

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

TIME SCHEDULE ORDER NO. R5-2008-0056

REQUIRING THE CITY OF VACAVILLE
EASTERLY WASTEWATER TREATMENT PLANT
SOLANO COUNTY

TO COMPLY WITH REQUIREMENTS PRESCRIBED IN ORDER NO. R5-2008-0056
(NPDES PERMIT NO. CA0077691)

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

1. On 25 April 2008, the Regional Water Board adopted Waste Discharge Requirements (WDR) Order No. R5-2008- 0055, prescribing waste discharge requirements for the City of Vacaville (hereafter Discharger) at the Easterly Wastewater Treatment Plant (hereafter Facility), Solano County.
2. WDR Order No. R5-2008-0055, contains Final Effluent Limitations IV.A.1.a. which reads, in part, as follows:

Parameter	Units	Effluent Limitations				
		Average Monthly	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
Nitrate (as N) (total recoverable)	mg/L	17				

3. California Water Code (CWC) section 13300 states: *“Whenever a regional board finds that a discharge of waste is taking place or threatening to take place that violates or will violate requirements prescribed by the regional board, or the state board, or that the waste collection, treatment, or disposal facilities of a discharger are approaching capacity, the board may require the discharger to submit for approval of the board, with such modifications as it may deem necessary, a detailed time schedule of specific actions the discharger shall take in order to correct or prevent a violation of requirements.”*
4. Federal regulations, 40 CFR §122.44 (d)(1)(i), require that NPDES permit effluent limitations must control all pollutants which are or may be discharged at a level which will cause or have the reasonable potential to cause or contribute to an in-stream excursion above any State water quality standard, including any narrative criteria for water quality. Beneficial uses, together with their corresponding water quality objectives or promulgated water quality criteria, can be defined per federal regulations as water quality standards.
5. In accordance with CWC section 13385(j)(3), the Regional Water Board finds that, based upon results of effluent monitoring, the Discharger is not able to consistently comply with the new effluent limitations for nitrate. These limitations are new requirements that become applicable to the Order after the effective date of adoption of the waste discharge requirements, and after July 1, 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.

6. Immediate compliance with these new effluent limitations for nitrate are not possible or practicable. The Clean Water Act and the California Water Code authorize time schedules for achieving compliance.
7. On 15 February 2007, the Discharger submitted justification for a compliance schedule which included: (a) documentation that diligent efforts have been made to quantify pollutant levels in the discharge and the sources of the pollutant in the waste stream; (b) documentation of source control measures and/or pollution minimization measures efforts currently underway or completed; (c) a proposal for additional or future source control measures, pollutant minimization actions, or waste treatment (i.e., facility upgrades); and (d) a demonstration that the proposed schedule is as short as practicable. Therefore, this Order provides a time schedule for the Discharger to develop, submit, and implement methods of compliance, including utilizing pollution prevention activities, conducting site specific studies to develop site specific water quality objectives, conducting Use attainability analysis to determine if the MUN designation is appropriate in New Alamo Creek, or constructing necessary treatment facilities to meet the new effluent limitations or require modification of the effluent limitations for nitrate.
8. CWC section 13385(h) and (i) require the Regional Water Board to impose mandatory minimum penalties upon dischargers that violate certain effluent limitations. CWC section 13385(j) exempts certain violations from the mandatory minimum penalties. CWC section 13385(j)(3) exempts the discharge from mandatory minimum penalties *“where the waste discharge is in compliance with either a cease and desist order issued pursuant to Section 13301 or a time schedule order issued pursuant to Section 13300, if all the [specified] requirements are met.”*
9. Compliance with this Order exempts the Discharger from mandatory penalties for violations of effluent limitations for nitrate only, in accordance with CWC section 13385(j)(3). CWC 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.
10. Since the time schedules for completion of action necessary to bring the waste discharge into compliance exceeds 1 year, this Order includes interim requirements and dates for their achievement. The time schedules do not exceed 5 years.

The compliance time schedules in this Order include interim performance-based effluent limitations for nitrate. The interim effluent limitations consist of a maximum daily effluent concentration derived using sample data provided by the Discharger. In developing the interim limitations, when there are ten sampling data points or more, sampling and laboratory variability is accounted for by establishing interim limits that are based on normally distributed data where 99.9% of the data points will lie within 3.3 standard deviations of the mean (*Basic Statistical Methods for Engineers and Scientists, Kennedy*

and Neville, Harper and Row). Therefore, the interim limitations in this Order are established as the mean plus 3.3 standard deviations of the available data. Where actual sampling shows an exceedance of the proposed 3.3-standard deviation interim limit, the maximum detected concentration has been established as the interim limitation. When there are less than 10 sampling data points available, the *Technical Support Document for Water Quality- Based Toxics Control* ((EPA/505/2-90-001), TSD) recommends a coefficient of variation of 0.6 be utilized as representative of wastewater effluent sampling. The TSD recognizes that a minimum of 10 data points is necessary to conduct a valid statistical analysis. The multipliers contained in Table 5-2 of the TSD are used to determine a maximum daily limitation based on a long-term average objective. In this case, the long-term average objective is to maintain, at a minimum, the current plant performance level. Therefore, when there are less than ten sampling points for a constituent, interim limitations are based on 3.11 times the maximum observed effluent concentration to obtain the daily maximum interim limitation (TSD, Table 5 2). Derivation of these interim limitations is summarized below:

Constituent	Units	MEC	Mean	Standard Deviation	Interim limitation
Nitrate	mg/L	27	16	4.23	30

11. The Regional Water Board finds that the Discharger can undertake treatment plant measures to maintain compliance with the interim limitations included in this Order. Interim limitations are established when compliance with the final effluent limitations cannot be achieved by the existing discharge. Discharge of constituents in concentrations in excess of the final effluent limitations, but in compliance with the interim effluent limitations, can significantly degrade water quality and adversely affect the beneficial uses of the receiving stream on a long-term basis. The interim limitations, however, establish an enforceable ceiling concentration until compliance with the effluent limitation can be achieved.
12. On 25 April 2008, in Sacramento, California, after due notice to the Discharger and all other affected persons, the Board conducted a public hearing at which evidence was received to consider a Time Schedule Order under CWC section 13300 to establish a time schedule to achieve compliance with waste discharge requirements.
13. 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 CWC section 15321 (a)(2), Title 14, of the California Code of Regulations.
14. Any person adversely affected by this action of the Board may petition the State Water Resources Control Board to review this action. The petition must be received by the State Water Resources Control Board, Office of the Chief Counsel, P.O. Box 100, Sacramento, CA 95812-0100, within 30 days of the date on which this 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 Discharger shall comply with the following time schedule to ensure compliance with the effluent limitations for nitrate contained in WDR Order No. R5-2008-0055 as described in the above Findings:

<u>Task</u>	<u>Date Due</u>
Submit Method of Compliance Workplan/Schedule	Within 6 months of adoption of this Order
Submit and implement a Pollution Prevention plan (PPP) ¹ pursuant to CWC section 13263.3	Within 6 months of adoption of this Order
Progress Reports ²	1 June, annually, after approval of work plan until final compliance
Full compliance with effluent limitations for nitrate	1 May 2013

¹ The PPP shall be prepared for nitrate, where appropriate, and shall meet the requirements specified in CWC section 13263.3(d)(3).

² The progress reports shall detail what steps have been implemented towards achieving compliance with waste discharge requirements, including studies, construction progress, evaluation of measures implemented, and recommendations for additional measures as necessary to achieve full compliance by the final date.

2. The following interim effluent limitations shall be effective immediately. The interim effluent limitations for nitrate shall be effective until **30 April 2013**, or when the Discharger is able to come into compliance, whichever is sooner.

Parameter	Maximum Daily Effluent Limitation
Nitrate as N (Total Recoverable) (mg/L)	30

3. For the compliance schedules required by this Order, the Discharger shall submit to the Regional Water Board on or before each compliance report due date, the specified document or, if appropriate, a written report detailing compliance or noncompliance with the specific schedule date and task. If noncompliance is being reported, the reasons for such noncompliance shall be stated, and shall include an estimate of the date when the Discharger will be in compliance. The Discharger shall notify the Regional Water Board by letter when it returns to compliance with the time schedule.
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. If compliance with these effluent limitations is not achieved by the Full Compliance date, the discharge would not be exempt from the mandatory minimum penalties for violation of certain effluent limitations, and would be subject to issuance of a Cease and Desist Order in accordance with CWC section 13301.

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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 25 April 2008.

PAMELA C CREEDON, Executive Officer