

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

TIME SCHEDULE ORDER R5-2018-0037
REQUIRING
CITY OF JACKSON
WASTEWATER TREATMENT PLANT
AMADOR COUNTY

TO COMPLY WITH REQUIREMENTS PRESCRIBED IN ORDER R5-2018-0036
(NPDES PERMIT NO. CA0079391)

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

1. The City of Jackson (Discharger) owns and operates the Wastewater Treatment Plant (Facility). The Facility discharges up to 0.71 million gallons per day (MGD) of treated wastewater to Jackson Creek, a water of the United States, and a tributary to Amador Lake within the Mokelumne River watershed.
2. On 25 October 2007, the Central Valley Water Board adopted Waste Discharge Requirements (WDRs) Order R5-2007-0133 (NPDES No. CA0079391), which included final effluent limitations for, *inter alia*, cyanide, dichlorobromomethane, nitrate, and total coliform organisms. Finding that the Discharger could not comply with many of the final effluent limitations in WDRs Order R5-2007-0133, the Central Valley Water Board granted the Discharger a compliance schedule in the WDRs that required compliance with the final effluent limits for cyanide and dichlorobromomethane by 18 May 2010.
3. On 3 November 2011, the Central Valley Water Board issued Time Schedule Order (TSO) R5-2011-0909, which provided until 1 March 2015 for the Discharger to come into compliance with the final effluent limitations for cyanide, dichlorobromomethane, nitrate, and total coliform organisms. The Central Valley Water Board adopted Order R5-2013-0902 on 13 November 2013 amending TSO R5-2011-0909, granting the Discharger higher interim limits based on the Facility's performance.
4. On 5 December 2013, the Central Valley Water Board adopted WDRs Order R5-2013-0146, which included final effluent limitations for, *inter alia*, cyanide, chlorodibromomethane, dichlorobromomethane, nitrate plus nitrite, total coliform organisms, and total trihalomethanes. The final effluent limitations for cyanide and dichlorobromomethane in WDRs Order R5-2013-0146 varied slightly from the applicable effluent limitations in the previous WDRs due to the statistical variance in the effluent dataset, but were based upon the same numeric water quality standards and were thus not considered more or less stringent limits. However, the final effluent limitation for nitrate plus nitrate was more stringent, based on modified regulatory requirements for nitrate.
5. Also, on 5 December 2013, the Central Valley Water Board adopted Order R5-2013-0148 amending TSO R5-2011-0909-01 to reflect the limits in WDRs Order R5-2013-0146 and concurrently adopted TSO R5-2013-0147, which provided the Discharger until 1 March 2018 to comply with the new final effluent limitations for chlorodibromomethane and total trihalomethanes.

6. On 5 February 2015, the Central Valley Water Board adopted TSO R5-2015-0003 to rescind TSOs R5-2011-0909-02 and WDRs Order R5-2013-0147 and to provide the Discharger until 1 March 2018 to comply with the final effluent limitations for cyanide, chlorodibromomethane, dichlorobromomethane, nitrate, and total trihalomethanes.
7. On 18 February 2016, the Central Valley Water Board adopted Order R5-2016-0003 amending TSO R5-2015-0003 to extend the compliance date for cyanide, chlorodibromomethane, dichlorobromomethane, nitrate, and total trihalomethanes to 1 November 2018.
8. On 20 October 2017, the Central Valley Water Board adopted Order R5-2017-0103 amending TSO R5-2015-0003-01 to extend the compliance date for cyanide, chlorodibromomethane, dichlorobromomethane, nitrate, and total trihalomethanes to 1 June 2019.
9. On 5 April 2018, the Central Valley Water Board adopted Order R5-2018-0013 amending TSO R5-2015-0003-02 to add a compliance schedule for total coliform organisms requiring final compliance by 1 June 2019.
10. On 31 May 2018, the Central Valley Water Board adopted WDRs Order R5-2018-0036, which imposed Final Effluent Limitations IV.A.1, which reads, in part, as follows:

Table 4. Effluent Limitations

Parameter	Units	Effluent Limitations				
		Average Monthly	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
Priority Pollutants						
Chlorodibromomethane	µg/L	0.41	--	0.82	--	--
Cyanide, Total (as CN)	µg/L	4.2	--	8.7	--	--
Dichlorobromomethane	µg/L	0.56	--	0.99	--	--
Non-Conventional Pollutants						
Nitrate Plus Nitrite (as N)	mg/L	10	21	--	--	--
Total Trihalomethanes ¹	µg/L	80	120	--	--	--

¹ The sum of bromoform, chlorodibromomethane, chloroform, and dichlorobromomethane.

- e. **Total Coliform Organisms.** Effluent total coliform organisms shall not exceed the following, with compliance measured at Monitoring Location EFF-001 as described in the MRP, Attachment E. Once the UV disinfection system becomes operational, compliance shall be measured at Monitoring Location UVS-001 as described in the MRP, Attachment E.
 - i. 2.2 most probable number (MPN) per 100 mL, as a 7-day median;
 - ii. 23 MPN/100 mL, more than once in any 30-day period; and
 - iii. 240 MPN/100 mL, at any time.
11. The final effluent limitations for cyanide and dichlorobromomethane in WDRs Order R5-2018-0036 varied slightly from the applicable effluent limitations in the previous WDRs due to the statistical variance in the effluent dataset, but were based upon the same numeric water quality standards and were thus not considered more or less stringent limits. Also, WDRs Order R5-2018-0036 established final average weekly effluent limitations for nitrate plus nitrite and total trihalomethanes in addition to the final average monthly effluent limitations included in the

previous WDRs, consistent with the requirements of 40 C.F.R. section 122.45(d). Since the average weekly effluent limitations were based upon the same numeric water quality standards as the previous WDRs, final effluent limitations for these constituents were not considered more or less stringent.

NEED FOR TIME SCHEDULE EXTENSION AND LEGAL BASIS

12. The Discharger submitted infeasibility analyses on 11 January 2010, 20 May 2010, 20 August 2013, and 24 November 2014 requesting additional time to comply with final effluent limitations for cyanide, chlorodibromomethane, dichlorobromomethane, nitrate plus nitrite, and total coliform organisms through construction of a suite of Facility upgrades. The Discharger is constructing Facility upgrades to replace chlorine disinfection with UV disinfection to comply with the cyanide, chlorodibromomethane, dichlorobromomethane, total trihalomethanes, and total coliform organisms final effluent limitations, and the modification of the oxidation ditches to provide simultaneous nitrification/denitrification to comply with nitrate plus nitrite final effluent limitations. Due to changes in project scope and delays in financing and construction, TSO R5-2015-0003-03 provided until 1 June 2019 to comply with final effluent limitations for cyanide, chlorodibromomethane, dichlorobromomethane, total trihalomethanes, and total coliform organisms.
13. On 1 November 2012, the Discharger submitted a Pollution Prevention Plan that:
 - Documented a point disinfection relocation to comply with dichlorobromomethane and cyanide limits, and
 - Proposed to stabilize the wastewater treatment process with the addition of lime to stabilize wastewater pH at (or above) 7.0 to bring effluent nitrate concentrations into compliance.
14. The Discharger cannot consistently comply with the final effluent limitations for cyanide, chlorodibromomethane, dichlorobromomethane, nitrate plus nitrite, total trihalomethanes, and total coliform organisms in WDRs Order R5-2018-0036 and must implement additional actions to reach compliance. This Order, TSO R5-2018-0037, retains the compliance schedule and interim limitations set forth in TSO R5-2015-0003-03 and is intended to provide protection from MMPs for these constituents.

MANDATORY MINIMUM PENALTIES

15. Water Code section 13385, subdivisions (h) and (i), requires the Central Valley Water Board to impose MMPs upon dischargers that violate certain effluent limitations. Water Code section 13385(j)(3) exempts discharges from these 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...

16. Per the requirements of Water Code section 13385, subdivision (j)(3), the Central Valley Water Board finds that new or modified control measures are necessary in order to comply with new or more stringent effluent limitations, and that the Discharger could not have designed, installed, and put into operation the new or modified control measures within 30 calendar days of the date that the final effluent limitations went into effect. The proposed time schedule is needed to complete designs, award bids, and begin construction of upgrades. Several phases of construction have been completed. However, additional proposed improvements include (1) conversion to UV disinfection to reduce chlorination byproducts and total coliform organisms in the effluent, and (2) improvements to achieve denitrification via simultaneous nitrification and denitrification to improve compliance with nitrate plus nitrite effluent limitations.
17. TSOs generally may only provide protection from MMPs for up to five years. However, Water Code section 13385, subdivision (j)(3)(C)(ii)(II), authorizes the Board to grant an additional five years if the Board finds, following a public hearing, that a Discharger is making diligent progress towards bringing the waste discharge into compliance and that the additional time is necessary to comply with the effluent limitations.
18. Compliance with this TSO provides protection for the Discharger from MMPs as follows:
 - a. **Chlorodibromomethane and total trihalomethanes (the sum of bromoform, chloroform, chlorodibromomethane, and dichlorobromomethane):** WDRs Order R5-2013-0146-01 imposed new final effluent limits for chlorodibromomethane and total trihalomethanes that went into effect on 24 January 2014. WDRs Order R5-2018-0036 retained these limits as final effluent limitations and established a final average weekly effluent limitation for total trihalomethanes in accordance with 40 C.F.R. section 122.45(d). TSO R5-2013-0147 provided the Discharger with MMP protection for chlorodibromomethane and total trihalomethanes violations from 24 January 2014 until 28 February 2018. TSO R5-2015-0003-03 carried forward MMP protections for these constituents through 31 May 2019. Consistent with TSO R5-2015-0003-03, this TSO provides MMP protection for these constituents through 31 May 2019. The total time of MMP protection is 5 years, 4 months, and 7 days. This time schedule is as short as possible and does not exceed ten (10) years in length from the date the final effluent limitations became effective.
 - b. **Cyanide and dichlorobromomethane:** WDRs Order R5-2007-0133 imposed final effluent limitations for cyanide and dichlorobromomethane that became effective 18 May 2010. These limits were carried forward as final effluent limitations by WDRs Orders R5-2013-0146-01 and R5-2018-0036. TSO R5-2011-0909-02 provided the Discharger with MMP protection for cyanide and dichlorobromomethane violations from 3 November 2011 through 28 February 2015. TSO R5-2015-0003-03 extended MMP protections for these constituents through 31 May 2019. Consistent with TSO R5-2015-0003-03, this TSO provides MMP protection for these constituents through 31 May 2019. The total time of MMP protection is 7 years and 7 months. This time schedule is as short as possible and does not exceed ten (10) years in length from the date the final effluent limitations became effective.
 - c. **Nitrate plus nitrite:** WDRs Order R5-2013-0146-01 imposed a final effluent limitation for nitrate plus nitrite that became effective on 24 January 2014 and that was more stringent than the final effluent limitation imposed by WDRs Order R5-2007-0133 (TSO R5-2011-0909-02 provided the Discharger with MMP protection for nitrate violations from 3 November 2011 until 24 January 2014, when the more stringent nitrate plus nitrite

effluent limitation became effective). WDRs Order R5-2018-0036 carried forward this limit as a final effluent limitation and established a final average weekly effluent limitation in accordance with 40 C.F.R. section 122.45(d). After being amended, TSO R5-2011-0909-02 provided protection for nitrate plus nitrite from 24 January 2014 through 28 February 2015. TSO R5-2015-0003-03 extended MMP protections for this constituent through 31 May 2019. Consistent with TSO R5-2015-0003-03, this TSO provides MMP protection for this constituent through 31 May 2019. The total time of MMP protection is 5 years, 4 months, and 7 days. This time schedule is as short as possible and does not exceed ten (10) years in length from the date the final effluent limitations became effective.

- d. **Total Coliform Organisms:** WDRs Order R5-2007-0133 imposed new final effluent limits for total coliform organisms that became effective on 25 October 2007 and that were more stringent than the final effluent limitation imposed by WDRs Order 5-00-173. TSO R5-2011-0909 provided the Discharger with MMP protection for total coliform organism violations from 3 November 2011 until 28 February 2015, after the more stringent total coliform organisms effluent limitation became effective. TSO R5-2015-0003-03 extended MMP protections for this constituent from 5 April 2018 through 31 May 2019. Consistent with TSO R5-2015-0003-03, this TSO provides MMP protection for this constituent through 31 May 2019. The total time of MMP protection is 4 years, 5 months, and 24 days. This time schedule is as short as possible and does not exceed ten (10) years in length from the date the final effluent limitations became effective.

19. The Board finds that the time schedules in Finding No. 18 are as short as possible, considering 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. The Board further finds that the Discharger is making diligent progress towards bringing the waste discharge into compliance, that the additional time is necessary to comply with the effluent limitations, and that the time schedule does not exceed ten (10) years in length from the date the final effluent limitations became effective.
20. This TSO provides a time schedule for completing the actions necessary to ensure compliance with final effluent limitations. Since the time schedule for the completion of these actions exceeds one (1) year, this TSO includes interim effluent limitations and interim requirements and dates for their achievement.
21. This TSO includes performance-based interim effluent limitations for cyanide, chlorodibromomethane, dichlorobromomethane, nitrate plus nitrite, and total trihalomethanes, which consist of average monthly and maximum daily interim effluent limits carried forward from TSO R5-2015-0003-03. Order R5-2018-0036 established new, final average weekly effluent limitations for nitrate plus nitrite and total trihalomethanes. Because the averaging periods for interim effluent limitations must correspond to the averaging periods for final effluent limitations, this TSO replaces the interim maximum daily effluent limitations for nitrate plus nitrite and total trihalomethanes from TSO R5-2015-0003-03 with interim average weekly effluent limitations. The interim average weekly effluent limitations were developed by applying an AWEL/MDEL multiplier reflecting a 98th percentile occurrence probability to the interim average monthly effluent limitation.

Parameter	Units	Interim AMEL	Interim AWEL	Interim MDEL
Cyanide	µg/L	23	--	49
Chlorodibromomethane	µg/L	3.4	--	6.8
Dichlorobromomethane	µg/L	21	--	51
Nitrate plus Nitrite	mg/L	151	290	--
Total Trihalomethanes	µg/L	720	1,200	--

22. This TSO includes 7-day median and 30-day period interim performance-based effluent limitations for total coliform organisms carried forward from TSO R5-2015-0003-03.

Parameter	Units	7-day Median	More Than Once In Any 30-Day Period
Total coliform organisms	MPN/100 mL	23	240

23. The Central Valley Water Board expects 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.
24. 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 section 13385, subdivision (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.

REGULATORY BASIS

25. Water Code section 13300 states, in part:

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.

26. Water Code section 13267 states, in part:

In conducting an investigation ... 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.

27. The Discharger owns and operates the Facility. The technical and monitoring reports required by this TSO are necessary to determine compliance with WDRs Order R5-2018-0036 and with this TSO.
28. Issuance of this TSO is exempt from the provisions of the California Environmental Quality Act (Pub. Resources Code, § 21000 et seq.) pursuant to Water Code section 13389, since the adoption or modification of an 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.)
29. On **31 May 2018**, 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 a Time Schedule Order under Water Code section 13300 to establish a time schedule to achieve compliance with WDRs.

IT IS HEREBY ORDERED THAT, pursuant to Water Code section 13300 and 13267, Time Schedule Order R5-2015-0003, including the amendments on 18 February 2016, 20 October 2017, and 6 April 2018, **is rescinded on the effective date of WDRs Order R5-2018-0036, 1 August 2018**, except for enforcement purposes, and, in order to ensure compliance with the requirements of WDRs Order R5-2018-0036:

1. The Discharger shall comply with the following time schedule to ensure completion of the compliance projects described in Finding 12:

Task	Compliance Date
Submit Progress Report ¹	31 January 2019
Submit documentation that construction has been completed	28 February 2019
Submit documentation of enhanced treatment process startup	31 May 2019
Submit documentation showing that the discharge fully complies with the final effluent limitations for cyanide, chlorodibromomethane, dichlorobromomethane, nitrate plus nitrite, total trihalomethanes, and total coliform organisms.	1 June 2019
¹ The progress report shall detail the steps taken to comply with this Order, including documentation showing completion of tasks, construction progress, evaluation of the effectiveness of the implemented measures, and assessment of whether additional measures are necessary to meet the compliance dates.	

2. The following interim effluent limitations for cyanide, chlorodibromomethane, dichlorobromomethane, nitrate plus nitrite, total trihalomethanes, and total coliform organisms shall be effective upon adoption of this Order, and shall apply in lieu of the corresponding final effluent limitations in WDRs Order R5-2018-0036. The Discharger shall maintain compliance with the following interim effluent limitations through 31 May 2019, or when the Discharger is able to come into compliance with the final effluent limitations, whichever is sooner.

- a. **Cyanide, chlorodibromomethane, dichlorobromomethane, nitrate plus nitrite, and total trihalomethanes.** Cyanide, chlorodibromomethane, dichlorobromomethane, nitrate plus nitrite, and total trihalomethanes in the effluent shall not exceed:

Parameter	Units	Interim Average Monthly Effluent Limitation	Interim Average Weekly Effluent Limitation	Interim Average Daily Effluent Limitation
Cyanide	µg/L	23	--	49
Chlorodibromomethane	µg/L	3.4	--	6.8
Dichlorobromomethane	µg/L	21	--	51
Nitrate plus Nitrite	mg/L	151	290	--
Total Trihalomethanes	µg/L	720	1,200	--

- b. **Total coliform organisms.** Total coliform organisms in the effluent shall not exceed:

- i. 23 MPN/100 mL, as a 7-day median; and
- ii. 240 MPN/100 mL, more than once in any 30-day period.

3. 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 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 0p.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.

This Order shall become effective on **1 August 2018**, when the WDRs Order R5-2018-0036 becomes effective by a separate action of the Central Valley Water Board at its regularly scheduled Board meeting.

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 **31 May 2018**.

Original signed by

PATRICK PULUPA, Executive Officer