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**California Regional Water Quality Control Board  
North Coast Region**

**ORDER R1-2023-0030  
MODIFYING TIME SCHEDULE ORDER No. R1-2017-0045  
TO PROVIDE TIME SCHEDULES TO COMPLY WITH  
ORDER No. R1-2017-0007**

**CITY OF RIO DELL  
WASTEWATER TREATMENT FACILITY  
NPDES No. CA0022748  
Humboldt County  
WDID No. 1B83134OHUM**

**1. FINDINGS**

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

- 1.1. The City of Rio Dell (Permittee or Discharger) is the owner and operator of the Rio Dell Wastewater Treatment Facility (Facility), a publicly owned treatment works, which discharges secondary treated wastewater under Waste Discharge Requirements (WDRs) contained in Order No. R1-2017-0007 (2017 Permit), adopted by the Regional Water Board on August 17, 2017. The Permit also serves as a National Pollutant Discharge Elimination System (NPDES) permit (NPDES No. CA0022748). The Permit contains discharge prohibitions, effluent and receiving water limitations, and monitoring and reporting requirements. The 2017 Permit expired on October 31, 2022, but was administratively continued pending issuance of a new permit.
- 1.2. The 2017 Permit prescribes final effluent limitations for dichlorobromomethane, chlorodibromomethane, total trihalomethanes, and haloacetic acids, as shown in Table 1.

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**Table 1. Final Effluent Limitations**

<b>Parameter</b>	<b>Units</b>	<b>Monthly Average Effluent Limitation (AMEL)</b>	<b>Maximum Daily Effluent Limitation (MDEL)</b>
Chlorodibromomethane	µg/L	0.40	0.80
Dichlorobromomethane	µg/L	0.56	1.1
Total Trihalomethanes	µg/L	80	--
Haloacetic Acids	µg/L	60	--

- 1.3. On October 20, 2017, the Regional Water Board Executive Officer issued Time Schedule Order No. R1-2017-0045. Time Schedule Order No. R1-2017-0045 includes interim effluent limitations for dichlorobromomethane, chlorodibromomethane, total trihalomethanes, and haloacetic acids and requires the Permittee to investigate and implement operational modifications to its chlorine disinfection system to achieve compliance with Effluent Limitation IV.A.1.a of the 2017 Permit by October 31, 2022.
- 1.4. On October 28, 2021, the City of Rio Dell submitted a Report of Waste Discharge which also included a written request to extend the deadline to meet final effluent limitations for Task 7 in Time Schedule Order No. R1-2017-0045. The extension request detailed the continued efforts of the Permittee to comply with Time Schedule Order No. 2017-0045 and included justification for the delay as outlined below in finding 2.3. On September 22, 2022, Regional Water Board staff completed review of the Report of Waste Discharge and the NPDES Order No. 2017-0007 was administratively extended. Staff determined that the Permittee satisfied the extension request requirements set forth in Time Schedule Order No. R1-2017-0045. As such, the Regional Water Board approve the extension of the deadline to comply with final effluent limitations as specified in Task 7 of Table 1 below. The final compliance date for Task 7 has been extended from October 31, 2022 to October 31, 2027.

## **2. NEED FOR TIME SCHEDULE ORDER**

- 2.1. The Permittee is unable to comply with final effluent limitations for dichlorobromomethane, chlorodibromomethane, total trihalomethanes, and haloacetic acids in the 2017 Permit and the anticipated reissued NPDES permit, which, based on a reasonable potential analysis using monitoring data reported during the term of the 2017 Permit, will retain the final effluent limitations for these constituents. The Permittee has requested an extension of the date for compliance with final effluent limitations and with the due dates for implementation milestones for tasks not yet completed pursuant to Time Schedule Order No. R1-2017-0045.
- 2.2. Consistent with Time Schedule Order No. R1-2017-0045, the Permittee completed a Chloramine Disinfection Study that provides the process by which the Permittee can propose, gain approval for, and implement a full-scale chloramine disinfection process to maintain adequate disinfection and reduce the production of chlorine disinfection byproducts to meet final effluent limitations. On February 10, 2022, the permittee submitted a report detailing the conclusions of the completed bench scale testing of the Chloramine Disinfection Study. A bench test was conducted from August to October of 2020 to determine if adequate disinfection can be achieved with chloramination while achieving compliance with anticipated ammonia effluent limits. The bench test showed chloramination to be a feasible option. A full-scale chloramine disinfection test is scheduled to be completed during the summer of 2023. Additional time to complete the testing of the full-scale chloramine disinfection was requested on October 28, 2021, to implement

operational changes based on study results.

- 2.3. Despite diligent efforts to comply with the time schedule, the City of Rio Dell was unable to complete Tasks I through L addressed in Table 1 of Order No. R1-2017-0045 by their respective compliance dates. Progress was delayed to unforeseen challenges including supply chain breakdowns and lockdown safety measures during the statewide COVID-19 emergency response. Furthermore, damage inflicted by the December 20, 2022 earthquake centered along coastal Humboldt County and prolonged flooding impacting the area in December 2022 and January 2023 delayed compliance projects. As a result, the Regional Water Board finds that it is reasonable to provide additional time to comply with the effluent limitations for dichlorobromomethane, chlorodibromomethane, Total Trihalomethanes, and Haloacetic Acids.

### **3. OTHER REGULATORY REQUIREMENTS**

- 3.1. California Water Code section 13300 states:
- 3.2. "Whenever a regional board finds that a discharge of waste is taking place or threatening to take place that violates or will violate requirements prescribed by the regional board, or the state board, or that the waste collection, treatment, or disposal facilities of a discharger are approaching capacity, the board may require the discharger to submit for approval of the board, with such modifications as it may deem necessary, a detailed time schedule of specific actions the discharger shall take in order to correct or prevent a violation of requirements."
- 3.3. Water Code section 13267, subdivision (a) provides that the Regional Water Board may investigate the quality of any waters of the state within its region in connection with any action relating to the Basin Plan. Water Code section 13267, subdivision (b) provides that the Regional Water Board, in conducting an investigation, may require a discharger to furnish, under penalty of perjury, technical or monitoring program reports. The reports required by this Order, pursuant to Water Code section 13267, are necessary to ensure that the future threat to water quality created by activities at the Facility are properly assessed and controlled. Due to the importance of protecting water resources as explained herein, the costs associated with developing the required reports and work plans bear a reasonable relationship to the benefits that will be obtained from having the necessary information for the Regional Water Board to properly regulate and monitor the Facility.
- 3.4. Water Code section 13383, subdivision (a) provides the Regional Water Board may establish monitoring, inspection, entry reporting, and record keeping requirements, as authorized by section 13160, 13376, or 13377 for any person who discharges, or proposes to discharge to navigable waters. Subdivision (b) provides that the Regional Water Board may require any person subject to this section to establish and maintain monitoring equipment or methods, including,

where appropriate, biological monitoring methods, sample effluent as prescribed, and provide other information as may be reasonably required.

3.5. Water Code section 13385(j)(3), provides that mandatory minimum penalties (MMPs) will not apply to future violations of final effluent limitations if:

- A time schedule 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;
- The Regional Water 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;
- The Regional Water 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
- 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.

3.6. The Permittee has satisfied the above bulleted requirements. Following a public hearing, the Regional Water Board may extend the time schedule for an additional five years in length if the Permittee demonstrates that it is making diligent progress towards bringing the waste discharge into compliance with the effluent limitation, and the additional time is necessary to comply with the effluent limitation;

3.7. The compliance schedules established in this Order are intended to be as short as possible. The compliance schedule for dichlorobromomethane, chlorodibromomethane, total trihalomethanes, and haloacetic acids accounts for the interrelationship between ammonia, bacteria, and disinfection byproducts, the time necessary to complete construction, testing, and fine tuning of the

Permittee’s new phased Chloramine Disinfection Project. The Regional Water Board recommends that the Permittee continue to evaluate resources to identify a means to shorten the time frame for achieving compliance with effluent limitations for these pollutants.

**IT IS HEREBY ORDERED**, pursuant to California Water Code section 13300, 13267 and 13383, the Permittee shall comply with the following requirements and schedule of actions to comply with the 2017 Permit:

1. The Permittee shall comply with the following interim effluent limitations, at **Discharge Point 001**, until **October 31, 2027<sup>1</sup>**, for dichlorobromomethane, chlorodibromomethane, total trihalomethanes, and haloacetic acids:

Parameter	Units	Monthly Average Effluent Limitation (AMEL)
Chlorodibromomethane	µg/L	2.34
Dichlorobromomethane	µg/L	20.0
Total Trihalomethanes	µg/L	113
Haloacetic Acids	µg/L	196

2. The Permittee shall implement the tasks in the following compliance schedule in order to achieve compliance with final dichlorobromomethane, chlorodibromomethane, total trihalomethanes, and haloacetic acids effluent limitations and final effluent limitations at Discharge Point 001 of the 2017 Permit at the earliest possible date, but no later than the compliance dates set forth in the following schedule:

**Table 1: Interim Effluent Limitations Compliance Schedule**

Task	Task Description	Compliance Date
1	Complete full scale chloramine disinfection testing. <ul style="list-style-type: none"> <li>• Install temporary chloramine disinfection system.</li> <li>• Conduct testing to verify chloramination represents a viable disinfection process.</li> </ul>	<b>October 31, 2023</b>
2	Submit a technical report on full-scale chloramine disinfection study including monitoring results for disinfection byproducts and ammonia at monitoring locations EFF-001 and EFF-003; analysis of chloramine disinfection as viable disinfection process to comply with	<b>March 1, 2024</b>

<sup>1</sup> The Regional Water Board intends to include a compliance schedule for disinfection byproducts in the renewed NPDES permit. This order is necessary to provide a compliance schedule until the board can consider the schedule in the renewed permit.

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	final effluent limitations for final ammonia impact ratio, total coliforms, dichlorobromomethane, chlorodibromomethane, total trihalomethanes, and haloacetic acids.	
<b>3</b>	<p><b>3.1</b> If compliance the full-scale chloramine disinfection study concludes that chloramination will result in compliance with final effluent limitations, the Permittee will submit full system design plans for full chloramine disinfection unit and follow compliance dates outlined in <b>Tasks 4, 5, and 7.</b></p> <p><b>3.2</b> If compliance the full-scale chloramine disinfection study concludes that chloramination will <b>not</b> result in compliance with final effluent limitations, then the Permittee shall submit, for Regional Water Board Executive Officer approval, a report identifying additional measures that the Permittee will evaluate in order to reduce the production of and achieve compliance with final effluent limitations for chlorine disinfection by-products. Possible measures include evaluation of other disinfection methods such as ultraviolet light disinfection or conducting a study to evaluate the potential for dilution credits and a mixing zone to achieve compliance and follow compliance dates outlined in <b>Tasks 4,6, and 7.</b></p>	<b>November 1, 2024</b>
<b>4</b>	The Permittee shall submit an annual progress reports May 1 beginning in 2023.	<b>May 1, 2023</b> <b>May 1, 2024</b> <b>May 1, 2025</b> <b>May 1, 2026</b> <b>May 1, 2027</b>
<b>5</b>	Completion of construction and installation of chloramine disinfection unit (fully installed and operational).	<b>July 1, 2025</b>
<b>6</b>	Submit a work plan for alternate disinfection byproduct reduction strategy. Including sources of financing and specific milestone tasks to be completed.	<b>November 1, 2025</b>
<b>7</b>	Achieve compliance with final effluent limitations for dichlorobromomethane, chlorodibromomethane, total trihalomethanes, and haloacetic acids as required by this Order.	<b>May 31, 2025 if Task 3.1 is implemented</b> <b>October 1, 2027 if Task 3.2 is implemented</b>

3. In the interim period until the Permittee can achieve full compliance with the 2017 Permit, the Permittee shall operate and maintain, as efficiently as possible, all facilities and systems necessary to comply with all prohibitions, effluent limitations and requirements identified in the 2017 Permit or any future waste discharge requirements issued for the Facility.
4. 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, an extension of the compliance date deadline(s). The extension request shall include justification for the delay and shall be submitted at least thirty (30) days prior to the respective deadline to be considered complete and timely.
5. If the Executive Officer of the Regional Water Board 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 sections 13268, 13350 and 13385. The Regional Water Board reserves the right to take any enforcement actions authorized by law.

Any person aggrieved by this action of the Regional 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., within 30 calendar days of the date of adoption of this Order at the following address, 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:

State Water Resources Control Board  
Office of Chief Counsel  
P.O. Box 100, 1001 I Street  
Sacramento, CA 95812-0100

Or by email at [waterqualitypetitions@waterboards.ca.gov](mailto:waterqualitypetitions@waterboards.ca.gov)

For instructions on how to file a petition for review, see the at [Water Quality Petitions Website](https://www.waterboards.ca.gov/public_notices/petitions/water_quality/wqpetition_instr.shtml)  
([https://www.waterboards.ca.gov/public\\_notices/petitions/water\\_quality/wqpetition\\_instr.shtml](https://www.waterboards.ca.gov/public_notices/petitions/water_quality/wqpetition_instr.shtml))

Ordered by:

Valerie Quinto,  
Executive Officer 2023\_0030\_RioDell\_TSO