# CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD CENTRAL VALLEY REGION

#### ORDER R5-2018-0050

# AMENDING WASTE DISCHARGE REQUIREMENTS ORDER R5-2013-0010 FOR IRONHOUSE SANITARY DISTRICT IRONHOUSE WATER RECYCLING FACILITY CONTRA COSTA COUNTY

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

# **Waste Discharge Requirements Order R5-2013-0010**

- 1. On 1 February 2013, the Central Valley Water Board adopted Waste Discharge Requirements (WDRs) Order R5-2013-0010, prescribing requirements for Ironhouse Water Recycling Facility (WRF) in Contra Costa County. The Ironhouse Sanitary District (Discharger) owns and operates the WRF.
- 2. The WRF includes collection; headworks; tertiary treatment consisting of anoxic basins, aeration basins, and membrane bioreactor (MBR) basins; ultraviolet disinfection; and 335 acres of land application area (LAA) located on-site. The WDRs prescribe requirements for the Discharger's collection, tertiary treatment, and the LAA. National Pollutant Discharge Elimination System Order R5-2013-0157-01 (NPDES CA0085260) regulates discharge to the San Joaquin River, which may occur year-round.
- 3. Effluent Limitations C.3 in WDRs Order R5-2013-0010 contain pH limits for treated wastewater stored in any pond not to be less than 6.5 or greater than 9.0.

## **Proposed Amendment**

- 4. The Discharger stores tertiary UV disinfected wastewater in the North Effluent Storage Pond (North Pond). The pH of treated wastewater stored in the North Pond typically ranges 7.5 to 10.5 and has a median pH of 9.2, which exceeds Effluent Limitation C.3. Prior to being stored in the North Pond, the pH of the tertiary UV disinfected wastewater typically ranges from 6.7 to 7.5 and has an average of 7.1.
- 5. On 4 January 2017, the Discharger submitted a letter requesting to amend WDRs Order R5-2013-0010 to raise the pH limit of Effluent Limitations C.3 from 9.0 to 11.
- 6. The 4 January 2017 letter includes an evaluation of whether the pH levels in the North Pond have impacted pH levels in groundwater. The North Pond monitoring data show that the pH varies by warm or cool season, with lower pH level in the cool season. The groundwater monitoring data show a decreasing trend in pH from August 2000 through August 2016 in both upgradient and downgradient monitoring wells from an approximate pH of 7.6 to a pH of 7.2. Based on the data, it does not appear that the pH of the North Pond is impacting the pH of underlying groundwater.
- 7. The 4 January 2017 letter states that the Discharger has attempted to control the North Pond pH by utilizing mixing equipment, vegetation removal, and a pond dye. None of these actions proved successful to reduce pH levels in the North Pond.

8. Because the tertiary UV disinfected wastewater does not demonstrate reasonable potential to impact groundwater pH or cause or contribute to an exceedance of the applicable water quality objectives due to metal mobilization, this Order revises Effluent Limitations C.3 of Order R5-2013-0010 as described below.

## **Public Notice**

- The Central Valley Water Board has notified the Discharger and interested agencies and persons of its intent to amend waste discharge requirements for this discharge and has provided them with an opportunity for a public hearing and an opportunity to submit their written views and recommendations.
- 10. The Central Valley Water Board, in a public meeting, heard, and considered all comments pertaining to the discharge.

**IT IS HEREBY ORDERED** that Order R5-2013-0010 is amended solely to revise Effluent Limitation C.3 and to clarify the Monitoring and Reporting Program (MRP) effluent monitoring requirements. Pursuant to Water Code sections 13263 and 13267, the Discharger, its agents, successors and assigns, to meet the provisions contained in Division 7 of the Water Code and regulations adopted thereunder, shall comply with amended Order R5-2013-0010 as follows:

1. Effluent Limitations C.3 is replaced with the following language:

No wastewater contained in any pond shall have a pH of less than 6.5 or greater than 10.0 as an annual average.

2. The Monitoring and Reporting Program is revised to change the sampling frequency of pH under Storage Pond Monitoring from weekly to twice monthly.

Any person aggrieved by this action of the Central Valley Water Board may petition the State Water Board to review the action in accordance with Water Code section 13320 and California Code of Regulations, title 23, sections 2050 and following. The State Water Board must receive the petition by 5:00 p.m., 30 days after the date of this Order, except that if the thirtieth day following the date of this Order falls on a Saturday, Sunday, or state holiday, the petition must be received by the State Water Board by 5:00 p.m. on the next business day. Copies of the law and regulations applicable to filing petitions may be found on the Internet at:

http://www.waterboards.ca.gov/public\_notices/petitions/water\_quality

or will be provided upon request.

I, PATRICK PULUPA, 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 31 May 2018.

Original signed by
PATRICK PULUPA, Executive Officer