

**State of California
CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LOS ANGELES REGION**

TIME SCHEDULE ORDER NO. R4-2003-0082

**REQUIRING THE CITY OF SIMI VALLEY
(SIMI VALLEY WATER QUALITY CONTROL PLANT)
TO COMPLY WITH REQUIREMENTS PRESCRIBED IN
ORDER NUMBER R4-2003-0081
(NPDES PERMIT NO. CA0055221)**

The California Regional Water Quality Control Board, Los Angeles Region (hereafter Regional Board), finds:

1. The City of Simi Valley (hereafter The City or Discharger) own and operate the Simi Valley Water Quality Control Plant (hereafter Simi Valley WQCP) located at 600 West Los Angeles Avenue, Simi Valley, California.
2. The Regional Board adopted waste discharge requirements (WDRs) regulating the discharge of tertiary treated effluent from the Simi Valley WWTP to Arroyo Simi, a water of the United States, above the estuary, within the Calleguas Creek watershed. These requirements were reissued in NPDES Order No. R4-2003-0081 adopted by this Regional Board on May 1, 2003. NPDES Order No. R4-2003-0081 serves as the National Pollutant Discharge Elimination System (NPDES) permit (NPDES No. CA0055221).
3. NPDES Order No. R4-2003-0081 prescribes new waste load allocations for chloride, new effluent limitations for total ammonia as nitrogen and chronic toxicity. The numerical limits for total ammonia, as functions of temperature and pH, are contained in Attachment H (attached) of NPDES Order No. R4-2003-0081. These limits had to be met by June 13, 2002, as required by the 1994 *Water Quality Control Plan, Los Angeles Region: Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties* (Basin Plan).

The final limits for chloride, ammonia nitrogen, and chronic toxicity are given below. The Basin Plan-based ammonia limit takes effect on the effective date of NPDES Order No. R4-2003-0081; i.e., 50 days after its adoption (June 25, 2003). The TMDL-based waste load allocation for ammonia nitrogen takes effect four years after the effective date of the *Nitrogen Compounds and Related Effects* TMDL adopted by the Regional Board on October 24, 2002.

Constituent	Units	Discharge Limitations		
		Daily Maximum	7-Day Average	Monthly Average
Total Ammonia	mg/L	^[1]	--	^[1]
	mg/L	--	--	2.35 ^[2]
	lbs/day	^[3]	--	^[3]

March 28, 2003
Revised: May 6, 2003
Revised: June 5, 2003

Constituent	Units	Discharge Limitations		
		Daily Maximum	7-Day Average	Monthly Average
Chloride	lbs/day	10,100 ^[4]		
	lbs/day	9,200 ^[5]		
Chronic Toxicity	TUc	2.0		1.0 ^[6]

Footnotes:

- [1] The City must meet the total ammonia limitations contained in Attachment H, Basin Plan Tables 3-2 and 3-4, for the protection of freshwater aquatic habitat, by June 14, 2002. At a future date, these Ammonia Tables will be replaced with the 1999 USEPA Ammonia Update criteria for ammonia, according to the Ammonia Basin Plan Amendment, Resolution No. 2002-011 (adopted by the Los Angeles Regional Board on April 25, 2002). Following State Board, Office of Administrative Law, and USEPA approval of the Ammonia Basin Plan Amendment, the Regional Board will reopen this NPDES permit to revise the ammonia effluent limits using the new criteria. However, following State Board, Office of Administrative Law, and USEPA approval of the *Nitrogen Compounds and Related Effects* TMDL, the waste load allocation limit for ammonia will replace other ammonia limits in the NPDES permit.
- [2] This is the waste load allocation for ammonia nitrogen, according to the *Nitrogen Compounds and Related Effects* TMDL adopted by the Regional Board on October 24, 2002. This limit becomes effective four years after the USEPA approves the *Nitrogen Compounds and Related Effects* TMDL, and will supercede both an effluent limitation based on the WQO in the current Basin Plan Tables 3-2 and 3-4, and an effluent limitation based on the 1999 USEPA Ammonia Update criteria (Basin Plan Amendment Resolution No. 2002-011).
- [3] The mass emission rates are based on the plant design flow rate of 12.5 mgd. During wet-weather storm events in which the flow exceeds the design capacity, the mass discharge rate limitations shall not apply, and concentration limitations will provide the only applicable effluent limitations.
- [4] This is the waste load allocation (WLA) under routine conditions, according to the Chloride TMDL promulgated by USEPA on March 22, 2002.
- [5] This is the waste load allocation (WLA) under drought conditions, according to the Chloride TMDL promulgated by USEPA on March 22, 2002.
- [6] This the limitation for monthly median.
4. The Discharger cannot consistently meet the above-mentioned effluent limits on their respective compliance dates.
5. In lieu of an interim limit for chronic toxicity, the Discharger has requested that parallel chronic toxicity testing using a zeolite column to remove ammonia in accordance with MRP section VI.D.7., be allowed.
6. The 1994 Basin Plan provides that to protect aquatic life, the total ammonia concentrations in receiving waters shall not exceed the objectives for the corresponding in-stream conditions given in Tables 3-1 to 3-4 of the Basin Plan. The objectives for total ammonia take into account the effect of un-ionized ammonia on aquatic habitat. Compliance with this requirement was required by June 14, 2002. The City conducted a pilot study for nitrification and denitrification to evaluate the process to reduce total nitrogen in their effluent. The City has started to upgrade its Simi Valley WWTP so that it nitrifies and denitrifies, thereby meeting the waste load allocations in the *Nitrogen*

Compounds and Related Effects TMDL for Calleguas Creek Watershed. Additionally, the Discharger has the option to participate in a water effects ratio (WER) study to develop a site objective for ammonia. If the Discharger chooses to participate in a WER study, then the WER study must be completed within three years of the effective date of the TMDL.

7. A WER adjusts the existing objective to account for site-specific conditions by measuring the actual toxicity of the site water to aquatic species in the waterbody. The Discharger should follow the requirements outlined in the Basin Plan, USEPA *Region 9 & 10 Guidance for Implementing Whole Toxicity Testing Program (May 31, 1996)*, *Water Quality Standards Handbook: Second Edition (EPA-823-B-94_005a, August 1994)*, other USEPA guidance, and as specified by the Regional Board for the development of SSOs.
8. The Regional Board acknowledges that the Discharger has made substantial efforts to upgrade its wastewater treatment plant and to comply with the nitrogen objectives in the Basin Plan. The regional Board is issuing this Order in recognition that the Discharger has established a schedule for construction based on the *Nitrogen Compounds and related Effects TMDL* compliance dates, and the Order is intended to afford the Discharger time to complete construction and startup operations.
9. California Water Code (CWC) section 13300 allows the Discharger “to submit for approval by the board, with such modifications as [the board] may deem necessary, a detailed time schedule of specific actions the discharger shall take in order to correct or prevent a violation of requirements.” The Discharger has a strategy for complying with the nitrate plus nitrite nitrogen limit within four years from the adoption of Nitrogen TMDL. Through this Time Schedule Order (TSO), the Discharger will be required to submit a workplan specifying the actions the Discharger will take in order to prevent the violations of the applicable effluent limitations for nitrate and nitrite nitrogen. Upon submittal, the Regional Board will evaluate the workplan.
10. Water Code section 13385 requires the Discharger to submit workplan specifying actions that the Discharger will take in order to prevent the violations of the applicable effluent limitations for ammonia nitrogen. Further, the limitations covered by this TSO are necessary because the effluent limitations became effective after July 1, 2000, new control measures are necessary to comply with the limitations, and the appropriate control measures can not be put into operation within 30 days. In initially approving the schedule, the Regional Board had concluded that the Discharger’s schedule was as short as possible, taking into account the technological, operational, and economic factors that affect the design, development, and implementation of the control measures.
11. Exceedances of the new NPDES limits for chloride and total ammonia nitrogen are not subject to CWC Section 13385 subdivisions (h) and (i) as long as the Discharger complies with all of the requirements of the TSO; does not exceed the interim limits; and, meets requirements A through D of CWC Section 13385(j)(3).

12. This TSO allows the Discharger to achieve full compliance with the ammonia nitrogen limitations by October 24, 2004. The TSO prescribes an interim limit for this constituent for the Simi Valley WQCP to comply until the full compliance date. The TSO also prescribes interim limits for chloride, to allow the Discharger to develop a workplan which identifies implementation tasks that will lead to the attainment of water quality objectives for chloride and other salts on a watershed-wide basis.
13. The interim limit for ammonia nitrogen is based on the Simi Valley WQCP effluent performance data, from January 1996 to December 2002. The monthly average interim limit was derived statistically at the 95th percentile of the data by using the P-Limit Program.
14. The action taken by this Regional Board pertaining to the TSO does not preclude the possibility of actions to enforce the waste discharge requirements and permit by third parties pursuant to section 505 of the Federal Clean Water Act.
15. The Regional Board may reopen this TSO at its discretion or at the request of the Discharger, if warranted.
16. According to the Discharger's proposal, construction of all facilities necessary for compliance with the final ammonia effluent limit will be completed by September 2004. This TSO concerns an existing facility, does not otherwise alter the status quo with respect to the facility, and is, therefore, categorically exempt from the provisions of the California Environmental Quality Act (Public Resources Code, Section 21100, et.seq.) in accordance with Section 15301 of Title 14, California Code of Regulations.

The Board notified the Discharger and interested agencies and persons of its intent to issue a time schedule Order concerning violations or threatened violations of waste discharge requirements.

The Board, in a public hearing, heard and considered all testimony pertinent to this matter. All Orders referred to above, Regional Board files on this matter, and records of hearings and testimony therein are included herein by reference.

IT IS HEREBY ORDERED that, pursuant to the California Water Code section 13300, the City of Simi Valley, as operator of the Simi Valley Water Quality Control Plant, shall:

1. Comply with the following interim effluent limit on the effective date of NPDES Order No. R4-2003-0081:

Constituent	Units	Monthly Average ^[1]	Daily Maximum ^[2]
Ammonia nitrogen	mg/L	30	---
Nitrate + Nitrate as Nitrogen	mg/L	31.60	32.17
Chloride	mg/L		190 ^[3]
	lbs/day		19,800 ^[4]

Footnotes:

- [1] The Interim limit is based on effluent performance data from January 1996 through December 2002 for the Simi Valley WQCP. The monthly average interim effluent limit was derived statistically as the 99% confidence level of the 95th percentile, using the P-limit software. This program incorporates the procedure in Appendix E of the *Technical Support Document (TSD) For Water Quality-based Toxics Control [EPA/505/2-90-001]* for the limit calculation.
 - [2] Daily maximum interim effluent limits were derived statistically as the 99% confidence level of the 99th percentile, using the approach in *Appendix E of the TSD For water Quality-based Toxics Control [EPA/505/2-90-001]*
 - [3] This is the concentration-based limit for chloride from Order No. 96-043, that was stayed by the Sate Board, Order DWQ 2002-0017, adopted October 17, 2002. It remains in effect until the stay is dissolved. Since the current Basin Plan does not authorize the inclusion of compliance schedules and interim limits within the NPDES permit, for non-CTR based limits, the interim limit for chloride is contained in this TSO. The permit will be re-opened, if necessary, to revise the concentration-based limit when the stay is dissolved. The USEPA's March 22, 2002, chloride TMDL included mass-based waste load allocations for chloride loading; however, the Regional Board cannot implement the WLA until after the stay granted by the State Board, Order DWQ 2002-0017 adopted October 17, 2002, is dissolved. When the stay is dissolved, any subsequent chloride effluent limitations established in a chloride TMDL for the Callegaus watershed. Unless there is a subsequent TMDL action, the waste load allocations are 10,000 lbs/day in routine conditions and 9,200 lbs/day in drought conditions.
 - [4] The mass emission rate is calculated as follows, using the design capacity of 12.5 mgd and the interim chloride limit of 190 mg/L: Flow (MGD) X Concentration (mg/L) 8.34 (conversion factor) = lbs/day.
2. The City shall submit its workplan by October 4, 2003 for achieving full compliance with NPDES Order No. R4-2003-0081 for chloride and ammonia nitrogen. The workplan should include milestones with dates for the following activities, or other applicable activities.

Milestones
Begin construction of the NDN facilities
Submit a copy of the updated chloride implementation workplan – subset of the salts workplan
Complete construction of NDN facilities required for compliance
Complete process start-up and optimization
Achieve full compliance with ammonia nitrogen limitations in NPDES Order No. R4-2003-0081

- 3. The City shall submit the pollution prevention plan (PPP) workplan with the time schedule for implementation for approval of the Executive Officer within 120 days after the adoption of this TSO (by August 29, 2003), pursuant to CWC section 13263.3.
- 4. Achieve full compliance with the limitations in NPDES Order No. R4-2003-0081 for ammonia nitrogen by October 24, 2004.
- 5. The Discharger is allowed to run parallel chronic toxicity utilizing a zeolite column to remove ammonia until October 24, 2004.

6. Submit quarterly progress reports of efforts towards compliance with the effluent limits for ammonia nitrogen, to include, but not limited to:
 - a. Status of the NDN plant modification activities; and/or
 - b. Status of the development of WERs, SSOs and/or UAAs.

Progress reports shall be submitted by the fifteenth day of the first month following the reporting quarter (January 15, April 15, July 15 and October 15). The first progress report shall be received at the Regional Board by October 15, 2003, and will cover the months of July 2003 through September 2003. The first progress report shall also include an update on the status of the derivation of the SSO and/or UAA.

7. If the Discharger fails to comply with any provisions of this Order, the Executive Officer may issue an Administrative Civil Liability Complaint pursuant to California Water Code section 13323. The Regional Board may also refer the case to the Attorney General for injunction and civil monetary remedies, pursuant to California Water Code sections 13331 and 13385.
8. All other provisions of NPDES Order No. R4-2003-0081 not in conflict with this Order is in full force and effect.

I, Dennis Dickerson, Executive Officer, do hereby certify that the foregoing is a full, true and correct copy of an order adopted by the California Regional Water Quality Control Board, Los Angeles Region, on May 1, 2003.

Dennis A. Dickerson
Executive Officer