

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

CLEANUP AND ABATEMENT ORDER NO. R5-2007-0711

FOR
EL DORADO IRRIGATION DISTRICT
CAMINO HEIGHTS WASTEWATER TREATMENT FACILITY
EL DORADO COUNTY

This Order is issued to the El Dorado Irrigation District (EID) based on provisions of California Water Code Section 13304, which authorizes the Regional Water Quality Control Board, Central Valley Region, (hereafter Regional Water Board) to issue a Cleanup and Abatement Order (CAO).

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

1. The El Dorado Irrigation District (hereafter "Discharger") owns and operates the Camino Heights wastewater treatment facility (WWTF), which is comprised of a domestic wastewater collection system, two treatment lagoons, one storage lagoon, and a 15-acre spray field.
2. The Camino Heights WWTF is located in the SW-1/4 of Section 12, T10N, R11E, MDB&M with surface water drainage to Weber Creek, which is a tributary to the South Fork of the American River upstream of Folsom Lake.
3. On 27 April 2001, the Regional Water Board adopted Waste Discharge Requirements (WDRs) Order No. 5-01-100, which prescribes requirements for the treatment and disposal of up to 60,000 gallons per day (gpd) of domestic wastewater.
4. On 28 June 2005, Regional Water Board staff issued a Notice of Violation (NOV) for a 22 November 2004 spill that occurred when the main effluent irrigation line broke. Approximately 25,000 gallons of disinfected wastewater was discharged to a surface watercourse. The discharge of disinfected wastewater to surface water or surface water drainage courses is a violation of Discharge Prohibitions A.2 and A.5 of WDRs Order No. 5-01-100.
 - a. Discharge Prohibition A.2 of WDRs Order No. 5-01-100 states, " By-pass around, or overflow from, the treatment plant and spray disposal area of untreated or partially treated waste is prohibited."
 - b. Discharge Prohibition A.5 of WDRs Order No. 5-01-100 states " The discharge of wastewater from the spray disposal field to surface waters or surface water drainage courses is prohibited."
5. On 4 January 2006, the Discharger informed Regional Water Board staff that they had installed a "soft start" valve to reduce water hammer in the effluent irrigation system.
6. On 18 April 2006, the Discharger notified Regional Water Board staff that it had been discharging wastewater to the spray field during periods of precipitation and/or within 24

hours of a precipitation event without the tailwater control system functioning. EID began discharging to the spray field as an emergency response to prevent the risk of pond overflow. The discharge of wastewater to the spray fields without the tailwater system operating, and the discharge of wastewater to the spray fields during periods of precipitation or within 24 hours of a precipitation event, is a violation of Discharge Specifications B.5, B.6, B.8, and B.10 of WDRs Order No. 5-01-100.

- a. Discharge Specification B.5 of the WDRs states, "All tailwater and/or storm water shall be collected and returned to the holding ponds at all times when wastewater is being applied to the spray disposal field."
 - b. Discharge Specification B.6 of the WDRs states, "The Discharger shall not irrigate with effluent 24 hours before precipitation, during periods of precipitation, for 24 hours after cessation of precipitation, or when the ground is saturated."
 - c. Discharge Specification B.8 of the WDRs states, "The tailwater recapture system must be operated to capture all wastewater runoff, as well as any storm water runoff that occurs within 24 hours of the last application of wastewater."
 - d. Discharge Specification B.10 of the WDRs states "The discharge shall remain within the designated treatment and disposal areas at all times."
7. On 31 May 2006, the Discharger met with Regional Water Board staff to discuss inflow and infiltration (I/I) issues associated with the wastewater treatment and storage ponds. The Discharger's consultant presented geotechnical information suggesting that unlined Pond Nos. 2 and 3 are receiving I/I from seasonal fracture flow and sub-surface flow through highly permeable Tertiary gravels within the eastern slope (upslope) of the unlined ponds. Additionally the Discharger informed Regional Water Board staff that they were considering re-designing the 15-acre spray field, as they were currently utilizing only 5-acres of the 15-acre sprayfield. Regional Water Board staff advised the Discharger that new WDRs would need to be developed to regulate the facility, once the Discharger completed facility improvements to reduce I/I into Pond Nos. 2 and 3, and re-designed the 15-acre spray field.
8. On 15 August 2006, Regional Water Board staff issued a NOV for a 22 December 2005 spill in which 750 gallons of disinfected wastewater was released to a seasonal stream when an effluent irrigation line broke. The discharge of disinfected wastewater to surface water or surface water drainage courses is a violation of Discharge Prohibitions A.2 and A.5 of WDRs Order No. 5-01-100.
- a. Discharge Prohibition A.2 of WDRs Order No. 5-01-100 states, "By-pass around, or overflow from, the treatment plant and spray disposal area of untreated or partially treated waste is prohibited."
 - b. Discharge Prohibition A.5 of WDRs Order No. 5-01-100 states "The discharge of wastewater from the spray disposal field to surface waters or surface water drainage courses is prohibited."

9. On 28 September 2006, the Discharger submitted a letter describing the immediate and long-term actions it planned to take to decrease I/I into Pond Nos. 2 and 3, and stop the discharge of wastewater to the spray disposal field 24 hours prior to, during, and 24 after a precipitation event. Immediate actions and long-term improvements include, but are not limited to:
 - a. Designing a 5-acre subsurface drip system within an unused portion of the existing 15-acre spray field.
 - b. Improving Pond No. 2 by:
 - Grading the road to slope away from Pond No. 2.
 - Constructing a drain to approximately six feet below ground surface (bgs) above Pond No. 2 to cut off and divert subsurface water to the creek.
 - Constructing concrete/gunite surface drainage ditches around Pond No. 2 to direct storm water to the creek, and
 - Cleaning out storm water drains and improving drainage around Pond No. 2.
 - c. Improving Pond No. 3 by:
 - Raising the bottom of Pond No. 3 approximately three to five feet and then raising the berms approximately two and a half feet, or
 - Constructing a 22-foot cut-off drain around Pond No. 3 to reduce inflow and infiltration into Pond No. 3.
10. On 24 January 2007, approximately 600 gallons of disinfected wastewater surfaced and was contained on site when an effluent irrigation line break occurred.
11. On 16 February 2007, the Discharger submitted a letter stating that construction of the 8-foot deep cut-off trench around Pond No. 2 had been completed. The cut-off trench is designed to capture subsurface drainage and re-direct the flow away from the storage ponds. Additionally the Discharger stated that they had completed road grading and drainage ditch improvements to reduce surface runoff from entering the storage ponds.
12. On 1 May 2007, the Discharger submitted comments to the Draft CAO. In the comment letter, the Discharger stated that the previously proposed modifications to Pond No. 3 to reduce I/I and a background groundwater quality study are not necessary. However, the Discharger has not submitted information that justifies its contention that long-term improvements to Pond No. 3 are not needed. Specifically, the water balance submitted with the 28 September 2006 letter is inadequate for the following reasons:
 - a. It is unclear how the values for influent flows, groundwater inflow into the ponds, precipitation, and pond evaporation were derived. All model inputs must be justified, and supporting document/calculations must be provided.

- b. The use of 90 percent of the average pan evaporation to determine pond evaporation is not justified.
- c. The water balance did not include separate inputs for sewer I/I and groundwater inflow to the pond system. A sewer I/I analysis must be included to support the water balance.
- d. The use of a 0.6-acre disposal area for the subsurface drip system is inconsistent with the Discharger's previous proposal to install a 5-acre subsurface drip system, yet no supporting design calculations were included to justify the drip system discharge rates.
- e. It is not clear how the number of non-rain days were calculated. The WDRs do not allow the Discharger to irrigate with effluent 24 hours before precipitation, during precipitation, for 24 hours after precipitation, or when the ground is saturated.

Therefore it is appropriate to require that the Discharger submit a revised water balance. If the revised water balance shows that the facility does not have sufficient capacity to comply with the WDRs, it is appropriate to require that the Discharger complete the improvements to Pond No. 3 and/or any other work needed to ensure adequate capacity.

Furthermore, a background groundwater quality study is necessary to allow staff to evaluate compliance with the groundwater limitations of the WDRs.

- 13. A preliminary review of the Discharger's Quarterly Monitoring Reports by Regional Water Board staff indicates that the Discharger may have degraded groundwater quality. This Order requires the Discharger to submit a groundwater quality analysis report.

REGULATORY CONSIDERATIONS

- 14. The *Water Quality Control Plan for the Sacramento River and San Joaquin River Basins, Fourth Edition*, (hereafter Basin Plan) designates beneficial uses, establishes water quality objectives, contains implementation plans and policies for protecting waters of the basin, and incorporates by reference plans and policies adopted by the State Water Board. Pursuant to Section 13263(a) of the California Water Code, waste discharge requirements must implement the Basin Plan.
- 15. Surface water drainage is to Weber Creek, a tributary to the South Fork of the American River. The beneficial uses of the South Fork of the American River are municipal and domestic supply, agricultural supply, industrial process supply, water contact recreation, non-contact water recreation, warm freshwater habitat, cold freshwater habitat, and wildlife habitat.
- 16. The beneficial uses of the underlying groundwater include municipal, domestic, and agricultural supply, and industrial service and process supply.
- 17. Section 13304(a) of the California Water Code provides that: "*Any person who has discharged or discharges waste into the waters of this state in violation of any waste*

discharge requirement 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 waters 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 the case of threatened pollution or nuisance, take other necessary remedial action, including, but not limited to, overseeing cleanup and abatement efforts. A cleanup and abatement order issued by the state board or a regional board may require the provision of, or payment for, uninterrupted replacement water service, which may include wellhead treatment, to each affected public water supplier or private well owner. 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.”

18. As described in the Findings, the discharge of waste to surface waters is a violation of WDRs Order No. 5-01-100, and threatens to cause pollution or nuisance. The Discharger, by failing to control the discharge, has caused or permitted, or threatens to cause or permit, waste to be discharged in such a manner that it threatens to cause a threat to public health and/or create a condition of pollution or nuisance. Each of these actions subjects the Discharger to an order under section 13304 of the California Water Code.
19. 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.”*
20. The technical reports required by this Order are necessary to ensure compliance with this CAO and WDRs Order No. 5-01-100, and to ensure the protection of the public health and safety and waters of the state. The Discharger owns and operates the facility that discharges waste subject to this Order.
21. 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.

22. Any person affected by this action of the Regional Water 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, El Dorado Irrigation District shall cleanup and abate, forthwith, the Camino Heights Wastewater Treatment Facility such that all the requirements prescribed in WDRs Order No. 5-01-100 are met.

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. **Effectively immediately**, and continuing until the long-term solutions are implemented and this Order is rescinded, the Discharger shall:
 - a. Monitor freeboard levels in Pond No.3 twice per week between 1 October and 31 May each year, and include the data in the monthly monitoring reports required under Monitoring and Reporting Program (MRP) No. 5-01-100.
 - b. Prepare monthly calculations of the volume of I/I entering the ponds between 1 October and 31 May each year, and include the data in the monthly monitoring reports required under MRP No. 5-01-100.
 - c. Submit monthly progress reports describing the work completed to date to comply with each of the requirements described below. The Monthly Progress Reports shall be submitted by the **1st day of the following month** (e.g. the January monthly report is due by 1 February). The Monthly Progress Report may be combined with the monthly monitoring report required by MRP No. 5-01-100.

2. By **15 July 2007**, the Discharger shall submit a revised water balance that addresses inadequacies cited in Finding No. 12. If the revised water balance does not clearly show adequate storage and disposal capacity to ensure compliance with the WDRs, then by **1 November 2007**, the Discharger shall submit documentation, including a water balance,

certifying that the long-term improvements to Pond No. 3 and/or other work needed to ensure adequate capacity have been completed.

3. By **1 October 2007**, the Discharger shall submit a *Sprayfield Evaluation Report*. The report shall evaluate options for the repair, replacement, and/or upgrade of the system to reduce or eliminate spills from the sprayfield and shall describe the selected actions that the Discharger will implement.
4. By **31 December 2007**, the Discharger shall submit a report certifying that the subsurface drip system has been installed and is operational. The report shall show that the area of the drip system is sufficient to ensure adequate capacity, as determined by the approved water balances. The report shall include the design information for the subsurface drip irrigation system along with calculations for the hydraulic and nutrient loading rates to the land application area. The report shall also contain an operation and maintenance plan for the sub-surface drip irrigation system.
5. By **1 May 2008**, the Discharger shall submit a *Background Groundwater Quality Study Report*. For each groundwater monitoring parameter/constituent identified in the MRP, the report shall present a summary of monitoring data, calculation of the concentration in background monitoring wells, and a comparison of background groundwater quality to that in wells used to monitor the wastewater ponds. Determination of background quality shall be made using the methods described in Title 27, Section 20415(e)(10), or equivalent, and shall be based on data from at least four consecutive quarterly (or more frequent) groundwater monitoring events. For each monitoring parameter/constituent, the report shall compare measured concentrations for compliance monitoring wells with the calculated background concentration.

If the *Background Groundwater Quality Study Report* shows that the wastewater discharge has impacted, or is likely to impact groundwater quality, then upon request of the Executive Officer the Discharger shall submit a *Groundwater Mitigation Plan* which shall evaluate contaminant control alternatives, describe a preferred alternative, and provide a proposed timeline to meet the Groundwater Limitations of WDRs Order No. 5-01-100. The selected contaminant control alternative must comply with State Water Resources Control Board Resolution No. 68-16 and be consistent with the most recent Basin Plan.

6. By **1 June 2008**, the Discharger shall submit a *Sprayfield Improvements Completion Report* certifying that the long-term improvements to reduce or eliminate spills from the sprayfield have been completed.
7. By **30 October 2008**, the Discharger shall submit a Report of Waste Discharge (RWD). The RWD shall consist of the following:
 - a. A completed Form 200 *Application/Report of Waste Discharge General Information* (enclosed), which for a corporation must be signed by a principal executive officer of at least the level of senior vice president.

- b. The answers to the enclosed *Additional Information Requirements for a Report of Waste Discharge* (enclosed). Please note that these answers must be in the form of a technical report prepared by a California Registered Professional Engineer or Geologist.

In addition to the above, the Discharger shall comply with existing WDRs Order No. 5-01-100 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 the Discharger is unable to perform any activity or submit any document in compliance with the schedule set forth herein, or in compliance with any work schedule submitted pursuant to this Order and approved by the Executive Officer, the Discharger may request, in writing, an extension of the time specified. The extension request shall include justification for the delay. Any extension request shall be submitted as soon as a delay is recognized and prior to the compliance date. An extension may be denied in writing or granted by revision of this Order or by a letter from the Executive Officer.

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 section 13268. The Regional Water Board reserves its right to take any enforcement actions authorized by law.

This Order is effective upon the date of signature.

PAMELA C. CREEDON, Executive Officer

(May 31, 2007)

Attachments: Additional Information Requirements for A Report of Waste Discharge
Form 200 Application/Report of Waste Discharge