

**STATE OF CALIFORNIA
CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL COAST REGION
895 Aerovista Place, Suite 101
San Luis Obispo, CA 93401**

TIME SCHEDULE ORDER NO. R3-2018-0011

**REQUIRING THE
HERITAGE RANCH COMMUNITY SERVICES DISTRICT
TO COMPLY WITH REQUIREMENTS PRESCRIBED IN
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM
PERMIT NO. CA0048941, ORDER NO. R3-2017-0026,
AS RENEWED OR REVISED**

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

1. The Heritage Ranch Community Services District (hereafter Discharger) owns and operates wastewater collection, treatment, and disposal facilities to provide sewerage service to the district.
2. The Central Coast Water Board adopted waste discharge requirements regulating the discharge of secondary-treated effluent from the Discharger's wastewater treatment plant (WWTP) to spray fields and an unnamed drainage tributary to Nacimiento River. These requirements were issued in Waste Discharge Requirements Order No. R3-2017-0026, adopted by the Central Coast Water Board on September 21, 2017. Order No. R3-2017-0026 serves as a National Pollutant Discharge Elimination System (NPDES) permit (NPDES No. CA0048941).
3. Analysis of the Discharger's Report of Waste Discharge and comment letter dated July 21, 2017, preceding the adoption of Order No. R3-2017-0026 revealed that the Discharger's effluent had a reasonable potential to cause or contribute to exceedances of water quality objectives for copper and un-ionized ammonia and therefore warranted the establishment of effluent limitations for those parameters. The Order also established effluent limitations for nitrate protective of the Basin Plan's narrative water quality objective for biostimulatory substances.
4. Order No. R3-2017-0026 prescribes final effluent limitations for copper, nitrate, and un-ionized ammonia as shown in Table 1.

Table 1 – Final Effluent Limitations

Pollutant	Units	Average Monthly	Maximum Daily
Copper, total recoverable	mg/L	11	22
Nitrate (as N)	mg/L	-	10
Un-ionized ammonia	mg/L	0.025	-

5. The State Water Resources Control Board's *Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California* (SIP) allows for compliance schedules and interim limitations based on an existing discharger's request and demonstration that it is infeasible for the discharger to achieve immediate compliance with a California Toxics Rule (CTR) criterion or with an effluent limitation based on a CTR criterion, such as the copper and un-ionized ammonia effluent limitations in Order No. R3-2017-0026. Numeric interim limitations for the pollutant must be based on current treatment facility performance or on existing permit limitations, whichever is more stringent.
6. The Discharger is unable to comply immediately with Order No. R3-2017-0026 copper and un-ionized ammonia final effluent limitations. The contributions of copper and un-ionized ammonia in WWTP effluent are predominately from community municipal drinking water distribution system and wastewater sources. Specifically, copper pipe corrosion is leaching copper into the water distribution system and therefore into the wastewater collection system, and domestic wastewater contains ammonia.
7. As described in the Discharger's July 21, 2017 correspondence, the Discharger has identified copper pipe corrosion as the likely source of copper in WWTP influent. Copper pipe corrosion is influenced by pH and alkalinity of the source water. In 2007, the Discharger began adding orthophosphate to the drinking water distribution system to control copper corrosion via pH adjustment. However, some of the locations in the water distribution system have reported sub-optimal orthophosphate residual concentrations. The Discharger will increase orthophosphate dosing in order to decrease copper pipe corrosion and monitor the distribution system to maintain optimal residual concentrations.
8. The Discharger acknowledges that in the event orthophosphate addition is unsuccessful as a copper control strategy, it is likely that an alternate pH adjustment process will be required. To that end, this Time Schedule Order includes milestones to implement such alternatives if drinking water distribution system sampling indicates that targeted orthophosphate residuals are insufficient to curb copper leaching into the Discharger's domestic wastewater system and achieve compliance with Order No. R3-2017-0026.
9. The Discharger's possible operational changes made to meet the un-ionized ammonia final effluent limitation may disrupt the nitrogen balance at the WWTP. Changes in pH and aeration to reduce un-ionized ammonia concentrations in WWTP effluent may adversely affect the Discharger's ability to comply with nitrate effluent limitations in Order No. R3-2017-0026.
10. This Time Schedule Order subjects the Discharger to copper, nitrate, and un-ionized ammonia interim effluent limitations and compliance activities, as shown in Tables 2 and 3 below, including the evaluation of viable long-term treatment process changes, evaluation of drinking water distribution system orthophosphate addition, quarterly reporting, and potentially the design and construction of an alternate pH adjustment system to achieve full compliance with Order No. R3-2017-0026, as renewed or revised.

11. California Water Code (CWC) section 13300 authorizes the Central Coast Water Board to require dischargers to establish a time schedule, subject to Water Board approval, of specific actions a discharger shall take to correct or prevent actual or threatened discharges of waste in violation of requirements.
12. The Central Coast Water Board has delegated to its Executive Officer all powers and duties authorized by CWC section 13223. These powers include the authority to issue a time schedule order pursuant to CWC section 13300.
13. The Discharger cannot consistently comply with the copper, nitrate, and un-ionized ammonia final effluent limitations in Order No. R3-2017-0026 because the effluent limitations are new regulatory requirements, new or modified control measures are necessary to comply with the effluent limitations, and the new or modified control measures cannot be designed, installed, and put into operation within 30 calendar days. As a result, a discharge of waste from the current facility is taking place that threatens to violate requirements prescribed by the Central Coast Water Board. Therefore, this Time Schedule Order requires the Discharger to undertake actions to comply with the copper, nitrate, and un-ionized ammonia final effluent limitations in Order No. R3-2017-0026.
14. Pursuant to CWC section 13385(j)(3), violations of the final effluent limits for copper, nitrate, and un-ionized ammonia in Order No. R3-2017-0026, as renewed or revised, are not subject to CWC section 13385 subdivisions (h) and (i) mandatory minimum penalties as long as the Discharger complies with all of the requirements of this Time Schedule Order and all of the following requirements are met:
 - The time schedule order specifies the actions that the discharger is required to take in order to correct the violations that would otherwise be subject to subdivisions (h) and (i).
 - 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. (see Finding above).
 - The regional board establishes a time schedule for bringing the waste discharge into compliance with the final effluent limitation that is as short as possible, and does not exceed five years in length.
 - For time schedules that exceed one year from the effective date of the time schedule order, the schedule shall include interim requirements and the dates for their achievement. The interim requirements shall include both of the following:
 - Effluent limitations for the pollutant or pollutants of concern.
 - Actions and milestones leading to compliance with the effluent limitation.
 - 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 CWC section 13263.3. This Time Schedule Order requires the Discharger to prepare, implement, and submit a pollution prevention plan for copper, nitrate, and un-ionized ammonia.

This Time Schedule Order satisfies the above bulleted requirements.

15. This Time Schedule Order requires the Discharger to comply with a time schedule within five years of adoption, which will allow the Discharger to achieve full compliance with copper, nitrate, and un-ionized ammonia final effluent limitations in Order No. R3-2017-0026, as renewed or revised.

16. The Central Coast Water Board publicly noticed this Time Schedule Order from February 2, 2018, through March 3, 2018. On March 2, 2018, the Water Board received comments from the Discharger indicating its desire to include interim nitrate limitations due to the probable difficulties it may encounter in nitrogen balance for achieving the new un-ionized ammonia effluent limitations. This comment letter is publicly available for review at the Water Board offices.
17. This enforcement action is taken for the protection of the environment and as such is exempt from the provisions of the California Environmental Quality Act (Public Resources Code Section 21000, et seq.) in accordance with Section 15321, Chapter 3, Title 14, California Code of Regulations.

IT IS HEREBY ORDERED that, pursuant to sections 13267, 13383, and 13300 of the California Water Code, Heritage Ranch Community Services District shall:

1. Comply with the following copper and un-ionized ammonia interim effluent limitations commencing on the effective date of Time Schedule Order (TSO) No. R3-2018-0011:

Table 2 –Interim Effluent Limits

Constituent	Units	Average Monthly	Maximum Daily
Copper, total recoverable	mg/L	18	25
Nitrate (as N)	mg/L	-	17
Un-ionized ammonia	mg/L	2	-

2. Comply with the following compliance schedule commencing on the effective date of TSO No. R3-2018-0011:

Table 3 –Compliance Schedule

Required Actions	Compliance Due Dates ³
Copper	
Quarterly progress and monitoring reports of orthophosphate dosing and copper residual concentrations in the drinking water distribution system and WWTP influent and effluent. Reports shall include but not be limited to: <ul style="list-style-type: none"> • Discussion of overall progress in implementing the requirements of this TSO and achieving full compliance with Order No. R3-2017-0026 ²; • Tables of all orthophosphate dosing and copper residual data; • Map of drinking water distribution system showing and naming dosing and residual sampling points; • Graphical analyses of all monitoring data; 	1 st Quarter (Jan-Mar) – Report Due by May 1 st 2 nd Quarter (Apr-Jun) – Report Due by Aug 1 st 3 rd Quarter (Jul-Sep) – Report Due by Nov 1 st 4 th Quarter (Oct-Dec) – Report due by Feb 1 st

Required Actions	Compliance Due Dates ³
<ul style="list-style-type: none"> Narrative evaluation of observed trends of orthophosphate dose and drinking water distribution system and WWTP copper residuals, the effectiveness of dosing practices during a report's monitoring period and the TSO's overall effective period, and changes planned or executed to achieve compliance with Order No. R3-2017-0026; and, Laboratory reports as appendices. 	
Develop, implement, and submit Pollution Prevention Plan (PPP) ¹ pursuant to CWC section 13263.3 for copper (total recoverable), nitrate, and un-ionized ammonia	December 1, 2018
If copper residuals remain high (i.e., such that WWTP final effluent concentrations are still not met), adjust orthophosphate dose (target 1.5 mg/l residual) and evaluate impact to copper concentrations in drinking water distribution system, and WWTP influent and effluent	December 1, 2018
If copper residuals remain high after first adjustment, increase orthophosphate dose (target 2.0 mg/L residual) and evaluate impact to copper concentrations in drinking water distribution system, and WWTP influent and effluent	As needed basis, but no later than one month before quarterly sampling if drinking water distribution system concentrations have not decreased sufficiently to demonstrate compliance with final effluent limitations for copper in two consecutive samples.
If copper residuals remain high after second adjustment, evaluate pH adjustment system using caustic soda (NaOH). Complete concept design and permitting. Obtain funding approval.	1 year after drinking water distribution system concentrations have not decreased sufficiently in two consecutive samples.
Design pH adjustment system	1 year after completion of permitting and funding approval
Install pH adjustment system	1 year after completion of design
Achieve full compliance with final effluent limitations in Order No. R3-2017-0026	November 30, 2022
Un-ionized Ammonia and Nitrate	
<p>Quarterly progress and monitoring reports of un-ionized ammonia and nitrate in WWTP effluent. Reports shall include but not be limited to:</p> <ul style="list-style-type: none"> Discussion of overall progress in implementing the requirements of this 	<p>1st Quarter (Jan-Mar) – Report Due by May 1st 2nd Quarter (Apr-Jun) – Report Due by Aug 1st 3rd Quarter (Jul-Sep) – Report Due by Nov 1st 4th Quarter (Oct-Dec) – Report due by Feb 1st</p>

Required Actions	Compliance Due Dates ³
TSO and achieving full compliance with Order No. R3-2017-0026 ² ; <ul style="list-style-type: none"> • Analytical results of all un-ionized ammonia and nitrate samples; • Evaluation of nitrogen cycle trends within WWTP effluent; • Narrative evaluation of observed trends of un-ionized ammonia/nitrate concentrations, the effectiveness of any operational changes during a report's monitoring period and the TSO's overall effective period, and changes planned or executed to achieve compliance with Order No. R3-2017-0026; and, • Laboratory reports as appendices. 	
Based on nitrogen cycle monitoring, and any discernable trends, evaluate and implement treatment process optimization, including but not limited to aeration adjustments and effluent pH reduction. Identify and develop treatment improvement options that are technologically and economically feasible	September 21, 2019
Implement operational changes, and/or design WWTP improvements as necessary	September 21, 2020
Install WWTP improvements, as necessary	September 21, 2021
Achieve full compliance with final effluent limitation in Order No. R3-2017-0026	November 30, 2022

¹ The PPP shall be prepared for copper, nitrate, and un-ionized ammonia and shall meet the requirements specified in CWC section 13263.3(d)(3) for POTWs.

² The progress reports shall detail the Discharger's actions implemented towards achieving compliance with Order No. R3-2017-0026, including but not limited to studies, installation/construction progress, evaluation of measures implemented, and recommendations for additional measures as necessary to achieve full compliance by the final date of this TSO.

³ Compliance due dates are the latest allowable compliance date. The Discharger may be able to achieve compliance or progress sooner than the listed compliance date(s), based on any early successful implementation of the required actions.

3. All reports shall be submitted under discharger signed/certified cover letter to the California Integrated Water Quality System (CIWQS). All reports shall also include laboratory reports from an Environmental Laboratory Accreditation Program (ELAP)-certified laboratory. The Executive Officer may require revisions to the form or types of data and information reported.
4. All reports required by this TSO shall be signed by either a principal executive officer or ranking elected official or by a duly authorized representative of that person. A person is a duly authorized representative only if:
 - a. The authorization is made in writing by a person described above;
 - b. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity such as the position of

plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the owner of the regulated facility. (A duly authorized representative may thus be either a named individual or any individual occupying a named position.); and

- c. The written authorization is submitted to the Central Coast Water Board.
5. Any person signing a report required by this TSO shall make the following certification:

“In compliance with California Water Code section 13267, I certify under penalty of perjury that this document and all attachments were prepared by me, or under my direction or supervision, following a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. To the best of my knowledge and belief, this document and all attachments are true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.”
 6. If, in the opinion of the Executive Officer, the Discharger fails to comply with any provisions of this TSO, or fails to consistently demonstrate substantive progress towards achieving full compliance with effluent limitations in Order No. R3-2017-0026, as renewed or revised, the Executive Officer may terminate this TSO. In that case, or if compliance with the final effluent limitations of Order No. R3-2017-0026 is not achieved by the full compliance dates shown above in Table 3, the Discharger would not be exempt from the mandatory minimum penalties for violation of those effluent limitations, and would also be subject to issuance of a cease and desist order in accordance with CWC section 13301. The Central Coast Water Board reserves its right to take any enforcement action authorized by law.
 7. During the effective period of this TSO, the Discharger shall comply with all provisions of Order No. R3-2017-0026, as renewed or revised, that are not in conflict with this TSO.

The Central Coast Water Board's requirement that you submit the reports required by this TSO is made pursuant to sections 13267 and 13383 of the California Water Code. Pursuant to section 13268 of the Water Code, a violation of a Water Code section 13267 requirement may subject you to civil liability of up to \$1,000 per day for each day in which the violation occurs. Pursuant to section 13385 of the Water Code, a violation of a Water Code section 13383 requirement may subject you to civil liability of up to \$10,000 per day for each day in which the violation occurs.

The Central Coast Water Board needs the reports required by this TSO to ensure the Discharger's compliance with this TSO and its timely achievement of full compliance with the final effluent limitations of Order No. R3-2017-0026. The Discharger is required to submit this information because based on the available data it is responsible for the discharge and for compliance with Order No. R3-2017-0026. The evidence supporting this requirement is discussed above. More detailed information is available in the Central Coast Water Board's public file on this matter.

Any person aggrieved by this action of the Central Coast 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 the order, except that if the thirtieth day following the date of the order falls on a Saturday, Sunday, or state holiday, the petition must be received 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.

This Order is effective upon signature by the Executive Officer. The Executive Officer may modify the time schedule in this Order to permit a specified task or tasks to be completed at later dates if the Discharger demonstrates and the Executive Officer determines that the delay was beyond the reasonable control of the Discharger to avoid.

ORDERED BY _____
John M. Robertson, Executive Officer

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