additional performance data for such longer filter runs for our consideration. When all 16 filters are in service under the above conditions, the Plant capacity can be increased to the rate of 81 MGD.

We commend the Water Facilities Authority on their efforts to comply with the SWTR requirements and urge further efforts to optimize the pretreatment to meet the goals of CAP. We look forward to working with you and your staff in the future. If you have questions, please call me at (909) 383-4327.

Water Facilities Authority-Increased Filtration Rate
August 16, 1999
Page 3

Sincerely,


Kalyanpur Y. Baliga, Ph.D., P.E.
Senior Sanitary Engineer

cc: Robert Brownwood
Cindy Forbes
Richard Haberman
SBCDEHS

ORDINANCE NO. 99-07-02
ORDINANCE OF THE WATER FACILITIES AUTHORITY-JPA
REPEALING ORDINANCE 96-09-01

WHEREAS, the Agua de Lejos Treatment Plant has been in service since 1988;

WHEREAS, in order to maintain a state of plant readiness and reliability a scheduled approach to replacement of capital equipment is needed;

WHEREAS, a need to stabilize the fiscal impacts incurred by each Member Agency is needed;

NOW, THEREFORE, be it ordained by the Board of Directors of the Water Facilities Authority - Joint Powers Agency ("WFA") that:

1. This Ordinance establishes nine charges that will be made to each Member Agency. Charges to the Member Agencies for the WFA COPs will still be governed by the installment payment agreements. These charges are set forth below.

2. Definitions.

g. "Capital Replacement Project": Projects and/or equipment that are identified in the Capital Replacement Plan.

h. "FY": The Fiscal Year of the WFA beginning July 1.

3. Payments for the Capital Investment Required for the Treatment Plant. The final cost of the treatment plant (land, Metropolitan Water District of Southern California ("MWD") connection, treatment plant, and treatment plant expansion) is to be allocated among the Member Agencies based on percent entitlement of the treatment plant. Payments on the Certificates of Participation ("COPs") will be made quarterly in advance. The percentage entitlement of design capacity of each Member Agency is:

City of Upland	23.0% of design capacity in mg
Monte Vista Water District	24.0% of design capacity in mg
City of Ontario	31.4% of design capacity in mg
City of Chino	5.9% of design capacity in mg
City of Chino Hills	15.7% of design capacity in mg

4. Operations Issues.

a. If plant capability exceeds plant design capacity of 77 mgd, then each participating Member Agency's entitlement of plant capability is according to the