

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

CLEANUP AND ABATEMENT ORDER NO. R5-2005-0720

FOR
CIRCLE OAKS COUNTY WATER DISTRICT
WASTEWATER TREATMENT FACILITY
NAPA COUNTY

This Order is issued to Circle Oaks County Water District (hereafter "Discharger") based on provisions of California Water Code Section 13304, which authorizes the Regional Water Quality Control Board, Central Valley Region, (hereafter Regional Board) to issue a Cleanup and Abatement Order.

The Executive Officer of the Regional Board finds, with respect to the Discharger's acts, or failure to act, the following:

1. The Discharger owns and operates the Circle Oaks County Water District wastewater treatment facility, which is comprised of a domestic wastewater collection system and three stabilization ponds with disposal by percolation and evaporation.
2. The Circle Oaks County Water District Wastewater Treatment Facility is located approximately three miles south of the junction of State Highways 128 and 121 in Section 33, T7N, R3W, MDB&M.
3. On 22 April 1994, the Regional Board adopted Waste Discharge Requirements (WDRs) Order No. 94-097, which prescribes requirements for the collection and treatment of up to 72,000 gallons per day (gpd) of domestic wastewater.
4. Currently the wastewater system services 189 homes. At full build out, the wastewater system is designed to serve up to 339 homes. No new homes have been connected to the wastewater system since the Discharger implemented a water service connection moratorium in 2001.
5. On 10 February 2003, a Notice of Violation (NOV) was issued to the Discharger for a domestic wastewater spill, which occurred on 26 December 2002. The spill, estimated at up to 660 gallons, was the result of a sewer blockage in the collection system. The Discharger was in violation of Discharge Prohibition Nos. A.1 and A.2 of the WDRs.
 - Discharge Prohibition No. A.1 of the WDRs states: "*Discharge of wastes to surface waters or surface water drainage is prohibited.*"
 - Discharge Prohibition No. A.2 of the WDRs states: "*Bypass or overflow of untreated or partially treated waste is prohibited.*"
6. On 27 August 2003 staff conducted a site inspection and determined that the Discharger was in violation of Discharge Specification Nos. B.6 and B.8 of the WDRs for excess vegetation in the ponds and for not maintaining two feet of freeboard. In addition, staff observed floating solids in pond No. 1.

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- Discharge Specification No. B.6 states: “*Ponds shall be managed to prevent breeding of mosquitoes. In particular,*
 - a. *An erosion control program should assure that small coves and irregularities are not created around the perimeter of the water surface.*
 - b. *Weeds shall be minimized through control of water depth, harvesting, or herbicides.*
 - c. *Dead algae, vegetation, and debris shall not accumulate on the water surface.”*
 - Discharge Specification No. B.8 states: “*Ponds shall have sufficient capacity to accommodate allowable wastewater flow and design seasonal precipitation and ancillary inflow and infiltration. Design seasonal precipitation shall be based on total annual precipitation using a return period of 100-years, distributed monthly in accordance with historical rainfall patterns. Freeboard shall never be less than two feet (measured vertically to the lowest point of overflow).*”
7. On 16 September 2003, a NOV was issued to the Discharger for these violations. The NOV identified that the vegetation observed in the ponds should be removed, and that the Discharger must submit two technical reports. The first report was to describe measures taken to ensure that the freeboard meets the two-foot requirement. The second was to be a sludge management plan.
 8. On 25 September 2003, staff sent the Discharger a letter requesting the installation of groundwater monitoring wells, and a Draft Revised Monitoring and Reporting Program (MRP). The wells are necessary to determine if the discharge of waste from the ponds is degrading the underlying groundwater. The letter required the Discharger to submit a groundwater monitoring well installation workplan by 1 January 2004, and a well installation report and groundwater sampling and analysis plan (SAP) by 1 June 2004.
 9. On 30 October 2003, the Discharger submitted comments to the Draft Revised MRP requesting a 24-month delay in implementing the MRP. The Discharger indicated that the requirements in the Draft Revised MRP would dramatically impact the utility rates of the 189 homeowners in the District.
 10. On 11 November 2003, the Discharger submitted a response to the 16 September 2003 NOV. In summary, the Discharger stated that vegetation along the pond would be controlled via herbicide spray applications, the freeboard violation was found to be in error after the pond staff gauge was correctly calibrated, and that there was no urgency to submit a Sludge Management Plan at this time.
 11. On 24 November 2003, following staff’s discussions with the Discharger, the Executive Officer issued a final revised MRP. The MRP allowed a one year extension from staff’s original timeline for submittal of the Groundwater Monitoring Well Installation Workplan (to 1 January 2005), and the submittal of a Monitoring Well Installation Report and Groundwater SAP (by 1 June 2005).
 12. On 30 March 2004, the Discharger submitted the Sludge Management Plan as required by the 16 September 2003 NOV. In summary, the plan stated that after 40 years, the ponds have generated less than one foot of sludge and therefore there is no reason for concern for at least ten years or

more. The report didn't address the floating solids observed by staff during the August 2003 inspection.

13. On 17 December 2004, the Discharger requested a one-month extension to submit the Groundwater Monitoring Well Installation Workplan.
14. On 31 January 2005, the Discharger submitted a Groundwater Monitoring Well Installation Workplan and Groundwater SAP, which described the proposed installation and sampling of five groundwater monitoring wells around the three wastewater ponds. The workplan stated that the work to install the wells and complete one round of groundwater sampling would take approximately seven to nine weeks from the date of drill rig mobilization. Staff approved the workplan and the SAP on 16 February 2005, stating that the Monitoring Well Installation Report was due on 1 June 2005 and the second quarter groundwater monitoring report was to be submitted by 1 August 2005.
15. On 21 June 2005 the Discharger requested a two-year extension to install the five groundwater monitoring wells described in the approved groundwater monitoring well installation workplan. In summary, the letter stated "*Circle Oaks County Water District Board of Directors recently sent out a request for proposal and received one proposal from EBA Engineering to drill five monitoring wells near the district's wastewater ponds. EBA's proposal was the only proposal submitted and the cost was nearly \$40,000. The current financial condition of the district will not allow the expenditure of money without endangering the district financially.*"
16. Discharge Specification No. B.1 of the WDRs states: "*The monthly average dry weather discharge flow shall not exceed 72,000 gallons per day.*" Staff's review of monthly monitoring reports submitted from December 2001 to May 2005 indicates that the monthly average discharge has ranged from 33,524 gpd to 156,584 gpd. The highest flows were reported during the winter months. Flows exceeding 100,000 gpd were reported in December 2001, January 2002, December 2002, February 2005, and April 2005. In July, August, and September 2004, the Discharger exceeded the monthly average dry weather discharge of 72,000 gpd. During these months, the average dry weather flow ranged from 73,654 to 77,414 gpd. Because of these excessive flows, this C&A requires the Discharger to submit a workplan describing methods that will be used to provide an assessment of the collection system and a Inflow and Infiltration Assessment Report that provides results of the collection system evaluation.

REGULATORY CONSIDERATIONS

17. The Regional Board's Water Quality Control Plan (Fourth Edition) for the Sacramento River and San Joaquin River Basins (Basin Plan) establishes the beneficial uses of waters of the state and water quality objectives to protect those uses.
18. Surface water drainage is to Capell Creek, a tributary to Lake Berryessa. The beneficial uses of Lake Berryessa are municipal and domestic supply; agricultural supply; power generation; water contact recreation; noncontact water recreation; warm freshwater habitat; cold freshwater habitat; migration of warm and cold freshwater aquatic organisms; spawning, reproduction and/or early development of warm freshwater aquatic organisms; and wildlife habitat.

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19. The beneficial uses of underlying groundwaters as stated in the Basin Plan are municipal and domestic water supply, agricultural supply, and industrial service and process supply. No data currently exists as to the quality of the underlying groundwater.
20. The Discharger has discharged waste in violation of its WDRs in part because it has exceeded the permitted monthly average dry weather discharge limit and has failed to install groundwater monitoring wells as required by Revised Monitoring and Reporting Program No. 94-097. Due to the flow exceedances and lack of a groundwater monitoring network, the Discharger has caused or permitted, or threatens to cause or permit, waste to be discharged in such a manner that it threatens to create a condition of pollution or nuisance.
21. Section 13304(a) of the California Water Code provides that: “Any person who has discharged or discharges waste into waters of this state in violation of any waste discharge requirements or other order or prohibition issued by a regional board or the state board, or who has caused or permitted, causes or permits, or threatens to cause or permit any waste to be discharged or deposited where it is, or probably will be, discharged into the water of the state, and creates, or threatens to create, a condition of pollution or nuisance, shall upon order of the regional board clean up the waste or abate the effects of the waste, or, in case of threatened pollution or nuisance, take other necessary remedial action, including but not limited to, overseeing cleanup and abatement efforts. Upon failure of any person to comply with the cleanup or abatement order, the Attorney General, at the request of the board, shall petition the superior court for that county for the issuance of an injunction requiring the person to comply with the order. In the suit, the court shall have jurisdiction to grant a prohibitory or mandatory injunction, either preliminary or permanent, as the facts may warrant.”
22. Section 13267(b) of the California Water Code provides that: “In conducting an investigation specified in subdivision (a), the regional board may require that any person who has discharged, discharges, or is suspected of having discharged or discharging, or who proposes to discharge waste within its region, or any citizen or domiciliary, or political agency or entity of this state who has discharged, discharges, or is suspected of having discharged or discharging, or who proposes to discharge, waste outside of its region that could affect the quality of waters within its region shall furnish, under penalty of perjury, technical or monitoring program reports which the regional board requires. The burden, including costs, of these reports shall bear a reasonable relationship to the need for the report and the benefits to be obtained from the reports. In requiring those reports, the regional board shall provide the person with a written explanation with regard to the need for the reports, and shall identify the evidence that supports requiring that person to provide the reports.”
23. The technical reports required by this Order are necessary to ensure compliance with this C&A Order and WDR Order No. 94-097, and to ensure the protection of the public health and safety. The Discharger owns and operates the facility that discharges waste subject to this Order.
24. The issuance of this Order is an enforcement action taken by a regulatory agency and is exempt from the provisions of the California Environmental Quality Act, pursuant to Section 15321(a)(2), Title 14, California Code of Regulations.
25. Any person affected by this action of the Regional Board may petition the State Water Resources Control Board (State Board) to review the action in accordance with Section 2050 through 2068, Title 23, California Code of Regulations. The petition must be received by the State Board within 30 days of the date of this Order. Copies of the law and regulations applicable to filing petitions are available at http://www.waterboards.ca.gov/water_laws/cawtrcde/wqpetition_instr.html and will also be provided upon request.

IT IS HEREBY ORDERED that, pursuant to Sections 13304 and 13267 of the California Water Code, Circle Oaks County Water District shall cleanup and abate, forthwith, the wastewater treatment facility such that all the requirements prescribed in WDRs Order No. 94-097 are met. "Forthwith" means as soon as is reasonably possible.

Any person signing a document submitted under this Order shall make the following certification:

"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 knowledge and 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."

1. By **1 March 2006**, the Discharger shall submit a Revenue Plan that describes the costs associated with implementation of all tasks in this Order. The plan must show whether the Discharger has necessary funds to implement all tasks. Should the Revenue Plan show that there are inadequate funds, the Discharger must include an implementation schedule that shows how the Discharger will raise the necessary funds.
2. By **1 June 2006**, the Discharger shall submit a workplan describing methods (i.e. smoke testing, video surveying, manhole surveying, etc.) that will be used to provide an assessment of those segments of the collection system known to exhibit significant inflow and infiltration (I/I). The workplan shall also describe those portions of the collection system which are in need of immediate repair and shall include a proposed schedule for completing these necessary repairs.
3. By **1 July 2006**, the Discharger shall submit a report that provides results of the survey to determine the thickness and volume of sludge in each of the ponds.
4. By **1 September 2006**, the Discharger shall submit a Revised Sludge Management Plan that includes at a minimum a detailed program and schedule for periodic pond cleanout and disposal of biosolids removed during pond cleanout, including at least the items listed in Attachment A of this Order.
5. By **1 July 2007**, the Discharger shall submit a Groundwater Monitoring Well Installation Report of Results that contains the information presented in the second section of Attachment B. The monitoring wells must be installed in accordance with the approved groundwater monitoring well installation workplan.
6. By **1 July 2007**, the Discharger shall begin groundwater monitoring in accordance with requirements set forth in MRP No. 94-097.

7. By **1 July 2008**, the Discharger shall submit an *Inflow and Infiltration (I/I) Assessment Report* that describes the results of the Discharger's I/I evaluation of the collection system (i.e. smoke testing, video surveying, etc.), and repairs performed to reduce I/I to industry standards.
8. **Beginning 1 May 2006**, and by the first day of the second month following each calendar quarter (**i.e., by 1 February, 1 May, 1 August, and 1 November each year**), the Discharger shall submit a progress report describing the work completed to date regarding each of the reporting requirements described above.

In addition to the above, the Discharger shall comply with existing WDRs Order 94-097 and all applicable provisions of the California Water Code that are not specifically referred to in this Order. As required by the California Business and Professions Code Sections 6735, 7835, and 7835.1, all reports shall be prepared by, or under the supervision of, a California Registered Engineer or Professional Geologist and signed by the registered professional.

If, in the opinion of the Executive Officer, the Discharger fails to comply with the provisions of this Order, the Executive Officer may refer this matter to the Attorney General for judicial enforcement or may issue a complaint for administrative civil liability.

Failure to comply with this Order may result in the assessment of an Administrative Civil Liability up to \$1,000 per day or up to \$10,000 per day of violation, depending on the violation, pursuant to the California Water Code, including sections 13268, 13271, and 13350. The Regional Board reserves its right to take any enforcement actions authorized by law.

This Order is effective upon the date of signature.

----Original Signed by----

THOMAS R. PINKOS, Executive Officer

16 December 2005
(Date)

Attachment A: *Information Needs for a Sludge Management Plan*

Attachment B: *Requirements for Monitoring Well Installation Workplans and Monitoring Well Installation Reports*



California Regional Water Quality Control Board

Central Valley Region

Robert Schneider, Chair



Alan C. Lloyd, Ph.D.
Agency Secretary

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ATTACHMENT A INFORMATION NEEDS FOR A SLUDGE MANAGEMENT PLAN

A. Treatment Pond Cleaning

1. Describe the measurements for the sludge level in each treatment pond.
2. Describe the method for removing the sludge from each treatment pond.
3. Provide a time schedule for the sludge removal from each treatment pond.

B. Sludge Production

1. Provide a schematic diagram showing solids flow and sludge handling operations; include, where applicable, supernatant flow and handling operations.
2. Specify the annual biosolids production in dry tons and how this will be quantified.
3. For sludge handling facilities with sludge drying beds:
 - a. Describe number and size of sludge drying beds.
 - b. Describe sludge drying bed construction (e.g., liner, leachate collection system).
 - c. If sludge drying beds are not lined, thoroughly describe measures taken to ensure that groundwater is not adversely affected by sludge drying operations.
 - d. Indicate the frequency with which sludge is wasted and applied on sludge drying beds.

C. Biosolids Disposal

1. Describe and provide the following information related to the method of biosolids disposal. If more than one method is used, include the percentage of annual biosolids production disposed of by each method.
 - a. Landfill Disposal
 - i. Name(s) and location(s) of landfill(s).
 - ii. Name and telephone number of the contact person at the landfill(s).
2. Incineration
 - a. Name(s) and location(s) of incineration site(s).
 - b. Name and telephone number of the contact person at the incineration site(s).
3. Composting
 - a. Name(s) and location(s) of composting site(s).

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Attachment A
Sludge Management Plan Items

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- b. Name and telephone number of the contact person at the composting site(s).
- 4. Land Application Off-site
 - a. Ownership of the site(s) where biosolids are applied.
 - b. Name and telephone number of the contact person responsible for application of the biosolids.



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California Environmental Protection Agency

Attachment A
Sludge Management Plan Items

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- b. Name and telephone number of the contact person at the composting site(s).
- 4. Land Application Off-site
 - a. Ownership of the site(s) where biosolids are applied.
 - b. Name and telephone number of the contact person responsible for application of the biosolids.