CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD CENTRAL VALLEY REGION

TIME SCHEDULE ORDER R5-2012-0032 REQUIRING CITY OF MODESTO WATER QUALITY CONTROL FACILITY STANISLAUS COUNTY

TO COMPLY WITH REQUIREMENTS PRESCRIBED IN ORDER R5-2012-0031 (NPDES PERMIT CA0079103)

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

- On 7 June 2012 the Central Valley Water Board adopted Waste Discharge Requirements (WDR) Order R5-2012-0031, NPDES Permit No. CA0079103, prescribing WDRs for the City of Modesto (hereinafter Discharger) Water Quality Control Facility (hereafter Facility), Stanislaus County.
- 2. WDR Order R5-2012-0031, section IV.A.1.a (Table 6a), includes, in part, effluent limitations for total recoverable copper, as shown below. The effluent limitations are applicable to discharges from the Facility at Discharge Point No. 001 for the secondary effluent discharge.

Table 6a. Effluent Limitations – Seasonal Discharge

		Effluent Limitations				
Parameter	Units	Average Monthly	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
Copper (Total recoverable)	μg/L	15	-	26		

- 3. WDR Order R5-2012-0031, section IV.A.1.h and section IV.A.1.i, includes effluent limitations for iron and aluminum, respectively, as shown below. The effluent limitations are applicable to discharges from the Facility at Discharge Point No. 001 for the secondary effluent discharge.
 - h. **Iron, Total Recoverable.** For a calendar year, the annual average effluent concentration shall not exceed 300 μ g/L.
 - i. **Aluminum, Total Recoverable.** For a calendar year, the annual average effluent concentration shall not exceed 200 μ g/L.

Need for Time Schedule and Legal Basis

4. On 30 January 2012 the Discharger submitted an Infeasibility Analysis and justification for a request to comply with the schedule for copper, aluminum, and iron. The Infeasibility Analysis provided information supporting the infeasibility to immediately comply with the average monthly effluent limitations for copper, and the annual average effluent limits for aluminum and iron. For compliance with the final average monthly effluent limitations for copper, and the annual average effluent limitations for aluminum and iron, the Discharger has requested a time frame of three years to conduct a source identification study, and develop and implement source control strategies.

Mandatory Minimum Penalties

- 5. California Water Code (CWC) sections 13385(h) and (i) require the Central Valley Water Board to impose mandatory minimum penalties (MMPs) upon dischargers that violate certain effluent limitations. CWC section 13385(j)(3) exempts the discharge from MMPs "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 or 13308, if all the [specified] requirements are met...for the purposes of this subdivision, the time schedule may not exceed five years in length...".
- 6. Per the requirements of CWC section 13385(j)(3), the Central Valley Water Board finds that:
 - a. This Order specifies the actions that the Discharger is required to take in order to correct the violations that would otherwise be subject to CWC sections 13385(h) and (i).
 - b. The Discharger has stated that three years is necessary to allow the time to develop and implement a source control approach to comply with the final effluent limitations for copper, aluminum, and iron. The Discharger's approach will include monitoring and development of a source identification study to determine the sources of copper, aluminum, and iron entering the collection system and within the Facility. In addition, the Discharger will concurrently prepare a local limits study update to evaluate changes since the last study was conducted in 2004. If sources other than domestic activities are identified and deemed controllable, appropriate source control actions will be implemented.
 - c. The effluent limitations for copper are new effluent limitations that are new, more stringent, or modified regulatory requirements that became applicable to the waste discharge after the effective date of WDR Order R5-2012-0031. New or modified control measures are necessary in order to comply with the final average monthly effluent limitations for copper. The new or modified control measures cannot be designed, installed, and put into operation within 30 calendar days.

However, the final effluent limitations for aluminum and iron are not new limits in the recently adopted WDR Order R5-2012-0031. The effluent limits for aluminum and iron were new, more stringent, or modified regulatory requirements that became applicable to the waste discharge after the effective date of previous WDR Order R5 2008 0059-01 (i.e. 14 June 2008) and the effluent limitations were carried forward to WDR Order R5-2012-0031. At this time, the Central Valley Water Board finds that the Discharger cannot come into compliance with the aluminum and iron effluent limits within five years of the date that these limits became effective in June 2008. When the aluminum and iron effluent limits were established in June 2008, the Discharger believed that they could comply with these limits. However, the Discharger subsequently determined that they cannot comply with the aluminum and iron effluent limits as documented in their 30 January 2012 Infeasibility Study. Furthermore, since 2008, the Discharger has not made diligent efforts towards compliance with the aluminum and iron effluent limits. In the event that the Discharger makes subsequent diligent efforts towards compliance with the aluminum and iron effluent limits, the Central Valley Water Board may issue a subsequent time schedule order to provide appropriate protection from MMPs consistent with CWC section 13385(j)(3)(C)(ii)(II).

- d. This Order establishes a time schedule to bring the waste discharge into compliance with the effluent limitations that is as short as possible, taking into account the technological, operational, and economic factors that affect the design, development, and implementation of the control measures that are necessary to comply with the effluent limitations.
- 7. By statute, a Cease and Desist Order or Time Schedule Order may provide protection from MMPs for no more than five years.
- 8. Compliance with this Order exempts the Discharger from MMPs for violations of the final average monthly effluent limitations for copper required in WDR Order R5-2012-0031, as described in Finding 2, from 7 June 2012 (the date of this Order) until 1 July 2015. The Discharger has not previously been protected from MMPs for violations of the copper effluent limitations. This Order does not exempt the Discharger from MMPs for violations of the final effluent limitations for aluminum and iron required in WDR Order R5-2012-0031, as described in Finding 3, above, because the Discharger cannot come into compliance with the effluent limits within 5 years from the date the effluent limits became effective.
- 9. In accordance with CWC section 13385(j)(3)(C), the total length of protection from MMPs for the final average monthly effluent limitations for copper does not exceed five years.
- 10. This Order provides a time schedule for completing the actions necessary to ensure compliance with the final average monthly effluent limitations for copper, and annual average effluent limitations for aluminum and iron contained in WDR Order R5-2012-0031. Since the time schedule for completion of actions necessary to bring the waste discharge into compliance exceeds one year, this Order includes interim effluent limitations and interim requirements and dates for their achievement.

11. This Order includes new performance-based interim effluent limitations for copper, aluminum, and iron. The Central Valley Water Board calculated an interim average monthly effluent limitation (AMEL) for copper, aluminum, and iron based on the current treatment plant performance. With 10 or more sampling data points, sampling and laboratory variability is accounted for by establishing interim effluent limitations 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, interim AMEL for copper, aluminum, and iron were calculated as the 99.9th percentile using the mean plus 3.3 standard deviations.

The following table summarizes the calculation of the 99.9th percentile for copper, aluminum, and iron based on secondary effluent data for the period from February 2009 through March 2011:

Constituent	Units	Sample Count	Mean	Standard Deviation	99.9 th Percentile
Aluminum, Total Recoverable	μg/L	13	215	82	500
Iron, Total Recoverable	μg/L	13	272	101	600
Copper, Total Recoverable	μg/L	13	7.23	4.30	21

12. The Central Valley Water Board finds that the Discharger can maintain compliance with the interim effluent limitations included in this Order. Interim effluent limitations are established when compliance with the final effluent limitations cannot be achieved by the existing Facility. 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 effluent limitations, however, establish an enforceable ceiling concentration until compliance with the final effluent limitation can be achieved.

Other Regulatory Requirements

13. 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."

- 14. CWC section 13267 states in part: 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, or any citizen or domiciliary, or political agency or entity of this state who has discharged, discharges, or is suspected of having discharged or discharging, or who proposes to discharge, waste outside of its region that could affect the quality of waters 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 Discharger owns and operates the wastewater treatment facility which is subject to this Order. The technical and monitoring reports required by this Order are necessary to determine compliance with the WDRs and with this Order.
- 16. Issuance of this Order is exempt from the provisions of the California Environmental Quality Act (Pub. Resources Code, § 21000 et seq.) ("CEQA") pursuant to CWC section 13389, since the adoption or modification of a NPDES permit for an existing source is statutorily exempt and this Order only serves to implement a NPDES permit. (*Pacific Water Conditioning Ass'n, Inc. v. City Council of City of Riverside* (1977) 73 Cal.App.3d 546, 555-556.).
- 17. On 7 June 2012, 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 this Time Schedule Order under CWC section 13330 to establish a time schedule to achieve compliance with waste discharge requirements.

IT IS HEREBY ORDERED THAT:

 Pursuant to CWC Sections 13300 and 13267, the Discharger shall comply with the following time schedule to comply with the final average monthly effluent limitations for copper and the final average annual effluent limitations for aluminum and iron, described in Findings 2 and 3, and shall submit reports and ensure completion of the compliance project described in Finding 4:

TASK	COMPLIANCE DATE
Submit Work Plan and schedule for compliance with the final effluent limits for copper, aluminum, and iron. The work plan shall include the tasks the Discharger will take to develop a source identification study, and shall document the objectives and methods to complete the study and comply with the final effluent limits for aluminum and iron	1 October 2012
Submit and implement a Pollution Prevention Plan (PPP) for copper, aluminum, and iron. The PPP shall meet the requirements specified in CWC Section 13263.3(d)(3)	31 December 2012
Submit Local Limits Study Update	31 December 2012
Submit a source identification study. The study shall describe the most likely sources of copper, aluminum, and iron. The study shall also include the type of source control actions that will be implemented to comply with the final effluent limits for aluminum and iron.	3 June 2013
Submit Annual Progress Reports. The annual progress reports shall document the steps taken to comply with the final effluent limits for copper, aluminum, and iron and with this Order. The reports shall describe the completion of tasks, evaluation of the effectiveness of the implemented measures, and an assessment of whether additional measures are necessary to meet the final compliance date.	1 September 2013 and 1 September 2014
Comply with Final Effluent Limitations for copper, aluminum, and iron	1 July 2015

2. Discharge of secondary treated wastewater at Discharge Point No. 001 shall not exceed the following interim effluent limitations. These interim effluent limitations for copper, aluminum, and iron are effective upon adoption of this Order. The Discharger shall comply with the following interim effluent limitations through 30 June 2015.

Parameter	Units	Interim Average Monthly Effluent Limit
Aluminum, Total Recoverable	μg/L	500
Iron, Total Recoverable	μg/L	600
Copper, Total Recoverable	μg/L	21

- 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."
- 4. In accordance with California Business and Professions Code sections 6735, 7835, and 7835.1, engineering and geologic evaluations and judgments shall be performed by or under the direction of registered professionals competent and proficient in the fields pertinent to the required activities. All technical reports specified herein that contain work plans, that describe the conduct of investigations and studies, or that contain technical conclusions and recommendations concerning engineering and geology shall be prepared by or under the direction of appropriately qualified professional(s), even if not explicitly stated. Each technical report submitted by the Discharger shall contain the professional's signature and/or stamp of the seal.

If, in the opinion of the Executive Officer, 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, may issue a complaint for administrative civil liability, or may take other enforcement actions. Failure to comply with this Order or with the WDRs may result in the assessment of Administrative Civil Liability of up to \$10,000 per violation, per day, depending on the violation, pursuant to the CWC, including sections 13268, 13350 and 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 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, 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 7 June 2012.