

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

**CEASE AND DESIST ORDER NO. R3-2017-0016 REQUIRING
CAMBRIA COMMUNITY SERVICES DISTRICT
TO CEASE AND DESIST DISCHARGING WASTE TO ITS
CLASS II SURFACE IMPOUNDMENT**

WHEREAS the California Regional Water Quality Control Board, Central Coast Region (hereinafter Water Board) finds that:

1. The Cambria Community Services District (Discharger) owns and operates the Class II surface impoundment located at 990 San Simeon-Monterey Creek Road, approximately two miles north of Cambria and a half mile from the ocean in San Luis Obispo County, assessor's parcel numbers 013-051-024, and 013-051-008.
2. The Discharger collects reverse osmosis waste and other wastes from its Emergency Water Supply advanced treatment facility (Emergency Water System) in the Class II surface impoundment that is regulated pursuant to Waste Discharge Requirements (WDR) Order No. R3-2014-0047, in accordance with California Code of Regulations, title 27, section 20005 and following (Title 27).
3. The Discharger installed a pan lysimeter under the leachate collection and recovery system (LCRS) as an engineered alternative to the prescriptive vadose zone monitoring system requirements of Title 27 section 20415 (d). The intent of the vadose zone monitoring system is to identify the earliest possible detection of a release from the surface impoundment.
4. The vadose zone or unsaturated zone is defined as the zone between the ground surface and the regional water table. Soil and rock in this zone are partly filled with water and partly filled with air.
5. Based on the information the Discharger submitted in support of its Report of Waste Discharge (ROWD), supplemental information, and ROWD amendments for issuance of WDR No. R3-2014-0047, the depth to highest anticipated groundwater surface is approximately nine feet below the bottom of the LCRS sump.
6. WDR Order No. R3-2014-0047 provides in relevant parts:

A. Compliance with Other Regulations, Orders, and Standard Provisions 1.

"Discharge of waste, operations, and monitoring shall comply with all applicable requirements contained in Title 27. If any applicable regulation requirements overlap or conflict in any manner, the most water quality protective requirement must govern in all cases, unless specifically stated otherwise in this Order, or as directed by the Executive Officer."

B. Prohibitions 4.

"Disposal of wastes within five (5) feet of the highest anticipated elevation of underlying groundwater, including the capillary fringe, is prohibited, except as

allowed under Title 27, § 20080 (b) and (c). The bottom of waste for the surface impoundment is defined as the lowest part of the LCRS.”

C. Specifications 10.

“The vadose zone monitoring system shall be capable of identifying the earliest possible detection of a release from the surface impoundment.”

7. Title 27 section 20240(c) states, in relevant part:
“All new landfills, waste piles, and surface impoundments shall be sited, designed, constructed, and operated to ensure that wastes will be a minimum of five feet (5 ft.) above the highest anticipated elevation of underlying ground water”
8. Title 27, Article 4, Table 4.1, Construction Standards for Units, requires that the impoundment be constructed with a capacity to contain the 1,000-year, 24-hour precipitation event.
9. The Water Board has adopted *Water Quality Control Plan for the Central Coastal Basin* (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.
10. The following beneficial uses listed in the Basin Plan apply to all groundwater in the Estero Bay Hydrologic Unit, San Simeon Hydrologic Sub-Area where the subject facility is installed:
 - Municipal and Domestic Supply (MUN); and
 - Agricultural Supply (AGR).
11. Water Code section 13267 authorizes the Water Board to require any person who discharged, discharges, or is suspected of having discharged or discharging, within its region, to furnish technical or monitoring program reports in connection with any action relating to any requirement authorized by Division 7 of the Water Code. The Water Board invokes this authority in monitoring and reporting programs, including Monitoring and Reporting Program (MRP) No. R3-2014-0047.
12. The Water Board notified the Discharger of various violations of WDR Order No. R3-2014-0047 via combined notices of violation and a directive to submit technical and monitoring reports pursuant to Water Code section 13267 dated February 9, 2017 (13267 Order).
13. The 13267 Order required the Discharger to submit, among other things, “copies of all surface impoundment inspection log entries from January 1 through January 23, 2017.”
14. Water Board staff reviewed the surface impoundment inspection log copies the Discharger submitted in response to the 13267 Order and discovered that the Discharger detected liquid in the vadose zone monitoring system (VZMS) pan lysimeter on January 24, 2017, when it pumped 26 gallons from the VZMS during a weekly liner integrity test.
15. Further review of the inspection logs revealed that the Discharger conducted weekly liner integrity tests on the VZMS on January 31, 2017 (zero gallons removed), February 7, 2017 (90 gallons removed), February 14, 2017 (120 gallons removed), and February 21, 2017 (100 gallons removed).

16. On March 14, 2017, and April 11, 2017, the Discharger sent emails to Water Board staff and reported groundwater levels in the three monitoring wells surrounding the surface impoundment, relative to the shallowest and deepest elevations of the surface impoundment bottom. The distances between monitoring well depth to groundwater elevations and the elevations of the bottom of the surface impoundment were reported as follows:

Date	MW1 ^a Distance from bottom of Impoundment to GW ^b (feet)	MW2 Distance from bottom of Impoundment to GW (feet)	MW3 Distance from bottom of Impoundment to GW (feet)
March 14, 2017	2.73 to 0.73	6.84 to 5.84	-0.51 to 1.49
April 11, 2017	3.8 to 1.8	8.48 to 7.48	1.09 to 3.09

^aMW = Monitoring Well, ^bGW = Groundwater (depth to groundwater elevation)

17. The March 14, 2017 and April 11, 2017 reported groundwater elevations demonstrate that the Discharger failed to estimate the rise of the groundwater surface effectively during site evaluation and impoundment design processes, which resulted in the continued failure to maintain 5 feet of separation between the bottom of the impoundment and the groundwater surface elevation as required by WDR Order No. R3-2014-0047 and Title 27, detailed in findings 6 to 8 above.

18. The failure to maintain the required separation distance between the bottom of the surface impoundment and the top of the groundwater surface threatens water quality because any potential release of waste from the surface impoundment would have a reduced travel time to reach the aquifer. Such release of waste would cause immediate impacts to groundwater when the groundwater surface is up to or above the elevation of the bottom of the surface impoundment, which occurred on March 14, 2017, when the Discharger recorded a negative 0.51 foot of separation.

19. The failure to anticipate and maintain 5 feet of separation from the bottom of the surface impoundment to the top of the groundwater surface highlights a flaw in the surface impoundment design and the hydrogeological assessments contained in "Technical Memorandum 2: Physical Setting and Waste Characterization" dated July 15, 2014 and in "Technical Memorandum: Evaluation of Brine Evaporation Pond for Inundation from the 0.1-Percent Annual Exceedance Probability Storm Event" dated November 11, 2014, which were submitted as part of the Report of Waste Discharge development process.

20. The presence of liquid in the VZMS indicates that either:

- a) The surface impoundment liner is leaking, or
- b) Groundwater has infiltrated into the VZMS indicating a serious flaw in the design of the leak detection system.

21. Water Code section 13301 authorizes the Water Board to issue a cease and desist order when it finds that a discharge of waste is taking place, or threatening to take place, in violation of requirements or discharge prohibitions prescribed by the Water Board.

22. The Water Board finds that a discharge of waste is taking place, or threatening to take place, in violation of WDR Order No. R3-2014-0047 and Title 27 section 20240(c) because the Discharger has discharged waste or is threatening to discharge waste within five (5) feet of underlying groundwater.

23. This Cease and Desist Order is an enforcement action to protect the environment, and as such, is exempt from the provisions of the California Environmental Quality Act (CEQA), in accordance with California Code of Regulations, title 14, sections 15307, 15308 and 15321.
24. This Cease and Desist Order prohibits discharge of wastewater to the Class II surface impoundment facility until implementation of corrective actions as required below.
25. On April 18, 2017, the Water Board notified the Discharger and interested agencies and persons of its intent to adopt this Cease and Desist Order and provided an opportunity to submit written evidence and comments.
26. Any person adversely affected by this action of the Water Board may petition the State Water Board to review the action. The petition must be received by the State Water Board Office of Chief Counsel, P.O. Box 100, Sacramento, CA 95812-0100, within 30 days of the date on which the action was taken. Copies of the law and regulations applicable to filing petitions will be provided upon request, and are available at:

http://www.waterboards.ca.gov/public_notices/petitions/water_quality/.

IT IS HEREBY ORDERED, in accordance with Water Code sections 13301 and 13267 that the Discharger shall immediately cease and desist from discharging and threatening to discharge wastes in violation of Order No. R3-2014-0047 and shall take appropriate remedial or preventative actions as follows before recommencing discharges of reverse osmosis wastes from the Emergency Water System (EWS):

The Discharger has two options going forward: I) rehabilitate the Impoundment before recommencing waste storage operations; or II) discontinue use of the impoundment for waste storage.

The Discharger must submit a workplan with milestones and timelines for accomplishing the tasks stated below within 30-days of the adoption of this cease and desist order. The workplan shall include a timeline for removing all wastes from the surface impoundment at the earliest possible date.

I Tasks To Be Completed Before Recommencing Surface Impoundment Operations:

1. The Discharger shall contract with a hydrogeologist to perform a hydrogeologic evaluation of the surface impoundment site as well as upgradient properties to determine the highest anticipated groundwater elevation beneath the surface impoundment. An assessment of the volume of water with which the surface impoundment site will be inundated in a 1,000-year, 24-hour storm event is also required.
2. The Discharger shall contract with a licensed civil engineer or geologist with the requisite surface impoundment design experience to evaluate, propose, document, and oversee the design and installation of a drainage system beneath the surface impoundment such that the maximum groundwater surface elevation, including the capillary fringe, shall be maintained at five feet of separation.

3. The Discharger shall contract with a licensed engineer or geologist with the requisite surface impoundment design experience to evaluate, propose, document, and oversee the repair of the VZMS. The repairs shall preclude liquid from entering the pan lysimeter other than from the LCRS.
4. The Discharger shall submit a technical report documenting the proposed changes to achieve the required groundwater separation distance and VZMS repairs, including milestones and timelines, to the Executive Officer for review and approval.

II. Alternatively, Tasks To Be Completed Before Discontinuing Use of the Surface Impoundment:

5. If the Discharger chooses to discontinue using the existing Class II surface impoundment for the storage of designated wastes from the EWS facility, the Discharger shall provide the following for Executive Officer's approval:
 - a) A final closure plan and timeline for closing the facility in accordance with WDR Order No. R3-2014-0047, specifications 20, 21, and 22; or
 - b) The Discharger may propose a detailed plan and timeline for the cleaning and re-purposing of the surface impoundment.

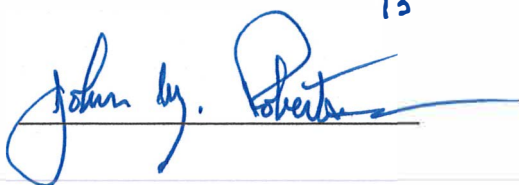
If, in the opinion of the Water Board or its delegate, the Discharger fails to comply with the provisions of this Cease and Desist Order, the Water Board may pursue further enforcement action. The Executive Officer, Assistant Executive Officer, or other delegate may issue a complaint for administrative civil liability or take any other applicable enforcement action. Failure to comply with this Cease and Desist Order may result in the assessment of administrative civil liability for up to \$1,000 per violation per day, pursuant to Water Code section 13268, or \$5,000 per violation per day, pursuant to Water Code section 13350. Any discharge to waters of the United States may result in administrative civil liability up to \$10,000 per discharge violation per day pursuant to Water Code section 13385. The Water Board may refer this matter to the Attorney General for judicial enforcement. The Water Board reserves its right to take any enforcement actions authorized by law.

Electronic Submittal of Information

The Discharger is directed to submit all reports required under this Cease and Desist Order adopted by the Water Board, as well as all other future monitoring reports, in Electronic Data Format – searchable Portable Document Format (.pdf) to GeoTracker.

CERTIFICATION

I, John M. Robertson, Executive Officer, do hereby certify that 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 July 14, 2017.

 13

ECM # 1000006221

r:\rb3\shared\wdr\wdr facilities\san luis obispo co\cambria wwtp\emergency water supply project\enforcement\cdo\ccsd title 27 cdo
final draft.docx