

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

ORDER NO. R5-2008-0136

CEASE AND DESIST ORDER
REQUIRING
THE CITY OF DIXON
DIXON WASTEWATER TREATMENT FACILITY
SOLANO COUNTY

TO CEASE AND DESIST
FROM DISCHARGING CONTRARY TO REQUIREMENTS

The Regional Water Quality Control Board, Central Valley Region, (hereafter referred to as "Regional Water Board") finds that:

1. The City of Dixon (hereafter Discharger) owns and operates a wastewater treatment facility (WWTF) in Dixon, Solano County.
2. The WWTF is regulated by Waste Discharge Requirements (WDRs) Order No. 94-187, which was adopted by the Regional Water Board on 24 June 1994.
3. The WWTF serves the City of Dixon, and comprises a headworks, thirteen unlined wastewater treatment/storage ponds covering approximately 140 acres (two of which are aerated), eight percolation/evaporation ponds on 160 acres, and 120 acres of additional land application disposal areas. The Discharger relies solely on percolation and evaporation to dispose of all wastewater.

Background

4. WDRs Order No 94-187 limits influent flows to 1.2 mgd as an average daily dry weather flow, prohibits the discharge of waste to surface waters, and imposes limits on the degree of groundwater degradation that the discharge may cause.
5. On 3 May 1996, the Regional Water Board adopted Cease and Desist Order (CDO) No. 96-152, which required that the Discharger construct capacity improvements and address a major sewer inflow and infiltration (I/I) problem that caused exceedance of the influent flow limits of the WDR and two major spills of disinfected and dechlorinated wastewater to surface waters in 1995 and 1996. Among other related items, CDO No. 96-152 required that the Discharger address the capacity problem as follows:
 - a. Evaluate infiltration/inflow by 1 October 1996.
 - b. Expand to accommodate 1.35 mgd average daily dry weather flow and I/I flows by 1 December 1996.
 - c. Expand to 1.5 mgd average daily dry weather flow by 1 January 1998.
 - d. Provide a plan and schedule for future expansions to provide capacity for build out to 7.5 mgd by 1 January 1998.

6. The Phase 1 expansion was completed on time. However, the 1996 average daily dry weather flow exceeded the new capacity and staff determined that the proposed Phase 2 project would not provide adequate wastewater storage and disposal capacity to comply with CDO No. 96-152. Additionally, Regional Water Board staff's review of the Discharger's groundwater monitoring data indicated that the facility had degraded groundwater quality in excess of the permitted limits.
7. On 19 September 1997, the Regional Water Board rescinded CDO No. 96-152 and adopted CDO No. 97-193, which required that the Discharger:
 - a. Evaluate groundwater degradation and comply with the Groundwater Limitations of the WDRs by 15 July 1998.
 - b. Evaluate current and projected dry weather influent flows by 15 July 1998.
 - c. Expand the WWTF to accommodate existing flows and at least five years of projected growth by 1 December 2001.
 - d. Eliminate the migration of pollutants to groundwater by 1 December 2001 (if needed based on the groundwater quality evaluation).
8. The Discharger completed a timely evaluation of current and projected influent flows to comply with CDO No. 97-193, and performed a study to assess the causes of the excess I/I. The Discharger implemented several major I/I improvements, which increased the facility treatment, storage, and disposal capacity to 1.82 mgd as an average daily dry weather flow. As of late 2004, the Discharger had complied with the intent of CDO No. 97-193 with respect to hydraulic capacity improvements and I/I control. However, the WWTF did not have sufficient treatment and disposal capacity to accommodate all projected residential, commercial, and industrial growth expected over the subsequent three years.
9. The Discharger did not fully comply with CDO No. 97-193 as follows:
 - a. The Discharger's 16 July 1998 and 19 February 2002 evaluations of groundwater quality concluded that the WWTF had degraded groundwater with salinity constituents, but did not present a complete evaluation of the nature and extent of the degradation as required.
 - b. The Discharger took no specific actions that resulted in measurable improvements in effluent or groundwater quality.

2005 Cease and Desist Order

10. The Dixon WWTF's effluent is saline due to a low salinity and very hard water supply. Due to the hardness, many residences and businesses use self-regenerating water softeners, and the discharge of brine from the water softeners to the community sewer appears to account for most of the excess salinity in the effluent. Based on analytical data provided in the Discharger's monthly monitoring reports between April 2004 and November 2007, the treated effluent discharged to the WWTF ponds and land application

area is characterized in the table below. Potable water supply data for the City is also included for comparison purposes.

Parameter	Effluent Concentration			City Water Supply Concentration ¹
	Minimum	Maximum	Mean	
Biological oxygen demand, mg/L	10	150	47	NA
Total dissolved solids, mg/L	480	1,300	804	361
Electrical conductivity, umhos/cm	895	2,260	1,347	598
Sodium, mg/L	110	330	187	49
Chloride, mg/L	85	340	181	13
Nitrate (as N), mg/L	<0.1	6.8	0.53	0.5
Total Kjeldahl nitrogen, mg/L	3.3	34	13	NA
Hardness, mg/L	NA	NA	NA	250

¹ Flow-weighted average based on Consumer Confidence Reports for 2004 through 2006 for California Water Service Company and Dixon-Solano Municipal Water Service (part of Solano Irrigation District).

11. On 24 June 2005, the Regional Water Board rescinded CDO No. 97-193, and adopted CDO No. R5-2005-0078, which requires that the Discharger expand the facility as needed to provide adequate treatment, storage and disposal capacity through 2014 and construct various improvements needed to ensure compliance with the narrative groundwater limitations of the WDRs. The 2005 CDO required compliance with the following:
 - a. A new influent flow limit of 1.82 mgd as an average daily dry weather flow and 880 million gallons per year as a total annual flow. Upon completion of a planned Phase I improvements project, the CDO allowed the Executive Officer to approve an increase to 2.0 mgd as an average daily dry weather flow and 880 million gallons per year as a total annual flow.
 - b. Numerical groundwater limitations by 30 October 2009. The numerical limitations clarified the groundwater limitations of WDRs Order No. 94-187, but did not substantively change them.
 - c. Submit a *Hydrogeologic Investigation Workplan* for evaluation of additional off-site percolation disposal areas by 1 September 2005.
 - d. Submit a *Wastewater Facilities and Financing Plan* for Phase 1 and 2 improvements by 30 December 2005. Phase 1 was required to include a capacity expansion and geomembrane lining systems for all wastewater treatment and storage ponds to ensure compliance with the groundwater limitations. Phase 2 was required to include a capacity expansion to accommodate all planned growth through 2014.

- e. Submit a *Background Groundwater Quality Report* proposing numerical groundwater limitations to implement the narrative groundwater limitations by 30 March 2006.
- f. Submit a *Phase 1 90% Design Report*, including plans, specifications, a *Construction Quality Assurance Plan*, and a water balance capacity analysis for all Phase 1 improvements by 30 June 2006.
- g. Certify that the construction contract for the Phase 1 project had been awarded by 30 December 2006.
- h. Submit the *Hydrogeologic Investigation and Disposal Site Evaluation Report* that demonstrates that discharge of treated effluent at the selected off-site disposal area will ensure compliance with the Groundwater Limitations by 30 April 2007.
- i. Submit a *Phase 2 Pre-Design Report* certifying that it has purchased or leased sufficient land to accommodate all projected effluent disposal needs through 2014 by 30 June 2007.
- j. Certify completion of the *Headworks and Phase 1 Improvements Project* by 30 October 2007.
- k. Submit a *Report of Waste Discharge (RWD)* and a *Phase 2 90% Design Report* for all new facilities required to provide adequate treatment storage and disposal for projected influent flows through 2014 by 30 December 2007.
- l. Certify that the construction contract for the Phase 2 project had been awarded by 30 June 2008.
- m. Certify that construction of the Phase 2 project has commenced by 1 August 2008.
- n. Certify completion of the Phase 2 project by 30 October 2009.
- o. Submit quarterly progress reports.

The hydrogeologic investigation to identify potential replacement/expansion discharge sites and the scope of improvements for Phases 1 and 2 were requested by the Discharger.

Violations of the 2005 Cease and Desist Order

12. The Discharger has submitted the required progress reports, complied with the influent flow limits prescribed by CDO No. R5-2005-0078, and has satisfactorily completed the *Hydrogeologic Investigation Workplan* and the *Background Groundwater Quality Report*. The other requirements were not satisfied as follows:
 - a. The Wastewater Facilities and Financing Plan for Phase 1 and 2 improvements was submitted on time, but was inadequate because it did not include a description of specific capital improvements, a preliminary capital cost estimate, and a financing plan showing how the improvement project(s) would be funded.
 - b. The Discharger did not submit the Phase 1 90% Design Report.
 - c. The Discharger did not award a construction contract for the Phase 1 project.

- d. The Discharger did not submit the Hydrogeologic Investigation and Disposal Site Evaluation Report.
 - e. The Discharger did not submit the Phase 2 Pre-Design Report.
 - f. The Discharger did not complete the headworks improvements project, which was to include connecting the new 42-inch trunk sewer to the WWTF, installation of additional aerators, and/or other improvements to increase the treatment capacity to at least 2.0 mgd, and provide pond liners.
 - g. The Discharger did not submit a Report of Waste Discharge.
13. On 8 February 2006, staff granted the Discharger a conditional approval of the Wastewater Facilities and Financing Plan, but noted specific deficiencies and warned the Discharger that it had incurred, and would continue to incur, civil liabilities for this inadequate report unless all future reports submitted to comply with the CDO were submitted complete and on time.
 14. In July 2006, the Dixon City Council increased monthly sewer rates to support repayment of general obligation bonds that it planned to issue to finance the projects required by the 2005 CDO. However, a taxpayer group qualified a ballot initiative (Measure L) to repeal the sewer rate increases, which passed in November 2006. That action invalidated the *Wastewater Facilities and Financing Plan*, and staff notified the Discharger on 12 January 2007 that it was in non-compliance with the CDO and that enforcement actions would be evaluated.
 15. In March 2007, the Dixon City Council appointed several community members to the Dixon Citizens Wastewater Advisory Committee to independently assess and guide the Discharger's decision-making process with respect to WWTF expansion and improvements required to comply with the 2005 CDO. The Discharger held a series of four workshops to educate the committee and the public about the issues and the CDO, and the citizens committee met approximately once per week through the end of 2007.
 16. On 31 May 2007, staff issued a Notice of Violation (NOV) citing the Discharger's failure to submit a revision or addendum to the *Wastewater Facilities and Financing Plan*, the *Phase 1 90% Design Report*, certification of contract award for construction of the Phase 1 project, and the *Hydrogeologic Investigation (HI) and Disposal Site Evaluation Report*, each of which was required by CDO No. R5-2005-0078.
 17. On 9 July 2007, the Executive Officer and staff attended a Citizens Wastewater Advisory Committee meeting at the committee's request. The committee expressed concern about the 31 May 2007 NOV, and asked the Executive Officer to respond to several questions regarding the need for facility improvements to protect groundwater quality, as well as the consistency of the CDO with the salinity guidance memorandum issued by the Executive Officer in April 2007. The committee then asked whether the Executive Officer would be willing to prepare a new CDO with extended deadlines for the Regional Water Board's consideration. The Executive Officer responded to the committee's questions and expressed concern about the Discharger's lack of progress in the last ten years since

the first CDO was adopted, particularly with regard to the violations of the current 2005 CDO. The Executive Officer agreed to consider any specific proposal made by the Discharger, as long as the scope of work and deadlines were reasonable and justified.

18. On 11 July 2007, the Executive Officer and staff met with the Discharger to discuss the Discharger's continued failure to comply with CDO No. R5-2005-0078. The Discharger requested a new CDO that would grant an extension of time for certain tasks that were not completed, and which might revise the CDO's scope of work. On 20 August 2007, the Executive Officer sent a letter to the Discharger, urging the Discharger to select new preferred compliance alternatives and immediately take steps to implement a public outreach and salinity source control program to demonstrate the Discharger's commitment to comply with the intent of the 2005 CDO. The Executive Officer agreed to consider a revised CDO and required the Discharger to submit a detailed scope of work and schedule with proposed new milestone dates by 30 November 2007, and monthly updates as to the progress being made on compliance with either the current CDO or an alternate scope of work.
19. The Discharger's response, which was received on 20 November 2007, indicated that the Discharger had done little to demonstrate its commitment to comply with the 2005 CDO and did not provide a detailed scope of work as requested. On 30 November 2007, the Executive Officer and staff again met with the Discharger to discuss the City's progress.
20. On 25 January 2008, the Executive Officer issued a \$220,000 Administrative Civil Liability Complaint No. R5-2008-0501 for 2,200 aggregate days of violation of CDO No. R5-2005-0078. The Discharger paid the liability in full on 29 February 2008.

Numerical Groundwater Limitations

21. The Groundwater Limitations of Order No. 94-187 state:
"The discharge shall not cause underlying groundwater to:
 1. *Contain waste constituents in concentrations statistically greater than receiving water limits, where specified below, or background groundwater quality where not specified.*
 2. *Contain chemicals, heavy metals, or trace elements in concentrations that adversely affect beneficial uses or exceed maximum contaminant levels specified in 22 CCR, Division 4, Chapter 15.*
 3. *Exceed a most probable number of total coliform organisms of 2.2/100 mL over any seven-day period.*
 4. *Exceed concentrations of radionuclides specified in 22 CCR, Division 4, Chapter 15.*
 5. *Contain taste or odor-producing substances in concentrations that cause nuisance or adversely affect beneficial uses.*

6. *Contain concentrations of chemical constituents in amounts that adversely affect agricultural use.”*

22. Item No. 3 of Cease and Desist Order No. R5-2005-0078 further states:

“Effective 30 October 2009, the Discharger shall comply with the following Groundwater Limitation:

a. The discharge of waste from any treatment pond, storage pond, disposal pond, land disposal area, or land application area shall not cause the underlying groundwater to contain constituents in excess of background groundwater quality, or in excess of the applicable water quality objective, whichever is higher. Compliance with this limitation shall be measured by a groundwater monitoring well network approved by Regional Board staff.”

23. Based on the approved *Background Groundwater Quality Report* discussed above, the following table presents site-specific numeric groundwater limitations that satisfy the groundwater limitations of the WDRs and the 2005 CDO. Derivation of the site specific limitations follow the procedure in the Basin Plan, in which the limitation is the higher of either the background concentration or the applicable water quality limit. It is noted that the Discharger previously proposed the background concentrations, and that staff previously transmitted the limitations below.

<u>Parameter</u>	<u>Background Groundwater Concentration</u>	<u>Water Quality Limit for Groundwater ¹</u>	<u>Site-Specific Numeric Groundwater Limitation</u>
Electrical conductivity, umhos/cm	1,302	700	1,302
Total dissolved solids, mg/L	808	450	808
Nitrate nitrogen, mg/L	18.7	10	18.7
Boron, mg/L	0.65	0.7	0.7*
Chloride, mg/L	50	106	106*
Sodium, mg/L	143	69	143
Iron, mg/L	0.1	0.3	0.3*
Manganese, mg/L	0.01	0.05	0.05*
Barium, mg/L	0.345	1.0	1.0*
Sulfate, mg/L	76	250	250*

¹ Based on the most stringent interpretation of the narrative objectives set forth in the Basin Plan for protection of the beneficial uses of groundwater. Other considerations may apply before selecting a site-specific final water quality limit.

* This value applies only when a discharger has implemented best practicable treatment and control to control and/or minimize degradation.

24. Based on staff's 10 January 2007 approval of the Addendum to the *Background Groundwater Quality Report*, and staff's 2 March 2007 review of the *Tracer Study*, the Discharger has caused pollution in violation of the groundwater limitations for chloride and sodium as summarized in the table below.

Parameter	Site-Specific Numeric Groundwater Limitation	Compliance Wells Exceeding Background Concentration	Compliance Wells Exceeding Groundwater Limitation
Chloride, mg/L	106	SE-MW MW-7 MW-8 MW-9 MW-10	SE-MW MW-7 MW-8 MW-9 MW-10
Sodium, mg/L	143	SE-MW MW-7	SE-MW MW-7

25. The Discharger has also caused the groundwater to be polluted or degraded for electrical conductivity, total dissolved solids, and boron, but staff have determined that compliance with the sodium and chloride effluent limits contained in this Order will in turn lower the concentrations of electrical conductivity and total dissolved solids to levels which should be protective of groundwater. Therefore, this Order does not include effluent limits for those two constituents. In regard to boron, it is appropriate to allow the Discharger to submit additional information to determine whether or not a revised WDR will require control measures for boron.
26. The Discharger estimates that residential discharges to the sewer system contribute approximately 40% to 50% of the salinity. Control of residential salinity input will contribute to the achievement of water quality objectives. This Order requires the Discharger to complete and submit a *Salinity Source Study* (as described in Health and Safety Code Section 116786) and a *Residential Salinity Source Control Plan* that describes measures the City will undertake to address salinity discharged into the community sewer system from existing residential water softening or conditioning appliances.
27. The Discharger has proposed to adopt sewer use ordinances prohibiting the installation of new residential water softening or conditioning appliances that discharge salinity to the community sewer system and establishing local limits for sodium and chloride for industrial/commercial users of the community sewer system. This Order requires submittal and enforcement of the adopted ordinances.
28. Many residences and businesses in the City of Dixon use self-regenerating water softeners, and the discharge of brine from the water softeners to the community sewer accounts for a significant portion of the excess salinity in the WWTP effluent. Residential salinity is a major component of the overall salinity that enters the WWTP. Control of residential salinity, in the form of an ordinance prohibiting the installation of new

residential water softeners or requiring the removal of existing water softeners, that discharge to the community sewer system will contribute to achievement of water quality objectives.

29. Because the Discharger is in violation of the Groundwater Limitations of the WDRs and cannot reasonably be expected to comply with those limitations for several years, it is appropriate to set interim performance-based effluent limits to minimize groundwater pollution to the extent possible. These interim limits are set at the maximum observed effluent concentrations for sodium and chloride. It is also reasonable to require the Discharger to take steps to control the sources of salt entering the wastewater stream, and evaluate the results through a *Salinity Source Control Effectiveness Report* which will describe the results of the source control program and determine whether physical improvements to the WWTF are necessary to meet the final effluent limitations. The final effluent limitations implement the Groundwater Limitations of the WDRs.

Other

30. In summary, the Discharger has not complied with CDO No. R5-2005-0078, and has taken no action beyond preliminary planning efforts to comply with the pollution prevention/control requirements of that Order. Compliance with the 2005 CDO was hampered in part by the ratepayer initiative that prevented approval of a bond issue that was to finance the bulk of the compliance projects.
31. Development in the WWTF service area has been slowed by the rejection of a major commercial development project and the current housing market decline. Therefore, it appears that the WWTF has sufficient capacity for three to four years at the maximum allowable annual residential growth rate of three percent, assuming that there is no significant commercial or industrial growth. Should housing market conditions improve, flows to the WWTF may rapidly approach the design capacity.

Regulatory Considerations

32. As a result of the events and activities described in this Order, the Regional Water Board finds that the Discharger has caused or permitted waste to be discharged in such a manner that it has created, and continues to threaten to create, a condition of pollution or nuisance. The Regional Water Board also finds that the Discharger has discharged, and has the potential to discharge, waste in violation of WDRs No. 94-187.
33. Further, the Discharger has failed to comply with CDO No. R5-2005-0078 by failing to mitigate and control groundwater pollution at the facility. Therefore, it is appropriate to establish a new compliance schedule for source control and/or facility improvements designed to bring the facility into compliance with the Groundwater Limitations of the WDRs.

34. The Regional Water Board's Water Quality Control Plan for the Sacramento and San Joaquin River Basins (Basin Plan) designates beneficial uses, includes water quality objectives to protect the beneficial uses, and includes implementation plans to implement the water quality objectives.
35. Surface water drainage from the facility is to Cache Slough. The beneficial uses of Cache Slough, as stated in the Basin Plan, are agricultural supply; water contact recreation; noncontact water recreation; warm freshwater habitat, cold freshwater habitat; migration of aquatic organisms; spawning, reproduction, and/or early development; and wildlife habitat.
36. The beneficial uses of underlying groundwater are municipal and domestic water supply, agricultural supply, industrial service supply, and industrial process supply.
37. Section 13301 of the California Water Code states in part: *"When a regional board finds that a discharge of waste is taking place or threatening to take place in violation of the requirements or discharge prohibitions prescribed by the regional board or the state board, the board may issue an order to cease and desist and direct that those persons not complying with the requirements or discharge prohibitions (a) comply forthwith, (b) comply in accordance with a time schedule set by the board, or (c) in the event of a threatened violation, take appropriate remedial or preventive action."*
38. Section 13267(b) of the California Water Code states: *"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."*
39. The required technical reports are necessary to assure compliance with WDRs Order No. 94-187 and this Order, and to assure protection of public health and safety. The Discharger owns and operates the facility that discharges the waste subject to this Order.
40. The issuance of this Order is an enforcement action 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.

41. On 11 September 2008, in Rancho Cordova, California, after due notice to the Discharger and all other affected persons, the Regional Water Board conducted a public hearing at which evidence was received to consider a Cease and Desist Order.
42. Any person affected by this action of the Regional Water Board may petition the State Water Resources Control 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 Water Resources Control Board, Office of Chief Counsel, P.O. Box 100, Sacramento, CA, 95812-0100, within 30 days of the date on which the Regional Water Board action took place. Copies of the law and regulations applicable to filing petitions are available at http://www.waterboards.ca.gov/laws_regulations/ and also will be provided upon request.

IT IS HEREBY ORDERED that Cease and Desist Order No. R5-2005-0078 is rescinded and that, pursuant to Sections 13301 and 13267 of the California Water Code, the City of Dixon, its agents, successors, and assigns, shall in accordance with the following tasks and time schedule, implement the following measures and identify and implement all improvements required to ensure long-term compliance with WDRs No. 94-187 or any superceding waste discharge requirements or orders issued by the Regional Water Board.

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. Unless and until the Regional Water Board rescinds this Order or adopts revised Waste Discharge Requirements that contain another limit, the monthly average daily dry weather influent flow rate¹ shall not exceed 1.82 mgd, and the total annual influent flow rate shall not exceed 880 million gallons per year (as measured from 1 July to 30 June each year), unless an improvement project is completed, in which case the permitted ADWF shall increase to 2.0 mgd if the following requirements are met. The total annual influent flow limitation shall remain at 880 million gallons per day

The following two documents must be received and approved by the Regional Water Board staff, and written authorization by the Executive Officer must be issued, before the increase in the permitted ADWF takes effect.

- a. Submittal of an *Expansion Completion Report* prepared and signed by a California-registered professional civil engineer (with experience in the design

¹ The average daily dry weather flow (ADWF) shall be based on the months of July through September.

b. Demonstration that the California Environmental Quality Act requirements have been satisfied for the WWTF expansion.

2. Effective **immediately**, treatment pond effluent shall not exceed the performance-based effluent concentration limits tabulated below. Compliance with these limitations shall be determined by analytical results for monthly composite samples obtained downstream of the treatment ponds, at the outlet structure, before discharge to the percolation/ evaporation ponds or land application disposal areas and analyzed pursuant to revised Monitoring and Reporting Program No. 94-182 (Revision 2) or subsequent revision thereto.

<u>Parameter</u>	<u>Monthly Average Concentration Limit</u>
Chloride	340 mg/L
Sodium	330 mg/L

3. Prior to commencement of any water quality study or investigation intended to support a report of waste discharge and/ or a revised effluent or groundwater limitation, the Discharger shall submit a workplan for Regional Water Board staff review.
4. By **30 September 2008**, the Discharger shall complete and submit a *Salinity Source Study* prepared in accordance with Health and Safety Code Section 116786.
5. By **30 November 2008**, the Discharger shall adopt and submit an Ordinance prohibiting the installation of new residential water softening or conditioning appliances that discharge sodium, chloride, or other saline substances to the community sewer system.
6. By **30 November 2008**, the Discharger shall adopt and submit an Ordinance establishing sodium and chloride limits for industrial and commercial users of the community sewer system. The limits shall be designed to achieve the final effluent limits listed in Item No. 10. The Ordinance shall clearly describe the enforcement actions the Discharger will take to ensure compliance with the requirements.
7. By **30 April 2009**, the Discharger shall submit a *Residential Salinity Source Control Plan* that will describe measures and timelines it will undertake to substantially reduce sodium and chloride discharged into the community sewer system from existing residential water softening or conditioning appliances.

8. By **31 January 2012**, the Discharger shall submit a *Salinity Source Control Effectiveness Report* describing the results of its sodium and chloride source control program and setting forth conclusions about whether physical improvements to the WWTF are necessary.

In conjunction with the review of this Report, Regional Water Board staff may re-evaluate groundwater quality and any supplemental groundwater and geology data provided by the Discharger. In addition, the Discharger may ask that the Regional Water Board reevaluate the final effluent limits listed in Item No. 10.

9. If the Discharger or Regional Water Board staff concludes that physical improvements to the WWTF are necessary, then by **31 January 2013**, the Discharger shall submit a *Report of Waste Discharge (RWD)* to apply for revised WDRs for the WWTF. The RWD shall include a detailed description of all improvements and new facilities required to comply with this Order, control/prevent groundwater degradation, and expand the WWTF (if needed). The RWD shall contain sufficient detail to support preparation of revised WDRs. If the Discharger wishes the Regional Water Board to use different water quality limitations than those listed in Finding No. 23 to determine final groundwater limitations, then the RWD shall include a site-specific analysis to determine the most appropriate water quality limitations. The RWD shall include a specific discussion about boron concentrations in groundwater and effluent, and provide the Discharger's rationale for whether or not boron control measures are necessary to protect the groundwater.

If wastewater treatment facility improvements are necessary and will be financed by the State Revolving Fund loan program, then by **30 April 2013**, the Discharger shall submit a complete *Facilities Plan* to both the Regional Water Board and the State Water Board Division of Financial Assistance. The *Facilities Plan* shall comply with the guidelines set forth in the *Policy for Implementing The State Revolving Fund For Construction of Wastewater Treatment Facilities*, and shall include a Project Report, a complete environmental document prepared to comply with the California Environmental Quality Act, and a draft Revenue Program.

10. Effective **1 January 2014**, treatment plant effluent shall not exceed the final effluent concentration limits tabulated below. Compliance with these limitations shall be determined by analytical results for a single, combined, volume-weighted, composite sample of effluent taken monthly from any unlined treatment pond, land application disposal area, and evaporation/percolation pond that contains six inches or more of water across the entire bottom surface.

<u>Parameter</u>	<u>12-Month Average² Concentration Limit</u>
Chloride	106 mg/L
Sodium	143 mg/L

² 12-month average concentrations shall be calculated monthly as the average of samples collected over the twelve most recent calendar months.

11. Regional Water Board staff anticipates a period of review of no more than 60 days from receipt for each report submitted to comply with this Order. Should the review period exceed 60 days, subsequent due dates shall be extended by the number of days of review in excess of 60.
12. **Beginning 1 November 2008**, 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 (a) the work completed to date and (b) the work anticipated during the upcoming quarter regarding each of the reporting requirements described above.

In addition to the above, the Discharger shall comply with all applicable provisions of the California Water Code that are not specifically referred to in this Order.

All technical reports required herein that involve planning, investigation, evaluation, or design, or other work requiring interpretation and proper application of engineering or geologic sciences, shall be prepared by or under the direction of persons registered to practice in California pursuant to California Business and Professions Code, sections 6735, 7835, and 7835.1. As required by these laws, completed technical reports must bear the signature(s) and seal(s) of the registered professional(s) in a manner such that all work can be clearly attributed to the professional responsible for the work.

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 or up to \$10,000 per day of violation, depending on the violation, pursuant to the California Water Code, including sections 13268, 13350, and 13385. The Regional Water Board reserves its right to take any enforcement actions authorized by law.

I, PAMELA C. CREEDON, 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 Valley Region, on 11 September 2008.

Original signed by

PAMELA C. CREEDON, Executive Officer

AMENDED 11 September 2008

ALO/MRH/SER/WSW