

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

CLEANUP AND ABATEMENT ORDER R5-2011-0702

CITY OF STOCKTON
REGIONAL WASTEWATER CONTROL FACILITY
SAN JOAQUIN COUNTY

This Order is issued to the City of Stockton based on provisions of Water Code section 13304, which authorizes the California Regional Water Quality Control Board, Central Valley Region (hereafter “Central Valley Water Board” or “Board”) to issue a Cleanup and Abatement Order (CAO), and Water Code section 13267, which authorizes the Board to require the submittal of technical reports.

The Executive Officer of the Central Valley Water Board finds, with respect to the Discharger’s acts, or failure to act, the following:

1. The City of Stockton (hereafter “Discharger”) owns and operates a wastewater collection, treatment, and disposal system, and provides sewerage service to the City of Stockton, the Port of Stockton, and surrounding urbanized unincorporated areas. Treated municipal wastewater is discharged to the San Joaquin River.
2. On 23 October 2008, the Central Valley Water Board issued Waste Discharge Requirements (“WDRs”) Order R5-2008-0154, which became effective on 12 December 2008. WDRs Order R5-2008-0154 contained new requirements and rescinded Order R5-2002-0083, except for enforcement purposes.
3. WDRs Order R5-2008-0154 Effluent Limitations IV.A.1.a. states, in part:
 - a. The Discharger shall maintain compliance with the effluent limitations specified in Table 6:

Table 6

Parameter	Units	Effluent Limitations				
		Average Monthly	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
Ammonia, Total (as N)	mg/L	2	--	5	--	--
	lbs/day ¹	917	--	2294		

¹ Mass-based effluent limitations are based on a design flow of 55 mgd.

4. According to the Discharger’s self-monitoring reports, between 30 December 2010 and 31 January 2011, the Discharger violated the ammonia maximum daily effluent concentration nineteen times, the ammonia maximum monthly effluent concentration once, the ammonia daily mass effluent limitation once, and the monthly ammonia mass limitation once. The Discharger was assessed \$63,000 in mandatory minimum penalties.
5. The Discharger also exceeded the ammonia daily maximum on 2 February 2011 and 17 February 2011, and exceeded the ammonia monthly average on 28 February 2011, and is subject to mandatory minimum penalties for those effluent violations.

6. The Discharger asserts that weekly receiving water monitoring data for the period of effluent ammonia violations indicates there was no discernable effect to receiving water quality as a result of these discharges. In comparison with the USEPA's Ambient Water Quality Criteria for the Protection of Freshwater Life for total ammonia, during the months of December, January, and February 2011, weekly receiving water sampling upstream and downstream of the discharge indicated receiving water concentrations of ammonia at less than 10% of the 30 day average chronic ammonia criteria.
7. On 27 January 2011, the Discharger's consultant, Carollo Engineers, submitted a report entitled *Nitrifying Biotower (NBT) Operations*. The report showed a strong correlation between effluent ammonia concentrations and NBT feed water temperature. The report recommended constructing a new pump station and pipeline to allow for bypass of more secondary effluent around the oxidation ponds, to construct a third NBT, and to modify existing NBT operation to maintain the temperature of the water applied to the NBTs at 10°C or greater. If the water temperature falls below 10°C, the rate of nitrification significantly decreases, and the Discharger is at risk of violating the ammonia effluent limit.
8. On 26 May 2011, the Discharger submitted a proposed project task list and schedule to modify the NBTs to increase the temperature of the influent. This Order requires the Discharger to complete the proposed tasks, within the proposed timeline. The Discharger has determined the method to modify the system to comply with the effluent limitations.

REGULATORY CONSIDERATIONS

9. As described above, the discharge of ammonia in excess of the effluent limitations violates WDRs Order R5-2008-0154. The Discharger, by failing to control the effluent ammonia concentration, has caused, permitted, or threatens to cause or permit, waste to be discharged in such a manner that it has caused or threatens to cause a threat to public health and/or create a condition of pollution or nuisance. Therefore, the Discharger is subject to this Order pursuant to Water Code section 13304.
10. The *Water Quality Control Plan for the Sacramento River and San Joaquin River Basins, Fourth Edition*, (the "Basin Plan") designates beneficial uses, establishes water quality objectives, contains implementation plans and policies for protecting waters of the basin, and incorporates by reference plans and policies adopted by the State Water Board.
11. Treated wastewater is discharged to the San Joaquin River. The beneficial uses of the San Joaquin River are municipal and domestic supply; agricultural supply; water contact recreation; non-contact water recreation; warm freshwater habitat; cold freshwater habitat; migration of aquatic organisms; spawning, reproduction, and/or early development, and wildlife habitat.
12. The discharge of ammonia to the San Joaquin River in excess of effluent limitations has the reasonable potential to cause or contribute to an exceedance of the Basin Plan's narrative toxicity objective.

13. Water Code section 13304(a) states, in relevant part, that: *“Any person who has discharged or discharges waste into the waters of this state in violation of any waste discharge requirement or other order or prohibition issued by a regional board or the state board, or who has caused or permitted, causes or permits, or threatens to cause or permit any waste to be discharged or deposited where it is, or probably will be, discharged into the waters of the state and creates, or threatens to create, a condition of pollution or nuisance, shall upon order of the regional board, clean up the waste or abate the effects of the waste, or, in the case of threatened pollution or nuisance, take other necessary remedial action, including, but not limited to, overseeing cleanup and abatement efforts.”*
14. Water Code section 13267(b)(1) states, in relevant part, that: *“In conducting an investigation specified in subdivision (a), the regional board may require that any person who has discharged, discharges, or is suspected of having discharged or discharging, or who proposes to discharge waste within its region ... shall furnish, under penalty of perjury, technical or monitoring program reports which the regional board requires. The burden, including costs, of these reports shall bear a reasonable relationship to the need for the report and the benefits to be obtained from the reports. In requiring those reports, the regional board shall provide the person with a written explanation with regard to the need for the reports, and shall identify the evidence that supports requiring that person to provide the reports.”*
15. The burden, including costs, of these reports bear a reasonable relationship to the need for the report and the benefits to be obtained from the reports because the technical reports required by this Order are necessary to ensure compliance with this CAO and WDRs Order R5-2008-0154, and to ensure the protection of water quality and public health. The Discharger owns and operates the facility that discharges waste subject to this Order.
16. The issuance of this Order is an enforcement action taken by a regulatory agency and is exempt from the provisions of the California Environmental Quality Act (Pub. Resources Code, § 21000, *et seq.*) (“CEQA”) pursuant to California Code of Regulations, title 14, section 15321(a)(2), and is an action by a regulatory agency for the protection of the environment, and is exempt from the provisions of CEQA pursuant to California Code of Regulations, title 14, section 15321(a)(2).

IT IS HEREBY ORDERED that, pursuant to Water Code sections 13304 and 13267, the City of Stockton shall cleanup and abate the ammonia effluent violations at its Regional Wastewater Control Facility in accordance with the scope and schedule set forth below, and shall ensure full compliance with WDRs Order R5-2008-0154.

Any person signing a document submitted under this Order shall make the following certification:

“I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my

knowledge and on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.”

1. By **1 September 2011**, the Discharger shall submit a *Temporary Modification Plan* to construct a temporary pumping system that will blend secondary effluent with Nitrifying Biotower (“NBT”) influent. The pumping system will be designed to increase the temperature of the influent during cold weather periods such that the NBTs consistently treat the wastewater to comply with the ammonia effluent limitation. The temporary system shall remain in place until a permanent blending system has been designed, constructed, and is operational.
2. By **30 December 2011**, the Discharger shall submit a *Design Contract Report* showing it has awarded a design contract for a permanent blending system that will provide a blend of secondary effluent with NBT influent. The permanent blending system will be designed to increase the temperature of the influent during cold weather periods such that the NBTs consistently treat the wastewater to comply with the ammonia effluent limitation.
3. By **15 December 2011**, the Discharger shall submit a *Temporary Modification Operational Report* showing that the temporary pumping system has been installed and is operational.
4. By **31 July 2012**, the Discharger shall submit a *Construction Contract Award Report* showing that it has awarded a construction contract for a permanent blending system. The report shall also show the proposed construction start date.
5. By **30 August 2013**, the Discharger shall submit a *Construction Completion* report showing construction has been completed and that the NBTs are now designed to ensure compliance with the ammonia effluent limitation, even during periods of cold weather.
6. Beginning on **1 August 2011**, and continuing on the first day of the second month after each calendar quarter (i.e, by 1 August, 1 November, 1 February, and 1 May each year), the City will submit a report describing its compliance with this Order.

In addition to the above, the Discharger shall comply with existing WDRs Order R5-2008-0154 and all applicable provisions of the Water Code that are not specifically referred to in this Order. As required by the Business and Professions Code sections 6735, 7835, and 7835.1, all reports shall be prepared by, or under the supervision of, a California Registered Engineer or Professional Geologist and signed by the registered professional.

If the Discharger is unable to perform any activity or submit any document in compliance with the schedule set forth herein, or in compliance with any work schedule submitted pursuant to this Order and approved by the Executive Officer, the Discharger may request, in writing, an extension of the time specified. The extension request shall be submitted at least 30 days

before the deadline, and shall include justification for the delay. An extension may be granted by revision of this Order or by a letter from the Executive Officer.

If the Discharger fails to comply with the provisions of this Order, the Executive Officer may refer this matter to the Attorney General for judicial enforcement or may issue a complaint for administrative civil liability. Failure to comply with this Order may result in the assessment of administrative civil liability up to \$10,000 per violation per day, pursuant to the Water Code sections 13268, 13350, and/or 13385. The Central Valley Water Board reserves its right to take any enforcement actions authorized by law.

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 California Water Code 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 that this Order becomes final, except that if the thirtieth day following the date that this Order becomes final falls on a Saturday, Sunday, or state holiday, 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.

Original signed by Frederick Moss for
PAMELA C. CREEDON, Executive Officer

20 June 2011

DATE

BLH/WSW: 6/16/11