STATE OF CALIFORNIA
CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL COAST REGION

STAFF REPORT FOR REGULAR MEETING OF FEBRUARY 7, 2003

Prepared on January 14, 2003

ITEM NUMBERS: **13 and 14**

SUBJECT: **Adoption of Findings of Mitigation and Mitigation Monitoring Program (Resolution No. R3-2003-0006) and New Waste Discharge Requirements for Los Osos Community Services District, Los Osos Wastewater Facilities, San Luis Obispo County (Order No. R3-2003-0007)**

KEY INFORMATION

Facility/Owner:	Los Osos Wastewater Facilities/Los Osos Community Services District
Location:	Intersection of Ravenna Avenue and Los Osos Valley Road
Discharge Type:	Municipal/Domestic
Design Capacity:	1.4 MGD Annual Average (1.6 MGD Peak Day)
Treatment Type:	Tertiary (extended aeration process with nitrogen reduction followed by coagulation, filtration and disinfection), aerobic digestion of solids
Disposal:	Leachfields (subsurface infiltration)
Recycling:	Future plans, but not addressed in this Order
Existing Orders:	Time Schedule Order No. 00-131, Cease and Desist Order Nos. 99-53, 99-54, 99-55 and 99-56

SUMMARY

Los Osos Community Services District (CSD) proposes to construct a wastewater collection, treatment, disposal and recycling system to serve the communities of Cuesta-by-the-Sea, Baywood Park and Los Osos. The CSD's community wastewater project is needed to comply with requirements specified in Resolution No. 83-13 and Time Schedule Order No. 00-131. The proposed Waste Discharge/Recycled Water Requirements Order is for the long awaited community sewer system. Included in this staff report, is discussion of the Findings of Mitigation and Mitigation Monitoring Program which should be adopted by the Regional Board to assure compliance with California Environmental Quality Act (CEQA) requirements associated with the wastewater project.

BACKGROUND

The Setting – The Baywood Park/Los Osos area of San Luis Obispo County is located on the southern edge of Morro Bay National Estuary, approximately ten miles west of the City of San Luis Obispo (shown on Attachment A of proposed Order). The community has a population of approximately 15,000 people, and contains about 5,000 individual lots (many of which are only 25 or 37.5 feet wide). Throughout the community, on-site septic systems are used for treatment and disposal of wastewater. Because many of the lots are too small for conventional leachfields, deeper seepage pits are frequently used for wastewater disposal. Depth to ground water varies throughout the community, however in shallow areas many of the seepage pits discharge directly to ground water (with no separation).

Water Quality Impacts - Inadequate treatment and disposal of wastewater in Los Osos impacts beneficial uses of surface and ground water in a number of ways. The sole source of drinking water in Los Osos is ground water. Ground water (drinking water supply) has been so degraded by nitrates that use of the shallow portions of the aquifer is now limited primarily to non-domestic supply (irrigation). Because shallow ground water is so degraded, domestic supply is pumped from the deeper portions of the aquifer. Pumping from the deeper zone creates additional water quality problems by increasing the potential for seawater intrusion. Also, since septic tank effluent is discharged into the shallow aquifer, ground water elevations are higher, exacerbating shallow ground water problems (inadequate separation from seepage pits, and flooding).

Surfacing ground water, especially during the wet season, creates a public health threat by forcing wastewater to the ground surface. Surfacing water (ground water mixed with wastewater) flows and/or is pumped into roadside ditches and storm drains, and then flows into Morro Bay. In less adequately drained areas, surfacing wastewater remains ponded until it can soak back into the soil. This situation is hazardous to children who are tempted to play in these puddles. Increased bacteria in Morro Bay have contaminated shellfish and resulted in shellfish growing areas being downgraded by the State Department of Health Services. Studies have indicated the bacteria is from multiple sources (birds, animals and human), with the largest flow (or transport mechanism) from nearby surface water runoff (creeks).

Recent bacteria testing results (October 2001) in shallow ground water seeping from the Los Osos shoreline into Morro Bay have been very high (detected as high as 5400 Maximum Probable Number or MPN). DNA testing of this bacteria laden seepage has confirmed the largest source of the bacteria is from humans.

Discharge Prohibition - The Regional Board has been concerned with the high-density use of septic systems in Baywood Park/Los Osos since before 1971. However, early efforts to get the County to voluntarily embark on a solution to water quality and public health problems from the septic systems were unsuccessful, other than some increased monitoring of the area.

In 1983, the Regional Board adopted Resolution No. 83-13, which amended the Water Quality Control Plan, Central Coast Basin (Basin Plan) and prohibited, effective November 1, 1988, discharges of waste from individual and community sewage systems within portions of the Baywood Park/Los Osos area of San Luis Obispo County (Basin Plan prohibition area). The prohibition means that discharges to both existing and new septic systems are illegal.

At the time the Regional Board adopted Resolution No. 83-13, the County represented that it could and would design and complete a wastewater collection and treatment system that would eliminate the need for individual and community on-site sewage systems by the prohibition date of November 1, 1988. The County failed to make significant progress toward planning and constructing the wastewater system by the effective date of the prohibition.

After the prohibition took effect, the Regional Board issued Cease and Desist Orders to the County and some multi-family housing projects, providing time schedules for them to stop discharging. Additionally, the Regional Board stopped authorizing discharges to septic systems for new homes and commercial and governmental buildings unless the discharger could demonstrate their project was not covered by the prohibition or was exempt based on criteria in the Basin Plan.

Community Wastewater Project - After many years of facilities planning punctuated by delays from litigation and multiple alternatives studies, the County Board of Supervisors voted unanimously to proceed with the community wastewater project for Los Osos in October 1995. The Regional Board reviewed the proposed project and found it acceptable as a means of resolving water quality problems in the community. The County then proceeded

with design plans and completion of the environmental review and permitting process. The community sewer system was on schedule to begin construction in 1997. However, the project was prevented from proceeding by the Coastal Commission's action (and then indefinitely postponed) on an appeal of the Coastal Development Permit. A prime reason for the Commission's action was to be responsive to the Los Osos Community's request to form their own service district to implement their own wastewater project. It should be noted that the Coastal Commission did unanimously vote in August of 2002 on a request by San Luis Obispo County (on behalf of the CSD) to amend the Local Coastal Plan, and thereby zone and designate a site for the Los Osos Wastewater Treatment Facility.

In November 1998, voters in Los Osos formed a Community Services District (CSD) to replace San Luis Obispo County as the governing body for community services. The CSD chose not to proceed with the County's wastewater project, and developed a revised project for wastewater collection, treatment and disposal. Unfortunately, development of the revised project included significant time delays from what had previously been envisioned by the CSD.

Cease and Desist Orders - The CSD submitted a schedule for implementing its wastewater project and the Regional Board included that schedule in Cease and Desist Orders issued for CSD facilities discharging within the prohibition area (Cease and Desist Order Nos. 99-53, 99-54, 99-55 and 99-56 adopted in May 1999). Milestone dates specified in the Cease and Desist Orders are based on significant and measurable steps in the project.

At the time of Cease and Desist Orders adoption, the schedule appeared attainable, however the schedule was developed by the CSD based on implementing a project, which was unlikely to provide for acceptable resolution of water quality problems. The original proposal included sewering approximately half the community and treating the wastewater (and septage from remaining tanks in use) in an Advanced Integrated Wastewater Pond System (AIWPS).

To address uncertainties in the original CSD project, the District embarked upon an evaluation of multiple wastewater project alternatives. This evaluation of alternatives examined not only the CSD's original wastewater project, but also variations/combinations of it, and several other potential wastewater project alternatives. In addition, the CSD's consultants examined other potential wastewater and septic tank technologies. This evaluation resulted in a wastewater project which appears technically sound as well as viable. Initially, the AIWPS pond proposal was popular with community residents because of its perceived low estimated cost. However, careful and detailed evaluation of alternatives demonstrated the current wastewater project to be superior due to: 1) being in line with community goals, values and acceptance, 2) ability to meet regulatory requirements, 3) ability to address the community's water quality problems (ground water and Morro Bay), 4) ability to sustain the ground water basin and primary drinking water supply, and 5) long term cost-effectiveness.

Unfortunately, delays due to re-evaluating alternative technologies and facility sites resulted in violations of the milestones of progress scheduled in the Cease and Desist Orders.

Time Schedule Order - In an effort to assure timely completion of the wastewater project, the Board adopted Time Schedule Order No. 00-131 at its October 27, 2000 public meeting. The Time Schedule Order, based on Section 13308 of the Water Code, is similar to that issued to the County in 1996. The Time Schedule Order contains a date-specific compliance schedule and a dollar amount, which would be assessed for each day the CSD fails to meet the schedule. The daily penalty amount specified in Order No. 00-131 is the maximum allowable amount, $10,000. Time Schedule Order No. 00-131 includes the following compliance dates:

Task	Completion Date
Circulate draft EIR	12/15/00 (done)
Final CEQA document	04/01/01 (done)
Form assessment district or comparable financing for wastewater system	07/29/01 (done)
Complete approved design plans	07/15/02
Submit County Use and Coastal Development permits	07/15/02
Begin construction	09/06/02
Complete construction	08/30/04

Status Reports due quarterly and two weeks after each above date.

Based on current progress on the project and delays due to litigation, the project is expected to be completed at least 18 months behind the specified schedule. However, Time Schedule Order No. 00-131 provides that delays beyond the CSD's ability to control may be accepted by the Board without imposition of monetary penalties. Delays are described in the CSD's quarterly status report (included as Attachment 4) and include litigation filed against the CSD in San Luis Obispo County Superior Court, litigation filed against the CSD in the U.S. District Court and appealed to the U.S. Court of Appeals, consequential delays in the State Revolving Fund loan commitment, and ability of the CSD to sell bonds. Bonds were sold on October 31, 2002, and the project is now proceeding with design work.

DISCUSSION

As described in the background information above, construction of the community sewer system has been a hotly contested issue for more than two decades. The CSD, and its design consultants, are eager to have formalized waste discharge requirements from the Regional Board to facilitate final design work on the wastewater collection, treatment, disposal and recycling facilities.

Treatment Facilities - The proposed treatment facility will be located at the intersection of Ravenna Avenue and Los Osos Valley Road. Facilities will include tertiary treatment (extended aeration process with denitrification, followed by coagulation, filtration and disinfection) and aerobic digestion of solids. Facilities will be designed to treat wastewater from the equivalent of 18,428 people (expected build-out population in 2020 per the Estero Area Specific Plan). The proposed treatment method (a type of activated sludge process) is designed specifically for its nitrogen removal capabilities. Treatment capacity is designed for 1.3 million gallons per day (MGD) daily average, 1.6 MGD peak day and 1.4 MGD annual average flow. A diagram of treatment processes is included as Attachment B of the proposed Order.

Disposal and Reuse - Constructed leachfields located throughout the community will be used to dispose/recharge the highly treated effluent. According to hydrogeologic modeling conducted by consultants for the CSD, effluent needs to be discharged at a variety of locations in order to maintain the water balance of the community's ground water basin. Leachfield disposal will be located primarily at the intersection of Highland Drive and Broderson Avenue but also at other locations throughout the community. Recycling of treated wastewater for landscape irrigation is also included in the proposed project. Disposal locations are depicted on Attachment C of the proposed Order.

Project Development - The thirty-plus year history of water quality problems in Los Osos has been the source of material for volumes of technical reports prepared by federal, state and local agencies, private consultants, citizen action groups and others. Water quality problems associated with ongoing discharges from septic systems on small lots with very little (if any) separation to ground water range

from nitrate and pathogen contamination in ground water to surfacing effluent. The CSD's community-wide wastewater management plan is designed to resolve these issues over the long-term.

In addition to providing sewer service to most of the developed area of Baywood Park/Los Osos, the CSD plans to develop and implement an On-site Wastewater Management Plan to assure adequate design, operation, maintenance and monitoring of on-site systems which remain in use outside of the prohibition boundary and in areas authorized by the Regional Board in Order No. 00-012 (General Waste Discharge Requirements for the Bayview Heights and Martin Tract Areas of Los Osos). Although details of the On-site Wastewater Management Plan have yet to be defined, staff continues to work with the CSD to facilitate development of an effective plan.

In June 2001, the Los Osos CSD completed a Water Master Plan for the Community of Los Osos. The Water Master Plan describes the safe yield from the ground water basin, the sole source of domestic water supply for the community. The safe yield of ground water is expected to meet water demand from the built-out community (estimated population in 2015) provided the Los Osos Wastewater Project and Urban Water Management (conservation) Plan are fully implemented in order to maintain a hydrologic balance for the ground water basin. Recommendations presented in the Water Master Plan are based on stated ground water management goals including maximizing safe yield and minimizing seawater intrusion into the ground water aquifer. The completion of the Los Osos wastewater project is a necessary component of this Water Master Plan for the community of Los Osos.

In September, 2000, the Los Osos CSD completed hydrogeologic investigations of the wastewater disposal sites and movement of ground water influenced by such disposal. These investigations concluded that ground water coming in contact with percolating wastewater will take at least one year to migrate off the disposal site and at least 14 years to reach the Bay. Accordingly, movement through the soil will contribute to further treatment of such ground waters. The investigations further conclude that some strategic ground water pumping may be needed to mitigate mounded ground water downgradient from the disposal site.

During early project development, staff provided the CSD with draft Waste Discharge Requirements so that the CSD could make informed decisions regarding facility designs. The draft Waste Discharge Requirements provided to the CSD were those which had been developed for San Luis Obispo County and considered by the Regional Board in 1997. Proposed Order No. R3-2003-0007 reiterates similar, but not identical requirements to those specified in the draft requirements developed for San Luis Obispo County. The proposed Order also includes recycled water specifications to assure protection of water quality and public health from potential impacts associated with use of recycled water. The proposed requirements are described below.

PROPOSED REQUIREMENTS

The proposed Order is based on Title 22 of the California Code of Regulations, Basin Plan requirements and recommendations, and staff's professional judgment. It is consistent with comparable discharge requirements within our Region and designed to protect water quality for existing and anticipated beneficial uses of surface and ground waters in the vicinity of the discharge.

Prohibitions and Effluent Limitations - Proposed prohibitions limit the discharge to wastewater receiving full treatment and disposed of at designated disposal and reuse areas depicted on Attachment C of the Order. Effluent limitations are based on the design capacity of the treatment facilities (1.4 million gallons per day) and constituent concentrations common for subsurface disposal (settleable solids, suspended solids and biochemical oxygen demand) to assure long-term function of the disposal system. An

effluent limitation for nitrogen of 7 mg/l monthly average and 10 mg/l daily maximum is proposed to assure protection and ultimately restoration of underlying ground water. The drinking water standard (Maximum Contaminant Level or MCL) for nitrate (as nitrogen) is 10 mg/l. Therefore, effluent concentrations of 7 mg/l will eventually lead to restoration of ground water to drinkable quality with some margin of safety (due to effluent limit being lower than drinking water limit, and dilution with other sources of ground water). Based upon staff's review of other treatment plant's nitrogen removal processes, the proposed nitrogen limitation is expected to be the lowest long-term performance level for the proposed treatment processes.

Recycled Water Specifications - The CSD ultimately plans to reuse treated wastewater for landscape irrigation. Therefore, recycled water specifications are included in the proposed Order in accordance with Water Code section 13523. Recycled water specifications are based on Title 22 of the California Code of Regulations and designed to protect water quality and public health. Details of the CSD's recycled water project are not yet complete. Therefore, the proposed Order requires an Engineering Report on the Production, Distribution and Use of Recycled Water (required by Title 22 and describing the reuse project entirety) be submitted for approval of the Executive Officer after consultation with State and local Health Departments.

Receiving Water Limitations – Ground water is the potential receiving water for the proposed discharge. As described above, much of the shallow zone of the Los Osos ground water basin is degraded due to excess nitrate. The proposed community wastewater treatment system is specifically designed to reduce existing high nitrate levels in ground water and preserve reduced nitrate levels for the long-term. Receiving water limitations in the proposed Order limit the discharge to that which will not degrade receiving (ground) waters based on comparison to historical (pre-discharge) monitoring data. Surface water impacts are addressed by the prohibition of runoff, overflow or any other discharge to areas other than approved disposal and reuse sites (Prohibitions A.1 and A.2.). Surface waters will be further protected by the long-term restoration of ground water, since surface water is in communication with ground water.

Provisions – The proposed Order requires compliance with a Monitoring and Reporting Program and with Standard Provisions and Reporting Requirements. Provisions regarding proper disposal of biosolids, nuisance prevention and public safety are also included in the proposed Order. As indicated above, the Order also requires development and implementation of an On-site Wastewater Management Plan to assure ongoing operations, maintenance and monitoring of on-site systems within the unsewered areas of the community.

Monitoring Requirements – The proposed Order includes a Monitoring and Reporting Program to assure ongoing protection of water quality and compliance with specified requirements. Requirements include daily, weekly and monthly effluent and recycled water monitoring and semi-annual ground water monitoring. Submittal of self-monitoring reports is required monthly with an annual summary report due January 30th of each year.

For many years, San Luis Obispo County implemented a ground water monitoring program in Los Osos. The CSD recently developed a revised ground water monitoring program which is incorporated (in part) into the proposed Order. The CSD's ground water monitoring program is designed to detect and evaluate ground water constituent concentrations, trends and potential impacts relating to the discharge. Many aspects of the County's former program have been incorporated into the CSD's monitoring program to provide for long-term continuity and comparisons of data. Recent ground water monitoring results are provided in the following table and monitoring wells are

depicted on Attachment C of the proposed Order. Similar to historical data, the monitoring data continues to show ground water impacted by nitrates (16 wells exceeding the MCL for drinking water and five wells approaching the MCL).

LOS OSOS GROUND WATER MONITORING DATA

Well ID #	Depth to Water (ft)	Nitrate as N (mg/l)	Sample Date	Well ID #	Depth to Water (ft)	Nitrate as N (mg/l)	Sample Date
7K3	51	12	06/24/02	17N4	30	7.6	06/28/02
7L3	36	15	06/24/02	18B1	18	6.9	06/24/02
7N1	5	3	06/28/02	18C1	16	15	06/24/02
7Q1	7	16	06/26/02	18E1	25	11	06/27/02
7R1	21	12	06/24/02	18H3	60	11	07/09/02
8N2	35	2.4	06/25/02	18J6	24	6.9	06/25/02
13A7	5	12	07/02/02	18L3	38	9.2	06/25/02
13G	39	9.3	06/26/02	18L4	19	19	06/26/02
13H	25	1	06/26/02	18N1	68	18	06/27/02
13L5	22	19	06/26/02	18R1	10	14	07/02/02
13Q1	82	20	06/27/02	20B	60	5.7	07/02/02
17D	NA	17	07/09/02	24A	149	11	06/27/02
17F4	40	3	06/28/02	13F1	NA	20	08/20/02

Data Source: Los Osos Community Services District NA – Data not available at time of report preparation

ENVIRONMENTAL SUMMARY

Los Osos Community Services District certified a Final EIR for the project on March 1, 2001, in accordance with the California Environmental Quality Act (Public Resources Code, Section 21000, et seq.) and the CEQA Guidelines (Title 14 California Code of Regulations section 15000 et seq.) (FEIR).

Pursuant to CEQA guidelines Section 15096, the Regional Board, as a responsible agency, has a more limited role than the lead agency. The Regional Board is responsible for mitigating or avoiding only the direct or indirect environmental effects of those parts of the project which it approves. Also, the Regional Board can only require alternatives or mitigation measures that are within its jurisdiction.

Regional Board staff reviewed the FEIR and relied on it in drafting Resolution No. R3-2003-0006. Copies of the FEIR were made available to the Regional Board members. The significant environmental effects and mitigation measures described in Resolution No. R3-2003-0006 are taken from the FEIR. The resolution also contains a mitigation monitoring program as required by CEQA. The draft Order mandates implementation of the mitigation measures described in the resolution and mandates compliance with the mitigation monitoring program.

COMMENTS

Los Osos CSD (Discharger): The CSD supports adoption of the proposed Order to facilitate final design of treatment and disposal facilities. In addition to the comments below, the CSD provided editorial-type comments and corrections, which have been addressed in the Staff Report and proposed Order. The CSD's comment letter is included (by request) as Attachment 3 to this report.

1. The compliance dates specified in Time Schedule Order No. 00-131 are out of date due to delays beyond the reasonable control of the District and should be modified at the appropriate time. Accordingly, language should be added to Finding No. 18 of the proposed Order describing the reasons for delays (specific language was provided by the CSD).

Staff Response: Clarifying language, similar to that proposed by the CSD, is added to the discussion of project delays (page 4, column 1 above). Details regarding the current status of the project are more appropriately located in the Staff Report. The time schedule order is independent of this Order and they serve different purposes. This Order regulates waste discharges associated with construction and operation of the wastewater collection and treatment system. The time schedule order enforces the CSD's obligation to proceed with design and construction of the system. The Regional Board will make determinations regarding time schedule order compliance at a separate proceeding.

2. The proposed facilities are designed for annual average flow of 1.4 MGD. Effluent Limitation B.1 should be revised to reflect 1.4 MGD as the annual average rather than the monthly average.

Staff Response: Staff agrees. The proposed Order has been revised to incorporate this comment.

State Department of Health Services (DHS)

1. If the project is changed from the currently proposed method of disposal, then the project will need to be re-evaluated by DHS to assure compliance with Title 22 Ground Water Recharge Criteria.

Staff Response: The proposed Order authorizes discharge from the proposed project only. Any significant changes to the project would require re-evaluation and possible revision of requirements. The proposed Order also provides for evaluation and approval (after consultation with state and local health departments) when details are developed for the reuse portion of the project (Recycled Water Specifications C1, C2 and C5). Also, ground water monitoring reports are required to be provided to DHS for additional verification of ongoing restoration and protection of ground water resources. No changes are needed to the proposed Order to address this comment.

2. The DHS recommends maximizing the use of recycled water to the greatest extent possible as a means of protecting ground water resources.

Staff Response: Staff agrees with DHS's recommendation and the CSD proposes to pursue water recycling as part of this project. Provisions are included in the proposed Order to address water recycling needs. The proposed Order does not include requirements for a specific amount of the effluent to be reused as such requirements are outside the scope of this project and outside the authority of the Regional Board.

3. If chlorine is used for disinfection, chlorine residual shall be monitored continuously.

Staff Response: Continuous monitoring for chlorine residual has been added to the proposed Monitoring Program in lieu of grab sampling. However, staff is currently unaware of any U.S. EPA approved methods for performing such monitoring. Therefore, the requirement is accompanied by a footnote indicating alternative (not U.S. EPA approved) methods of analysis may be used until such time as approved methods are adopted into federal regulations (40 CFR 136).

Hatch & Parent (legal firm representing Southern California Water Co./California Cities Water)

1. A critical element of the wastewater project that is not addressed in the draft Order is the effluent disposal and its recharge of the community's potable water supply.

Staff Response: As described in the Staff Report and Findings of the propose Order, the community wastewater project is designed specifically to address effluent disposal. Furthermore, a primary objective of the Los Osos wastewater project is to restore and provide long-term protection of ground water

beneficial uses (community's ground water resources), in addition to protecting surface waters and public health. The proposed Order includes requirements specifically to assure those goals are met, consistent with the mission of this agency.

2. All of the studies completed to date indicate that treated wastewater must not be exported and must be recharged in order to preserve sustainable yield from the ground water basin.

Staff Response: Staff agrees with this statement. Disposal and/or reuse of treated wastewater in a manner which will ultimately recharge the ground water basin has always been a vital component of water resources and wastewater planning for this community.

3. The Water Co. agrees with the concept of utilizing ground water from the shallow zone downgradient of the main disposal area only if such ground water is not significantly impaired.

Staff Response: The wastewater project itself and ground water limitations specified in the proposed Order, are designed to restore and protect ground water beneficial uses, including the shallow zones downgradient from the disposal areas. As described in the Staff Report above, extensive ground water monitoring will be conducted to assure ground water quality is restored and protected.

4. Due to using the shallow zone ground water, water supply is likely to increase in nitrate and TDS concentrations for the short term. However, the supply is expected to remain within appropriate drinking water standards.

Staff Response: The Regional Board's charge is to regulate discharges of waste. Water supply pumped from the upper zones will continue to be higher in nitrate and TDS concentrations than water pumped from the deeper zones due to historic and current septic system use. However, as water quality in the upper zones is improved over time, the disparity between the two will reduce correspondingly and the shallow zone water will be restored to useable (drinking water) quality.

5. Constituents which are not removed through the wastewater treatment process may increase concentrations in water supply over time as they accumulate in ground water near supply wells. Southern California Water Co. has located its supply wells to avoid impacts caused by individual septic systems. Also, since septic systems are dispersed over the entire community, water quality impacts are also disbursed. However, the main disposal area for the community wastewater project will be upgradient from supply wells and will therefore influence water quality in those wells.

Staff Response: Currently, the prevailing strategy used by water purveyors in Los Osos to deal with contaminants in shallow ground water is to shift use (pumping and extraction) to deeper zones (simple avoidance). However, the fact remains that long-term sustainable water supply for the community depends upon using both the shallow and deeper zones in a managed fashion to maximize quality while minimizing contamination of the lower aquifer by saltwater intrusion. The high level of treatment provided by the proposed facilities will greatly reduce water quality impacts from urban development when compared to the current use of septic system on-site disposal. Furthermore, proposed reuse and multiple disposal sites (located throughout the community) will help minimize both quantity and quality issues associated with treated wastewater disposal. The proposed Order includes a narrative requirement stating that "the discharge shall not cause significant increase of mineral constituent concentrations in underlying ground water, as determined by comparison of samples collected from wells prior to and post discharge commencement". The monitoring and reporting program that is included with the proposed Order is designed to monitor changes or trends in water quality downgradient of the disposal areas, and assure

that this requirement is met.

6. The proposed Order should be consistent with Department of Health Services' (DHS) water reuse and ground water recharge requirements (and proposed requirements).

Staff Response: Staff believes that the proposed Order is consistent with and does reflect DHS's water reuse and ground water protection requirements. During the past several years of project development, Regional Board staff and the CSD have remained in communication with DHS (through meetings, letters and telephone conversations) to assure that project details and proposed limitations are consistent with the agency's mission to protect public health and corresponding requirements. Comments provided by DHS on the proposed Order are addressed above.

7. Commenter would like to see review of other similar projects, such as the Orange County Groundwater Replenishment Project.

Staff Response: Staff encourages the Southern California Water Co. to contact Orange County directly for information regarding its projects. It should be noted however that the Orange County Groundwater Replenishment Project is substantially different in scope and objective from the Los Osos wastewater project. The Orange County project injects tertiary treated water directly into a drinking water aquifer in order to maintain a freshwater barrier from further seawater intrusion caused by historic ground water over-pumping. Unlike this project, the Los Osos wastewater project does not propose to directly inject highly treated water into ground water, rather disposal will occur through leachfield disposal (subsurface percolation).

8. The purpose of the project should be clearly articulated by the Regional Board (is the project remediation of contaminated ground water or to stop on-going contamination from on-site waste discharges).

Staff Response: The Regional Board made the decision to prohibit discharges to septic systems in 1983. Continuing discharge to septic systems is not an option. The CSD has proposed a wastewater collection, treatment and disposal project that will discontinue septic system discharges. The Regional Board's responsibility, which will be implemented by the Order, MRP and CEQA resolution, is to regulate and prevent the discharge of waste in order to prevent water pollution and nuisance as defined in Water Code section 13050.

Al Barrow (Resident of Los Osos): Mr. Barrow has sent many emails regarding his opposition to the community wastewater project. Staff routinely responds to each of Mr. Barrow's water quality related questions or comments. Most of the contents of Mr. Barrow's emails do not directly relate to the proposed requirements. However, the following comments do appear to be directed to the proposed Order (Mr. Barrow's emails are included as Attachment 5). It should be noted that the first three paragraphs of the December 23, 2002 email, reference a California Coastal Commission staff report for a different project (one proposed by San Luis Obispo County in 1997) and do not refer to the Regional Board Staff Report for this item.

1. Faster, cheaper and more environmentally sensitive alternatives are available for collecting, treating and disposing of wastewater in Los Osos. Such alternatives should be re-evaluated.

Staff Response: As indicated in the Staff Report above, considerable time (decades) and money have been spent evaluating feasible alternatives. The alternatives suggested in Mr. Barrow's correspondence were evaluated, reconsidered, and rejected on the basis that they are either ineffective at reaching water quality goals, more costly than the proposed project, technically infeasible or illegal. The Los Osos CSD has developed a technically, financially and environmentally sound project.

Staff does not recommend allowing additional time for re-evaluating project alternatives yet again.

2. Disposal, as the project recharge at Broderson is described in the LOCSD WWTF design, allows them to duck Recharge regulations under EHS Title 22 Groundwater Recharge Regulations.

Staff Response: As indicated in the Staff Report above, staff has consulted with DHS (multiple times during the past several years) to assure consistency of the proposed Order with current DHS requirements. Furthermore, the proposed Order calls for further consultation regarding reuse projects, once such details have been developed (Recycled Water Specifications C.1 – 5). Proposed Monitoring and Reporting Program No. R3-2003-0007 also requires monitoring reports to be copied to DHS for its independent review.

3. Mr. Barrow requests a petition to appeal the draft requirements.

Staff Response: By December 30, 2002 letter, staff responded to Mr. Barrow's request by providing information regarding filing a petition after Regional Board action (such as adopting Waste Discharge Requirements for the Los Osos Wastewater Project). However, the draft Order (circulated for public comment) is provided specifically to provide information and gain comments and recommendations for development of a final Staff Report and recommendation for the Regional Board. As such the draft Order is not subject to petition or appeal.

4. NDMA is a byproduct of bleach and other chlorine substances (Trihalomethanes and Halo Acetic Acid). Our upper aquifer has been receiving NDMA via septic systems for 30 years that plus the grand collection of chemicals and hormones may render the upper aquifer useless until a treatment plant for that water is operational. The cost: around $1 million or $30 million for the life of the plant which would involve membrane technology. This must be solved before "buildout" is implemented as the safe basin yield includes the 50-50% blending of the upper and lower aquifer.

Staff Response: The community wastewater project does not propose to use chlorine but rather ultra-violet light for its disinfection process. Accordingly, chlorination by-products are not expected to be in the discharge regulated by the proposed Order. The project does not include any proposal for wholesale pumping and treatment of the shallow aquifer. Improvement in the water quality of the shallow aquifer is expected to occur over time due to removal of the current discharge of waste.

5. Here is a support document to the other NDMA article I sent you today. Again 30% of American will have cancer in their lifetime. Chlorine has been used to disinfect drinking water, sewage and as a common household product, bleach clothing. The amounts put in our upper aquifer is substantial enough to warrant special monitoring as well as treatment to remove NDMA from our drinking water. EPA 9, RWQCB, LOCSD and Morro Bay National Estuary Program go farther and state virus and pathogenic bacteria are polluting the Bay via our upper aquifer. My question is do you want us to drink it?

Staff Response: See Response to Comment No. 4 above. The CSD is not proposing to use chlorine for its disinfection process.

Mr. Barrow's comment highlights the importance of discontinuing Los Osos community septic tank use (current waste practices), and completing the community wastewater project as soon as possible. As indicated in the Staff Report, one of the primary goals of the wastewater project is to restore the shallow aquifer's beneficial uses. Further delays are contrary to this goal.

No further comments regarding the proposed action were received from approximately 180

interested parties notified of the draft Staff Report and proposed Order.

RECOMMENDATION

Adopt Resolution No. R3-2003-0006 (Findings of Mitigation and Mitigation Monitoring Program) and then adopt Order No. R3-2003-0007 (Waste Discharge/Recycled Water Requirements) as proposed.

ATTACHMENTS

1. Resolution No. R3-2003-0006, Findings of Mitigation and Mitigation Monitoring Program
2. Draft WDR/WRR Order No. R3-2003-0007 with Monitoring and Reporting Program and Standard Provisions and Reporting Requirements
3. October 3, 2002 letter from Bruce Buel regarding proposed Waste Discharge/ Recycled Water Requirements
4. January 10, 2003 Quarterly Status Report on Los Osos Wastewater Collection, Treatment and Disposal Project
5. December, 23, 2002 and two January 12 2003 emails comments from Mr. Al Barrow

S:/wb/coastal watershed/staff/sorrel/los osos WDRs/los osos csd.itm

STATE OF CALIFORNIA
CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL COAST REGION

SUPPLEMENTAL SHEET FOR REGULAR MEETING OF FEBRUARY 7, 2003
Prepared on January 28, 2003

ITEM NUMBER: 14

SUBJECT: **Waste Discharge/Recycled Water Requirements for Los Osos Community Services District Wastewater Project, Order No. R3-2003-0007**

KEY INFORMATION: The following information and comments were received after preparation of the agenda staff report.

SUMMARY

Project delays caused by litigation have forced the Los Osos Community Services District (CSD) to miss project milestone dates associated with the State loan. The CSD requested extension of the milestone dates to accommodate the revised project schedule and Regional Board staff sent a letter supporting such action. Both letters (addressed to James Kuykendall, Loans and Grants Branch Chief) are included as Supplemental Report Attachment 1.

In order to evaluate the metals content of effluent, annual effluent monitoring for heavy metals is proposed to be added to Monitoring and Reporting Program No. R3-2003-0007. Annual effluent monitoring for metals is consistent with requirements for other land disposal facilities within the Central Coast Region.

Also included in this Supplemental Staff Report are further comments received on the proposed Order and staff responses to those comments.

COMMENTS

Michael Multari, Morro Bay National Estuary Program Director: On January 23, 2003, Mr. Multari submitted a letter supporting adoption of the proposed Waste Discharge/Recycled Water Requirements to facilitate project implementation and protection of the estuary. Mr. Multari's letter is included as Supplemental Report Attachment 2.

Hatch & Parent (on behalf of Southern California Water Co./California Cities Water)

On January 24, 2003, Regional Board staff met with representatives from Cal Cities Water Co., Los Osos Community Services District (CSD) and California Department of Health Services (DHS) in order to further discuss comments from Cal Cities Water Co. regarding the proposed requirements (summarized in the agenda staff report). The same day, Hatch & Parent submitted two additional comment letters regarding the Los Osos wastewater project. One letter (addressed to Executive Officer Roger Briggs) rebuts each of the staff responses to comments provided earlier (and summarized in the agenda staff report) (Supplemental Report Attachment 3). The second letter (addressed to Chairman Gary Shallcross) presents Cal Cities Water Co.'s belief that discharge from the Los Osos wastewater project will degrade water quality and therefore should not be authorized in the proposed Waste Discharge/Recycled Water Requirements (Supplemental Report Attachment 4). Specific comments from both letters are as follows:

1. See Hatch & Parent Comment No. 1 (Staff Report page 8). The proposed Order fails to address drinking water supply issues such as percentage of water supply resulting from percolating effluent or recycling of constituents

within the ground water basin.

Staff Response: See response to comment No. 1 on pages 8 and 9 of the agenda staff report. It should be noted that the proposed Order is limited to regulation of waste discharge and use of recycled water. The proposed Order does not specifically address drinking water supply management outside the realm of protecting ground water beneficial uses.

2. See Hatch & Parent Comment No. 2 (Staff Report page 9). Cal Cities Water Co. does not believe that the Regional Board is addressing ground water basin sustainable yield affirmatively.

Staff Response: See response to comment No. 2 on page 9 of the agenda staff report. Implementation of the community wastewater project as soon as possible is the best way to prevent further impairment of surface and ground waters resulting from ongoing septic system discharges.

3. See Hatch & Parent Comment Nos. 3 and 4 (Staff Report page 9). There is no solute transport model to demonstrate that the wastewater project will result in protection or restoration of the ground water basin from all minerals, only nitrates have been modeled. The wastewater project creates a closed system which will degrade ground water quality in some parts of the basin.

Staff Response: See responses to comment Nos. 3 and 4 on page 9 of the agenda staff report.

4. See Hatch & Parent Comment Nos. 5 and 6 (Staff Report pages 9 and 10). The response that "Staff believes that the proposed Order is consistent with and does reflect DHS's water reuse and ground water protection requirements" does not clearly state that the proposed Order is consistent with the DHS Draft Regulations for a Groundwater Recharge Reuse Project.

Staff Response: See responses to comment Nos. 5 and 6 on pages 9 and 10 of agenda staff report. During a January 24, 2003 meeting (with DHS, CSD, Cal Cities Water Co. and Regional Board staff), representatives from DHS once again confirmed that the proposed Order is consistent with DHS requirements and policy. Specifically,

(a) The proposed Order is consistent with DHS requirements;

(b) DHS's draft ground water recharge regulations do not apply to the Los Osos wastewater project; and

(c) The Los Osos wastewater project is designed to meet the public health protection goals of draft recharge regulations even though those regulations do not specifically apply to this project.

In order to document the purpose of the wastewater project and consistency of the Order with DHS requirements, staff proposes that Finding Nos. 1 and 13 (of proposed Order No. R3-2003-0007) be amended as follows (additional language is underlined):

"1. The purpose of the Order is to issue Waste Discharge and Recycled Water Requirements for the Los Osos Community Services District (hereafter Discharger). The Discharger submitted a report of waste discharge on July 8, 2002, for authorization to discharge treated municipal wastewater from the proposed Los Osos Wastewater Facilities serving the communities of Cuesta-by-the-Sea, Baywood Park and Los Osos, in San Luis Obispo County. The purpose of the Los Osos Wastewater Facilities is to collect, treat and dispose of domestic and municipal wastewater and to eliminate discharges from on-site systems in accordance with Resolution No. 83-13."

"13. **Recycled Water** – Title 22, Division 4, Chapter 3 of the California Code of Regulations specifies State Department of Health Services' criteria for use of recycled water. Water Code section 13523 authorizes the Regional Board to issue reclamation requirements for water that is proposed to be used as reclaimed (recycled) water. The Regional Board has consulted with the State and County Health Departments regarding these reuse requirements. The State Department of Health Services (DHS) has

evaluated the proposed project description and these waste discharge requirements and provided comments and recommendations which have been incorporated into this Order. DHS has determined that this Order is consistent with DHS's requirements, recommendations and policies regarding use of recycled water and protection of water quality and public health. DHS has also determined that this is a disposal project, not a ground water recharge project."

5. See Hatch & Parent Comment No. 7 (Staff Report page 10). Regional Board staff is confusing Water Factory 21 with the Groundwater Replenishment project. This Board is taking a position with the Los Osos project that is contrary to that of other Regional Boards facing similar situations. Wastewater disposal in Los Osos should be considered ground water injection.

Staff Response: See response to comment No. 7 on page 10 of the agenda staff report. The comment references Orange County's Groundwater Replenishment Project, which includes several components designed to protect ground water resources from the effects of overdraft. Water Factory 21 is a component of the project which directly injects into the ground water aquifer a blend of reclaimed water and well water to create a freshwater barrier to saltwater intrusion.

6. See Hatch & Parent Comment No. 8 (Staff Report page 10). The project should be considered a Groundwater Recharge Reuse Project and regulated accordingly.

Staff Response: See response to comment No. 8 on page 10 of the agenda staff report and response to comment No. 4 above.

7. Cal Cities Water Co. agrees that a community wastewater system is needed in Los Osos. However, the proposed Order does not reflect requirements specified by other Regional Boards or DHS for other similar projects. A comparison of selected other projects was submitted to support this comment.

Staff Response: See response to comment No. 4 above. The proposed Order applies state regulations, Regional Board policies, and staff's professional judgement in a manner consistent with discharge regulation throughout the Central Coast Region. Accordingly, project specifics (water quality problems, site characteristics, project design, etc.) are considered in developing the proposed requirements. Projects selected for comparative purposes (to support the comment) are significantly different from the Los Osos wastewater project in purpose, site characteristics, problems being addressed and project components.

8. Water supplied from some of Cal Cities Water Co. wells will likely triple in nitrate concentration and double in TDS due to proximity to the discharge area and utilizing the shallow aquifer water.

Staff Response: See response to comment No. 4 in the agenda staff report (page 9).

9. There is insufficient evidence to support the claims by Regional Board staff that the wastewater project will not negatively effect Cal Cities Water Co. wells.

Staff Response: Evaluation and regulation of the proposed discharge is based on protection of water quality (surface and ground waters). Staff has not evaluated and makes no "claims" regarding Cal Cities Water Co. specific wells. However, Regional Board staff supports recommendations made by DHS (during a January 24, 2003 meeting) that Cal Cities Water Co. and the CSD (two largest water purveyors in Los Osos) work together to develop a well use plan. Proper management and use of water supply wells throughout the community will enable both water purveyors to contribute to ground water basin management in the most cost-effective manner. Also, such water supply management could efficiently balance water supply quality with minimizing salt-water intrusion. As indicated in the agenda staff report, the proposed Order includes extensive ground water monitoring to assure compliance with the discharge requirements and protection of ground water quality.

10. The proposed project creates a "closed loop" for pollutants within the ground water basin

which will degrade water quality.

Staff Response: Existing waste disposal practices in Los Osos are characterized by septic tank effluent (primary treated wastewater) discharged into seepage pits, some in direct contact with ground water. The proposed wastewater project will discharge tertiary treated and disinfected wastewater into leachfields with significant separation to ground water. A vast majority of the pollutants present in the wastewater will be removed through the treatment processes. Significantly less pollutants will be discharged to the ground water basin than is currently occurring. And ground water monitoring (required in the proposed Order) will be used to verify the results.

11. The proposed Order does not include provisions to address water supply management.

Staff Response: As indicated in the agenda staff report, Regional Board authority is linked to regulating waste discharges. Water supply management is certainly an important issue for long-term maintenance of the ground water basin, but is outside the Regional Board's realm of authority.

12. The proposed Order does not include provisions regulating discharge of harvest well water should the volume harvested exceed demand.

Staff Response: The project includes plans to pump shallow ground water from "harvest wells" in order to reduce mounding of the shallow ground water downgradient of the discharge area. This ground water is not considered a waste or recycled water and therefore is not regulated by the Regional Board.

13. Cal Cities Water Co. has always supported the wastewater project in general terms, but is under no obligation to participate in planned management of the shallow ground water unless there is clear benefit to its customers.

Staff Response: Staff remains hopeful that Cal Cities Water Co. will participate with the CSD in basin-wide water supply management (of upper and lower zones) for the long-term benefit of the entire community including its customers. However, as indicated in responses to comments Nos. 1, 2, 9, 11 and 12 (above), such issues are outside the purview of the Regional Board.

14. The proposed Order will allow the CSD to degrade water quality in Los Osos. Such authorization is in direct conflict with the mandate of the Regional Board.

Staff Response: Staff strongly disagrees with the statement. After three decades of study, alternatives evaluation and project development, the CSD is pursuing the most effective feasible means of resolving water quality issues in Los Osos. Resolution of wastewater problems in Los Osos and long-term protection and restoration of water quality is not necessarily synonymous with the lowest cost water available for Cal Cities Water Co. customers. The water companies (Cal Cities and the CSD) have been able to shift use to the deeper zones to avoid impaired shallow ground water. However, long-term dependence upon the deeper ground water, will undoubtedly lead to further saltwater intrusion into the aquifer. Comprehensive, basin-wide ground water management must be implemented if long-term water quality and sustainable supply is to be assured. The community wastewater project represents the most significant step toward implementing such basin-wide ground water management.

15. Should the Regional Board adopt the proposed Order without reasonable changes, other more time consuming and costly resolution will likely result and will delay the wastewater project.

Staff Response: This statement is contrary to and conflicts with Cal Cities Water Co.'s stated support for the wastewater project. The comment is reiterated throughout both January 23, 2003 letters from Cal Cities Water Co.'s legal representative. Unfortunately, examples are not provided to indicate desired modifications which are within the purview of the Regional Board. During the January 24, 2003 meeting, Cal Cities suggested that the wastewater project could be re-designed by those in attendance (Cal Cities, CSD, DHS and Regional Board staff) to a project acceptable to Cal Cities Water Co. (such as adding reverse osmosis or other treatment processes). The Regional Board does not have authority (nor does staff recommend) designing or re-designing the treatment facility. Such action would clearly delay

the project, add considerably to the cost burden for the community, and is not supported by evidence of need. In a January 3, 2001 comment letter on the wastewater project EIR, Cal Cities Water Co. described the objective of the project to protect and proactively manage the ground water basin and recommended that each of the water purveyors in Los Osos enter into a ground water management agreement to assure sustainability of the ground water basin and minimize saltwater intrusion. As indicated above, Regional Board staff and DHS strongly support such cooperation among the water purveyors. However, such requirements are outside the realm of Regional Board authority. However, should dependence upon the deeper ground water zone continue and threaten further saltwater intrusion, the issue may require evaluation and possible adjudication of ground water rights by the State Water Resources Control Board.

ATTACHMENTS

1. January 21, 2003 letter to SWRCB
2. January 23, 2003 letter from Morro Bay NEP
3. January 23, 2003 letter from Hatch & Parent to Executive Officer Briggs
4. January 23, 2003 letter from Hatch & Parent to Chairman Shallcross

S:/WB/CoastalWatershed/Staff\Sorrel/LosOsosWDRs/los osos csd WDR.sup

MORRO BAY
NATIONAL
ESTUARY
PROGRAM

January 23, 2003

Chairman Shallcross and Boardmembers
Central Coast Regional Water Quality Control Board
C/O Roger Briggs, Executive Director
895 Aerovista, #101
San Luis Obispo, CA 93401

Dear Chairman Shallcross and Boardmembers,

The Morro Bay National Estuary Program strongly supports your approval of the Waste Discharge and Recycled Water Requirements for the Los Osos Community Services District and the related mitigation and monitoring program.

As you are well aware, inadequate wastewater treatment in Los Osos has had significant adverse impacts on both the community's groundwater resources and the estuary. Our Comprehensive Conservation and Management Plan cites these problems and specifically directs the MBNEP to "support the efforts of the Los Osos Community Services District to improve the level of wastewater treatment in the community." We believe the LO CSD has made considerable progress toward the implementation of the much-needed system. Clearly, approval of these requirements and associated mitigations is a critical step toward this end. The CCMP does not specify any particular treatment methodology, but we are glad that a system has been found that appears satisfactory to the majority of the community and that meets the technical requirements of your board.

The MBNEP has long supported the efforts of the LO CSD and has cooperated wherever possible with the CCRWQCB staff and others in furthering the wastewater treatment facility. We, therefore, endorse the staff's recommendations and encourage you to help move this long-awaited project forward.

Thank you very much.

Sincerely,

Michael Multari
Program Director

601 EMBARCADERO, SUITE 11 MORRO BAY, CA 93442
805/772-3834 FAX 805/772-4162 www.mbnep.org

Item No. 14 Attachment 2
Supplemental Sheet
Meeting of February 7, 2003
Los Osos CSD Wastewater Project

California Regional Water Quality Control Board
Central Coast Region

Winston H. Hickox
Secretary for
Environmental
Protection

Internet Address: http://www.swrcb.ca.gov/rwqcb3
895 Aerovista Place, Suite 101, San Luis Obispo, California 93401
Phone (805) 549-3147 • FAX (805) 543-0397

Gray Davis
Governor

January 21, 2003

James Kuykendall, Chief
Division of Loans and Grants
State Water Resources Control Board
P. O. Box 944212
Sacramento, Ca 94244-2120

Dear Mr. Kuykendall:

LOS OSOS WASTEWATER PROJECT- SRF LOAN NO. C-03-4140-110

This letter is intended to convey the high priority need and our support for the Los Osos Wastewater Project, and to concur with the Los Osos Community Services District's (CSD) January 13, 2003 request for extension of the Project Milestone dates. As you know, the CSD has been actively pursuing this vital project, but has been delayed by several court actions. Despite these delays, the CSD has made progress completing significant project milestones such as adoption of a final EIR for the project, formation of an assessment district, sale of bonds, purchasing property, preliminary design plans and other project components.

We look forward to completion of the Los Osos Wastewater Project as soon as possible to prevent further degradation of water quality due to septic system discharges and we are available to assist your staff (if needed) to facilitate project funding. If you have questions, please call **Sorrel Marks at 805/549-3695** or Gerhardt Hubner at 805/542-4647.

Sincerely,

for Roger W. Briggs
Executive Officer

S:/wb/coastal watershed/staff/sorrel/lososos-general/kuykendall.ltr
File: Los Osos CSD Wastewater Project

cc: Bruce Buel, General Manager
Los Osos CSD
P. O. Box 6064
Los Osos, CA 93412

Roger

2003 JAN 14 PM 3:33
SAN LUIS OBISPO, CA 93401

President
Rosemary Bowker

Vice-President
Stan Gustafson

Director
Frank Freiler
Gordon Hensley
Sylvia Smith

General Manager
Bruce S. Buel

Utilities Manager
George J. Milanés

Administrative Services Manager
Lynne L. Corenbaum

Fire Chief
Bruce D. Pickens

January 13, 2003

James D. Kuykendall, Chief
Loans and Grants Branch
SWRCB Division of Clean Water Program
P. O. Box 944212
Sacramento, CA 94244-2120

SUBJECT: Los Osos Wastewater Project; SRF Loan #C-03-4140-110

Dear Mr. Kuykendall

The Los Osos Community Services District (LOCSD) respectfully requests that the SWRCB extend LOCSD's SRF Loan "Project Milestones" set forth in the SWRCB's September 28, 2001 Facilities Plan Approval and in the SRF Loan Resolution adopted by the SWRCB on January 23, 2002. LOCSD is submitting this request because our project was delayed for approximately fourteen months as a result of two lawsuits filed against the District. These lawsuits prevented LOCSD from issuing the municipal bonds required to fund the final design of our wastewater project. As detailed below, LOCSD has won each of the lawsuits, issued bonds, and engaged the design engineer to move forward with our project.

LOCSD's efforts to form our Wastewater Assessment District were challenged in a state court action, *Coleman v. Los Osos Community Services Dist.* (San Luis Obispo County Superior Court Case No. CV 10500) in May 2001. Petitioner Cinthea Coleman sought a writ of mandate and temporary restraining order prohibiting the LOCSD from counting the mailed ballots that had been returned regarding the wastewater assessment. The Petition alleged that the assessment violated Proposition 218 (Cal. Const. art. XIIID). The LOCSD was able to demonstrate, and the Court found, total compliance with the requirements of Proposition 218 (Cal. Const. art. XIIID). The Petition for Writ of Mandate was denied in July of 2001, and no appeal followed.

A second lawsuit was filed in the United States District Court for the Central District of California (Case No. CVOL-5880TJH (JWJx)) in August 2001. The Complaint alleged four causes of action against the LOCSD – grounded in 42 U.S.C. § 1983 – for violations of procedural and substantive due process and imposition of an excessive fine in violation of the 8th Amendment. The LOCSD responded to the Complaint with a Motion to Dismiss under rule 12B of the Federal Rules of Procedure. Following a full briefing, the District Court

Offices At:
2122 9th Street
Los Osos, California 93402

Mailing Address:
P.O. Box 6064
Los Osos, California 93412
Phone 805/528-9370
Fax 805/528-9377
www.losososcsd.org

January __, 2003 LOCSD Letter to SWRCB (Cont.)

granted the LOCSD's motion to dismiss the lawsuit in its entirety. Plaintiffs then sought relief in the Ninth Circuit Court of Appeal. After full briefing and oral argument, the Ninth Circuit Court issued an unpublished Memorandum of Opinion affirming the District Court's ruling. Plaintiffs/Appellants then filed a Petition for Rehearing, which the 9th Circuit denied on June 6, 2002. The Plaintiffs/Appellants retained the ability to seek U.S. Supreme Court review of the 9th Circuit Decision through September 6, 2002. The Plaintiffs/Appellants choose not to file the Writ, thus ending the litigation.

With the litigation over, the LOCSD Board authorized the sale of municipal bonds on September 19, 2002. The Bonds were sold on October 31, 2002. LOCSD then authorized Montgomery Watson Harza (MWH) to prepare the final design for LOCSD's Wastewater Project on October 31, 2002.

Attached is the Project Schedule from the MWH contract. As detailed in the attached schedule, MWH is required to submit Phase I and Phase II Final Plans and Specifications to LOCSD by March 1, 2004. LOCSD expects to start Phase I construction no later than June 28, 2004 and finish Phase I construction no later than December 30, 2005. LOCSD expects to start Phase II construction no later than January 2, 2006 and finish Phase II construction not later than June 29, 2007.

LOCSD has reviewed the revised scheduled with Central Coast RWQCB staff and understands that the Central Coast RWQCB will submit a letter indicating their concurrence with LOCSD's request under separate cover.

LOCSD requests that the SWRCB amend the FPA and the Loan Resolution to recognize this revised timeline.

Feel free to contact me if you have any questions at 528-9375 or e-mail me at bbuel@losososcsd.org.

Sincerely,

Bruce Buel
LOCSD General Manager

CC: Board
Wayne Pierson, Diana Robles, & Leo Sarmiento @SWRCB
Roger Briggs, Gerheardt Hubner, & Sorrel Marks @ RWQCB
Steve Hyland @ MWH
Gary Grimm
File

Project Schedule

Description	Date
Start Design Services	October 31, 2002
Complete Surveying (a)	March 21, 2003
Submit Prelim. Design (30 Percent)	April 28, 2003
Re-initiate §7 Consultation w/USFWS	May 1, 2003
Initiate CEQA review (if necessary)	May 1, 2003
SWRCB / RWQCB Presentation (b)	May 2, 2003
Conduct VE Study	May 5 - 9, 2003
Receive VE Report	May 16, 2003
Submit Draft VE Response Report LOCSD 30 Percent Review Comments	May 23, 2003
Conduct Community Workshops	May 27 - 29, 2003
Conduct VE Coordination Meeting (c)	May 30, 2003
Debrief LOCSD Board Approve VE Disposition Resume Detailed Design	June 05, 2003
Submit Final VE Response Report	June 13, 2003
Coastal Development Permit Planning Commission Hearing	June Hearing Date (TBD)
Submit 50 Percent Submittal	September 15, 2003
SWRCB / RWQCB Presentation (b)	September 22, 2003
LOCSD 50 Percent Review Comments	September 29, 2003
Coastal Development Permit Coastal Commission Hearing	November Meeting
Submit 90 Percent Submittal	January 5, 2004
SWRCB / RWQCB Presentation (b)	January 12, 2004
Conduct Community Workshop	January 14, 2004
LOCSD 90 Percent Review Comments	January 19, 2004
Debrief LOCSD Board Authorize Eligibility Determination	January 22, 2004
Submit 100 Percent Submittal	February 16, 2004
SWRCB Approval of Documents	February 27, 2004
Advertise for First Phase Bids	March 01, 2004
Open First Phase Bids	April 14, 2004
Submit ATA Package to SWRCB	May 10, 2004
SWRCB ATA Construction Contract	May 24, 2004
Start First Phase Construction (NTP)	June 28, 2004

(a) Predicated on resuming and completing second phase of septic tank surveying on October 07, 2002 and March 21, 2003 (24 weeks), respectively.

(b) Presentation of design submittal documents by MWH to SWRCB and RWQCB staff.

(c) Coordination meeting with LOCSD, SWRCB, RWQCB, and VE staff to finalize disposition of VE recommendations.

MORRO BAY
NATIONAL
ESTUARY
PROGRAM

January 23, 2003

Chairman Shallcross and Boardmembers
Central Coast Regional Water Quality Control Board
C/O Roger Briggs, Executive Director
895 Aerovista, #101
San Luis Obispo, CA 93401

Dear Chairman Shallcross and Boardmembers,

The Morro Bay National Estuary Program strongly supports your approval of the Waste Discharge and Recycled Water Requirements for the Los Osos Community Services District and the related mitigation and monitoring program.

As you are well aware, inadequate wastewater treatment in Los Osos has had significant adverse impacts on both the community's groundwater resources and the estuary. Our Comprehensive Conservation and Management Plan cites these problems and specifically directs the MBNEP to "support the efforts of the Los Osos Community Services District to improve the level of wastewater treatment in the community." We believe the LO CSD has made considerable progress toward the implementation of the much-needed system. Clearly, approval of these requirements and associated mitigations is a critical step toward this end. The CCMP does not specify any particular treatment methodology, but we are glad that a system has been found that appears satisfactory to the majority of the community and that meets the technical requirements of your board.

The MBNEP has long supported the efforts of the LO CSD and has cooperated wherever possible with the CCRWQCB staff and others in furthering the wastewater treatment facility. We, therefore, endorse the staff's recommendations and encourage you to help move this long-awaited project forward.

Thank you very much.

Sincerely,

Michael Multari
Program Director

601 EMBARCADERO, SUITE 11 MORRO BAY, CA 93442
805/772-3834 FAX 805/772-4162 www.mbnep.org

Item No. 14 Attachment 2
Supplemental Sheet
Meeting of February 7, 2003
Los Osos CSD Wastewater Project

11911 San Vicente Boulevard, Suite 350
Los Angeles, CA 90049
Telephone: (310) 440-9996
Fax: (310) 440-9961

HATCH & PARENT
A Law Corporation

Steven L. Hoch
Direct Dial: (310) 440-5081
SHoch@HatchParent.com

REGIONAL
JAN 24 AM 10:28
SAN LUIS OBISPO, CA 93401

January 23, 2003

FEDERAL EXPRESS

Mr. Roger W. Briggs
Executive Officer
Regional Water Quality Control Board
Central Coast Region
895 Aerovista Place
San Luis Obispo, CA 93401

Re: January 10, 2003 Letter from RWQCB re Draft Waste Discharge Requirements for Los Osos Wastewater Project

Dear Mr. Briggs:

In response to your January 10, 2003 letter to Warren Morgan of California Cities Water Company ("Cal-Cities"), Cal-Cities responds as follows:

Comment No. 1

Comment No. 1 in Cal-Cities Letter: "A critical element of the wastewater project that is not addressed in the draft Order is the effluent disposal and its recharge of the community's potable water supply."

RWQCB Response: "Staff disagrees. As described in the Staff Report and Findings of the proposed Order, the community wastewater project is designed specifically to address effluent disposal. Furthermore, a primary object of the Los Osos wastewater project it to restore and provide long-term protections of ground water resources (the community's sole source of water), in addition to protecting surface waters and public health. The proposed Order includes requirements specifically to assure those goals are met, consistent with the mission of this agency."

Cal-Cities' Response: The response begs the issue. Cal-Cities understands fully the reason that such a facility is needed. Cal-Cities has always been supportive of such a facility in Los Osos and agrees in general with that need. However, such a need must not override all other considerations which could be ameliorated by this Board taking the appropriate action.

Cal-Cities unaddressed concern is that using a large volume of water with a high percentage wastewater origin in the drinking water system is problematic. There is no solution in the plan or the requested permit. In fact, the draft permit fails to take into account the negative effects of a closed system that cycles large volumes of water between wastewater and drinking water systems. No where in the RWQCB's response is this issue addressed. Further, there has been no independent indication by the Los Osos Community Services District ("LOCSD") of the recognition of this problem nor approaches to resolve the issues.

Comment No. 2

Comment No. 2 in Cal-Cities Letter: "All of the studies completed to date indicate that treated wastewater must not be exported and must be recharged in order to preserver sustainable yield from the ground water basin."

RWQCB Response: "We agree and disposal and/or reuse of treated wastewater in a manner which will ultimately recharge the ground water basin has always been a vital component of water resources and wastewater planning for this community."

Cal-Cities' Response: Cal-Cities is pleased that the RWQCB recognizes the importance of the issue, but Cal-Cities does not see that this Board is addressing the issue affirmatively.

Comment No. 3

Comment No. 3 in Cal-Cities Letter: "Although you agree with the concept of utilizing ground water from the shallow zone downgradient of the main disposal area, such use should only occur if such ground water is not significantly impaired."

RWQCB Response to No. 3: "The wastewater project itself and ground water limitations specified in the proposed Order, are designed to restore and protect ground water, including the shallow zones downgradient from disposal areas. As described in the Staff Report, extensive ground water monitoring will be conducted to assure ground water quality is restored and protected."

Cal-Cities' Response: Cal-Cities questions the basis of the RWQCB conclusion. Cal-Cities believes that there is no current solute transport model which would assist in assuring that this assumption has any basis in fact. The solute transport model currently existing deals only with nitrates, not mineral buildup. Cleath & Associates has indicated that the model is being reviewed by others to determine if its calibration is such that it can be relied upon even for nitrates.

Comment No. 3

Comment No. 3 (sic) in Cal-Cities Letter: "Due to using the shallow zone ground water, water supply is likely to increase in nitrates and TDS concentrations for the short term. However, the supply is expected to remain within appropriate drinking water standards."

RWQCB Response No. 3: "This agency's charge it to regulate discharges of waste. Water supply pumped from the upper zones will continue to be higher in nitrate and TDS concentrations than water pumped from the deeper zones due to impacts caused by historic and current septic tank use. However, as water quality in the upper zones is restored over time, the disparity between the two will reduce correspondingly and the shallow zone water will be restored to useable (drinking water) quality."

Cal-Cities' Response: This is a closed system where treated wastewater will recharge the portion of the aquifer that provides up to 40% of Cal-Cities' water supply. The operation of the proposed LOCSD project will ensure a systematic degradation of water quality in that part of the basin. Treatment of the water supply will eventually be required. Treating wastewater is more efficient since it is a smaller volume as compared to the drinking water supply. There is no basis that the shallow zone will be restored regarding TDS. In other words, it is very unlikely that "the disparity between the two [upper and lower aquifer] will reduce" over time regarding salt content.

Comment No. 4

Comment No. 4 in Cal-Cities Letter: "Constituents which are not removed through the wastewater treatment process may increase concentrations in water supply over time as they accumulate in ground water near supply wells. Southern California Water Co. has located its supply wells to avoid impacts caused by individual septic systems. Also, since septic systems are dispersed over the entire community, water quality impacts are also disbursed. However, the main disposal area for the community wastewater project will be upgradient from supply wells and will therefore influence water quality in those wells."

RWQCB Response No. 4: "Currently, the prevailing strategy used by water purveyors in Los Osos to deal with contaminants in shallow ground water is to shift use to deeper zones (simple avoidance). However, the fact remains that long-term sustainable water supply for the community depends upon using both shallow and deeper zones in a managed fashion to maximize quality while minimizing contaminating the lower aquifer (through saltwater intrusion). The high level of treatment provided by the proposed facilities will greatly reduce water quality impacts from urban development when compared to the current use of septic system on-site disposal. Furthermore, proposed reuse and multiple disposal sites (located throughout the community) will help minimize both quantity and quality issues associated with

treated wastewater disposal. The proposed Order includes a narrative requirement stating that "the discharge shall not cause significant increase of mineral constituent concentrations in underlying ground water, as determined by comparison of samples collected from wells prior to and post discharge commencement." The monitoring and reporting program that is included with the proposed Order is designed to monitor changes or trends in water quality downgradient of the disposal areas, and assure that this requirement it met."

Cal-Cities' Response: "Simple avoidance" means spending capitol to seek alternative sites for wells. There is no reason why Cal-Cities should be forced to bear the cost of these impacts because that is a "simple" solution. In fact, the issue of "simple avoidance" is a burden that LOCSD should bear by accepting the changes that Cal-Cities believes the RWQCB should make to the draft permit. Simple avoidance means that the aquifer will be negatively effected. Prevention is preferred over monitoring for impacts.

Comment No. 4

Comment No. 4 (sic) in Cal-Cities Letter: "The proposed Order should be consistent with Department of Health Services' (DHS) water reuse and ground water recharge requirements (and proposed requirements)."

RWQCB Response: "Staff believes that the proposed Order is consistent with and does reflect DHS's water reuse and ground water protection requirements. During the past several years of project development, Regional Board staff and the CSD have remained in communication with DHS (through meetings, letter and telephone conversations) to assure that project details and proposed limitations are consistent with that agency's mission to protect public health and corresponding requirements."

Cal-Cities' Response: Cal-Cities suggest that the RWQCB response requires clarification. When RWQCB says "Staff believes that the proposed Order is consistent with and does reflect DHS's water reuse and groundwater protection requirements," it is not read that RWQCB's staff is stating that these requirements are in fact consistent with the DHS's 8/2/02 Draft Regulations for a Groundwater Recharge Reuse Project.

Comment No. 5

Comment No. 5 in Cal-Cities Letter: "Southern California Water Co. would like to see review of other similar projects, such as the Orange County Groundwater Replenishment Project."

RWQCB Response: "Staff encourages the Southern California Water Co. to contact Orange County directly for information regarding its projects. It should be noted however that

the Orange County Groundwater Replenishment Project is substantially different in scope and objective than the Los Osos wastewater project. The Orange County project injects tertiary water directly into a drinking water aquifer in order to maintain a freshwater barrier from further seawater intrusion caused by historical ground water overpumping. Unlike this project, the Los Osos wastewater project does not propose to directly inject highly treated water to ground wate., rather disposal will occur though leachfield dispersal, and subsurface percolation."

Cal-Cities Response: RWQCB argues that LOCSD is not directly injecting. Cal-Cities notes that DHS regulations define subsurface injection as: "the controlled insertion of recharge water below the ground surface resulting in the recharge of a groundwater basin, and includes direct insertion into the saturated zone and insertion into the vadose zone." (22 CCR §60301.840) That is, in fact, what is being done here. There is a controlled insertion of water put into the percolation basins which will result in a recharge of groundwater, both in the vadose and saturated zone. Mincing over definitions is not relevant to the issue at hand.

Further, we believe that RWQCB is confusing the Water Factory 21 with the Groundwater Replenishment Project. Also, Water Factory 21 uses Reverse Osmosis in addition to tertiary treatment.

No other similar project in California has been handled in the same manner as the proposed LOCSD project. It is troublesome that this Board is taking a position with the LOCSD project that is contrary to that of other Regional Boards facing similar situations.

Comment No. 6

Comment No. 6 in Cal-Cities Letter: "The purpose of the project should clearly be articulated by the Regional Board (is the project remediation of contaminated ground water or to stop on-going contamination from on-site waste discharges)."

RWQCB Response: "The project is clearly described as indicated in the Staff Report (pages 4 and 5), in the proposed Order (Finding Nos. 7, 8, 16, 17 and 18 and Receiving Water Limitation D2) and in the response to Comment No. 1 (above). The proposed community wastewater project has multiple purposes including: 1) restoring ground water quality; 2) preventing ongoing impacts from waste disposal, and 3) providing for long-term protection of the community water supply and adjacent Morro Bay estuary."

Cal-Cities Response: Cal-Cities does not dispute that the RWQCB states what it believes this project is at the places cited in its response. However, the RWQCB indicates that this is a remediation project. However, the RWQCB incorrectly defines this project by not stating that it is a Groundwater Recharge Reuse Project (GRRP). By avoiding a proper definition of the project, this Board can avoid the necessary (and legally required) steps which

would protect the water supply needed by Cal-Cities. The Board's decision is, at best, totally arbitrary and without any proper support.

Cal-Cities would be interested in meeting with the RWQCB and its staff to further discuss these issues. If you wish to further discuss this matter, please contact me at (310) 440-9996.

Very truly yours,

Steven L. Hoch
For HATCH & PARENT
A Law Corporation

SLH:smm

cc: Sorrel Marks, RWQCB
Denise Kruger, SCWC

11911 San Vicente Boulevard, Suite 350
Los Angeles, CA 90049
Telephone: (310) 440-9996
Fax: (310) 440-9961

HATCH & PARENT
A Law Corporation

Steven L. Hoch

Direct Dial: (310) 440-5081
SHoch@HatchParent.com

January 23, 2003

RECEIVED
03 JAN 27 AM 8:13
CENTRAL COAST REGION
SAN LUIS OBISPO, CA 93401

FEDERAL EXPRESS

Garry C. Shallcross, Chairman
Regional Water Quality Control Board
Central Coast Region
895 Aerovista Place
San Luis Obispo, CA 93401

Re: Draft Waste Discharge/Recycled Water Requirements,
Order No. R3-2002-0108, for Los Osos Community Service District,
Los Osos Wastewater Facility

Dear Mr. Shallcross:

This office represents the Southern California Water Company ("SCWC") which is one of three water purveyors in the community of Los Osos. SCWC operates under the business name of California Cities Water Company ("Cal-Cities") and provides water service to customers residing in portions of the Los Osos community. Cal-Cities submits the following comments relating to the Regional Water Quality Control Board, Central Coast Region's ("Regional Board") draft Waste Discharge/Recycled Water Requirements, Order No. R3-2002-0108, ("Draft Permit") for Los Osos Community Service District's ("LOCSD") planned Los Osos Wastewater Facility ("LOCSD project"). Cal-Cities has direct and immediate concerns about the Draft Permit and the LOCSD project as proposed. The proposed main disposal site for the LOCSD project, known as the Broaderson Site, is approximately 2,000 feet hydraulically up-gradient of Cal-Cities' Rosina Well. Two other proposed disposal sites are within 500 feet of the Rosina Well.

Cal-Cities strongly believes that:

1. While a wastewater treatment facility is needed in Los Osos, the Draft Permit does not contain sufficient safeguards for the LOCSD Project to assure that substantive and long term environmental harm to the water supply aquifer will not occur;

2. The Regional Board appears poised to approve a permit that: (a) fails to meet the permit requirements set by other Regional Water Quality Control Boards in the State, who have and are dealing with similar projects; and (b) fails to take into account the California Department

of Health Services' (DHS) current and proposed regulations for such projects;

3. The water delivered by Cal-Cities from the wells closest to the LOCSD project's proposed Broaderson Site will likely experience a tripling of nitrate concentrations and a doubling of total dissolved solids (TDS) concentrations in the short term under a proposed blending operation as proposed in the LOCSD project;

4. If the LOCSD project is placed into operation as planned, Cal-Cities' largest water supply wells will likely require treatment due to a systematic, "closed-loop" degradation in water quality. However, the continued operation of those wells is necessary to ensure that the wastewater does not surface above ground. Thus, placing an impaired source in lead position;

5. There is insufficient scientific basis to support the claims by Regional Board staff that the LOCSD project will not negatively effect Cal-Cities wells and the water supply to the Los Osos Community generally.

In an attempt to resolve these issues informally and expeditiously, Cal-Cities has had numerous discussions with the LOCSD, its engineers and its legal counsel over the last 18 months. All attempts to have these issues addressed by LOCSD directly have failed. Cal-Cities has likewise discussed these issues with the Regional Board staff, both in writing and in face-to-face meetings, but likewise, all attempts to have these issues addressed have failed. Should the Regional Board grant the Draft Permit without the any reasonable changes, other forms of more time consuming and costly resolutions will likely result.

Description of the LOCSD Project's Relationship to Cal-Cities' Wells

LOCSD is planning on permitting, constructing and operating a wastewater collection, treatment and disposal system in the community of Los Osos. This project is required by the Regional Board due to the increasing concentrations of nitrates in the upper zone of the Los Osos aquifer. The cause of the elevated nitrate concentrations is most likely the septic systems currently in use in Los Osos. LOCSD is planning to construct a community-wide wastewater collection and treatment system.

Treated wastewater will be disposed through a combination of irrigation use and subsurface leachfields. Since groundwater elevations are lower on the west side of the Los Osos Fault, the majority of the treated wastewater will be disposed of on the west side. The west side will receive approximately 950,000 gallons per day (gpd) while the east side will receive 450,000 gpd at build-out. As a result of the proposed leachfield operation, a groundwater mound is anticipated to form in the upper west side aquifer. This mound is expected to surface in the Cuesta-by-the-Sea neighborhood. To prevent this groundwater surfacing in the lower elevation areas in western Los Osos, a total of 300,000 to 400,000 gpd of groundwater will require

"harvesting" from the shallow aquifer (upper zone). The harvesting well pumping rates will be adjusted based on groundwater elevations in over 30 monitoring wells located throughout western Los Osos. The LOCSD proposes that Cal-Cities pump up to 300,000 gpd (or 208 gpm) from the upper aquifer. The proposal further suggests that the harvested water should be blended with water pumped from the lower aquifer and discharged to the drinking water distribution system.

Summary of Cal-Cities Concerns

Cal-Cities believes that there are certain aspects of the project which are sufficiently troublesome to warrant further review by the Regional Board prior to adopting the Draft Permit. These include:

1. The type of permit sought for this project is not the proper permit given the circumstances surrounding the LOCSD project, the basin, and the scope of the operation intended. The proposed LOCSD project is more properly categorized as a Groundwater Recharge Reuse Project (GRRP) than a remediation project. (See, Kennedy/Jenks Report, Exhibit G.) Alternatively, given the circumstances here at issue, the Draft Permit should require far more of LOCSD then is being sought in order to protect a major, vital, and sole source of public water supply to the Los Osos Community. This failure is especially troublesome in that this Regional Board is taking a position contrary to other Regional Board's facing similar situations.

2. Any contaminant that cannot be removed by the tertiary treatment methods proposed by the LOCSD may mass load within the west upper aquifer. The LOCSD project essentially creates a "closed loop" system since the harvest wells are designed to intercept the treated wastewater water as it migrates subsurface towards the ocean. This will result in an ever-increasing concentration of certain contaminants (those that are not removed by tertiary treatment).

3. The water extracted by Cal-Cities' Rosina and Skyline Wells will be blended with water extracted from the lower zone of the aquifer and are intended to be used to supply the drinking water system. Considering current nitrate concentrations of the Skyline Well (upper zone) and Rosina Well (lower zone), a significant volume of diluting water will be required to meet the nitrate drinking water standard in the blended water. The required large volume of diluting water translates directly into the need to use 100% blended water in the drinking water system. If the LOCSD project is implemented as proposed, the water delivered by Cal-Cities will likely experience a tripling of nitrate concentrations and a doubling of total dissolved solids (TDS) concentrations in the short term.

4. Since such a large volume of water is needed to dilute the harvest water and the drinking water system will be supplied with essentially 100% blended water, a dedicated blend station will be required. Further, this dedicated blend station will require every well within the Cal-Cities system to have dedicated mains leading directly from each well site to the blend

station. Pressure zone modifications to the distribution system will not be able to deliver non-blended water. There are no provisions made for this by the Regional Board in the Draft Permit.

5. As drinking water is used, it will pick up contaminants and enter the wastewater system again. This cycling will allow contaminants that cannot be removed by the proposed wastewater treatment system to re-enter the drinking water supply and increase in concentration over time. This cycling occurs under the present situation of septic tanks discharging to the upper aquifer. However, contaminants are spread over a larger area and are not concentrated upstream of a community water supply well as would occur under the proposed LOCSD project. As water purveyors, Cal-Cities has specifically attempted to locate its wells to escape the negative impacts of the septic tank discharges. This essentially extends the cycle time between water supply and wastewater systems.

6. The volume of harvest water that must be pumped is dictated by the groundwater elevations in approximately 30 monitoring wells. Wastewater flows typically increase during the wintertime and groundwater is also recharged at a higher rate at this time due to precipitation. Water systems and irrigation use, on the other hand, will experience a decrease in water supply demand during the winter. This sets up a situation in which the harvest wells may need to be pumped at a higher rate while the water system and irrigation use demands are reduced. It is not clear that the drinking water systems and irrigation uses will be able to handle the harvest well flow rates at all times. There are also no provisions in the Draft Permit described for the discharge of harvest water to waste should the capacity to handle harvest water is exceeded. This presents operational concerns for Cal-Cities that remain unaddressed in the Draft Permit.

7. In November 2000, the LOCSD requested that Cal-Cities commit to accepting up to 300,000 gpd of harvest water from the upper west side aquifer. Cal-Cities has always supported the LOCSD project in general terms and agreed in concept to the harvesting well. However, Cal-Cities made it clear and continues to make it clear that there would need to be a manifest benefit to its customers before any commitment to harvesting water. At this time, Cal-Cities is under no obligation to participate in the program. Cal-Cities has reiterated its concerns over the water quality aspects of the LOCSD project to the LOCSD several times through our participation in the Technical Advisory Committee for the Los Osos Groundwater Basin as well as in other forums, including specific meetings with the LOCSD legal counsel and lead engineering consultant for the project.

8. The available volume of diluting water is the daily volume required to meet system demand minus the volume of daily harvest water. Therefore, the actual blending ratios will change through time. This presents a risk of exceeding the nitrate MCL during periods of low demand.

9. There are no contingency plans to relocate the Skyline and Rosina Wells or to substitute for loss of supply in the future should that become necessary due to the LOCSD project. Further, Cal-Cities is not obligated to sacrifice these wells.

10. The investigation into water quality concerns is only beginning at this time. A solute transport model in currently under development but is far from completion. No other studies related to the impact of the use of treated wastewater in the upper and lower zones of the aquifer have been made. This is especially troublesome in light of the lack of inclusion of upgradient protective features in the Draft Permit.

11. The Regional Board's Draft Permit as written will allow the LOCSD to operate in manner that will contribute to the degradation of the water quality Los Osos. This is in direct contradiction to the Regional Board's legally mandated directive. The Regional Board is required to *protect* the beneficial uses of the water supply and to prevent nuisance. (See, Cal. Water Code §13241.) Additionally, the State Water Resources Control Board ("SWRCB") has directed that any project which will produce an increased volume of waste must meet waste discharge requirements which will assure that (1) a pollution or nuisance will not occur and (2) *the highest water quality consistent with maximum benefit* to the people of the State will be maintained. (See, SWRCB, Resolution 68-16.) As raised in the concerns listed above, the Draft Permit as written will not achieves these objectives.

Further Submissions Accompanying this Letter

In order that the Regional Board be fully apprised of Cal-Cities concerns, we offer the following submissions which are transmitted with this letter:

A. Regional Hydrogeologic Setting
B. Description of Cal-Cities' Los Osos System
C. Preliminary Blending Calculation Evaluation of the LOCSD Project
D. Water Quality Baseline Description
E. Mass Loading/Salt Loading
F. Response to the January 10, 2003 Letter from Mr. Briggs of the Regional Board
G. Kennedy/Jenks Report: Comparison of Indirect Potable Recharge Projects

Conclusion

It is Cal-Cities hope that this information will be viewed in a constructive manner and that the Draft Permit being considered by the Regional Board will be modified to address the issues raised here. Cal-Cities is hopeful that this can be so resolved informally. However, the actions of this Regional Board will effect the ability of Cal-Cities and LOCSD to work cooperatively toward a resolution. Should the Regional Board grant the Draft Permit without any reasonable changes to

ensure the protection of water quality in Los Osos, other forms of more time consuming and costly resolution will likely result which will surely delay the LOCSD project longer than necessary.

Very truly yours,

Steven L. Hoch
For HATCH & PARENT, A Law Corporation

SLH:smm
Enclosures

cc: Sorrel Marks, RWQCB
Denise Kruger, SCWC

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL COAST REGION
895 Aerovista Place, Suite 101
San Luis Obispo, California 93401

RESOLUTION NO. R3-2003-0006

Adoption of Findings of Mitigation and Adoption of Mitigation Monitoring Program Waste Discharge Requirements Order No. R3-2003-0007 for the Los Osos Community Services District, Los Osos Wastewater Facility

The California Regional Water Quality Control Board, Central Coast Region (Regional Board), finds:

I. FINAL EIR CERTIFICATION AND REGIONAL BOARD ROLE AS RESPONSIBLE AGENCY

In accordance with the California Environmental Quality Act (CEQA) Guidelines (Title 14, California Code of Regulations sections 15000, et seq.), the Los Osos Community Services District (Los Osos CSD), as Lead Agency, prepared a draft Environmental Impact Report (EIR) for the Los Osos Wastewater Facilities Project. The draft EIR was prepared and circulated for public review in accordance with CEQA and guidelines for Environmental Review of State Revolving Fund projects. The document was available for public review and subject to several workshops of the Los Osos CSD. Relevant environmental issues were included in the EIR. Following public review and comment, the Los Osos CSD certified the Final EIR on March 1, 2001.

The contents of the Draft EIR, the response to comments, and any other related attachments including the Mitigation Monitoring Program compose the Final EIR for the Los Osos CSD Wastewater Facilities Project (Project). The Final EIR is incorporated into these findings by reference and was considered in adoption of this Resolution.

As a responsible agency, the Regional Board is required to make findings of mitigation or overriding considerations and adopt a mitigation monitoring program only for those portions of the project that are being approved by the responsible agency. (CEQA Guidelines section 15096(g)(1).) In 1983, the Regional Board adopted a Basin Plan amendment prohibiting discharges to septic tanks in the Baywood Park/ Los Osos prohibition area effective November 1988. The decision to prohibit septic tanks was made over twenty years ago and is <u>not</u> the subject of this proceeding. The portion of the project to be approved by the Regional Board in this proceeding is set forth in Waste Discharge Requirements Order R3-2003-0007.

The Regional Board may require only those alternatives and mitigation measures that are within its jurisdiction. CEQA does not grant the Regional Board any additional discretionary authority. (CEQA Guidelines sections 15040 and 15096(g).) The jurisdiction of the Regional Board is limited to regulating the impacts to water quality and the beneficial uses of water caused by the discharge of wastes. Additionally, the Regional Board may require prevention and abatement of conditions of nuisance that are associated with the discharge of wastes, as defined in Water Code section 13050. The Regional Board does <u>not</u> have jurisdiction over water supply, water rights or sea water intrusion. Finally, subject to limited exceptions that do not apply

here, the Regional Board may not specify the design, location, type of construction, or particular manner in which compliance may be had with any waste discharge requirement or other order of the Regional Board. (Water Code section 13360.)

Findings in Resolution No. R3-2003-0006 are limited to portions of the project approved by Waste Discharge Requirements Order No. R3-2003-0007 and mitigation measures within the Board's jurisdiction.

II. PROJECT BACKGROUND AND DESCRIPTION SUMMARY

The following summary description is excerpted from Chapter 3 of the Final EIR for the Los Osos Wastewater Facilities Project and covers the entire project approved by the Lead Agency. **Only a portion of the project described below is subject to approval of the Regional Board. The portion subject to Regional Board approval is described in Waste Discharge Requirements Order R3-2003-0007.**

Project Components

The Project consists of a comprehensive wastewater management program for the community of Los Osos with the following components:

- A Septic System Maintenance and Management Program (SSMMP);
- A wastewater collection system;
- A wastewater treatment facility;
- Wastewater disposal facilities and ground water harvesting and monitoring wells;
- Wastewater solids handling facilities at the wastewater treatment plant to enable the hauling of biosolids to a disposal or recycling facility;
- Appurtenant structures and on-site amenities;
- Construction activities;
- A program for the mitigation of direct impacts to habitat for endangered species;

Description of Project Components

Septic System Maintenance and Management Program (SSMMP): A Septic System Maintenance and Management Program is proposed which would affect all properties within the General Plan urban reserve line that lie outside the Regional Board Prohibition Area, as illustrated by (see Figure 3-2 of the Final EIR), in addition to the neighborhoods of Bayview Heights and the Martin Tract, which are within the Prohibition Area but outside the wastewater collection area. Within the SSMMP, each of the 1,051 remaining septic tanks and leach fields would remain in place and would be maintained by the Los Osos CSD. On a regular schedule (about once every five years) each septic tank would be pumped of septage and the septage would be transported to the wastewater treatment facility. Substandard septic systems would need to be upgraded to current standards by individual property owners. The program would include initial inspections of septic tanks to determine their efficacy and age, as well as ongoing routine inspections and septage hauling and disposal.

Collection System: The collection system consists of the installation of about 204,000 feet of sewer pipe. Within the collection area (the Regional Board Prohibition Area) all of the septic tanks would be abandoned and all sewage would be collected through a series of gravity and pressurized (pumped) sewer lines which would convey waste to a treatment plant. The collection system would also include control telemetry to monitor and manage collection operations.

The proposed collection system would serve a build-out population of 17,963 within the Collection/Regional Board Prohibition Zone (4,774 connections), or an area roughly 87 percent of the community. Collection system components include main laterals, piping connections to the property line, pumps and effluent filters. Preliminary estimates are that about 22% of the individual connections would occur at the rear of a property and that about 600 connections will require an onsite pump.

The collection system will be a conventional gravity system consisting of three major components:

- Connection lines at each property to convey flow from the dwellings to the sewer main in the street;
- Sewer mains to convey flow to the treatment plant;
- Pump stations to lift the flow over hills and high areas.

In addition to the gravity and pressurized sewer lines, a series of up to 11 pump stations would be needed. Pump stations would be located on vacant lots purchased by the Los Osos CSD or within public rights-of-way. These stations will generally be required in low-lying areas and where sewer depths approach 11 feet in depth. The stations will use electrically driven submersible pumps set in pre-cast concrete vaults with two pumps per station. The concrete vaults will be sited within lightly traveled public right of ways.

Solids from all septic systems outside the collection system area and within the SSMMP will be periodically pumped and transported by truck to the septage receiving and treatment facility incorporated into the treatment plant (see below). Septage will be pumped from every maintained septic tank at least once every five years. Assuming 1,051 septic tanks and 250 working days per year, this amounts to an average of about 210 septic tanks per year, or about 4,000 gallons per week (2-3 tanker truck loads). The septage receiving station, consisting of a truck drive-through, discharge area and underground vaults, would be enclosed within the Wastewater Treatment Facility and would be fully odor scrubbed.

Wastewater Treatment Facility: The wastewater treatment facility would consist of a hybrid extended aeration wastewater treatment plant which relies primarily on natural organisms and processes to treat collected wastewater. The preferred configuration is considered a hybrid, because it will be constructed almost entirely underground and will be fully odor scrubbed. The facility will be designed to treat the collected wastewater to achieve water quality standards established by the Regional Board, primarily as they relate to the removal of excess nitrate from the effluent stream. The treated wastewater will also undergo filtration and final disinfection to permit safe, approved disposal and/or reuse.

The treatment facility will be designed with a capacity to treat an average daily dry weather flow (ADWF) of approximately 1.365 million gallons per day (mgd). Implementation of a water

conservation program is expected to conserve 150,000 gallons per day, making the adjusted average dry weather flow about 1.2 mgd which is intended to serve a build-out population of 17,283 residents within the Collection/Prohibition Zone. Septage pumped periodically from the septic tanks within the service area of the SSMMP will be received and treated at the wastewater treatment facility site.

The preferred location for the wastewater treatment facility is an 11 acre parcel owned by Tri-W Inc. located at the northwest corner of Los Osos Valley Road and Palisades, across the street from the Los Osos Community Center and adjacent to the community library. The wastewater treatment facility is expected to occupy about 5-6 acres of the site, with the remainder devoted to landscaped open space. The site is currently vacant.

The extended aeration process produces biosolids that are stabilized and therefore non-putrescible. It is estimated that the treatment plant will generate approximately 1,400 pounds per day (dry weight basis) of biosolids, which will be hauled to a landfill or composting facility.

The entire treatment plant will be covered and odor scrubbed. The buildings and enclosed structures of the treatment plant will be held under negative air pressure, meaning that clean outside air will be drawn into the air spaces above the treatment processes. This approach prevents the 'leakage' of unscrubbed air to the outside.

Effluent Disposal: At build-out of the Prohibition Area, wet weather flows through the treatment system could reach as high as 1.7 mgd at build-out of the community. However, during the dry season (most of the year) the flow will be lower, around 1.365 mgd. Implementation of a water conservation program is expected to reduce water consumption by about 150,000 gallons per day, which will reduce the amount of water entering the collection system. Therefore, between 1.2 - 1.7 mgd of treated wastewater will need to be disposed. The preferred disposal method is to percolate the highly treated and disinfected wastewater into the ground by way of sub-surface leach fields.

The preferred disposal strategy addresses these factors through a combination of recycling and sub-surface disposal. During dry weather up to 200,000 gallons per day of treated wastewater will be recycled by irrigating play fields and landscaping within the community. Among the sites being considered are the four public schools (Baywood Elementary, Monarch Grove Elementary, Sunnyside Elementary and Los Osos Middle School) and the Sea Pines Golf Course. The balance of the highly treated and disinfected wastewater (about 950,000 gallons per day during dry weather) will be pumped to sub-surface leach fields where it will percolate ultimately into the sandy soils. Also during the dry season, leach field use will be rotated to maximize the long-term life of the system and to ensure that the sub-surface soils do not become saturated.

During the rainy season, treated wastewater passing through the treatment process could reach as high as 1.7 mgd for short periods (60 days or less) and require disposal. During wet weather when surface irrigation is unavailable, all of the treated wastewater will be disposed of exclusively through the sub-surface leach fields. Leach fields will be located in portions of the community where sufficient depth to ground water (30 feet or more) exists to accept the treated wastewater without resulting in the saturation of surface soils. The areas tentatively chosen are located primarily within street rights-of-way and on other lands. Every five to ten years the disposal leach fields will require maintenance in which the field would be completely exposed and rehabilitated.

Ground water modeling indicates that the area west of the inferred trace of Strand B of the Los Osos fault has the capacity to accept about 950,000 gallons per day of treated effluent, once individual septic leach fields are no longer in use. The primary disposal site is a 40 acre portion of an 80 acre parcel located south of Broderson Avenue (the Broderson site) adjacent to a developed residential neighborhood. Leach fields would be constructed in linear arrays parallel with Highland Drive on an eight-acre portion of the property located toward the southerly property boundary (up-slope). Preliminary sub-surface geotechnical investigations suggest that the Broderson site can accommodate up to 800,000 gallons per day of treated effluent. Other locations proposed for disposal on the west side of the fault are:

- Vista de Oro property on the east side of Pecho Valley Road south of Monarch.
- The Los Osos Valley Road right-of-way between Broderson Avenue and Doris Avenue, and the Pine Avenue right-of-way from Los Osos Valley Road northward.
- A portion of Monarch Grove Elementary School (backup)

To prevent the mounded ground water from surfacing downslope of the Broderson site, a series of four ground water harvesting wells (and one alternate) will be employed. It is estimated that 400,000 gallons per day will need to be harvested. A series of up to 30 monitoring wells will also be used to monitor the sub-surface ground water mounding and to monitor ground water quality.

The preferred option for the disposal of recovered water is to undergo additional nitrogen reduction through either blending with water from the deep aquifer, or through additional treatment that may include ion exchange or some other denitrification process to meet drinking water standards.

The area east of the inferred fault trace is more limited in its capacity to accept treated wastewater for disposal. This is due to the generally shallower depth to ground water and the prevalence of perched clays which restrict percolation. Areas on the east side of the fault considered for disposal include:

- A portion of the Pismo Avenue right-of-way between 7th and 14th Streets
- A portion of the Santa Maria Avenue right-of-way between 13th Street and 17th Street.
- Los Osos Middle School (stand-by only)
- A portion of the Santa Paula Avenue right-of-way between South Bay Boulevard and 15th Street
- A four-acre portion of the 30 acre Powell property located east of the Middle School at the end of El Moro.

Wastewater Bio-Solids Disposal: An extended aeration treatment plant serving the Prohibition Area would produce approximately 1,400 pounds of bio-solids per day (dry weight) and non-toxic chemicals (40 lbs.). Once treated to satisfy federal and state requirements, treated solids would be removed from the wastewater treatment facility about three times per week and hauled (initially) to a landfill. To be disposed of in a landfill, bio-solids must meet the pollutant concentrations specified by Title 40 Section 503.23 of the Code of Federal Regulations, which also prescribes landfill management practices to be followed for sludge handling. A more complete discussion of

bio-solids disposal and management regulations is provided in Chapter 6.2: Hydrogeology and Water Resources.

Wastewater Facility Appurtenant Structures: The Los Osos Wastewater Facility treatment plant site is a multi-use facility intended to benefit the entire Los Osos/Baywood Park community by providing a state of the art wastewater treatment plant in a park like setting.

The treatment facility consists of two major components, the principal treatment areas, which are buried beneath the park; and a cluster of buildings that include final treatment and processing, lab facilities, visitor and operations space and maintenance facilities. The buildings are clustered low on the site set into the natural grade so that only a portion of the roofs are visible from Los Osos Valley Road. Approximately three-quarters of the treatment facility will be located below grade, thereby minimizing visual impacts, and creating additional area for recreational uses. Vehicular access to the treatment facility by employees, visitors and the septage and bio-solids trucks will be directly from the northerly extension of Ravenna Avenue. The bio-filter/odor scrubber is located between the underground portion of the treatment facility, separating the more active park and play fields from uses on top of the treatment facility structure.

Open Space and Landscaping: Constructing the treatment plant underground provides an opportunity for most of the site to be landscaped or otherwise improved to provide an open space and recreation amenity for the community. A preliminary design is illustrated by Figure 3-8 of the Final EIR, which incorporates a large grass area suitable for youth soccer or other types of active recreation. The site will also incorporate a system of pedestrian/bicycle trails and visitor parking.

Appurtenant Structures and Offsite Improvements: The cluster of buildings include the Los Osos CSD offices, visitor/reception and information area (4,000 square feet), and public meeting hall for the Los Osos CSD. This building is located near the County Library site and the proposed parking lot to serve the park and public uses in the vicinity. A covered walkway/arbor directly connects the Los Osos CSD offices with the treatment facility.

In addition, a stormwater retention basin is provided in the northwest corner of the site, which is designed to accept runoff expected from a 50-year storm. The retention system also provides for up to 18 hours of emergency storage in the event of a major failure of the treatment plant.

Full street frontage improvements will be installed along Los Osos Valley Road (curb, gutter, sidewalk, Class I bicycle path, and parking) and a two-thirds street construction of Ravenna Avenue north of Los Osos Valley Road along the property frontage to provide direct access to the treatment plant site.

Construction Activities: Construction of the project is expected to take about 16-24 months. Construction of the collection system will involve the installation of collection pipes within easements and public rights-of-way using trenching techniques. Because of the predominance of sandy soils in the Los Osos area, a given trench will be limited to a maximum of 1,000 feet open at any given time. Trenching will require de-watering in shallow ground water areas as well as stabilizing measures. In general, construction activities will have as many as 6 pipe runs excavated at a time to avoid disrupting traffic. The collection system will also involve the installation of submersible pump stations, which will involve excavation and construction of underground vaults.

Construction of the treatment plant and the recreation amenities will involve grading, excavation and building construction. Due to the shallow ground water associated with the treatment plant site, it may need to be de-watered during construction activities.

Lastly, individual property owners will be responsible for the de-commissioning their septic tanks, the installation of on-site collection laterals and for the replacement of plumbing fixtures with water conserving fixtures. Septic tank de-commissioning involves pumping the tank out, removing the top of the tank and backfilling the tank with sand.

Mitigation of Biological Impacts: Construction of the various components of the Project will result in the permanent loss of habitat for special status plant and animal species. The species of most concern is the federally endangered Morro Shoulderband Dune Snail whose habitat includes portions of the proposed treatment plant site, and may occupy undeveloped lots throughout the community.

Impacts to federally listed plant or animal species are governed by the federal Endangered Species Act and enforced by the United State Fish and Wildlife Service (USFWS). Recognizing that any permanent loss of habitat for an endangered species will be considered a significant and irreversible environmental impact, the Los Osos CSD has made a mitigation proposal to the USFWS that is summarized in the mitigation measures at the end of Chapter 6.11 of the Final EIR.

III. THE RECORD

CEQA Guidelines section 15091(b) requires that the Responsible Agency's findings be supported by substantial evidence in the record. Accordingly, the Responsible Agency's record consists of the following:

1. Documentary and oral evidence, testimony, and staff comments and responses received and reviewed by the Board during its public meetings (various times from 1971 through February 2003), and the public hearing (February 7, 2003) on the project described in Waste Discharge Requirements No. R3-2003-0007. All documents in the Regional Board's files including, but not limited to those listed below, are also part of the record.

2. The Los Osos Community Service District Wastewater Facility Project, Final Environmental Impact Report, as certified on March 1, 2001.

3. Documentary and oral evidence, testimony, and staff comments and responses received and reviewed by the Regional Board during public hearings on the project.

4. Crawford Multari & Clark Associates (2001) Draft and Final Environmental Impact Report for the Los Osos Wastewater Facilities Project.

5. Bertrando and Bertrando Research Consultants (2000), Cultural Resource Inventory of the Resource Park site.

6. Brown and Caldwell (1983), Phase I Water Quality Management Study Vol. 1 and II.

7. California Department of Water Resources (1989), Geohydrology and Management of Los Osos Valley Ground Water Basin San Luis Obispo County.

8. Engineering Development Associates (1998), Preliminary Drainage Evaluation, Los Osos/Baywood Park Community Drainage Project.

9. Fugro West, Inc. (1997), Final Supplemental Environmental Impact Report for the CSA 9 Wastewater Treatment Facilities.

10. Metcalf and Eddy (1996), Hydrogeologic Evaluation of the Proposed Broderson Recharge Site.

11. Metcalf and Eddy (1996), Final Los Osos Water Reclamation Project, Technical Memoranda.

12. Morro Group (1987), *Final Environmental Impact Report for the County Service Area No. 9 Wastewater Treatment Facilities. Volumes I and II.* August. Los Osos, California. Prepared for County of San Luis Obispo, Office of Environmental Coordinator. San Luis Obispo, California.

13. Oswald Engineering Associates, Inc. (2000), The Resource Park Wastewater Facilities Project Draft Project Report.

14. San Luis Obispo County Planning and Building Department (1987), *Addendum Environmental Impact Report, County Service Area No. 9 Wastewater Treatment Facilities*. Prepared for the County of San Luis Obispo by The Morro Group.

15. San Luis Obispo County Planning and Building Department (1989), *Final Supplemental Environmental Impact Report, County Service Area No. 9 Wastewater Treatment Facilities*. Prepared for the County of San Luis Obispo by The Morro Group.

16. State Water Resources Control Board (1998), Policy for Implementing the State Revolving Fund for Construction of Wastewater Treatment Facilities.

17. U.S Geological Survey (1988), Hydrogeology and Water Resources of the Los Osos Valley Ground-Water Basin, San Luis Obispo County, California.

18. URS Corporation (2000), Baseline Report of the Los Osos Valley Groundwater Basin, Los Osos, California.

19. Wallace, John. L and Associates (2000) *Urban Water Management Plan*.

20. Montgomery Watson Engineers, Inc., (2001) Draft Project Report for the Los Osos Wastewater Facilities Project.

21. Water quality data compiled since 1983 by the Regional Water Quality Control Board documenting nitrate concentrations in the Los Osos groundwater basin.

22. The Staff Report prepared for the regular meeting of February 7, 2003 for the Regional Water Quality Control Board.

23. Montgomery Watson Harza, Inc., (2002) Report of Waste Discharge for the Los Osos Wastewater Project.

24. Matters of common knowledge to the Responsible Agency which they consider, such as:

    A. The Water Quality Control Plan, Central Coast Region, adopted by the Regional Water Quality Control Board, Central Coast Region.
    B. The Porter-Cologne Water Quality Control Act, Water Code Section 13000 et seq.
    C. Title 23 California Code of Regulations Division 2, governing the State Water Resources Control Board and the 9 Regional Water Quality Control Boards.
    D. The California Environmental Quality Act (CEQA) and the state CEQA guidelines implementing the Act.
    E. Other formally adopted policies and ordinances of the Regional Board and the State Board.

IV. FINDINGS FOR PROJECT IMPACTS

The following section contains the findings required by CEQA Guidelines section 15096. These findings are organized by resource issue area, with impacts that result from the portion of the project to be mandated in Waste Discharge Requirements Order No. R3-2003-0007. The impacts were identified in the March 2001 Final Environmental Impact Report for the Los Osos Community Service District's Wastewater Facility Project. The organization of this section is as follows, and reflects the organization of the March 2001 Final EIR.

Geology
Drainage
Air Quality
Public Health and Safety

Each significant impact of the portion of the project being regulated by Waste Discharge Requirements Order No. R3-2003-0007, is set forth below, followed by the recommended mitigation measures, a specific finding for the impact, the supporting evidence, and a description of the residual impact after mitigation has been implemented.

POTENTIAL SIGNIFICANT EFFECTS WHICH HAVE BEEN MITIGATED TO A LEVEL OF INSIGNIFICANCE

The Regional Board has concluded that the mitigation measures identified in the Mitigation Monitoring Program included in this Resolution will result in substantial mitigation of the following effects and that these effects are not considered significant or they have been mitigated to a level of insignificance.

GEOLOGY

A. **Impact GEO-1:** Construction of the collection system (including the collection pipes and up to 11 pump stations) will involve trenching within road rights-of-way and easements at 200-foot increments. Such disturbance will temporarily increase the potential for erosion and reduce the stability of the soil. These impacts are considered significant unless mitigated (Class II). Refer to the February 2001 Final EIR page 118.

B. **Mitigation GEO-1:** An NPDES Construction Activity Storm Water Permit shall be obtained prior to the onset of construction activities. Appropriate BMPs, as established in the project NPDES Construction Storm Water Permit, shall be employed during project construction, which may include, but are not limited to, temporary sand bagging; construction of berms; installation of geofabric, and revegetation of areas by hydroseeding and mulching; and the use of trench stabilizing and de-watering. The NPDES permit shall apply to all proposed facilities, and shall address 50 to 100-year precipitation events to the extent feasible. The Pollution Prevention Plan portion of the NPDES permit shall be reviewed and approved by the County Engineering Department and the RWQCB.

Mitigation GEO-2: Project implementation shall include a long-term Erosion Control Plan. The plan shall include the treatment plant site, the collection system, and the disposal sites. The Erosion Control Plan shall identify erosion control practices to be implemented throughout the construction and operation of these facilities. These measures may include, but are not limited to, recompaction of soils; revegetation of disturbed areas; utilization of soil binding; or other methods for reducing short-term and long-term erosion. The Plan shall be reviewed by the County Office of Planning and Building, and shall be included in contractor bid and contract documents.

C. **Findings:** The aforementioned mitigation measures, along with mitigation incorporated into the project description, reduce the impact to a level of insignificance.

D. **Supportive Evidence:** The requirements of the NPDES and the elements described for the required long term erosion control plan will avoid potential erosion impacts associated with construction of the collection system within road rights-of-way.

A. **Impact GEO-2:** The collection system will require the installation of up to 11 pump stations in sub-surface vaults. Excavation and construction of the pump/lift stations will increase the potential for erosion and soil instability. These impacts are considered significant unless mitigated (Class II). Refer to the February 2001 Final EIR page 118.

B. **Mitigation: GEO-1, GEO-2** (see above)

C. **Findings:** The aforementioned mitigation measures, along with mitigation incorporated into the project description, reduce the impact to a level of insignificance.

D. **Supportive Evidence:** As many as eleven pump stations will be required. Each station will be constructed in a concrete vault approximately 6 feet wide by 8 feet long. The remainder of the stations will require pumps between 30 and 85 horsepower in concrete vaults

approximately 8 feet wide by 12 feet long. The depth of all the pump stations will generally be less than approximately fifteen feet. The concrete vaults will be sited within lightly traveled public right of ways and fitted with traffic rated access hatches which will allow maintenance of the pumps and station structure. Soils associated with excavation sites are poorly consolidated and potentially unstable. Compliance with the discharge requirements of an NPDES permit and adherence to the measures described in the erosion control plan will reduce these potential impacts to less than significant.

A. **Impact GEO-3:** The collection system infrastructure (pipes, pump stations, etc.) could be damaged or ruptured as a result of a seismic event due to ground shaking or liquefaction. These impacts are considered significant unless mitigated (Class II). Refer to the February 2001 Final EIR page 118.

B. **Mitigation GEO-6:** Implementation of CDMG Liquefaction Mitigation. Where determined necessary by geotechnical investigations, design of system components shall incorporate recommendations contained in the CDMG publication "Guidelines for Evaluating and Mitigating Seismic Hazards in California." Mitigation cited in this publication include recompaction of liquefiable soils and use of reinforced shallow foundations.

Mitigation GEO-7: Prior to construction, a complete grading and drainage plan shall be submitted to the LOCSD and County Department of Planning and Building for review and approval. Such grading and drainage plan shall address the requirements of the geotechnical investigation described in Measure GEO-5.

Mitigation GEO-8: Rehabilitation of disposal leach fields shall be rotated so that no more than one field is under re-construction at a time.

Mitigation GEO-9: In addition to the long-term erosion control plan cited in Measure GEO-2, above, plans for the Broderson disposal site shall designate access routes for review and approval by the LOCSD that intrude minimally into the landscape. Plans shall include prompt re-vegetation of disturbed areas.

C. **Findings:** The aforementioned mitigation measures, along with mitigation incorporated into the project description, reduce the impact to a level of insignificance.

D. **Supportive Evidence:** Portions of the collection system may be isolated due to fault rupture, where the system crosses potentially active strands of the Los Osos Fault. Liquefiable soils in the area may also have similar effects. Mitigation specified below, including design for isolation and quick repair of damaged portions, and compliance with relevant sections of the Uniform Building Code, will reduce these potential impacts to a less than significant level.

A. **Impact GEO-5:** The construction of the Hybrid Extended Aeration system will require the excavation of about 193,600 cubic yards of soil material. Sandy soils associated with the treatment plant site are potentially unstable and will require stabilization to enable construction. Impacts associated with soil instability are considered significant unless mitigated (Class II). Refer to the February 2001 Final EIR page 119.

B. **Mitigation GEO-1:** An NPDES Construction Activity Storm Water Permit shall be obtained prior to the onset of construction activities. Appropriate BMPs, as established in the project NPDES Construction Storm Water Permit, shall be employed during project construction, which may include, but are not limited to, temporary sand bagging; construction of berms; installation of geofabric, and revegetation of areas by hydroseeding and mulching; and the use of trench stabilizing and de-watering. The NPDES permit shall apply to all proposed facilities, and shall address 50 to 100-year precipitation events to the extent feasible. The Pollution Prevention Plan portion of the NPDES permit shall be reviewed and approved by the County Engineering Department and the RWQCB.

Mitigation GEO-2: Project implementation shall include a long-term Erosion Control Plan. The plan shall include the treatment plant site, the collection system, and the disposal sites. The Erosion Control Plan shall identify erosion control practices to be implemented throughout the construction and operation of these facilities. These measures may include, but are not limited to, recompaction of soils; revegetation of disturbed areas; utilization of soil binding; or other methods for reducing short-term and long-term erosion. The Plan shall be reviewed by the County Office of Planning and Building, and shall be included in contractor bid and contract documents.

Mitigation GEO-7: Prior to construction, a complete grading and drainage plan shall be submitted to the LOCSD and County Department of Planning and Building for review and approval. Such grading and drainage plan shall address the requirements of the geotechnical investigation described in Measure GEO-5.

C. **Findings:** The aforementioned mitigation measures, along with mitigation incorporated into the project description, reduce the impact to a level of insignificance.

D. **Supportive Evidence:** The treatment plant will be constructed underground on about five acres of the Tri-W site. The area to be excavated is about 4 acres and about 30 feet deep. The walls of the excavated area will require grading and stabilization to enable construction of the treatment plant. The excess dirt excavated from the site will be exported to a point of disposal.

Final grading and drainage plans for the project have not been prepared. However, the mitigation measures described above require adherence to the requirements of an NPDES permit, long term erosion control plan and complete grading and drainage plans which will be prepared for the final project design to address these issues.

A. **Impact GEO-6:** Grading of the treatment plant site to accommodate the treatment plant, water feature(s) and landscaping will result in soil disturbance and a temporary increase in erosion potential. This impact is considered significant unless mitigated (Class II). Refer to the February 2001 Final EIR page 119.

B. **Mitigation: GEO-1, GEO-2, GEO-7** (see above)

C. **Findings:** The aforementioned mitigation measures, along with mitigation incorporated into the project description, reduce the impact to a level of insignificance.

D. **Supportive Evidence:** The treatment plant will be constructed underground on about five acres of the Tri-W site. The area to be excavated is about 4 acres and about 30 feet deep. The walls of the excavated area will require grading and stabilization to enable construction of the treatment plant. The excess dirt excavated from the site will be exported to a point of disposal.

Final grading and drainage plans for the project have not been prepared. However, the mitigation measures described above require adherence to the requirements of an NPDES permit, long term erosion control plan and complete grading and drainage plans which will be prepared for the final project design to address these issues.

A. **Impact GEO-7:** The treatment plant site is located in proximity to the inferred trace of Strand B of the Los Osos Fault. The exact location of the fault is unknown, and therefore a precise determination of its potential to produce surface rupture is likewise unknown. However, should the trace of the fault coincide with the treatment plant, a seismic event associated with the fault could damage facilities associated with the treatment plant. These impacts are considered significant unless mitigated (Class II). Refer to the February 2001 Final EIR page 119.

B. **Mitigation GEO-5:** Prior to construction, a geotechnical investigation shall be carried out as part of final facility design. This geotechnical investigation shall include analysis of the proposed treatment plant site, the disposal system, and the collection system, where determined necessary by the LOCSD and governing regulatory agencies. The geotechnical investigation shall address the following issues:

- Design of facility foundations and walls such that potential impact associated with fault rupture onsite would be reduced to the extent feasible. Design measures for rapid repair of facilities shall be identified as necessary.

- The investigation shall determine onsite ground water levels, and identify soil layers that could be subject to liquefaction during a seismic event. Specific measures, such as excavation/recompaction of foundation areas, long-term dewatering, or utilization of foundation piles, should be identified as necessary to reduce potential impacts to a less than significant level.

- The investigation shall identify the potential for settlement or lurching associated with seismic events. Specific measures, such as excavation/recompaction, shall be identified as necessary to reduce potential impacts to a less than significant level.

- The investigation shall identify the potential for disruption of collection associated with fault rupture. Design measures for isolation and rapid repair of facilities shall be identified, where necessary.

- The County Engineering Department shall review and approve the scope and findings of the geotechnical investigation, and shall review final project design to ensure incorporation of recommended measures.

C. **Findings:** The aforementioned mitigation measures, along with mitigation incorporated into the project description, reduce the impact to a level of insignificance.

D. **Supportive Evidence:** The treatment plant site parallels the inferred trace of Strand B of the Los Osos Fault, which was discussed in detail in the 1989 Final Supplemental EIR for the CSA 9 Wastewater Treatment Facilities, SCH 89030816 and incorporated by reference. This portion of the fault, if it does exist, is not considered active, and due to the nature of the local soils, previous environmental analysis cited a low potential for ground rupture. All facilities associated with the plant will be designed and installed in accordance with the UBC standards for Seismic Zone 4, and will include mechanisms for isolation of damaged areas and rapid recovery as described in the mitigation measures listed below. The plant is also designed with 6 hours of emergency storage capacity and potential for onsite emergency retention in the event it is isolated.

A. **Impact GEO-8:** A seismic event associated with any of the potentially faults described in "Setting", above, could adversely impact the treatment plant and its function. These impacts are considered significant unless mitigated (Class II). Refer to the February 2001 Final EIR page 120.

B. **Mitigation GEO-3:** All proposed facilities shall be designed and constructed in accordance with UBC Seismic Zone 4 regulations.

Mitigation GEO-4: Prior to finalization of project design, the LOCSD shall consult with the California Division of Mines and Geology CDMG to determine the Design Basis Earthquake for system components.

Mitigation GEO-5: Prior to construction, a geotechnical investigation shall be carried out as part of final facility design. This geotechnical investigation shall include analysis of the proposed treatment plant site, the disposal system, and the collection system, where determined necessary by the LOCSD and governing regulatory agencies. The geotechnical investigation shall address the following issues:

- Design of facility foundations and walls such that potential impact associated with fault rupture onsite would be reduced to the extent feasible. Design measures for rapid repair of facilities shall be identified as necessary.

- The investigation shall determine onsite ground water levels, and identify soil layers that could be subject to liquefaction during a seismic event. Specific measures, such as excavation/recompaction of foundation areas, long-term dewatering, or utilization of foundation piles, should be identified as necessary to reduce potential impacts to a less than significant level.

- The investigation shall identify the potential for settlement or lurching associated with seismic events. Specific measures, such as excavation/recompaction, shall be identified as necessary to reduce potential impacts to a less than significant level.

- The investigation shall identify the potential for disruption of collection associated with fault rupture. Design measures for isolation and rapid repair of facilities shall be identified, where necessary.

- The County Engineering Department shall review and approve the scope and findings of the geotechnical investigation, and shall review final project design to ensure incorporation of recommended measures.

C. **Findings:** The aforementioned mitigation measures, along with mitigation incorporated into the project description, reduce the impact to a level of insignificance.

D. **Supportive Evidence:** The treatment plant will be designed to satisfy federal, state and local standards for construction in Seismic Zone 4 as required by the UBC, and will incorporate emergency treatment capacity in the event the treatment process is interrupted. Seismic impacts associated with a substantial earthquake event cannot be completely mitigated. However, all feasible measures are being incorporated into the design and operation of the project.

A. **Impact GEO-9:** Soils associated with the treatment plant site consist of unconsolidated sands that may pose a significant risk of liquefaction. This impact is considered significant unless mitigated (Class II). Refer to the February 2001 Final EIR page 120.

B. **Mitigation GEO-7:** Prior to construction, a complete grading and drainage plan shall be submitted to the LOCSD and County Department of Planning and Building for review and approval. Such grading and drainage plan shall address the requirements of the geotechnical investigation described in Measure GEO-5.

C. **Findings:** The aforementioned mitigation measures, along with mitigation incorporated into the project description, reduce the impact to a level of insignificance.

D. **Supportive Evidence:** The occurrence of liquefaction of soils at the project site could result in failure of the structural integrity of the Treatment Plant, which in turn could result in the release of large quantities of treated effluent. A recent geophysical survey and geological analysis of a groundwater anomaly just east of the treatment facility site concludes that liquefaction susceptibility is increased due to the presence of a buried fluvial channel (Mann 1998). Mitigation suggested by the California Division of Mines and Geology in their publication "Mitigating the Impacts of Liquefaction" will be incorporated into the treatment plant project design and all components of the system will be designed to comply with UBC standards.

A. **Impact GEO-11:** Construction of the disposal leach fields will result in the temporary disturbance of soils and potential erosion at the Broderson site and various street rights-of-way within the community. These impacts will be temporary but are considered significant unless mitigated (Class II). Refer to the February 2001 Final EIR page 121.

B. **Mitigation GEO-2:** Project implementation shall include a long-term Erosion Control Plan. The plan shall include the treatment plant site, the collection system, and the disposal sites.

The Erosion Control Plan shall identify erosion control practices to be implemented throughout the construction and operation of these facilities. These measures may include, but are not limited to, recompaction of soils; revegetation of disturbed areas; utilization of soil binding; or other methods for reducing short-term and long-term erosion. The Plan shall be reviewed by the County Office of Planning and Building, and shall be included in contractor bid and contract documents.

C. **Findings:** The aforementioned mitigation measures, along with mitigation incorporated into the project description, reduce the impact to a level of insignificance.

D. **Supportive Evidence:** Construction of the disposal leach fields on the Broderson site will take place over a period of approximately 6 months and will entail removal of vegetation over an 8-acre portion of the site for equipment access and leach field placement. The Broderson site exhibits slopes of over 10 percent at the upper (southerly) elevations where the leach field would be constructed, and sandy soils which may be subject to erosion or landsliding once disturbed. The leach fields will be installed in shallow (3 feet or less) trenches arranged parallel to the slope and dug using conventional trenching machinery. Compliance with an erosion control plan that identifies strategies for minimizing erosion caused by leach field construction will reduce these impacts to a less than significant level.

A. **Impact GEO-12:** The Los Osos area is within Seismic Zone 4 as defined by the UBC. A seismic event associated with one or more of the active faults affecting the region could result in ground shaking that could damage the leach fields. These impacts are considered significant unless mitigated (Class II). Refer to the February 2001 Final EIR page 121.

B. **Mitigation GEO-3:** All proposed facilities shall be designed and constructed in accordance with UBC Seismic Zone 4 regulations.

Mitigation GEO-4: Prior to finalization of project design, the LOCSD shall consult with the California Division of Mines and Geology CDMG to determine the Design Basis Earthquake for system components.

Mitigation GEO-5: Prior to construction, a geotechnical investigation shall be carried out as part of final facility design. This geotechnical investigation shall include analysis of the proposed treatment plant site, the disposal system, and the collection system, where determined necessary by the LOCSD and governing regulatory agencies. The geotechnical investigation shall address the following issues:

- Design of facility foundations and walls such that potential impact associated with fault rupture onsite would be reduced to the extent feasible. Design measures for rapid repair of facilities shall be identified as necessary.

- The investigation shall determine onsite ground water levels, and identify soil layers that could be subject to liquefaction during a seismic event. Specific measures, such as excavation/recompaction of foundation areas, long-term dewatering, or utilization of foundation piles, should be identified as necessary to reduce potential impacts to a less than significant level.

- The investigation shall identify the potential for settlement or lurching associated with seismic events. Specific measures, such as excavation/recompaction, shall be identified as necessary to reduce potential impacts to a less than significant level.

- The investigation shall identify the potential for disruption of collection associated with fault rupture. Design measures for isolation and rapid repair of facilities shall be identified, where necessary.

- The County Engineering Department shall review and approve the scope and findings of the geotechnical investigation, and shall review final project design to ensure incorporation of recommended measures.

C. **Findings:** The aforementioned mitigation measures, along with mitigation incorporated into the project description, reduce the impact to a level of insignificance.

D. **Supportive Evidence:** Similar potential impacts to the disposal system could occur as those described under Impact GEO-3, above, for the collection system. Again, adherence to the requirements of the Uniform Building Code and the inclusion of storage in the system will reduce these impacts to a less than significant level.

A. **Impact GEO-13:** The disposal leach fields would release treated wastewater into potentially liquefiable zones that may increase the potential for liquefaction over existing conditions. These impacts are considered significant unless mitigated. Refer to the February 2001 Final EIR page 122.

B. **Mitigation GEO-8:** Rehabilitation of disposal leach fields shall be rotated so that no more than one field is under re-construction at a time.

Mitigation GEO-9: In addition to the long-term erosion control plan cited in Measure GEO-2, plans for the Broderson disposal site shall designate access routes for review and approval by the LOCSD which intrude minimally into the landscape. Plans shall include prompt re-vegetation of disturbed areas.

C. **Findings:** The aforementioned mitigation measures, along with mitigation incorporated into the project description, reduce the impact to a level of insignificance.

D. **Supportive Evidence:** As described in Chapter 6.1, page 115, Geologic Hazards, liquefaction can occur where poorly consolidated surface material overlies shallow groundwater. When energy is introduced into this system, such as during a seismic event, the soils temporarily lose cohesion as the soils become saturated. The introduction of additional water into the sub-surface environment associated with the disposal system has the potential to increase the potential for liquefaction.

A preliminary liquefaction analysis of the treatment plant site and the various disposal sites prepared by CFS Geotechnical Consultants, Inc. (Appendix B of the Final EIR) concludes that liquefaction potential on the various sites would generally be no different than present

conditions once the septic systems cease operation and the disposal leach fields are installed. Table 6.1-1 on pages 1123 and 124 of the Final EIR provides a summary of the liquefaction potential for each disposal site. Based on this analysis, the potential for liquefaction at these sites is no greater with the project than under existing conditions.

A. **Impact GEO-15:** The disposal system will consist of a series of sub-surface leach fields which will periodically (about every 10 years) require maintenance and rehabilitation. Impacts associated with these activities will be temporary and comparable to those associated with leach field construction. These impacts are considered significant unless mitigated (Class II). Refer to the February 2001 Final EIR page 124.

B. **Mitigation GEO-9:** In addition to the long-term erosion control plan cited in Measure GEO-2, plans for the Broderson disposal site shall designate access routes for review and approval by the LOCSD which intrude minimally into the landscape. Plans shall include prompt re-vegetation of disturbed areas.

C. **Findings:** The aforementioned mitigation measures, along with mitigation incorporated into the project description, reduce the impact to a level of insignificance.

D. **Supportive Evidence:** Sub-surface leach fields require periodic maintenance and about once every ten years require complete excavation and rehabilitation. Impacts associated with rehabilitation are comparable to those associated with construction since a comparable effort is required. Adherence to an erosion control plan as described in Mitigation GEO-2 will reduce these impacts to a less than significant level. It should be noted that a schedule that rotates the timing of rehabilitation will be employed to minimize potential impacts.

DRAINAGE

A. **Impact WR-2:** Construction activities at the treatment plant site will increase the potential for erosion, which could adversely affect the quality of stormwater entering the site as well as waters downstream. These impacts are considered significant unless mitigated (Class II). Refer to the February 2001 Final EIR page 152.

B. **Mitigation WR-1:** Grading, Drainage and Erosion Control Plan. Construction plans for the Tri-W site shall include a complete grading and drainage plan incorporating the recommendations of a geotechnical engineering evaluation (see Mitigation GEO-5). Measures to be considered for the mitigation of potential drainage, erosion, seepage and water quality impacts include, but are not limited to:

- The incorporation of an on-site runoff collection system which includes energy dissipation, berms, temporary settling basins, and/or a silt/hydrocarbon separator for the collection and removal of hazardous materials and sediments.

- The incorporation of an on-site drainage system to collect runoff from all impervious onsite services, including parking spaces, roads and buildings.

- Surface runoff should be collected by curbs, gutters and drainage swales and conveyed to an appropriate point of disposal. Discharges of greater than five feet per second should be released through an energy dissipater or outlet.

- The incorporation of sub-surface drains to intercept seepage and convey it to an acceptable point of disposal.

- Watering the site at least twice per day during construction, or more frequently if determined necessary by the LOCSD.

- Re-vegetating portions of the site exclusive of paved areas as soon as reasonable following grading.

- Incorporating rain gutters and downspouts for buildings.

- Grading surfaces adjacent to buildings so that runoff is conveyed away from foundations and onto paved surfaces or underground collection pipes.

Mitigation WR-2: NPDES Permit. The LOCSD will obtain and comply with an NPDES stormwater permit for construction activities and will develop an SWPP for the project, which will include, among other requirements, the identification of Best Management Practices (BMPs) to be used for erosion control, actions for control of potential fuel or drill tailing release, and requirements for disposal (i.e., location, quality) of water from dewatering activities. Note: The mitigation measure description from the Final EIR has been modified because LOCSD can obtain coverage under the General NPDES permits for stormwater discharges associated with construction activities and industrial facilities issued by the State Water Resources Control Board.

C. **Findings:** The aforementioned mitigation measures, along with mitigation incorporated into the project description, reduce the impact to a level of insignificance.

D. **Supportive Evidence:** Construction of the treatment plant will require excavation of a four-acre area for the treatment plant and grading over much of the site. Disturbance of soils and vegetation associated with construction will increase the potential for erosion. Adherence to the erosion control plan identified in Mitigation Measure WR-1 and the NPDES permit requirements identified in Measure WR-2 will reduce these impacts to a less than significant level.

A. **Impact WR-4:** Constructing a treatment plant and park on the Tri-W site will alter the volume and velocity of runoff leaving the site and will alter existing drainage patterns. The increase in surface runoff could adversely affect downstream drainage courses. This impact is considered significant unless mitigated (Class II). Refer to the February 2001 Final EIR page 152.

B. **Mitigation WR-1, WR-2:** (see above)

C. **Findings:** The aforementioned mitigation measures, along with mitigation incorporated into the project description, reduce the impact to a level of insignificance.

D. **Supportive Evidence:** Construction of the treatment plant will significantly alter the drainage onsite. Included in the design of the project is parking, buildings, concrete walkways and other impermeable surfaces which will increase runoff (see Figure 3-8 of the Final EIR). The increase in impermeable surfaces will increase the amount and velocity of runoff generated on the site and entering surrounding drainage systems, which in turn could accelerate erosion and could contribute to localized flooding.

Included in the project description is a retention basin located at the northerly boundary of the site where runoff would be collected and meted out to the existing downstream drainage consistent with historic flows from the site. The retention basin is being sized to accommodate runoff from the project site after development and is system is expected to fully mitigate potential drainage impacts.

A. **Impact WR-5:** Heavy metals and other hazardous materials washed from on-site parking could enter the surface flow during a rainstorm, adversely affecting water quality downstream. This impact is considered significant unless mitigated (Class II). Refer to the February 2001 Final EIR page 152.

B. **Mitigation WR-2:** (see above)

C. **Findings:** The aforementioned mitigation measures, along with mitigation incorporated into the project description, reduce the impact to a level of insignificance.

D. **Supportive Evidence:** When a site is developed with facilities for automobiles, or lies downstream of an area in which the primary source of runoff is from streets, the potential exists for pollution of storm water runoff. The sources of pollution are the hydrocarbons used by automobiles and hydrocarbons in asphaltic pavement materials. The primary concern in this case is the potential to increase pollutants entering surface and sub-surface flows that eventually enter Morro Bay and the Sweet Springs Preserve. According to a publication by the Metropolitan Washington Council of Governments entitled "Controlling Urban Runoff", storm water sampled in the study area contained between 2 and 10 milligrams of pollutants per liter. The pollutant load generated at the project site will likely be less than these samples because the test sites used in the study were from highly urbanized areas with a higher potential for hydrocarbon pollution.

A. **Impact WR-6:** Construction of the disposal leach field on the Broderson property will involve soil and vegetative disturbance which will alter on-site drainage and may increase the potential for erosion. These impacts are considered significant unless mitigated (Class II). Refer to the February 2001 Final EIR page 153.

B. **Mitigation WR-2:** (see above)

Mitigation WR-3: Revegetation Plan. A comprehensive revegetation plan will be developed for the Broderson and Powell sites, which at a minimum will include re-planting of exposed surfaces with native vegetation.

C. **Findings:** The aforementioned mitigation measures, along with mitigation incorporated into the project description, reduce the impact to a level of insignificance.

D. **Supportive Evidence:** The construction of the leach field will temporarily create site conditions that may adversely affect runoff. Mitigation identified below, including the acquisition of an NPDES permit, and development of a revegetation plan, would reduce impacts to a less than significant level.

A. **Impact WR-7:** Construction of the disposal leach fields in street rights-of-way will increase the potential for erosion and runoff into surface water bodies. This impact is considered significant unless mitigated (Class II). Refer to the February 2001 Final EIR page 154.

B. **Mitigation WR-2:** (see above)

C. **Findings:** The aforementioned mitigation measures, along with mitigation incorporated into the project description, reduce the impact to a level of insignificance.

D. **Supportive Evidence:** Adherence to the erosion control plan identified in Mitigation Measure WR-1 and the NPDES permit requirements identified in Measure WR-2 will reduce these impacts to a less than significant level.

A. **Impact WR-8:** Periodic renovation of the sub-surface leach fields will require excavation activities that have the potential to result in short-term runoff impacts similar to those associated with construction. This is considered a significant adverse impact unless mitigated (Class II). Refer to the February 2001 Final EIR page 154.

B. **Mitigation WR-2:** (see above)

C. **Findings:** The aforementioned mitigation measures, along with mitigation incorporated into the project description, reduce the impact to a level of insignificance.

D. **Supportive Evidence:** Adherence to the erosion control plan identified in Mitigation Measure WR-1 and the NPDES permit requirements identified in Measure WR-2 will reduce these impacts to a less than significant level.

<u>AIR QUALITY</u>

A. **Impact AQ-4:** Operation of the treatment facility may result in periodic odors that would adversely affect surrounding neighborhoods. These impacts are considered significant unless mitigated (Class II). Refer to the February 2001 Final EIR page 208.

B. **Mitigation AQ-3:** Odor Performance Standard. Neighbors of the Tri-W site shall be informed that odor nuisance complaints are to be directed to the APCD for documentation.

Any odor complaints received by the County Engineering Department or plant staff shall be forwarded within one day of receipt to the APCD. The APCD will contact plant staff following each odor nuisance complaint to determine the nature and cause of the odor sources. The Los Osos Community Services District shall utilize a threshold of three nuisance complaints per year as a performance guideline with respect to odor generation. Should nuisance complaints exceed this number, the District shall assess odor levels at the treatment plant site. The assessment shall include the following:

Utilization of a scentometer to assess odor concentration with respect to the BAAQMD dilution to threshold ratio (D/T ratio). This ratio indicates the number of equal volume dilutions to the point at which 50% of the population below the age of 45 first detects the odor. Regulation 7 adopted by the BAAQMD restricts the release of odorous substances to 4 D/T at the property line. If the D/T ratio exceeds the 4 D/T ratio threshold established by the BAAQMD, the district shall provide a letter report to the APCD summarizing the nature and cause of the odor source, the frequency at which this source has caused complaints in the past, the frequency at which this source is anticipated to occur, and a course of action to reduce onsite odor generation. Measures may include, but are not limited to, the following:

- Upstream addition of ferrous chloride to the influent stream to reduce septic conditions;

- Establishment of additional "negative air" containment areas; Additional treatment component enclosure, and; Installation of airflow baffles to improve odor dissipation.

C. **Findings:** The aforementioned mitigation measures, along with mitigation incorporated into the project description, reduce the impact to a level of insignificance.

D. **Supportive Evidence:** The Tri-W site where the treatment facility will be located is bordered to the south by single-family residences and on the east by the library and community center/county park. Prevailing winds are generally on-shore during the day (from the west) and would be expected to carry odors downwind (to the east) and elsewhere should odors emanate from the plant.

Odors generated at wastewater treatment facilities are typically associated with specific components of the treatment train that deal with organic solids or provide the opportunity for septic conditions. Sources of odor commonly generated at wastewater treatment plant facilities include hydrogen sulfide gas and ammonia, which are by-products of the treatment process. The proposed project would employ an Extended Aeration plant constructed underground where it would be sealed and fully odor scrubbed.

However, under adverse circumstances, accidents or malfunctions can occur which, if left uncorrected, could result in adverse odors being emitted. During light wind conditions when the dissipation of odors generated onsite is reduced, the potential exists for increased odor concentrations to occur. These concentrated odors can then be transported, without breaking up, offsite to adjacent land uses. Prevailing wind conditions within the Los Osos area are characterized by wind speeds of 2 to 8 mph, with prevailing winds associated with eastward onshore flow from the Pacific Ocean. Under these prevailing conditions, windspeed is anticipated to be adequate such that odors generated onsite are reduced to adequate concentrations.

With regard to wind conditions that could contribute to concentrated movement of odors, it should be noted that light wind conditions of less than 1 mph have a 19 percent occurrence frequency. This is equivalent to 69 days per year. Under these light wind conditions, wind direction is variable, with a small prevailing frequency occurrence of 31 percent (of light wind days) from the south. However, light winds from both the east and west occur at a frequency of 29 percent. Therefore, concentrated movement of air under light wind conditions would have a basically equal potential to affect sensitive receptors located to the east, west and north of the subject property.

Complaints associated with other conventional treatment plants in San Luis Obispo County have been compiled by the APCD. Primary factors associated with nuisance complaints appear to be geographic location of the plant with respect to sensitive receptors, prevailing wind conditions, and treatment procedures. Review of 1994 to 1996 nuisance complaints for treatment plants within San Luis Obispo County indicate that the APCD has received complaints for only the City of San Luis Obispo Water Reclamation Plant and the California Men's Colony, neither of which are extended aeration plants or fully odor scrubbed. The City of San Luis Obispo Water Reclamation Plant is located upwind and adjacent to residential areas along South Higuera Street. It should be noted that this plant utilizes secondary biological treatment processes that differ from those proposed with the Hybrid Extended Aeration system, and is located adjacent to residential land uses.

Review of the APCD file for the City of San Luis Obispo Water Reclamation Plant indicate eleven complaints were received by the APCD in 1994 (all from one resident), three were received in 1995, and eight were received in 1996. Reviews of files indicate that these complaints are generally associated with periodic procedures or conditions, rather than long-term operation.

Given the design of the system, and the proximity of residences, in the event of a malfunction in the odor scrubbing system odor levels could potentially reach levels that would prompt a nuisance complaint. Based upon the number of complaints associated with the City of San Luis Obispo Treatment Plant, and given the proximity of the Tri-W site to existing sensitive receptors, it is anticipated that the number of complaints received would average about one per year. Therefore, under the BAAQMP threshold previously discussed, this impact is considered adverse but not significant because of mitigation incorporated into the design of the project.

PUBLIC HEALTH AND SAFETY

A. **Impact PS-3:** A break or malfunction in the collection system could result in the accidental release of untreated effluent. These impacts are considered significant unless mitigated (Class II). Refer to the February 2001 Final EIR page 230.

B. **Mitigation PS-1:** Hazardous Materials Management Plan. A Hazardous Materials Management Plan shall be developed and submitted to the County of San Luis Obispo Health Department for approval. The plan shall identify hazardous materials utilized onsite and their characteristics; storage, handling and training procedures; and spill contingency procedures. Additionally, the Plan should address fuel storage at the pump station sites.

C. **Findings:** The aforementioned mitigation measures, along with mitigation incorporated into the project description, reduce the impact to a level of insignificance.

D. **Supportive Evidence:** As discussed in Chapter 6.1 of the Final EIR, Geology, the collection system would be designed for rapid repair and isolation of damaged sections. Operation of the collection and treatment system will require preparation of an Emergency Response Plan identifying manpower and equipment needed for efficient response to release onsite. The plan is required to address the following topics.

- Hazardous materials handling, storage and application.
- Hazardous material spill response.
- Emergency release of untreated influent from the collection system or treatment facilities.
- Emergency failure of treatment facilities, resulting in a release of untreated or primary treated effluent.

Together, these measures will reduce potential impacts to a less than significant level.

A. **Impact PS-5:** Chemicals utilized within the proposed treatment process would be limited to agents utilized for bio-solids thickening, and to ensure adequate removal of nitrogen. Agents utilized (alum, polymer and methanol) are liquids with low human contact risks. This is considered to be potentially significant, but mitigable (Class II). Refer to the February 2001 Final EIR page 230.

B. **Mitigation PS-1:** (see above)

C. **Findings:** The aforementioned mitigation measures, along with mitigation incorporated into the project description, reduce the impact to a level of insignificance.

D. **Supportive Evidence:** Storage and handling procedures would conform to appropriate state regulations and would subject to a Hazardous Materials Management Plan. Storage onsite for these materials would utilize above ground storage tanks (ASTs), and secondary containment would be provided through utilization of a wall or containment berm surrounding the tank area. These agents would be added to the treatment train through direct feed mechanisms controlled by the plant's SCADA (System Control and Data Analysis) system. Therefore, potential health risks associated with these agents are considered less than significant.

As discussed in Mitigation PS-1, operation of the treatment plant would require preparation and submittal of a Hazardous Waste Management Plan to the County Health Department for review and approval. This plan would identify material characteristics, storage volumes, handling procedures, and spill response. Project implementation would also include preparation of an Emergency Response Plan identifying manpower and equipment for efficient response to agent release onsite. The County Hazardous Materials Response Team is

equipped to handle such a release. Therefore, potential public safety associated with storage and use of treatment agents onsite will be reduced to less than significant .

A. **Impact PS-9:** Disposal of bio-solids in a landfill could adversely impact landfill capacity. This impact is considered significant unless mitigated (Class II). Refer to the February 2001 Final EIR page 232.

B. **Mitigation PS-3:** Prior to operation of the wastewater treatment system, the Los Osos CSD shall either 1) secure a contract for bio-solids disposal with a land disposal or recycling facility or 2) construct a bio-solids recycling facility that satisfies Title 40, Section 503 of the Code of Federal Regulations.

C. **Findings:** The aforementioned mitigation measures, along with mitigation incorporated into the project description, reduce the impact to a level of insignificance.

D. **Supportive Evidence:** Approximately 1,640 pounds of brown sludge (bio-solids) would be produced by the wastewater treatment plant per day. Once treated to satisfy federal and state requirements, treated bio-solids would be removed from the Wastewater Treatment facility about three times per week and hauled to a landfill. To be disposed of in a landfill, bio-solids must meet the pollutant concentrations specified by Title 40 Section 503.23 of the Code of Federal Regulations, which also prescribes landfill management practices to be followed for bio-solids handling. The bio-solids would be classified as Class B and be fully oxidized and stable. The moisture content would be approximately 25%.

Nearby landfills include Cold Canyon and Chicago Grade. According to a Site Engineer at Cold Canyon, although the recent expansion includes a lined disposal section, they have not historically accepted bio-solids. Their staff was uncertain regarding future policies for bio-solids and whether they would accept ongoing bio-solids disposal from the proposed wastewater system. It should be noted that capacity exists to accept the bio-solids associated with the project, and San Luis Obispo County received tentative approval for bio-solids disposal for the County proposed project. If Cold Canyon decides to accept the bio-solids, it would be required to meet restrictive standards and would be fairly costly (upwards of $88/ton).

It should be noted that the project will not start producing bio-solids for disposal until 2005. In the intervening time, the LOCSD will have the option of either securing permission to dispose of bio-solids at one of the landfills or constructing a bio-solids recycling facility. Regardless Mitigation Measure PS-3 requires the CSD to either contract for land disposal or to construct a recycling facility proper to start-up of the treatment plant.

V. CEQA GENERAL FINDINGS

A. The Regional Board finds that changes or alterations have been incorporated into the portion of the project approved by Waste Discharge Requirements Order R3-2003-0007 to mitigate or avoid significant impacts. These changes or alterations include mitigation measures and project modifications outlined herein and set forth in more detail in the March 2001 Final EIR. These changes and alterations have been proposed by LOCSD and so may be required for

compliance with Waste Discharge Requirements Order R3-2003-0007, without violating Water Code section 13360.

B. Any significant impacts described in the Final EIR but not described in this resolution will not result from the portion of the project approved by Waste Discharge Requirements Order R3-2003-0007. Any project alternatives or mitigation measures described in the Final EIR but not described in this resolution are either not relevant to significant environmental effects of the portion of the project approved by Waste Discharge Requirements Order R3-2003-0007 or are outside the jurisdiction of the Regional Board.

C. The Regional Board finds that the project as approved by Waste Discharge Requirements Order R3-2003-0007 includes an appropriate Mitigation Monitoring Program. This Mitigation Monitoring Program ensures that measures that avoid or lessen the significant project impacts, as required by CEQA and the State CEQA Guidelines, will be implemented as described.

VI. MITIGATION MONITORING PROGRAM

Section 21081.6 of the Public Resources Code requires that when a public agency is making the findings required by State CEQA Guidelines Section 15091(a)(1), codified as Section 21081(a) of the Public Resources Code, the public agency shall adopt a reporting or monitoring program for the changes to the proposed project which it has adopted or made a condition of approval, in order to mitigate or avoid significant effects on the environment.

A. Compliance with approved mitigation measures is to be achieved through two primary methods. Both methods integrate mitigation monitoring into existing processes, as encouraged by CEQA.

- The Regional Board will include the mitigation measures in Waste Discharge Requirements Order No. R3-2003-0007.

- The Regional Board will monitor implementation of the mitigation measures along with its monitoring of compliance with Waste Discharge Requirements Order No. R3-2003-0007 through regular monitoring, status reports and direct staff oversight.

THEREFORE, be it resolved that:

The Regional Board hereby adopts findings of mitigation and a mitigation monitoring program, as described herein, for the Los Osos Community Service District's Wastewater Facility Project.

Further, the Board certifies that compliance with the mitigation monitoring program is adequate to ensure the implementation of the mitigation measures described herein.

I, Roger W. Briggs, Executive Officer of the California Regional Water Quality Control Board, Central Coast Region, do hereby certify the foregoing is a full, true, and correct copy of a Resolution adopted by the California Regional Water Quality Control Board, Central Coast Region, on February 7, 2003.

_____

Executive Officer

_____

Date

S:/wb/coastal watershed/staff/sorrel/los osos WDRs/los osos csd ceqa.res

Resolution No. R3-2003-0007 Mitigation Monitoring Program

Appendix B

Mitigation Measures	Specific Monitoring Action(s)	Timeframe for Monitoring	Responsible Monitoring Party	Discussion
Geology				
Mitigation GEO-1: An NPDES Construction Activity Storm Water Permit shall be obtained prior to the onset of construction activities. Appropriate BMPs, as established in the project NPDES Construction Storm Water Permit, shall be employed during project construction, which may include, but are not limited to, temporary sand bagging; construction of berms; installation of geofabric, and revegetation of areas by hydroseeding and mulching; and the use of trench stabilizing and de-watering. The NPDES permit shall apply to all proposed facilities, and shall address 50 to 100-year precipitation events to the extent feasible. The Pollution Prevention Plan portion of the NPDES permit shall be reviewed and approved by the County Engineering Department and the RWQCB.	LOSCD shall confirm that the it has obtained coverage under the General Construction Activity Storm Water Permit by submitting to RWQCB a copy of NOI. Review copy of SWPPP	Prior to Construction	RWQCB Staff	A GCASWP is required for all projects over 5 acres in size and will be required for building permit approval
Mitigation GEO-2: Project implementation shall include a long-term Erosion Control Plan. The plan shall include the treatment plant site, the collection system, and the disposal sites. The Erosion Control Plan shall identify erosion control practices to be implemented throughout the construction and operation of these facilities. These measures may include, but are not limited to, recompaction of soils; revegetation of disturbed areas; utilization of soil binding; or other methods for reducing short-term and long-term erosion. The Plan shall be reviewed by the County Department of Planning and Building, and shall be included in contractor bid and contract documents.	Review LOCSD long term erosion control plan; LOSCD shall submit to RWQCB letter report the plan was reviewed by the Co. Dept. of Planning and Building and was included in the contract bid documents.	Prior to Construction / Contractor Bidding Phase	RWQCB staff	
Mitigation GEO-3: All proposed facilities shall be designed and constructed in accordance with UBC Seismic Zone 4 regulations.	LOCSD shall submit to RWQCB a letter report that they have checked plans and the facilities have been designed and will be constructed in accordance with UBC Seismic Zone 4 regulations	Plan Check	RWQCB Staff	The project is required to meet the UBC
Mitigation GEO-4: Prior to finalization of project design, the LOCSD shall consult with the California Division of Mines and Geology (CDMG) to determine the Design Basis Earthquake for system components.	LOCSD shall submit a letter report to RWQCB confirming that it has consulted with CDMG regarding Design Basis Earthquake	Prior to completion of 50% construction documents	RWQCB staff	Early determination of the Design Basis Earthquake will prevent inaccuracy in plans

Mitigation Measures	Specific Monitoring Action(s)	Timeframe for Monitoring	Responsible Monitoring Party	Discussion
Mitigation GEO-5: Prior to construction, a geotechnical investigation shall be carried out as part of final facility design. This geotechnical investigation shall include analysis of the proposed treatment plant site, the disposal system, and the collection system, where determined necessary by the LOCSD and governing regulatory agencies. The geotechnical investigation shall address the following issues: • Design of facility foundations and walls such that potential impact associated with fault rupture onsite would be reduced to the extent feasible. Design measures for rapid repair of facilities shall be identified as necessary. • The investigation shall determine onsite ground water levels, and identify soil layers that could be subject to liquefaction during a seismic event. Specific measures, such as excavation/recompaction of foundation areas, long-term dewatering, or utilization of foundation piles, should be identified as necessary to reduce potential impacts to a less than significant level. • The investigation shall identify the potential for settlement or lurching associated with seismic events. Specific measures, such as excavation/recompaction, shall be identified as necessary to reduce potential impacts to a less than significant level. • The investigation shall identify the potential for disruption of collection associated with fault rupture. Design measures for isolation and rapid repair of facilities shall be identified, where necessary. • The County Engineering Department shall review and approve the scope and findings of the geotechnical investigation, and shall review final project design to ensure incorporation of recommended measures.	LOCSD shall submit a copy of the geotechnical investigation report to RWQCB.	Prior to starting conceptual drawings	RWQCB staff	Ground water levels and geologic structure of the treatment and disposal sites have already been determined. Other items, including seismic potential and specific analysis of structural requirements remain to be determined
Mitigation GEO-6: Implementation of CDMG Liquefaction Mitigation. Where determined necessary by geotechnical investigations, design of system components shall incorporate recommendations contained in the CDMG publication "Guidelines for Evaluating and Mitigating Seismic Hazards in California." Mitigation cited in this publication include recompaction of liquefiable soils and use of reinforced shallow foundations.	LOCSD shall submit to the RWQCB a letter report of implementation of CDMG mitigation where applicable	Plan Check / 50% Construction Documents	RWQCB staff	None

Mitigation Measures	Specific Monitoring Action(s)	Timeframe for Monitoring	Responsible Monitoring Party	Discussion
Mitigation GEO-7: Prior to construction, a complete grading and drainage plan shall be submitted to the LOCSD and County Department of Planning and Building for review and approval. Such grading and drainage plan shall address the requirements of the geotechnical investigation described in Measure GEO-5, above.	LOSCD shall submit to the RWQCB a copy of project grading and drainage plans that the County Department of Planning and Building has reviewed	Prior to Construction	RWQCB staff	Submittal of grading and drainage plans will be required for final building permit approval
Mitigation GEO-8: Rehabilitation of disposal leach fields shall be rotated so that no more than one field is under re-construction at a time.	Submit documentation to the RWQCB through standard operating procedures (SOP) that rehabilitation will take place in the specified manner	Prior to Operation of Leach Field Systems	RWQCB staff	SOP will be developed as part of facilities management
Mitigation GEO-9: In addition to the long-term erosion control plan cited in Measure GEO-2, above, plans for the Broderson disposal site shall designate access routes for review and approval by the LOCSD which intrude minimally into the landscape. Plans shall include prompt re-vegetation of disturbed areas.	LOCSD shall provide to the RWQCB a letter report confirming plans that include the items identified.	Plan Check/50% Construction Documents	RWQCB staff	
Drainage				

Mitigation Measures	Specific Monitoring Action(s)	Timeframe for Monitoring	Responsible Monitoring Party	Discussion
Mitigation WR-1: Grading, Drainage and Erosion Control Plan. Construction plans for the Tri-W site shall include a complete grading and drainage plan incorporating the recommendations of a geotechnical engineering evaluation (see Mitigation GEO-5). Measures to be considered for the mitigation of potential drainage, erosion, seepage and water quality impacts include, but are not limited to: • The incorporation of an on-site runoff collection system which includes energy dissipation, berms, temporary settling basins, and/or a silt/hydrocarbon separator for the collection and removal of hazardous materials and sediments. • The incorporation of an on-site drainage system to collect runoff from all impervious onsite services, including parking spaces, roads and buildings. • Surface runoff should be collected by curbs, gutters and drainage swales and conveyed to an appropriate point of disposal. Discharges of greater than five feet per second should be released through an energy dissipater or outlet. • The incorporation of sub-surface drains to intercept seepage and convey it to an acceptable point of disposal. • Watering the site at least twice per day during construction, or more frequently if determined necessary by the LOCSD. • Re-vegetating portions of the site exclusive of paved areas as soon as reasonable following grading. • Incorporating rain gutters and downspouts for buildings. • Grading surfaces adjacent to buildings so that runoff is conveyed away from foundations and onto paved surfaces or underground collection pipes.	LOCSD shall submit to RWQCB a copy of grading, drainage, and erosion control plans and the incorporation of listed items	Plan Check/50% Construction Documents	RWQCB staff	Inclusion of grading, drainage and erosion control plans will be required by the County prior to issuance of building permits
Mitigation WR-2: NPDES Permit. The LOCSD will obtain and comply with an NPDES permit and will develop an SWPPP for the project, which will include, among other requirements, the identification of Best Management Practices (BMPs) to be used for erosion control, actions for control of potential fuel or drill tailing release, and requirements for disposal (i.e., location, quality) of water from dewatering activities. NOTE: The mitigation measure description from the Final EIR has been modified because LOCSD can obtain coverage under the General NPDES permits for stormwater discharges associated with construction activities and industrial facilities issued by the State Water Resources Control Board.	LOSCD shall confirm that the it has obtained coverage under the General Construction Activity Storm Water Permit by submitting to RWQCB a copy of NOI. Review copy of SWPPP	Prior to construction	RWQCB staff	

Mitigation Measures	Specific Monitoring Action(s)	Timeframe for Monitoring	Responsible Monitoring Party	Discussion
Mitigation WR-3: Revegetation Plan. A comprehensive revegetation plan will be developed for the Broderson and Powell sites, which at a minimum, will include re-planting of exposed surfaces with native vegetation.	LOCSD shall verify by letter report to RWQCB the inclusion of re-vegetation plans in 100% construction documents	Prior to Construction/100% Construction Documents Review	RWQCB staff	
Air Quality				
Mitigation AQ-3.Odor Performance Standard. Neighbors of the Tri-W site shall be informed that odor nuisance complaints are to be directed to the APCD for documentation. Any odor complaints received by the County Engineering Department or plant staff shall be forwarded within one day of receipt to the APCD. The APCD will contact plant staff following each odor nuisance complaint to determine the nature and cause of the odor sources. The Los Osos Community Services District shall utilize a threshold of three nuisance complaints per year as a performance guideline with respect to odor generation. Should nuisance complaints exceed this number, the District shall assess odor levels at the treatment plant site. The assessment shall include the following: • Utilization of a scentometer to assess odor concentration with respect to the BAAQMD dilution to threshold ratio (D/T ratio). This ratio indicates the number of equal volume dilutions to the point at which 50% of the population below the age of 45 first detects the odor. Regulation 7 adopted by the BAAQMD restricts the release of odorous substances to 4 D/T at the property line. If the D/T ratio exceeds the 4 D/T ratio threshold established by the BAAQMD, the district shall provide a letter report to the APCD summarizing the nature and cause of the odor source, the frequency at which this source has caused complaints in the past, the frequency at which this source is anticipated to occur, and a course of action to reduce onsite odor generation. Measures may include, but are not limited to, the following: o Upstream addition of ferrous chloride to the influent stream to reduce septic conditions; o Establishment of additional "negative air" containment areas; o Additional treatment component enclosure, and; o Installation of air flow baffles to improve odor dissipation.	LOCSD shall submit to RWQCB a copy of the "Odor Performance Standard" protocol in Standard Operating Procedures (SOP) for plant	Prior to Operation	RWQCB staff	The SOP for the plant will be developed prior to operation
Public Health, Safety and Services				
Mitigation PS-1 Hazardous Materials Management Plan. A Hazardous Materials Management Plan shall be developed and submitted to the County of San Luis Obispo Health Department for approval. The plan shall identify hazardous materials utilized onsite and their characteristics; storage, handling and training procedures; and spill contingency procedures. Additionally, the Plan should address fuel storage at the pump station sites.	LOCSD shall by letter report to the RWQCB verify submittal of plans for containment and spill prevention to the County Health Department for both construction and operational phases	Prior to Construction (Spill Prevention and Response) / Prior to Operation (HMMP)	RWQCB staff	

Mitigation Measures		Specific Monitoring Action(s)	Timeframe for Monitoring	Responsible Monitoring Party	Discussion
Mitigation PS-3	Prior to the operation of the wastewater treatment system, the Los Osos CSD shall either 1) secure a contract for bio-solids disposal with a land disposal or recycling facility or 2) construct a bio-solids recycling facility that satisfies Title 40, Section 503 of the Code of Federal Regulations.	LOCSD shall submit a report to RWQCB describing plans for bio-solids disposal either by construction or contract If LOCSD chooses the construction options, it shall submit to the RWQCB a report of waste discharge, upon request of the Executive Officer.	Prior to Operation of Treatment Facility	RWQCB staff	

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL COAST REGION
81 Higuera Street, Suite 200
San Luis Obispo, California 93401-5427

WASTE DISCHARGE/RECYCLED WATER REQUIREMENTS
ORDER NO. R3-2003-0007
Waste Discharger Identification No. 3 401078001

For

LOS OSOS COMMUNITY SERVICES DISTRICT
LOS OSOS WASTEWATER FACILITY
San Luis Obispo County

The California Regional Water Quality Control Board, Central Coast Region (hereafter Board), finds that:

PURPOSE OF ORDER

1. The purpose of the Order is to issue new Waste Discharge and Recycled Water Requirements for the Los Osos Community Services District (hereafter Discharger). The Discharger submitted a report of waste discharge on July 8, 2002, for authorization to discharge treated municipal wastewater from the proposed Los Osos Wastewater Facilities serving the communities of Cuesta-by-the-Sea, Baywood Park and Los Osos, in San Luis Obispo County.

FACILITY OWNER AND LOCATION

2. The Discharger's Wastewater Treatment Plant will be located on property owned by the Discharger in San Luis Obispo County at the intersection of Ravenna Avenue and Los Osos Valley Road (Latitude 35°18'40" Longitude 120°50'24"), as shown on Attachment A, included as part of this Order.

FACILITY/SITE DESCRIPTION

3. **Treatment** - The proposed treatment system consists of grit removal, secondary treatment (extended aeration process), denitrification, secondary sedimentation, filtration and disinfection. Solids will be aerobically digested, dewatered and disposed of at an approved biosolids disposal site. The treatment plant's annual average flow design capacity is 1.4 million gallons per day (MGD) and peak capacity is 1.6 MGD. A diagram of the treatment processes is shown on Attachment B, included as part of this Order.

4. **Disposal and Reuse** - Treated municipal wastewater will be discharged to leachfields or reused for landscape irrigation within the community. Discharge areas are depicted on Attachment C of this Order. Details of the Discharger's reuse program are not yet available, therefore reclamation requirements according to Water Code Section 13523 are included in this Order as guidance for development of that program and may be updated and/or revised to address reuse program specifics.

5. **Geology, Soils and Ground Water** – The vicinity of the discharge is characterized by sandy soils overlying an upper aquifer (Old Dune Sand deposits) and a lower aquifer (Paso Robles formation). The primary disposal area is located in sandy soils on moderately sloping terrain, overlying 150 feet separation to ground water in the Los Osos Valley Ground Water Basin. Other disposal and reuse areas are located on level to gently sloping terrain with depth to ground water varying from 30 to 150

feet. The direction of ground water flow is predominantly northwest toward Morro Bay, however localized flow direction variations occur due to pumping of ground water.

6. **Watershed and Surface Waters** - Morro Bay State and National Estuary abuts the community of Los Osos along the northern and western perimeters. Los Osos Creek meanders east of the community and discharges to Morro Bay at the northeastern tip of Los Osos. Both water bodies are depicted on Attachment C of the proposed Order. Water quality in Morro Bay is impaired by pathogens, metals and sediment.

   A DNA study completed in 2002 for Morro Bay identified humans as the primary source of coliform bacteria in freshwater seeps from shallow groundwater along the estuarine edge of Los Osos. Los Osos Creek is impaired by nutrients and priority organic pollutants. However, based on local topography and direction of ground water flow, such impacts are likely the result of surface runoff to Los Osos Creek rather than seepage of ground water. On December 13, 2002, the Regional Board adopted a pathogen Total Maximum Daily Load (TMDL) for Morro Bay, including an associated implementation plan to achieve TMDL goals. Completion of the community wastewater system in Los Osos is a vital component of the Pathogen TMDL Implementation Plan.

7. **Existing Disposal Practices** – A small portion of the Los Osos community (approximately 80 homes plus a motel) is served by a tertiary treatment facility which produces fully treated and disinfected water for reuse as golf course irrigation. The remainder of the community's wastewater treatment and disposal (from approximately 5000 homes) is by septic systems. Many of these septic systems discharge partially treated wastewater within close proximity or directly to shallow ground water. Such practices have impaired ground water with nitrate contamination and impaired surface waters in Morro Bay as indicated in Finding No. 6 (above).

8. **Ground Water Quality** - Recent ground water quality in the uppermost aquifer in Los Osos is as depicted in the following table (well sites depicted on Attachment C). Similar to historical data, the monitoring data continues to show ground water impaired by nitrates (15 wells exceeding the Maximum Contaminant Level (MCL) for drinking water and five wells approaching the MCL of 10 mg/L Nitrate as Nitrogen). Historically, shallow ground water was the predominant source of domestic supply for Los Osos. However, due to nitrate contamination in the shallow zones beyond state drinking water standards, ground water use has shifted to the better quality, deeper zones. Both upper and lower ground water zones are needed to meet the community's long-term water supply needs.

Well ID #	Depth to Water (ft)	Nitrate as N (mg/l)	Sample Date	Well ID #	Depth to Water (ft)	Nitrate as N (mg/l)	Sample Date
7K3	51	12	06/24/02	17N4	30	7.6	06/28/02
7L3	36	15	06/24/02	18B1	18	6.9	06/24/02
7N1	5	3	06/28/02	18C1	16	15	06/24/02
7Q1	7	16	06/26/02	18E1	25	11	06/27/02
7R1	21	12	06/24/02	18H3	60	11	07/09/02
8N2	35	2.4	06/25/02	18J6	24	6.9	06/25/02
13A7	5	12	07/02/02	18L3	38	9.2	06/25/02
13G	39	9.3	06/26/02	18L4	19	19	06/26/02
13H	25	1	06/26/02	18N1	68	18	06/27/02
13L5	22	19	06/26/02	18R1	10	14	07/02/02
13Q1	82	20	06/27/02	20B	60	5.7	07/02/02
17D	NA	17	07/09/02	24A	149	11	06/27/02
17F4	40	3	06/28/02	13F1	NA	20	08/20/02

Data Source: Los Osos Community Services District NA – Data not available at time of report preparation

9. In September 2000, Cleath and Associates, consultants for the Los Osos CSD, completed hydrogeologic investigations of the wastewater disposal sites and movement of ground water influenced by such disposal. These investigations concluded that ground water coming in contact with percolating wastewater will take at least one year to migrate off the disposal site and at least 14 years to reach the Bay. Accordingly, movement through the soil will contribute to further treatment of such ground waters. The investigations further conclude that some strategic ground water pumping may be needed to mitigate mounded ground water downgradient from the disposal site.

BASIN PLAN

10. The Water Quality Control Plan, Central Coast Basin (Basin Plan), was adopted by the Board on and approved on September 8, 1994. The Basin Plan incorporates statewide plans and policies by reference and contains a strategy for protecting beneficial uses of surface and ground waters in the vicinity of the discharge.

11. **Surface Water Beneficial Uses** - Present and anticipated beneficial uses of Morro Bay include:

    a. Industrial Process Supply
    b. Water Contact Recreation
    c. Non-contact Water Recreation
    d. Wildlife Habitat
    e. Cold Fresh Water Habitat
    f. Migration of Aquatic Organisms
    g. Spawning, Reproduction and/or Early Development
    h. Preservation of Biological Habitats of Special Significance
    i. Rare, Threatened or Endangered Species
    j. Estuarine Habitat
    i. Commercial and Sport Fishing
    x. Aquaculture
    y. Shellfish Harvesting

    Present and anticipated beneficial uses of Los Osos Creek include:

    a. Municipal
    b. Agricultural
    c. Ground Water Recharge
    d. Water Contact Recreation
    e. Non-contact Water Recreation
    f. Wildlife Habitat
    g. Cold Fresh Water Habitat
    h. Warm Fresh Water Habitat
    i. Migration of Aquatic Organisms
    j. Spawning, Reproduction and/or Early Development
    k. Rare, Threatened or Endangered Species
    l. Fresh Water Replenishment
    m. Commercial and Sport Fishing

12. **Ground Water Beneficial Uses** - Present and anticipated beneficial uses of ground water in the vicinity of Los Osos include:

    a. Municipal,
    b. Domestic,
    c. Agricultural and
    d. Industrial supply.

13. **Recycled Water** – Title 22, Chapter 3 of the California Code of Regulations specifies State Department of Health Services' criteria for use of recycled water. Water Code section 13523 authorizes the Regional Board to issue reclamation requirements for water that is proposed to be used as reclaimed (recycled) water. The Regional Board has consulted with the State and County Health Departments regarding these reuse requirements. The State Department of Health Services (DHS) has evaluated the proposed project description and these waste discharge requirements and provided comments and recommendations which have been incorporated into this Order.

14. The Los Osos CSD project is designed to meet Title 22 requirements for recycled water. This Order incorporates those requirements and has been reviewed by DHS.

15. **Stormwater** - Federal Regulations for stormwater discharges, promulgated by the U.S. Environmental Protection Agency, require specific categories of industrial activities including Publicly Owned Treatment Works (POTWs) and construction activities that disturb a total of five acres or more to obtain a NPDES permit regulating the control of stormwater. The State Water Resources Control Board has adopted general NPDES permits for stormwater discharges associated with industrial facilities and stormwater discharges associated with construction activities. The California Environmental Quality Act (CEQA) mitigation and monitoring program in the Order require the Discharger to obtain coverage under the appropriate general NPDES permit before commencing construction and before operation of the wastewater treatment facility.

MONITORING PROGRAM

16. Monitoring and Reporting Program (MRP) No. R3-2003-0007 is part of this Order. The MRP requires routine wastewater influent and effluent and receiving water (ground water) sampling and analysis to verify compliance with this Order. Monitoring reports are required monthly and an annual report is required by January 30th of each year. Additionally, this Order requires the Discharger to comply with the CEQA mitigation monitoring program in Resolution R3-2003-0006.

CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA)

17. The Los Osos Community Services District certified a Final Environmental Impact Report (EIR) on March 1, 2002, in accordance with CEQA (Public Resources Code, Section 21000, et seq.) and the California Code of Regulations.

    Pursuant to CEQA guidelines Section 15096, the Regional Board, as a responsible agency, adopted Resolution No. R3-2003-0006 that contains required findings and a mitigation monitoring program. These findings are limited to the portion of the wastewater project approved by the Regional Board and to mitigation measures that are within the Regional Board's jurisdiction. Compliance with the mitigation measures and mitigation monitoring program described in the Resolution is mandated by this Order.

EXISTING ORDERS AND RESOLUTIONS

18. **Resolution No. 83-13** – In 1983, the Regional Board adopted Resolution 83-13, which amended the Basin Plan and prohibited, effective November 1, 1988, discharges of waste from individual and community sewage systems within portions of the Los Osos area of San Luis Obispo County. At the time of adoption of Resolution No. 83-13, the County represented that it could design and complete a wastewater, collection treatment and disposal system that would eliminate the need for individual and community on-site sewage systems by the prohibition date of November 1, 1988.

19. **Cease and Desist Orders** – The Discharger replaced the County as the agency responsible for implementing the community wastewater project and developed a plan and schedule for project implementation. In May 1999, the Regional Board issued Cease and Desist Orders (Nos. 99-53, 99-54, 99-55 and 99-56) to the Discharger and included the project implementation into those Orders. At the time of adoption, the project implementation schedule appeared reasonably attainable.

20. **Time Schedule Order** – To address uncertainties in the original CSD project, the Discharger embarked on an evaluation of multiple collection, treatment, disposal and management alternatives. This evaluation resulted in modifications to the proposed project and the project implementation schedule. In October 2000, the Regional Board adopted Time Schedule Order No. 00-131 based on Section 13308 of the California Water Code. Time Schedule Order No. 00-

131 contains a date-specific compliance schedule and a daily penalty of $10,000 for failure to meet the scheduled compliance dates. Order No. 00-131 also provides that the Regional Board may modify the time schedule in the Order to permit specified tasks to be completed at later dates if the Discharger demonstrates and the Regional Board determines that the delay was beyond the reasonable control of the Discharger.

GENERAL FINDINGS

21. On **September 6, 2002,** the Board notified the Discharger and interested agencies and persons of its intent to consider adoption of waste discharge requirements for the discharge and has provided them with a copy of the proposed Order and an opportunity to submit written comments and scheduled a public hearing.

22. In a public hearing on **February 7, 2003**, the Board heard and considered all comments pertaining to the discharge, all evidence in the record, the Final Environmental Impact Report and the applicable law and found this Order consistent with the above findings.

IT IS HEREBY ORDERED, pursuant to authority in Section 13263, 13267 and 13523 of the California Water Code, that Los Osos Community Services District, its agents, successors, and assigns, may discharge waste from the Los Osos Wastewater Facility providing compliance is maintained with the following:

All technical and monitoring reports submitted pursuant to this Order are required pursuant to Section 13267 of the California Water Code. Failure to submit reports in accordance with schedules established by this Order or attachments to this Order, or failure to submit a report of sufficient technical quality to be acceptable to the Executive Officer, may subject the Discharger to enforcement action pursuant to Section 13268 of the California Water Code.

(Note: General permit conditions, definitions and the method of determining compliance are contained in the attached "Standard Provisions and Reporting Requirements for Waste Discharge Requirements," dated January 1984, referenced in paragraph E.2. of this Order.)

Throughout these requirements footnotes are listed to indicate the source of requirements specified. Requirement footnotes are as follows:

WC = Water Code
BP = Basin Plan
T22 = California Code of Regulations, Title 22, Recycled Water Criteria
DHS = State Department of Health Services

Requirements without footnotes are based on staff's professional judgment.

A. PROHIBITIONS

1. Discharge to areas other than the disposal facilities shown on Attachment C of this Order or reuse sites approved by the Executive Officer, is prohibited. [T22, WC]

2. Discharge of any wastes including overflow, bypass and runoff from transport, treatment or disposal systems to adjacent drainage ways or adjacent properties is prohibited. [T22, WC]

3. Discharge of untreated or partially treated wastewater is prohibited. [WC]

4. Discharge of wastewater within 100 feet of any well used for domestic supply or irrigation of food crops is prohibited. [BP]

B. EFFLUENT LIMITATIONS
(Discharge to Leachfields)

1. The annual average effluent shall not exceed 1.4 MGD.

2. Effluent discharged to the disposal system shall not exceed the following limitations:

Constituent	Units	Monthly (30-Day) Average	Daily Maximum
Settleable Solids	ml/l	0.1	0.5
BOD, 5-Day	mg/l	60	100
Suspended Solids	mg/l	60	100
Total Nitrogen (as N)	mg/l	7	10

C. RECYCLED WATER SPECIFICATIONS

(Reclamation (reuse) Requirements adopted under Water Code section 13523 apply in addition to Effluent Limitations specified above)

1. Discharger shall develop an Engineering Report on the Production, Distribution and Use of Recycled Water (Engineering Report) in conformance with Title 22 of the California Code of Regulations, for review and approval of the Executive Officer (after consultation with State and local Health Departments). The Engineering Report must be submitted no less than six months in advance of proposed reuse of wastewater.

2. Recycled water production and use shall at all times be in conformance with recycled water criteria established in Title 22, Division 4, Chapter 3 of the California Code of Regulations and the Engineering Report[T22, WC]. Recycled water shall be adequately oxidized, coagulated, clarified, filtered, disinfected[T22] and not exceed the following limitations:

Parameter	Units	Monthly Mean	Max.
BOD_5	mg/l	30	90
Suspended Solids	mg/l	30	90
Turbidity[T22]	NTU	2*	5**
pH[BP]	units	In range 6.5-8.4	

* 24-hr mean value. [T22]

**Turbidity must not exceed 5 NTU more than 5% of the time within a 24-hr period and must not exceed 10 NTU. [T22]

3. The median number of coliform organisms in recycled water shall not exceed 2.2 MPN per 100 ml, as determined from the bacteriological results of the last 7 days for which analyses have been completed. The number of coliform organisms shall not exceed 23 MPN per 100 ml in more than one sample in any 30-day period and shall not exceed 240 MPN per 100 ml in any single sample. [T22]

4. Recycled water subject to a chlorine disinfection process shall include a CT (chlorine concentration times model contact time) of not less than 450 milligram-minutes per liter at all times with a model contact time of at least 90 minutes, based on peak dry weather design flow. [T22] Chlorine residual in reclaimed water shall equal or exceed 0.5 mg/l, as measured immediately after the chlorine contact zone.

5. Any alternative, comparable disinfection process must be approved by California Department of Health Services and the Executive Officer.

6. Delivery of reclaimed water for irrigation purposes shall cease as soon as possible and all wastewater shall be returned to the treatment and/or disposal system if:

   a. Disinfection of wastewater ceases at any time; or,

   b. Reclamation specifications are violated or threaten to be violated.

7. Recycled water shall be confined within the authorized reuse areas (approved by the Executive Officer after consultation with State and local health departments).

8. Recycled water shall not be used for irrigation during extended periods of rainfall and/or runoff.

9. Personnel involved in producing, transporting or using recycled water shall be informed of possible health hazards that may result from contact and use of recycled water.

10. Use of recycled water shall occur at a time and in a manner to prevent or minimize public contact with recycled water and to prevent ponding in irrigation areas.

11. Areas irrigated with recycled water shall be posted in English and Spanish to warn the public that recycled water is being used. Signs shall be no less than four inches high by eight inches wide and include the wording "RECYCLED WATER – DO NOT DRINK".

12. Recycled water valves shall be of a design to prevent public access.

13. Drinking fountains shall be protected from recycled water spray, mist or runoff.

14. Tank trucks used to transport recycled water shall be appropriately labeled and shall not leak.

D. RECEIVING WATER LIMITATIONS
(Ground Water Limitations)

(Receiving water quality is a result of many factors, some unrelated to the discharge. This permit considers these factors and is designed to minimize the influence of the discharge to receiving waters.)

The discharge shall not cause:

1. The nitrate-nitrogen (NO_3 as N) level of ground water to exceed 10 mg/l.[BP]

2. Significant increase of mineral constituent concentrations in underlying ground water, as determined by comparison of samples collected from wells prior to and post discharge commencement.

3. Concentrations of chemicals and radionuclides in ground water to exceed limits set forth in Title 22, Chapter 15, Articles 4 and 5 of the California Code of Regulations. [BP]

E. PROVISIONS

1. Discharger shall comply with "Monitoring and Reporting Program No. R3-2003-0007" (included as part of this Order), as ordered by the Executive Officer.

2. Discharger shall comply with all items of the attached "Standard Provisions and Reporting Requirements for Waste Discharge Requirements," dated January 1984 (included as part of this Order).

3. Implementation of Mitigation Measures pursuant to California Environmental Quality Act:

   a. The Discharger shall incorporate into the work required by this Order the following mitigation measures, identified in the FEIR and set forth in Resolution No. R3-2003-0006:

      i. Geology: Geo-1, Geo-2, Geo-3, Geo-4, Geo-5, Geo 6, Geo-7, Geo-8 and Geo-9.
      ii. Drainage: WR-1, WR-2 & WR-3.
      iii. Air Quality: AQ-3.
      iv. Public Health, Safety and Services: PS-1 and PS-3.

   b. The Discharger shall implement the Mitigation Monitoring Program in Resolution No. R3-2003-0006.

4. Treatment and discharge shall not cause pollution or nuisance as defined in Section 13050 of the California Water Code.

5. All accumulated biosolids or solid residue shall be disposed at a location authorized by law. Discharger shall report to the Executive Officer, plans to discharge at a facility not covered by existing waste discharge requirements or general waste discharge requirements at least six months before disposal begins. If the Executive Officer directs the Discharger to submit a report of waste discharge, Discharger shall not begin disposal until it has obtained coverage under individual or general waste discharge requirements or other authorization to discharge.

6. Treatment, storage and disposal facilities shall be managed to exclude the public and posted to warn the public of the presence of wastewater.

7. Discharger shall develop and implement an on-site wastewater management plan no later than **January 1, 2004** assure ongoing operations, maintenance and monitoring of on-site disposal systems for the unsewered areas in the community of Los Osos.

8. Pursuant to Title 23, Division 3, Chapter 9, of the California Code of Regulations, the Discharger must submit a report to the Executive Officer, no later than **August 7, 2007,** addressing:

   a. Whether there will be changes in the continuity, character, location or volume of the discharge; and,

   b. Whether, in their opinion, there is any portion of the Order that is incorrect, obsolete or otherwise in need of revision.

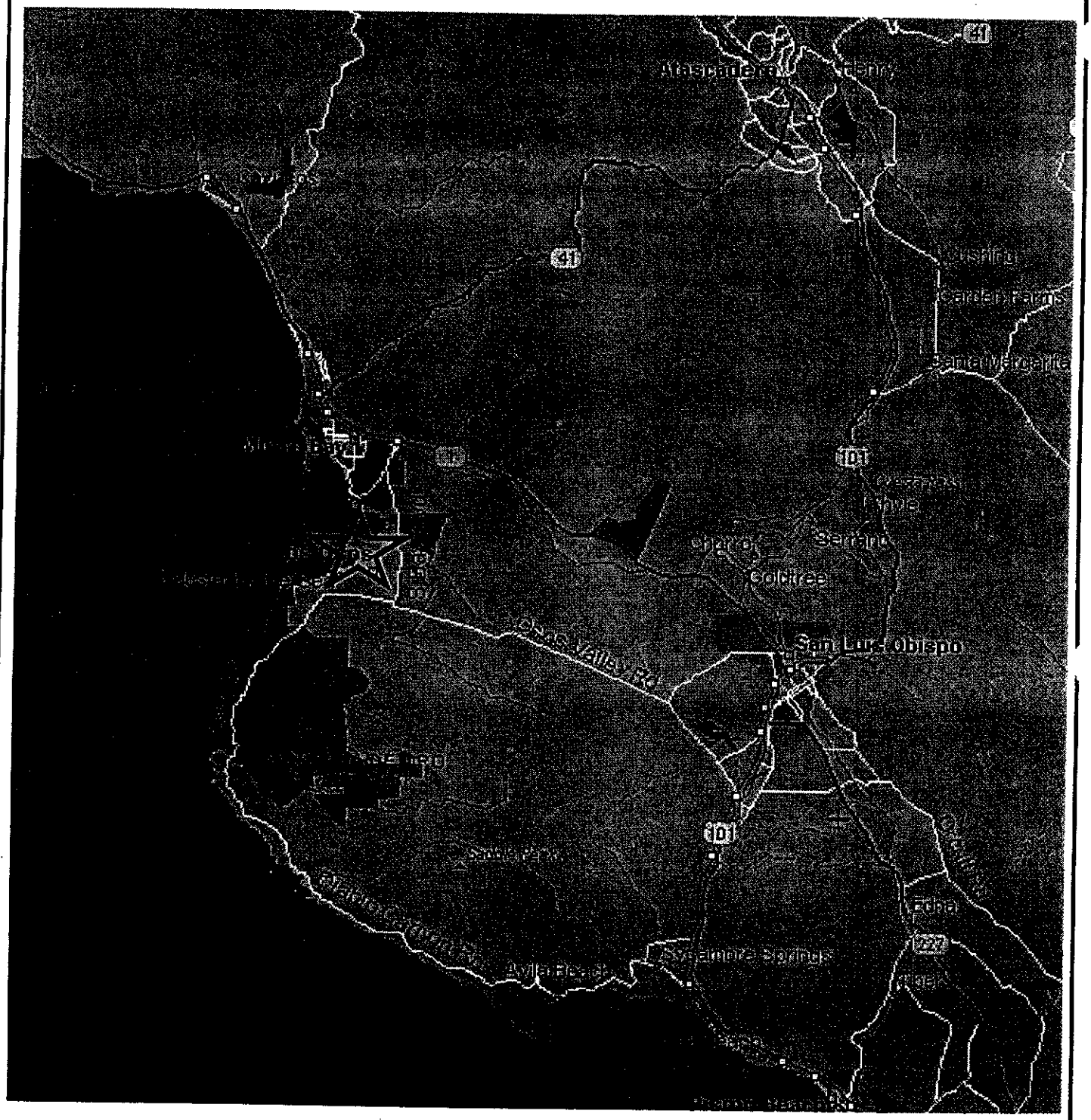
I, Roger W. Briggs, Executive Officer, do hereby certify the foregoing is a full, true, and correct copy of an order adopted by the California Regional Water Quality Control Board, Central Coast Region, on February 7, 2003.

Executive Officer

_____

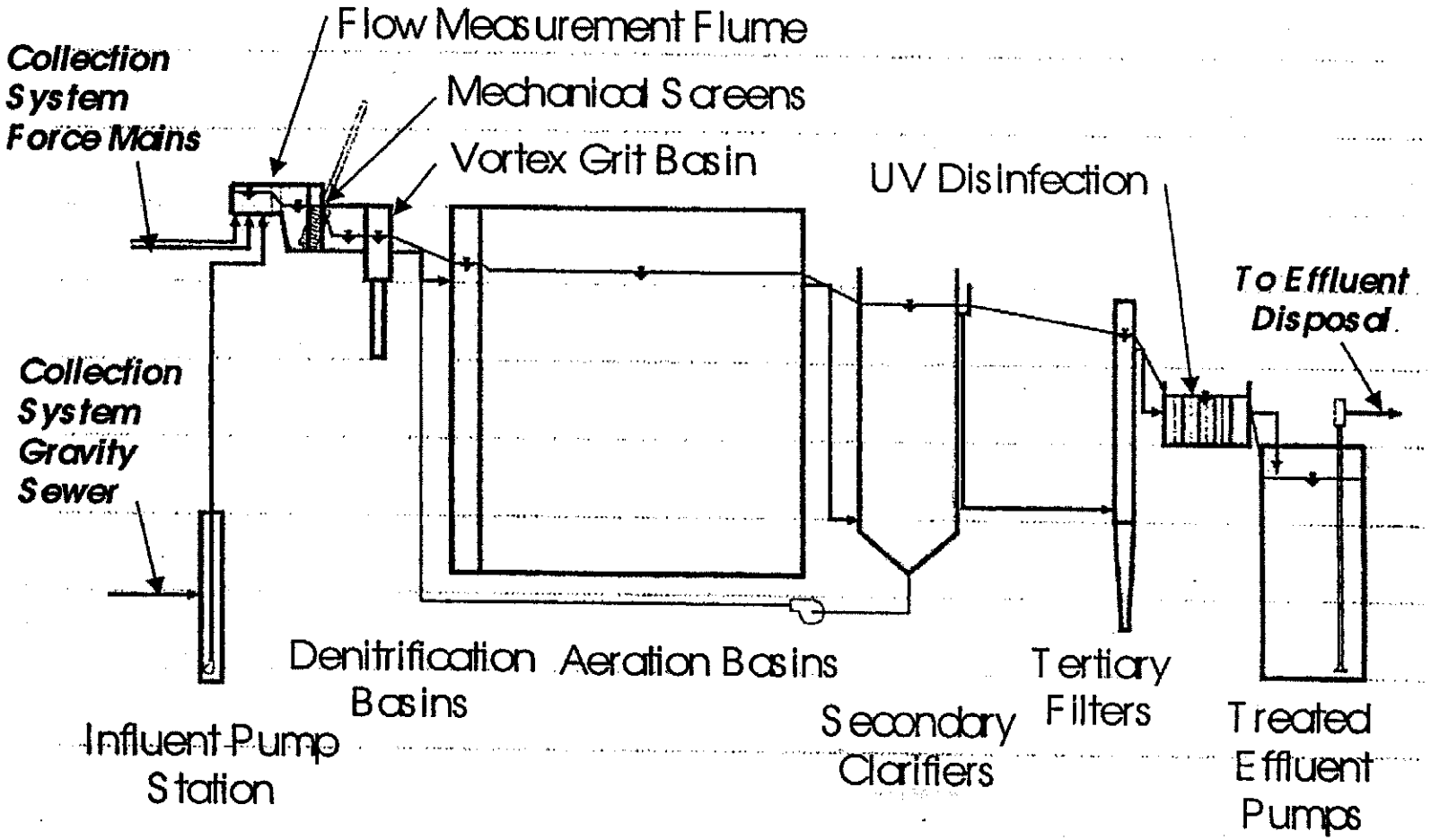
Date

S:/wb/coastal watershed/staff/sorrel/los osos WDRs/los osos csd.wdr



ATTACHMENT A
LOS OSOS COMMUNITY SERVICES DISTRICT
ORDER NO. R3-2002-0108

ATTACHMENT B
LOS OSOS COMMUNITY SERVICES DISTRICT
ORDER NO. R3-2002-0108



ATTACHMENT C
LOS OSOS COMMUNITY SERVICES DISTRICT
ORDER NO. R3-2002-0108

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL COASTAL REGION

MONITORING AND REPORTING PROGRAM NO. R3-2003-0007
FOR
LOS OSOS COMMUNITY SERVICES DISTRICT
LOS OSOS WASTEWATER FACILITY
SAN LUIS OBISPO COUNTY

Influent Monitoring

Representative samples of the influent to the treatment plant shall be collected and analyzed as follows:

Constituent	Units	Type of Sample	Minimum Sampling and Analyzing Frequency
Flow Volume	mgd	metered	Daily
Maximum Daily Flow	mgd	calculated	Monthly
Suspended Solids	mg/l	24-hr. composite	Monthly
Biochemical Oxygen Demand, 5-day	mg/l	24-hr. composite	Monthly

Effluent Monitoring

Representative samples of the effluent shall be collected and analyzed as follows:

Constituent	Units	Type of Sample	Minimum Sampling and Analyzing Frequency
Flow Volume	mgd	metered	Daily
Settleable Solids	ml/l	grab	Daily
Biochemical Oxygen Demand, 5-day	mg/l	24-hr. composite	Weekly
Suspended Solids	mg/l	24-hr. composite	Weekly
Total Nitrogen (as N)	mg/l	grab	Monthly

Recycled Water Monitoring

Representative samples of water provided for reuse shall be collected and analyzed as follows (in addition to Effluent Monitoring above):

Constituent	Units	Type of Sample	Minimum Sampling and Analyzing Frequency
Flow Volume	mgd	metered	Daily
Site of use	--	site identification	Daily (as used)
Total Coliform Organisms	MPN/100ml	grab	Daily
Total Chlorine Residual	mg/l	metered	Continuous[2]
Turbidity[1]	NTU	metered	Continuous
Biochemical Oxygen Demand, 5-day	mg/l	24-hr. composite	Weekly
Suspended Solids	mg/l	24-hr. composite	Weekly
pH	units	grab	Weekly

[1] Recycled water shall be sampled for turbidity using a continuous meter and recorder following filtration. Compliance with the 2 NTU daily average limitation shall be determined by averaging the recorded turbidity levels at a minimum of four-hour intervals over a 24-hour period. Compliance with the 5 NTU limitation shall be determined using the recorded turbidity levels taken at intervals of no more than 1.2 hours over a 24-hour period. Should the continuous turbidity meter and recorder fail, grab sampling at a minimum frequency of 1.2 hours may be substituted for a period of up to 24 hours.

[2] Continuous chlorine residual monitoring may be performed using alternative methods until such time as methods of analysis for continuous chlorine residual monitoring are approved by U.S. EPA under 40 CFR 136. Chlorine monitoring is not required if chlorine is not need for treatment

Ground Water Monitoring

Representative samples of ground water shall be collected and analyzed from the following twenty five (25) monitoring wells Well ID Nos. 13A7, 13G, 13H, 13L5, 13Q1, 24A, 7K3, 7L3, 7N1, 7Q1, 7R1, 8N2, 17D, 17F4, 17N4, 18B1, 18C1, 18E1, 18H3, 18J6, 18L3, 18L4, 18N1, 18R1, 20B (as identified and described in the Discharger's Ground Water Monitoring Network Design, dated February 2002). These monitoring wells are graphically shown on Attachment C of Order No. R3-2003-0007. Additional wells may be added to the Ground Water Monitoring Program as deemed appropriate. The samples are to be analyzed as follows:

Constituent	Units	Type of Sample	Minimum Sampling and Analyzing Frequency
Depth to ground water	feet	measure	Semi-annually
Total Dissolved Solids	mg/l	grab	Semi-annually
pH	Units	grab	Semi-annually
Total Nitrogen (as N) (all forms identified)	mg/l	grab	Semi-annually
Sodium	mg/l	grab	Semi-annually
Chloride	mg/l	grab	Semi-annually
Sulfate	mg/l	grab	Semi-annually
Boron	mg/l	grab	Semi-annually

The results shall be tabulated and include a narrative description of analytical results (general mineral constituents, including all forms of nitrogen, depth to ground water, and ground water flow direction) and water quality trends (changes in water quality, impacts from sea water intrusion). Sample procedures, and equipment used shall also be reported. Contour maps shall be provided that include: a) ground water elevations and flow direction, b) TDS concentrations, and c) Nitrate as Nitrogen concentrations.

In addition, analytical results for water quality data collected from water purveyor wells in the basin shall be reported. Any additional monitoring performed shall be submitted with regular monitoring reports.

Disposal Area Monitoring

The disposal areas shall be inspected daily for indications of actual or threatened overflow, seepage, surfacing or other problems. An inspection log shall be kept of the disposal areas conditions, observations, problems noted, and corrective actions taken. A summary of the log shall be included with each month's monitoring report.

Biosolids Monitoring

Representative samples of biosolids removed from the facilities for disposal shall be collected and analyzed as follows:

Constituent	Units	Type of Sample	Minimum Sampling and Analyzing Frequency
Volume	Gallons or Cubic Yards	Grab	Annually or when disposal occurs (whichever is less frequent)
Moisture Content	percent	Grab	" " "
Total metals	mg/kg	Grab	" " "

Reporting

Monthly monitoring reports shall be submitted to the Regional Board by the 30th day of each month following sampling. Reports shall summarize monitoring data, noncompliance, reasons for noncompliance, corrective action, disposal area monitoring, and any other significant events relating to compliance with Order No. R3-2003-0007. Copies of monitoring reports shall also be submitted to the Department of Health Services at 1180 Eugenia Place, Suite 200, Carpinteria, CA 93013. Annual summary reports shall be submitted in accordance with Standard Provision C.16.

ORDERED BY _____
Executive Officer

February 7, 2003
Date

S:/wb/coastal watershed/staff/sorrel/los osos WDRs/los osos csd.mrp

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL COAST REGION

JANUARY, 1984

STANDARD PROVISIONS AND REPORTING REQUIREMENTS for WASTE DISCHARGE REQUIREMENTS

CONTENTS:

A. General Conditions
B. General Monitoring Requirements
C. General Reporting Requirements
D. Bypasses or Upsets
E. Enforcement
F. Definitions (Defines terms that appear in quotes)

A. General Permit Conditions:

Prohibitions:

1. Introduction of "incompatible wastes" to the treatment system is prohibited. (See F.9.)

2. Discharge of chemical and biological warfare agents is prohibited.

3. Discharge of "toxic wastes" is prohibited. (See F.18.)

4. Introduction of pollutants into the collection, treatment, or disposal system by an "indirect discharger" that:

   a. inhibit or disrupt the treatment process, system operation, or the eventual use or disposal of sludge; or,

   b. cause or "significantly contribute" to a violation of any requirement of this Order, is prohibited. (See F.17.)

5. Introduction of "pollutant-free" wastewater to the collection, treatment, and disposal system in amounts that threaten compliance with this order is prohibited. (See F.14.)

Provisions:

6. Production and use of reclaimed water shall conform with reclamation criteria established in Title 22, Chapter 3, of the California Administrative Code. For uses of reclaimed water not addressed in Title 22 and not in the main body of this order, use is subject to review and dependent upon approval by the Executive Officer before use may begin (For uses addressed in Title 22, see C.8.).

7. Collection, treatment, and discharge of waste shall not create nuisance or pollution, as defined by Section 13050 of the California Water Code.

8. As necessary to assure safe and reliable collection, treatment, and disposal of waste and consistent compliance with this order, the discharger shall adopt and enforce a local source control program. (See C.16.)

9. Objectionable odors originating at this facility shall not be perceivable beyond the limits of the wastewater treatment and disposal areas.

10. The discharger shall prevent formation of a habitat for carriers of pathogenic microorganisms in any part of the treatment and disposal system.

11. Petroleum products, grease, and scum shall not be visible on disposal ponds.

12. Facilities and systems for collection, treatment, and control of wastewater shall be properly operated and maintained. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staff and training, and adequate laboratory and process controls, including appropriate quality assurance procedures.

13. Transport and treatment facilities and permanent disposal ponds shall be adequately protected against overflow, flooding, or washout as the result of a 100-year frequency flood or 100-year, 24-hour storm.

14. All disposal areas shall be on land owned or controlled by the discharger.

15. Operation of collection, treatment, and disposal systems shall be in a manner that precludes public contact with wastewater.

16. Collected screenings, sludges, and other solids removed from liquid wastes shall be disposed in a manner approved by the Executive Officer.

17. Publicly owned wastewater treatment plants shall be supervised and operated by persons possessing certificates of appropriate grade pursuant to Title 23 of the California Administrative Code.

18. The Regional Board shall be allowed:

    a. entry upon premises where an effluent source is located or where records must be kept under the conditions of this order;

    b. access to copy any records that must be kept under the conditions of this order;

    c. to inspect any facility, equipment (including monitoring and control equipment), practices, or operations regulated or required under this order; and,

d. to photograph, sample, and monitor for the purpose of showing compliance with this order.

19. After notice and opportunity for a hearing, this order may be terminated or modified for cause, including, but not limited to:

a. violation of any term or condition contained in this order;

b. obtaining this order by misrepresentation, or by failure to disclose fully all relevant facts;

c. a change in any condition or endangerment to human health or environment that requires a temporary or permanent reduction or elimination of the authorized discharge; and,

d. a material change in character, location, or volume of the discharge.

20. This order does not authorize commission of any act causing injury to the property of another, does not convey any property rights of any sort, does not remove liability under federal, state, or local laws, and does not guarantee a capacity right.

21. The discharger shall take all reasonable steps to minimize or correct adverse impacts on the environment resulting from noncompliance with this order.

22. Provisions of this order are severable. If any provision of the order is found invalid, the remainder of the order shall not be affected.

23. The discharger shall furnish, within a reasonable time, any information the Regional Board may request to determine compliance with this order or to determine whether cause exists for modifying or terminating this order.

24. Safeguards shall be provided to assure maximal compliance with all terms and conditions of this order. Safeguards shall include preventative and contingency plans and may also include alternative power sources, stand-by generators, retention capacity, operating procedures, or other precautions. Preventative and contingency plans for controlling and minimizing the effect of accidental discharges shall:

a. identify possible situations that could cause "upset", "overflow" or "bypass", or other noncompliance. (Loading and storage areas, power outage, waste treatment unit outage, and failure of process equipment, tanks, and pipes should be considered.)

b. evaluate the effectiveness of present facilities and procedures and describe procedures and steps to minimize or correct any adverse environmental impact resulting from noncompliance with the order.

25. Physical Facilities shall be designed and constructed according to accepted engineering practice and shall be capable of full compliance with this order when properly operated and maintained. Proper operation and maintenance shall be described in an Operation and Maintenance Manual. Facilities shall be accessible during the wet-weather season.

26. Should additional data become available through monitoring or investigation that indicates compliance with this order is not adequately protecting ground water, the Regional Board will review and revise this order as appropriate.

B. General Monitoring Requirements:

1. Monitoring location, minimum sampling frequency, and sampling method for each parameter shall comply with the Monitoring and Reporting Program of this order. Monitoring must be conducted according to test procedures approved under 40 CFR Part 136, entitled "Guidelines Establishing Test Procedures for Analysis of Pollutants," unless other test procedures have been specified in this order.

2. If results of monitoring a pollutant appear to violate effluent limitations based on a weekly, monthly, 30-day, or six-month period, but compliance or non-compliance cannot be validated because sampling is too infrequent, the frequency of sampling must be increased to validate the test within the next monitoring period. The increased frequency must be maintained until the Executive Officer agrees the original monitoring frequency may be resumed.

   For example, if suspended solids are monitored weekly and results exceed the weekly average numerical limit in the order, monitoring of suspended solids must be increased to at least four (4) samples every week (ref. paragraph F.1.).

3. Water quality analyses performed in order to monitor compliance with this order shall be by a laboratory certified by the State Department of Health Services for the constituent(s) being analyzed.

   If the laboratory used or proposed for use by the discharger is not certified by the California Department of Health Services due to restrictions in the State's laboratory certification program, the discharger shall be considered in compliance with this provision provided:

   a. Data results remain consistent with results of samples analyzed by the Regional Board;

b. A quality assurance program is used at the laboratory, including a manual containing steps followed in this program that is available for inspections by the staff of the Regional Board; and,

c. Certification is pursued in good faith and obtained as soon as possible after the program is reinstated.

4. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity. Samples shall be taken during periods of peak loading conditions. Influent samples shall be samples collected from the combined flows of all incoming wastes, excluding recycled wastes. Effluent samples shall be samples collected downstream of the last treatment unit.

5. If any parameter is monitored at locations specified in the order more frequently than required and is analyzed using approved test procedures, the results shall be included in calculations and reports.

6. All monitoring instruments and devices used by the discharger to fulfill the prescribed monitoring program shall be properly maintained and calibrated as necessary to ensure their continued accuracy.

7. The discharger shall maintain records of all monitoring information, including all calibration and maintenance records; all original strip chart recordings for continuous monitoring instrumentation; the date, exact place, and time of sampling; the individual who performed the sampling; the date analysis was performed; the laboratory and individual who performed the analysis; the analytical techniques used; and results. Records shall be maintained for a minimum of three years. This period may be extended during the course of any unresolved litigation or when requested by the Board.

C. General Reporting Requirements:

1. Monitoring results shall be reported at intervals and in a manner specified in the Monitoring and Reporting Program of this order.

2. Monitoring reports shall be submitted on State Water Resource Control Board Form Q2 or an acceptable alternate form. A master copy of the form will be supplied by the Regional Board upon request.

3. Any noncompliance that may endanger health or the environment shall be reported orally within 24 hours from the time the discharger becomes aware of the circumstances (telephone: 805-549-3147). Unless waived by the Executive Officer of the Regional Board, a written report shall be submitted within five (5) days of awareness and shall contain a description of the noncompliance and its cause; the period of noncompliance (including exact dates and times) or anticipated duration; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance. This provision includes, but is not limited to:

a. violation of a discharge prohibition;

b. any "upset", "overflow", or "bypass";

c. violation of a discharge limitation for any "hazardous substance."

4. Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule shall be submitted within 14 days following each scheduled date unless otherwise specified within the order. If reporting noncompliance, the report shall include a description of the reason, a description and schedule of tasks necessary to achieve compliance, and an estimated date for achieving full compliance. A second report shall be submitted within 14 days of full compliance.

5. All instances of noncompliance not reported under paragraph numbers C.3. and C.4., above, shall be submitted along with monitoring reports. The report shall contain the information listed in paragraph C.3.

6. Reports shall be submitted in advance of any planned changes in the permitted facility or activity that may result in noncompliance.

7. The "discharger" shall file a report of waste discharge or secure a waiver from the Executive Officer at least 120 days before making any material change or proposed change in the character, location, or volume of the discharge.

8. An engineering report as specified by Section 60323, Chapter 3, Title 22, of the California Administrative Code, is required, and written approval of the Executive Officer must be received by the discharger and user, before reclaimed water is supplied for any uses and to any users other than those enumerated in this Order.

9. Within 120 days after the discharger discovers, or is notified by the Regional Board, that monthly average daily flow will or may reach design capacity of waste treatment and/or disposal facilities within four (4) years, the discharger shall file a written report with the Regional Board. The report shall include:

   a. the best estimate of when the monthly average daily dry weather flow rate will equal or exceed design capacity; and,

   b. a schedule for studies, design, and other steps needed to provide additional capacity for waste treatment and/or disposal facilities before the waste flow rate equals the capacity of present units.

   In addition to complying with paragraphs C.14.c and C.15, the required technical report shall be prepared with public participation and reviewed, approved and jointly submitted by all planning and building departments having jurisdiction in the area served by the waste collection, treatment, or disposal facilities.

10. The "discharger" shall submit reports to the:

    California Regional Water Quality Control Board
    Central Coast Region
    1102-A Laurel Lane
    San Luis Obispo, California 93401

11. Transfer of control or ownership of a waste discharge facility must be preceded by a notice to the Regional Board at least 30 days in advance of the proposed transfer date. The notice must include a written agreement between the existing discharger and proposed discharger containing specific date for transfer of responsibility, coverage, and liability between them. Whether an order may be transferred without modification and a public hearing is at the descretion of the Board. If order modification is necessary, transfer may be delayed 120 days after the Regional Boards receipt of a complete Report of Waste Discharge.

12. Except for data determined to be confidential under Section 13267 (b) of the California Water Code, all reports prepared in accordance with this order shall be available for public inspection at the office of the Regional Board.

13. Should the discharger discover that it failed to submit any relevant facts or that it submitted incorrect information in a report, it shall promptly submit the missing or correct information.

14. All reports shall be signed as follows:

    a. For a corporation; by a principle executive officer of at least the level of vice president;

    b. For a partnership or sole proprietorship; by a general partner or the proprietor, respectively;

    c. For a public agency; by either a principal executive officer or ranking elected official; or,

    d. Their "duly authorized representative."

15. Any person signing a report makes the following certification, whether its expressed or implied:

    "I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment."

16. By January 30 of each year, the discharger shall submit an annual report to the Regional Board. The report shall contain both tabular and graphical summaries of the monitoring data obtained during the previous year. The discharger shall discuss the compliance record and corrective actions taken, or which may be needed, to bring the discharge into full compliance. The report shall address operator certification and provide a list of current operating personnel and their grade of certification. The report shall inform the Board of the date of the Facility's Operation and Maintenance Manual (including contingency plans as described in Provision A.24.), of the date the manual was last reviewed, and whether the manual is complete and valid for the current facility. The report shall restate, for the record, the laboratories used by the discharger to monitor compliance with effluent limits and provide a summary of performance relative to section B, General Monitoring Requirements.

    If the facility treats industrial or domestic wastewater and there is no provision for periodic sludge monitoring in the Monitoring and Reporting Program, the report shall include a summary of sludge quantities, analyses of its chemical and moisture content, and its ultimate destination.

    If appropriate, the report shall also evaluate the effectiveness of the local source control or pretreatment program using the State Water Resources Control Board's "Guidelines for Determining the Effectiveness of Local Pretreatment Program."

17. The discharger must notify the Regional Board whenever there is a substantial change in the volume or character of pollutants being introduced into the wastewater system. Notice shall include information on the quality and quantity of waste being introduced to the system and the anticipated impact of the waste upon the quantity and quality of the aggregate discharge.

18. The discharger must notify the Regional Board as soon as it knows or has reason to believe that it or an indirect discharger has begun, or expects to begin, use or manufacture of a "toxic waste" or "hazardous substance" not reported in the Report of Waste Discharge that may, directly or indirectly, discharge into the treatment and disposal system.

D. Bypasses or Upsets

1. Bypass

    a. If the discharger knows in advance of the need for a "bypass," it shall submit notice to the Executive Officer at least 10 days before the "bypass."

b. Enforcement action will be taken against the discharger for "bypass" unless:

(i) "Bypass" was unavoidable to prevent loss of life, personal injury, or "severe property damage";

(ii) There was no feasable alternative to the "bypass," such as use of auxilliary treatment facilities, retention of untreated waste, or maintenance during normal periods of equipment down-time. (This condition is not satisfied if adequate back-up equipment could have been installed to prevent a "bypass" which occurred during normal periods of equipment down-time or preventive maintenance); and,

(iii) The discharger submitted notice to the Executive Officer as specified in paragraphs C.3. and D.1.a., above.

2. Upset

A discharger seeking to establish the occurance of an "upset" has the burden of proof. A discharger who wishes to establish the affirmative defense of "upset" shall demonstrate, through properly signed, contemporaneous operating logs or other relative evidence that:

a. an "upset" occurred and the discharger can identify the specific cause(s) of the "upset"; and,

c. the facility was at the time of "upset" being properly operated; the discharger submitted notice of "upset" within 24 hours; and the discharger took all reasonable steps to minimize or correct any adverse impact on the environment.

E. Enforcement:

1. The discharger must comply with all conditions of this order.. Non-compliance violates state law and is grounds for enforcement action or modification of the existing order.

2. Any person failing or refusing to furnish technical or monitoring program reports as required by subdivision (b) of section 13267 of the California Water Code, or falsifying any information provided therein, is guilty of a misdemeanor.

3. The discharger and any person who violates waste discharge requirements and/or who intentionally or negligently discharges waste or causes or permits waste to be deposited where it is discharged into surface waters of the state may be liable for civil and/or criminal remedies, as appropriate, pursuant to sections 13350, 13385, and 13387 of the California Water Code.

4. Upon reduction, loss, or failure of any part of the wastewater facility, the discharger shall, to the extent necessary to maintain compliance with this order, control production or all discharges, or both, until the facility is restored or an acceptable interim method of treatment or disposal is provided. Should enforcement action be brought against the discharger, the necessity to halt or reduce the permitted activity in order to obtain compliance with the conditions of this order shall not be a defense.

F. Definitions:

1. "Average" or "Mean" is the arithmetic mean of daily concentrations over the specified period

$$\text{Average} = \frac{1}{N} \quad (X_1 + X_2 + \ldots + X_N),$$

in which "N" is the number of days samples were analyzed during the period and "X" is either the constituent concentration (mg/l) or flow for each sampled day. To be valid, "N" must be four or greater.

2. "Bypass" means the diversion of waste streams around any portion of a treatment facility to the disposal area or from the treatment facility to a nonauthorized location.

3. A "composite sample" is a combination of no fewer than eight (8) individual samples obtained at equal time intervals (usually hourly) over the specified sampling (composite) period. The volume of each individual sample is proportional to the flow rate at time of sampling. The period shall be specified in the Monitoring and Reporting Program ordered by the Executive Officer.

4. "Daily Discharge" means the discharge of a pollutant measured during a calendar day or during any 24-hour period reasonably representative of the calendar day for purposes of sampling.

5. "Daily Maximum" limit means the maximum acceptable concentration or mass emission rate of a pollutant measured during a calendar day or during any 24-hour period reasonably representative of the calendar day for purposes of sampling. Its normally compared with results based on "composite samples."

6. "Duly Authorized Representative" is one where:

a. the authorization is made in writing by a person described in the signatory paragraph (C.14:a,b, or c) of this document;

b. the authorization specifies either an individual or the occupant of a position having responsibility for the overall operation of the regulated facility, such as the plant manager; and,

c. the written authorization was submitted to the Regional Board.

7. A "grab sample" is defined as any individual sample collected in less than 15 minutes. "Grab samples" shall be collected during peak loading conditions, which may or may not be during hydraulic peaks.

8. "Hazardous substance" means any substance designated as hazardous or extremely hazardous in sections 66680 or 66685 of the California Administrative Code (Title 22, Division 4, Chapter 30, Article 9).

9. "Incompatible wastes" are:

   a. Wastes which create a fire or explosion hazard in the treatment works;

   b. Wastes which will cause corrosive structural damage to treatment works, including all wastes with a pH lower than 5.0 unless the works is specifically designed to accommodate such wastes;

   c. Solid or viscous wastes in amounts which cause obstruction to flow in sewers, or which cause other interference with proper operation of treatment works;

   d. Any waste, including oxygen demanding pollutants (BOD, etc), released in such volume or strength as to cause inhibition or disruption in the treatment works and subsequent treatment process upset and loss of treatment efficiency; and,

   e. Heat in amounts that inhibit or disrupt biological activity in the treatment works or that raise influent temperatures above 40°C (104°F) unless the treatment works is designed to accommodate such heat.

10. "Indirect Discharger" means a nondomestic discharger introducing pollutants into a publicly owned treatment and disposal system.

11. "Log Mean" is the geometric mean. Used for determining compliance of fecal or total coliform populations, it is calculated with the following equation:

$$\text{Log Mean} = (C_1 \times C_2 \times \ldots \times C_N)^{1/N},$$

in which "N" is the number of days samples were analyzed during the period and any "C" is the concentration of bacteria (MPN/100 ml) found on each day of sampling. To be valid, "N" must be five or more.

12. "Median" is the value below which half the samples (ranked progressively by increasing value) fall. It may be considered the middle value, or the average of two middle values. To be valid, three or more values are required.

13. "Overflow" means the intentional or unintentional diversion of flow from the collection and transport systems, including pumping facilities, and from disposal areas.

14. "Pollutant-free wastewater" means infiltration and inflow, storm waters, and cooling waters and condensates which are essentially free of pollutants.

15. "Severe property damage" means substantial physical damage to property, damage to treatment facilities which causes them to become inoperable, or substantial and permanent loss to natural resources which can reasonably be expected to occur in the absence of a "bypass." It does not mean economic loss caused by delays in production.

16. "Sludge" means the solids, residues, and precipitates separated from, or created in, wastewater by the unit processes of a treatment system.

17. To "significantly contribute" to a waste discharge requirement violation means an "indirect discharger" must:

    a. Discharge a daily pollutant loading in excess of that allowed by contract with the discharger or by state or local law;

    b. Discharge wastewater which substantially differs in nature or constituents from its average discharge;

    c. Discharge pollutants, either alone or in conjunction with discharges from other sources, which results in a waste discharge requirement violation or prevents sludge use or disposal; or,

    d. Discharge pollutants, either alone or in conjunction with pollutants from other sources, that increase the magnitude or duration of waste discharge requirement violations.

18. "Toxic waste" means any toxic and persistent waste which falls within the following categories:

    a. PCB's
    b. Pesticides
    c. Toxic Metals
    d. Cyanides
    e. Halogenated Organics
    f. Non-halogenated volatile organics

19. "Upset" means an exceptional incident causing noncompliance with technology-based effluent limitations because of factors beyond the reasonable control of the discharger. It does not include noncompliance caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventative maintenance, or careless or improper operation.

CENTRAL COAST REGIONAL
WATER QUALITY CONTROL BD.
2002 OCT -4 PM 1:21
81 HIGUERA STE. 200
SAN LUIS OBISPO, CA 93401

President
Rosemary Bowker

Vice-President
Stan Gustafson

Director
Frank Freiler
Gordon Hensley
Sylvia Smith

General Manager
Bruce S. Buel

Utilities Manager
George J. Milanes

Administrative Services Manager
Lynne L. Corenbaum

Fire Chief
Bruce D. Pickens

October 3, 2002

California Regional Water Quality Control Board
Central Coast Region
81 Higuera Street, Suite 200
San Luis Obispo, CA 93401

Attention: Mr. Roger W. Briggs, Executive Officer

Subject: Los Osos Wastewater Facilities
Proposed Waste Discharge / Recycled Water Requirements

Dear Mr. Briggs,

These written comments and recommendations are filed on behalf of the Los Osos Community Services District in response to your letter dated September 6, 2002 regarding Proposed Waste Discharge / Recycled Water Requirements (WDR Order No. R3-2002-0108) for the Los Osos Wastewater Facilities. A review and written comments regarding the draft requirements were requested to be submitted to your office no later than October 6, 2002. This letter responds to your request. We request that this letter be made part of the Regional Board record and that copies be distributed to the Board members.

The District strongly supports the Regional Board's efforts to protect and remediate ground water and surface water quality related to discharges from individual and community sewage systems within portions of the Baywood Park/Los Osos area of San Luis Obispo County. As you know, the District continues to be committed to the successful planning, design, construction and operation of the proposed wastewater project. We are especially appreciative of the time and efforts that Sorrel Marks, Gerhardt Hubner, Brad Hageman, and you have taken to discuss with the community and the District the ongoing project needs and to help to provide solutions to community concerns.

Offices At:
2122 9th Street
Los Osos, California 93402

Mailing Address:
P.O. Box 6064
Los Osos, California 93412
Phone 805/528-9370
Fax 805/528-9377
www.losososcsd.org

Item No. 13 & 14 Attachment 3
February 7, 2003 Meeting
Los Osos CSD

LOCSD 10/3/02 LETTER TO RWQCB (CONTINUED)

The District's review of and comments on the draft Waste Discharge / Water Reclamation Requirements were assisted by the following individuals:

Rob Miller (JLWA) – LOCSD Engineer
Steve Hyland (MWH) – Project Manager.
Gary Grimm – Environmental Legal Counsel

A summary of the District's comments and recommendations is presented as follows:

1. Paragraph 2 – Note that the project latitude is 35° 18' 40" in lieu of 50° 18' 40".

2. Paragraph 3 – Recommend revising the third sentence to read: "The treatment plant's annual average flow is 1.4 million gallons per day (MGD), peak day flow is 1.6 MGD, and average daily dry weather flow is 1.3 MGD."

3. Paragraph 15 – Recommend changing the word "form" to "from" in the first sentence of the fifth subparagraph.

4. Paragraph 18 – Recommend that the following sentence be added to the first paragraph:

   "Order No. 00-131 provides that the Board may modify the time schedule in the Order to permit specified task or tasks to be completed at later dates if the Discharger demonstrates and the Board determines that the delay was beyond the reasonable control of the Discharger."

MONTGOMERY WATSON

[illegible]

January 10, 2002

03 JAN 10 PM 3:59

[illegible]

Mr. Roger Briggs
Executive Officer
California Regional Water Quality Control Board
Central Coast Region
895 Aerovista Place, Suite 101
San Luis Obispo, CA 93401-7906

Subject: Los Osos Community Services District
Los Osos Wastewater Collection, Treatment, and Disposal Project
January 2003 Quarterly Status Report

Dear Mr. Briggs:

This letter is the January 2003 Quarterly Status Report for the Los Osos Community Services District (District) wastewater project. The report describes the activities conducted during the months of October, November, and December, 2002. The report addresses litigation, project funding, Early Start activities, Final Design, Septic System Management Program, District Engineer activities, environmental and cultural activities, hydrogeological evaluation, public information program, and project schedule.

General

The State Water Resources Control Board (SWRCB) issued a Facilities Plan Approval (FPA) Amendment dated September 28, 2001.

The District voted on July 5, 2001 to award the design and construction management of the Los Osos Wastewater Project to Montgomery Watson Harza (MWH). The District approved Amendments No. 3, 4, 5, and 6 to the existing consulting services agreement with MWH for Early Start activities starting July 2001. The progress associated with the Early Start activities during the subject period is summarized below.

The LOCSD Board authorized execution of the final design contract on September 19, 2002 and issued notice to proceed for final design services on October 31, 2002. The progress associated with final design services during the subject period is summarized below.

1340 Treat Blvd.
Suite 300
Walnut Creek, California
94596

Tel: 925 933 2250/925 975 3400
Fax: 925 945 1760/925 975 3412

Servi

Item No. 13 & 14 Attachment 4
February 7, 2003 Meeting
Los Osos CSD

Litigation

Two lawsuits to stop the project were filed against the District. The Coleman vs. District suit filed in San Luis Obispo Superior Court was dismissed in July 2001 and the appeal period has expired. The Keller et. al. vs. District suit filed in US District Court was dismissed on September 18, 2001. The plaintiffs filed a motion on September 28, 2001 to disqualify the District Court Judge that rendered the order to dismiss the original suit. This motion to disqualify was denied on October 24, 2001 by the United States District Court.

The Keller et. al. plaintiffs subsequently filed an appeal in appellate court to overturn the dismissals. The appeal was heard in the Ninth Circuit Court of Appeals in Pasadena March 12, 2002 and denied on April 30, 2002. The plaintiffs subsequently filed a Petition for Rehearing with the Ninth Circuit Court of Appeals on May 7, 2002. The Petition for Rehearing was denied on June 6, 2002. The period for appeal with the US Supreme Court by the plaintiffs, their last legal recourse on this issue, expired on September 6, 2002.

The Citizens for Affordable and Safe Environment (CASE) have filed another lawsuit. The lawsuit is filed against the California Coastal Commission (CCC) as the respondent and also names the District as one of three real parties of interest. This lawsuit temporarily delayed the sale of bonds and issuance of notice to proceed with final design, but the District was able to surmount this difficulty. A motion to dismiss this lawsuit was filed by the CCC and the three parties of interest on December 23, 2002 in San Luis Obispo Superior Court. The Court is scheduled to conduct a hearing on this motion on January 29, 2003.

Project Funding

The District adopted Resolution 2001-24 on June 28, 2001 to form an Assessment District and to initiate the process for obtaining bond financing ($19,200,000). The District submitted a SRF Loan Application ($65,400,000) to the State Water Resources Control Board (SWRCB) on October 1, 2001.

A SRWCB workshop was conducted on January 9, 2002 for the Resolution Approving a Loan Commitment for the Los Osos Community Services District Wastewater Collection, Treatment, and Disposal Project, State Revolving Fund Loan Project No. C-04-4014-110. No public comment was received at this workshop. The Resolution was subsequently adopted at the SWRCB meeting held on January 23, 2002.

The District Board passed a resolution to move forward with the sale of bonds on August 15, 2002. With the favorable resolution of the Keller et. al. lawsuit, the District was able to execute the sale of bonds on October 31, 2002.

The District continues to pursue appropriations from Congress to assist funding the project. The District also continues to aggressively pursue additional funding sources

during Final Design. The District has applied for a $3,000,000 Proposition 50 grant and an application for a $1,000,000 Proposition 13 grant is pending.

The District has obtained approximately $3,000,000 from property owners who have elected to prepay their assessment in lieu of monthly user charges.

Early Start Activities

The District, with support from the District Engineer, Gary Grimm, and MWH, has reviewed the proposed Waste Discharge / Recycled Water Requirements submitted by your office in a letter dated September 6, 2002. Draft comments have been prepared and reviewed with Sorrel Marks and Gerhardt Hubner on October 2, 2002. A formal response letter was submitted to the RWQCB on October 3, 2002. The RWQCB is scheduled to review the Waste Discharge / Recycled Water Requirements for approval on February 7, 2003.

The District approved the inclusion of the Monarch Grove development and Sea Pines Golf Resort into the District on September 19, 2002.

Approximately 75 percent of the wastewater collection system has been surveyed to date as part of the Early Start activities. The marking of the location and depth of septic tanks was initiated by Al's Septic Pumping Service on behalf of the District on September 24, 2001. EDA and RRM crews commenced land surveying work the week of October 1, 2001. The septic tank survey work is scheduled to be completed at the end of February 2003.

Final Design

Final design work commenced on November 1, 2003. A summary of key activities conducted during this period is presented below by project components.

Task 1 - Project Management

- Completed general project mobilization of staff and resources at a new project office located at 1236 Los Osos Valley Road, Suite W.
- Executed contracts for engineering services with Brown-Buntin, EDA, Fugro, RMC, RRM, and Villalobos & Associates. Execution of contract for engineering services with Cleath & Associates is pending.
- Finalized revision of project schedule to reflect changes based on the actual notice to proceed for final design, accelerated SWRCB review and approval durations, and the desire of RWQCB to start construction in June 2004.
- Submitted the following deliverables:
  - CAD Drafting Guidelines
  - Wastewater Loading TM

- ♦ Design Criteria TM
- Met with SWRCB and RWQCB staff with Bruce Buel in Sacramento on December 2, 2002 to discuss project schedule revisions.
- Drafted contract amendment to address the inclusion of Monarch Grove / Sea Pines into the service area.
- Assisted pre-proposal meeting conducted on December 18, 2002 for Value Engineering consultant selection.
- Assisted preparation for public information efforts with Bruce Buel and Maria Singleton.

Task 2 – Collection System

- Conducted two-day work session on November 13 and 14 and on December 11 and 12 with John Bergen – Collection System Coordinator and the Team Leaders for collection system Area A, Area B, Area C, and Area D. Work sessions reviewed and developed design criteria and standards for the design of the collection system.
- The December 11 - 12 work session also included meeting with SLO County staff to discuss traffic and roadway coordination items and design requirements.
- Completed development of information for Design Criteria TM.

Task 3 – Pump Stations / Wells

- Completed development of information for Design Criteria TM.
- Gathered information regarding natural gas distribution system for possible fuel source for standby power.

Task 4 – Wastewater Treatment Facility

- Conducted meeting with SLO County staff on November 7 regarding coordination of potential shared parking area south of new library construction on the WWTF site.
- Conducted WWTF site tour on November 21 with Dennis Gellerman – WWTF Team Leader and Jerry Gantney – Civil Project Engineer. Addressed off-site drainage, on-site drainage, traffic requirements, earthwork balance, and related sitework issues. Subsequently met with RRM to discuss coordination of landscaping and architectural design.
- Conducted technical review session on December 12 with Don Bassett, Roger Stephenson, and Lea Fisher regarding process selection and layout.
- Conducted tour of Gilroy Wastewater Treatment Plant on December 9, 2002 with Rosemary Bowker, Gordon Hensley, and Liz Caldwell. Objective of site visit was to observe first-hand the potential odor associated with sludge and residuals (screenings and grit) operations utilizing similar equipment and processes proposed for the Los Osos WWTF.

- Conducted site visit of Pacifica Water Recycling Plant on December 9, 2002 to obtain information regarding odor issues.
- Completed development of information for Design Criteria TM.
- Completed gathering information for and preparing Wastewater Loading TM. Kristen Field visited the Central Coast RWQCB to obtain available data and contacted local agencies for supplemental data.

Task 5 – Effluent Disposal

- Conducted meeting on November 14 and December 5, 2002 with LOCSD and Cal-Cities staff to discuss water management issues related to effluent disposal and harvest water.
- Completed development of information for Design Criteria TM.

Task 6 – Support Services

- Started preparation of draft Geotechnical Report.

Septic System Management Program

The District's Septic System Management Program (SSMP) will provide the requirements and guidelines for the management of on-site septic systems for every residence that will not be served by District's wastewater treatment facility or the Monarch Grove treatment facility. The SSMP will be developed to meet the requirements of AB 885. AB 885 requires the SWRQB to adopt regulations or standards for on-site septic systems by January 1, 2004. The bill addresses ongoing contamination of coastal waters by leaking or poorly functioning on-site wastewater treatment systems.

The District activities for the SSMP this quarter are summarized as follows:

- The SSMP Subcommittee of the Wastewater Committee continued to develop a draft SSMP Ordinance. The draft will be tailored to meet the needs of the community of Los Osos and comply with SB 885.

- The draft SSMP Ordinance will be submitted to RWQCB for review and concurrence; then brought to the Wastewater Committee for review and approval; and then forwarded to the District Board for review, approval, and ultimate adoption.

District Engineer Activities

John L. Wallace & Associates (JLWA) serves as District Engineer to provide support services for water, wastewater, and drainage issues. Activities for the Los Osos Wastewater Project for this quarter are summarized as follows:

- Continued assistance with property and easement acquisition for future wastewater facilities.

- Continued preparation of lot splits and other modifications for the Assessment District.

- Attended collection system workshops.

- Reviewed Technical Memoranda and other design team submittals.

- Assisted District with scope and selection process for Value Engineering.

- Provided design team with background information and related technical data.

Environmental and Cultural Activities

Crawford, Multari, Clark, & Associates (CMCA) continued to conduct environmental activities on behalf of the District. Activities for this quarter are summarized as follows:

- Coastal Development Permit and General Plan Amendment (GPA) – The GPA went before the Coastal Commission the week on August 8, 2002 in San Luis Obispo. The amendment was modified (minor clarification), and the modification approved by the Commission. The amendment was ratified by the Board of Supervisors in October and sent back to the Executive Director of the Coastal Commission for final acknowledgement. A lawsuit was filed by CASE challenging the amendment. The District responded to the court requesting a dismissal because the filing was untimely. According to Coastal Commission staff, the judicial appeal period (90 days) for the GPA begins with the final acknowledgement of the Commission. After this, the District will prepare an application for the Coastal Development Permit to the County that will include the preliminary (approximately 30 percent) design submittal for the Wastewater Project. The CDP will go to the County Planning Commission in Spring 2003. This permit can be appealed to the Coastal Commission.

- Habitat Conservation Plan - CMCA continues to work with the multi-agency committee (US Fish & Wildlife Service (USFWS), California Department of Fish & Game (CDFG), California Coastal Commission, and San Luis Obispo County) towards the preparation of a regional Habitat Conservation Plan (HCP) that will conform to CEQA mitigation requirements. A Memorandum of Understanding that discusses roles and responsibilities amongst the various participants will be heard by the Board of Supervisors on January 28, 2003. After execution of the MOU, formal application for the HCP can begin.

- Cultural Resources – CMCA subcontracted with Far Western Anthropological Research Group to complete the Section 106 consultation under the National Historic

Preservation Act. The State Historic Preservation Office (SHPO) has accepted for review the archaeological program needed during construction of the Wastewater Project.

- CEQA – During preparation of the preliminary (30 Percent) design, CMCA will re-open the CEQA process, if required, to modify the Final EIR.

- Endangered Species Act – Consultation with the USFWS regarding the Section 7 Permit for the Wastewater Project including the Broderson site (effluent disposal) and the Tri-W site (WWTF) continues. Approval to conduct a prototype percolation field testing program at the Broderson effluent disposal site is being handled under a prior consultation.

Hydrogeological Evaluation

Cleath & Associates (C&A) continued to provide hydrogeological engineering services on behalf of the District. Activities for this quarter are summarized as follows:

- Published results of Summer 2002 Nitrate Monitoring program.

- Assisted District personnel with Fall 2002 groundwater sampling for the Nitrate Monitoring Program.

- Received contract with District for calibration of solute transport addition to the Groundwater Basin Management Plan model. Currently refining calibration options with assistance from Waterloo Hydrogeologic, Inc (Canada).

- Submitted proposals to District for harvest well design and construction and for investigating potential impacts from wastewater disposal on water levels at Scenic Way.

Public Information and Media Relations Program

Singleton^2 & Associates (S^2&A) continued to provide consultation services to the District in the areas of community, media, and governmental relations. Activities for this quarter are summarized as follows:

- Proactive coordination of media coverage on numerous issues/events with the following outlets: the Sun Bulletin, The Tribune, Bay News, New Times, KVEC Radio, and KSBY TV.

- Facilitated Editorial Board meeting in November with staff from The Tribune.

- Issuance of press releases to local media on the following topics: Sale of Bonds, Growth Cap Workshops, $2 Million Grant, Purchasing of Broderson property, Filing of Motion to Dismiss, Sylvia Smith's Retirement, Swearing in of Board Members.

- Coordination of media interviews related to various issues.

- Preparation of standby statements for various Project issues.

- Assistance with copy and editing of Bear Pride's Winter Issue.

- Assistance with Strategic Planning and External Relations related to numerous issues for the Wastewater Project.

- Assistance with the development of Wastewater Conservation Fixture and Low Income Assistance Programs to be offered by the District in 2003.

- Assistance with organizing an Open House of the Los Wastewater Project Office to be hosted by the LOCSD and MWH and held on 2/03.

- Participation in bi-weekly Wastewater Project Team meetings.

- Attendance and review at the LOCSD Board Meetings and workshops to provide comments, observations and recommendations for improvement.

- Development of Phase II Public Information and Media Relations Program (PIMRP) for Final Design of Wastewater Project. LOCSD Board approved a one-year contract with S^2 & Associates to execute the Phase II PIMRP on November 21, 2002.

- Initiate design of the Phase II Public Information and Media Relations Program with General Manager.

Project Schedule

A meeting was conducted in Sacramento on December 3, 2002 with Diana Robles and Leo Sarmiento – SWRCB, Gerhardt Hubner – RWQCB, Bruce Buel – LOCSD, and Steve Hyland – MWH to discuss the project schedule and update the SRF Loan Resolution. The SWRCB staff agreed to accelerate the time needed for review and approval of project documents. The accelerated review process can be accommodated provided that coordination meetings with progress submittals at key milestones are conducted with SWRCB, RWQCB, and MWH staff.

The project schedule has been revised to reflect the actual notice to proceed for final design, the accelerated review process by the SWRCB staff, and the desire of the

RWQCB to start construction in early Summer 2004. The current project schedule and list of deliverables are attached for reference.

Closing

The District remains committed to completing Los Osos Wastewater Project as soon as possible. The resolution of the Keller et. al. lawsuit, the sale of bonds, and the subsequent authorization to start final design are major accomplishments.

The District appreciates the cooperation and understanding of you and your staff in the development and implementation of this project. The District is especially appreciative of the continued assistance of Gerhardt Hubner and Sorrel Marks.

We look forward to continuing to work with you on this challenging and important project. Please contact Bruce Buel at (805) 528 – 9370 or Steve Hyland at (805) 528 - 9385 if you have any questions.

Sincerely,

Steve Hyland

Steve Hyland
Project Manager

c. Bruce Buel – LOCSD
Gary Grimm
Rob Miller - JLWA
Chris Clark – CMCA
Maria Singleton – S^2&A
Tim Cleath / Spencer Harris – C&A
Vanessa Nishikawa – MWH

Project Schedule

Description	Interval (Weeks)	Date
Start Design Services		October 31, 2002
Complete Surveying (a)		March 21, 2003
Submit Prelim. Design (30 Percent)	25	April 28, 2003
Re-initiate §7 Consultation w/USFWS		May 1, 2003
Initiate CEQA review (if necessary)		May 1, 2003
SWRCB / RWQCB Presentation (b)	1	May 2, 2003
Conduct VE Study	1	May 5 - 9, 2003
Receive VE Report	1	May 16, 2003
Submit Draft VE Response Report LOCSD 30 Percent Review Comments	1	May 23, 2003
Conduct Community Workshops	1	May 27 - 29, 2003
Conduct VE Coordination Meeting (c)		May 30, 2003
Debrief LOCSD Board Approve VE Disposition Resume Detailed Design	1	June 05, 2003
Submit Final VE Response Report		June 13, 2003
Coastal Development Permit Planning Commission Hearing		June Hearing Date (TBD)
Submit 50 Percent Submittal	14	September 15, 2003
SWRCB / RWQCB Presentation (b)	1	September 22, 2003
LOCSD 50 Percent Review Comments	1	September 29, 2003
Coastal Development Permit Coastal Commission Hearing		November Meeting
Submit 90 Percent Submittal	14	January 5, 2004
SWRCB / RWQCB Presentation (b)	1	January 12, 2004
Conduct Community Workshop		January 14, 2004
LOCSD 90 Percent Review Comments	1	January 19, 2004
Debrief LOCSD Board Authorize Eligibility Determination	1	January 22, 2004
Submit 100 Percent Submittal	3	February 16, 2004
SWRCB Approval of Documents	2	February 27, 2004
Advertise for First Phase Bids	0	March 01, 2004
Open First Phase Bids	7	April 14, 2004
Submit ATA Package to SWRCB	3	May 10, 2004
SWRCB ATA Construction Contract	2	May 24, 2004
Start First Phase Construction (NTP)	4	June 28, 2004

(a) Predicated on resuming and completing second phase of septic tank surveying on October 07, 2002 and March 21, 2003 (24 weeks), respectively.
(b) Presentation of design submittal documents by MWH to SWRCB and RWQCB staff.
(c) Coordination meeting with LOCSD, SWRCB, RWQCB, and VE staff to finalize disposition of VE recommendations.

Deliverables

Description	Copies	Schedule (a)
General		
Monthly Status Reports	1	Monthly
RWQCB Quarterly Reports	1	Quarterly
Preliminary (30 Percent) Design (b)		
CAD Drafting Guidelines	10	Dec 02, 2002
Design Criteria TM	10	Dec 16, 2002
Wastewater Loading Technical Memorandum	1	Dec 16, 2002
Energy Generation Evaluation	1	Jan 27, 2003
Water Management Technical Memorandum	1	Jan 27, 2003
Draft Geotechnical Report	10	Jan 27, 2003
Corrosion Report	10	Jan 27, 2003
Area Classification TM	10	Jan 27, 2003
SCADA Architecture TM	10	Jan 27, 2003
Acoustical Report	10	Feb 03, 2003
Architectural Code Study	10	Feb 03, 2003
Erosion Control Plans	1	Feb 03, 2003
Reclaimed Water Engineering Report	1	Mar 03, 2003
3D Model Visuals	25	Apr 28, 2003
List of Grinder Pump Parcels	1	Apr 28, 2003
Preliminary (30 Percent) Design Submittal	10	Apr 28, 2003
Preliminary Construction Cost Estimate	10	May 12, 2003
50 Percent Design Submittal (c)		
Potholing Plan	1	May 19, 2003
50 Percent Design Submittal	10	Sep 15, 2003
50 Percent Construction Cost Estimate	10	Oct 6, 2003
90 Percent Design Submittal (d)		
90 Percent Design Submittal	10	Jan 5, 2004
Final Geotechnical Report	10	Jan 19, 2004
90 Percent Construction Cost Estimate	10	Jan 26, 2004
Design Review Board Application	10	Jan 12, 2004
Final (100 Percent) Design Submittal (e)		
Final (100 Percent) Contract Documents	200	Feb 16, 2004
Final (100 Percent) Construction Cost Estimate	10	Mar 1, 2004

State W. er Resources Control oard

Division of Financial Assistance

1001 I Street • Sacramento, California 95814 • (916) 341-5700 FAX (916) 341-5707
Mailing Address: P.O. Box 944212 • Sacramento, California • 94244-2120
Internet Address: http://www.swrcb.ca.gov

Winston H. Hickox
Secretary for Environmental Protection

Gray Davis
Governor

The energy challenge facing California is real. Every Californian needs to take immediate action to reduce energy consumption. For a list of simple ways you can reduce demand and cut your energy costs, see our website at www.swrcb.ca.gov.

FEB - 7 2003

Mr. Bruce Buel
General Manager
Los Osos Community Services District
P. O. Box 6064
Los Osos, CA 93412

Dear Mr. Buel:

REQUEST FOR SUNSET DATE EXTENSION; LOS OSOS COMMUNITY SERVICES DISTRICT (DISTRICT); WASTEWATER FACILITIES PROJECT (PROJECT); STATE REVOLVING FUND LOAN PROJECT NO. C-06-4014-110

Thank you for your letter of January 13, 2003, requesting an extension to the September 11, 2003, sunset date for initiation of construction of the District's project. State Water Resources Control Board's (SWRCB) Resolution No. 2002-020, committing preliminary SRF loan funds to the District expires unless the District initiates construction by September 11, 2003. Due to legal delays of the District's project, the District is proposing to initiate project construction by June 28, 2004.

Based on our review and in consultation with Central Coast Regional Water Quality Control Board staff, we will recommend approval of your extension request to the SWRCB at the July 2003 Board meeting. An amended Facilities Planning Approval letter reflecting the changes in the Project's milestone schedule will be issued accordingly.

If you have any questions regarding this letter, please contact Mr. Leo Sarmiento at (916) 341-5830 or sarmienl@swrcb.ca.gov.

Sincerely,

Diana Robles

Diana Robles, P.E.
Senior WRC Engineer

cc: Mr. Gerhardt Hubner
Ms. Sorrel Marks
Central Coast Regional Water Quality Control Board
895 Aerovista Place, Suite 101
San Luis Obispo, CA 93401

Waste Discharge/Recycled Water Requirements for Los Osos CSD Wastewater Project

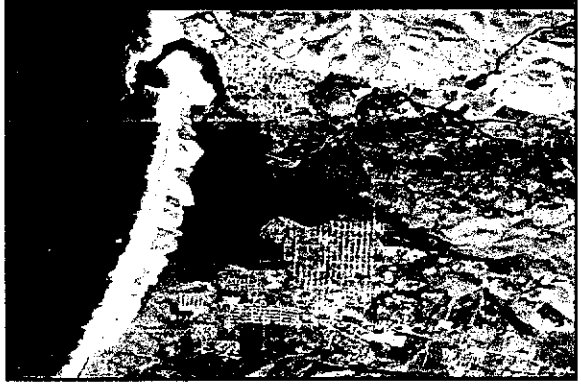
Item Nos. 13 and 14
February 7, 2003

Staff Report by
Gerhardt Hubner - Senior Eng. Geologist
and
Sorrel Marks - Sanitary Engineering Associate

Los Osos Wastewater Project Presentation Overview

- *Background*
- *Current Project Status*
- *Project Description*
- *CEQA Resolution*
- *Proposed Discharge & Reuse Requirements*
- *Monitoring & Reporting Program*
- *Response to Comments*
- *Summary*

Los Osos Community & Morro Bay



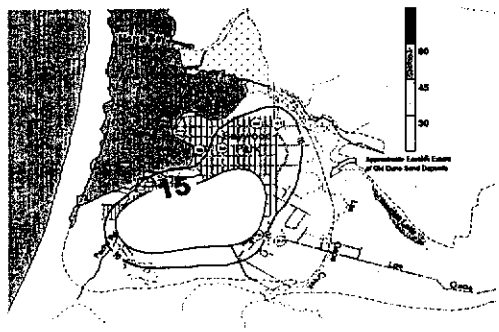
Water Quality Problems

- *Population 15,000 using septic systems*
- *High density - small lots*
- *Seepage pits in ground water*
- *Beneficial Uses impaired*
- *Sole source of drinking water*
- *Use shifted to deeper zones*

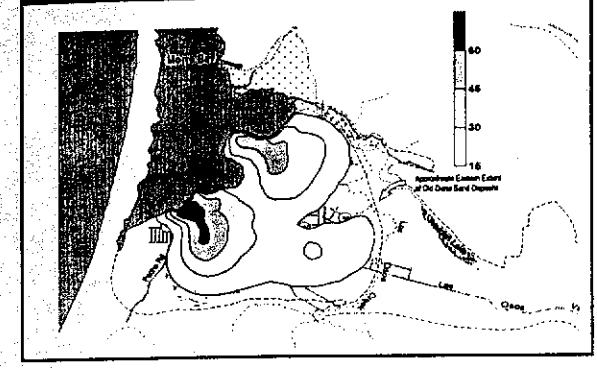
Water Quality Problems

- *1 MGD being discharged*
- *Seawater intrusion in deeper zone*
- *Public health threat from surfacing ground water*
- *Sampling of ground water seeps indicates high number of bacteria - DNA testing confirmed human origin of bacteria*

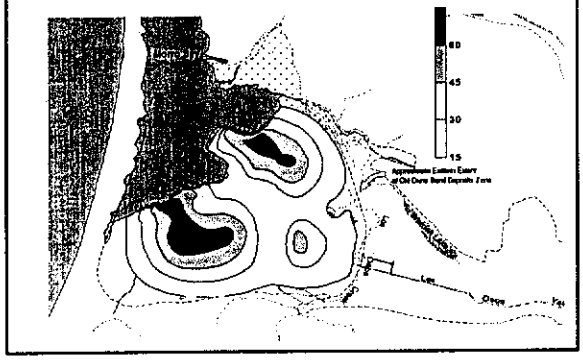
Average Nitrate Concentrations Upper Aquifer: 1954-1973



Average Nitrate Concentrations Upper Aquifer: 1974-1984



Average Nitrate Concentrations Upper Aquifer: 1985 - 1994



Nitrate Concentrations - Upper Aquifer Summer 2002

Regional Board Actions in Los Osos

- *Res. No. 83-13 prohibits on-site discharges*
- *Complete prohibition in 1988*
- *County project, issued CDO and TSO, CSD takes over project in 1998*
- *CDO issued to CSD in 1999*
- *Time Schedule Order No. 00-131*
- *Priority grant & loan funding*
- *(Today) WDRs to facilitate design work*

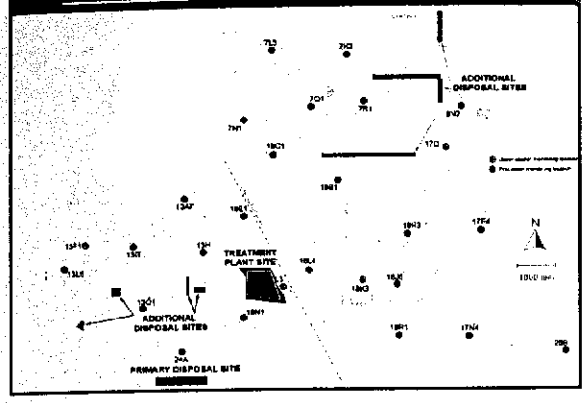
Los Osos Wastewater Project Status

- *Final EIR certified: 4/2001*
- *Facilities Plan approved: 9/2001*
- *Assessment District (86% approval): 7/2001*
- *Coastal Commission Approval for WWTP site*
- *Bonds sold 10/2002*
- *Design Phase 2002-2003*
- *Construction begins 2004*

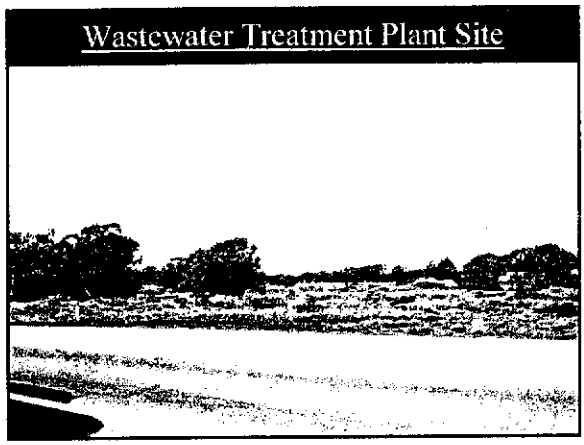
CEQA Findings and Mitigation Monitoring Program

- *Resolution to be considered today*
- *CEQA findings and mitigation measures*
- *Issues within the Regional Board's authority*
- *Mitigation Monitoring Program*

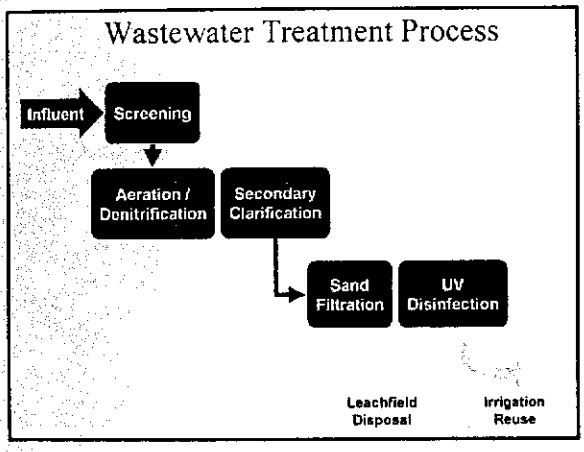
Los Osos Monitoring Well Location



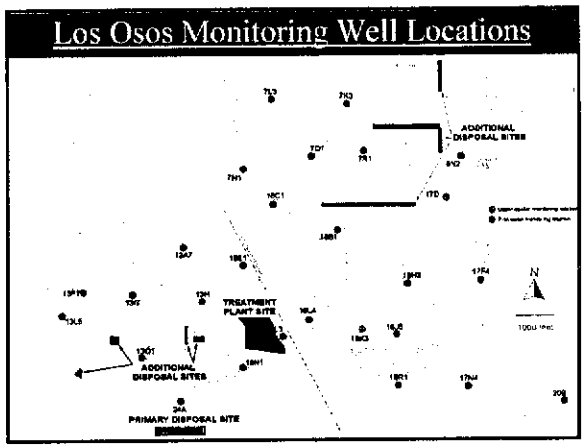
Wastewater Treatment Plant Site



Wastewater Treatment Process



Los Osos Monitoring Well Locations



Main Leachfield Disposal Site

Proposed Requirements

- *Prohibitions: Authorized discharge only*
- *Effluent Limitations: Settleable Solids, BOD, Suspended Solids, Nitrogen*
- *Recycled Water Specifications: (Title 22)*
- *Receiving Water Limitations: Ground water protection and restoration*
- *Provisions: Monitoring, reporting, biosolids management, on-site management plan*

000177

Monitoring & Reporting Program

- *Influent and Effluent Monitoring*
- *Recycled Water Monitoring*
- *Ground Water Monitoring Well Network (Basin-wide)*
- *Biosolids Monitoring*
- *Reporting Program (RWQCB and DHS)*

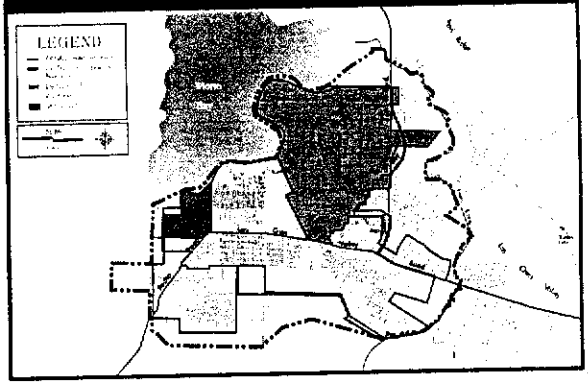
Comments on Draft Order

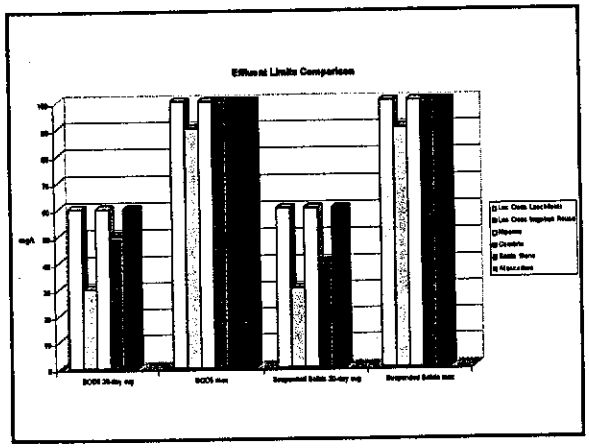
- *Public Notice*
  1. *RWQCB Web site*
  2. *Media*
  3. *150 + by mail*
- *Comments Received*
  - *CSD, DHS, MBNEP support adopting WDR*
  - *Resident Mr. Al Barrow requests re-evaluation of project alternatives*

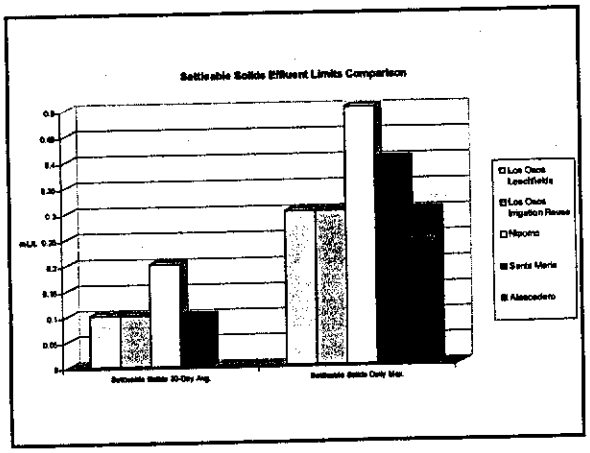
Comments on Draft Order

- *Cal Cities (1 of 3 water purveyors) requests:*
  - *Call this a GW Recharge Project*
    Response – Disposal Project not Recharge
  - *Incorporate draft DHS requirements*
    Response – Draft Regulations are draft and don't apply
  - *Water supply management*
    Response – Not within Regional Board's Jurisdiction
  - *Modified WDR Modifications unspecified and Project*
    Response – Project has been in development for over four years undergone numerous evaluations and revisions and subject to public comment
  - *Consistency with other Projects*
    Response – See Graphs

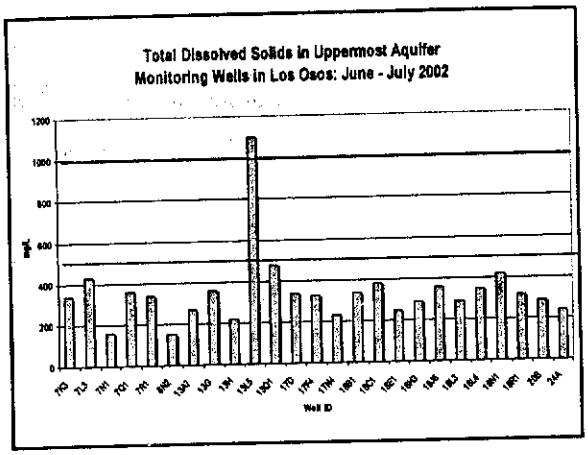
Water Purveyor Service Areas

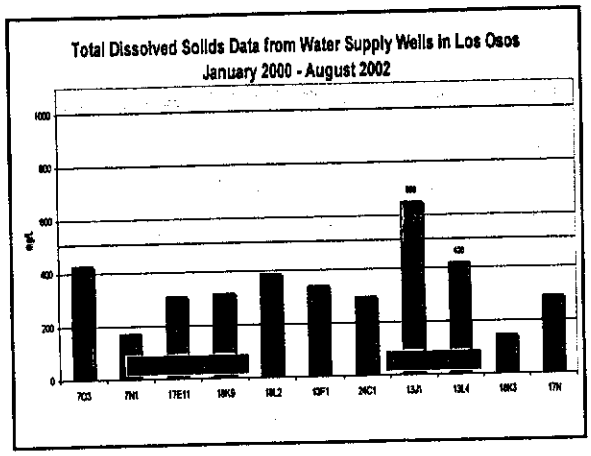


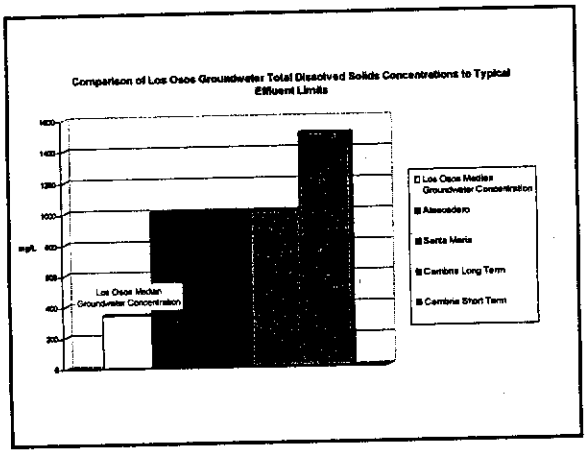




000178







Comments and Responses

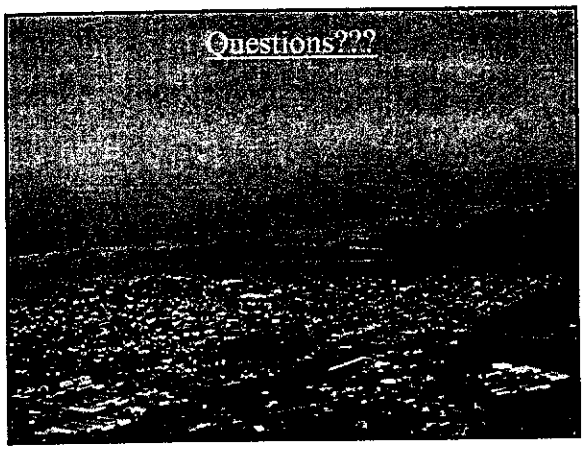
- *January 24, 2003 meeting - CSD, DHS, Cal Cities*
- *Staff Responses summarized in Staff Report & Supplement Sheet*
- *Supplemental Sheet proposed changes to Findings No. 1 and 13 to clarify purpose and type of project*

Summary

- *Community has developed a technically and environmentally sound project*
- *Proposed WDR Order designed to protect and restore beneficial uses of surface and ground water and protect public health*
- *Adoption of WDR Order will facilitate final design*
- *One more step toward resolving 3-decade old water quality issue*

Recommendation

- *Adopt Mitigation Findings and Mitigation Monitoring Program Resolution No. R3-2003-0006 (Item No.13)*
- *Adopt Waste Discharge/Recycled Water Requirements Order No. R3-2003-0007 (Item No. 14); including Changes proposed in Supplemental Sheet*



Priority Pollutant Monitoring

Add to Monitoring and Reporting Program (page 2)

Ground Water Monitoring

"Representative ground water samples shall be collected from Well No. 24A and analyzed for Priority Pollutants annually, with data reported in the Annual Summary Report."

West Basin Municipal Water District

Purpose: Replace potable water used for seawater intrusion barrier (caused by historical overpumping), with blended source.

Components:

- *Secondary and tertiary treated wastewater blended with potable water*
- *RO treatment of 5 MGD for blending*
- *RO brine discharged to 5-mile long ocean outfall*
- *17 MGD injected directly into ground water basin*
- *Total Nitrogen limit 10mg/l (annual average)*

Water Replenishment District (Montebello Forebay)

Purpose: Receive multiple sources of water for recharge of ground water

Components:

- *Treated wastewater (secondary plus media filtration and disinfection (NPDES discharge) sent to spreading basins*
- *Reclaimed water from multiple sources - Blended water (effluent, rising ground water, urban runoff, purchased imported water)*
- *Existing permit from 1991, implements existing DHS regs.*
- *Nitrogen limit (Nitrate + Nitrite): 10mg/l*

East Valley Water Recycling Project

Purpose: Ground water recharge demonstration project - Discontinued due to expense, failure to meet requirements and public pressure

Components:

- *Tertiary effluent discharged to LA River, reused for irrigation or blended for recharge*
- *Shallow basins (used since 1944) to infiltrate runoff and blended water*
- *Blending used to meet Total Nitrogen limit 10mg/l*
- *Cost of RO estimated at $150 million (not included)*

Dublin/San Ramon Services District

Purpose: Originally constructed for ground water recharge. Never operated as a recharge project as originally intended. Water used for irrigation

Components:

- *Tertiary treated and disinfected wastewater*
- *Title 22 criteria for irrigation reuse, without RO treatment.*