
North Coast Regional Water Quality Control Board

**Response to Written Comments
Draft Waste Discharge Requirements
Order No. R1-2023-0039
National Pollutant Discharge Elimination System (NPDES)
For the
Crescent City
Wastewater Treatment Facility
Regional Water Quality Control Board, North Coast Region
December 12, 2023**

Comments Received

The deadline for submittal of public comments regarding draft Waste Discharge Requirements for Order No. R1-2023-0039, National Pollutant Discharge Elimination System Permit (Draft Permit) for the Crescent City (City or Permittee) Wastewater Treatment Facility (Facility) was August 31, 2023. Upon request from the City, the Regional Water Board extended the public comment period through September 7, 2023. Regional Water Board staff (Staff) only received written comments from the Permittee during the Draft Permit's notification period, including both a letter from the City of Crescent City and an email from Jacobs Engineering Group (Operator), the contracted Facility operator.

Regional Water Board staff notified the Permittee on November 20, 2023, of the proposed changes to the Draft Permit made in response to comments received. The Permittee did not identify any significant concerns with the proposed changes identified.

This Response to Comments document includes a summary of the comments received from the Permittee, followed by Regional Water Board staff response to each comment. Additionally, this Response to Comments document includes a summary of staff-initiated changes made to the Permit. Text added to the Proposed Permit is identified by underline and text to be deleted from the Proposed Permit is identified by strike-through in this document. The term "Draft Permit" refers to the version of the permit that was sent out for public comment. The term "Proposed Permit" refers to the version of the permit that has been modified in response to comments received and is being presented to the North Coast Regional Water Quality Control Board (Regional Water Board) for consideration.

A. Crescent City Comment Letter

Comment No. A1: The City identified that the table notes in Table 2 of the Draft Permit were incorrectly referenced.

Response to Comment No. A1: Regional Water Board staff have corrected the table note references as follows:

Table 1. Effluent Limitations¹

Parameter	Units	Average Monthly	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum	Six-Month Median
Biochemical Oxygen Demand 5-day @ 20°C (BOD ₅)	mg/L	30	45	--	--	--	--
Total Suspended Solids	mg/L	30	45	--	--	--	--
pH	standard units	--	--	--	6.0	9.0	--
Oil and Grease	mg/L	25	40	--	--	75	--
Ammonia Nitrogen, Total (as N)	mg/L	--	--	72	--	180	18
Settleable Solids	mL/L	1.0	1.5	--	--	3.0	--
Turbidity	NTU	75	100	--	--	225	--
Copper, Total Recoverable	µg/L	--	300	300	--	840	32

Parameter	Units	Average Monthly	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum	Six-Month Median
Silver, Total Recoverable	µg/L	--	--	79	--	200	16
Endosulfan ⁴²	µg/L	--	--	0.54	--	0.81	0.27
Endrin	µg/L	--	--	0.12	--	0.18	0.060
Total Residual Chlorine ⁵³	µg/L	--	--	240	--	1800	60
DDT ⁶⁴	µg/L	0.0051	--	--	--	--	--
Heptachlor	µg/L	0.0015	--	--	--	--	--
Dieldrin	µg/L	0.0012	--	--	--	--	--

Table Notes

1. See Definitions in Attachment A and Compliance Determination discussion in section 7 of this Order.
2. The sum of the concentrations of endosulfan-alpha, endosulfan-beta, and endosulfan sulfate, as identified in Attachment A of this Order and Appendix I of the Ocean Plan under the Endosulfan definition.
3. See section 7.4412 of this Order regarding compliance with chlorine residual effluent limitations.
4. The sum of the concentrations of 4,4'DDT, 2,4'DDT, 4,4'DDE, 2,4'DDE, 4,4'DDD, and 2,4'DDD.

Comment No. A2: The City requests that the total coliform effluent limitation in section 4.1.1.3.2.2 of the Draft Permit be changed to match the source regulation in the Water Quality Control Plan for Ocean Waters of California (Ocean Plan). Specifically, the proposed Order includes the effluent limitation indicating that no sample shall exceed 230 MPN per 100 mL. The Ocean Plan requires that not more than 10 percent of the samples shall exceed 230 MPN per 100 mL. Additionally, the City requests that Table Note No. 3 within Table E-3, as applied to fecal coliform monitoring also be applied to total coliform monitoring.

Response to Comment No. A2: Regional Water Board staff (Staff) agrees that the total coliform effluent limitation is not consistent with the Ocean Plan language for total coliform bacteria standard for the protection of shellfish harvesting.

Section II.B.2.a.(1) of the Ocean Plan includes the following total coliform water quality objectives for the protection of shellfish harvesting, “The median total coliform density shall not exceed 70 per 100 mL, and not more than 10 percent of the samples shall exceed 230 per 100 mL.”

Section 4.1.1.3.2.1 of the Draft Permit states, “The median value of total coliform bacteria shall not exceed an MPN of 70 per 100 mL in a calendar month.” Section 4.1.1.3.2.2 of the Draft Permit states that, “No sample shall exceed an MPN of 230 per 100 mL.” The existing total coliform effluent limit in the Draft Permit is incorrect and has been updated consistent with the Ocean Plan shellfish harvesting standards, which correction is consistent with antidegradation requirements. (CWA, section 303(d)(4)(B)).

Section 4.1.1.3.2.2 of the Proposed Permit has been modified as follows:

“Not more than 10 percent of the samples collected in a calendar month shall exceed an MPN of 230 per 100 mL.”

Additionally, section 4.3.3.3.1.2 of the Fact Sheet (Shellfish Standards (Total Coliform Bacteria)) has been modified as follows: “The median concentrations of total coliform bacteria shall not exceed an MPN of 70 organisms per 100 mL in a calendar month; and not more than 10 percent of samples shall exceed an MPN of 230 organisms per 100 mL.” Section 4.3.3.3.1.3.2.2 of the Fact Sheet (Total Coliform) has also been modified as follows: “Not more than 10 percent of the samples shall exceed an MPN of 230/100 mL.”

Furthermore, Table Note 3 from Table E-3 of the Proposed Permit’s Monitoring and Reporting Program has been applied to Total Coliform.

Comment No. A3: The City requests that the Fact Sheet be updated to include the rationale for the retained Fecal Coliform Effluent Limitations under sections 4.1.1.3.3.2

and 4.1.1.3.3.3 of the Proposed Permit. The City further questions the necessity of these requirements as the new total coliform requirements are considered as stringent or more stringent. The City identifies that these limitations were retained to prevent backsliding, but that the National Shellfish Sanitation Program (NSSP), that the retained effluent limitations were based on, states that the control authority only need to utilize one or the other (total coliform or fecal coliform) water quality criteria, and that the EPA allows for relaxation of water quality based effluent limitations based on state standards.

Response to Comment No. A3: Regional Board staff agrees that retention of fecal coliform effluent limitations for protection of shellfish is unnecessary given inclusion of total coliform effluent limitations. The National Shellfish Sanitation Program (NSSP) is the federal/state cooperative program recognized by the U.S. Food and Drug Administration (FDA) and the Interstate Shellfish Sanitation Conference (ISSC) for the sanitary control of shellfish produced and sold for human consumption. The NSSP [Guide for the Control of Molluscan Shellfish](#) allows for the use of either fecal coliform or total coliform in protecting shellfish harvesting areas.

The Draft effluent limitations for the protection of shellfish harvesting are included in sections 4.1.1.3.3.2, 4.1.1.3.3.3 and 4.1.1.3.3.4. Section 4.1.1.3.3.1 includes fecal coliform effluent limitations for the protection of the REC-1 beneficial use. The fecal coliform effluent limitations in the Draft Permit are shown below.

4.1.1.3.3. Fecal Coliform

4.1.1.3.3.1. The 30-day geometric mean of fecal coliform density not to exceed 200 per 100 mL;

4.1.1.3.3.2. The median value of fecal coliform bacteria shall not exceed a Most Probable Number (MPN) of 14 per 100 milliliters (mL) in a calendar month;

4.1.1.3.3.3. No more than 10% of samples collected in a calendar month shall exceed an MPN of 43 per 100 mL; and

4.1.1.3.3.4. No single sample shall exceed an MPN of 400 per 100 mL.

The existing fecal coliform effluent limitations for the protection of shellfish harvesting is unnecessary under the NSSP, which allows for the choice between total coliform or fecal coliform effluent limitations, and the Ocean Plan which contains total coliform water quality objectives for the protection of shellfish harvesting. Total coliform effluent limitations included within the Proposed Permit provide equivalent protection to historical fecal coliform effluent limitations. To the extent removal of historical fecal coliform effluent limitations constitutes backsliding notwithstanding this equivalent protection, removal of this limitation is consistent with federal and state antidegradation requirements. (CWA, section 303(d)(4)(B)).

Therefore, sections 4.1.1.3.3.2, 4.1.1.3.3.3 and 4.1.1.3.3.4 have been removed from the Proposed Permit. Fecal coliform effluent limitations for the protection of the REC-1 beneficial use have been retained.

Additionally, section 4.3.3.3.1.3.1 of the Fact Sheet (Fecal Coliform) has been removed from the Proposed Permit.

Finally, section 4.4.1. of the Fact Sheet (Anti-Backsliding Requirements) has been updated to include the following:

“Order No. R1-2017-0002 also retained final effluent limitations for fecal coliform for the protection of shellfish harvesting. The National Shellfish Sanitation Program (NSSP) is the federal/state cooperative program recognized by the U.S. Food and Drug Administration (FDA) and the Interstate Shellfish Sanitation Conference (ISSC) for the sanitary control of shellfish produced and sold for human consumption. The NSSP [Guide for the Control of Molluscan Shellfish](#) allows for the use of either fecal coliform or total coliform in protecting shellfish harvesting areas. Additionally, the Ocean Plan contains total coliform water quality objectives for the protection of shellfish harvesting. These total coliform water quality objectives have been established as effluent limitations in this Order in place of the historical fecal coliform effluent limitations. The Pacific Ocean, in the vicinity of the discharge, is not listed as an impaired waterbody on the 303(d) list. As discussed in Fact Sheet section 4.4.2 below, removal of historical fecal coliform effluent limitations and inclusion of total coliform effluent limitations complies with federal and state antidegradation requirements. Thus, removal of these effluent limitations meets the exception in CWA section 303(d)(4)(B).”

Comment No. A4: The City requests that the Effluent Discharge Evaluation requirement (section 6.3.1.5 of the Draft Permit) be removed as it believes there is no technical basis to believe the existing minimum initial dilution ratio would have changed. The City further identifies that the volume of wastewater received at the Facility has remained constant and that this study would place an undue financial burden on an already economically disadvantaged community.

Response to Comment No. A4: Staff agrees that the Permittee is not required to conduct an Effluent Discharge Evaluation during the term of the Proposed Permit. The minimum initial dilution was originally determined by a dye study in 1982. An additional mixing zone model was performed in 2004 and reduced the dilution ratio from 50:1 to 29:1. The 2004 mixing zone model has been determined to be adequate for the Proposed Permit. Section 6.3.1.5 of the Proposed Permit has been removed.

Comment No. A5: The City requests that the monthly monitoring requirements for dieldrin, endosulfan, DDT, heptachlor, and silver be reduced. It further asks that if the monitoring frequency must be monthly, that the Board allow for a reduced monitoring frequency for the first year of monitoring so that the City may allow for the additional laboratory expenses in future budgets.

Response to Comment No. A5: Staff understands that the City requires a new budget to accommodate the additional monitoring requirements for dieldrin, endosulfan, DDT, heptachlor, and silver. Appendix III of the Ocean Plan includes monitoring frequency requirements for Table 3 pollutants and states that monitoring for chemical constituents for point sources, at facilities that discharge less than 10 MGD, the monitoring frequency shall be at least once complete scan of the Table 3 pollutants annually.

Table E-3 of the Draft Permit includes annual monitoring requirements for Ocean Plan Table 3 pollutants. As stated in Comment A5, the Draft Permit includes monthly monitoring requirements for dieldrin, endosulfan, DDT, heptachlor, and silver. Per the Permittee's request and in compliance with Ocean Plan monitoring requirements, the Proposed Permit has been updated to specify quarterly monitoring requirements for dieldrin, endosulfan, DDT, heptachlor, and silver as follows:

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method ¹
Silver, Total Recoverable	µg/L	24-hour composite	Monthly <u>Quarterly</u> ⁵	Standard Methods
Endosulfans ⁷	µg/L	Grab	Monthly <u>Quarterly</u> ⁵	Standard Methods
DDT ⁸	µg/L	Grab	Monthly <u>Quarterly</u> ⁵	Standard Methods
Heptachlor	µg/L	Grab	Monthly <u>Quarterly</u> ⁵	Standard Methods
Dieldrin	µg/L	Grab	Monthly <u>Quarterly</u> ⁵	Standard Methods

Furthermore, Table Note 5 of Table E-3 of the Draft Permit has been modified as follows:

Accelerated Monitoring (monthly, quarterly, and annual monitoring frequency). If a test result exceeds an effluent limitation the Permittee shall take two more samples, one within 7 days and one within 14 days following receipt of the initial sample result. During the intervening period, the Permittee shall take steps to identify the cause of the exceedance and take steps needed to return to compliance.

Comment No. A6: The City requests that the Regional Water Board remove or adjust the biosolids monitoring requirements in section 9.6.2. of the Draft Permit's Monitoring and Reporting Program (MRP) as the City's method of disposal does not result in the need to submit a Biosolids Annual Report and this data is not submitted to EPA.

Response to Comment No. A6: Section 9.6.2. of the MRP has been removed from the Proposed Permit to reflect that the City does not facilitate the final application of the biosolids for disposal, but instead disposes its biosolids through a permitted landfill that is itself responsible for overseeing the required monitoring and reporting of the biosolids being applied. Additionally, Section 10.5.4 of the Proposed Permit's Monitoring and Reporting Program, identifying the need for the discharger to submit an annual biosolids report to U.S. EPA has been removed as it is not applicable to the Permittee's current biosolids disposal method.

Comment No. A7: The City identified that section 5.1.1 of the Draft Permit's MRP indicates that whole effluent toxicity monitoring shall be completed semiannually, although Table E-3 of the MRP indicates that it will be conducted Annually. The City requests that section 5.1.1 is updated to indicate annual monitoring.

Response to Comment No. A7:

Section 5.1.1. of the Proposed Permit's MRP has been updated to indicate annual WET monitoring as shown below:

5.1.1. **Test Frequency.** The Permittee shall conduct chronic WET testing ~~semiannually, once during the first quarter and once during the third quarter of each calendar year,~~ in accordance with the schedule established by this MRP while discharging at Discharge Point 001, as summarized in Table E-4 E-3, above.

B. Jacobs Engineering Group E-Mail:

Comment No. B1: The Operator identified that section 4.1.1.1 of the Draft Permit indicated that the effluent limitations were included prior to this section instead of afterwards.

Response to Comment No. B1: Section 4.1.1.1 of the Proposed Permit has been modified as follows:

4.1.1.1. The Permittee shall maintain compliance with the ~~above~~ following effluent limitations at Discharge Point 001, with compliance measured at Monitoring Location EFF-001 as described in the Monitoring and Reporting Program (MRP), Attachment E:

Comment No. B2: The Operator identified that Table 2 of the Draft Permit included a crossed out Average Weekly Effluent Limitation (AWEL) for total recoverable copper that should be removed.

Response to Comment No. B2: The crossed out AWEL for total recoverable copper was inadvertently not removed from the Draft Permit and has been removed from the Proposed Permit.

Comment No. B3: The Operator suggests that the language for section 4.3.4.8 of the Draft Permit include the word “once” to provide clarity in how the UV lamps should be maintained. It indicates that this language as written, “wipe/clean the quartz sleeves at least every 24 hours...” may otherwise be interpreted as requiring the quartz sleeves to be wiped/cleaned continuously.

Response to Comment No. B3 Section 4.3.4.8 of the Proposed Permit has been updated to provide clarification, as follows:

4.3.4.8. Wipe/clean the quartz sleeves at least once every 24 hours following the manufacturer’s procedures to ensure the minimum required UV dose delivery is consistently achieved. Cleaning intervals shall be increased as necessary to ensure compliance with permit requirements such as UV dose and total coliform organism requirements.

Staff Initiated Changes:

The following sections describe changes made to the Draft Permit, initiated by Regional Water Board staff to update and provide clarification to the Proposed Permit. The modified sections are identified by their section numbers as indicated in the Proposed Permit. Regional Water Board staff notified the Permittee on November 20, 2023, of the changes made to the Draft Permit and the Permittee did not have any objections to the proposed changes.

1. The Draft Permit was updated to identify Jacobs Engineering Group as the contracted operator for the Facility. Section 1.1 of the Proposed Permit’s Fact Sheet has been modified as follows:
 - 1.1 The City of Crescent City and Jacobs Engineering Group (hereinafter Permittee) is the owner and operator, respectively, of the Crescent City Wastewater Treatment Facility (hereinafter Facility), a Publicly-Owned Treatment Works (POTW).
2. Sections 6.1.2.2.1, 6.1.2.2.4, and 6.3.2.1.2 of the Proposed Permit have been updated to correctly identify the applicable Monitoring and Reporting Program sections referenced. These sections have been updated as follows:
 - 6.1.2.2.1. Notify Regional Water Board staff within 24 hours of having knowledge of such noncompliance. Spill notification and reporting shall be conducted in

accordance with Section 5.5 of Attachment D and ~~40.5~~ 10.6 of the Monitoring and Reporting Program (Attachment E).

6.1.2.2.4. Report the results of such investigations and corrective actions implemented in the monthly self-monitoring report (SMR) as required by MRP section ~~40.2.7.2.5~~ 10.3.6.2.5 and ~~40.2.7.2.6~~ 10.3.6.2.6.

6.3.2.1.2. The concentration of the pollutant is reported as non-detect (ND) and the effluent limitation is less than the MDL, using definitions described in Attachment A and reporting protocols described in MRP section ~~40.2.4~~ 10.3.5.

3. A definition for Instream Waste Concentration has been added to Attachment A, Definitions, of the Proposed Permit, as follows:

INSTREAM WASTE CONCENTRATION (IWC)

The concentration of a toxicant or effluent in the receiving water after mixing (the inverse of the dilution factor).

4. Section 1.7.3.3 of the Proposed Permit's Standard Provisions has been updated to correctly identify the applicable reference section. This section has been updated as follows:

1.7.3.3. The Permittee submitted notice to the Regional Water Board as required under Standard Provisions – Permit Compliance ~~4.7.5~~ 1.7.6 below. (40 C.F.R. § 122.41(m)(4)(i)(C).)

5. Section 8.1.2 of the Proposed Permit's Monitoring and Reporting Program has been updated to clarify how the geometric mean and 6-week rolling geometric mean will be applied to receiving water limitations. This section has been updated as follows:

8.1.2. The geometric mean for fecal coliform density shall be calculated using the five most recent sample results for comparison with the 30-day geometric mean receiving water limitation in section 5.1.1.1.1.1 of this Order. The 6-week rolling geometric mean for enterococci shall be calculated weekly for comparison with the 30-day geometric mean receiving water limitation in section 5.1.1.1.1.2 of this Order.

6. Section 8.1.3 of the Proposed Permit's Monitoring and Reporting Program has been updated to clarify what single sample results will result in the need of repeat sampling. This section has been updated as follows:

- 8.1.3. If a single sample exceeds any of the single sample maximum receiving water limitations in sections 5.1.1.1.1-4 and 5.1.1.1.2 of this Order, the Permittee shall conduct repeat sampling at that location to determine the extent and persistence of the exceedance. Repeat sampling shall be conducted within 24 hours of receiving analytical results and continued every 24 hours until the sample result is less than the single sample maximum receiving water limitation or until a sanitary survey is conducted to determine the source of the high bacterial densities.
7. Section 4.4.2 of the Proposed Permit's Fact Sheet has been updated to remove an incorrect reference. The third paragraph of Section 4.4.2 of the Proposed Permit's Fact Sheet has been updated as follows:

~~As discussed in this section and the fourth paragraph of Fact Sheet section 4.4.1, above, this~~ This Order is consistent with applicable federal and state antidegradation policies, as it does not authorize the discharge of increased concentrations of pollutants or increased volumes of treated wastewater beyond that which was permitted to discharge in accordance with Order No. R1-2017-0002.