

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
CENTRAL VALLEY REGION

CEASE AND DESIST ORDER R5-2014-0146  
REQUIRING  
MALAGA COUNTY WATER DISTRICT  
WASTEWATER TREATMENT FACILITY  
FRESNO COUNTY

TO COMPLY WITH REQUIREMENTS PRESCRIBED IN  
WASTE DISCHARGE REQUIREMENTS ORDER R5-2014-0145 (NPDES PERMIT NO. CA0084239)

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

1. The Malaga County Water District (Discharger) owns and operates a Wastewater Treatment Facility (Facility) in the unincorporated community of Malaga, Fresno County.
2. The Facility provides sewerage service to approximately 1,300 residents and various industrial users. The Facility consists of a 1.2 million gallons per day (mgd) activated sludge secondary treatment system with dissolved air flotation/primary clarification, aeration basins, and three secondary sedimentation basins. Secondary-treated wastewater is discharged to eight evaporation/percolation ponds (Discharge Point 002). Wastewater can also be tertiary-treated in a 'fuzzy' filter and disinfected with ultraviolet light. Disinfected, tertiary-treated wastewater is discharged to Central Canal, up to 0.45 mgd (Discharge Point 001).
3. On 4 December 2014, the Central Valley Water Board adopted Waste Discharge Requirements (WDRs) Order R5-2014-0145 (NPDES Permit No. CA0084239). WDR Order R5-2014-0145 section IV.A.1. includes, in part, the following effluent limitation for flow at Discharge Point 002:

1. **Average Monthly Flow.** The average monthly discharge flow shall not exceed the following:

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- b. 0.49 mgd at Discharge Point 002, unless the Executive Officer approves a higher flow, up to 0.85 mgd, as allowed by Provision VI.C.2.b. Compliance shall be determined at monitoring location EFF-002.
4. WDRs Order R5-2014-0145, section IV.B.1.a includes, in part, the following effluent limitations at Discharge Point 001:
    - a. The Discharger shall maintain compliance with the effluent limitations specified in Table 4:

**Table 4. Final Effluent Limitations**

Parameter	Units	Effluent Limitations				
		Average Monthly	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
Copper, Total Recoverable	µg/L	6.5	--	12	--	--
Cyanide, Total (as CN)	µg/L	4.2	--	8.7	--	--
Nitrate plus Nitrite (as N)	mg/L	10.	--	--	--	--

5. By letter dated 25 June 2014, Fresno Irrigation District informed the Central Valley Water Board that it would agree to continue allowing discharge from the Facility to Central Canal year-round for the next 3-5 years, after which it would be open to accepting the discharge during irrigation season. The letter identified the irrigation season as typically lasting six months, between April through September, but also indicated the irrigation season could vary from two months to nine

months. Thus, WDRs Order R5-2014-0145, Provision VI.C.6.b requires the discharge to Central Canal to cease during months when there are no irrigation water deliveries beginning on 31 January 2020.

6. WDRs Order R5-2014-0145, Provision VI.C.4.d.v states:

- v. Ponds shall have sufficient capacity to accommodate allowable wastewater flow and design seasonal precipitation and ancillary inflow and infiltration during the non-irrigation season (i.e., during periods when there are no irrigation water deliveries). Design seasonal precipitation shall be based on total annual precipitation using a return period of 100 years, distributed monthly in accordance with historical rainfall patterns. The Discharger shall operate and maintain all ponds sufficiently to protect the integrity of containment dams and berms and prevent overtopping and/or structural failure. Unless a California-registered civil engineer certifies (based on design, construction, and conditions of operation and maintenance) that less freeboard is adequate, the operating freeboard in any pond shall never be less than two feet (measured vertically from the lowest possible points of overflow).

7. WDRs Order R5-2014-0145, Provision VI.C.4.d.vi states:

- vi. Prior to the onset of the rainy season each year, available pond storage capacity shall at least equal the volume necessary to comply with the Disposal Ponds Operating Requirement at Section VI.C.4.d.v, above.

8. WDRs Order R5-2014-0145, Provision VI.A.2.g states:

- g. The Discharger shall ensure compliance with any existing or future pretreatment standard promulgated by U.S. EPA under section 307 of the [Clean Water Act], or amendment thereto, for any discharge to the municipal system.

9. WDRs Order R5-2014-0145, Provision VI.C.5.a states, in part:

**a. Pretreatment Requirements**

- i. The Discharger shall be responsible and liable for the performance of all Control Authority pretreatment requirements contained in 40 CFR Part 403, including any subsequent regulatory revisions to 40 CFR Part 403...

10. WDRs Order R5-2014-0145, Section V.B. includes Groundwater Limitations, as follows:

**B. Groundwater Limitations**

- 1. Release of waste constituents associated with the Facility or discharge shall not cause or contribute to groundwater containing constituent concentrations in excess of the concentrations specified below or natural background quality for the specified constituents, whichever is greater:
  - a. Nitrate (as N) of 10 mg/L.
  - b. For constituents identified in Title 22 of the California Code of Regulations, the MCLs quantified therein.

**Need for Time Schedule for Effluent Limitations**

11. On 27 August 2014, the Discharger submitted a request and justification for time schedules for the new copper, cyanide, and nitrate plus nitrite (as N) effluent limitations. The Discharger proposes to make modifications to its existing aeration basins to enable denitrification to meet

the new effluent limitation for nitrate plus nitrite (as N). The Discharger also proposes to conduct an evaluation of the sources and concentrations of copper and cyanide into the Facility and determine the removal efficiency of these parameters. Additional monitoring will be conducted as part of the study, and the Discharger proposes to submit a report with recommendations after the additional monitoring and source and concentration evaluation have been conducted. Additionally, as part of its pretreatment program, the Discharger is required to evaluate and update its local limits, as necessary, which may assist with source control.

### **Mandatory Minimum Penalties**

12. California Water Code (Water Code) sections 13385(h) and (i) require the Central Valley Water Board to impose mandatory minimum penalties (MMPs) upon dischargers that violate certain effluent limitations. Water Code section 13385(j)(3) exempts the discharge from 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...*”
13. Per the requirements of Water Code 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 Water Code sections 13385(h) and (i).
  - b. The Discharger has requested additional time to complete Facility modifications and conduct studies to comply with the final effluent limitations for copper, cyanide, and nitrate plus nitrite (as N). The Discharger proposes to complete modifications to its existing aeration basins to allow for denitrification of the wastewater to meet the nitrate plus nitrite (as N) effluent limitation. The Discharger proposes to conduct a study to determine sources and concentrations of copper and cyanide into the Facility, determine the removal efficiency at the Facility, and prepare a report with recommendations to address copper and cyanide. Additionally, the Discharger is required to conduct a local limits evaluation as part of its pretreatment program, which may assist in source control for copper and cyanide.
  - c. The final effluent limitations for copper, cyanide, and nitrate plus nitrite (as N) are new, more stringent, or modified regulatory requirements that became applicable to the waste discharge after the effective date of WDRs Order R5-2014-0145 and after 1 July 2000. New or modified control measures are necessary in order to comply with the final effluent limitations for copper, cyanide, and nitrate plus nitrite (as N). The new or modified control measures cannot be designed, installed, and put into operation within 30 calendar days.
  - d. 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.
14. Compliance with this Order exempts the Discharger from MMPs for violations of the final effluent limitations for copper and cyanide found in WDRs Order R5-2014-0145 from 1 February 2015 until 31 January 2020 and the final effluent limitation for nitrate plus nitrite (as N) found in WDRs Order R5-2014-0145 from 1 February 2015 until 31 July 2016. The

Discharger has not previously been exempt from MMPs for violations of the copper, cyanide, and nitrate plus nitrite (as N) effluent limitations.

15. In accordance with Water Code section 13385(j)(3)(C), the time schedule established by the Central Valley Water Board for bringing the waste discharge into compliance with final effluent limitations for copper, cyanide, and nitrate plus nitrite (as N) does not exceed five years.
16. This Order provides a time schedule for completing the actions necessary to ensure compliance with the final effluent limitations for copper, cyanide, and nitrate plus nitrite (as N) contained in WDRs Order R5-2014-0145. 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.
17. This Order includes performance-based interim effluent limitations for copper, cyanide, and nitrate plus nitrite (as N). The interim effluent 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 effluent data submitted by the Discharger. The interim effluent limitations were developed using the statistical based approach provided in U.S. EPA's *Technical Support Document for Water Quality-Based Toxics Control* (TSD). The TSD provides guidance on estimating the projected maximum effluent concentration using a lognormal distribution of the observed effluent concentrations at a desired confidence level, as detailed in Section 3.3 of the TSD. The multipliers in Table 3-1 of the TSD were used to calculate the 99th percent confidence level and 99th percentile of the data set based on the number of effluent samples and the coefficient of variation. The multipliers from the table were multiplied by the highest observed effluent concentration (MEC) to estimate the maximum expected effluent concentration; this value was used as the interim effluent limitation for the average monthly effluent limitations (AMELs). The interim performance-based maximum daily effluent limitations (MDELs) were established in accordance with section 1.4 and Table 2 of the *Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California* (SIP), by multiplying the interim AMEL by the MDEL/AMEL multiplier.

Effluent data from January 2010 through December 2013 were used to calculate the interim effluent limitations in the table below. 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 <sup>1</sup>	Interim MDEL <sup>2</sup>
Copper, Total Recoverable	µg/L	41	36	21	10	0.50	70	130
Cyanide, Total (as CN)	µg/L	6.6	27	2.8	1.8	0.64	14	30
Nitrate plus Nitrite (as N)	mg/L	20	26	14	2.8	0.20	26	--

<sup>1</sup> Projected 99<sup>th</sup> percentile effluent concentration value for an assumed lognormal distribution at a 99 percent confidence upper bound. Calculated per Section 3.3.2 of the TSD.

<sup>2</sup> Interim MDEL calculated using MDEL/AMEL multiplier from Section 1.4 of the SIP.

18. 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.

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

## **Enforcement History**

### *Disposal Capacity*

20. The Discharger was previously regulated by WDRs Order 99-100, Cease and Desist (CDO) 5-01-001, WDRs Order R5-2008-0033, and CDO R5-2008-0032. WDRs Order 99-100 was the first NPDES permit issued to the Discharger, and included findings that the Discharger proposed to construct a tertiary filter and chlorine disinfection treatment units. The tertiary treatment and disinfection units were constructed to address the Discharger's insufficient disposal capacity and functioned to supplement the disposal ponds by discharging the tertiary, disinfected wastewater to Central Canal. Between adoption of WDRs Order 99-100 and CDO 5-01-001, the Discharger proposed emergency discharges to Central Canal to alleviate the freeboard in the ponds. The Discharger had constructed a temporary chlorination system and discharge pipeline, but not the tertiary filter. Additionally, CDO 5-01-001 included findings that the Discharger had constructed a one-foot deep temporary pond for additional percolation capacity. The Discharger did not inform the Central Valley Water Board about its temporary pond prior to initiating the discharge, nor did it inform the Central Valley Water Board when treated wastewater from the emergency pond spilled onto adjacent property. CDO 5-01-001 included a schedule requiring the Discharger to construct the tertiary filter and disinfection units prior to commencing discharge to Central Canal.
21. WDRs Order R5-2008-0033 and CDO R5-2008-0032 rescinded WDRs Order 99-100 and CDO 5-01-001, respectively. WDRs Order R5-2008-0033 included an effluent flow limitation to the disposal ponds (Discharge Point 002) of 0.85 mgd, which is less than the design capacity of the secondary treatment system (1.2 mgd). CDO R5-2008-0032 required the Discharger to address disposal capacity issues, and indicated the disposal capacity of the ponds was likely less than 0.85 mgd, and was more likely around 0.42 mgd, based on a water balance provided by the Discharger in 2006.
22. CDO R5-2008-0032 required the Discharger to: "*Evaluate [Facility] treatment and disposal capacity and identify short-term and long-term measures to secure adequate treatment and disposal capacity for the volume, type, and concentrations of wastes in influent projected through at least 2028.*" The CDO further specified that: "*Study results shall include evaluations of, but not limited to, short-term measures necessary to comply with Order No. R5-2008-0033, implementation of appropriate ongoing operations and maintenance, and long-term measures to meet [Facility] treatment and disposal needs through at least 2028.*"
23. On 28 July 2008, the Discharger submitted the *Treatment and Disposal Capacity Study* (Study) to fulfill requirement No. 3 of CDO R5-2008-0032 (p. 6). Central Valley Water Board staff provided a review of the Study on 24 September 2009 and requested that the Discharger submit

a revised Study to address several deficiencies and provide additional information. The Discharger did not submit a revised Study, as requested, but submitted the *Short Term Improvements Implementation Report* (Report) on 29 April 2011, which summarized short-term improvements completed as part of the Study. The Report included a list of improvements made to treatment components that had been out of service for many years. The Report also included a list of items the Discharger completed to address disposal capacity issues. This included maintenance of three disposal ponds to increase percolation rates, adoption of a moratorium on new or expanding sewer connections until disposal capacity is expanded, and initiation of discussions with City of Fresno regarding consolidation of sewer treatment and disposal. The District also indicated that it contacted property owners and companies to determine if they were willing to sell or lease their property or accept treated effluent for recycling/reclamation, but none were reportedly willing to do so. The Report did not include updated information regarding the disposal capacity of the ponds.

24. On 19 August 2013, Central Valley Water Board staff sent a letter to the Discharger requesting additional information regarding disposal capacity issues as part of the NPDES permit renewal process. In part, the letter requested the Discharger provide status updates regarding maintenance work performed on the disposal ponds and how, if at all, the maintenance work affected disposal capacity. The letter also requested information regarding the status of land acquisition for additional disposal ponds, and the status of alternative disposal measures the Discharger had looked into. The letter requested a response by 3 October 2013.
25. On 10 October 2013, Central Valley Water Board staff contacted the Discharger's Board president, Mr. Charles Garabedian, via telephone because the Discharger had not submitted a response to the letter in Finding No. 24, nor had it communicated to the Central Valley Water Board about the letter or its response. Mr. Garabedian indicated he was in possession of a memorandum from the Discharger's consulting engineer that addressed four of the five items in the August 2013 letter. Mr. Garabedian offered to send Central Valley Water Board staff the memorandum while the Discharger worked on its response. However, Mr. Garabedian indicated the memorandum was not the Discharger's official response to the August 2013 letter. On 10 October 2013, Central Valley Water Board staff received the memorandum. Central Valley Water Board staff reviewed the memorandum, which was essentially a memorandum from the consulting engineer to the Discharger requesting additional information from the Discharger to allow the consulting engineer to prepare a response to the August 2013 letter.
26. On 24 October 2013, Central Valley Water Board staff communicated with the general manager, Mr. Russ Holcomb, to again inquire on the status of the Discharger's response. At that time, Mr. Holcomb indicated the response would be sent in soon, but did not give a specific date. The Discharger provided a response on 29 October 2013. The response included updated disposal capacity estimates and vague information regarding the status of alternative disposal measures the Discharger had looked into. The Discharger also noted it had recently purchased approximately four acres of land near the Facility, but did not include detailed information about developing the land, such as a schedule or a description of the work that needs to be completed. The Discharger indicated it would provide information about which ponds had received maintenance work at a later date, and also indicated it was planning to isolate one or more ponds to determine percolation rates and would also provide that information at a later date. This information was not provided until 27 October 2014 (see Finding No. 27). Additionally, the response did not include a discussion on how the Discharger estimated higher percolation rates for the revised disposal capacity than what it had previously used, considering the Discharger had not, to the best of Central Valley Water Board staff's knowledge, performed a study to determine new percolation rates for the ponds since 2007.

27. On 27 October 2014, the public comment due date for adoption of this Order, the Discharger provided an internal memorandum from its consulting engineer addressed to the Discharger. The memorandum included information regarding the disposal capacity of the ponds, and also included recommendations for the Discharger. The memorandum was resubmitted on 3 November 2014 with the signature and stamp of the engineer in responsible charge. On 19 November 2014, the Discharger submitted a proposed disposal pond maintenance plan. As of the adoption date of this Order, Central Valley Water Board staff had not had sufficient time to thoroughly review the Discharger's 27 October 2014 and 19 November 2014 technical submittals. However, if review of the technical information provided supports a higher effluent flow limitation to the disposal ponds, WDRs Order R5-2014-0145 allows the Executive Officer to approve a higher effluent flow limitation.

#### *Pretreatment*

28. On 18 February 2010, staff from a U.S. EPA contractor conducted a pretreatment compliance inspection of the Discharger's pretreatment program. The Discharger was informed of the pretreatment program deficiencies during the inspection exit interview and received the checklist identifying the deficiencies on that same date. It is clear the Discharger was aware of the pretreatment program deficiencies in 2010 given the discussions during the exit interview and the deficiency checklist even though the final report was not transmitted until 6 September 2013 with the Central Valley Water Board's Notice of Violation. Furthermore, the Discharger's attempts to correct several of the deficiencies in 2010 also demonstrates its awareness of the pretreatment program deficiencies. The inspection report included a list of 17 items the Discharger was required to address, and three items Central Valley Water Board staff recommended to enhance the pretreatment program.

29. On 6 and 7 January 2014, staff from the Central Valley Water Board, U.S. EPA – Region IX, and a U.S. EPA contractor conducted a pretreatment compliance inspection and audit of the Discharger's pretreatment program. The Discharger was found to be in violation of several pretreatment requirements and was sent a Notice of Violation on 14 February 2014 that provided a list of 24 items it must address to comply with the pretreatment requirements, and a list of 12 items Central Valley Water Board staff recommended to enhance the pretreatment program.

30. On 2 April 2014 and 1 May 2014, the Discharger provided responses to the 14 February 2014 Notice of Violation. The Discharger indicated it revised several documents that were deemed unsatisfactory in the 14 February 2014 Notice of Violation that transmitted the pretreatment compliance inspection/audit report, and included copies of some of the documents. The response indicated the Discharger would work on developing local limits and was working on conducting evaluations for slug discharges, among other things.

#### *Groundwater Monitoring*

31. WDRs Order R5-2008-0033 required the Discharger to evaluate its current groundwater monitoring well network to determine the adequacy of the network in detecting any impacts from every treatment, storage, and disposal unit that does or may release waste constituents to groundwater, and for determining compliance with Groundwater Limitations. The Discharger was required to evaluate each groundwater monitoring well, and was also required to provide recommendations for necessary modifications to the network where deficiencies were documented.

32. The Discharger submitted the *Evaluation of Groundwater Monitoring System* on 15 July 2008. The Discharger's evaluation concluded that the current groundwater monitoring network was providing consistent and reliable data for monitoring the effects of effluent disposal in the immediate vicinity of the Facility. The Discharger did suggest that an additional downgradient well would be desirable and reported that it had been unable to locate an existing groundwater monitoring well further downgradient that would be close enough to the Facility to be relevant.
33. On 23 September 2008, Central Valley Water Board staff provided the Discharger with a review of the *Evaluation*, which Board staff deemed deficient. The review indicated that Central Valley Water Board staff disagreed with the Discharger on the direction of groundwater flow based on the groundwater elevation map included with the report, and requested the Discharger provide groundwater elevation contour maps and a table depicting groundwater flow direction and gradient using the existing monitoring well data. The Discharger was also required to evaluate the adequacy of the upgradient well as a background well based on actual groundwater flow direction and gradient, and background water quality data from monitoring wells at other nearby sites. The review also requested the Discharger provide documentation of its efforts to find a suitable location for an additional downgradient monitoring well and a work plan to implement any changes to the monitoring network if the evaluation determines such changes are necessary.
34. The Discharger submitted a second evaluation on 3 November 2008. As requested, the Discharger provided a groundwater elevation contour map and table depicting groundwater flow direction and gradient, based on wells owned by the Discharger, to support its claim that groundwater flows in a northwest direction. The Discharger's evaluation of the upgradient well consisted of stating that the well was adequate "due to the general groundwater direction" and that the well provides representative groundwater information upgradient of the Facility. In addition, the Discharger indicated that to its knowledge, there are no other representative groundwater monitoring wells in the vicinity. The Discharger also noted that its original evaluation did not indicate an additional downgradient well was necessary, only that it may be beneficial. As such, in the Discharger's opinion, there were insufficient grounds for Central Valley Water Board staff to require that a new downgradient groundwater monitoring well be installed immediately.
35. Central Valley Water Board staff provided a second review of both submittals on 24 September 2009, which indicated the evaluation was still deficient and provided the Discharger with more direction to resolve the deficiencies. The review letter indicated Central Valley Water Board staff looked at groundwater information from a site northwest of the Facility and from two nearby sites with groundwater monitoring networks, the latter accessed through the State Water Resources Control Board's GeoTracker website, all of which indicate that groundwater flow direction is to the west and southwest. Additionally, the review letter noted Central Valley Water Board staff believed that mounding associated with percolation beneath the ponds precluded the use of the depth to groundwater measurement in the downgradient wells to establish the direction of local groundwater flow and gradient. The review also noted that the location and operation of the Central Canal also needed to be included in the evaluation of the groundwater monitoring network. The Discharger was directed again to re-evaluate the groundwater gradient and direction of flow. The review letter indicated that Central Valley Water Board staff disagreed with the Discharger's assessment that the upgradient well was adequate as a background well. The review letter noted that the upgradient well is degraded and/or polluted by nitrates and, consequently, does not represent "background" within the meaning of State Water Resources Control Board's Resolution 68-16. The Discharger was directed to, at minimum, examine monitoring data from other sites in the vicinity that conduct groundwater



monitoring to determine if the chemical quality of the upgradient well is representative of other wells in the area and is providing accurate background quality information.

36. On 23 October 2009, the Discharger provided a third iteration of its groundwater monitoring network evaluation. The Discharger indicates that there is no information substantiating Central Valley Water Board staff's claim that the upgradient well is not suitable. Additionally, the Discharger indicated there were no wells in the vicinity of the upgradient well that are representative of first-encountered groundwater. The Discharger also noted that the groundwater monitoring well network was approved by the Central Valley Water Board in 2001. The Discharger continued to argue that the existing groundwater monitoring network is adequate, and that the groundwater flow direction is to the northwest and not west or southwest as the Central Valley Water Board claims.
37. Central Valley Water Board staff provided a third review of all the submittals on 14 December 2012, which indicated the evaluation was still deficient. The review requested either a proposal to use additional data from existing wells in support of an evaluation of background conditions, or a work plan for an additional background well. The review also requested the Discharger submit a work plan for an additional downgradient well. On 15 February 2013, the Discharger's attorney responded to Central Valley Water Board staff's third review with a letter in which the attorney accused Central Valley Water Board staff of numerous things including harassing the Discharger. In the letter, the attorney indicated that nowhere in the evaluation did the Discharger ever mention installation of additional upgradient or downgradient wells, and questioned whether the Central Valley Water Board has the authority to require the Discharger to install any of these wells. The letter did say the Discharger had installed an additional downgradient monitoring well but indicated the well was not yet operational because testing had not occurred. However, no other information was included, such as the location of the well, but the Discharger's attorney alluded to the Central Valley Water Board likely disagreeing with the location. Central Valley Water Board staff did not respond to the attorney's letter because the letter did not raise substantial new issues and the issues raised had already been discussed and addressed in previous correspondence from the Central Valley Water Board to the Discharger.
38. In its 2013 Annual Report, the Discharger noted that three of the four groundwater monitoring wells were dry during the fourth quarter, and later confirmed via telephone that all four wells were dry.

### **Regulatory Considerations**

39. The Discharger addressed two requirements in CDO R5-2008-0032 but has not adequately addressed the disposal capacity issues. However, CDO R5-2008-0032 is no longer adequate and is being replaced by this Order.
40. Based on Findings No. 3, 5-7, and 20-26, a discharge of waste is threatening to take place in violation of WDRs Order R5-2014-0145. The disposal ponds (Discharge Point 002) have a disposal capacity of 0.49 mgd, based on the available information submitted under the responsible charge of a professional engineer, and the Discharger will be restricted from discharging to Central Canal during months when there are no irrigation water deliveries. The irrigation water delivery period can vary each year from approximately two months to nine months and is generally about six months. During wet years, the disposal ponds do not have enough capacity to accommodate current flows, which averaged 0.65 mgd between 2010-2013.

41. Based on Finding No. 8, 9, and 28-30, the Discharger is in violation of WDRs Order R5-2014-0145. The Discharger has failed to properly implement its pretreatment program and comply with the requirements in 40 CFR Part 403.
42. Based on Findings No. 31-38, the Central Valley Water Board cannot make a determination whether the disposal ponds are conditionally exempt from Title 27, California Code of Regulations, due to the lack of adequate groundwater data. This Order requires the Discharger to submit a work plan and time schedule for installation of new groundwater monitoring wells, that will enable Central Valley Water Board staff to determine compliance with Groundwater Limitations V.B. in WDRs Order R5-2014-0145 (see Finding No. 10), and to allow the Central Valley Water Board to determine if the disposal ponds meet the exemptions in Title 27, California Code of Regulations, Section 20090(b).
43. Water Code section 13301 states: *“When a regional board finds that a discharge of waste is taking place, or threatening to take place, in violation of requirements or discharge prohibitions prescribed by the regional board or the state board, the board may issue an order to cease and desist and direct that those persons not complying with the requirements or discharge prohibitions (a) comply forthwith, (b) comply in accordance with a time schedule set by the board, or (c) in the event of a threatened violation, take appropriate remedial or preventive action. In the event of an existing or threatened violation of waste discharge requirements in the operation of a community sewer system, cease and desist orders may restrict or prohibit the volume, type, or concentration of waste that might be added to that system by dischargers who did not discharge into the system prior to the issuance of the cease and desist order. Cease and desist orders may be issued directly by a board, after notice and hearing.”*
44. 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.”*
45. The Discharger owns and operates the wastewater treatment facility that is subject to this Order. The technical and monitoring reports required by this Order are necessary to determine compliance with the WDRs and with this Order, and to ensure the Discharger secures adequate disposal capacity for the long term.
46. 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.).
47. On 4 December 2014, 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 Cease and Desist Order under Water Code section 13301 to establish a time schedule to achieve compliance with waste discharge requirements.

**IT IS HEREBY ORDERED THAT** Cease and Desist Order R5-2008-0032 is rescinded upon the adoption date of this Order, except for enforcement purposes, and, pursuant to California Water Code sections 13301 and 13267, Malaga County Water District, its agents, successors, and assigns, shall:

1. Cease and desist discharging wastes in violation and threatened violation of WDRs Order R5-2014-0145.
2. Resolve the disposal capacity issues at the Facility, according to the following:

Task	Description	Compliance Date
2a	Submit a technical report that includes: <ul style="list-style-type: none"> <li>• Detailed information with supporting evidence<sup>1</sup>, if available, of all measures the Discharger has taken since at least March 2008 to address disposal capacity issues. This shall include any and all alternative disposal measures the Discharger has looked into and/or evaluated.</li> </ul>	1 February 2017
2b	To address future disposal capacity, the Discharger shall submit a technical report that: <ul style="list-style-type: none"> <li>• Describes, in detail, what the Discharger proposes to do to increase its disposal capacity and maintain the increased disposal capacity. The Discharger shall evaluate alternative disposal measures, including but not limited to, recycling/reuse and regionalization. If the Discharger determines other alternative measures are infeasible, it shall include an infeasibility analysis that demonstrates why the disposal alternatives are infeasible.</li> <li>• Includes a complete analysis of the disposal capacity of the onsite ponds. The analysis shall be accompanied by supporting documentation, such as a description with calculations on how percolation rates were determined. The discussion shall also include the long-term percolation rate(s) and how the Discharger intends to maintain those long-term percolation rates.</li> <li>• Include an implementation schedule for implementing the above actions.</li> </ul> The technical report is subject to Executive Officer approval.	1 February 2017
2c	Implement the items described in task 2b, above	Within 180 days following Executive Officer approval of task 2b

<sup>1</sup> Supporting evidence may include correspondence such as letters and/or emails, and meeting notes, among other things.

3. Comply with the following schedule to ensure the pretreatment program is properly implemented and complies with requirements in Title 40, Code of Federal Regulations, Part 403, as appropriate:

Task	Description	Compliance Date
3a	Submit certification that the Discharger has adequately evaluated all nondomestic users for the need to develop a slug discharge control plan,	1 February 2016

Task	Description	Compliance Date
	and how the Discharger will ensure, or has ensured, that the plans are developed where applicable. [Title 40, Code of Federal Regulations, 403.8(f)(2)(vi)]	
3b	Submit a local limits evaluation for revising and/or developing local limits as necessary. [Title 40, Code of Federal Regulations, 403.5(c)]	1 August 2016

4. Comply with the following schedule to ensure sufficient and adequate data are available for determining compliance with Groundwater Limitations V.B in WDRs Order R5-2014-0145, and for determining if the disposal ponds meet the exemptions from Title 27, California Code of Regulation (CCR) in section 20090(b). Adequate groundwater data include data that are representative of regional groundwater conditions unaffected by the Facility (i.e., background data), and data representative of first-encountered groundwater downgradient of the Facility at locations where any impacts to groundwater from waste, storage, and/or treatment units at the Facility can be detected.

Task	Description	Compliance Date
4a	Submit a technical report for a proposed groundwater monitoring well network that includes a monitoring well installation work plan and implementation schedule: <ul style="list-style-type: none"> <li>The groundwater monitoring well network shall include one or more background monitoring wells representative of regional groundwater conditions, and a sufficient number of designated monitoring wells to evaluate the extent to which, if any, the Facility has degraded or threatens to degrade groundwater. The groundwater monitoring well installation work plan shall satisfy Section 1 in Attachment A of this Order.</li> </ul>	1 February 2016
4b	Implement monitoring well installation and destruction work plan and commence groundwater monitoring in accordance with the Monitoring and Reporting Program (MRP). <ul style="list-style-type: none"> <li>The Discharger shall install approved monitoring wells and commence groundwater monitoring in accordance with Attachment E – MRP in WDRs Order R5-2014-0145.</li> </ul>	180 days following written approval of task 4a. by Executive Officer
4c	Submit a technical report that satisfies Section 2 in Attachment A of this Order. If the work plan proposed destruction of groundwater monitoring wells, the completion report shall include well destruction details.	90 days following completion of task 4b.
4d	Report on monthly and quarterly sampling	In accordance with the MRP
4e	Submit a technical report that discusses natural background quality: <ul style="list-style-type: none"> <li>After one year of monitoring, the Discharger shall characterize natural background quality of monitored parameters.</li> </ul>	120 days following completion of 1 <sup>st</sup> year of sampling

Task	Description	Compliance Date
4f	<p>Submit a technical report that describes the method of compliance for ensuring the disposal ponds comply with land disposal regulations in Title 27, CCR.<sup>1</sup></p> <ul style="list-style-type: none"> <li>This report is required if the Discharger fails to comply with tasks 4a through 4e, above, or if groundwater monitoring data collected from the monitoring well network [required by implementation of tasks 4a through 4e] indicate the disposal ponds have caused or are contributing to an exceedance(s) of water quality objectives contained in the <i>Water Quality Control Plan for the Tulare Lake Basin, Second Edition, Revised January 2004</i> (Tulare Lake Basin Plan).</li> </ul>	1 February 2018

<sup>1</sup> Where sufficient and adequate groundwater monitoring data are not available, the Central Valley Water Board cannot make a finding that the onsite disposal ponds meet precondition (b)(2) in section 20090 of Title 27, CCR. For the onsite disposal ponds to be exempted from Title 27, CCR requirements, all three preconditions under section 20090(b) must be met. Thus, if the Central Valley Water Board cannot find with current data that discharge to the onsite disposal ponds meets all preconditions, it cannot exempt the onsite disposal ponds from Title 27, CCR requirements, and the Discharger would need to determine a method or methods for complying with Title 27, CCR requirements.

5. The Discharger shall comply with the following time schedule to submit reports and ensure compliance with final effluent limitations for copper, cyanide, and nitrate plus nitrite (as N).

Task	Description	Compliance Date
5a	Submit and implement a Pollution Prevention Plan (PPP) for copper, cyanide, and nitrate plus nitrite (as N) that meets the requirements specified in California Water Code Section 13263. <sup>1</sup>	3 August 2015
5b	Provide a list of the modifications completed to the aeration basins to provide denitrification capabilities.	3 August 2015
5c	Submit a report that includes the results of the additional copper and cyanide monitoring, including sources and concentrations of copper and cyanide.	3 August 2015
5d	Submit a technical report that includes an implementation schedule for addressing copper and cyanide in the effluent.	1 October 2015
5e	Progress Reports <sup>2</sup>	1 February and 1 August, semi-annually, until final compliance
5f	Comply with the final effluent limitations for nitrate plus nitrite (as N)	1 August 2016
5g	Comply with the final effluent limitations for copper and cyanide	1 February 2020

<sup>1</sup> The pollution prevention plan shall be prepared and implemented for copper, cyanide, and nitrate plus nitrite (as N), and shall meet the requirements specified in Water Code section 13263.3. The pollution prevention plan shall describe pollution prevention activities the Discharger will implement in the short-term and the long-term to reduce effluent concentrations for copper, cyanide, and nitrate plus nitrite (as N).

<sup>2</sup> 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 date.

6. Discharge from Discharge Point 001 shall not exceed the following interim effluent limitations. These interim effluent limitations for copper, cyanide, and nitrate plus nitrite (as N) are effective upon the effective date of WDRs Order R5-2014-0145 and shall apply in lieu of the corresponding final effluent limitations in WDRs Order R5-2014-0145. The Discharger shall comply with the following interim effluent limitations through the dates specified in the table below.

Parameter	Units	Interim Maximum Daily Effluent Limitation	Interim Average Monthly Effluent Limitation	Effective Through
Copper, Total Recoverable	µg/L	130	70	31 January 2020
Cyanide, Total (as CN)	µg/L	30	14	31 January 2020
Nitrate plus Nitrite (as N)	mg/L	--	26	31 July 2016

7. 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."*

8. 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.
9. 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 Resources Control Board (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., within 30 days of the adoption 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](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 4 December 2014.

*Original signed by:*

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PAMELA C. CREEDON, Executive Officer

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
CENTRAL VALLEY REGION

CEASE AND DESIST ORDER R5-2014-0146

ATTACHMENT A  
STANDARD REQUIREMENTS FOR MONITORING WELL INSTALLATION WORK PLAN AND  
MONITORING WELL INSTALLATION REPORT

Prior to installation of groundwater monitoring wells, the Discharger shall submit a work plan containing, at a minimum, the information listed in Section 1, below. Groundwater monitoring wells may be installed after the Central Valley Water Board Executive Officer approves the work plan. Upon installation of the groundwater monitoring wells, the Discharger shall submit a well installation report that includes the information contained in Section 2, below. All work plans and reports must be prepared under the direction of, and signed by, a professional geologist or civil engineer licensed by the State of California.

**SECTION 1 – Monitoring Well Installation Work Plan and Groundwater Sampling and Analysis Plan**

The monitoring well installation work plan shall contain the following minimum information:

**A. General Information**

1. Purpose of the well installation project;
2. Brief description of local geologic and hydrogeologic conditions;
3. Proposed monitoring well locations and rationale for well locations;
4. Topographic map showing facility location, roads, and surface water bodies;
5. Large-scaled site map showing all existing onsite wells, proposed wells, surface water bodies and drainage courses, buildings, waste handling facilities, utilities, and major physical and man-made features.

**B. Drilling Details**

1. Onsite supervision of drilling and well installation activities;
2. Description of drilling equipment and techniques;
3. Equipment decontamination procedures;
4. Cuttings disposal methods;
5. Soil sampling intervals (if appropriate); logging methods; number and location of soil samples and rationale; and sample collection, preservation, and analytical methods.

**C. Monitoring Well Construction Details (in graphic form with rationale provided in narrative form):**

1. Borehole diameter;
2. Casing and screen material, diameter, and centralizer spacing (if needed);
3. Type of well caps (bottom cap either screw on or secured with stainless steel screws);
4. Anticipated depth of well, length of well casing, and length and position of perforated interval;
5. Thickness, position, and composition of surface seal, sanitary seal, and sand pack;
6. Anticipated screen slot size and filter pack.

**D. Well Development (performed at least 48 hours after sanitary seal placement):**

1. Method of development to be used (i.e., surge, bail, pump, etc.);
2. Parameters to be monitored during development and record keeping technique;



3. Method of determining when development is complete;
4. Disposal of development water.

**E. Well Survey (precision of vertical survey data shall be at least 0.01 foot):**

1. Identify the Licensed Land Surveyor or Civil Engineer that will perform the survey;
2. Datum for survey measurements;
3. List well features to be surveyed (i.e., top of casing, horizontal and vertical coordinates, etc.).

**F. Schedule for Completion of Work**

**G. Appendix: Groundwater Sampling and Analysis Plan (SAP)**

The Groundwater SAP, a guidance document that is referred to by individuals responsible for conducting groundwater monitoring and sampling activities, shall contain, at a minimum, a detailed written description of standard operating procedures for:

1. Equipment to be used during sampling;
2. Equipment decontamination procedures;
3. Water level measurement procedures;
4. Well purging (include a discussion of procedures to follow if three casing volumes cannot be purged);
5. Monitoring and record keeping during water level measurement and well purging (include copies of record keeping logs to be used);
6. Purge water disposal;
7. Analytical methods and required reporting limits;
8. Sample containers and preservatives;
9. General sampling techniques;
10. Record keeping during sampling (include examples of record-keeping logs);
11. QA/QC samples;
12. Chain of Custody;
13. Sample handling and transport.

**SECTION 2 – Monitoring Well Installation Report**

The monitoring well installation report must provide the information listed below. In addition, the report must also clearly identify, describe, and justify any deviations from the approved work plan.

**A. General Information:**

1. Purpose of the well installation project;
2. Number of monitoring wells installed and identifying label(s) for each;
3. Brief description of geologic and hydrogeologic conditions encountered during well installation;
4. Topographic map showing facility location, roads, surface water bodies;
5. Large-scaled site map showing all previously existing wells, newly installed wells, surface water bodies and drainage courses, buildings, waste handling facilities, utilities, and other major physical and man-made features.

**B. Drilling Details (in narrative and/or graphic form):**

1. Onsite supervision of drilling and well installation activities;

2. Drilling contractor and driller's name;
3. Description of drilling equipment and techniques;
4. Equipment decontamination procedures;
5. Well boring log (provide for each well);
  - a. Well boring number and date drilled;
  - b. Borehole diameter and total depth;
  - c. Total depth of open hole (i.e., total depth drilled if no caving or back-grouting occurs);
  - d. Depth to first encountered groundwater and stabilized groundwater depth;
  - e. Detailed description of soils encountered, using the Unified Soil Classification System.

**C. Well Construction Details (provide a diagram for each well):**

1. Monitoring well number and date constructed;
2. Casing and screen material, diameter, and centralizer spacing (if needed);
3. Length of well casing;
4. Length and position of slotted casing and size of perforations;
5. Thickness, position and composition of surface seal, sanitary seal, and sand pack;
6. Type of well caps (bottom cap either screw on or secured with stainless steel screws).

**D. Well Development (provide for each well):**

1. Date(s) and method of development;
2. How well development completion was determined;
3. Volume of water purged from well and method of development water disposal.

**E. Well Survey (provide for each well):**

1. Reference elevation at the top rim of the well casing with the cap removed (feet above mean sea level to within 0.01 foot);
2. Ground surface elevation (feet above mean sea level to within 0.01 foot);
3. Horizontal geodetic location, where the point of beginning shall be described by the California State Plane Coordinate System, 1983 datum, or acceptable alternative (provide rationale);
4. Present the well survey report data in a table.

**F. Water Sampling:**

1. Date(s) of sampling;
2. How well was purged;
3. How many well volumes purged;
4. Levels of temperature, EC, and pH at stabilization;
5. Sample collection, handling, and preservation methods;
6. Sample identification;
7. Analytical methods used;
8. Laboratory analytical data sheets;
9. Water level elevation(s);
10. Groundwater contour map.

**G. Soil Sampling (if applicable):**

1. Date(s) of sampling;
2. Sample collection, handling, and preservation methods;
3. Sample identification;

CEASE AND DESIST ORDER R5-2014-0146  
ATTACHMENT A – REQUIREMENTS FOR MONITORING WELL  
INSTALLATION WORK PLAN AND MONITORING WELL  
INSTALLATION REPORT  
MALAGA COUNTY WATER DISTRICT  
WASTEWATER TREATMENT FACILITY  
FRESNO COUNTY

4. Analytical methods used;
5. Laboratory analytical data sheets;
6. Present soil sampling data in a table.

**H. Well Completion Report(s)** (as defined in California Water Code § 13751). Blank forms are available from California Department of Water Resources' website [www.water.ca.gov](http://www.water.ca.gov). Submit this section under separate cover.

**I. Appendix (include, at a minimum, copies of the following):**

1. County-issued well construction permits;
2. Registered engineer or licensed surveyor's report and field notes;
3. Field notes from well development.