



California Regional Water Quality Control Board
Central Coast Region



Linda S. Adams
Acting Secretary for
Environmental Protection

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Edmund G. Brown Jr.
Governor

February 9, 2011

Mr. John Waddell
County of San Luis Obispo, Public Works Department
County Government Center, Room 207
San Luis Obispo, CA 93408

Dear Mr. Waddell:

**NOTICE OF AVAILABILITY OF DRAFT WASTE DISCHARGE REQUIREMENTS FOR
THE COUNTY OF SAN LUIS OBISPO, LOS OSOS WATER RECYCLING FACILITY,
SAN LUIS OBISPO COUNTY**

This letter is intended to notify you of the availability of draft Waste Discharge Requirements for the County of San Luis Obispo's Los Osos Water Recycling Facility, Draft Order No. R3-2011-0001 for review and comment. The Draft Order and staff report are available online at
http://www.waterboards.ca.gov/centralcoast/board_decisions/tentative_orders/index.shtml.

Persons wishing to comment on the proposed Order must submit comments in writing to the letterhead address no later than 5:00 pm on **March 11, 2011**. All comments received prior to that date will be considered in the formulation of staff recommendations regarding the waste discharge. The Central Coast Water Board will not accept written comments on the proposed Order after 5:00 pm on **March 11, 2011**, unless the Chair rules that exclusion would create a severe hardship and that the late submission will not prejudice any party or the Water Board. Any person asking to submit late materials must explain why the materials were not submitted earlier. The Chair will rule at or before the hearing. Late submissions that consist of evidence (as opposed to policy statements or comments) are generally prejudicial unless all designated parties and Water Board staff have time to consider the evidence before the meeting.

The Water Board will hold a public hearing to consider adoption of proposed Order No. R3-2011-0001 on **May 5, 2011**, during a regularly scheduled meeting at the Water Board's office in San Luis Obispo. Interested persons are invited to attend the hearing and will have the opportunity to make oral comments on the proposed Order. For the accuracy of the record, all important testimony should be submitted in writing. The Board Chair will limit time for oral comment, generally three minutes.

All documents relevant to the proposed Order are available for review and copying at the office of the Central Coast Water Board, 895 Aerovista Place, Suite 101, San Luis Obispo, California 93401-5427, on weekdays between the hours of 8:00 a.m. and 5:00 p.m. Please bring the foregoing to the attention of any persons known to you who would be interested in this matter.

If you have questions, please call **David LaCaro at 805-549-3892** or Harvey Packard at 805-542-4639.

Sincerely,


for Roger W. Briggs
Executive Officer

Attachments:

1. Draft Staff Report for Order No. R3-2011-0001
2. Draft Order No. R3-2011-0001 with Monitoring & Reporting Program
3. Central Coast Water Board Standard Provisions

cc (Email):

Pavvo Ogren, SLO County Public Works Director (pogren@co.slo.ca.us)
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Dan Gilmore, Los Osos CSD (dgilmore@losososcsl.org)

cc (Mail):

Los Osos IPL

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

STAFF REPORT FOR REGULAR MEETING OF MAY 5, 2011

Prepared on February 8, 2011

ITEM NUMBER: **XX**

SUBJECT: **Waste Discharge Requirements for the County of San Luis Obispo, Los Osos Water Recycling Facilities, San Luis Obispo County (Order No. R3-2011-0001)**

KEY INFORMATION

Facility Name	Los Osos Water Recycling Facility
Facility Owner:	County of San Luis Obispo
Location:	2300 Los Osos Valley Road, Los Osos, CA 93402
Discharge Type:	Municipal/Domestic
Design Capacity:	1.2 MGD Annual Average
Treatment Type:	Extended Aeration with Tertiary Filtration
Disposal:	Leachfield, urban reuse, and agricultural reuse
Recycling:	Future plans, but Discharger has not yet developed Engineering Report
This Action:	Adopt Order No. R3-2011-0001

SUMMARY

The County of San Luis Obispo (County) proposes to construct a wastewater collection, treatment, disposal and recycling system to serve the communities of Los Osos and Baywood Park. The Los Osos Water Recycling Facility (WRF) is intended to result in compliance with an onsite wastewater system prohibition set forth in Resolution No. 83-13 found in the Water Quality Control Plan (Basin Plan) for the Central Coast Region. The proposed Waste Discharge Requirements Order (Order) is specific to the treatment, disposal, and reuse of the Los Osos WRF.

PURPOSE

The design and construction of the wastewater treatment system for the community of Los Osos has been a controversial issue for nearly three decades. Due to AB 2701¹, the County plans to design and construct a community-wide wastewater treatment facility capable of 1) addressing the current water quality issues, 2) allowing an opportunity for urban and agricultural water reuse, and 3) providing a major step in water balance in the Los Osos groundwater basin. The County is eager to obtain waste discharge requirements from the Central Coast Water Board as such requirements will facilitate funding from the State Water

¹ [ftp://leginfo.public.ca.gov/pub/05-06/bill/asm/ab_2701-2750/ab_2701_bill_20060920_chaptered.pdf](http://leginfo.public.ca.gov/pub/05-06/bill/asm/ab_2701-2750/ab_2701_bill_20060920_chaptered.pdf)

Board and allow final design work on the wastewater collection, treatment, disposal and recycling facilities.

DISCUSSION

The Setting – The Los Osos/Baywood Park 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, onsite 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 groundwater varies throughout the community; however, in shallow areas many of the seepage pits and leach fields discharge directly to groundwater.

Treatment Facilities - The proposed treatment facility will be located at 2300 Los Osos Valley Road. The proposed treatment system consists of bar screens, secondary treatment (parallel oxidation ditches), secondary clarification, tertiary filtration, and ultraviolet disinfection. Solids will be thickened then mechanically dewatered and disposed of at an approved biosolids disposal site. The facility will also include a septage receiving holding tank to meter septage into the wastewater treatment process. The septage holding tank will be used only for sources within the Los Osos area that are not served by the community wastewater treatment facility. The treatment plant's annual average flow design capacity is 1.2 million gallons per day. A diagram of the treatment processes is shown on Attachment B of the Order.

Disposal and Reuse - Treated municipal wastewater will be discharged to leachfields, urban landscape irrigation, and agricultural irrigation (disposal and reuse areas are depicted on Attachment C). The Discharger included a list of areas proposed for disposal in its report of waste discharge application.

- Discharge Point 1: agricultural reuse irrigation at 25 different locations.
- Discharge Point 2: Broderson leach field.
- Discharge Point 3: Bayridge Estates leach field at two locations.
- Discharge Point 4: urban reuse irrigation at 10 different locations.

Details of the Discharger's reuse program are not yet available; therefore, general reclamation requirements are included in this Order as guidance for development of that program and may be updated and/or revised to address reuse program specifics.

General Groundwater Characteristics - The Los Osos Basin covers approximately 10 square miles, of which approximately 6.7 square miles underlie

Los Osos, Baywood Park, and the Los Osos Creek Valley. The groundwater basin is bounded to the north, east, and south by relatively impermeable bedrock formations and to the west where the aquifers crop out on the ocean floor. The fresh water portion of the basin is defined by the saltwater/fresh water interface, which has moved onshore. In the deepest portions of the basin, the fresh water-bearing deposits extend to depths of approximately 700 feet below sea level. Previous studies have identified six aquifer zones in the Los Osos Basin, which include the unconfined alluvial aquifer in the Los Osos Creek Valley and five interbedded aquifer zones designated in previous reports as Zones A through E. The aquifer zones include: 1) the unconfined perched aquifer (Zone A), 2) the upper transitional aquifer (Zone B), 3) the upper main supply aquifer (Zone C), and the lower aquifers (Zones D and E). The upper and lower aquifer systems are separated by a regional aquitard that averages approximately 50 feet in thickness².

Water Production and Seawater Intrusion - Domestic water supply for the Los Osos community is produced by three main water purveyors: Golden State Water Company (GSWC), Los Osos Community Services District (LOCSD), and S and T Mutual Water Company (S&T). Additional drinking and irrigation water comes from individual private wells, mostly in outlying rural areas. Under supervision of San Luis Obispo County Superior Court, the three main water purveyors and the county entered into an Interlocutory Stipulated Judgment (ISJ) on August 5, 2008. The ISJ allows for the parties to cooperatively assess, develop, and implement a plan to address water rights and use in the Los Osos Basin. The County's participation in the ISJ working group allows coordinated efforts between the construction of the wastewater project and water management in Los Osos.

The ISJ working group notified the public of its efforts through the May 5, 2010 Los Osos Groundwater Basin Plan Update. The May 2010 update included a discussion of Los Osos Basin characteristics, the basin's safe yield, and current seawater intrusion. The update also included various activities that the ISJ working group will investigate and consider to balance the basin. Further, the ISJ working group plans to incorporate these actions as part of the subsequent Los Osos Groundwater Basin Management Plan (BMP). According to the May 2010 update, the seawater wedge has extended into the lower aquifer through "fingers" at a rate of 700 feet per year. These data were analyzed from 2005 through 2010. The May 2010 Los Osos Groundwater Basin Plan Update is available at the following website:

[http://www.losososcsd.org/Library/Document%20Library/groundwaterbasinupdate5-4-2010\[1\].pdf](http://www.losososcsd.org/Library/Document%20Library/groundwaterbasinupdate5-4-2010[1].pdf)

Water Board staff recognizes that wastewater management in combination with groundwater basin management, conservation practices, and water reuse constitute the model for new wastewater projects within the Central Coast

² Cleath & Associates, Sea Water Intrusion Assessment and Lower Aquifer Source Investigation of the Los Osos Valley Groundwater Basin, San Luis Obispo County, California, Prepared for the Los Osos Community Services District, Dated October 2005.

Region as well as the state. The proposed Order supports the wastewater management and reuse components of comprehensive water quality management in Los Osos.

PROPOSED REQUIREMENTS

Consistent with Water Code, Division 7, including sections 13263 and 13523, 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 the Central Coast Region and designed to protect water quality for existing and anticipated beneficial uses of surface waters and groundwaters 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 (1.2 million gallons per day) and constituent concentrations common for subsurface disposal (settleable solids, suspended solids and biochemical oxygen demand) to ensure long-term function of the disposal system. An effluent limitation for nitrogen of 7 mg/L as N monthly average and 10 mg/L as N daily maximum is proposed to ensure protection and ultimate restoration of underlying groundwater. The state drinking water standard for nitrate is 10 mg/L as N. Therefore, effluent concentrations of 7 mg/L as N will eventually lead to restoration of groundwater to drinkable quality with some margin of safety (due to effluent limit being lower than drinking water limit, and dilution with other sources of groundwater).

Recycled Water Specifications - The County ultimately plans to reuse treated wastewater for urban and agricultural 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, Division 4, Chapter 3 of the California Code of Regulations and designed to protect water quality and public health. The facility is design to meet recycled water specifications of 2.2 most probable number per 100 liters for total coliform. Meeting these recycled water specification will protect water contact beneficial use objectives as well as public health standards for unrestricted recycled water use. Details of the County's recycled water project are not yet complete. In accordance with Title 22 requirements, 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 entirely) be submitted for approval of the Executive Officer after consultation with State Department of Public Health prior to reuse activities.

Once the engineering report is approved, with consultation by the State Department of Public Health, staff anticipates issuing master reclamation requirements to regulate the end use of the recycled water.

Receiving Water Limitations – Groundwater is the receiving water for the proposed discharge. As described above, much of the shallow zone of the Los Osos groundwater basin is degraded due to excess nitrate. The proposed community wastewater treatment system is specifically designed to reduce nitrate loading to groundwater and reduce nitrate levels in the long term. Receiving water limitations in the proposed Order do not allow the discharge to degrade groundwater compared to historical (pre-discharge) conditions. 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 groundwater, which ultimately discharges to surface waters of Morro Bay and creeks tributary to Morro Bay.

Provisions – The proposed Order requires compliance with a monitoring and reporting program and the Water Board's standard provisions for waste discharge requirements. Provisions regarding proper disposal of biosolids, nuisance prevention and public safety are also included in the proposed Order. The Order requires the development of a strategy to develop and implement an onsite wastewater management plan to ensure ongoing operations, maintenance and monitoring of onsite systems within the unsewered areas of the community. The Order also requires the County to participate in a basin-wide stakeholder group that will develop and implement a salt and nutrient management plan as required by the State Water Board's Recycled Water Policy.

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

The following table presents the most recent groundwater quality data available from wells screened in the uppermost aquifer in Los Osos. Well locations are depicted on Attachment D. Similar to historical data, the monitoring data continue to show groundwater impaired by nitrate (17 wells exceed the Maximum Contaminant Level (MCL) of 10 mg/L as N for drinking water and one well is at the MCL). Four wells have concentrations approaching the MCL. As indicated above, historically, shallow groundwater was the predominant source of domestic supply for Los Osos. However, due to nitrate contamination in the shallow zones, groundwater production has shifted to the better quality, deeper zones.

Los Osos Upper Aquifer Groundwater Quality

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
7K	51.17	11	10/26/2006	17F4	na	0.6	10/26/2006
7L3	36.46	23	10/24/2006	17N4	20.75	5.6	10/25/2006
7N1	6.25	29	10/18/2006	18A	na	11	10/26/2006
7Q1	2.67	21*	10/18/2006	18B1	17.83	7.0	10/26/2006
7R1	21.0	13	10/26/2006	18C1	16.21	14	10/24/2006
8N2	34.35	1.2	10/27/2006	18E1	24.0	7.9	11/1/2006
8Ma	39.83	4.2*	10/25/2006	18F1	95	5	5/8/2006
8Mb	40.17	18*	10/25/2006	18J6	19.50	1.9*	10/19/2006
13F1	15	19	4/6/2006	18L3	38.58	5.9	10/20/2006
13G	39.33	10	10/18/2006	18L4	19.52	14	10/24/2006
13H	25.79	2.6*	10/19/2006	18N1	72.63	20	10/27/2006
13L5	21.50	11*	10/20/2006	18R1	10.50	18	11/1/2006
13Q1	83.58	18	10/27/2006	20B	na	6.0	10/25/2006
17D	na	17	10/24/2006	21D	10.25	4.8	10/25/2006
17E9	91.50	13	10/31/2006	24A	154.2	11	10/31/2006

Data Source: Cleath and Associates Los Osos Nitrate Monitoring Program, October 2006

* - other form of nitrogen detected

na - Data not available at time of report preparation

ENVIRONMENTAL SUMMARY

The County certified a final Environmental Impact Report (EIR) on September 29, 2009, for the construction and operation of a sewage treatment and water recycling facility.

The EIR did not identify any potentially significant environmental effects with respect to the adoption of these waste discharge requirements and within the jurisdiction of the Central Coast Water Board. Specifically, the EIR identifies no impacts with respect to groundwater quality and water supply (EIR Table Q.2-1, Section 5.2) and no impacts with respect to drainage and surface water quality (EIR, Table Q.2-1, Section 5.3). The EIR explained that the County would need to obtain a Clean Water Act Section 404 permit and a Clean Water Act Section 401 (Water Quality Certification) for potential adverse effects on federally protected wetlands. The Central Coast Water Board would consider water quality certification in a separate regulatory process, which is not subject to the requirements of this Order.

The Central Coast Water Board is a responsible agency pursuant to CEQA (CEQA Guidelines Section 15096). The Central Coast Water Board has considered the EIR and makes its own conclusions in this Order on whether and how to approve the waste discharge requirements for the project. Since the EIR has not identified any potentially significant environmental effects within the

jurisdiction, Water Board is not required to make any specific finding pursuant to CEQA Guidelines 15096. The proposed waste discharge requirements will result in improved water quality in the Los Osos Basin since they require advanced tertiary treatment that will remove nitrate and bacteria, among other constituents, to concentrations below applicable water quality objectives, and because discharges from individual onsite systems that have polluted the groundwater and contaminated the surface water will cease upon completion of the facility.

BACKGROUND

Water Quality Impacts – Impacts to beneficial uses of groundwater underlying the community of Los Osos are attributed to the inadequate treatment and disposal of wastewater. The community's drinking water source is the Los Osos groundwater basin. Currently, nitrate concentrations in the shallow groundwater aquifer exceed the drinking water standard (10 milligrams per liter [mg/L] as nitrogen). The use of the shallow aquifer is currently limited primarily to non-domestic supply or irrigation. As a result, domestic water supply is pumped from the deeper aquifer, which creates an additional water quality problem by increasing seawater intrusion. Furthermore, continued septic tank discharges into the shallow aquifer have led to higher groundwater elevations (flooding) in certain areas during wet years.

Surfacing groundwater, especially during the wet season, creates a public health threat by exposing the public to inadequately treated wastewater. In various locations of the community, surfacing water (groundwater mixed with wastewater) is pumped into roadside ditches and storm drains, which then flow into Morro Bay. In areas with poor drainage the surfacing water remains ponded until it either evaporates or percolates back into the soil. Increased bacteria loading to Morro Bay has resulted in the closure of specific shellfish harvesting parcels by the State Department of Public Health. Most closures are temporary and are rescinded once water quality conditions improve. However, these temporary closures have affected the local shellfish harvesting companies, and clearly reflect impacts to shellfish harvesting beneficial uses within the Morro Bay. Studies indicate that bacteria are generated from multiple sources (birds, livestock, domestic animals, and human). More specifically, human were found to be the greatest single source (40%) of total *E. coli* strains found in samples from seeps located along the fringe of Los Osos/Baywood Park areas.³ Los Osos and Chorro Creeks are the largest sources of fresh water to Morro Bay. In samples from Los Osos Creek, human *E. coli* DNA strains had the second largest (next to avian DNA) contribution at 17%.

In May 2006, staff of the Central Coast Water Board sampled shallow groundwater seeps located on the Los Osos shoreline into Morro Bay. The samples contained

³ Kitts, Christopher, Mark N. Moline, Andrew Schaffner, Mansour Samadpour, Katie McNeil, and Shanta Duffield. *Identifying the Source of Escherichia Coli Contamination to Shellfish Growing Areas of Morro Bay Estuary*. Tech. San Luis Obispo, 2002.

total coliform bacteria concentrations as high as 2,419 most probable number per liter⁴⁵.

Discharge Prohibition - The Central Coast Water Board identified the high-density use of septic systems in Los Osos/Baywood Park as a problem prior to 1971. At that time the Central Coast Water Board encouraged the County to develop a solution to address water quality and public health problems due to inadequate septic system treatment and disposal. However, the County's efforts were unsuccessful.

In 1983, the Central Coast Water Board adopted Resolution No. 83-13, which prohibited discharges of waste from individual and community onsite wastewater treatment systems within the urbanized area of Los Osos/Baywood Park (Prohibition Zone). Consequently, the County planned to design and construct a wastewater collection, treatment, and disposal system that would eliminate the need for individual and community onsite wastewater treatment systems by the prohibition effective date of November 1, 1988. The County failed to make significant progress toward planning and constructing the community wastewater system by the effective date of the prohibition.

After the prohibition took effect, the Central Coast Water Board issued cease and desist orders to the County and some multi-family housing projects within the Prohibition Zone. The cease and desist orders included time schedules to comply with the final terms of the prohibition to cease discharging. The County has implemented a building moratorium in the Prohibition Zone since 1988.

On March 31, 2000, the Central Coast Water Board adopted Order No. R3-2000-0012, granting exemptions for septic system discharges from the Bayview Heights and Martin Tract areas. At that time, these areas were not proposed to be connected to the proposed community sewer system due to disproportionate cost, and provided the remainder of the community was sewered, the Bayview Heights and Martin Tracts (alone) were not expected to contribute to water quality degradation. In addition, the overall density of development in the Bayview Heights and Martin Tracts is one acre per onsite system, meeting the minimum lot size criteria specified in the Basin Plan. In order to preserve the overall lot size density, subdivision of existing parcels is prohibited by Order No. R3-2000-0012 unless the resulting parcels are served by the community sewer system.

COMMUNITY WASTEWATER PROJECT HISTORY

Initial County Wastewater Project - After years of delays due to litigation and multiple alternative studies, the County Board of Supervisors voted to proceed with the Los Osos community wastewater project in October 1995. Central Coast

⁴ The Basin Plan water quality objective states: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.

⁵ Samples were collected on May 16, 2006 and results read on May 17, 2006. Analyses was performed May 16, 2006, using Colilert method for total coliform and E. coli bacteria.

Water Board staff reviewed the proposed project and found it acceptable for addressing water quality problems in the community. The County then proceeded with design, environmental review and permitting of the project. The community sewer system was on schedule to begin construction in 1997. However, the project's progress was halted due to appeals of the coastal development permit to the California Coastal Commission. The Coastal Commission allowed the Los Osos community to form a community services district to take control of the wastewater project.

Los Osos CSD Wastewater Project - In November 1998, the Los Osos voters formed a community services district (CSD) to replace the County as the governing body for community services (mainly water and wastewater management). The CSD abandoned the County's proposed wastewater project and initiated redesign, and redeveloped a revised project for wastewater collection, treatment, and disposal.

The Los Osos CSD ultimately submitted its community wastewater project for Central Coast Water Board staff review, and on February 7, 2003, the Central Coast Water Board adopted waste discharge requirements for the project. In 2004, the County issued its coastal development permit for the CSD project, and in August 2004 (after full appeal hearing) the California Coastal Commission issued its coastal development permit. Each permit was challenged by citizen groups through the courts and the permits were upheld.

The CSD requested bids, awarded three contracts (two for collection system areas and one for the treatment plant), and construction began in August 2005. In September 2005, a recall election replaced three CSD board members with board members who opposed the project under construction. The CSD issued temporary stop work orders to all three contractors on October 3, 2005. Construction of the wastewater treatment facility stopped, and the CSD subsequently defaulted on its State Revolving Fund low-interest loan.

Succeeding County Wastewater Project - On September 20, 2006, Assembly Bill 2701 (Blakeslee Bill or AB 2701) was approved by the Governor. AB 2701 allowed the County to undertake efforts necessary to design and construct a community wastewater treatment facility for Los Osos/Baywood Park prohibition area.

The County immediately began the conceptual design and environmental review of the currently proposed project. The County conducted technical studies and provided the public an opportunity to review and comment on technical documents related to the community wastewater treatment project. The County released its draft environmental impact report (EIR) on November 14, 2008, and certified its final EIR and adopted a coastal development permit on September 29, 2009.

Shortly after the final EIR and permit approval, 23 parties appealed the Board of Supervisors' actions to the Coastal Commission. At its January 14, 2010

hearing, the Coastal Commission found that the appeals raised substantial issues with the project and required a *de novo* hearing. The Coastal Commission unanimously approved the newly conditioned permit and final EIR at its June 11, 2010 *de novo* hearing. County staff submitted its report of waste discharge to the Central Coast Water Board on August 16, 2010, in accordance with Section 13260 of the California Water Code.

COMPLIANCE HISTORY

Los Osos CSD Cease and Desist Orders – On May 21, 1999, the Central Coast Water Board adopted updated cease and desist orders for four on-site wastewater systems located within the Basin Plan prohibition zone that are owned and operated by the Los Osos CSD. CDOs previously issued to the County were updated to reflect the newly formed CSD as owner of the wastewater facilities and incorporated an updated project implementation schedule. The CDOs were issued to achieve full compliance with the Basin Plan Prohibition and were specific to the Bayridge Estates (No. 99-53), Los Osos CSD Water Division (No. 99-54), Los Osos Fire District (No. 99-55), and the Vista Del Oro Estates (No. 99-56). Each CDO contained compliance schedules to achieve full compliance with the Basin Plan Prohibition. Milestone dates specified in the cease and desist orders were based on significant and measurable steps in the project.

Delays due to re-evaluating project alternatives, permit appeals, court challenges, and the CSD's halting the project under construction resulted in violations of the CDO milestones. The cease and desist orders are still in effect.

Time Schedule Order - The Central Coast Water 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 a time schedule order issued to the County in 1996. The time schedule order contains a date-specific compliance schedule and a dollar amount to be assessed for each day the CSD failed to meet the schedule milestones. The penalty amount specified in Order No. 00-131 is the maximum allowable amount of \$10,000 per day. Time Schedule Order No. 00-131 includes the following compliance dates:

Task	Completion Date
Circulate draft EIR	12/15/00
Final CEQA document	04/01/01
Form assessment district or comparable financing for wastewater system	07/29/01
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

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

On October 6, 2005, the Central Coast Water Board adopted Administrative Civil Liability Order No. R3-2005-0137 penalizing the CSD \$11 million due to its failure to complete and implement the community wastewater management plan.

Individual Cease and Desist Orders - In December 2006 and May 2007, the Central Coast Water Board adopted 13 cease and desist orders requiring the recipients to meet the requirements of Resolution No. 83-13 by ceasing the use of their septic systems if the county fails to construct a community-wide wastewater system. Water Board enforcement staff also entered into settlement agreements with 25 additional Los Osos homeowners with terms similar to the cease and desist orders. Several order recipients filed petitions with the State Water Resources Control Board (State Water Board) challenging the cease and desist orders. The State Board denied the petitions and the recipients subsequently sued in San Luis Obispo County Superior Court to overturn the orders. On December 28, 2010, the court issued an order denying the petitioners' case, stating that the cease and desist orders "are supported by substantial evidence, and that the hearings were conducted in the manner required by law." The court also found that the "Regional Board went out of its way to provide due process of law, allowing affected residents a reasonable opportunity to speak their minds and present exculpatory evidence." The orders and settlements require maintenance of the on-site systems (including pumping every three years, consistent with standard conservative maintenance recommendations) and connection to the sewer system once it is available.

RECOMMENDATION

Adopt Order No. R3-2011-0001 as proposed.

ATTACHMENTS

1. Draft WDR Order No. R3-2011-0001 with Monitoring and Reporting Program and Standard Provisions and Reporting Requirements
2. Central Coast Water Board Standard Provisions, 1984

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL COAST REGION
895 Aerovista Place, Suite 101
San Luis Obispo, California 93401-7906**

**DRAFT WASTE DISCHARGE/RECYCLED WATER REQUIREMENTS
ORDER NO. R3-2011-0001**

Waste Discharger Identification No. 3 400910371

**FOR THE
LOS OSOS WATER RECYCLING FACILITY
SAN LUIS OBISPO COUNTY**

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

PURPOSE OF ORDER

1. The purpose of this Order is to prescribe new waste discharge and recycled water requirements for the County of San Luis Obispo (hereafter Discharger or County). The Discharger submitted a report of waste discharge on August 16, 2010, for authorization to discharge treated municipal wastewater from the proposed Los Osos Water Recycling Facility (LOWRF) serving approximately 12,500 residents in the community of Los Osos/Baywood Park, in San Luis Obispo County (refer to Attachment A). The purpose of the Los Osos Water Recycling Facility is to collect, treat, recycle, and dispose of domestic and municipal wastewater and subsequently eliminate discharges from on-site wastewater treatment systems in accordance with Resolution No. 83-13.

FACILITY OWNER AND LOCATION

2. The LOWRF will be owned and operated by the County of San Luis Obispo and located on a parcel of approximately 30 acres, located two miles east of the community core and behind the Los Osos cemetery, as shown on Attachment B, included as part of this Order.

The County and the Los Osos Community Services District may mutually apply for the transfer of LOWRF responsibility after a minimum of three years. The transfer of LOWRF responsibilities must be approved by the Central Coast Water Board.

FACILITY/SITE DESCRIPTION

3. **Service Area** - Within Los Osos, the most densely zoned and developed areas are under a waste discharge prohibition issued by the Central Coast Water Board, which prohibits septic tank discharges to the groundwater basin. This area is referred to as the "Prohibition Zone." It is the basis for the planned service area of the wastewater project and the corresponding wastewater assessment district. The current population of the planned service area is approximately 12,500, with 4,800

connections and an estimated start-up flow of approximately 0.9 MGD. The build-out population is estimated at 18,500 with a flow of 1.2 MGD.

Monarch Grove Development – This is a development of approximately 83 residences, which discharges approximately 200,000 gallons of domestic wastewater to a wastewater treatment plant located in the Sea Pines Golf Course. The Monarch Grove Development is located within the service area, but is not currently proposed to be served by the LOWRF. However, the Monarch Grove Development may connect to the LOWRF in the future.

Bayview Heights and Martin Tracts – These areas were exempted from the prohibition zone (refer to Finding No. 27) in March 2000. These areas will not be connected to the LOWRF. However, individual residential dwellings may connect to the LOWRF in the future.

4. **Treatment** - The proposed treatment system consists of bar screens, secondary treatment (parallel oxidation ditches), secondary clarification, tertiary filtration, and ultraviolet disinfection. Solids will be thickened then mechanically dewatered and disposed of at an approved biosolids disposal site. The facility will also include a septage receiving holding tank to meter septage into the wastewater treatment process. The septage facility will receive septage only from the area served by the community wastewater treatment facility. The treatment plant's annual average flow design capacity is 1.2 million gallons per day (MGD). A diagram of the treatment processes is shown on Attachment C, included as part of this Order.
5. **Disposal and Reuse** - Treated municipal wastewater will be discharged to leachfields, urban landscape irrigation, and agricultural irrigation (refer to Attachment B). The Discharger included a list of areas proposed for disposal in its report of waste discharge application.
 - Discharge Point 1: Agricultural reuse irrigation at 25 different locations.
 - Discharge Point 2: Broderson leach field.
 - Discharge Point 3: Bayridge Estates leach field at 2 locations.
 - Discharge Point 4: Urban reuse irrigation at 10 different locations.

Details of the Discharger's reuse program are not yet available; therefore, reclamation requirements according to California 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.

6. **Existing Disposal Practices** – A small portion of the service area (approximately 80 homes plus a motel) is served by a tertiary treatment facility that 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 groundwater. Such practices have impaired groundwater with nitrate and impaired surface waters in Morro Bay.

Residences located outside of the service area will not be served by the LOWRF. In accordance with Section VIII.D.3.g of the Central Coast Water Quality Control Plan (Basin Plan), a wastewater management plan must be developed and implemented by a local agency. This Order requires the County to develop and implement an onsite wastewater management plan to comply with the Basin Plan and ensure water quality protection from impacts resulting from continued use of onsite disposal to the Los Osos basin.

GEOLOGY, SOILS, AND GROUNDWATER

7. **Soils and Groundwater** – 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 groundwater in the Los Osos Valley Groundwater Basin. Other disposal and reuse areas are located on level to gently sloping terrain with depth to groundwater varying from 30 to 150 feet. The direction of groundwater flow is predominantly northwest toward Morro Bay; however, localized flow direction variations occur due to pumping of groundwater.
8. **Seawater intrusion** – The Los Osos Groundwater Basin has been the subject of many studies. In October 1979, the State Water Resources Control Board, Division of Planning and Research studied seawater in the Los Osos groundwater basin¹. According to this document, the Los Osos groundwater basin was not affected by seawater intrusion at that time. Chemical analysis of chloride in both domestic and municipals wells demonstrated lower concentrations; therefore, a seawater wedge had not yet intruded into the deep portion of the aquifer. The Los Osos Wastewater Project's Final Environmental Impact Report² reported seawater intrusion into the Lower Aquifer (Zone D) at a rate of 60 feet per year and Lower Aquifer (Zone E) at a rate of 54 feet per year. These data were analyzed from 1985 through 2005 located between Broderson Avenue and Palisades Avenue. According to the May 4, 2010 Interlocutory Stipulated Judgment (ISJ) Working Group's Los Osos Groundwater Basin Update³, the seawater wedge has extended into the lower aquifer through "fingers" at a rate of 700 feet per year. That finding is based on data from 2005 through 2010.

¹ Zipp, Richard J. *Geohydrology and Water Quality - Baywood-Los Osos Groundwater Basin, San Luis Obispo County, California*.

Tech. Division of Planning and Research, State Water Resources Control Board, October 1979. Print.

² <http://www.lowwp-eir.net/lowwpeir/pdf/EIR/Appendix%20D%20-%20Groundwater.pdf>

³ [http://www.lososocsd.org/Library/Document%20Library/groundwaterbasinupdate5-4-2010\[1\].pdf](http://www.lososocsd.org/Library/Document%20Library/groundwaterbasinupdate5-4-2010[1].pdf)

The ISJ Working group is made up of three major water purveyors in the area and San Luis Obispo County. The ISJ Working Group is currently implementing water production strategies in order to reduce the rate of seawater intrusion and adequately manage the Los Osos groundwater basin balance.

9. **Groundwater Quality** – The following table presents the most recent groundwater quality data available from wells screened in the uppermost aquifer in Los Osos. Well locations are depicted on Attachment D. Similar to historical data, the monitoring data continue to show groundwater impaired by nitrate (17 wells exceed the Maximum Contaminant Level (MCL) of 10 mg/L N for drinking water and one well is at the MCL. Four wells have concentrations approaching the MCL. Historically, shallow groundwater was the predominant source of domestic supply for Los Osos. However, due to nitrate contamination in the shallow zones, groundwater production has shifted to the better quality, deeper zones.

Table 1: Los Osos Upper Aquifer Groundwater Quality

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
7K	51.17	11	10/26/2006	17F4	na	0.6	10/26/2006
7L3	36.46	23	10/24/2006	17N4	20.75	5.6	10/25/2006
7N1	6.25	29	10/18/2006	18A	na	11	10/26/2006
7Q1	2.67	21*	10/18/2006	18B1	17.83	7.0	10/26/2006
7R1	21.0	13	10/26/2006	18C1	16.21	14	10/24/2006
8N2	34.35	1.2	10/27/2006	18E1	24.0	7.9	11/1/2006
8Ma	39.83	4.2*	10/25/2006	18F1	95	5	5/8/2006
8Mb	40.17	18*	10/25/2006	18J6	19.50	1.9*	10/19/2006
13F1	15	19	4/6/2006	18L3	38.58	5.9	10/20/2006
13G	39.33	10	10/18/2006	18L4	19.52	14	10/24/2006
13H	25.79	2.6*	10/19/2006	18N1	72.63	20	10/27/2006
13L5	21.50	11*	10/20/2006	18R1	10.50	18	11/1/2006
13Q1	83.58	18	10/27/2006	20B	na	6.0	10/25/2006
17D	na	17	10/24/2006	21D	10.25	4.8	10/25/2006
17E9	91.50	13	10/31/2006	24A	154.2	11	10/31/2006

Data Source: Cleath and Associates Los Osos Nitrate Monitoring Program, October 2006

* - other form of nitrogen detected

na – Data not available at time of report preparation

10. In October 2008, Hopkins Groundwater Consultants completed a study summarizing current hydrological conditions of the Los Osos Basin as well as potential impacts of the Los Osos Wastewater discharge. This study concluded that disposal at the Broderson site would result in less than significant impacts to adjacent groundwater. More specifically, the disposal would result in lower nitrogen loading than existing septic systems discharges and would also allow for improved planning strategies to reduce seawater intrusion rates.

SURFACE WATERS

11. The Morro Bay Estuary abuts the community of Los Osos along its northern and western perimeters. Los Osos Creek meanders east of the community and discharges to Morro Bay at the northeastern tip of Los Osos. Water quality in Morro Bay is impaired by pathogens, metals and sediment.

A DNA study⁴ completed on March 29, 2002, identified humans as the primary source of coliform bacteria in freshwater seeps from shallow groundwater along the estuarine edge of Los Osos. On December 13, 2002, the Central Coast Water 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. Los Osos Creek is impaired by nutrients and priority organic pollutants. However, based on local topography and direction of groundwater flow, such impacts are likely the result of surface runoff to Los Osos Creek rather than seepage of groundwater. On December 3, 2004, the Central Coast Water Board adopted a nutrient TMDL for Los Osos Creek, Warden Creek, and Warden Lake Wetland. The TMDL became effective on March 1, 2005.

12. **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 one acre or more to obtain NPDES permits 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. This Order requires the Discharger to obtain coverage under the appropriate general NPDES permits before commencing construction and before operation of the wastewater treatment facility.

Storm water management at the LOWRF will consist of a combination of low impact development design and runoff retention. In general, impervious surfaces will be

⁴ Kitts, Christopher, Mark N. Moline, Andrew Schaffner, Mansour Samadpour, Katie McNeil, and Shanta Duffield. *Identifying the Source of Escherichia Coli Contamination to Shellfish Growing Areas of Morro Bay Estuary*. Tech. San Luis Obispo, 2002. Print.

minimized. Facilities not directly contacted by wastewater, such as the administration and maintenance buildings and parking lot, will utilize vegetated swales and retention cells to filter runoff and maximize percolation. The treatment works area will be graded to a retention basin and all stormwater will be pumped to the headworks. Storm water from surrounding areas will be directed around the treatment works.

BASIN PLAN

13. The Central Coast Water Board has adopted the *Water Quality Control Plan, Central Coast Basin* (the Basin Plan), which designates beneficial uses, establishes water quality objectives, and contains implementation programs and policies to achieve those objectives for receiving waters within the Region.
14. **Surface Water Beneficial Uses** - Present and anticipated beneficial uses of Morro Bay are included in the following table. Although this project does not include discharges to surface waters, protection of these beneficial uses is important as the discharges may have direct and indirect impacts to surface waters.

Table 2 – Surface Water Beneficial Uses

Receiving Water	Beneficial Uses
Morro Bay	Industrial Process Supply (IND) Water Contact Recreation (REC – 1) Non-contact Water Recreation (REC-2) Wildlife Habitat (WILD) Cold Fresh Water Habitat (COLD) Migration of Aquatic Organisms (MIGR) Spawning, Reproduction and/or Early Development (SPAWN) Preservation of Biological Habitats of Special Significance (BIOL) Rare, Threatened or Endangered Species (RARE) Estuarine Habitat (EST) Commercial and Sport Fishing (COMM) Aquaculture (AQUA) Shellfish Harvesting (SHELL)
Los Osos Creek	Municipal (MUN) Agricultural (AGR) Groundwater Recharge (GWR) Water Contact Recreation (REC-1) Non-contact Water Recreation (REC-2) Wildlife Habitat (WILD) Cold Fresh Water Habitat (COLD) Warm Fresh Water Habitat (WARM)

Receiving Water	Beneficial Uses
	Migration of Aquatic Organisms (MIGR) Spawning, Reproduction and/or Early Development (SPAWN) Rare, Threatened or Endangered Species (RARE) Fresh Water Replenishment (FRSH) Commercial and Sport Fishing (COMM)

15. **Groundwater Beneficial Uses** - Present and anticipated beneficial uses of groundwater in the vicinity of Los Osos include:

Table 3: Groundwater Beneficial Uses

Receiving Water	Beneficial Uses
Los Osos Basin	Municipal, and Domestic Supply (MUN), Agricultural Supply (AGR) Industrial Process Supply (PROC), Industrial Service Supply (IND)

RECYCLED WATER

16. **Recycled Water** – Title 22, Division 4, Chapter 3 of the California Code of Regulations specifies State Department of Public Health (DPH) 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 Central Coast Water Board has consulted with the State and County Health Departments regarding these reuse requirements. The State DPH has evaluated the proposed project description and these waste discharge requirements and provided comments and recommendations which have been incorporated into this Order. DPH has determined that this Order is consistent with DPH's requirements, recommendations and policies regarding use of recycled water and protection of water quality and public health. DPH has also determined that this is a disposal project, not a groundwater recharge project.

The Los Osos Water Recycling Facility is designed to meet Title 22 requirements for recycled water. This Order incorporates those requirements.

17. **Recycled Water Policy** - The Strategic Plan Update 2008-2012 for the Water Boards includes a priority to increase sustainable local water supplies available for meeting existing and future beneficial uses by 1,725,000 acre-feet per year, in excess of 2002 levels, by 2015, and ensure adequate water flows for fish and wildlife habitat. The State Water Resources Control Board (State Water Board) adopted the Recycled Water Policy (Resolution No. 2009-0011) on February 3, 2009. The Recycled Water Policy is intended to support the Strategic Plan priority

to promote sustainable local water supplies. Increasing the acceptance and promoting the use of recycled water is a means towards achieving sustainable local water supplies and can result in reduction in greenhouse gases, a significant driver of climate change. The Recycled Water Policy is also intended to encourage beneficial use of, rather than solely disposal of, recycled water.

18. The Recycled Water Policy calls for the development of regional groundwater basin/sub-basin salt/nutrient management plans. The State Water Board recognizes that, pursuant to the letter from statewide water and wastewater entities dated December 19, 2008, and attached to Resolution No. 2009-0011 adopting the Policy, the local water and wastewater entities, together with local salt/nutrient contributing stakeholders, will fund locally driven and controlled, collaborative processes open to all stakeholders that will prepare salt and nutrient management plans for each basin/sub-basin in California, including compliance with CEQA and participation by Central Coast Water Board staff.
19. It is the intent of the Recycled Water Policy that salts and nutrients from all sources be managed on a basin-wide or watershed-wide basis in a manner that ensures attainment of water quality objectives and protection of beneficial uses. The appropriate way to address salt and nutrient issues is through the development of regional or sub-regional salt and nutrient management plans rather than through imposing requirements solely on individual projects. The Central Coast Water Board finds that a combination of regional management plans and individual or programmatic project requirements may be necessary to protect beneficial uses.
20. One of the primary components of the required regional salt/nutrient management plans is the development and implementation of groundwater basin/sub-basin monitoring programs. As specified in the Recycled Water Policy, salt/nutrient contributing stakeholders will be responsible for conducting, compiling, and reporting the monitoring data once the regional groundwater monitoring programs are developed.

ANTIDEGRADATION

22. State Water Board Resolution No. 68-16 (*Statement of Policy with Respect to Maintaining High Quality of Waters in California*) requires Regional Water Boards, in regulating the discharge of waste, to maintain high quality waters of the State unless it is demonstrated that any change in quality will be consistent with the maximum benefit to the people of the State, will not unreasonably affect beneficial uses, and will not result in water quality less than that described in a Regional Water Board's policies (i.e., quality that exceeds applicable water quality standards). Resolution No. 68-16 also states, in part:

Any activity which produces or may produce a waste or increased volume or concentration of waste and which discharges or proposes to discharge to existing high quality waters will be required to meet waste discharge requirements which will result in best practicable treatment and control of the discharge necessary to assure that (a) a pollution or nuisance will not occur and (b) the highest water quality consistent with maximum benefit to the people of the State will be maintained.

The discharge regulated by this Order is subject to waste discharge requirements that will result in treatment, control, prevention of pollution and nuisance, and maintenance of water quality consistent with maximum benefit to the people of the State. As such, these waste discharge requirements are consistent with the provisions of Resolution No. 68-16.

As described in Findings No. 25, the Central Coast Water Board adopted Resolution No. 83-13 prohibiting the discharge of waste from onsite waste water systems (or septic systems). Continued inadequate treatment and disposal from these septic systems have led to exceedances of water quality objectives and public health standards. The LOWRF will be constructed in compliance with this Order, which will replace the existing onsite wastewater systems.

This Order requires best practicable treatment or control, which will ensure that pollution or nuisance will not occur. The facility is required to meet effluent limitations identified in Section B of this order and is designed to produce tertiary treated recycled water. The discharge will not cause further degradation of the groundwater as the upper groundwater aquifer is already polluted due to the continued use of onsite wastewater systems. The effluent limitations are more stringent than the applicable water quality objectives and will eventually result in improving the quality of the groundwater.

All properties subject to the prohibition (as discussed in Finding No. 3) will be required to connect to the LOWRF. The community wastewater treatment and disposal facility will achieve compliance with the prohibition, improve water quality, and is consistent with maximum benefit to people of the state. In various locations of the community, surfacing water (groundwater mixed with wastewater from septic systems) is pumped into roadside ditches and storm drains, which then flow into Morro Bay. In areas with poor drainage the surfacing water remains ponded until it either evaporates or percolates back into the soil. The surfacing of wastewater will be reduced or cease with operation of the LOWRF.

The Monitoring and Reporting Program of this Order requires the Discharger to collect representative samples in order to ensure compliance with effluent limitations and water quality objectives of the receiving water.

MONITORING PROGRAM

23. Monitoring and Reporting Program (MRP) No. R3-2011-0001 is part of this Order. The MRP requires routine wastewater influent and effluent and receiving water (groundwater) 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.

CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA)

24. The County of San Luis Obispo is the lead agency pursuant to the California Environmental Quality Act (CEQA) (Cal. Pub. Res. Code Section 15367). As the lead agency, the County certified a final Environmental Impact Report (EIR) on September 29, 2009 for the construction and operation of a sewage treatment and water recycling facility. The EIR did not identify any potentially significant environmental effects with respect to the adoption of these waste discharge requirements and within the jurisdiction of the Central Coast Water Board. Specifically, the EIR identifies no impacts with respect to groundwater quality and water supply (EIR Table Q.2-1, Section 5.2) and no impacts with respect to drainage and surface water quality (EIR, Table Q.2-1, Section 5.3). The EIR explained that the County would need to obtain a Clean Water Act Section 404 permit and a Clean Water Act Section 401 (Water Quality Certification) for potential adverse effects on federally protected wetlands. The Central Coast Water Board will consider water quality certification in a separate regulatory process, which is not subject to the requirements of this Order.

The Central Coast Water Board is a responsible agency pursuant to CEQA (CEQA Guidelines Section 15096). The Central Coast Water Board has considered the EIR and makes its own conclusions in this Order on whether and how to approve the waste discharge requirements for the project. Since the EIR has not identified any potentially significant environmental effects within the jurisdiction, Water Board is not required to make any specific finding pursuant to CEQA Guidelines 15096. The proposed waste discharge requirements will result in improved water quality in the Los Osos Basin since they require advanced tertiary treatment that will remove nitrates, among other constituents, to concentrations below applicable water quality objectives, and because discharges from individual onsite systems that have polluted groundwater and contaminated surface water will cease upon completion of the facility.

EXISTING ORDERS AND RESOLUTIONS

25. **Resolution No. 83-13** – In 1983, the Regional Board adopted Resolution No. 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. 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.

26. **Cease and Desist Orders** – The Los Osos CSD 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 Central Coast Water Board issued cease and desist orders (Nos. 99-53, 99-54, 99-55 and 99-56) to the Los Osos CSD and included the project implementation schedule into those orders. At the time of adoption, the project implementation schedule appeared reasonably attainable.
27. **General Waste Discharge Requirements Order No. R3-2000-0012** - On September 8, 1999, the Central Coast Water Board issued exemptions to the Basin Plan prohibition through this order. The Board identified 38 vacant lots in the Bayview Heights and Martin Tracts and found that water quality impacts caused by discharges associated with development of these lots (even if all 38 were to proceed) were unlikely to be significant, because of the overall one-acre density and adequate depth to groundwater that exists in both tracts. On March 31, 2000, the Central Coast Water Board adopted General Waste Discharge Requirement Order No. R3-2000-0012, which allows conventional onsite wastewater system use on the existing lots located in the Bayview Heights and Martin Tracts. Currently there are 26 residences that are regulated by this General Order.
28. **Statewide General Waste Discharge Requirements for Sanitary Sewer Systems (General WDRs)**. - The General WDRs, Order No. 2006-0003-DWQ, adopted May 2, 2006, apply to publicly owned sanitary sewer systems (collection systems) that are one mile or greater in length. The General WDRs require collection system entities to develop a Sanitary Sewer Management Plan (SSMP). SSMPs are required to include goals; organization; legal authority; operations and maintenance program; design and performance provisions; an overflow emergency response plan; fats, oils, and greases control program; systems evaluations and capacity assurance program; monitoring, measures, and program modifications; and an SSMP Program audit. Additionally, the General WDRs require the collection system entities to report sanitary sewer overflows (SSOs). Collection system entities are required to report SSOs that are greater than 1,000 gallons. Furthermore, some entities must also report SSOs less than 1,000 gallons discharging to surface waters or storm drains or that threaten public health. Reporting provisions are set forth in the General WDRs. Reporting occurs through the Statewide Online SSO database. Reporting times vary depending on discharge amount and destination. This Order requires the Discharger to enroll under the General WDRs prior to the operation of the WRF.

GENERAL FINDINGS

29. On **February 9, 2011**, the Central Coast Water Board notified the Discharger and interested agencies and persons of its intent to consider adoption of waste discharge requirements for the discharge and provided them with a copy of the proposed Order and an opportunity to submit written comments and scheduled a public hearing.
30. In a public hearing on **May 5, 2011**, the Central Coast Water 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 that, pursuant to authority in Sections 13263, 13267 and 13523 of the California Water Code, San Luis Obispo County, its agents, successors, and assigns, may discharge waste from the Los Osos WRF 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:

CWC = California Water Code

BP = Basin Plan

T22 = California Code of Regulations, Title 22, Recycled Water Criteria

DPH = State Department of Public Health

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

A. PROHIBITIONS

1. Discharge to areas other than the disposal facilities shown on Attachment D of this Order or reuse sites approved by the Executive Officer is prohibited. ^{T22, CWC}

2. Discharge of any wastes including overflow, bypass seepage, overspray and runoff from transport, treatment, or disposal systems to adjacent properties, adjacent drainage ways, or to waterways is prohibited. ^{T22, CWC}
3. Discharge of untreated or partially treated wastewater is prohibited. ^{CWC}
4. Discharge of wastewater within 150 feet of any well used for domestic supply or irrigation of food crops is prohibited. ^{T22}

B. EFFLUENT LIMITATIONS
(Discharge to Leachfields)

1. The annual average effluent shall not exceed 1.2 MGD.
2. Effluent discharged to the disposal system shall not exceed the following limitations:

Table 4: Effluent Limitations

Constituent	Units	Monthly Average (30-day)	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

mL/L – milliliters per liter
mg/L – milligrams per liter

3. The treatment, storage, and disposal facilities shall be managed to exclude the public and posted to warn the public of the presence of wastewater.

C. RECYCLED WATER SPECIFICATIONS

(Reclamation (reuse) requirements adopted under California 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, CWC}. Recycled water shall be adequately

oxidized, coagulated, clarified, filtered, disinfected^{T22} and not exceed the following limitations:

Table 5: Recycled Water Limitations

Constituent	Units	Monthly mean	Maximum
BOD ₅	mg/L	30	90
Suspended Solids	mg/L	30	90
pH ^{BP}	s.u.	6.5-8.4	

1 - 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 seven 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. Turbidity of the filtered wastewater shall not exceed 0.2 NTU more than 5 percent of the time within a 24-hour period and 0.5 NTU at any time.^{T22}
6. Any alternative, comparable disinfection process must be approved by California Department of Public Health and the Executive Officer.
7. 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.
8. Recycled water shall be confined within the authorized reuse areas approved by the Executive Officer after consultation with State and local health departments.
9. Recycled water shall not be used for irrigation during extended periods of rainfall and/or runoff.
10. 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.

11. 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.
12. 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"^{T22}.
13. Recycled water valves shall be of a design to prevent public access.
14. Drinking fountains shall be protected from recycled water spray, mist or runoff.
15. Tank trucks used to transport recycled water shall be appropriately labeled and shall not leak.
16. No impoundment of disinfected tertiary recycled water shall occur within 100 feet of any domestic water supply well.^{T22}
17. Except as allowed under section 7604 of title 17, California Code of Regulations, no physical connection shall be made or allowed to exist between any recycled water system and any separate system conveying potable water.^{T22}
18. The portions of the recycled water piping system that are in areas subject to access by the general public shall not include any hose bibs. Only quick couplers that differ from those used on the potable water system shall be used on the portions of the recycled water piping system in areas subject to public access.^{T22}

D. RECEIVING WATER LIMITATIONS

(Groundwater 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.)

1. The discharge shall not cause groundwater to contain taste- or odor-producing substances in concentrations that adversely affect beneficial uses.^{BP}
2. The discharge shall not cause radionuclides to be present in concentrations that are deleterious to human, plant, animal, or aquatic life or result in the accumulation of radionuclides in the food web to an extent which presents a hazard to human, plant, animal, or aquatic life.^{BP}
3. The discharge shall not cause groundwater to contain concentrations of organic or inorganic chemicals in excess of the limiting concentrations set forth in California Code of Regulations, Title 22, Division 4, Chapter 15, Article 5.5, Section 64444

(organic) and Article 4, Section 64431 (inorganic).^{BP}

4. The discharge shall not cause groundwater to contain concentrations of chemical constituents in amounts that adversely affect the agricultural supply beneficial use. Interpretation of adverse effects shall be as described in University of California Agricultural Extension Service guidelines provided in Table 3-3 of the Central Coast Basin Plan.^{BP}
5. The discharge shall not cause a significant increase in mineral constituent concentrations in the underlying groundwater, as determined by comparison of samples collected from wells located upgradient and downgradient of the disposal area.^{BP}
6. The discharge shall not cause underlying groundwater to contain concentrations of constituents in excess of water quality objectives listed in Finding No. 12 and Table 3-8 of the Basin Plan.

E. PRETREATMENT SPECIFICATIONS

1. The Discharger is exempt from applicable pretreatment requirements specified under 40 CFR 125.66(d). In accordance with requirements specified in this Order, the Discharger shall implement public education and waste minimization/source reduction programs to limit the introduction of toxic pollutants and pesticides into the treatment plant. Implementation of a pollution prevention program will substitute for those requirements specified under 40 CFR 125.66 (d) (Nonindustrial Source Control Program).

F. BIOSOLIDS SPECIFICATIONS

Biosolids refers to non-hazardous sewage sludge as defined in 40 CFR 503.9. Sewage sludge that is hazardous (as defined in 40 CFR 261) must be disposed of in accordance with requirements of the Resource Conservation Recovery Act (RCRA). Sludge with PCB levels in excess of 50 mg/kg must be disposed in accordance with 40 CFR 761.

1. All biosolids generated by the Discharger shall be used or disposed of in compliance with the applicable portions of the following regulations.
 - a. 40 CFR 503 - for biosolids that are land applied, placed in surface disposal sites (dedicated land disposal sites or monofills), or incinerated.
 - b. 40 CFR 258 - for biosolids disposed of in municipal solid waste landfills.

- c. 40 CFR 257 - for all biosolids use and disposal practices not covered under 40 CFR 258 or 503).
- d. 40 CFR 503 Subpart B (land application) applies to biosolids applied for the purpose of enhancing plant growth or for land reclamation. Section 503 Subpart C (surface disposal) applies to biosolids placed on the land for the purpose of disposal.

The Discharger is responsible for ensuring that all biosolids produced at its facility are used or disposed of in accordance with these rules, whether the Discharger uses or disposes of the biosolids itself or transfers them to another party for further treatment, use, or disposal.

G. PROVISIONS

1. Discharger shall comply with Monitoring and Reporting Program No. R3-2011-0001 (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. Treatment and discharge shall not cause pollution or nuisance as defined in Section 13050 of the California Water Code.
4. All accumulated biosolids or solid residue shall be disposed of at a location authorized by law. The 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.
5. Treatment, storage, and disposal facilities shall be managed to exclude the public and posted to warn the public of the presence of wastewater.
6. In accordance with Finding No. 17, stakeholders associated with the management and protection of the Los Osos Groundwater Basin are required to develop and implement a Salt and Nutrient Management Plan. The Discharger shall participate in a basin-wide stakeholder group and participate in the development, implementation, and monitoring of the salt and nutrient management plan as required by the Recycled Water Policy.
7. The Discharger shall submit a strategy identifying its approach to develop and implement an onsite wastewater management plan for compliance with the Basin

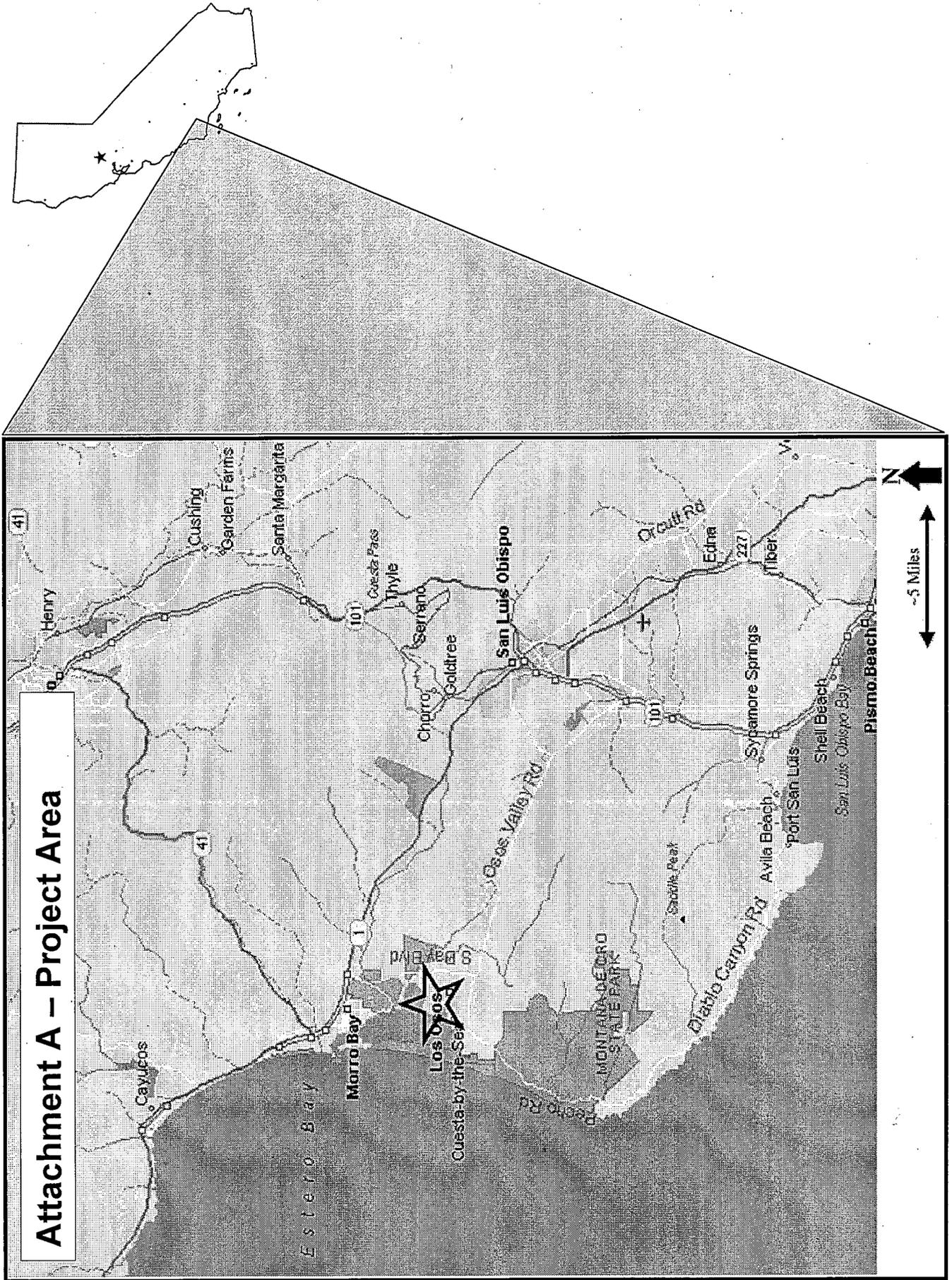
Plan no later than **December 2, 2011**. The strategy should identify a schedule for the development and implementation of the onsite wastewater management plan, any participating agencies, and a map of the affected unsewered areas.

9. Pursuant to Title 23, Division 3, Chapter 9, Article 2 of the California Code of Regulations, the Discharger must submit a report to the Executive Officer, no later than **January 1, 2016**, addressing:
 - a. Whether there will be changes in the continuity, character, location or volume of the discharge; and,
 - b. Whether, in its 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 May 5, 2011.

Executive Officer

Attachment A – Project Area



**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL COASTAL REGION**

**MONITORING AND REPORTING PROGRAM ORDER NO. R3-2011-0001
FOR
SAN LUIS OBISPO COUNTY
LOS OSOS WASTEWATER RECYCLING FACILITY**

This Monitoring and Reporting Program (MRP) is issued pursuant to California Water Code Section 13267. This MRP is issued to San Luis Obispo County because it is the owner and operator of the Los Osos Wastewater Recycling Facility. The reports required by this MRP are necessary to determine compliance with the waste discharge requirements and ensure protection of the beneficial uses of waters of the state and public health.

Influent Monitoring

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

Table 1: Influent Monitoring

Constituent	Units	Type of Sample	Minimum Sampling and Analysis 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

mgd – million gallons per day
mg/L – milligrams per liter

Effluent Monitoring

Representative samples of the effluent shall be collected (downstream of any in-plant return flows of disinfection units) and analyzed as follows:

Table 2: Effluent Monitoring

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
Heavy Metals	mg/L	grab	Annually

mgd – million gallons per day
mL/L – milliliters per liter
mg/L – milligrams per liter

Recycled Water Monitoring

Representative samples of water provided for reuse shall be collected and analyzed in accordance with the following table. (in addition to Effluent Monitoring above). Recycled water monitoring shall be consistent with the Discharger's Engineering Report as discussed in Section C.1 of this Order. The Engineering Report must be submitted no less than six months in advance of any proposed reuse project.

Table 3: Recycled Water Monitoring

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
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	s.u.	grab	Weekly

mgd – million gallons per day

MPN/100mL – Most Probable Number per 100 milliliters

mg/L – milligrams per liter

s.u. – standards units

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

Groundwater Monitoring

Semiannual Groundwater Monitoring - Representative samples of groundwater shall be collected and analyzed semiannually from the following 16 monitoring wells: Well ID Nos. 13G, 13H, 13L5, 13Q1, 17E9, 17F4, 17N4, 18E1, 18J6, 18L3, 18L4, 18N1, 18R1, and 24A (refer to Attachment D of this Order). Additional wells may be added to the groundwater monitoring program as deemed appropriate by the Executive Officer. The semiannual samples are to be analyzed in accordance with the following table.

Table 4: Semiannual Groundwater Monitoring

Constituent	Units	Type of Sample
Depth to groundwater	Feet	measure
Total Dissolved Solids	mg/L	grab
pH	s.u.	grab

Total Nitrogen (as N) (all forms identified)	mg/L	grab
Sodium	mg/L	grab
Chloride	mg/L	grab
Sulfate	mg/L	grab
Boron	mg/L	grab

mg/L – milligrams per liter

s.u. – standard unit

Annual Groundwater Monitoring - In addition, representative groundwater samples shall be collected from Well Nos. 24A and 18R1 and analyzed for priority pollutants^{1 2} on an annual basis. Furthermore, Well No. 18R1 shall be sampled for Total Coliform (MPN/100mL) on a semiannual basis. These annual results shall be reported in the annual summary report.

Biennial Groundwater Monitoring - Representative samples of groundwater shall be collected and analyzed every two years from the following 16 monitoring wells: Well ID Nos. 7K3, 7L3, 7N1, 7Q1, 7R1, 8N2, 8Ma, 8Mb, 17D 18A 18B1, and 18C1 (refer to Attachment D of this Order). Additional wells may be added to the groundwater monitoring program as deemed appropriate by the Executive Officer. The biennial samples are to be analyzed in accordance with the following table.

Table 5: Biennial Groundwater Monitoring

Constituent	Units	Type of Sample
Depth to groundwater	Feet	measure
Total Dissolved Solids	mg/L	grab
pH	s.u.	grab
Total Nitrogen (as N) (all forms identified)	mg/L	grab
Sodium	mg/L	grab
Chloride	mg/L	grab
Sulfate	mg/L	grab
Boron	mg/L	grab

mg/L – milligrams per liter

s.u. – standard unit

Monitoring reports shall include tabulated monitoring results and a narrative description of analytical results (general mineral constituents, including all forms of nitrogen, depth to groundwater, and groundwater 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, which include: a) groundwater elevations and flow direction, b) TDS concentrations, and c) nitrate as N 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

¹ California Code of Regulations, Title 22, Division 4, Chapter 15, Article 4, Section 64431

² California Code of Regulations, Title 22, Division 4, Chapter 15, Article 5.5, Section 64444

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:

Table 6: Biosolids Monitoring

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	Annually or when disposal occurs (whichever is less frequent)
Total metals	mg/kg	grab	Annually or when disposal occurs (whichever is less frequent)

mg/kg – milligrams per kilograms

Reporting

Monthly monitoring reports shall be submitted to the Central Coast Water Board by the first day of the second calendar month following the sampling month. 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. R3-2011-0001. Copies of monitoring reports shall also be submitted to the Department of Public Health at 1180 Eugenia Place, Suite 200, Carpinteria, CA 93013. Annual summary reports shall be submitted in accordance with Standard Provision C.16.

Enforcement

Violation of this MRP could subject the discharger to administrative civil liability pursuant to Water Code section 13268.

Executive Officer

Date

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 Code of Regulations. For

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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 Code of Regulations
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;

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- 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. The 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:

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- 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.
4. 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:

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- 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.
5. 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.
 6. 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.
 7. 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.
 8. 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

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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 non compliance, 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 Code of Regulations 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:

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- a) the best estimate of when the monthly average daily dry weather a 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
895 Aerovista Place., Suite 101
San Luis Obispo, CA 93401-7906

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 discretion of the board. If order modification is necessary, transfer may be delayed 120 days after the Regional Board's 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 incorrect information.
14. All reports shall be signed as below:
 - 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;

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- c) For a public agency; by either a principal executive officer or ranking elected official; or,
 - d) Their "duly authorize] representative."
15. Any person signing a report makes the following certification, whether it is 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 discharger 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.

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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:
 - (1) "Bypass" was unavoidable to prevent loss of life, personal injury, or "severe property damage";
 - (2) There was no feasible alternative to the "bypass," such as use of auxiliary treatment facilities, retention of untreated waste, or maintenance during normal periods of equipment downtime. (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,
 - (3) 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 occurrence 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,
- b) 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:

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1. The discharger must comply with all conditions of this order. Noncompliance 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 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

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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 Code of Regulations (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.

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

$$\text{Log Mean} = (C_1 * C_2 * \dots * C_N)^{1/N}$$

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.

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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.

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27 sites

