

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

ORDER NO. R5-2003-0062

REQUIRING THE SAN JOAQUIN COUNTY SERVICE AREA 31
FLAG CITY WASTEWATER TREATMENT PLANT
TO CEASE AND DESIST
FROM DISCHARGING CONTRARY TO REQUIREMENTS

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

1. On 25 April 2003, the Regional Board adopted Waste Discharge Requirements (WDR) Order No. R5-2003-0061, for the San Joaquin County (Discharger), County Service Area 31 Flag City Wastewater Treatment Plant. WDR Order No. R5-2003-0061 regulates the discharge of approximately 0.04 million gallons per day (mgd) of treated domestic wastewater to Highline Canal. The design and permitted flow of the facility is 0.16 mgd.
2. WDR Order No. R5-2003-0061 contains Effluent Limitations for discharges from the outfall into Highline Canal for electrical conductivity, ammonia, nitrate, manganese, copper, total trihalomethanes, and barium as contained in Effluent Limitations B.1, which reads in part as follows:

<u>Constituents</u>	<u>Units</u>	<u>Monthly Average</u>	<u>Weekly Average</u>	<u>7-day Median</u>	<u>1-Hour Average</u>	<u>Daily Maximum</u>
Ammonia	mg/l	Table B ⁽¹⁾			Table B ⁽¹⁾	---
Nitrate (as Nitrogen)	mg/l	10	---	---	---	---
	lb/Day ⁽²⁾	13.3	---	---	---	---
Manganese	µg/l	50	---	---	---	---
	lb/Day ⁽²⁾	0.07	---	---	---	---
Copper	µg/l	Table A ⁽¹⁾	---	---	---	Table A ⁽¹⁾
Barium	µg/l	100	---	---	---	---
	lb/Day ⁽²⁾	0.13	---	---	---	---
Total Trihalomethanes ⁽³⁾	µg/l	80	---	---	---	---
	lb/Day ⁽²⁾	0.11	---	---	---	---
Electrical Conductivity	µhmos/cm	700 ⁽⁴⁾	---	---	---	---

⁽¹⁾ Tables A and B are located in Attachment E of Order No. R5-2003-0061.

⁽²⁾ Based on an average dry weather flow of 0.16 mgd.

⁽³⁾ The monthly average total trihalomethanes concentration shall not exceed 80 µg/l. Total trihalomethanes is the sum of bromoform, bromodichloromethane, chloroform, and dibromochloromethane.

⁽⁴⁾ Electrical conductivity effluent limitation based on annual average.

3. The use of chlorine as a disinfectant may result in the formation of total trihalomethanes that exceed the Effluent Limitation. Past sampling of the discharge shows total trihalomethanes above 80 µg/l. The discharge threatens to violate the Waste Discharge Requirement Effluent Limitation for total trihalomethanes.
4. The current facility design and operation result in incomplete nitrification and denitrification of wastewater and increased effluent ammonia and nitrate concentrations. Failure to nitrify and denitrify the wastewater would result in concentrations of ammonia and nitrate that exceed Effluent Limitations.

5. In order to consistently comply with the ammonia and nitrate Effluent Limitations, nitrification and denitrification of the wastewater is necessary.
6. The electrical conductivity of the Flag City Wastewater Treatment Plant effluent averages 1,186 μmhos . Based on review of results of past monitoring, the Discharger threatens to violate its effluent limitation for electrical conductivity.
7. Maximum observed constituent concentrations in the effluent taken from analytical laboratory reports submitted by the Discharger are shown below:

Constituent	Sample Date	Concentration
Manganese	9/24/2002	72 $\mu\text{g/l}$
Copper	7/30/2002	31 $\mu\text{g/l}$
Barium	9/24/2002	130 $\mu\text{g/l}$
Total Trihalomethanes	7/30/2002	153 $\mu\text{g/l}$

8. Based on the above findings, this discharge represents a threatened discharge of waste in violation of WDR Order No. R5-2003-0061, Effluent Limitations for electrical conductivity, ammonia, nitrate, manganese, copper, total trihalomethanes, and barium.
9. In accordance with California Water Code (CWC) Section 13385(j)(3), the Regional Board finds that, based upon operational capabilities, the Discharger is not able to consistently comply with the electrical conductivity, ammonia, nitrate, manganese, copper, total trihalomethanes, and barium effluent limitations, which are new requirements that become applicable to the permit after the effective date of adoption of the waste discharge requirements, and after 1 July 2000, for which new or modified control measures are necessary in order to comply with the limitations, and the new or modified control measures cannot be designed, installed, and put into operation within 30 calendar days.

Since the time schedules for completion of actions necessary to achieve full compliance exceed one year, interim requirements and dates for achievement are included in this Order. This time schedule does not exceed five years. Treatment actions can be taken to correct the violations that would otherwise be subject to mandatory penalties under California Water Code section 13385(h) and (i), and the Discharger can take reasonable measures to achieve compliance within five (5) years from the date the waste discharge requirements were required to be reviewed pursuant to Section 13380.

California Water Code Section 13385(j)(3) requires the Discharger to prepare and implement a pollution prevention plan pursuant to Section 13263.3 of the California Water Code. Ammonia and nitrate cannot be significantly reduced through source control measures in domestic wastewater. Therefore, a pollution prevention plan for ammonia and nitrate is not required by this Order.

Compliance with this Order exempts the Discharger from mandatory minimum penalties for violations of effluent limitations for electrical conductivity, ammonia, nitrate, manganese, copper, total trihalomethanes, and barium only, in accordance with California Water Code Section 13385(j)(3).

10. On 25 April 2003, in Sacramento, California, after due notice to the Discharger and all other affected persons, the Regional Board conducted a public hearing at which evidence was received to consider a Cease and Desist Order to establish a time schedule to achieve compliance with waste discharge requirements.
11. Issuance of this Order is exempt from the provisions of the California Environmental Quality Act (Public Resources Code, Section 21000, *et seq.*), in accordance with Section 15321 (a)(2), Title 14, California Code of Regulations.
12. Any person adversely affected by this action of the Regional Board may petition the State Water Resources Control Board (State Board) to review the action. The petition must be received by the State Board Office of the 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 on request.

IT IS HEREBY ORDERED THAT:

1. The San Joaquin County Service Area 31 Flag City Wastewater Treatment Plant shall cease and desist from discharging and threatening to discharge contrary to Waste Discharge Requirements Order No. R5-2003-0061, Effluent Limitations B.1 for electrical conductivity, ammonia, nitrate, manganese, copper, total trihalomethanes, and barium.
2. The San Joaquin County Service Area 31 Flag City Wastewater Treatment Plant shall comply with the following time schedule to assure compliance with the electrical conductivity, ammonia, nitrate, manganese, copper, total trihalomethanes, and barium Effluent Limitations contained in Waste Discharge Requirements Order No. R5-2003-0061 as described in the above Findings:

<u>Task</u>	<u>Compliance Date</u>
Implementation Schedule	1 November 2003
Submit Pollution Prevention Plans ¹	1 November 2004
Progress Reports ²	Every 6-months after submittal of Implementation Schedule
Achieve Full Compliance	1 January 2008

¹ The Pollution Prevention Plan shall be prepared for electrical conductivity, copper, manganese, total trihalomethanes, and barium and shall meet the requirements specified in California Water Code Section 13263.

² The progress reports shall detail what steps have been implemented towards achieving compliance with waste discharge requirements, including: construction progress, evaluation of the effectiveness of the implemented measures, and an assessment of additional measures necessary to meet the time schedule.

3. Until full compliance with Waste Discharge Requirements Order No. R5-2003-0061, and Effluent Limitations B.1 is achieved for ammonia and nitrate, the Discharger shall operate the treatment plant in a nitrification/denitrification mode to the maximum extent practicable.

4. If, in the opinion of the Executive Officer, the Discharger fails to comply with the provisions of this Order, the Executive Officer may apply to the Attorney General for judicial enforcement or issue a complaint for Administrative Civil Liability.

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 25 April 2003.

THOMAS R. PINKOS, Executive Officer

JMD