## CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD CENTRAL VALLEY REGION

# TIME SCHEDULE ORDER R5-2013-0102 REQUIRING CALAVERAS COUNTY WATER DISTRICT AND SADDLE CREEK GOLF COURSE, L.P. COPPER COVE WASTEWATER RECLAMATION FACILITY CALAVERAS COUNTY

## TO COMPLY WITH REQUIREMENTS PRESCRIBED IN ORDER R5-2013-0072 (NPDES PERMIT CA0084620)

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

- On 31 May 2013, the Central Valley Water Board adopted Waste Discharge Requirements (WDR)
  Order R5-2013-0072, prescribing waste discharge requirements, for the Calaveras County Water
  District and Saddle Creek Golf Course, L.P. (Discharger) Copper Cove Wastewater Reclamation
  Facility (Facility), in Calaveras County.
- 2. WDR Order R5-2013-0072 section IV.A.1 includes, in part, the following final effluent limitations:
  - a. The Discharger shall maintain compliance with the following effluent limitations at Discharge Point No. 001, with compliance measured at Monitoring Location REC-001 as described in the Monitoring and Reporting Program:

Table 6. Effluent Limitations

	Units	Effluent Limitations					
Parameter		Average Monthly	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum	
Dichlorobromomethane	μg/L	0.56		1.6			
Ammonia Nitrogen, Total (as N)	mg/L	0.74		2.2			
	lbs/day	5.9		17			
Electrical Conductivity @ 25°C	μmhos/cm	900					
Nitrate Plus Nitrite (as N)	mg/L	10					

- 1 Mass-based effluent limitations are based on a flow of 0.95 MGD.
  - g. **Aluminum, Total Recoverable.** For a calendar year, the annual average effluent concentration shall not exceed 200 µg/L.
  - h. **Manganese, Total Recoverable.** For a calendar year, the annual average effluent concentration shall not exceed 50 µg/L.

3. The effluent limitations for ammonia, electrical conductivity (EC), chloroform, aluminum and manganese became applicable to the waste discharge on the effective date of Waste Discharge Requirements (WDR) Order R5-2006-0081 by the Central Valley Water Board (23 August 2006). Dichlorobromomethane became effective on 18 May 2010. The Discharger was unable to comply with the effluent limits for aluminum, ammonia, EC, chloroform, iron and manganese; therefore, the Central Valley Water Board adopted Time Schedule Order (TSO) R5-2006-0082. On 8 June 2012, the Central Valley Water Board adopted TSO R5-2012-0055, extending the compliance time schedules for EC, chloroform, aluminum and manganese to until 1 August 2016, and added a new compliance schedule for dichlorobromomethane.

### **Need for Time Schedule Extension and Legal Basis**

4. The Discharger installed a new disinfection system at the tertiary treatment system that began operation in 2008 for irrigation of the golf course. The secondary effluent is filtered and then undergoes ultraviolet light (UV) disinfection. On 12 March 2012, the Discharger requested that it be allowed to extend its time schedule to until 1 August 2016 to achieve compliance with the final effluent limitations for chloroform, dichlorobromomethane, electrical conductivity, aluminum and manganese. Order R5-2012-0055 extended the time schedule to allow for treatment plant modifications, test different polymers and construct stormwater mitigation. To comply with these final effluent limitations the Discharger commenced a full scale pilot test in September 2012. Previously, the Discharger stored chlorine disinfected secondary effluent in a storage pond (Pond 6), which is used for winter storage prior to tertiary treatment and reuse on the golf course. The addition of chlorine creates disinfection byproducts, such as chloroform and dichlorobromomethane, as well as, increases the EC. The pilot test eliminated the use of chlorine disinfection prior to storage in Pond 6. Instead, all wastewater is treated to tertiary levels and disinfected with UV disinfection prior to storage in Pond 6. This is expected to eliminate the formation of disinfection byproducts.

Although the new treatment configuration eliminates disinfection byproducts, the Discharger can no longer comply with ammonia final effluent limitations contained in Order R5-2013-0072. The new treatment configuration disturbed accumulated solids in a settling pond and decreased residence time in the treatment ponds that has resulted in reduced ammonia removal. In addition, the renewed WDR Order R5-2013-0072 includes a new effluent limitation for nitrate plus nitrite that the Discharger cannot meet due to incomplete denitrification. The Discharger needs additional time to modify treatment plant operations and construct additional aeration to meet the ammonia and nitrate plus nitrite final effluent limitations or eliminate discharge to the jurisdictional wetlands.

No extension was requested by the Discharger from the time allowed in previous TSO R5-2012-0055 (1 August 2016) for EC, dichlorobromomethane, aluminum and manganese. This Order maintains the same compliance schedule.

#### **Mandatory Minimum Penalties**

7. 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 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..."

- 8. 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 three years is necessary to determine what operation modifications are necessary to comply with EC, dichlorobromomethane, aluminum, manganese, ammonia and nitrate plus nitrite effluent limitations. Also, the Discharger is evaluating elimination of reclaimed effluent discharged to the jurisdictional wetlands on Saddle Creek Golf Course. If the discharge is eliminated, a NPDES permit would no longer be required. The final effluent limitations for EC, dichlorobromomethane, aluminum, manganese, ammonia and nitrate plus nitrite were new, more stringent, or modified regulatory requirements that became applicable to the waste discharge after the effective dates of WDR R5-2006-0081 and WDR R5-2013-0072. New or modified control measures are necessary in order to comply with the final effluent limitations for EC, dichlorobromomethane, aluminum, manganese, ammonia and nitrate plus nitrite. The new or modified control measures cannot be designed, installed, and put into operation within 30 calendar days.
  - c. 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.
- 9. The final effluent limitations for ammonia, chloroform, EC, aluminum, and manganese became applicable to the waste discharge on the effective date of WDR Order R5-2006-0081 (23 August 2006). The final effluent limitations for dichlorobromomethane became applicable to the waste discharge on 18 May 2010. The final effluent limitations for nitrate plus nitrite became applicable to the waste discharge on the effective date of WDR Order R5-2013-0072 (31 May 2013). TSO R5-2006-0082 provided protection from MMPs from 23 August 2006 to 1 August 2011 for violations of effluent limitations for ammonia, aluminum and manganese, and from 23 August 2006 to 1 June 2009 for violations of effluent limitations for EC. TSO R5-2012-0055 extended the protection from MMPs for EC, chloroform, aluminum and manganese until 1 August 2016. TSO R5-2012-0055 also provided protection from MMPs for dichlorobromomethane until 1 August 2016.
- 10. Previous Cease and Desist Orders or Time Schedule Orders have not provided the Discharger with protection from MMPs for violations of the final effluent limitations for nitrate plus nitrite. Ammonia was included in TSO R5-2007-0082 which protected the District from MMPs from 23 August 2006 to 1 June 2011.
- 11. Per the requirements of CWC Section 13385(j)(3)(C)(i), an individual 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).
- 12. Compliance with this Order exempts the Discharger from MMPs for violations of the final effluent limitations for EC, dichlorobromomethane, aluminum, manganese, ammonia and nitrate plus nitrite from the date of this Order until **1 August 2016**.

- 13. Per the requirements of CWC Section 13385(j)(3)(C)(ii)(I) for the purpose of treatment facility upgrade, the time schedule shall not exceed 10 years. 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 beyond the initial five years, if the Discharger demonstrates that the additional time is necessary to comply with the effluent limitation. In accordance with CWC Section 13385(j)(3)(C)(ii)(I) the total length of the compliance schedules is less than ten years. 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 ammonia, EC, dichlorobromomethane, aluminum and manganese and nitrate plus nitrite contained in WDR R5- 2013-0072. The Central Valley Water Board also finds that because of the Discharger's construction schedule, additional time is necessary to comply with the final effluent limitations.
- 14. This Order provides a time schedule for completing the actions necessary to ensure compliance with the final effluent limitations for ammonia, EC, dichlorobromomethane, aluminum, manganese and nitrate plus nitrite contained in WDR Order R5-2013-0072. 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.
- 16. This Order includes new, performance-based interim effluent limitations for ammonia and nitrate plus nitrite and continues performance-based interim effluent limitations for EC, dichlorobromomethane, aluminum, and manganese.
  - a. For EC, dichlorobromomethane, aluminum, and manganese the interim maximum daily and average monthly effluent limitations remain the same as described in TSO R5-2012-0055.
  - b. For ammonia and nitrate plus nitrite, this Order establishes an interim effluent limitations based on the current treatment plant performance. Interim average monthly effluent limitations (AMEL) for ammonia and nitrate plus nitrite are based on normally distributed data where 99.9 of the data points lie within 3.3 standard deviations of the mean. For ammonia, since WDR Order R5-2013-0072 includes both AMELs and maximum daily effluent limitations (MDELs), this Order includes an interim AMEL and MDEL. The MDEL has been established the same as the AMELs, due to insufficient data to statistically calculate a separate MDEL. The following table shows the values used in the calculations and the resulting interim effluent limitations for ammonia and nitrate plus nitrite:

Interim Limits for Ammonia and Nitrate plus Nitrite

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Parameter	Units	Mean Effluent Standard Concentration Deviation		Interim AMEL	Maximum Effluent Concentration	Interim MDEL		
Ammonia, Total (as N)	mg/L	16	0.5	21	19	21		
Nitrate plus Nitrite (as N)	mg/L	13	9	52	22			

- 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. California 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."
- 20. 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.
- 21. The Discharger owns and operates the treatment system that is subject to this Order. The technical and monitoring reports required by this Order are necessary to determine compliance with the requirements in WDR Order R5-2013-0072 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") 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.).
- 23. On 26 July 2013, 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 Water Code section 13301 to establish a time schedule to achieve compliance with waste discharge requirements.

**IT IS HEREBY ORDERED THAT** Time Schedule Order R5-2012-0055 is rescinded, except for enforcement purposes, and, pursuant to California Water Code Sections 13300 and 13267:

1. The Discharger shall comply with the following time schedule to submit reports and ensure completion of the compliance project described in Finding 4, above:

**Compliance Schedules** 

Task	Compliance Date
Workplan and Schedule. Submit workplan for facility upgrades for reduction of ammonia and nitrate plus nitrite that includes compliance options investigations analysis, funding sources and schedule.	7 August 2013
Compliance Alternative Investigation and Selection of Preferred Compliance Alternative for ammonia and nitrate. Submit a report that includes: 1) a compliance options investigations analysis and 2) a rationale for selection of preferred compliance option(s), and 3) discussion of funding sources. The report shall also describe the selected preferred compliance alternative(s) and schedule for implementing the alternative(s).	7 February 2014
Storm Water Runoff Measures. Submit a report that includes a schedule and a description of the process and steps on how the Discharger will proceed with the construction of stormwater runoff measures and/or other measures to reduce manganese.	6 June 2014
Nitrogen Removal. Submit a report that includes a schedule and a description of the process and steps on how the Discharger will proceed with the implementation of the of compliance alternative for reduction of ammonia and nitrate plus nitrite.	7 August 2014
Comply with Final Effluent Limitations for EC, dichlorobromomethane, aluminum, manganese, ammonia and nitrate plus nitrite. Submit a report demonstration compliance with the final limits.	31 July 2016
Submit Progress Reports <sup>1</sup>	31 July 2014, 31 July 2015

The progress reports 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 EC, dichlorobromomethane, aluminum, manganese, ammonia and nitrate plus nitrite shall be effective upon adoption of this Order. The Discharger shall maintain compliance with the following interim effluent limitations through 31 July 2016, or when the Discharger is able to come into compliance with the final effluent limitations shown in Finding 2, whichever is sooner.

## Interim Effluent Limitations – Discharge to SCGC Receiving Pond NC-2D (For UV Disinfected Effluent)

Constituent	Units	Interim Effluent Limit	
		Average Monthly	Maximum Daily
Electrical Conductivity	µmhos/cm	1200	-
Dichlorobromomethane	μg/L	13	13
Aluminum	μg/L	1182	1182
Manganese, Total Recoverable	μg/L	1337	
Ammonia, Total (as N)	mg/L	21	21
Nitrate plus Nitrite, (as N)	mg/L	52	52

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 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, 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 **26 July 2013**.

Original Signed By
PAMELA C. CREEDON, Executive Officer