



California Regional Water Quality Control Board

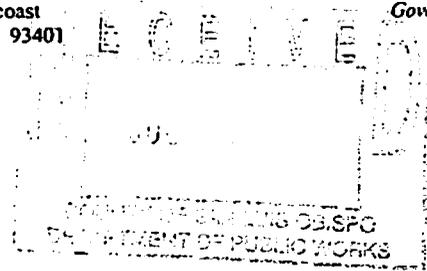
Central Coast Region



Linda S. Adams
Secretary for
Environmental
Protection

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Arnold Schwarzenegger
Governor



June 27, 2007

Paavo Ogren, Deputy Director
San Luis Obispo County Department of Public Works
County Government Center, Room 207
San Luis Obispo, CA 93408

Dear Mr. Ogren:

DRAFT VIABLE PROJECT ALTERNATIVES FINE SCREENING ANALYSIS, LOS OSOS WASTEWATER PROJECT

Thank you for this opportunity to comment on your May 2007 *Draft Viable Project Alternatives Fine Screening Analysis* for the Los Osos Wastewater Project. The Central Coast Water Board's role in this project is to permit disposal and reuse of treated wastewater from the project. We set water quality standards that we expect the project to achieve, but we do not specify what locations or technology should be used. We have experience with development and operation of wastewater facilities, including those with STEP/STEG collection systems. We hope the following comments will benefit you and the Technical Advisory Committee as you prepare the final viable project alternatives report.

In general, we found the report's assumptions regarding future waste discharge requirements to be correct, the viability analysis to be thorough, and the cost estimates for each option to be appropriate. However, we must question the statement in your cover memo that "STEP-STEG will remain a viable community option throughout the process of selecting a wastewater project for Los Osos." As explained below, use of STEP-STEG collection will make it difficult to treat the wastewater to a level required for disposal overlying the shallow aquifer, which is necessary to mitigate seawater intrusion.

Since seawater is currently intruding inland at a rate of 60 feet per year, and at the stated volume of 149 million gallons per year, the community really has no choice but to increase mitigation of the seawater intrusion problem or eventually face destruction of its water supply. Considering the small cost difference between Level 1 and Level 2 mitigation relative to the potential future cost of replacing its water supply, Level 2 appears to be the community's minimum acceptable level of seawater intrusion mitigation.

Level 2 seawater intrusion mitigation includes disposal at the Broderson property, which lies over the shallow aquifer that is contaminated by nitrate. In order to restore shallow aquifer quality, we will expect any wastewater disposed of at the Broderson property (or any other site overlying the shallow aquifer) to be denitrified. Effluent disposed at the Broderson property must contain less than 10 mg/L nitrate as nitrogen. Even if only Level 1 seawater intrusion mitigation is chosen, Table 2.3 points out that partial denitrification (effluent with total nitrogen

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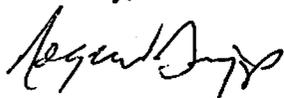
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between 10 and 20 mg/L as nitrogen) will be required for cemetery reuse, urban reuse, agricultural reuse, and agricultural exchange. We agree with this assessment.

In order to denitrify the wastewater, the treatment facility influent must have a proper balance of carbon and nitrogen. STEP/STEG collection systems leave most of the carbon in the interceptor tanks, but collect most of the nitrogen. Influent from a STEP/STEG collection would not have a proper balance of carbon and nitrogen. This would inhibit denitrification. This is demonstrated on pages 4-13 and 4-14 of the Fine Screening Analysis. Expected total nitrogen concentrations from a gravity collection system with BIOLAC or oxidation ditch treatment systems are 7 mg/L as nitrogen. Compare this to expected total nitrogen concentrations from a STEP/STEG collection system with the same treatment systems, which are 37 to 39 mg/L as nitrogen. These higher concentrations of total nitrogen are unacceptable for any disposal or reuse option other than spray fields which would have no seawater intrusion mitigation benefit. This analysis leads us to conclude that if the community wants to mitigate for seawater intrusion, then a STEP/STEG collection system must also be considered with treatment that will effectively denitrify the unique influent.

These are the extent of our comments at this point. We trust this analysis process will lead you to a viable project that addresses all the septic system discharges in the prohibition zone. If you have any questions or would like to discuss these comments, please feel free to contact Allison Dominguez at (805) 549-3882, or Harvey Packard at (805) 542-4639.

Sincerely,



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Executive Officer

cc:

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