

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
CENTRAL VALLEY REGION

ORDER R5-2019-1004

AMENDING TIME SCHEDULE ORDER R5-2017-0092

FOR

CITY OF BIGGS  
BIGGS WASTEWATER TREATMENT PLANT  
BUTTE COUNTY

The Central Valley Regional Water Quality Control Board (Central Valley Water Board or Board) finds:

1. The City of Biggs (hereinafter Discharger) located in Butte County provides sewerage service and serves a population of approximately 1,800.
2. On 4 October 2012, the Central Valley Water Board adopted Waste Discharge Requirements (WDRs) Order R5-2012-0083, NPDES Permit No. CA0078930, prescribing waste discharge requirements for the Biggs Wastewater Treatment Plant (hereafter Facility), in Butte County. WDRs Order R5-2012-0083 included, in part, final effluent limitations for ammonia that became effective 23 November 2012.
3. On 4 October 2012, the Central Valley Water Board adopted Time Schedule Order (TSO) R5-2012-0084, NPDES Permit No. CA0078930, which included interim effluent limitations for ammonia.
4. WDRs Order R5-2012-0083 included a compliance schedule and a 23 November 2017 deadline for compliance with filtration and disinfection requirements.
5. Since WDRs Order R5-2012-0083 and TSO R5-2012-0084 were adopted, the Discharger has made significant efforts to convert the method of effluent disposal at the Facility from a surface water discharge to land application. Efforts towards compliance have been split into two project phases. By 2017, Phase 1 was complete and Phase 2 was expected to undergo construction in April 2018.
6. Due to delays in Phase 2 of the project, on 11 August 2017, the Central Valley Water Board adopted Time Schedule Order (TSO) R5-2017-0092 which contained interim effluent limits for ammonia and total coliform and a two year time schedule that required compliance with final effluent limitations for ammonia and total coliform as well as compliance with filtration, turbidity, and disinfection requirements by 30 November 2019.
7. As of the date of this Order, the current status of the compliance project is as follows:

- Completed – acquisition of 70 acres of land application area for flood irrigation, construction of 2-40 million-gallon lined storage ponds, construction of the tailwater pond, installation of 6 groundwater monitoring wells, completion of a baseline groundwater quality investigation and construction of the effluent pipeline.
  - In-Progress - additional SCADA monitoring, effluent pump station, upgraded chlorination dosing system, and irrigation pump station.
8. On 30 April 2019, the Discharger submitted a letter that requested additional time beyond that provided in TSO R5-2017-0092 to complete Facility improvements necessary to demonstrate compliance with final effluent limitations for ammonia and total coliform as well as compliance with filtration, turbidity, and disinfection requirements. The letter included justification for requesting additional time to comply by presenting historical measures taken by the Discharger since 2015 and providing an update on Phase 2 of the land conversion project. Additional time is required for the Discharger to construct improvements necessary to comply with final effluent limitations for ammonia and total coliform; and filtration, turbidity, and disinfection requirements.
  9. Immediate compliance with final effluent limitations for ammonia and total coliform is not possible or practicable. This Order amends TSO R5-2017-0092 by reassessing appropriate interim effluent limitations for ammonia and extending the time schedule for an additional one year to achieve full compliance with final effluent limitations for ammonia and total coliform as well as compliance with filtration, turbidity, and disinfection requirements by 30 November 2020.
  10. Issuance of this Order is exempt from the provisions of the California Environmental Quality Act (Pub. Resources Code, § 21000, et seq.)(CEQA), pursuant to Cal. Wat. Code § 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.). Issuance of this Order is also exempt from CEQA pursuant to California Code of Regulations, title 14, § 15321(a)(2).
  11. The Central Valley Water Board has notified the Discharger and interested agencies and persons of its intent to amend TSO No. R5-2017-0092 for this discharge and has provided them with an opportunity to submit their written views and recommendations.

**IT IS HEREBY ORDERED THAT** TSO No. R5-2017-0092 is amended as shown below:

1. The Order number is changed from R5-2017-0092 to R5-2019-1004.
2. Finding 7 is now added and reads as follows:

*The Discharger was unable to immediately comply with Special Provisions VI.C.4.c & 6 (filtration, turbidity, and disinfection requirements), therefore, WDR Order R5-2012-0083 provided a time schedule for achieving compliance. Compliance with Other Special Provisions VI.C.4.c & 6 was to be achieved by 5 years from the effective date of WDR Order R5-2012-0083, or 23 November 2017.*

3. Finding 7 from the previous Order is amended to be Finding 8 and now reads as follows:

*The Discharger was unable to meet the 4 October 2017 deadline for compliance with final ammonia effluent limits and the 23 November 2017 deadline for compliance with the filtration, turbidity, and disinfection requirements due to delays in the project permitting, land acquisition, and funding. On 11 April 2017 the Discharger submitted a request and justification for additional time to comply with final effluent limitations for ammonia and the filtration, turbidity, and disinfection requirements. Therefore, the Central Valley Water Board adopted TSO R5-2017-0092 on 11 August 2017. TSO R5-2017-0092 provided a time schedule for meeting the effluent limitations for ammonia and the filtration, turbidity, and disinfection requirements. Compliance is to be achieved by 30 November 2019.*

4. Finding 8 from the previous Order is amended to be Finding 9 and now reads as follows:

*Since WDR Order R5-2012-0083, TSO R5-2012-0084, and TSO R5-2017-0092 were adopted, the Discharger has made significant efforts to convert the method of effluent disposal at the Facility from a surface water discharge to land application. Efforts towards compliance have been split into two project phases. As of the date of this Order, Phase 1 is complete and construction of Phase 2 is in progress. Phase 2 includes the necessary land acquisition and Facility expansion to allow for land application of treated effluent.*

5. Finding 9 from the previous Order is amended to be Finding 10.
6. Finding 10 from the previous Order is amended to be Finding 11.
7. Finding 11 from the previous Order is amended to be Finding 12 and now reads as follows:

*The current status of the project is as follows:*

- *Completed – acquisition of 70 acres of land application area for flood irrigation, 2-40 million gallon lined storage ponds, a tailwater pond, installation of 6 groundwater monitoring wells, a baseline groundwater quality investigation and construction of the effluent pipeline.*
- *In-progress – additional SCADA monitoring, effluent pump station, upgraded chlorination dosing system, and irrigation pump station.*

8. Finding 12 from the previous Order is amended to be Finding 13 and now reads as follows:

*The Discharger is currently unable to meet the 30 November 2019 deadline established in TSO R5-2017-0092 for compliance with final ammonia effluent limits and the filtration, turbidity, and disinfection requirements due to delays in the project permitting, land acquisition, and funding. On 30 April 2019 the Discharger submitted a request and justification for additional time to comply with final effluent limitations for ammonia and the filtration, turbidity, and disinfection requirements. The submittal included justification for a time schedule extension for compliance which included documentation that diligent efforts have been made toward compliance by implementing improvements to the WWTP in preparation for converting from surface water discharge to land application of the effluent.*

9. Finding 13 from the previous Order is amended to be Finding 14.
10. Finding 14 from the previous Order is amended to be Finding 15.
11. Finding 15 from the previous Order is amended to be Finding 16.
12. Finding 16 from the previous Order is amended to be Finding 17.
13. Finding 17 from the previous Order is amended to be Finding 18 and now reads as follows:

*The final effluent limitations for ammonia and total coliform (when wastewater receives less than 20:1 dilution in the receiving water) became applicable to the waste discharge on 23 November 2012. By statute, a Time Schedule Order may provide protection from MMPs for up to five years pursuant to Water Code section 13385, subdivision (j)(3)(A) through (D), and an additional five years (ten years total) pursuant to Water Code section 13385, subdivision (j)(3)(C)(ii)(II). Five and ten years from the effective date of the new ammonia and filtration, turbidity, and disinfection requirements is 23 November 2017 and 23 November 2022, respectively.*

14. Finding 18 from the previous Order is amended to be Finding 19 and now reads as follows:

*The Discharger has demonstrated that approximately one more year (November 2020) is a necessary amount of time to comply with final effluent limitations for ammonia and total coliform (when wastewater receives less than 20:1 dilution in the receiving water) and to comply with the filtration and turbidity specifications.*

15. Finding 19 from the previous Order is amended to be Finding 20 and now reads as follows:

*The Discharger was previously provided a time schedule order for protection from MMPs from violations of final effluent limitations for total coliform. The final effluent limitations for total coliform were effective on 23 November 2012. TSO R5-2017-0092 provided MMPs protection from 11 August 2017 through 30 November 2019. A time schedule from the effective date of this Order until 30 November 2020 may be provided pursuant to Water Code section 13385, subdivision (j)(3)(A) through (D) to allow for protection from MMPs for violations of the final effluent limitations for total coliform.*

16. Finding 20 from the previous Order is amended to be Finding 21 and now reads as follows:

*New final effluent limitations for ammonia became effective on 23 November 2012. TSO R5-2012-0084, issued pursuant to Water Code section 13385, subdivision (j)(3)(A) through (D), provided a schedule for compliance with the effluent limitations for ammonia and protection from MMPs for violations of final effluent limitations for ammonia until 4 October 2017. TSO R5-2017-0092 was adopted on 11 August 2017 and extended protection from MMPs for violations of effluent limitations for ammonia until 30 November 2019 pursuant to Water Code section 13385, subdivision (j)(3)(C)(ii)(II).*

17. Finding 21 from the previous Order is amended to be Finding 22.

18. Finding 22 from the previous Order is amended to be Finding 23 and now reads as follows:

*Compliance with this Order exempts the Discharger from MMPs for violations of the final effluent limitations for ammonia and total coliform (when wastewater receives less than 20:1 dilution in the receiving water) found in WDR Order R5-2012-0083 from the date of this Order's adoption (26 November 2019) until 30 November 2020.*

19. Finding 23 from the previous Order is amended to be Finding 24 and now reads as follows:

*In accordance with Water Code section 13385(j)(3)(C)(ii)(II), the total length of protection from mandatory minimum penalties for violation of the final effluent limitations ammonia does not exceed ten years. The initial five-year time schedule as allowed pursuant to Water Code section 13385, section (j)(3)(C)(i) expired 23*

*November 2017 for the ammonia effluent limits. TSO R5-2017-0092 extended the time schedule until 30 November 2019. An extended time schedule period from the effective date of this Order until 30 November 2020 for ammonia effluent limits is pursuant to Water Code section 13385(j)(3)(C)(ii)(II).*

20. Finding 24 from the previous Order is amended to be Finding 25 and now reads as follows:

*In accordance with Water Code section 13385(j)(3)(C)(i), the total length of protection from mandatory minimum penalties for the violation of final effluent limitations for total coliform does not exceed five years. TSO R5-2017-0092 provided protection from MMPs until 30 November 2019. An extended time schedule period from the effective date of this Order until 30 November 2020 for total coliform effluent limits is pursuant to Water Code section 13385(j)(3)(A) through (D).21.*

21. Finding 25 from the previous Order is amended to be Finding 26.

22. Finding 26 from the previous Order is amended to be Finding 27 and now reads as follows:

*This Order includes new performance-based interim effluent limitations for ammonia. Interim ammonia effluent limitations consist of a maximum daily effluent limitation (MDEL) and an average monthly effluent limitation (AMEL) derived using sample data provided by the Discharger. In developing the performance-based interim AMEL, where there are 10 data points or more and only once per month sampling is required, sampling and laboratory variability is accounted for by establishing interim effluent limitations that are based on normally distributed data where 99.9 percent 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, 3rd Edition, January 1986). When at least 80 percent of the data points are reported as non-detect (ND) values, or if there are less than 10 data points available, the interim AMEL is based on 3.11 times the maximum observed effluent concentration (MEC) when once per month sampling is required. Additionally, if either of these procedures produces an interim AMEL less than the MEC, the MEC is sometimes established as the interim AMEL. The interim MDEL can be calculated by multiplying the calculated AMEL with a multiplier from Table 2 (which is each parameters MDEL multiplier divided by their AMEL multiplier) of the Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California. To calculate the coefficient of variation (CV), division of sample variance by sample mean was completed using historical records. In this case, based on best professional judgment, and evaluation of the facility performance, the interim AMEL and MDEL for ammonia are set at 31.3 mg/L and 59.2 mg/L, respectively*

*January 2016 through July 2019 effluent data were used in calculating interim*

*effluent limitations for ammonia. The following table summarizes the calculation of the interim effluent limitations*

**Table 1 - Interim Effluent Limitation Calculation Summary**

Parameter	Units	# of Samples	Mean	Standard Deviation	CV	99.9%	MEC	Interim AMEL	Interim MDEL
Ammonia, Total (as N)	mg/L	180	9.9	5.2	0.53	26	26	31.3	59.2

- 23. Finding 27 from the previous Order is amended to be Finding 28.
- 24. Finding 28 from the previous Order is amended to be Finding 29.
- 25. Finding 29 from the previous Order is amended to be Finding 30.
- 26. Finding 30 from the previous Order is amended to be Finding 31 and now reads as follows:

*As described in Finding 7 of this Order, WDR Order R5-2012-0083 provided a time schedule with a final date for achieving compliance with the filtration, turbidity, and disinfection requirements of 23 November 2017. TSO R5-2017-0092 extended this date to 30 November 2019. This Order extends the final date for achieving compliance with the filtration, turbidity, and disinfection requirements to 30 November 2020.*

- 27. Finding 31 from the previous Order is amended to be Finding 32.
- 28. Finding 32 from the previous Order is amended to be Finding 33.
- 29. Finding 33 from the previous Order is amended to be Finding 34.
- 30. Finding 34 from the previous Order is amended to be Finding 35.
- 31. Finding 35 from the previous Order is amended to be Finding 36 and now reads as follows:

*On 26 November 2019, 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 waste discharge requirements.*

- 32. Order condition 2 from the previous Order is amended and now reads as follows:

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*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 ammonia and total coliform contained in WDR Order R5-2012-0083, as described in the above findings:*



**Table 2 - Compliance Schedule**

Task	Compliance Date
<b>Work Plan and Schedule.</b> The Discharger shall submit a work plan and schedule to achieve compliance with final effluent limitations for ammonia and total coliform as well as the filtration, turbidity, and disinfection requirements.	Completed
<b>Submit and implement a Pollution Prevention Plan (PPP).</b> The PPP shall be prepared for ammonia in accordance with Water Code section 13263.3, subdivision (d)(2). The PPP shall describe pollution prevention activities the Discharger will implement in the short-term and the long-term to reduce effluent concentrations for ammonia and total coliform.	Completed
<b>Semi-Annual Progress Reports<sup>1</sup></b> The Discharger shall submit semi-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, and recommendations for additional measures as necessary to achieve full compliance by the final compliance date.	1 February 2020 1 August 2020
<b>Submit Final Construction Documents.</b> The Discharger shall submit the final construction documents for the compliance project.	Completed
<b>Start Construction of Compliance Project.</b> The Discharger shall submit notice of start of construction of compliance project.	Completed
<b>Final Compliance.</b> Comply with final effluent limitations for ammonia and total coliform. Achieve compliance with filtration, turbidity, and disinfection requirements.	30 November 2020

*1Semi-annual progress reports are inclusive of any progress to comply with final effluent limitations from January 1 through June 30 for the first semi-annual report (due 1 August) and July 1 through December 31 for the second semi-annual report (due 1 February).*

33. Order condition 3 from the previous Order is amended and now reads as follows:

*The following interim effluent limitations shall be effective immediately. The interim effluent limitations for ammonia and total coliform shall be effective until 30 November 2020, or when the Discharger is able to come into compliance, whichever is sooner.*

**Table 3 - Interim Effluent Limitations for Ammonia**

Parameter	Units	Interim AMEL	Interim MDEL
Ammonia	mg/L	31.3	59.2

*When the wastewater receives dilution of less than 20:1, effluent total coliform organisms shall not exceed:*

- i. 23 MPN/100 mL, as a 7-day median, and*
- ii. 240 MPN/100 mL, no more than once in any 30-day period.*

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 [laws and regulations](#) ([http://www.waterboards.ca.gov/public\\_notices/petitions/water\\_quality](http://www.waterboards.ca.gov/public_notices/petitions/water_quality)) applicable to filing petitions may be found on the Water Board's website or will be provided upon request.

**This Order is effective upon the date of signature.**



**PATRICK PULUPA, Executive Officer**

11/26/2019

**Date**