

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

**WASTE DISCHARGE REQUIREMENTS ORDER NO. 01-100
Modified November 14, 2014**

For

**CAMBRIA COMMUNITY SERVICES DISTRICT WASTEWATER TREATMENT PLANT,
SAN LUIS OBISPO COUNTY**

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

SITE OWNER AND LOCATION

1. The Cambria Community Service District, (hereafter "Discharger") owns and operates a Wastewater Treatment Facility located at 5500 Heath Lane in Cambria, San Luis Obispo County (see Attachment A).

evaporation/percolation pond, shown on Attachment A1. The disposal site capacity is currently 1.5 mgd.

PURPOSE OF ORDER

2. The primary objectives of this updated Order are to: 1) regulate the discharge of treated wastewater to land, 2) update the Discharge Monitoring Program, and 3) bring the site into compliance with the Basin Plan and all applicable laws and regulations pertaining to this discharge.

5. **Geology:** The surface soils below the land disposal site are generally sandy and silty clays, underlain by clays and impermeable bedrock of franciscan chert, volcanic rock and sandstone. Permeabilities generally decrease with depth and distance from surface waters.

SITE/FACILITY DESCRIPTION

3. **Design and Current Capacity:** The treatment system consists of flow equalization and grit removal facilities, two 0.5 MGD activated sludge treatment units (1.0 total treatment capacity), two 0.3 MG holding ponds and disinfection facilities. The Discharger is in the design phase of upgrading and expanding its treatment plant capacity. A diagram of the treatment facility processes is shown on Attachment B, included as part of this order.
4. **Discharge Type:** Effluent is pumped to the land disposal site and sludge is disposed at a private land disposal facility. The effluent land disposal site is located 2.5 miles north of the treatment plant and consists of 22 acres of spray disposal areas and an

6. **Groundwater:** Depth to ground water at the land disposal site is approximately 17 feet at the evaporation/percolation pond site and 9 feet at the spray area. However, depth to ground water is as little as 4 feet in low lying areas near San Simeon Creek. Ground water movement within the disposal area is generally towards San Simeon Creek, to the south-southwest. Cambria Community Services District's primary source of water supply is the San Simeon Creek well field, located approximately 2000 feet east (upgradient) of the disposal area.
7. Provision D.2 has been included requiring the discharger to take steps to ensure that degradation of the water supply does not occur. Maintenance of a minimum ground water level differential is necessary to protect the water supply well field from dissolved salts and nitrates in the wastewater discharge. The effluent limitation for total dissolved solids is based on maintaining the prescribed differential.
8. **Surface water:** Surface water in San Simeon

Creek flows to the west approximately one mile to the Pacific Ocean. Van Gordon Creek flows south to the confluence with San Simeon Creek in the southwest corner of the disposal area.

- 9. **Storm water:** Currently, all storm water is directed away from the treatment facility. Storm water that comes into contact with the treatment process is collected and treated. The site is protected from flooding or washout from a 100-year flood event.
- 9a. In 2014, the CCSD added supplemental treatment units including microfiltration and reverse osmosis to produce water of suitable quality for upstream groundwater recharge. Microfiltration reject and backwash flows will be discharged to the disposal area. (Added November 14, 2014.)

MONITORING & REPORTING PROGRAM

- 10. The requirements for monitoring and reporting are contained in the attached Monitoring and Reporting Program No. 01-100. Minor changes were made to the program from the previous Order. The Discharger is now required to monitor nitrogen and ammonia levels in effluent as well as groundwater elevation in all sampling wells.

BASIN PLAN

- 11. The Water Quality Control Plan, Central Coast Basin (Basin Plan) was adopted by the Board on November 19, 1989 and approved by the State Board on August 16, 1990. The Board approved amendments to the Basin Plan on February 11, 1994 and September 8, 1994. The Basin Plan incorporates statewide plans and policies by reference and contains a strategy for protecting beneficial uses of State waters.
- 12. Present and anticipated beneficial uses of groundwater in the vicinity of the discharge include:
 - a. Municipal and Domestic Supply, and
 - b. Agricultural Supply
- 13. Surface water quality objectives have not been included, since surface water discharge is prohibited by this Order.

- 14. Median Groundwater objectives for this Sub-basin are not specifically described in the Basin Plan. However groundwater sampling results indicate that salts and nitrates are increasing partially as a result of this discharge to land.
- 15. Historic values for the groundwater (as measured in supply wells) in this area are as follows:

Constituent	Concentration (mg/l)
Total Dissolved Solids	375
Sodium	21
Chloride	19

*New Santa Rosa supply well has much higher TDS (~750mg/l)

Effluent values of the same constituents are as follows:

Constituent	Concentration (mg/l)
Total Dissolved Solids	860*
Sodium	180
Chloride	253

*When using San Simeon supply water

Groundwater data also indicates a significant increase in salts between upgradient and downgradient* wells.

Constituent	Upgradient (mg/l)	Downgradient* (mg/l)
Total Dissolved Solids	373	767
Sodium	22	120
Chloride	21	173

*Downgradient wells are under periodic tidal influence and apparent increases are not solely from effluent discharge.

This order contains provisions to limit the impacts of salt at the Cambria CSD disposal field and plan for future salts management.

ENVIRONMENTAL ASSESSMENT

- 16. This action is intended to enforce the laws and regulations administered by the Board. As

such, this action is categorically exempt from the provisions of the California Environmental Quality Act pursuant to Section 13389 of the Water Code of the Resources Agency Guidelines.

EXISTING ORDERS AND GENERAL FINDINGS

17. This discharge has been subject to Waste Discharge Requirements contained in Order No. 93-24 adopted May 14, 1993.
18. Discharge of waste is a privilege, not a right, and authorization to discharge is conditional upon the discharge complying with provisions of Division 7 of the California Water Code and any more stringent effluent limitations necessary to implement water quality control plans, to protect beneficial uses, and to prevent nuisance. Compliance with this Order should assure this and mitigate any potential adverse changes in water quality due to the discharge.
19. On July 25, 2001, the Board notified the Discharger and interested agencies and persons of its intent to issue waste discharge requirements for the discharge and has provided them with a copy of the proposed Order and an opportunity to submit written views and comments.
20. After considering all comments pertaining to this discharge during a public hearing on December 7, 2001, this Order was found consistent with the above findings.
21. The amendment is exempt from CEQA for the following reasons:
 - a. By proclamations dated January 17, 2014, and April 25, 2014, the Governor declared a state of emergency in California due to the ongoing extraordinary drought. Each proclamation included a directive that suspended the environmental review required by the California Environmental Quality Act (CEQA) to allow certain directives from the Governor to take place as quickly as possible. The project is consistent with the following directive from the April 25, 2014, proclamation: Directive 12: The California Department of

Public Health, the Office of Emergency Services, and the Office of Planning and Research will assist local agencies that the Department of Public Health has identified as vulnerable to acute drinking water shortages in implementing solutions to those water shortages.

Under Directive 19 of the April 25, 2014 Proclamation, environmental review required by CEQA is suspended for actions taken pursuant to Directive 12, and for all necessary permits needed to implement those actions, when the Office of Planning and Research “concur that local action is required.” DDW has identified the Cambria Community Services District (District) as having critical drinking water shortages, meaning that the District will deplete its available supplies within 60 to 90 days. The Office of Emergency Services has indicated that the project described in the attached Notices of Exemption is necessary to solve this critical drinking water shortage. The Office of Planning and Research concurred that local action is required on September 12, 2014. Therefore, the project is exempt from CEQA because the Governor suspended CEQA for this project pursuant to Directives 19 and 12 of the April 25, 2014 proclamation.

- b. The project is also consistent with the statutory exemption for an emergency project. CEQA defines emergency as follows: “‘Emergency’ means a sudden, unexpected occurrence, involving a clear and imminent danger, demanding immediate action to prevent or mitigate loss of, or damage to, life, health, property, or essential public services. ‘Emergency’ includes such occurrences as fire, flood, earthquake, or other soil or geologic movements, as well as such occurrences as riot, accident, or sabotage.” [Public Resources Code Section 21060.3.] Specific actions necessary to prevent or mitigate an emergency are exempt from CEQA. Emergency activities do not include long-term projects undertaken for the purpose of preventing or mitigating a situation that has a low probability of occurrence in the

short-term. [Title 14 California Code of Regulations, Section 15269(c).] The basis for the exemption is that the Discharger's water situation is dire. The District currently has less than a six month drinking water supply. The Emergency Water Supply Project will avoid potentially disastrous consequences from not having adequate water for health, safety, sanitation, and fire protection. These impacts are likely to occur in the very near future and continue as long as drought conditions persist. The project is necessary to prevent or mitigate a water shortage emergency, prevent seawater intrusion that could make current supplies unusable, and will otherwise mitigate the effects of the drought emergency declared by the Governor and emergencies that result from future critical water shortages.

- c. This facility is an existing facility and the amendment allows negligible or no expansion of use. The amendment does not change the effluent limitations, increase the flow limit, or relax any other restrictions of this Order. The microfiltration reject and backwash flows consist of groundwater pumped from under the facility and excess suspended solids removed from microfiltration product water. The primary filtration process is precautionary because the suspended solids content of pumped groundwater is already very low. This increases the concentration of suspended solids in the discharge as compared to groundwater but does not otherwise add or concentrate any waste already present in the groundwater. The percolation process removes the suspended solids from the discharge before it reaches groundwater, so suspended solids concentrations in groundwater will not increase. The amendment is therefore exempt from the provisions of the CEQA in accordance with Section 15301, Title 14 of the California Code of Regulations.

22. The amendment is consistent with Resolution 68-16 (Antidegradation Policy). This Order and Order No. R3-2014-0008 already require the Discharger to address the Wastewater Treatment Facility's prior and ongoing impacts

to groundwater. As stated in Finding 21, the amendment does not increase the flow limits or allow reduced treatment of wastes discharged from that facility. Rather, microfiltration reject water and filter backwash will undergo additional treatment through the percolation process, which will remove suspended solids. The additional discharge will treat or leave in place waste that is already present and will not produce a waste or increased volume or concentration of waste. Therefore, the Antidegradation Policy does not require the board to make findings that the amendment implements the best practicable treatment or control of the discharge necessary to ensure that (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. Nevertheless, the board has considered the Antidegradation Policy as part of its overall consideration of the Emergency Water Treatment Facility. Discharge of the reject/backwash flows is necessary to accommodate the Emergency Water Treatment Facility, which is necessary to maintain existing drinking water service. Groundwater recharged with recycled water for later extraction and use in accordance with the Recycled Water Policy and state and federal water quality laws is to the maximum benefit of the people of the State of California. Discharge of this waste stream to the percolation ponds represents the best practicable treatment or control of this waste stream because percolation provides additional treatment that direct injection would not and because it avoids moving waste that is already present in groundwater at this facility to a different location, where it could affect current drinking water supplies that are not already impacted by the Wastewater Treatment Plant. Thus, the amendment is consistent with maximum benefit to the people of the State because it will accommodate the Emergency Water Treatment Facility, will not unreasonably affect beneficial uses, and will not cause or contribute to exceedances of applicable water quality standards.

IT IS HEREBY ORDERED, pursuant to authority in Sections 13263 and 13267 of the California Water Code, the Cambria Community Services District, its agents, successors, and assigns, may discharge waste at the afore-

described facility providing compliance is maintained with the following:

All technical and monitoring reports submitted pursuant to this Order are required pursuant to Section 13267 of the California Water Code. Failure to submit reports in accordance with schedules established by this Order, 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. The Regional Board will base all enforcement actions on the date of Order adoption.

(Note: other prohibitions and 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. Applicable paragraphs are referenced in paragraph D.2. of this Order.)

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

BP Basin Plan
Design Design of Facility

Requirements not referenced are based on staff's best professional judgment.

PROHIBITIONS

1. Discharge to any areas other than the evaporation/percolation pond and spray area shown on Attachment B is prohibited.
2. Discharge of any wastes including overflow bypass, and seepage from transport, treatment or disposal system to adjacent drainageways or properties is prohibited.

Effluent Limitations

1. Effluent discharged shall not exceed the following limits:

Constituent	Unit	30-Day Mean	Daily Instantaneous Maximum
Suspended Solids	mg/l	40	100

A. DISCHARGE SPECIFICATIONS

General Specifications

1. Neither the treatment nor the discharge of waste shall create a condition of pollution.
2. Contamination or nuisance, as defined by Section 13050 of the California Water Code (CWC). (H & S.C. Section 5411, CWC Section 13263).
3. Waste shall not be disposed of in any position where they can be carried from the disposal site and discharged into waters of the State or United States.
4. Discharge of uncontaminated storm waters to the treatment facilities is prohibited unless adequate capacity is available.
5. Bypass of the treatment facilities and discharge of untreated or partially treated waste to the disposal site is prohibited. The discharge of up to 90,000 gallons per day of microfiltration unit reject and backwash may be discharged to the disposal area. (Added November 14, 2014)
6. Discharge shall be confined to the designated land discharge area as shown on Attachment B without overflow or bypass to adjacent properties or drainageways.
7. Daily flow, averaged over each month, shall not exceed 1.5 MGD^{Design}.

BOD ₅ Soluble	mg/l	50	100
Total Dissolved Solids	mg/l	1000	1500
PH ^{BP}	pH units		Between 6.5 and 8.4

Groundwater Limitations

1. The discharge shall not cause nitrate concentrations in the groundwater downgradient of the disposal area to exceed 10 mg/l (as N)^{BP}.
2. The discharge shall not cause a significant increase of mineral constituent concentrations in underlying groundwaters, as determined by comparison samples collected from wells located upgradient and downgradient of the disposal area.
3. The discharge shall not cause concentrations of chemicals and radionuclides in groundwater to exceed limits set forth in Title 22, Chapter 15, Article 4 and 5 of the California Code of Regulations^{BP}.

Wastewater Quality

1. Effluent discharged to the percolation and evaporation ponds shall have a dissolved oxygen concentration greater than 2.0 mg/l.

System Operation

1. At least two feet of freeboard shall be maintained within the District controlled disposal ponds.
2. Discharge shall not cause the formation of vector habitat within treatment or disposal areas.
3. The public shall not have contact with inadequately treated wastewater as a result of treatment or disposal
4. The discharge shall not contain substances in concentrations, which are toxic to human, animal, aquatic or plant life operations.

Solids Control

5. All accumulated sludge, salts, or solid residues shall be disposed of in a manner approved by the Executive Officer.
6. Solids shall be tested as outlined in the attached Discharge Monitoring Program.

D. PROVISIONS

1. The Discharger shall maintain an ongoing salts management program with the intent of reducing mass loading of salt in treated effluent to a level that will ensure compliance with Basin Plan Objectives and not negatively impact beneficial uses of groundwater. Salt reduction measures should focus on all potential salt contributors to the collection system, including residential, commercial, and industrial dischargers. As part of the salts management program, the Discharger shall provide an annual evaluation of salt reduction efforts. This evaluation shall include, but not be limited to:
 - a. Calculations of annual salt mass (lbs) discharged to the percolation ponds;
 - b. Analysis of ground water monitoring results related to salt and nutrient (N) constituents;
 - c. A summary of existing salt reduction measures;
 - d. Recommendations and time schedules for implementation of any additional salt reduction measures; and
 - e. The establishment or identification of a downgradient well which can reliably monitor influences from this discharge on groundwater.

The first installment of this evaluation shall be submitted to this office by January 2003 with the annual report. The annual evaluation may be included as part of the annual monitoring report each year.

2. Static ground water levels at well No. 3 (9P2) shall be maintained at or below those at production well No. 2 (SS4) at all times. Specifics are detailed in the Groundwater Monitoring section of M&RP No. 01-100.
3. Order No. 93-24, "Waste Discharge Requirements for the Cambria Community Services District", adopted by the Board in May 14, 1993, is hereby rescinded.
4. The Discharger shall comply with "Monitoring and Reporting Program No. 01-100", as specified by the Executive Officer and incorporated as part of this Order.
5. The Discharger shall comply with all items of the attached "Standard Provisions and Reporting Requirements for Waste Discharge Requirements" dated January 1984.
6. The Discharger shall submit a written report by May 30, 2005, acceptable to the Executive Officer, addressing:
 - a. Whether there will be changes in the continuity, character, location, or volume of the discharge; and,
 - b. Whether, in their opinion, there is any portion of the Order that is incorrect, obsolete, or otherwise in need of revision.
 - c. A summary of all violations of Waste Discharge Requirements, Order No. 01-100, which occurred since adoption of the order along with a description of the cause(s) and corrective action taken.

I, Kenneth A. Harris Jr., Executive Officer, do hereby certify that the foregoing is a full, complete, and correct copy of an Order adopted by the California Regional Water Quality Control Board, Central Coast Region on November 14, 2014.

Kenneth A. Harris Jr.
Executive Officer