CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD CENTRAL VALLEY REGION

TIME SCHEDULE ORDER R5-2016-0050

REQUIRING THE QUINCY COMMUNITY SERVICES DISTRICT WASTEWATER TREATMENT PLANT PLUMAS COUNTY TO COMPLY WITH REQUIREMENTS PRESCRIBED IN WASTE DISCHARGE REQUIREMENTS ORDER R5-2016-0049 (NPDES PERMIT NO. CA0078981)

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

- 1. Waste Discharge Requirements (WDR) Order R5-2016-0049 was adopted by the Central Valley Water Board, prescribing waste discharge requirements for Quincy Community Services District (hereafter Discharger), Wastewater Treatment Plant (hereafter Facility), Plumas County. The Discharger provides sewerage service for the communities of Quincy and East Quincy. Order R5-2016-0049 regulates the discharge of up to 4.9 million gallons per day (peak wet weather flow) of disinfected secondary treated domestic wastewater to Spanish Creek, a water of the United States and tributary to the North Fork of the Feather River. Discharges to Spanish Creek typically occur during the wet season. During the dry season, the Discharger discharges treated domestic wastewater to land.
- 2. The Central Valley Water Board adopted Cease and Desist Order (CDO) R5-2010-0033, providing interim effluent limits and compliance schedule for copper with full compliance with the water quality-based effluent limitations required by 18 March 2015. Amended CDO R5-2010-0033-01 was later adopted to add interim limits and a compliance schedule for lead, with full compliance with the lead water quality-based effluent limitations by 18 March 2015.
- 3. WDR Order R5-2016-0049, contains Final Effluent Limitations IV.A.1.b.i., Table 5, which reads, in part, as follows:

Table 5: Effluent Limitations – Discharge Point 001 (Monitoring Location EFF-002)

		Effluent Limitations					
Parameter	Units	Average Monthly	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum	
Priority Pollutants							
Copper, Total Recoverable	μg/L	4.6		7.4			
Lead, Total Recoverable	μg/L	1.0		2.2			

4. On 18 November 2015, the Discharger submitted an infeasibility analysis and requested extension of the compliance schedules for copper and lead. The Discharger requested an additional 5 years to come into compliance with the final effluent limitations for copper and lead.

Need for Time Schedule Extension and Legal Basis

5. The Discharger has made diligent efforts to achieve copper and lead compliance, including: implementation of a pollution prevention plan, public outreach to reduce discharges of contaminants into the collection system, development and improvement of a wetlands area to remove contaminants, maximizing land discharge, and cessation of septage receiving. Since 2010, the Discharger has completed a number of special studies including: biological assessment, antidegradation analysis, mixing zone and dilution study, emergency storage pond perimeter berm integrity evaluation, sampling/testing protocol for a feasibility study, and a new Spanish Creek diffuser and creek improvements design. Monitoring indicates the Discharger's water supply contains little to no copper and lead. It is believed the copper and lead is leaching from copper pipes and possibly lead solder joints in the water distribution system.

The Discharger is seeking two compliance pathways. One pathway is by acquiring a mixing zone and dilution credits for copper and lead. The Discharger will conduct a mixing zone and dilution study (MZDS) once a new diffuser is constructed and creek improvements are completed in fall of 2016. Specifically, the Discharger will implement a restoration project in Spanish Creek consisting of stream-bed grading, boulder rock vane construction, and installation of a new permanent outfall diffuser. The preferred outcome is for the Discharger to obtain dilution credits as a means of compliance with final effluent limits. WDRs R5-2016-0049 contains a reopener provision to allow the permit to be reopened to allow a mixing zone should the Discharger provide adequate justification.

The second compliance pathway is to upgrade the Facility. The Discharger's existing Facility was constructed in 1981. The biological treatment units are 34 years old and nearing the end of their useful life. Therefore, regardless of the allowance of dilution for copper and lead, facility improvements are needed.

The Discharger is evaluating Facility upgrade alternatives and recently completed a Preliminary Engineering Report and Feasibility Study (Study). The Study's recommended project alternative is effluent filtration to remove total suspended solids, thereby removing copper and lead, replacing the existing biological treatment process with a more effective nitrogen removal process, and improvements to the disinfection facilities. The Study also evaluated construction of a separate wastewater treatment facility for the community of East Quincy. East Quincy Community Services District (EQCSD) operates and maintains its own sewage collection system. However its wastewater is conveyed to the Discharger's Facility for treatment and effluent disposal. The Discharger and EQCSD have been in discussions over the years about whether to continue regionalizing or to construct a separate wastewater treatment facility for East Quincy. It is expected that both the Discharger and EQCSD will pursue a joint upgrade project that improves the existing Facility and effluent disposal facilities. It is estimated the necessary improvements would be completed by the end of 2020, but project implementation is dependent upon 1) adoption of the recommended alternative by both the Discharger and EQCSD, 2) acquisition of financing for the project, and 3) successful implementation of a Proposition 218 rate increase.

6. The Central Valley Water Board encourages regionalization and reclamation and adopted Resolution No. R5-2009-0028, "Resolution in Support of Regionalization, Reclamation, Recycling and Conservation for Wastewater Treatment Plants," on 23 April 2009. Resolution R5-2009-0028 requires, "Regional Water Board staff will facilitate dischargers' opportunities for wastewater regionalization, recycling, reclamation, and conservation. Regional Water Board staff facilitation may include, but is not limited to, attending local government and stakeholder meetings, participating in public outreach efforts, and supporting the use of grant funding. Staff facilitation

should promote initiation, optimization, and/or promotion of all types of water efficiency programs." Extending the compliance schedule for copper and lead will allow the Discharger to select the best joint project upgrade alternative with EQCSD and is consistent with the Central Valley Water Board's goal to encourage regionalization.

7. On 18 November 2015, the Discharger submitted a request for additional time to comply with the final effluent limitations for copper and lead. The Discharger has proposed a schedule to achieve compliance by **1 June 2021**.

Mandatory Minimum Penalties

- 8. California Water Code (CWC) sections 13385(h) and (i) require the Central Valley Water Board to impose mandatory minimum penalties (MMP's) upon dischargers that violate certain effluent limitations. CWC section 13385(j)(3) exempts the discharge from MMP's, "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...".
- 9. 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 section 13385(h) and (i).
 - b. To comply with final effluent limitations, the Discharger has determined that an additional five years is necessary to develop and implement the projects discussed in Finding 5.
 - c. This Order establishes a time schedule to bring the waste discharge into compliance with the effluent limitations in as short a time 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.
- 10. The final effluent limitations for copper and lead became applicable to the waste discharge on the effective date of WDR Order R5-2010-0032 (18 March 2010). CDO R5-2010-0033 provided protection from MMP's for violations of copper final effluent limitations from 18 March 2010 until 3 October 2013. CDO R5-2010-0033-01 provided protection from MMP's for violations of copper and lead final effluent limitations from 4 October 2013 until 18 March 2015. There was a lapse in protection from MMP's for violations of copper and lead effluent limitations from 19 March 2015 until 23 June 2016.
- 11. By statute, a Time Schedule Order may provide protection from MMP's for no more than five years, except as provided in CWC section 13385(j)(3)(C)(ii).
- 12. Per the requirements of 13385(j)(3)(C)(ii)(II) following a public hearing, and upon a showing that the Discharger is making diligent progress toward bringing the waste discharge into compliance with the effluent limitation, the Central Valley Water Board may extend the time schedule for an additional five years, if the Discharger demonstrates that the additional time is necessary to comply with the effluent limitation. The Central Valley Water Board finds, as described in previous findings in this Order, that the Discharger has demonstrated due diligence and is making diligent progress to bring the waste discharge into compliance with final effluent limitations for copper and lead contained in WDR Order R5-2016-0049. Therefore, in accordance with CWC Section 13385(j)(3)(C)(ii)(II), the time schedule is extended no more than five years.

- 13. Compliance with this Order exempts the Discharger from MMP's for violations of the final effluent limitations for copper and lead from **24 June 2016** through **1 June 2021**.
- 14. In accordance with CWC section 13385(j)(3)(C), the total length of protection from MMP's for the final effluent limitations for copper and lead does not exceed ten years
- 15. This Order provides a time schedule for completing the actions necessary to ensure compliance with the final effluent limitations for copper and lead contained in WDR Order R5-2016-0049. 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.
- This Order includes recalculated interim effluent limitations from CDO R5-2010-0033-01 for copper and lead. Since the compliance date for copper and lead is extended, the performancebased interim effluent limitations have been recalculated to be more representative of the most recent available data (March 2012 to March 2015). The recalculated interim effluent limitations for copper and lead are based on current treatment plant performance and are established as average monthly effluent limitations (AMEL) and maximum daily effluent limitations (MDEL). The United States Environmental Protection Agency (USEPA) has developed a statistical approach to estimate the projected maximum effluent concentration, which is calculated as the upper bound of the log normal distribution of effluent concentrations at a high confidence level. Table 3-1 Reasonable Potential Multiplying Factors: 99% Confidence Level and 99% Probability Basis, in USEPA's Technical Support Document For Water Quality-based Toxics Control, March 1991, (EPA/505/2-90-001) (TSD). The interim performance based AMELs in this Order are established as the estimated maximum effluent concentration determined through the above mentioned method. The interim performance-based MDELs in this Order were established using the procedures described in Table 5-3. Multipliers for Calculating Maximum Daily Permit Limits From Average Monthly Permit Limits, in USEPA's TSD by multiplying the interim AMELs by the MDEL/AMEL multipliers. A summary of the interim effluent limitation calculations is shown in the table below.

Interim Effluent Limitations Calculation Summary¹

Parameter	Units	MEC	CV	Multiplier	# of Samples	AMEL ²	MDEL ³
Copper, Total Recoverable	μg/L	9.3	0.35	1.67	14	17	28
Lead, Total Recoverable	μg/L	1.7	0.66	2.09	16	4.6	9.6

Based on data from March 2012 through March 2015

² AMEL calculated using the TSD approach as the maximum statistically projected critical discharge concentration ³ MDEL calculated as the AMEL x MDEL/AMEL multiplier (Table 5-3 of TSD)

- 17. 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.
- 18. 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 CWC 13385(j)(3). It is the intent of the Central Valley Water Board that a violation of an interim monthly effluent limitation subjects the Discharger to only one MMP for that monthly averaging period. In addition, a violation of an interim daily maximum effluent limit subjects the Discharger to one MMP for the day in which the sample was collected.

Other Regulatory Requirements

- 19. 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."
- 20. CWC section 13267(b)(1) states: "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."
- 21. The Discharger owns and operates the treatment facility which is subject to this Order. The technical and monitoring reports required by this Order are necessary to determine compliance with WDR Order R5-2016-0049 and with this Order.
- 22. 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.)

23. The Central Valley Water Board has notified the Discharger and interested agencies and persons of its intent to extend the compliance schedules for copper and lead contained in Cease and Desist Order R5-2010-0033-01 for this discharge and has provided them with an opportunity to submit their written views and recommendations.

IT IS HEREBY ORDERED THAT:

- Cease and Desist Order R5-2010-0033-01 is rescinded upon the effective date of this Order except for enforcement purposes.
- 2. Pursuant to CWC Section 13300 and 13267, by **1 June 2021** the Discharger shall comply with the following time schedule to ensure compliance with the final effluent limitations for copper and lead contained in Order R5-2016-0049.

Task		Compliance Date
а.	Annual Progress Reports. The Discharger shall submit annual progress reports. 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, status of upgrade project funding acquisition, and recommendations for additional measures as necessary to achieve full compliance by the final date.	1 November, annually, beginning 1 November 2016
b.	Preliminary Engineering Report (PER) and Feasibility Study Adopted Project Alternative. The Discharger shall submit documentation of the selected and adopted project upgrade alternative from the PER and Feasibility Study.	1 August 2016
C.	Adopted Project Implementation Schedule. The Discharger shall submit an updated implementation schedule based on the adopted project alternative to achieve compliance with the final effluent limitations for copper and lead.	1 November 2016
d.	Work Plan for Mixing Zone and Dilution Study. The Discharger shall submit a work plan for conducting the Mixing Zone and Dilution Study.	1 August 2016
e.	Mixing Zone and Dilution Study. The Discharger shall submit a mixing zone and dilution study after completion of the creek enhancements and new outfall diffuser construction.	31 December 2016
f.	Adopted Project Alternative Funding Acquisition. The Discharger shall provide an update on funding commitments for the project, including results of Proposition 218 rate increase proceedings. This information may be included as part of the Annual Progress Report.	1 November 2017
g.	Advertise for Public Bids. The Discharger shall submit proof of advertisement for public bids for project construction.	31 December 2018
h.	Notice to Proceed with Construction. The Discharger shall submit a copy of the Notice to Proceed for construction of the project.	1 February 2019
i.	Construction Complete/Final Compliance. Comply with the Final Effluent Limitations for copper and lead.	1 June 2021

3. The following interim effluent limitations are effective immediately. The interim effluent limitations for copper and lead are effective through **31 May 2021**.

Interim Effluent Limitations

		Interim Effluent Limit		
Constituent	Units	Average Monthly	Maximum Daily	
Copper, Total Recoverable	μg/L	17	28	
Lead, Total Recoverable	μg/L	4.6	9.6	

4. 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."

5. 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 civil engineering, geologic, or geophysical plans, calculations, specifications, and related reports submitted with technical reports specified herein shall be prepared by or under the direction of appropriately qualified professional(s), even if not explicitly stated and 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, 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 24 June 2016.

ORIGINAL SIGNED BY