

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

**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: Broderson leach field.
 - Discharge Point 2: Bayridge Estates leach field at 2 locations.
 - Discharge Point 3: Agricultural reuse irrigation at 25 different 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.

In accordance with Section 13523.1 of the California Water Code, Central Coast Water Board staff will propose master reclamation permit requirements or revisions to this Order for subsequent consideration and adoption by the Water Board. Discharge Points 3 and 4 (above) will be considered in the subsequent master reclamation permit requirements.

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 intrusion 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. This conclusion was based on data from 1985 through 2005 collected from wells 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.

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 to reduce the rate of seawater intrusion and adequately manage the Los Osos groundwater basin balance.

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.slocounty.ca.gov/Assets/PW/LOWWP/Draft+EIR/Appendix+D+-+Groundwater.pdf>

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

9. **Groundwater Quality** – The following table presents the most recent groundwater quality data available from a selection of 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 treatment plant 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 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. Stormwater 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.

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.

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) 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. Prior to using or providing recycled water, the Discharger will apply for a master reclamation permit or a subsequent revision to this Order pursuant to Section 13523.1 of the Water Code.

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.

21. **Master Reclamation Permit** – Pursuant to section 13523.1 of the Water Code, The Central Coast Water Board may, in lieu of issuing waste discharge requirements pursuant to Section 13263 or water reclamation requirements pursuant to Section 13523 for a user of reclaimed water, issue a master reclamation permit to a supplier or distributor, or both, of reclaimed water. These master reclamation permits must, at a minimum, include the adoption of waste discharge requirements, requirements consistent with the uniform statewide reclamation criteria pursuant to Section 13521, requirements to establish enforceable user requirements, submit quarterly reporting, and periodic inspections for facilities using reclaimed water. The Discharger must apply for a master reclamation permit or a subsequent revision to this Order prior to any reuse activities as discussed in Finding No. 5 (above).

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 Water Board's jurisdiction, the 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 and operation 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. Written comments were required to be received by March 11, 2011.
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 the California Water Code, Division 7, including Sections 13263, 13267, and 13523, San Luis Obispo County, its agents, successors, and shall comply 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 100 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	

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. Any alternative, comparable disinfection process (i.e., ultraviolet disinfection) must be approved by California Department of Public Health and the Executive Officer. This disinfection process combined with the filtration process, shall demonstrate to inactivate and/or remove 99.999 percent of the plaque-forming units of F-specific bacteriophage MS2, or polio virus in the wastewater. A virus that is at least as resistant to disinfection as polio virus may be used for purposes of the demonstration. On-site validation testing of the alternative disinfection process must be completed prior to reuse. The testing protocol and final testing results need to be reviewed and approved by the Central Coast Water Board and California Department of Public Health.

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 membrane 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.

Mono, dual, or mixed media gravity, upflow or pressure filtration systems shall not exceed 5 gallons per minute per square foot of surface area in. For traveling bridge automatic backwash filters flow shall not exceed 2 gallons per minute per square foot of surface area.

For filter media (i.e., sand filters), turbidity shall not exceed 2 NTU within a 24-hour period, 5 NTU's more than 5 percent of the time within a 24-hour period, and 10 NTU's at any time.^{T22}

6. Delivery of reclaimed water for irrigation purposes shall cease as soon as possible and all wastewater shall be returned to the treatment and/or disposal system if:
 - a. Disinfection of wastewater ceases at any time; or,

- b. Reclamation specifications are violated or threaten to be violated.
7. Recycled water shall be confined to the authorized reuse areas identified in the engineering report (refer to Section C.1 above), which requires approval by the Executive Officer and consultation with State and local health departments. Recycled water reuse shall not occur until the Water Board adopts a Master Reclamation Permit or subsequent revision to this Order pursuant to Section 13523.1 of the Water Code (refer to Finding No. 21).
 8. Recycled water shall not be used for irrigation during extended periods of rainfall and/or runoff.
 9. Personnel involved in producing, transporting or using recycled water shall be informed of possible health hazards that may result from contact and use of recycled water.
 10. Use of recycled water shall occur at a time and in a manner to prevent or minimize public contact with recycled water and to prevent ponding in irrigation areas.
 11. Areas irrigated with recycled water shall be posted in English and Spanish to warn the public that recycled water is being used. Signs shall be no less than four inches high by eight inches wide and include the wording "RECYCLED WATER – DO NOT DRINK"^{T22}.
 12. Recycled water valves shall be of a design to prevent public access.
 13. Drinking fountains shall be protected from recycled water spray, mist or runoff.
 14. Tank trucks used to transport recycled water shall be appropriately labeled and shall not leak.
 15. No impoundment of disinfected tertiary recycled water shall occur within 100 feet of any domestic water supply well.^{T22}
 16. 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}
 17. 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.

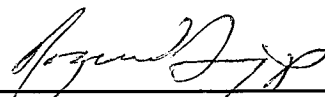
The Discharger is responsible for ensuring that all biosolids produced at its facility are used or disposed of in accordance with these rules, whether the Discharger uses or disposes of the biosolids itself or transfers them to another party for further treatment, use, or disposal.

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.

8. 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.
9. Discharges of waste in compliance with this Order are exempt from the prohibition of waste discharges established by Resolution No. 83-13 in accordance with Section VIII.3.J of the Basin Plan.
10. Consistent with Condition No. 88 from the Coastal Development Permit (No. DRC2008-00103), the County shall evaluate and, where appropriate, assist property owners in the implementation of opportunities to reuse existing septic tank effluent disposal systems (e.g., leach fields) to filter and percolate stormwater runoff. Prior to the connection of individual properties the County shall, at the consent of the landowner, evaluate whether existing on site wastewater disposal facilities have adequate capacity and depth to groundwater to accommodate and percolate stormwater runoff, and if so, provide site-specific recommendations on how to connect such a system.
11. The Discharger shall develop a work plan for installation of a representative upgradient groundwater monitoring well network for both disposal locations (Broderson and Bayridge). The work plan shall be submitted to the Central Coast Water Board by **February 3, 2012**. At a minimum, the work plan shall describe existing hydrogeologic conditions and an evaluation of optimal upgradient groundwater monitoring locations. The representative groundwater monitoring well network shall be installed and letter report confirming final installation shall be submitted six months prior to disposal. The upgradient groundwater monitoring well shall be monitored in accordance with Section D.1. of the monitoring and reporting program.

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

