

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
CENTRAL VALLEY REGION

RESOLUTION NO. R5-2003-0129

AMENDING WASTE DISCHARGE REQUIREMENTS  
ORDER NO. 5-01-044

NPDES NO. CA0077691

CITY OF VACAVILLE  
EASTERLY WASTEWATER TREATMENT PLANT  
ELMIRA, SOLANO COUNTY

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

1. On 15 March 2001, the Regional Board adopted Waste Discharge Requirements (WDRs) Order No. 5-01-044, NPDES No. CA0077691, prescribing WDRs for the City of Vacaville (hereafter Discharger) Easterly Wastewater Treatment Plant (EWWTP), Solano County incorporating an increase in discharge quantity and a plant expansion.
2. The Discharger owns and operates the EWWTP, a publicly owned treatment works (POTW), and provides sewerage service to the City of Vacaville and the unincorporated community of Elmira. Treated municipal wastewater is discharged to Old Alamo Creek, which is tributary to New Alamo Creek, tributary to Ulatis Creek, and tributary to Cache Slough, all waters of the United States, at the point, latitude 38° 20' 50" and longitude 121° 54' 37" (outfall 001). The Discharger is constructing a plant expansion (Phase I) increasing its existing design average dry weather flow (ADWF) of 10 mgd to 15 mgd. In addition, as a result of "Value Engineering", the Discharger designated a replacement outfall location. The new outfall will be 892 feet east (downstream) of the existing outfall (centerline to centerline), at the point, latitude 38° 20' 48" and longitude 121° 54' 06". The replacement outfall is expected to be put-in-service during the spring of 2004.
3. The treatment system consists of head works (screw pumps, bar screens, grit chamber), primary clarifiers, activated sludge reactors, secondary clarifiers, a chlorine contact chamber, dechlorination, sludge thickeners, sludge digesters, sludge drying beds/lagoons and a stabilization pond.
4. The EWWTP lacks sufficient secondary treatment capacity for secondary treatment of all inflows during peak wet weather events. In such circumstances, a portion of the flow is, after primary treatment, routed around secondary treatment facilities and recombined with secondary effluent prior to chlorination, dechlorination and discharge. This bypass practice is often referred to as effluent "blending."

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5. The Discharger has indicated that the proposed expansion for the EWWTP will reduce but not phase out the short-term bypass of the secondary treatment units during high flow conditions. The previous permits may have allowed this type of bypass in the past, however, the Clean Water Act, Section 402 prohibits sewage bypasses, which are defined in 40 CFR 122.41 (m) (1), as an “*intentional diversion of waste streams from any portion of a treatment facility*”, except in certain circumstances specified in the regulations. The United States Environmental Protection Agency (USEPA) has provided guidance in interpreting the bypass prohibition and exceptions, and has stated that peak wet weather discharges from POTWs routed around biological treatment units prior to discharge can be approved by an NPDES permit when certain principles have been met.
6. In Order No. 5-01-044, the Regional Board determined that because the Discharger has not provided information demonstrating that the bypass meets the exceptions to the prohibition, including demonstrating that all generally accepted good engineering practices have been considered, such as the construction of storage/equalization units, the permit did not allow bypass of secondary treatment. In addition, Order No. 5-01-044 included a provision that required secondary treatment units for the entire projected peak flows be provided if needed in accordance with a time schedule, and in the interim continue to aggressively reduce the peak infiltration/inflow (I/I) to the extent possible.
7. Provision F.4 of Order No. 5-01-044 provides that:  
“...The Discharger is required to phase out the bypass and provide full treatment of all its wastewater and if needed provide wastewater storage or additional secondary treatment units to treat entire projected peak flows in accordance with the following time schedule. In the interim period, the Discharger shall continue to reduce its I/I to the extent possible and submit a workplan, a budget, progress reports, and corrective action taken in accordance with a time schedule.....”
8. The Discharger filed a Petition for Review of Order No. 5-01-044 with the State Water Resources Control Board (State Board) pursuant to Water Code Section § 13320. The State Board ultimately reviewed Order No. 5-01-044 on its own motion. Among the issues reviewed was the effluent blending or bypass prohibition contained in Order No. 5-01-044. On October 3, 2002, the State Board issued its Water Quality Order (WQO) No 2002-0015. In WQO No. 2002-015, State Board found that the Regional Board acted properly in adopting the effluent bypass prohibition, subject to other conclusions in such Order.
9. State Board WQO No. 2002-0015 includes the following:  
“Once Vacaville has achieved significant infiltration and inflow reductions, has constructed equalization or storage units, or otherwise demonstrates that bypass is permissible, the Central Valley Regional Board can reopen the Vacaville permit to reconsider the blending prohibition. The Board notes that EPA’s position on blending is apparently evolving. The Board

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encourages the Central Valley Regional Board and Vacaville to consult with EPA on this topic.”

10. The Discharger maintains it has achieved significant reductions in infiltration and inflow to the collection system, which are described in reports, recently submitted to the Regional Board, and will continue to diligently pursue reductions in infiltration and inflow to the collection system. The Discharger has recently submitted to the Regional Board documents showing I/I is below the U.S. EPA definition of excessive I/I. The Discharger further indicates in order to eliminate blending or bypass completely, it must engage engineering and construction firms and undertake evaluations under the California Environmental Quality Act, and pursue certain legally mandated public bidding processes. Moreover, if required to begin development of plans and specifications for additional influent storage or treatment units, it would first have to prepare a scope of work for a predesign report and obtain a predesign report. Such scope of work and predesign process is likely to require at least 120 days. If it is ultimately concluded that the Discharger’s bypass is permissible, the Discharger will not be able to recover its costs of planning, design and construction. The Discharger has estimated that the need to bypass secondary treatment will occur less frequent once its expansion project is complete. Further, the frequency will statistically be still less as the plant is operating below the new design capacity. Under these circumstances, and given the evolving state of regulation on the blending or bypass issue, it is appropriate that the Discharger have the opportunity to obtain review of whether the requirements of Order 5-01-044 are appropriate without incurring potentially unnecessary cost. This Order also conserves the resources of the Regional Board and the Court.
11. The Discharger has filed a petition for writ of mandate and complaint challenging, inter alia, the prohibition on effluent blending or bypass.
12. The Discharger informed the State Board and Regional Board that it intends to file a motion for a preliminary injunction or for other interim relief regarding the prohibition on effluent blending or bypass. Specifically, the Discharger intends to file a motion having the effect of staying the schedule of Order No. 5-01-044 with respect to certain items related to the elimination of blending. To avoid unnecessary litigation of any motion, a stipulation was agreed upon by the Discharger, the Regional Board and State Board on 8 May 2003. This amendment constitutes the Regional Board’s action on the recommendation of Regional Board staff pursuant to the stipulation, specifically the recommendation to stay the blending prohibition and the schedule of certain items required in Provision F.4 of Order No. 5-01-044 until the Court considers the Discharger’s “petition for writ of mandate and complaint” challenging the prohibition on blending or bypass.
13. The action to adopt or amend an NPDES permit is exempt from the provisions of Chapter 3 of the California Environmental Quality Act (CEQA) (Public Resources Code Section 21000, et

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seq.), requiring preparation of an environmental impact report or negative declaration in accordance with Section 13389 of the California Water Code.

14. The Regional Board has notified the Discharger and interested agencies and persons of its intent to amend waste discharge requirements for this discharge and has provided them with an opportunity for a public hearing and an opportunity to submit their written views and recommendations.
15. The Regional Board, in a public meeting, heard and considered all comments pertaining to the discharge.
16. This Order shall amend Waste Discharge Requirements Order No. 5-01-044, NPDES No. CA0077691, pursuant to Section 402 of the CWA, and amendments thereto, and shall take effect upon the date of hearing, provided USEPA has no objections.

**IT IS HEREBY ORDERED** that Order No. 5-01-044 is amended solely to stay schedules of certain items required in Provision F.4. The City of Vacaville, its agents, successors and assigns, in order to meet the provisions contained in Division 7 of the California Water Code and regulations adopted thereunder, and the provisions of the Clean Water Act and regulations and guidelines adopted thereunder, shall comply with the following:

1. Provision No. F.4 in Order No. 5-01-044 shall be amended as follows:

**F. Provisions:**

4. Finding No. 4 of this Order indicates that the Discharger does not provide secondary treatment to all its wastewater during peak wet weather flows. Excess flows are bypassed from primary treatment to disinfection. The Discharger is required to phase out the bypass and provide full treatment of all its wastewater and if needed provide wastewater storage or additional secondary treatment units to treat entire projected peak flows in accordance with the following time schedule. In the interim period, the Discharger shall continue to reduce its I/I to the extent possible and submit a workplan, a budget, progress reports, and corrective action taken in accordance with a time schedule. The workplan and time schedule and budget shall be submitted by **1 July** each year of work proposed in the proceeding 12 months for the first two years in order to determine if additional treatment/storage units will be required.

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<u>Task</u>	<u>Date Due</u>
Submit I/I Workplan and Time Schedule	<b>1 July 2001</b>
Submit Report of 1 <sup>st</sup> year I/I study	<b>1 July 2002</b>
Submit final Report of success of I/I reduction	<b>1 July 2003</b>
Begin Plans/specs for additional treatment units	<b>120 days after entry of final order by the Trial Court</b>
Complete Plans & Specs	<b>1 year thereafter</b>
Commence Construction	<b>3 months after submittal of plans/specs</b>
Complete Construction	<b>1 year after start of construction</b>
Full compliance (bypass phased out)	<b>3 months after completion of construction</b>

I, THOMAS R. PINKOS, 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 5 September 2003.

original signed by

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THOMAS R. PINKOS, Executive Officer