

California Regional Water Quality Control Board
North Coast Region

CEASE AND DESIST ORDER NO. R1-2016-0016

REQUIRING THE CITY OF HEALDSBURG TO CEASE AND DESIST FROM DISCHARGING OR
THREATENING TO DISCHARGE EFFLUENT IN VIOLATION OF
WASTE DISCHARGE REQUIREMENTS, ORDER NO. R1-2016-0015

NPDES PERMIT NO. CA0025135
WDID NO. 1B820460SON

Sonoma County

The Regional Water Quality Control Board, North Coast Region (Regional Water Board) finds that:

1. The City of Healdsburg (hereinafter Permittee) owns and operates facilities for municipal wastewater collection, treatment, reclamation and disposal serving the City of Healdsburg. For the purposes of this Order, references to the “discharger” or “permittee” in applicable federal and state laws, regulations, or policy are held to be equivalent to the references to the Permittee herein.
2. The City of Healdsburg Wastewater Treatment, Reclamation and Disposal Facility (Facility) is designed for an average dry weather flow rate of 1.4 million gallons per day (mgd) and maximum sustained peak wet-weather flow of 4.0 mgd. The Facility was upgraded from a pond-based secondary treatment facility to a tertiary treatment facility in 2008. The current Facility consists of influent screening, grit removal, extended aeration with biological nutrient removal (BNR), microfiltration through hollow membrane fibers (membrane bioreactor), and ultraviolet (UV) light disinfection. The tertiary, disinfected effluent is discharged to the Basalt Pond, which is physically connected to and has a substantial nexus to the Russian River and is a water of the United States. Basalt Pond is owned by Syar Industries, Inc.
3. The Facility has been regulated by Waste Discharge Requirements (WDR) Order No. R1-2010-0034, National Pollutant Discharge Elimination System (NPDES) Permit (Permit) No. CA0025135, WDID No. 1B820460SON, adopted by the Regional Water Board on October 28, 2010. The permit expired on November 30, 2015, and has been administratively extended because the Permittee submitted a Report of Waste Discharge for its permit renewal in a timely manner.
4. WDR Order No. R1-2016-0015 is proposed for adoption concurrently with this Cease and Desist Order. Upon adoption of Order No. R1-2016-0015, it will serve as the current NPDES Permit for this Facility effective August 1, 2016. The Permit includes discharge prohibitions, effluent and receiving water limitations, and compliance provisions. This Cease and Desist Order will become effective upon adoption.
5. The Regional Water Board adopted the *Water Quality Control Plan for the North Coast Region* (hereinafter Basin Plan), which designates beneficial uses, establishes water quality objectives, and contains implementation programs and policies to achieve those objectives for all waters addressed through the Basin Plan. The Basin Plan

identifies present and potential beneficial uses for the Russian River, of which Basalt Pond is part.

6. The Permittee is violating or threatening to violate the following terms in Order Nos. R1-2010-0034 and R1-2016-0015:

- a. Discharge Prohibition III.J of Order No. R1-2010-0034 and Discharge Prohibition III.I of Order No. R1-2016-0015, which state:

“The discharge of wastewater effluent from the WWTF [Facility] to the Russian River, or its tributaries, is prohibited during the period of May 15 through September 30 each year.”

- b. Effluent Limitation IV.A.1.a of Order Nos. R1-2010-0034 and R1-2016-0015 which establishes effluent limitations for Total Recoverable Copper. Order No. R1-2010-0034 includes floating limitations for Total Recoverable Copper that are based on the hardness of the receiving water at the time of the discharge. Order No. R1-2016-0015 includes discrete limitations for copper as follows:

Table 4. Effluent Limitations

Parameter	Units	Effluent Limitations ¹		
		Average Monthly	Average Weekly	Maximum Daily
Copper, Total Recoverable	µg/L	9.9	--	15

7. The Permittee is violating or threatening to violate the following provision of the Basin Plan (section 4. Implementation Plans, North Coastal Basin, Prohibition 4) that prohibits point source waste discharges in the following location:

“The Russian River and its tributaries during the period of May 15 through September 30 and during all other periods when the waste discharge flow is greater than one percent of the receiving stream’s flow as set forth in NPDES permits.”

8. Section 13301 of the California Water Code 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 preventative action.”
9. The Permittee has been the subject of several previous cease and desist orders, including Order Nos. R1-2004-0065, R1-2006-0002, and R1-2010-0035. The Permittee addressed many of the effluent limitation violations, including acute toxicity, biochemical oxygen demand, and total suspended solids, that were the subject of these

previous cease and desist orders by completing its Facility upgrade project in May 2008, which increased the wastewater treatment capability from secondary to tertiary and added nitrification (conversion of ammonia to nitrate) and denitrification (conversion of nitrate to nitrogen gas for release into the atmosphere).

10. The Permittee continues to discharge year-round to Basalt Pond. Although the Permittee recycles approximately 10 percent of its dry weather flow (3.3 percent of the total annual flow), the Permittee has not yet achieved compliance with Discharge Prohibition III.J of Order No. R1-2010-0034 and Discharge Prohibition III.I of Order No. R1-2016-0015. This year-round discharge also does not comply with the Basin Plan.
11. The compliance schedule for completing tasks required to cease its discharge to Basalt Pond during the period May 15 through September 30 of each year has been extended in response to letters submitted by the Permittee on April 11, 2012, and April 24, 2014. These letters explained that the Permittee's plans to recycle 100 percent of Facility effluent, as a means to cease discharges to Basalt Pond during the seasonal discharge prohibition period, have been delayed due to the economic downturn that began in 2008, lack of funding, and staff turn-over.
12. On January 28, 2016, the Permittee submitted a written progress report to the Regional Water Board Executive Officer describing the Permittee's progress toward ceasing its discharge to Basalt Pond during the period May 15 through September 30 of each year. The progress report describes the Permittee's on-going efforts to construct recycled water transmission pipelines to expand recycled water use to a greater number of agricultural users. Specifically, the Permittee completed construction of a recycled water pumping station and sections of recycled water pipelines, including 1,250 feet of the Foreman Lane recycled water transmission pipeline and 4,750 feet of the Westside Road recycled water transmission pipeline.
13. The January 28, 2016, progress report further states that the Permittee provided approximately 6 million gallons of recycled water for vineyard irrigation (via pipeline and trucked) and dust control in 2014, and 10 million gallons of recycled water vineyard irrigation (via pipeline and trucked) and trucking for dust control, and residential and commercial landscape irrigation in 2015. The progress report also identified the Permittee's plans to focus efforts on expanding agricultural reuse due to the high demand and proximity to the Facility, indicating that extending recycled water pipelines to new areas (e.g., to the south of the Facility) will require time to negotiate routes, obtain rights of way, to conduct an environmental review, and to complete construction.
14. On February 17, 2016, the Permittee submitted a letter requesting that the schedule for compliance with the seasonal discharge prohibition be specified in terms of recycled water acreage served rather than to specify the recycled water pipelines by name (e.g., Foreman Lane pipeline and Westside Road pipeline). This change is requested because the Permittee's original plan to expand recycled water use to the West and North of the Facility may be modified with a plan to expand recycled water use to the south of the Facility where the Permittee is finding greater interest by vineyards wishing to receive recycled water.

15. On January 28, 2016, the Permittee submitted another letter requesting a compliance schedule for achieving compliance with copper effluent limitations in Order Nos. R1-2010-0034 and R1-2016-0015 and protection from mandatory minimum penalties for any exceedances of final copper effluent limitations¹. Although previous permits for the Permittee (Order Nos. R1-2005-0084 and R1-2010-0034) included effluent limitations for copper, the Permittee requested to have a period of time to operate its upgraded plant to determine if the upgraded Facility could reduce copper concentrations to levels that would comply with Order No. R1-2010-0034. During the term of the previous Order, Order No. R1-2005-0084, the Permittee had four exceedances intermittently during the five year permit term. During the current Order term, Order No. R1-201-0034, the Permittee monitored copper concentrations monthly between December 2010 and January 2016, and exceeded the average monthly effluent limitation twice effectively reducing the number of exceedances by half from the previous permit term.
16. The Permittee's letter identifies efforts made to address compliance, including implementation of a source identification and control program that includes adding orthophosphate to the drinking water distribution system to control copper corrosion and environmental inspections of commercial and industrial facilities that discharge to the Permittee's collection system. The Permittee proposes to conduct a water effect ratio (WER) study to determine if the characteristics of the Permittee's effluent decreases the bioavailability and toxicity of copper in comparison to CTR objectives that were based on characteristics of laboratory water.² The Permittee proposes to conduct the study and submit study results by June 1, 2017. This schedule accounts for the time needed for the Permittee to develop a WER study work plan to be submitted by March 31, 2016, for approval by the Regional Water Board Executive Officer and the need to conduct the WER study when discharge to the Russian River is allowed per the Basin Plan (October 1 to May 14 and when the waste discharge flow is less than one percent of the receiving stream's flow).
17. This Order, Order No. R1-2016-0016 replaces Cease and Desist Order No. R1-2010-0035.
18. Pursuant to Water Code section 13385(j)(3), mandatory minimum penalties (MMPs) will not apply to future violations of final effluent limitations for copper if:

¹ As further confirmed through an email from the Permittee dated February 26, 2016.

² The Permittee proposes to conduct a WER study to develop a site-specific copper multiplier for the discharge in accordance with guidance established by U.S. EPA in the document titled *Streamlined Water-Effect Ratio Procedure for Discharges of Copper* (EPA-822-R-01-005). The water quality objective for copper specified in the California Toxics Rule (CTR) for inland surface waters is in the form of an equation that includes a site-specific WER multiplier factor. Application of the WER multiplier, where applicable, allows for site-specific adjustment of the copper objective. In turn, the copper objective becomes the basis for developing appropriate effluent limitations. In the absence of a site-specific WER multiplier, the CTR uses a default value of one.

- a. A cease and desist order is issued on or after July 1, 2000, and specifies the actions that the discharger is required to take in order to correct the violations that would otherwise be subject to MMPs;
 - b. The Regional Board finds that the discharger is not able to consistently comply with one or more of the effluent limitations established in the waste discharge requirements applicable to the waste discharge because the effluent limitation is a new or more stringent regulatory requirement that has become applicable to the waste discharge after the effective date of the waste discharge requirements and after July 1, 2000, new or modified control measures are necessary in order to comply with the effluent limitation, and the new or modified control measures cannot be designed, installed, and put into operation within 30 calendar days;
 - c. The Regional Board establishes a time schedule for bringing 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, and where the time schedule exceeds one year, the time schedule includes interim requirements and actions and milestones leading to compliance, and
 - d. The discharger has prepared and is implementing in a timely and proper manner, or is required by the regional board to prepare and implement, a pollution prevention plan pursuant to Water Code section 13263.3.
19. Because this Order establishes a Cease and Desist Order for anticipated future violations of final copper effluent limitations, after making specific findings and setting interim effluent limitations, in accordance with the Water Code section 13385(j)(3) and the terms of this Order, no MMPs will be assessed for violations of the final copper effluent limitations. Specifically, the Regional Water Board finds that:
- a. The CDO is being issued after July 1, 2000, and specifies the actions the Permittee is required to take to correct the violations of the final copper effluent limitations in section IV.A.1.a of Order Nos. R1-2010-0034 and R1-2016-0015, as set out in Finding 6.b, above.
 - b. The final effluent limitations for copper established in Order No. R1-2016-0015 are more stringent than those required pursuant to Order Nos. R1-2004-0084 and R1-2010-0034. The Permittee will not be able to consistently comply with final effluent limitations for copper because new or modified control measures will be needed for the Permittee to comply, and the new or modified control measures are dependent on the completion of a study (e.g., water effect ratio study) that will take more than 30 calendar days to complete.
 - c. Requirement 4 of this CDO establishes interim effluent limitations for copper, and Requirement 3 of this CDO establishes a compliance schedule for bringing the Facility into compliance with final effluent limitations for copper established in the Permit that are as short as possible.

- d. This Order requires the Permittee to prepare and implement a pollution prevention plan in order to reduce the impacts when the discharge exceeds the final copper effluent limitations during the compliance period.
20. Accordingly, the Regional Water Board finds that MMPs for violations of final copper effluent limitations when discharging to Basalt Pond at Monitoring Location EFF-001 as specified in Effluent Limitations section IV.A.1.a of Order No. R1-2016-0015 do not apply through September 30, 2017, so long as the Permittee complies with the interim effluent limitations contained in Requirement 4, and the compliance schedule contained in Requirement 3, of this Order. If an interim effluent limit contained in this Order is exceeded, then the Permittee is subject to MMPs for that particular exceedance as it will no longer meet the exception in Water Code section 13385 (j)(3).
 21. Interim effluent limitations for copper established in Requirement 4 of this Order were derived based on Facility performance using available effluent monitoring data at Monitoring Location EFF-001, the point of discharge to Basalt Pond. Calculations were based on copper results submitted by the Permittee between December 2010 and October 2015 and statistical methods described in Appendix E of the U.S. EPA document titled *Technical Support Document for Water Quality-Based Toxics Control*, March 1991. During this time period the Permittee collected 71 copper samples with concentrations ranging from 3.9 µg/L to 13 µg/L. The calculations were run using the statistical program RPcalc. The average monthly effluent limitation was calculated as the 95th percentile limit of a lognormal sample distribution and the maximum daily effluent limitations as the 99th percentile limit of a lognormal sample distribution. Both calculations were run at the 95 percent confidence level.
 22. Issuance of this Order is exempt from the provisions of the California Environmental Quality Act (Pub. Resources Code section 21000 et seq.) ("CEQA") pursuant to Water Code section 13389 since the adoption or modification of an NPDES permit for an existing source is statutorily exempt and this Order only serves to implement an NPDES permit. Issuance of this Order is also exempt from CEQA pursuant to section 15321 of title 14 of the California Code of Regulations.
 23. On June 16, 2016, after due notice to the Permittee and all other interested persons, the Regional Water Board conducted a public hearing and received evidence regarding this Order.

THEREFORE, IT IS HEREBY ORDERED PURSUANT TO WATER CODE SECTIONS 13243, 13300 and 13301, that:

1. Cease and Desist Order No. R1-2010-0035 is rescinded, except for enforcement purposes, and is replaced by this Order.
2. The Permittee shall cease and desist from discharging and threatening to discharge waste to Basalt Pond between May 15 and September 30 of each year in violation of

the seasonal discharge prohibition identified in the Permittee’s NPDES Permit by implementing the following time schedule:

Task	Task Description	Compliance Date
A	Complete construction of recycled water transmission pipeline to serve approximately 500 acres of agricultural land (primarily vineyards) ³ .	September 30, 2017
B	Conduct a study that evaluates the technical, economic, and financial feasibility of completing a recycled water system to achieve full compliance with Discharge Prohibition III.I of Order No. R1-2016-0015, including the urban recycled water system that the Permittee identified in its 2005 Wastewater Treatment Plant Upgrade Project Environmental Impact Report (2005 EIR) and July 2010 Recycled Water System Plans and Technical Specifications and the agricultural recycled water system identified in the 2005 EIR and the March 21, 2016 Addendum to Final Environmental Impact Report. The study should be conducted in accordance with State Water Resources Control Board <i>Guidelines for Preparing Economic Analysis for Water Recycling Projects</i> , April 2011. Prepare and submit a report summarizing the study findings for review and approval by the Executive Officer.	August 1, 2018
C	Complete construction of recycled water transmission pipeline to serve approximately 2,000 acres in total or as required to increase Permittee’s recycled water use.	September 30, 2019
D	Complete construction of agricultural or urban recycled water transmission pipeline to serve additional acreage as needed to increase the Permittee’s recycled water use to achieve compliance with Discharge Prohibition III.1 of Waste Discharge Requirements Order No. R1-2016-0015.	July 31, 2021
E	Submit written progress reports describing compliance efforts to the Executive Officer. The progress reports shall describe progress on completion of the recycled water system, including funding status, construction progress, negotiations with potential recycled water users, and any problems encountered during the prior six months. Each report shall also evaluate progress for achieving full compliance with the seasonal discharge	April 1 and October 1 of each year until full compliance with Discharge Prohibition III.I is achieved

³ Recycled water application rates vary depending on vineyard water use which can range from about 2 to 9 inches per year.

Task	Task Description	Compliance Date
	prohibition by September 30, 2019. Regional Water Board staff may periodically present an informational update to the Regional Water Board based on the progress reports.	
F	Achieve compliance with Discharge Prohibition III.I of Waste Discharge Requirements Order No. R1-2016-0015.	No later than July 31, 2021

3. The Permittee shall cease and desist from discharging and threatening to discharge waste in violation of Order Nos. R1-2010-0034 and R1-2016-0015 described in Findings 4, above and achieve compliance with final effluent limitations for total recoverable copper at the earliest possible date in accordance with the following compliance schedule:

Task	Task Description	Compliance Date
A	Submit a pollution prevention plan for Regional Water Board Executive Officer approval that identifies measure that the Permittee will take to minimize the potential impacts when the discharge exceeds the final copper effluent limitations during the compliance period.	September 1, 2016
B	Conduct a discharge-specific water effect ratio (WER) study and submit study results to the Regional Water Board Executive Officer for review and approval.	June 1, 2017
C	Comply with final effluent limitations for total recoverable copper.	December 1, 2017

4. The Permittee shall comply with the following interim effluent limitations for total recoverable copper in the interim period from effective date of this Cease and Desist Order to September 30, 2017 established by this Order for the Permittee to reach compliance with final effluent limitations set forth in Order Nos. R1-2010-0034 and R1-2016-0015:

Interim Effluent Limitations for Discharge Point 001, Discharge to Basalt Pond

Parameter	Units	Average Monthly Effluent Limitation	Maximum Daily Effluent Limitation
Total Recoverable Copper	µg/L	12.3	15.2

5. If the Permittee is unable to perform any activity or submit any documentation in compliance with the deadlines set forth in Requirements above, the Permittee may request, in writing, that the Regional Water Board grant an extension of the time. The extension request shall include justification for the delay.

6. If the Regional Water Board Executive Officer finds that the Permittee fails to comply with the provisions of this Order, the Executive Officer may take all actions authorized by law, including referring the matter to the Attorney General for judicial enforcement or issuing a complaint for administrative civil liability pursuant to Water Code section 13350 and 13385. The Regional Water Board reserves the right to take any enforcement actions authorized by law.

7. Any person affected by this action of the Regional 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 Title 23, California Code of Regulations, section 2050. The petition must be received by the State Water Board within 30 days of the date of this Order. Copies of the law and regulations applicable to filing petitions will be provided upon request. In addition to filing a petition with the State Water Board, any person affected by this Order may request the Regional Water Board to reconsider this Order. To be timely, such request must be made within 30 days of the date of this Order. Note that even if reconsideration by the Regional Water Board is sought, filing a petition with the State Water Board within the 30-day period is necessary to preserve the petitioner's legal rights. If you choose to request reconsideration of this Order or file a petition with the State Water Board, be advised that you must comply with the Order while your request for reconsideration and/or petition is being considered.

Certification

I, Matthias St. John, Executive Officer, do hereby certify that the foregoing is a full, true, and correct copy of a Cease and Desist Order adopted by the California Regional Water Quality Control Board, North Coast Region, on June 16, 2016.

Matthias St. John
Executive Officer