

**STATE OF CALIFORNIA
REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL COAST REGION**

STAFF REPORT FOR REGULAR MEETING OF SEPTEMBER 21-22, 2017

Prepared on August 1, 2017

ITEM NUMBER: 11

SUBJECT: Revision of Waste Discharge Requirements, Reissuance of National Pollutant Discharge Elimination System Permit No. CA0048941 for Heritage Ranch Community Services District Wastewater Treatment Facility, San Luis Obispo County, Order No. R3-2017-0026

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KEY INFORMATION

Location: 4870 Heritage Road, Paso Robles, CA 93446
Place ID: 230132
Type of Discharge: Disinfected secondary-treated municipal wastewater and undisinfected secondary recycled water
Permitted Flow: 0.40 million gallons per day (MGD)
Type of Treatment: Partially aerated lagoons, sand filtration, hypochlorite disinfection
Disposal Method: Discharge to unnamed ephemeral drainage, tributary to Nacimiento River
Solid Wastes: Lagoon deposition; periodic cleanout
Existing Orders: Waste Discharge Requirements Order No. R3-2011-0007; Waste Discharge Requirements for Discharges of Storm Water Associated with Industrial Activities (General Permit No. CAS000001); and General Waste Discharge Requirements for Sanitary Sewer Systems (State Water Board Order No. 2006-003-DWQ).

This Action: Adopt Order No. R3-2017-0026

SUMMARY

This agenda item considers the reissuance of an existing NPDES permit. The Fact Sheet, Attachment F of the proposed Order, includes the legal requirements and technical rationale that serve as the basis for the requirements of the permit. Water Board staff recommends adoption of the proposed Order.

DISCUSSION

The Heritage Ranch Community Services District (hereinafter Discharger) is the sole owner of the Heritage Ranch Community Services Wastewater Treatment Facility (hereinafter Facility) providing wastewater treatment and recycling for the community of Heritage Ranch.

The Facility treats municipal wastewater through two partially aerated lagoons in series. Pond 1 is a combination of aerated lagoon and facultative pond, while Pond 2 is a polishing pond for

enhanced settling. Following the lagoons, the wastewater is chlorinated and pumped approximately 3 miles to two mono-media sand filters in series. Water is dechlorinated through an underdrain system prior to discharge to the unnamed ephemeral drainage way. The Discharger also maintains spray field irrigation for recycled water application.

Changes from the Existing Order

The proposed Order is structured in accordance with the statewide NPDES permit template. The proposed Order is consistent with the draft Order circulated for public comment, with the following exceptions:

1. The circulated draft Order contained a typographical error in the total chlorine residual effluent limitation (Table 4). The proposed Order has corrected the total chlorine residual limitation to non-detect, consistent with the existing Order and Fact Sheet.
2. Removed certain water-quality mass-based effluent limitation based on equivalent protection provided by concentration-based effluent limitation and flow limitation (page F-22).

Based on Discharger comments, additional modification to the proposed Order have been made. Please review the Comments section below for further information and details.

Compliance History

The Discharger has a good history of compliance and addressing discharge violations promptly when they have occurred. An unforeseen power failure caused the September 2011 violations. Other BOD violations occurred during the cleaning of sludge accumulations within the system. Total coliform violations in 2014 were not accompanied by fecal coliform violations, and residual chlorine was present.

COMMENTS

The Central Coast Water Board notified the Discharger and interested agencies and persons of its intent to issue WDRs for the discharge and provided an opportunity to submit written comments and recommendations. Notification was provided by posting on the Central Coast Water Board's website and posting at the facility. The written comments were due at the Central Coast Water Board office by 5:00 p.m. on July 21, 2017. One comment letter was received from the Discharger. The following discussion summarizes and addresses the Discharger comments:

1. The draft Order that was initially circulated contained the use of the Test of Significant Toxicity (TST) for toxicity evaluation. The Discharger requested, that until such time as the TST becomes an approved method under 40 CFR Part 136 and/or the State Board adopts an updated toxicity policy, the existing Order's toxicity provisions be carried forward. Staff agreed, and the proposed Order has been updated with the existing Order's toxicity provisions (Section V.A.6.a of the Monitoring and Reporting Program (Attachment E).
2. Discharger requested Table 4 be revised to include the daily dry weather flow limitation as a line item below the table. Staff has made the formatting change.

3. The Discharger commented on a consistency issue between un-ionized ammonia effluent limitations in Tables 4 and Fact Sheet page F-8. Staff has corrected the un-ionized ammonia limit to be consistent between the table and Fact Sheet (i.e., 0.025 mg/L as average monthly effluent limit).
4. The draft Order (Table E3) had increased nitrate effluent monitoring to quarterly from semiannual monitoring. According to the draft Order's Fact Sheet, the change had been proposed as a result of "Discharger request" and a single violation in August 2013. The Discharger has commented that they made no request to increase sampling, and Water Board staff could not find such request in the renewal application or other communications. As such, Water Board staff has kept the existing requirement for semiannual effluent monitoring for nitrate in the proposed Order. Water Board staff has also reminded the Discharger, during a recent in-person meeting, of standard provisions requiring an increase in sampling frequency should monitoring results indicate a problem with permitted effluent limitations.
5. Discharger requested nitrate effluent limitation be revised to 10 mg/L to be consistent with recently adopted Central Coast inland surface water NPDES permits and the maximum contaminant level for nitrate in drinking water. The previous nitrate effluent limitation (8 mg/L as N) was intended to meet the narrative standard regarding excessive biostimulatory growth. Water Board staff finds the use of 10 mg/L effluent limitation to be regionally consistent, will provide an equivalent level of protection of the beneficial use, and will not result in additional degradation of the receiving water.
6. Copper effluent limitations in the previous Order were based on the site-specific, natural conditions of the source water and found that the source water had a hardness of 130 mg/L. Recent monitoring data indicates the lowest measured hardness of the source water is 160 mg/L. The new information supports an exception to the anti-backsliding provisions, as the information was not available at the time of the previous permit issuance. Consideration of the naturally higher hardness in the source water would have justified the application of less stringent effluent limitations for copper. Consequently, relaxing the limitation for copper does not violate the anti-backsliding provision of the CWA, in accordance with CWA § 402(o)(2)(B). This approach is consistent with other inland surface water NPDES permits within the Central Coast region (e.g., City of Paso Robles R3-2011-0002 total dissolved solids). Therefore, the proposed Order implements the aquatic life criteria-based copper effluent limitations, as calculated based on recent monitoring data since 2011, of 11 mg/L AMEL and 22 mg/L MDEL.
7. Discharger conducted an analysis of source water contributions to effluent copper concentrations. Based on this analysis, provided at Attachment B to the Discharger comment letter, Water Board staff has determined the calculation of intake credits based on the State Implementation Plan (SIP) is appropriate. Water Board staff will work with Discharger to implement the SIP calculations.
8. The Discharger acknowledges some difficulty in meeting the new un-ionized ammonia effluent limitation using their existing infrastructure and operations, especially in light of maintaining compliance with the existing nitrate effluent limitations. Additionally, the Discharger is planning on operational changes to address copper leaching (via pH adjustments in source water) from the community water service area. The Discharger will need additional time to comply with the new limitations. The comment letter dated July 21, 2017 requests a Time Schedule Order (TSO) to achieve compliance with the

copper and un-ionized ammonia effluent limitations contained in the proposed Order. Water Board Staff supports the request and will work with Discharger to finalize a TSO, based on the information provided in Attachment A to the Discharger's comment letter.

RECOMMENDATION

Adopt Order No. R3-2017-0026, as proposed.

ATTACHMENT

For copies, please refer to the Central Coast Water Board's internet website at:

http://www.waterboards.ca.gov/centralcoast/board_info/agendas/2017/2017_agendas.shtml

1. Proposed Order No. R3-2017-0026, including the following associated attachments:
 - Attachment A – Definitions
 - Attachment B – Map
 - Attachment C – Flow Schematic
 - Attachment D – Standard Provisions
 - Attachment E – Monitoring and Reporting Program (MRP)
 - Attachment F – Fact Sheet

2. Heritage Ranch CSD Comment Letter dated July 21, 2017.

CW-230170

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