

SOUTH SAN LUIS OBISPO COUNTY SANITATION DISTRICT

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August 3, 2004

Ms. Sorrel Marks
Regional Water Quality Control Board
895 Aerovista Place, Suite 101
San Luis Obispo, CA 93401



Subject: Draft NPDES Permit Comments

Dear Sorrel,

We are in receipt of the June 1, 2004 copy of the Proposed Renewal of the NPDES Permit for the South San Luis Obispo County Sanitation District Wastewater Facility. We have had the opportunity to review the Draft Staff Report, Draft Waste Discharge Requirements as well as the Monitoring and Reporting Program. The areas noted below are our suggested revisions or comments to the subject document.

Facility Description – Section 5

The facility description should be revised to indicate that the facility has only one trickling filter and that biosolids are *currently* hauled to an off-site composting facility.

Relevant Regulations – Section 8

Please retain the following language that was included in WDR Order No. 99-32 in the new permit. "The Discharger's trickling filter facility qualifies for the alternative effluent limitations."

Treatment Standards – Section B.1

Staff has proposed a reduction in the following effluent limitations:

- BOD 30-Day ave. from 45 mg/l to 35 mg/l
- BOD 7-Day ave. from 60 mg/l to 53 mg/l
- TSS 30-Day ave. from 40 mg/l to 35 mg/l
- BOD 7-Day ave. from 60 mg/l to 53 mg/l

The District requests that the proposed effluent limitations be revised to the following limitations:

- BOD 30-Day ave. to remain at 45 mg/l, and if modified, to be no less than 40 mg/l
- BOD 7-Day ave. to remain at 60 mg/l
- TSS 30-Day ave. to remain at 40 mg/l
- BOD 7-Day ave. to remain at 60 mg/l

Through a significant amount of perseverance and the diligent efforts of district staff and consultants, plant operations have been improved to the point that effluent quality is not only superior to requirements but currently above design levels. This has included the use of expensive process chemicals in achieving effluent BOD and TSS levels consistently below effluent limitations.

While the plant is currently operating consistently within operating limits, the District is concerned that the reduction in effluent limitations would hamper the future operation of the plant as influent flow and loadings continue to increase. Given the water conservation measures that are being adopted by the parent agencies coupled with population growth, it is evident that not only will the wastewater flow rate increase but it will also be of a higher strength. This will impart an additional load on the plant that will affect its operation as well as its ability to consistently meet water quality requirements.

When the plant was upgraded in 1986 with the installation of a Fixed Film Reactor and Secondary Clarifier, the design objectives of the plant were 4.0 MGD with an influent BOD and TSS loading of 250 mg/l. The design objectives were subsequently increased in 1990, to 5.0 MGD while maintaining a design influent BOD and TSS loading of 250 mg/l. The 1990 project included the addition of the second Primary Clarifier and Secondary Digester. The design effluent limitation for the 1986 project was 40/40, while the 1990 project increased the limitation to 45/45. The Plant currently treats an average dry weather flow of 2.8 MGD with an influent BOD and TSS loading of 300 mg/l, a 50 mg/l increase in influent concentration.

Even with optimal plant performance, consistently meeting the Staff's proposed limitations will become increasingly difficult. The proposed lower effluent limitations coupled with increased influent flow and strength will inevitably bring the plant to the point of non-compliance. Of primary concern is the design capacity of the Fixed Film Reactor. At a design loading of 5.0 MGD, coupled with an influent level of 300 mg/l, the reactor may not be able to consistently produce an effluent water quality of 40 mg/l. An effluent quality of 35 mg/l is considered unachievable from a design basis.

While the District understands the Staff's desire to reduce the BOD/SS levels to 35/35, we feel that this would put the plant at an undue risk of violating effluent limitations given future plant flows and influent strength. As stated in the Staff report, it is unlikely that the change from 45/40 to 35/35 would have any measurable effect on the receiving ocean water quality and therefore would only serve to push the plant to a point of non-compliance. Given a review of the plant design parameters and discussions with Water Board staff specific to the permitting of the plant, the District would request that the effluent limitation of 45/40 remain the same as outlined above.

As a measure of the District's commitment to environmental water quality, the District will continue to strive to minimize effluent levels through the optimal performance of the facility. Currently, the District is implementing several projects in an effort to maintain the optimal performance of the plant. This includes the construction of the new Chlorine Contact Chamber,

which is scheduled to be completed in November of 2005, as well as the relocation of the injection point for brine, which will allow for testing of the combined effluent downstream of the injection point. In addition, the District has evaluated and is enhancing the Pretreatment Program in an effort to prevent industrial wastewater discharges that could negatively affect the operation of the District's facility.

Acute Toxicity Limitation – Section B.2

In reviewing the revised acute toxicity effluent limitations, a new daily maximum of 0.61 TUa was indicated. In reviewing the 2001 Ocean Plan and utilizing Equation 2 with a dilution (Dm) of 165 and a concentration (Ca) of 0.3 TUa results in an effluent limitation of 5.25 TUa which is consistent with the limitation that is indicated in the Draft WDR Table 2. It appears that 5.25 TUa is the correct value.

Chronic Toxicity Testing – Section B.2

The District requests that the sampling and testing for Chronic Toxicity occur at the same interval as metals testing, specifically Semi-Annually (Apr/Oct) rather than (Jan/Oct) as indicated.

Chlorine Contactor– Section F.5

The construction of the Chlorine Contactor will be completed by November 2005. The District is unable to meet the September 10, 2005 completion date identified in the report due to the long lead-time for delivery of the effluent pumps. The project plans and specifications are materially complete and the District Board has authorized Staff to advertise the project for competitive bidding. This schedule is consistent with the schedule you received at our meeting on June 22, 2004.

Brine Disposal – Section F.6

Brine is currently injected at the pressure manhole downstream of the Final Clarifier. With the addition of the Chlorine Contactor Project, brine will be able to be injected and sampled in the Chlorine Contactor. The brine injection location will be downstream of the dechlorination weir. Injection upstream of the weir would adversely affect the process control equipment in the Contactor. The design of the Contactor will allow grab sampling of the combined effluent stream in the effluent chamber.

Standard methods state that BOD sampling for plant effluent must occur before chlorination, which would remain unchanged. However, because the brine must be injected after chlorination, the specific sampling of the brine containing effluent would have to take place downstream of dechlorination. These samples would be tested to ensure that the brine is not negatively affecting the effluent.

As part of this project, the District will also develop a brine monitoring and control program specific to the operation of the Chlorine Contactor. The addition of the Chlorine Contactor will

substantially change the method by which brine injection is monitored and controlled. As a result, the District anticipates that the program can be submitted by November 2005 to coincide with the completion and operation of the Chlorine Contactor.

Benthic Biota Monitoring

The District requests that the triennially sampling period be July-October 2004 and 2007 rather than September-October 2004 and 2007.

Biosolids Monitoring

The District requests that the annual sampling be in July rather than October due to weather conditions.

Reporting

As the collection systems are the responsibility of the parent agencies, the District requests that the requirement to report a summary of any spills or overflows from the collection system as part of the Annual Report would be deleted from the District's orders.

If you have any questions regarding these comments, please contact Tom Zehnder or me at your earliest convenience.

Sincerely,



John L. Wallace
District Administrator

cc: Jeff Appleton, Plant Superintendent
John Jenks, Consulting Engineer