CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD CENTRAL VALLEY REGION

TIME SCHEDULE ORDER R5-2019-0022 REQUIRING CITY OF CLOVIS SEWAGE TREATMENT AND WATER REUSE FACILITY FRESNO COUNTY

TO COMPLY WITH REQUIREMENTS PRESCRIBED IN ORDER R5-2019-0021 (NPDES PERMIT CA0085235)

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

- On 4 April 2019 the Central Valley Water Board adopted Waste Discharge Requirements (WDR) Order R5-2019-0021, NPDES Permit No. CA0085235, prescribing WDRs for the City of Clovis (Discharger), Sewage Treatment and Water Reuse Facility (Facility) in Fresno County.
- 2. WDR Order R5-2019-0021 section IV.A.1.a. includes, in part, the following final effluent limitations applicable to discharges from the Facility through Discharge Point No. 001:

Table 4. Effluent Limitations – Discharge Point No. 001

		Effluent Limitations					
Parameter	Units	Average Average Monthly Weekly		Maximum Daily	Instantaneous Minimum	Instantaneous Maximum	
Copper, Total Recoverable	μg/L	2.8		4.8			
Cyanide, Total (as CN)	μg/L	4.3		8.5			
Zinc, Total Recoverable	μg/L	23		46			

WDR Order R5-2019-0021 section IV.A.2.a. includes, in part, the following final effluent limitations applicable to discharges from the Facility through Discharge Point No. 002:

Table 5. Effluent Limitations – Discharge Point No. 002

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		Effluent Limitations				
Parameter	Units	Average Monthly	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
Copper, Total Recoverable	μg/L	2.8		4.8		
Cyanide, Total (as CN)	μg/L	4.3		8.5		
Zinc, Total Recoverable	μg/L	23		46		

NEED FOR TIME SCHEDULE EXTENSION AND LEGAL BASIS

3. The Discharger is currently unable to comply with final effluent limitations for copper, cyanide, and zinc at Discharge Points 001 and 002. On 24 October 2018, the Discharger submitted a request and justification for a compliance schedule for copper and zinc. On 30 October 2018, the Discharger submitted a request and justification for a compliance

schedule for cyanide. For compliance with the final effluent limitations for copper and zinc, the Discharger has requested time to complete a water-effects ratio study, identify sources to the Facility, and control sources to the Facility. For compliance with the final effluent limitations for cyanide, the Discharger has requested time to complete a sample preservation and holding time study and to prepare a sampling and analysis procedure for more accurate cyanide determination.

MANDATORY MINIMUM PENALTIES

- 4. Water Code sections 13385, subdivisions (h) and (i) require the Central Valley Water Board to impose mandatory minimum penalties (MMPs) upon dischargers that violate certain effluent limitations. California Water Code 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 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...".
- 5. In accordance with Water Code section 13385, subdivision (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 Water Code sections 13385(h) and (i).
 - b. Based upon results of effluent monitoring, the Discharger is not able to consistently comply with the effluent limitations for copper, cyanide, and zinc.
 - c. These limitations are based on new requirements that became applicable to the waste discharge after the effective date of the waste discharge requirements, and after 1 July 2000, for which new or modified control measures cannot be designed, installed, and put into operation within 30 calendar days.
 - d. To comply with final effluent limitations for copper, cyanide, and zinc, the Discharger has determined that installation of additional treatment facilities is infeasible at this time and source control measures must be implemented.
 - e. This Order establishes time schedules to bring the waste discharge into compliance with final effluent limitations that are as short as possible, taking into account technological, operational, and economic factors that affect design, development, and implementation of the control measures that are necessary to comply with the effluent limitations.
- 6. By statute, a Cease and Desist Order or Time Schedule Order may provide protection from MMPs for no more than five years except as provided in Water Code section 13385(j)(3)(C)(ii).

- 7. Compliance with this Order exempts the Discharger from mandatory minimum penalties for violations of the final effluent limitations found in WDR Order R5-2019-0021 for copper, cyanide, and zinc from 1 June 2019 (effective date of WDR Order R5-2019-0021) until 31 May 2024. The Discharger has not previously been protected from mandatory minimum penalties for violations of the copper, cyanide, and zinc effluent limitations.
- 8. In accordance with Water Code section 13385(j)(3)(C)(i), the total length of protection from mandatory minimum penalties for the final effluent limitations for copper, cyanide, and zinc does not exceed five years.
- 9. This Order provides a time schedule for completing the actions necessary to ensure compliance with the final effluent limitations for copper, cyanide, and zinc contained in WDR Order R5-2019-0021. 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.
- 10. This Order includes new performance-based interim effluent limitations for copper, cyanide, and zinc. The interim limitations are based on the current treatment plant performance. The interim effluent limitations consist of statistically calculated performance-based average monthly and maximum daily effluent limitations derived using sample data provided by the Discharger.

In developing the interim limitations for total recoverable copper and total recoverable zinc, where there are 10 or more sampling data points, sampling and laboratory variability is accounted for by establishing interim limits that are based on 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 average monthly effluent limitations (AMELs) for copper and zinc in this Order are established as the mean plus 3.3 standard deviations of the available data. The interim maximum daily effluent limitations (MDELs) for copper and zinc were calculated based on the AMEL and the MDEL/AMEL multiplier from Table 2 of the *Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California* (State Implementation Policy or SIP).

In developing the interim limitations for total cyanide, where there are less than 10 sampling data points available, the EPA *Technical Support Document for Water Quality-Based Toxics Control* ((EPA/505/2-90-001), TSD) recommends a coefficient of variation (CV) of 0.6 be utilized as representative of wastewater effluent sampling. The TSD recognizes that a minimum of 10 data points are necessary to conduct a valid statistical analysis. The multipliers contained in Table 5-2 of the TSD are used to determine a MDEL 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 10 sampling points for a constituent, interim limitations are based on 3.11 times the maximum observed effluent concentration to obtain the interim AMEL when once per

month sampling is required. The interim MDEL for total cyanide was calculated based on the AMEL and the MDEL/AMEL multipliers from Table 2 of the SIP.

Effluent data from October 2015 through September 2018 were used to calculate the interim effluent limitations for total recoverable copper and total cyanide. Effluent data from August 2013 through August 2018 were used to calculate the interim effluent limitations for total recoverable zinc. The following table summarizes the calculations of the daily maximum and average monthly interim effluent limitations for these constituents:

Parameter	Units	MEC	No. of Observations	Mean	Standard Deviation	CV	Interim AMEL	Interim MDEL
Copper, Total Recoverable	μg/L	11	43	2.2	1.7	0.77	11	26
Cyanide, Total (as CN)	μg/L	5.6	5			0.6	17	35
Zinc, Total Recoverable	μg/L	270	10	74	71	0.96	310	770

- 11. 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 limitations can be achieved.
- 12. If an interim effluent limit contained in this Order is exceeded, then the Discharger is subject to MMPs for that particular exceedance as it will no longer meet the exemption in Water Code 13385, subdivision (j)(3). It is the intent of the Central Valley Water Board that a violation of an interim AMEL subjects the Discharger to only one MMP for that monthly averaging period. In addition, a violation of an interim MDEL subjects the Discharger to one MMP for the day in which the sample was collected.

OTHER REGULATORY REQUIREMENTS

- 13. Water Code 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. Water Code 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 WDRs Order R5-2019-0021 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 Water Code 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. The Central Valley Water Board has notified the Discharger and interested agencies and persons of its intent with the compliance schedules for copper, cyanide, and zinc contained in TSO R5-2019-0022 for this discharge and has provided them with an opportunity to submit their written views and recommendations.

IT IS HEREBY ORDERED THAT:

- 1. This Order shall become effective on 1 June 2019.
- 2. Pursuant to Water Code Sections 13300 and 13267, the Discharger shall comply with the following time schedule to submit reports and ensure compliance with the final effluent limitations for copper and zinc contained in WDRs Order R5-2019-0021, as described in the above findings:

Task	Description	Compliance Date
1a	Submit Annual Progress Reports documenting the steps taken to comply with this Order, describing the completion of tasks, progress of any construction, evaluation of the effectiveness of the implemented measures, and an assessment of whether additional measures are necessary to meet the final compliance date.	1 December, annually, until final compliance
1b	Complete Water-Effect Ratio sampling for copper and zinc.	1 June 2019
1c	Submit the Water-Effect Ratio Study Report for copper and zinc.	1 December 2019
1d	If the results of the Water-Effect Ratio Study are not sufficient to show that the discharge is not exceeding water quality criteria for copper and/or zinc, submit a work plan for an alternative method of compliance.	1 December 2020
1e	Submit and implement a Pollution Prevention Plan (PPP) for copper and zinc that meets the requirements specified in California Water Code Section 13263.3.	1 December 2022
1f	Comply with the Final Effluent Limitations for copper and zinc.	31 May 2024

3. Pursuant to Water Code Sections 13300 and 13267, the Discharger shall comply with the following time schedule to submit reports and ensure compliance with the final effluent limitations for cyanide in WDRs Order R5-2019-0021, as described in the above findings:

Task	Description	Compliance Date
2a	Submit Annual Progress Reports documenting the steps taken to comply with this Order, describing the completion of tasks, progress of any construction, evaluation of the effectiveness of the implemented measures, and an assessment of whether additional measures are necessary to meet the final compliance date.	1 December, annually, until final compliance
2b	Submit a Sample Preservation and Holding Time Study Plan.	1 July 2019
2c	If results of the Sample Preservation and Holding Time Study indicate that sample preservation is contributing to cyanide detections in the effluent, submit Standard Operating Procedures for sampling and analysis of cyanide to reduce or eliminate the effect of sample preservation.	1 July 2020
2d	If Tasks 2b or 2c are unsuccessful at identifying or correcting cyanide exceedances above the criterion, submit a work plan for an alternative method of compliance with the cyanide effluent limitations.	1 July 2021
2e	Submit and implement a Pollution Prevention Plan (PPP) for cyanide that meets the requirements specified in California Water Code Section 13263.3.	1 July 2022
2f	Comply with the Final Effluent Limitations for cyanide.	31 May 2024

4. Discharge from both Discharge Point 001 and Discharge Point 002 shall not exceed the following interim effluent limitations. The interim effluent limitations are effective from 1 June 2019 to 31 May 2024, or whenever the Discharger is able to come into compliance, whichever is sooner. Effective interim limitations shall apply in lieu of the corresponding final effluent limitations in WDRs Order R5-2019-0021.

Parameter	Units	Interim Average Monthly Effluent Limit	Interim Maximum Daily Effluent Limit
Copper, Total Recoverable	μg/L	11	26
Cyanide, Total (as CN)	μg/L	17	35
Zinc, Total Recoverable	μg/L	310	770

5. 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."

6. 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 for, 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 Water Code, 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 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 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, PATRICK PULUPA, 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 4 April 2019.

	Original signed by
•	PATRICK PULLIPA Executive Officer