

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

TIME SCHEDULE ORDER NO. R5-2010-XXXX

REQUIRING THE SACRAMENTO REGIONAL COUNTY SANITATION DISTRICT
SACRAMENTO COUNTY

TO COMPLY WITH REQUIREMENTS PRESCRIBED IN ORDER NO. R5-2010-XXXX
(NPDES PERMIT NO. CA0077682)

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

1. On X December 2010, the Central Valley Water Board adopted Waste Discharge Requirements (WDR) Order No. R5-2010-XXXX, prescribing waste discharge requirements for the Sacramento Regional County Sanitation District (hereinafter Discharger) at for the Sacramento Regional Wastewater Treatment Plant (hereafter Facility), in Sacramento County.
2. WDR Order No. R5-2010-XXXX, contains Final Effluent Limitations IV.A.1-~~a~~, which reads, in part, as follows:
 - a. The Discharger shall maintain compliance with the effluent limitations specified in Table 6:

Table 6. Effluent Limitations

| Parameter | Units | Effluent Limitations | | | | |
|-----------------------------------|-----------------|----------------------|----------------|---------------------|-----------------------|-----------------------|
| | | Average Monthly | Average Weekly | Maximum Daily | Instantaneous Minimum | Instantaneous Maximum |
| N-nitrosodimethylamine | µg/L | 0.0069 | -- | 0.0014 4 | -- | -- |
| 1,2-Diphenyl hydrazine | µg/L | 0.04 | -- | 0.08 | -- | -- |
| Dibenzo(a,h)anthracene | µg/L | 0.2 | -- | 0.4 | -- | -- |
| pH | su | -- | -- | -- | 6.5 | 8.5 |

3. WDR Order No. R5-2010-XXXX, contains Final Effluent Limitations IV.A.1, which reads, in part, as follows:
 - I. Chlorpyrifos and Diazinon. Effluent chlorpyrifos and diazinon concentrations shall not exceed the sum of one as defined below:

i. Average Monthly Effluent Limit

$$\frac{S_{AMEL}}{0.08} = \frac{C_{D-avg}}{0.08} + \frac{C_{C-avg}}{0.012} < 1.0$$

C_{D-avg} = average monthly diazinon effluent concentration in $\mu\text{g/L}$

C_{C-avg} = average monthly chlorpyrifos effluent concentration in $\mu\text{g/L}$

ii. Maximum Daily Effluent Limit

$$\frac{S_{MDEL}}{0.16} = \frac{C_{D-max}}{0.16} + \frac{C_{C-max}}{0.025} < 1.0$$

C_{D-max} = maximum daily diazinon effluent concentration in $\mu\text{g/L}$

C_{C-max} = maximum daily chlorpyrifos effluent concentration in $\mu\text{g/L}$

3.4. The effluent limitations at Discharge Point No. 001 specified in Order No. R5-2010-XXXX for N-nitrosodimethylamine, ~~1,2-diphenyl hydrazine~~ and dibenzo(a,h)anthracene are based on implementation of the California Toxics Rule (CTR). ~~The effluent limitations for pH are based on water quality objective for pH contained in the Water Quality Control Plan, Fourth Edition (Revised September 2009), for the Sacramento and San Joaquin River Basins (hereinafter Basin Plan).~~ The effluent limitations for chlorpyrifos and diazinon are based on water quality objectives contained in the Basin Plan. The effluent limitations for ~~pH, N-nitrosodimethylamine, 1,2-diphenyl hydrazine and dibenzo(a,h)anthracene,~~ chlorpyrifos and diazinon are new limitations, which were not prescribed in previous WDR Order No. 5-00-188, adopted by the Central Valley Water Board on 4 August 2000.

4.5. 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.”*

5.6. The Discharger requests time to conduct further testing to determine whether the detection of dibenzo(a,h)anthracene in the effluent ~~was~~ is the result of a one time detection or if dibenzo(a,h)anthracene is a constituent that ~~needs~~ requires source control. If further testing indicates dibenzo(a,h)anthracene is a consistent constituent of concern, the Discharger requests time to conduct source investigations and evaluate potential source controls that would achieve compliance with the final limits.

~~6. The Discharger requests time to conduct further testing to determine whether the detection of 1,2-diphenyl hydrazine in the effluent was the result of sampling method that is not appropriate for wastewater and 1,2-diphenyl hydrazine. An United States Environmental Protection Agency (EPA) study¹ indicated that gas chromatography is not suitable for~~

¹ Riggin RM, Howard CC. 1982. *Determination of Benzidines in Industrial and Municipal Wastewaters*. U.S.

~~detecting 1,2-diphenylhydrazine because it instantaneously decomposes to azobenzene in the gas chromatography injection port. The Discharger will continue to monitor for 1,2-diphenylhydrazine in the influent, effluent and ambient water with EPA approved methods that do not use gas chromatography. If further testing indicates 1,2-diphenylhydrazine is a consistent constituent of concern, the Discharger requests time to conduct source investigations and evaluate potential source controls that would achieve compliance with the final limits.~~

7. The Discharger requests time to conduct further testing to determine whether assimilative capacity exists in the ambient water for N-nitrosodimethylamine. The detection level of N-nitrosodimethylamine is substantially greater than the water quality objective. All the ambient water samples were non-detect, thus, with the detection level greater than the water quality objective, no assimilative capacity is available as required in the *Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California* (State Implementation Policy or SIP). However, even with assimilative capacity, the Discharger may not be able to meet the final effluent limits. Thus, the Discharger must either reduce N-nitrosodimethylamine by source control or change operations or change treatment process for disinfection by chlorine to another disinfection method. The Discharger requests time to conduct source investigations and evaluate potential source controls that would achieve compliance with the final limits.
8. In accordance with CWC section 13385(j)(3), the Central Valley Water Board finds that, based upon results of effluent monitoring, the Discharger is not able to consistently comply with the new water quality-based effluent limitation for ~~pH,~~ N-nitrosodimethylamine, ~~1,2-diphenylhydrazine and~~ dibenzo(a,h)anthracene, chlorpyrifos and diazinon. These limitations are new requirements that become applicable to WDR Order No. R5-2010-XXXX after the effective date of adoption of the waste discharge requirement 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.
9. Immediate compliance with the new effluent limitations for ~~pH,~~ N-nitrosodimethylamine, ~~1,2-diphenylhydrazine and~~ dibenzo(a,h)anthracene, chlorpyrifos and diazinon is not possible or practicable. The Clean Water Act and the California Water Code authorize time schedules for achieving compliance.

Mandatory Minimum Penalties

10. CWC section 13385(h) and (i) require the Central Valley 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... For the purposes of this subdivision, the time schedule may not exceed five years in length...

11. By statute, in accordance with CWC section 13385(j)(3)(C), a Time Schedule Order may provide protection from MMPs for no more than five years. Compliance with this Order only exempts the Discharger from mandatory penalties for violations of the final effluent limitations for ~~pH, N-nitrosodimethylamine, 1,2-diphenyl hydrazine and~~ dibenzo(a,h)anthracene, chlorpyrifos and diazinon in accordance with CWC section 13385(j)(3). Protection from MMPs for the final effluent limitations for ~~pH, N-nitrosodimethylamine, 1,2-diphenyl hydrazine and~~ dibenzo(a,h)anthracene, chlorpyrifos and diazinon begins immediately, and may not extend beyond 1 December 2015.
12. CWC section 13385(j)(3) requires the Discharger to submit and implement its pollution prevention plans for ~~pH, N-nitrosodimethylamine, 1,2-diphenyl hydrazine and~~ dibenzo(a,h)anthracene, chlorpyrifos and diazinon pursuant to section 13263.3 of the California Water Code.
13. Since the time schedule for completion of action necessary to bring the waste discharge into compliance exceeds 1 year, this Order includes an interim requirement and date for achievement. The time schedule does not exceed five years.

The compliance time schedule in this Order includes ~~an~~ interim maximum daily effluent limitations for ~~pH, N-nitrosodimethylamine, 1,2-diphenyl hydrazine and~~ dibenzo(a,h)anthracene, and chlorpyrifos. The data set are based on data collected between 12 June 2005 and 10 October 2009. All the data collected for N-nitrosodimethylamine, ~~1,2-diphenyl hydrazine and~~ dibenzo(a,h)anthracene, and chlorpyrifos had less than 20 percent detection. When at least 80% of the data points are reported as non detected values, interim limitations are based on 3.11 times the maximum observed effluent concentration (MEC) to obtain the daily maximum interim limitation. ~~The interim limitations for pH are set as the existing final instantaneous minimum effluent limitation prescribed in the previous WDR Order No. 5-00-188.~~ The following table summarizes the calculations of the daily maximum interim effluent limitation for these constituents:

| Parameter | Units | MEC | Mean (x) | Std. Dev. (sd) | Formula Used | Interim Limitation Maximum Daily |
|-----------------------------------|-----------------|----------------|---------------|----------------|--------------------|----------------------------------|
| pH | su | | | | | 6.0[†] |
| N-nitrosodimethylamine | ng/L | 0.082 | -- | -- | 3.11*MEC | 0.26 |
| 1,2-diphenyl hydrazine | µg/L | 2.8 | -- | -- | 3.1*MEC | 8.7 |
| Dibenzo(a,h)anthracene | µg/L | 0.51 | -- | -- | 3.11*MEC | 1.6 |
| <u>Chlorpyrifos</u> | <u>µg/L</u> | <u>0.039</u> | <u>--</u> | <u>--</u> | <u>3.11*MEC</u> | <u>0.12</u> |

[†] Instantaneous minimum effluent limit.

14. The Central Valley Water Board finds that the Discharger can 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. The Central Valley Water Board finds that the time schedule contained herein is as short as possible, taking into account the technological, operational, and economic factors that affect the design, development, and implementation of control measures that are necessary to comply with the final effluent limitations.

Other Regulatory Requirements

15. On XX December 2010, in Rancho Cordova, California, after due notice to the Discharger and all other affected persons, the Central Valley Water 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.
16. 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.

IT IS HEREBY ORDERED THAT:

1. The Discharger shall comply with the following time schedule to ensure compliance with the final effluent limitations for ~~pH, N-nitrosodimethylamine, 1,2-diphenylhydrazine and dibenzo(a,h)anthracene, chlorpyrifos and diazinon~~ contained in WDR Order No. R5-2010-XXXX as described in the above Findings:

Task

Submit Method of Compliance Workplan/Schedule.

Submit and implement an updated, or new as appropriate, Pollution Prevention Plan (PPP) pursuant to CWC section 13263.3.

Annual Progress Reports¹

Full compliance with the final effluent limitations for ~~pH, N-nitrosodimethylamine, 1,2-diphenylhydrazine~~ and dibenzo(a,h)anthracene.

Full compliance with the final effluent limitations for chlorpyrifos and diazinon.

Date Due

Within 6 months of adoption of this Order

Within 6 months of adoption of this Order

1 December, annually, after approval of workplan until final compliance

1 December 2015

1 December 2015

¹ 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 and until the date specified in the table for applicable parameter, or when the Discharger is able to come into compliance, whichever is sooner.

| Effective immediately and until: | Parameter | Maximum Daily Effluent Limitation (µg/L) |
|--|---|--|
| 1 December 2015 | pH | 6.0⁴ |
| 1 December 2015 | N-nitrosodimethylamine (µg/L) | 0.00026 |
| 1 December 2015 | 1,2-diphenylhydrazine (µg/L) | 8.7 |
| 1 December 2015 | Dibenzo(a,h)anthracene (µg/L) | 1.6 |
| <u>1 December 2015</u> | <u>Chlorpyrifos (µg/L)</u> | <u>0.12</u> |
| ⁴ Instantaneous minimum effluent limit. | | |

3. For the compliance schedule required by this Order, the Discharger shall submit to the Central Valley Water Board on or before the 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 Central Valley 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 or may issue an Administrative Civil Liability Complaint pursuant to CWC section 13323.

Any person aggrieved by this action of the Central Valley Water Board may petition the State Water Board to review the action in accordance with CWC section 13320 and California Code of Regulations, title 23, sections 2050 and following. The State Water Board must receive the petition by 5:00 p.m., 30 days after the date of this Order, except that if the thirtieth day following the date of this Order falls on a Saturday, Sunday, or state holiday (including mandatory furlough days), the petition must be received by the State Water Board by 5:00 p.m. on the next business day. Copies of the law and regulations applicable to filing petitions may be found on the Internet at:

http://www.waterboards.ca.gov/public_notices/petitions/water_quality

or will be provided upon request.

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 XX December 2010.

TIME SCHEDULE ORDER NO. R5-2010-XXXX
SACRAMENTO REGIONAL COUNTY SANITATION DISTRICT
SACRAMENTO REGIONAL WASTEWATER TREATMENT PLANT
SACRAMENTO COUNTY

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PAMELA C CREEDON, Executive Officer