



North Coast Regional Water Quality Control Board

California Regional Water Quality Control Board North Coast Region

TIME SCHEDULE ORDER No. R1-2017-0026 TO PROVIDE TIME SCHEDULES TO COMPLY WITH ORDER No. R1-2017-0005

CITY OF FORTUNA WASTEWATER TREATMENT PLANT NPDES No. CA0022730

Humboldt County WDID No. 1B831350HUM

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

- 1. The City of Fortuna (Permittee) is the owner and operator of the Fortuna Wastewater Treatment Plant (Facility), a publicly owned treatment works, which discharges secondary treated wastewater under Waste Discharge Requirements (WDRs) contained in Order No. R1-2017-0005, (Permit), adopted by the Regional Water Board on August 17, 2017. The Permit also serves as the National Pollutant Discharge Elimination System (NPDES) permit (NPDES No. CA0022730). The Permit contains discharge prohibitions, effluent and receiving water limitations, and monitoring and reporting requirements.
- 2. The Facility serves a population of 12,300 residential, commercial, and institutional users in the City of Fortuna and the Rohnerville-Campton Heights area, Humboldt County.
- 3. The Permit recognizes that the percolation ponds (EFF-003) are hydrologically connected to the Eel River and, therefore, discharges of treated wastewater are considered discharges to Waters of the United States and subject to Clean Water Act surface water regulations. Order No. R1-2011-0007 (Previous Permit) considered EFF-003 a discharge to land. This allowed the Facility to discharge May 15 through September 30, during the period when wastewater discharges to Eel River are prohibited pursuant to the Water Quality Control Plan, North Coast Basin (Basin Plan).

DAVID M. NOREN, CHAIR | MATTHIAS ST. JOHN, EXECUTIVE OFFICER

- 4. The Permit allows the direct discharge of fully treated effluent to Strongs Creek, a tributary of the Eel River, from October 1 through May 14 of each year. The Facility is designed to treat an average dry weather flow of 1.5 million gallons per day (mgd), and a peak wet weather flow of 7.0 mgd. When influent flows exceed 3 to 4 mgd, influent is partially diverted to an emergency overflow basin to ensure a constant flow rate. Wastewater in the emergency overflow basin is returned for treatment during low flow periods. Wastewater enters the headworks, which provides grit and screenings removal with an automatic bar screen and grit channels. Primary treatment includes three circular primary clarifiers to settle out heavy solids. Secondary treatment includes biological treatment by activated sludge in three aeration basins and two final clarifiers before disinfection by chloramines and dechlorination. Sludge from the primary and final clarifiers is pumped to an anaerobic digester and dewatered by a gravity belt sludge thickener. The sludge is then composted onsite into Class A biosolids.
- 5. The Permittee is violating or threatening to violate, the following discharge prohibition in Order Numbers R1-2017-0005 and R1-2011-0004:

III. DISCHARGE PROHIBITIONS

- **I.** The discharge of waste to the Eel River and its tributaries are prohibited during the period from May 15 through September 30 of each year.
- 6. The Permittee is violating or threatening to violate, the following provisions of the Basin Plan:

4. IMPLEMENTATION PLANS -POINT SOURCE MEASURES

Under this authority and in order to achieve water quality objectives, protect present and future beneficial uses, protect public health, and prevent nuisance, the Regional Water Board declares that point source waste discharges are prohibited in the following locations:

North Coastal Basin. The Mad and the Eel rivers and their tributaries during the period May 15 through September 30 *(Seasonal Discharge Prohibition)* 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.

7. California Water Code section 13300 states:

"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."

- 8. 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.
- 9. 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.
- 10. Order No. R1-2007-0007 was adopted on September 13, 2007, and became effective on November 1, 2007. The 2007 Order established a special study to determine whether the percolation ponds (EFF-003) are hydrologically connected to the Eel River and discharges of treated wastewater to the percolation ponds were discharged to waters of the United States. The Permittee was required to submit a workplan for a hydrogeologic study to determine the fate and transport of wastewater discharged to EFF-003 by February 1, 2008, and the Permittee complied with this requirement.

The Permittee was also required to submit a report of findings and conclusions of the hydrogeologic study by February 1, 2011. If the hydrogeologic study demonstrated that the wastewater pollutants discharged to EFF-003 reach the Eel River, the Permittee was required to submit a written proposal for Executive Officer approval to study alternatives to comply with the Seasonal Discharge Prohibition. The Permittee did not comply with this requirement as no report of findings or written proposal was submitted.

11. On November 9, 2010, the Permittee submitted a letter to the North Coast Regional Water Board that included a request for a Cease and Desist Order. The letter included a section with the following statement:

"In order to meet the seasonal discharge prohibition, <u>the City hereby commits to</u> <u>modify disposal methods</u> in order to ensure compliance with the Basin Plan seasonal discharge prohibitions. The commitment will result in a feasibility study and implementation of an alternative discharge point for the City's treated wastewater effluent during the seasonal prohibition of discharge to surface waters within the Basin."

The Permittee submitted a Compliance Schedule Update as an Exhibit A of the letter. The Permittee proposed a date of October 1, 2012, to complete construction of the effluent discharge point modification project with the goal to attain full compliance with Order No. R1-2007-0007, but did not meet it.

12. On September 1, 2011, the Permittee submitted a letter to the Regional Water Board that included a "Compliance Schedule Update for a Potential Section 13267 Order." The letter included a section with the following statement:

"In order to meet the seasonal discharge restrictions, <u>the City hereby commits to</u> <u>modify existing disposal methods</u> in order to ensure compliance with the Basin Plan seasonal discharge prohibitions. This commitment will result in a technical report and implementation of a modified or alternative discharge point for the City's treated wastewater effluent during the seasonal prohibition (summertime) of discharge to surface waters within the Basin. The full compliance schedule is presented in Exhibit A."

This letter also contained an Exhibit A that included the City's written proposal to study disposal alternatives to comply with the Seasonal Discharge Prohibition. The proposal included milestones and a time schedule for selection and implementation of an alternative disposal method. The Permittee proposed a date of June 30, 2020, to "secure necessary land and rights of way to accommodate the new summertime disposal system."

13. In August of 2016, the Permittee submitted Technical Memoranda evaluating wastewater treatment, disposal, and reuse alternatives to address compliance with Basin Plan prohibitions and effluent limitations. These Memoranda include analysis of design flows and loading to the Facility, disposal alternatives, treatment alternatives, cost estimates, capacity assessment and existing Facility hydraulics.

The Technical Memoranda recommends a detailed evaluation, including feasibility studies, site location, ground water monitoring and modelling, and to begin the process to evaluate permitting feasibility to implement the disposal alternatives. In February 2017, the State Water Board Division of Financial Assistance executed a

financing agreement to award the Permittee a \$500,000 planning grant to assess wastewater effluent disposal alternatives and conduct preliminary design of the preferred/recommended disposal alternative.

14. Under Regional Water Board Resolution No. R1-2015-0012 *Adoption of the 2014 Triennial Review of the Water Quality Control Plan for the North Coast Region, Proposed Basin Planning Project Priorities*, a Basin Plan amendment for the development of criteria for an exemption from the seasonal discharge prohibition on the Eel River is being considered. If the Preferred Discharge Alternative includes surface water discharge from May 15 through September 30, the City will coordinate with the Regional Water Board to determine if it is feasible to pursue this alternative given the status of the Basin Plan amendment or if the City should pursue a land discharge alternative.

IT IS HEREBY ORDERED, pursuant to California Water Code section 13300, 13267 and 13383, the Permittee shall comply with the following schedule of actions to correct or prevent violations of Order No. R1-2017-0026:

Task	Task Description	Compliance Date
1	The Permittee shall evaluate the water quality impacts of the effluent discharge on Strongs Creek and the Eel River. Task 1 consists of the following subtasks:	June 30, 2018
	 a. Prepare and submit, for Regional Water Board Executive Officer review and approval, a water quality monitoring plan and schedule of implementation to evaluate effluent impacts on surface water; 	May 30, 2017
	 Conduct water quality monitoring during both low and high flow stream conditions per the approved monitoring plan and schedule; 	
	 Develop a surface water model to evaluate changes in water quality due to input of treated wastewater into Strongs Creek and the Eel River; 	
	 d. Prepare and submit a final surface water disposal evaluation report and submit to the Regional Water Board for review and approval by the Executive Officer. 	
2	The Permittee shall evaluate site-specific disposal alternatives for land application of effluent discharge during the period May 15 to September 30. Task 2 consists of the following subtasks:	March 31, 2019
	 a. Conduct landowner outreach to identify potential parcels for land disposal of effluent; 	
	 Prepare and submit, for Regional Water Board Executive Officer review and approval, a groundwater monitoring plan 	

and schedule of implementation to evaluate effluent impacts on groundwater;	
c. Obtain necessary permits and approvals for conducting soils and groundwater testing;	
d. Conduct soils and groundwater sampling during winter and summer periods; and	
e. Prepare a final disposal site evaluation report and submit to the Regional Water Board for review and approval by the Executive Officer. The report shall include, at a minimum, the results of test pits, soil logs, drilling, sampling, well installation, well development, wellhead survey and laboratory analytical results.	
The Permittee shall prepare and submit, for Regional Water Board Executive Officer review and approval, a Technical Report identifying the Preferred Disposal Alternative for the proper disposal of treated effluent from May 15 through September 30. The technical report shall:	September 30, 2019
 Assess potential disposal alternatives (either via surface water and/or via land application); 	
b. Identify a preferred alternative;	
c. Include project design plans for the preferred alternative;	
d. Include a cost estimate for the preferred alternative; and	
e. Include a work plan that lays out the steps and proposed schedule to implement the preferred alternative.	
The Permittee shall submit a preliminary Report of Waste Discharge (ROWD) based upon the identified Preferred Disposal Alternative. The preliminary ROWD shall include: a. Proposed discharge location(s);	December 31, 2019
b. Evaluation of preferred alternative(s)' ability to comply with the seasonal discharge prohibition; andc. Anti-degradation analysis for any new proposed discharge location.	
The Permittee shall submit documentation that the California Environmental Quality Act (CEQA) process for the Preferred Alternative identified in Task 3 is complete.	June 30, 2020
The Permittee shall secure funding for the Preferred Alternative and provide the Regional Water Board with documentation regarding the funding source(s).	June 30, 2021
The Permittee shall submit documentation that the land necessary for the Preferred Alternative has been acquired, rights of way have been secured, or a long-term lease is secured.	December 31, 2021
	on groundwater; c. Obtain necessary permits and approvals for conducting soils and groundwater testing; d. Conduct soils and groundwater sampling during winter and summer periods; and e. Prepare a final disposal site evaluation report and submit to the Regional Water Board for review and approval by the Executive Officer. The report shall include, at a minimum, the results of test pits, soil logs, drilling, sampling, well installation, well development, wellhead survey and laboratory analytical results. The Permittee shall prepare and submit, for Regional Water Board Executive Officer review and approval, a Technical Report identifying the Preferred Disposal Alternative for the proper disposal of treated effluent from May 15 through September 30. The technical report shall: a. Assess potential disposal alternatives (either via surface water and/or via land application); b. Identify a preferred alternative; c. Include project design plans for the preferred alternative; d. Include a cost estimate for the preferred alternative; and e. Include a work plan that lays out the steps and proposed schedule to implement the preferred alternative. The Permittee shall submit a preliminary Report of Waste Discharge (ROWD) based upon the identified Preferred Disposal Alternative. The preliminary ROWD shall include: a. Proposed discharge location(s); b. Evaluation of preferred alternative(s)' ability to comply with the seasonal discharge prohibition; and c. Anti-degradation analysis for any new proposed discharge location. The Permittee shall submit documentation that the California Environmental Quality Act (CEQA) process for the Preferred Alternative and provide the Regional Water Board with documentation regarding the funding source(s). The Permittee shall submit documentation that the land necessary for the Preferred Alternative has been acquired, rights of way have

8	The Permittee shall submit a report of completion verifying the	December
	complete design plans and specifications for construction of the	31, 2022
	Preferred Alternative along with a complete ROWD.	
9	The Permittee shall submit a progress report on the status of	December
	construction for the Preferred Disposal Alternative.	31, 2023
10	The Permittee shall complete construction of the Preferred	December
	Alternative and achieve compliance with all Regional Water Board	31, 2024
	waste discharge requirements including Discharge Prohibitions.	

- 1. In the interim period until the Permittee can achieve full compliance with Order No. R1-2017-0005, 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 Order No. R1-2017-0005 or any future waste discharge requirements issued for the Facility.
- 2. 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 time. The extension request shall include justification for the delay and shall be submitted at least thirty days prior to the respective deadline to be considered complete and timely.
- 3. 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.

Ordered by:

Matthias St. John
Executive Officer
August 17, 2017

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