Response to Written Comments
Draft Waste Discharge Requirements
Order No. R1-2023-0016
National Pollutant Discharge Elimination System (NPDES)
For the
City of Eureka
Elk River Wastewater Treatment Plant
Regional Water Quality Control Board, North Coast Region
October 5, 2023

Comments Received

The deadline for submittal of public comments regarding draft Waste Discharge Requirements for Order No. R1-2023-0016, National Pollutant Discharge Elimination System Permit (Draft Permit) for the City of Eureka (City or Permittee) Elk River Wastewater Treatment Plant (Facility) was April 24, 2023. Upon request from the Humboldt Community Services District, the Regional Water Board extended the public comment period through May 16, 2023. Regional Water Board staff (Staff) received written comments from the Permittee, the Humboldt Community Services District, the Humboldt Baykeeper, and the Ecological Rights Foundation regarding the Draft Permit's notification period. Additionally, a late comment letter was received by the California Department of Public Health on May 30, 2023.

Regional Water Board staff met virtually with the Permittee on August 25, 2023 to discuss the Draft Permit and proposed changes made in response to comments received. The Permittee did not identify any significant concerns with the proposed changes discussed during this meeting.

This Response to Comments document includes the comments received from each of these commenters, 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. City of Eureka Comments

Comment No. A1: The City requests that the new permit provide a requirement for timely Regional Water Board action and regulatory certainty. Specifically, The City is requesting that the Regional Water Board provide a timely hearing and discontinue its practice of continually extending its own deadlines. The City further requests that the permit include a formal process and timeline for review and approval of interim documents, including a specified time span for Regional Water Board final action on them. Specifically, the City requests that the Regional Water Board comment on or approve submitted documents within 60 days of their submittal, and that the permit contain a specific "deemed approved" provision that provides that the City's submittal is approved if not acted on within the 60-day period. the City further requests that key interim deliverables, as determined by the City, receive consideration and evaluation by the Regional Board itself, not staff, or that the permit specifically delegate approval authority to the Executive Officers, with a right of appeal to the Regional Board.

Response to Comment No. A1: Regional Water Board staff recognize the City's concerns and will strive to promptly review and respond to all documents submitted for Executive Officer approval during the term of the Proposed Permit. Staff believe that allowing interim documents to be approved through inaction is a poor implementation policy and should be avoided. The City may at its discretion, when it believes that the approval period for a required submittal may soon lapse without a response, provide communication to the Regional Water Board's Executive Officer or staff to express the project's urgency. Staff further believe that submitting interim deliverables directed to the Regional Water Board itself is unnecessary and could lead to delays in approval. The Regional Water Board is a state body subject to open meeting requirements. A collective decision of the Regional Water Board may only be made at a properly noticed public meeting. Such meetings typically occur bi-monthly. Staff's actions are made on behalf of the Regional Water Board. The City may exercise the right to request reconsideration of any decision made by the Executive Officer or delegated staff to the Regional Water Board itself.

No changes were made to the Proposed Permit in response to this comment.

Comment No. A2: The City also requests the addition of explicit clarifying language regarding the City's compliance with Discharge Prohibitions 3.1 and 3.5. Both of these provisions must be expressly linked to the compliance schedules in Section 6.3.6 of the Order. Therefore, each Prohibition should be modified by adding the following clause to the end of each existing sentence: ", *as provided in this Order*." In addition, the following new sentence should also be added to the end of each Prohibition:

"*Compliance with this prohibition shall occur through performing the actions required in the compliance schedules contained in 6.3.6 of this Order.*"

Response to Comment No. A2: Regional Water Board Staff recognize the City's concern regarding the connection between Discharge Prohibitions 3.1 and 3.5 and the compliance schedules included in section 6.3.6 of the Order. Staff have added footnotes 1 and 2 to Discharge Prohibitions 3.1 and 3.5, respectively, to identify that the compliance schedules contained in section 6.3.6 of the Order should be considered when determining compliance with these requirements, as shown below:

[1] See section 6.3.6.3, Compliance with Discharge Prohibition 3.1.

[2] See section 6.3.6.2, Compliance with Discharge Prohibition 3.5.

Additionally, staff have updated sections 6.3.6.2 and 6.3.6.3 to provide additional clarity on how compliance with the discharge prohibitions is to be determined, as indicated below:

6.3.6.2. **Compliance with Discharge Prohibition 3.5**

Compliance with Discharge Prohibition 3.5, related to the bypass of secondary treatment due to high influent flows that exceed the trickling filter capacity, will be determined though the following compliance schedule.

Excessive infiltration and inflow (I&I) to the collection system has historically contributed to exceedances of the Facility's hydraulic capacity, resulting in the Facility bypassing secondary treatment when influent flows exceed the trickling filter capacity, and blending primary treated effluent with secondary treated effluent in the storage pond. This practice is prohibited in the current permit~~, so~~ and was previously addressed using Cease and Desist Order (CDO) No. R1-2016-0012 (revised on June 18, 2020 by Modification Order No. R1-2020-0020) ~~includes~~, and included requirements to evaluate the collection system and identify and address deficiencies to reduce I&I. Accordingly, the Permittee has developed a Wet Weather Improvement Plan to reduce unnecessary flows to the Facility, and has begun implementing the plan by repairing older, leaking manholes, mains, and laterals and has removing abandoned laterals and manholes to prevent future I&I entering the system from these areas. CDO No. R1-2016-0012 as revised, is proposed for recission concurrent with the adoption of this Order. To maintain and document compliance with the remaining tasks set forth in ~~(CDO) No. R1-2016-0012, as revised~~ the CDO, these tasks from the CDO have been incorporated into the NPDES Permit. Consequently, the Permittee shall comply with the following schedule of compliance:

6.3.6.3. **Compliance with Discharge Prohibition 3.1**

Compliance with Discharge Prohibition 3.1, related to the discharge of secondary treated municipal wastewater to Humboldt Bay, will be determined though the following compliance schedule.

Discharge Prohibition 3.1 is based on the following language contained in the State Water Board's Water Quality Control Policy for Enclosed Bays and Estuaries: "New discharges of municipal wastewaters and industrial process waters (exclusive of cooling water discharges) to enclosed bays and estuaries, other than the San Francisco Bay-Delta system, which are not consistently treated and discharged in a manner that would enhance the quality of receiving waters above that which would occur in the absence of the discharge, shall be prohibited." To comply with this Discharge Prohibition, the Permittee shall comply with the following schedule of compliance:

Comment No. A3: The City agrees with the continuation of Discharge Prohibition 3.7 from the current permit but requests a clarification to avoid regulatory uncertainty. As recognized in Attachment F at page F-5 of the Draft Permit, the Facility includes an Overflow Marsh that is a component of the Facility. During periods of high flows, excess treated wastewater from the holding pond can be directed to the Overflow Marsh. To avoid ambiguity, the City believes that it would be appropriate to add the following new sentence to the end of Discharge Prohibition 3.7: "*This prohibition does not apply to transfers to and from the Overflow Marsh at the Facility, as described in Section 2.1.2 of the Fact Sheet*."

Response to Comment No. A3: Staff agree that discharges to the Overflow Marsh, a component of the Facility, should be excluded from Discharge Prohibition 3.7. The Proposed Permit has been modified as follows:

3.7. The discharge of waste from the Facility to the Elk River and its tributaries, and to seasonal and tidal marshes adjacent to the Facility is prohibited. This prohibition does not apply to transfers to and from the Overflow Marsh at the Facility, as described in Section 2.1.2 of the Fact Sheet.

Comment No. A4: Section 5 of the proposed permit addresses receiving water limitations. The City agrees that it is not in violation of receiving water limitations simply because there are exceedances of Basin Plan objectives in the receiving water. Exceedances of water quality objectives could result from a wide variety of sources and events unrelated to the City's discharge. For regulatory clarity, therefore, the City requests that the Regional Board strike the word "*necessarily*" in the second sentence of Section 5.1.

Response to Comment No. A4: Staff agree that exceedances of water quality objectives could result from a wide variety of sources and events unrelated to the City's discharge. The Basin Plan's water quality objectives (WQOs) are added to NPDES permits as "Receiving Water Limitations" to make the Basin Plan's objectives enforceable in the event that the regulated waste discharge is causing exceedances of WQOs. As stated in the introductory paragraph of Section 5, the Regional Water Board will not assume that the Discharger is solely responsible for noncompliance with WQOs in the receiving water and may conduct an investigation to determine the cause of the exceedance and the responsible party or parties. Consequently, the word "*necessarily*" must remain present in section 5.1. However, Staff have modified section 5.1 to offer more clarity as follows:

5.1. Surface Water Limitations

Receiving water limitations are based on water quality objectives contained in the Basin Plan and are a required part of this Order. Receiving water conditions not in conformance with the limitations are not necessarily a violation of this Order. Monitoring results from locations described in the MRP, Attachment E, may be used by the Regional Water Board to assess compliance with receiving water limitations. ~~Compliance with receiving water limitations shall be measured at monitoring locations described in the MRP, Attachment E~~. The Regional Water Board may require an investigation to determine cause and culpability prior to asserting that a violation has occurred.

Comment No. A5: Section 6.3.6.2. of the Draft Permit discusses the City's I&I reduction efforts through its Wet Weather Improvement Plan. The second sentence of this section is ambiguous and refers to the Cease and Desist Order No. R1-2016-0012 as if it were to remain in effect. For regulatory clarity, it may be prudent to delete this sentence. A similar ambiguity exists in the Fact Sheet and page F-5.

Response to Comment No. A5: Regional Water Board staff recognize the City's concerns for maintaining clarity regarding the CDO and have modified Section 6.3.6.2 of the Order as shown in Response to Comment No. A2 above. Furthermore, the second paragraph of Section 2.1.1 of the Fact Sheet has been modified as follows:

Excessive I&I to the collection system has historically contributed to exceedances of the Facility's hydraulic capacity, resulting in the Facility bypassing secondary treatment when influent flows exceed the trickling filter capacity, and blending primary treated effluent with secondary treated effluent in the storage pond. This practice is prohibited in the current permit, ~~so Cease and Desist Order (CDO) R1-2016-0012 as amended by Order No. R1-2020-0021 includes requirements to evaluate the collection system and identify and address deficiencies to reduce I&I.~~ , but is addressed in the compliance schedule included as Section 6.3.6.2 of this Order. ~~Accordingly~~Furthermore,

the Permittee ~~has developed a~~ must continue to implement their Wet Weather Improvement Plan to reduce unnecessary flows to the Facility~~, and has begun implementing the plan by~~ through identified methods, including repairing older, leaking manholes, mains, and laterals and ~~has removed~~ removing abandoned laterals and manholes to prevent future I&I entering the system from these areas.

Comment No. A6: Alpha-Endosulfan is a new addition to the City's permit. The City does not believe that inclusion of this new effluent limitation is warranted. There was one positive sample during the previous permit cycle that was 0.0002 parts per billion (ppb) above the most stringent water quality objective of 0.0087 ppb. The City believes that this result was a false positive considering the extremely low concentrations being measured and the extremely low probability of alpha-Endosulfan (an insecticide) actually being present. The product has not been produced in the United States since 1982. The City requests that this constituent be removed from the permit as a new effluent limitation.

Response to Comment No. A6: Staff have completed additional review of the Facility monitoring data for alpha-endosulfan to determine if the City's request can be considered. Upon review of the monitoring data, it was determined that a second positive sample for alpha-endosulfan was reported in October 2021, outside of the initial reasonable potential analysis's evaluation period. The presence of a second positive sample for alpha-endosulfan supports Staff's determination that this constituent has the reasonable potential to be present in the Facility's discharge at a concentration above the applicable water quality objective.

However, the State Implementation Policy allows for the Regional Water Board to grant dilution credits on a pollutant-by-pollutant basis. Because the most stringent water criteria used to determine reasonable potential for alpha-endosulfan was the Saltwater Aquatic Life Protection, Continuous Concentration (4-day average) of 0.0087 µg/L and the Permittee's discharge is intermittent with an average discharge duration of only five hours, Regional Water Board staff has determined that application of the 31:1 dilution factor calculated in the City's *Technical Memorandum 1, Evaluation of Ammonia Toxicity during Elk River Wastewater Effluent Mixing in Humboldt Bay* in the calculation of the Order's effluent limitation for alpha-endosulfan would remain protective of beneficial uses. This determination is further discussed in Response to Comment A9 below.

Comment No. A7: An Ammonia Impact Ratio (AIR) is now being proposed to determine the City's compliance with an ammonia effluent limitation. The City supports the Regional Board's efforts to craft an ammonia effluent limitation that is reflective of the nature of the City's discharge and consistent with the science. However, the City needs more information to assess the AIR approach and to determine whether it is feasible. Among other issues, it is unclear to the City how the dilution credit that is mentioned in Attachment F, Section 4.3.2.4 (Page F-30) will be used to determine

compliance within the AIR calculation. Maintaining a very clear and achievable ammonia effluent limitation is critical to the City's long-term planning efforts. As the draft permit recognizes, studies submitted to the Regional Board by the City demonstrate sufficient mixing at the diffusers. To the extent the AIR recognizes this reality and incorporates it into the permitting approach, the City is supportive, but the City reserves its rights on this issue until more detail is provided.

Response to Comment No. A7: Regional Water Board staff recognize the City's concerns with the Ammonia Impact Ratio being proposed and have updated Attachment H, the Example Ammonia Impact Ratio (AIR) Calculator work sheet to reflect the use of the allowable dilution credit. Attachment H has been modified as follows:

ATTACHMENT H - EXAMPLE AMMONIA IMPACT RATIO (AIR) CALCULATOR

A	B	C	D	E	F	G	H	I	J
Date of Sample	**Ammonia Value in Effluent (mg/L N)**	**Dilution Ratio + 1 (32)**	**Receiving Water pH**	**Receiving Water Temperature (°C)**	**Receiving Water Salinity (g/kg)**	**MDEL Ammonia Standard as determined from Ammonia Criteria Tables**	**AMEL Ammonia Standard as determined from Ammonia Criteria Tables**	**MDEL Ammonia Impact Ratio (Column B/ (Column G* Column C))**	**AMEL Ammonia Impact Ratio (Column B/ (Column H* Column C))**

An example of a completed Ammonia Impact Ratio Calculator worksheet is included below for reference:

A	B	C	D	E	F	G	H	I	J

Date of Sample	Ammonia Value in Effluent (mg/L N)	Dilution Ratio + 1 (32)	Receiving Water pH	Receiving Water Temperature (°C)	Receiving Water Salinity (g/kg)	MDEL Ammonia Standard as determined from Ammonia Criteria Tables	AMEL Ammonia Standard as determined from Ammonia Criteria Tables	MDEL Ammonia Impact Ratio (Column B/ (Column G* Column C))	AMEL Ammonia Impact Ratio (Column B/ (Column H* Column C))
01/01/24	14	32	7.4	20	30	7.5	3.0	0.06	0.15

Because the resulting MDEL and AMEL Ammonia Impact Ratios are both under 1.0, the example Ammonia Impact Ratio Calculator worksheet shows that the data is in compliance with the Ammonia Impact Ratio effluent limitations.

Comment No. A8: The cyanide limits have been lowered, which is a huge concern to the City. The monthly limit of 0.40 ppb is an unreasonable and unattainable limit, given testing sensitivity thresholds of 1.0 ppb. The Regional Board has told the City in the past to request analysis at the lowest limit obtainable, and make sure the request is noted on the chain-of-custody form. While the City has taken this approach during the last permit term, it came at great expense. The City was sued by EcoRights, which alleged that the City was not testing at a low enough threshold to prove that cyanide limits were being met. By setting limits that are not technologically feasible, the Regional Board is setting up its permittees for failure. Please adjust these limits accordingly.

Response to Comment No. A8: See Response to Comment A9 below:

Comment No. A9: To the extent the Regional Board does not remove or modify the new or modified effluent limitations for ammonia, cyanide, and alpha-endosulfan, the City requests interim effluent limitations for these constituents.

Response to Comment No. A9: The City prepared their submittal titled *Technical Memorandum 1, Evaluation of Ammonia Toxicity during Elk River Wastewater Effluent Mixing in Humboldt Bay* that demonstrates through dilution modeling that a 31:1 dilution factor is appropriate for this Facility's discharge. While this study was performed to specifically address ammonia, the results may be applied at the discretion of the Regional Water Board to all, some, or no priority pollutants. Staff have determined that the 31:1 dilution factor may be applied not only to ammonia, but to cyanide and alpha-Endosulfan. Applying the dilution factor to the calculation of effluent limitations for cyanide and alpha-Endosulfan results in effluent limitations that are greater than the minimum levels for these constituents. The Proposed Order has been modified as follows:

Table 2 of the Proposed Order has been modified as follows:

Table 2. Effluent Limitations[1]

Parameter	Units	Average Monthly	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
Biochemical Oxygen Demand 5-day @ 20°C	mg/L	30	45	60	--	--
Total Suspended Solids	mg/L	30	45	60	--	--
pH	standard units	--	--	--	6.0	8.5
alpha-Endosulfan	µg/L	0.2280 ~~0.0071~~	--	0.4573 ~~0.0143~~	--	--
Ammonia Impact Ratio	mg/L	1.0	--	1.0	--	--
Cyanide, Total (as CN)	µg/L	12.76 ~~0.40~~	--	32.0 ~~1.0~~	--	--
Settleable Solids	mL/L	0.1	--	0.2	--	--
Total Residual Chlorine	µg/L	6.1	--	12	--	--
Turbidity	NTU	75	100	--	--	--

The last paragraph of Section 4.3.4.1. of the Proposed Order's Fact Sheet has been modified as follows:

> For ammonia, alpha-Endosulfan, and cyanide, a dilution credit of 31:1 (D = 31) is applied as discussed in Fact Sheet section 4.3.2.4. For all other constituents, no credit for dilution is allowed, which results in the ECA being equal to the applicable criterion (ECA=C).

Table F-5 within the Proposed Order's Fact Sheet has been modified as follows:

Table F-5. Determination of Long-Term Averages

Pollutant	Units	Acute ECA	Chronic ECA	Acute ECA Multiplier	Chronic ECA Multiplier	Acute LTA	Chronic LTA
Cyanide, Total (as CN)	µg/L	32 ~~1.0~~	32 ~~1.0~~	0.206	0.377	6.61 ~~0.21~~	12.05 ~~0.38~~
alpha-Endosulfan	µg/L	1.088 ~~0.034~~	0.2784 ~~0.0087~~	0.321	0.527	0.349 ~~0.011~~	0.1468 ~~0.0046~~

Table F-6 within the Proposed Order's Fact Sheet has been modified as follows:

Table F-6. Determination of Final WQBELs Based on Aquatic Life Criteria

Pollutant	Units	LTA	MDEL Multiplier	AMEL Multiplier	MDEL	AMEL
Cyanide, Total (as CN)	µg/L	6.61 ~~0.21~~	4.84	1.93	32.0 ~~1.00~~	12.76 ~~0.40~~
alpha-Endosulfan	µg/L	0.1468 ~~0.0046~~	3.11	1.55	0.4573 ~~0.0143~~	0.2280 ~~0.0071~~

The following paragraph has been added to Section 4.3.2.4, Minimum Dilution, of the Proposed Order's Fact Sheet:

> Additionally, the SIP allows for the Regional Water Board to apply dilution credits on a limited and/or pollutant-by-pollutant basis, which may result in a dilution credit for all, some, or no priority pollutants in a discharge. Staff have determined that the application of the 31:1 dilution ratio may be further applied to cyanide as cyanide does not bioaccumulate. Furthermore, the 31:1 dilution rate may also be applied to alpha-Endosulfan as the intermittent discharge performed by the Permittee, during periods of outgoing tide, prevents the presence of alpha-Endosulfan from exceeding the Saltwater Aquatic Life Protection, Continuous Concentration (4-day average) threshold of 0.0087 µg/L.

The first paragraph of Section 4.4.1, Anti-Backsliding Requirements, of the Proposed Order's Fact Sheet has been modified as follows:

> Sections 402(o) and 303(d)(4) of the CWA and federal regulations at 40 C.F.R. section 122.44(l) prohibit backsliding in NPDES permits. These anti-backsliding provisions require effluent limitations in a reissued permit to be as stringent as those in the previous permit, with some exceptions where limitations may be relaxed. The effluent limitations in this Order are at least as stringent as the effluent limitations in the previous Order, with the exception of mass-based

effluent limitations for BOD_5 and TSS and effluent limitations for cyanide, copper and 2,3,7,8-TCDD.

The following paragraph has been added to Section 4.4.1, Anti-Backsliding Requirements, of the Proposed Order's Fact Sheet:

> Order No. R1-2016-0001 included effluent limitations for cyanide at Discharge Point 001 based on the Saltwater Criteria for the protection of aquatic organisms. The Permittee identified that a dilution ratio of 31:1 is appropriate for their discharge within their submittal *Technical Memorandum No. 1 Evaluation of Ammonia Toxicity during Elk River Wastewater Effluent Mixing in Humboldt Bay along with the Humboldt Bay Effluent Modeling for the Elk River Wastewater Treatment Plant* (Technical Memorandum). Regional Water Board staff determined that the dilution ratio may additionally be applied to cyanide and have provided updated effluent limitations based on this consideration. Relaxation of effluent limitations for cyanide in this Order is permissible under CWA section 402(o)(2)(B) because the Technical Memorandum constitutes new information available to the Regional Water Board.

Table F-7 within the Proposed Order's Fact Sheet has been modified as follows:

Table F-7. Summary of Water Quality Based Effluent Limitations

Parameter	Units	Average Monthly	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
pH	standard units	--	--	--	6.0	8.5
Ammonia Total (as N)	mg/L	1.0[1]	--	1.0[1]	--	--
Chlorine, Total Residual	mg/L	6.1	--	12	--	--
Cyanide, Total (as CN)	µg/L	12.76 ~~0.40~~	--	32.0 ~~1.00~~	--	--
alpha-Endosulfan	µg/L	0.2280 ~~0.0071~~	--	0.4573 ~~0.0143~~	--	--
Fecal Coliform Bacteria	MPN/100 mL	14[1]	--	43[2]	--	--
Enterococci Bacteria	cfu/100 mL	110[3]	30[4]	--	--	--

Parameter	Units	Average Monthly	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum

Table Notes

1. The Ammonia Impact Ratio (AIR) is calculated as the ratio of the ammonia concentration in the effluent and the applicable ammonia standard (AMEL and MDEL). Attachment H contains a PDF example of the calculator that will be sent to the Permittee to determine compliance with the AMEL/MDEL AIR. For each of the applicable ammonia standards, Attachment G includes two tables that provide the variable AMEL and MDEL ammonia standards used in calculating the AIR. The AIR is the ammonia effluent limit and must be reported in the self-monitoring reports in addition to ammonia, pH, salinity, and temperature values. Monitoring for ammonia, pH, salinity, and temperature must be conducted concurrently in order for the AIR to be calculated properly. Compliance determination will be based on the receiving water data and ammonia effluent data taken on the same day.
2. The median value of fecal coliform bacteria shall not exceed 14 MPN/100 mL.
3. No samples shall exceed 43 MPN/100 mL a statistical threshold value (STV) of 110 cfu/100 mL shall not be exceeded by more than 10 percent of the samples collected in a calendar month and calculated in a static manner.
4. Shall not exceed 30 cfu/100 mL as a six-week rolling geometric mean, calculated weekly.

Comment No. A10: Section 6.3.1.7 of the draft permit states that: “Current analysis of likely compliance with copper and cyanide based upon a comparison of past treatment performance and effluent limitations contained in section 4 of this Order show that the Permittee can *substantially* comply with the effluent limitations without granting a mixing zone.” (Emphasis added.)

Effluent limitations are fixed numbers with which compliance is required (not substantial compliance). Declaring likely or substantial compliance with cyanide is premature, hypothetical, and legally irrelevant. The City has only recently found a lab that can test at 1.0 ppb, and has had samples that had results above the reporting limits. For this reason, the City requests a 31:1 mixing zone for cyanide as stated in Attachment F, Section 4.3.2.4, using the centerline dilution stated under Scenario E of the 2021 study performed by the City and its consultants.

Response to Comment No. A10: As indicated in Response to Comment A9, a dilution credit of 31:1 has been applied to cyanide as requested by the City. Additionally, Section 6.3.1.7 of the Proposed order has been updated as follows to clarify the status of the dilution credit:

6.3.1.7. **Mixing Zone Study.** Order No. R1-2009-0033 applied a 30:1 zone of initial dilution for the discharge based on Resolution 80-10 which relied

upon a modeling study performed in 1979. The 1979 study demonstrated that discharge at ebb tide conveyed all effluent out of Humboldt Bay and into the Pacific Ocean. A zone of initial dilution was granted based upon design of the outfall diffuser and application of Ocean Plan criteria. Order No. R1-2009-0033 included a requirement for the Permittee to perform an updated effluent discharge study. The new study, Effluent Discharge Study for the Elk River Wastewater Treatment Plant, January 7, 2014, demonstrated that not all of the effluent is conveyed to the Pacific Ocean upon discharge, as previously concluded in the 1979 study (see section 2.3 of the Fact Sheet for details). Since a significant portion of the effluent remains in Humboldt Bay, the discharge of effluent from the Facility must comply with the SIP as opposed to the Ocean Plan. Based upon this new information, a zone of initial dilution consistent with the Ocean Plan was not retained in Order No. R1-2016-0001. ~~Current analysis of likely compliance with copper and cyanide based upon a comparison of past treatment performance and effluent limitations contained in section 4 of this Order show that the Permittee can substantially comply with the effluent limitations without granting a mixing zone.~~ Should the Permittee wish to obtain future authorization for a mixing zone and associated dilution credit for the discharge into Humboldt Bay, a mixing zone study as specified in Section 1.4.2 of the SIP must be conducted. Upon concurrence that a future mixing zone is warranted, the Permittee would be required to submit a workplan for review and approval by the Regional Water Board Executive Officer prior to initiating a mixing zone study. Mixing zone study results would subsequently need to be submitted to the Regional Water Board for Executive Officer consideration. If approved, this Order may be accordingly revised.

On December 4, 2021, the Permittee submitted the “Humboldt Bay Effluent Modeling” study to determine if the Permittee’s discharge arrangement results in a long-term accumulation of effluent within Humboldt Bay, to estimate the increase in ammonia concentrations (relative to background concentrations) in Humboldt Bay as a result of discharge, and to demonstrate that ammonia toxicity is limited to the immediate vicinity of the diffuser to support chemical and near-field modeling.

The scope of the study was to determine a validated 3D hydrodynamic model that simulates the dominant processes important for the transport and mixing of discharged effluent within the receiving waters of Humboldt Bay and to simulate the Elk River WWTP discharge over representative wet and dry season conditions. Furthermore, the study incorporated a conservative numerical tracer within the effluent to assess effluent dispersion and mixing within the bay and the resulting estimated ammonia concentrations.

> The results of the study did not predict any instances of unionized ammonia concentrations reaching potentially toxic levels, indicating sufficient mixing of the effluent occurs and that ammonia toxicity is limited to within 2.5 feet of the diffuser.

Comment No. A11: The source of the Regional Board's legal authority to impose the toxicity provisions needs to be clarified. The toxicity provisions in the proposed permit appear to be based on the State Policy for Water Quality Control: Toxicity Provisions (Toxicity Provisions) and the related Test for Significant Toxicity (TST). The City is unaware of EPA approval of the Toxicity Provisions or formal approval of the TST. In the absence of EPA approval, the City understands that the applicable approach to toxicity is set forth in the State Water Resources Control Board's two precedential orders on the subject. (See State Board Orders Nos. 2003-0012 and 0013.)

Response to Comment No. A11: The United States Environmental Protection Agency approved the new Toxicity Provisions on May 1, 2023. EPA's approval is consistent with the requirements of section 303(c) of the Clean Water Act (CWA) and 40 C.F.R. Part 131.

Comment No. A12: If the Regional Board does not follow the two precedential orders identified above, then the City asks that the Regional Board consider revising the chronic toxicity provisions of the Order in a way that implements the dilution modelling documented in the City's 2021 Study (see Fact Sheet, pages F-30 and F-31.) This Study supports a dilution ratio of 31:1 to reflect the conditions near the point of discharge. Even a small dilution ratio of 5:1 would better reflect the actual conditions regarding the City's discharge and would be a more accurate tool to assess chronic toxicity. Any toxicity requirements in the Order should be reflective of actual conditions experienced at the discharge location and should not be based on hypothetical scenarios not actually present.

Response to Comment No. A12: The Toxicity Provisions allow the Regional Water Board to grant mixing zones and dilution credits for the numeric aquatic toxicity objectives in accordance with Section 1.4.2 of the State Implementation Policy. For Regional Water board staff to grant such an allowance, they must first consider the presence and classification of those pollutants in the discharge, as well as the level of flushing in Humboldt Bay, where pollutants may not be completely removed from the receiving waters. Because aquatic toxicity may result from a multitude of pollutants and Regional Water Board staff do not know which pollutants may cause the toxicity, it cannot effectively be determined if a dilution credit will maintain the protection of beneficial uses without further information. As such, a dilution credit cannot be granted at this time.

However, it should be noted that the Permit contains a reopener provision for mixing zone studies; Section 6.3.1.7 of the Proposed Order. As such, the City may choose to further evaluate receiving waters for assimilative capacity for chronic and/or acute

aquatic toxicity, and provide the necessary work plan and evaluation to support if a dilution credit may be granted for these limitations. No changes have been made to the Proposed Order in response to this comment.

Comment No. A13: Attachment E, Section 5.2.6. lists a quarterly sampling requirement for toxicity testing the contradicts the monthly testing requirement on Table E-3. Please change Table E-3 to quarterly.

Response to Comment No. A13: Per the Toxicity Provisions, non-storm water NPDES dischargers authorized to discharge at a rate equal to or greater than 5.0 MGD, the frequency of routine monitoring shall be at least one chronic aquatic toxicity test every calendar month during which there is expected to be at least 15 days of discharge. Section 5.2.6 of the Monitoring and Reporting Program has been updated as follows:

5.2.6. **Routine Monitoring Requirements.** The Permittee shall conduct at least one chronic aquatic toxicity test each calendar ~~quarter~~ month during which there is expected to be at least 15 days of discharge. Initiation of the routine monitoring test shall be at a time that would allow any required MMEL compliance tests to be initiated within the same calendar month as the routine monitoring test.

The Regional Water Board may in the future approve a reduction in the frequency of the routine monitoring when during the prior five consecutive years the MDEL and MMEL for chronic aquatic toxicity have not been violated, and the toxicity requirements included within the NPDES permit have been followed.

Comment No. A14: Section 5.4.1. discusses the submission of a generic TRE workplan in the future. Please clarify this section.

Response to Comment No. A14: The Draft Order incorrectly identified the date that the City of Eureka submitted their last Generic TRE as September 26, 2023, instead of September 26, 2016. Section 5.4.1 of the Proposed Order's Monitoring and Reporting Program is intended to have the City initiate a review of their existing TRE to determine if updates are necessary with this document. Regional Water Board staff anticipate that this document will require updating to reflect the content of the new Toxicity Provisions.

Section 5.4.1. of the Proposed Order's Monitoring and Reporting Program has been updated as follows:

5.4.1. Generic TRE Work Plan. The Permittee submitted a generic TRE Work Plan to the Regional Water Board on September 26, ~~2023~~ 2016. The Permittee's generic TRE Work Plan shall be reviewed by the Permittee no later than **July 1, 2024** and updated as necessary in order to remain current and applicable to the discharge and requirements of this Order.

Comment No. A15: Section 4.1.1.3.2 of the proposed permit includes new provisions for enterococci testing for both effluent and receiving waters. There are no commercial labs in Humboldt County that perform this testing. It will cost the City upwards of $20,000 to obtain the equipment and certification needed from the Environmental Laboratory Accreditation Program (ELAP) to perform this testing in-house. The City requests an extension on the requirement to test for this constituent to allow for acquisition of the necessary equipment and certification with ELAP. The City believes that it will take at least 24 months to be in a position to comply with this new requirement.

Response to Comment No. A15: Regional Water Board staff acknowledge that complying with Proposed Order's enterococci testing requirements will create a hardship for the Permittee until the City makes arrangements to have their laboratory attain ELAP accreditations for enterococci, or until a local laboratory provides enterococci analysis. The Proposed Order has been modified as follows to delay the enterococci monitoring and reporting requirements until such arrangements can be made.

Table E-3 of the Proposed Order's Monitoring and Reporting Program has been modified as follows:

Table E-3. Effluent Monitoring – Monitoring Location EFF-001

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Effluent Flow[1]	mgd	Meter	Continuous	
Biochemical Oxygen Demand 5-day @ 20°C (BOD_5)	mg/L	24-hr Composite	Weekly[2,3]	Part 136[4]
Total Suspended Solids (TSS)	mg/L	24-hr Composite	Weekly[2,3]	Part 136[4]
Settleable Solids	mL/L	Grab	Daily[5]	Part 136[4]
Turbidity	NTU	Grab	Daily[5]	Part 136[4]
Total Residual Chlorine[4]	ug/L	Meter4	Continuous[6]	Part 136[4]
pH	standard units	Grab	Daily[7]	Part 136[4]
Temperature	°C	Grab	Monthly[7]	Part 136[4]

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Cyanide, Total (as CN)	µg/L	~~24-hr Composite~~ Grab	Monthly[8]	Part 136[4]
alpha-Endosulfan	µg/L	24-hr Composite	Quarterly[8]	Part 136[4]
Fecal Coliform Bacteria	MPN/100 mL	Grab	Twice Weekly	Part 136[4]
Enterococci Bacteria	cfu/100 mL	Grab	Weekly[14]	Part 136[4]
Ammonia Nitrogen, Total (as N)	mg/L	24-hr Composite	Monthly[7,8]	Part 136[4]
Ammonia Impact Ratio[10]	Ratio	Calculate	Monthly[7,8]	Part 136[4]
CTR Priority Pollutants[9]	µg/L	24-hr Composite[10]	Annually[11]	Part 136[4,12]
Acute Toxicity[13]	Pass or Fail, % Effect	24-hr Composite	Quarterly	See Section 5.1 below
Chronic Toxicity[13]	Pass or Fail, % Effect	24-hr Composite	Monthly	See Section 5.2 below

Table Notes

1. Each month, the Permittee shall report the daily average and monthly average flows.
2. Monitoring of BOD_5 and TSS in influent shall coincide with monitoring of these parameters in effluent.
3. Accelerated Monitoring (weekly monitoring frequency). If two consecutive weekly test results exceed an effluent limitation, the Permittee shall take two samples each of the two weeks following receipt of the second sample result. During the intervening period, the Permittee shall take steps to identify the cause of the exceedance and take steps to return to compliance.
4. Pollutants shall be analyzed using the analytical methods described in 40 C.F.R. part 136 or by methods approved by the Regional Water Board or State Water Board, such as with the current edition of *Standard Methods for Examination of Water and Wastewater* (American Public Health Administration).

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
5. Accelerated Monitoring (daily monitoring frequency). If a test result exceeds an effluent limitation, the Permittee shall increase monitoring frequency to a minimum of twice a day for a week to evaluate whether an exceedance is persisting. If two of more samples in a week exceed an effluent limitation, the Permittee shall take steps to identify the cause of the exceedance and take steps needed to return to compliance.				
6. Samples shall be collected at points immediately prior to dechlorination and immediately following dechlorination. All chlorine measurements shall be reported as total residual chlorine. The Permittee shall monitor total residual chlorine in the effluent continuously using a method with a reporting limit as low as technically feasible. Benchtop measurements of effluent chlorine residual shall also be performed at least weekly using equipment capable of achieving a detection limit of 1.2 µg/L as a routine check of daily monitoring results. Should the Permittee determine that existing continuous monitoring equipment is unreliable, the Permittee may request, in writing for a specified time, Executive officer approval to collect hourly grab samples during WWTP operational hours for laboratory analysis. Such an approval would serve as an interim measure until new continuous monitoring could be reasonably installed.				
7. pH and temperature monitoring must coincide with monthly monitoring for ammonia.				
8. Accelerated Monitoring (monthly frequency). If a test result exceeds an effluent limitation the Permittee shall take two more samples, one within 14 days and one within 21 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.				
9. Those pollutants identified by the California Toxics Rule at 40 C.F.R. section 131.38. The Permittee is not required to sample and analyze for asbestos. Hardness shall be monitored concurrently with the priority pollutant sample. Holding times for unpreserved cyanide shall not exceed one hour.				
10. CTR priority pollutant samples shall be collected using 24-hour composite sampling, except for pollutants that are volatile. Samples for volatile pollutants may be collected as a grab sample.				
11. Effluent, and receiving water monitoring for CTR priority pollutants shall be conducted concurrently.				
12. Analytical methods shall achieve the minimum levels (ML) specified in Appendix 4 of the SIP and, in accordance with section 2.4 of the SIP, the Permittee shall report the ML and MDL for each sample result.				
13. Whole effluent chronic and acute aquatic toxicity shall be monitored in accordance with the requirements in section 5 of this MRP.				
14. <u>The Permittee shall began monitoring for enterococci, from an ELAP accredited lab, by December 1, 2025. If the Permittee is unable to obtain the services of an</u>				

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
ELAP accredited lab within the deadline set forth in this Order, the Permittee may request, in writing, that the Regional Water Board Executive Officer grant an extension of the time. The extension request shall include justification for the delay and shall be submitted at least 30 days prior to the deadline to be considered timely.				

Section 7.2.1.6 of the Proposed Order's Fact Sheet has been modified as follows:

7.2.1.6. Effluent monitoring for enterococci bacteria has been established at Monitoring Location EFF-001 in this Order to ensure that the discharge is protective of the water contact recreation beneficial use (REC-1). The monitoring for enterococci has been delayed until the Permittee can attain ELAP accreditation for enterococci testing, no later than December 1, 2025. If the Permittee is unable to obtain the services of an ELAP accredited lab within the deadline set forth in this Order, the Permittee may request, in writing, that the Regional Water Board Executive Officer grant an extension of the time. The extension request shall include justification for the delay and shall be submitted at least 30 days prior to the deadline to be considered timely.

The second paragraph of Section 7.6.1 of the Proposed Order's Fact Sheet has been modified as follows:

> Receiving water monitoring for enterococci bacteria has been established in this Order to assess compliance with bacteria WQOs in the vicinity of the Permittee's outfall. The monitoring for enterococci has been delayed until the Permittee can attain ELAP accreditation for enterococci testing, no later than December 1, 2025.

Comment No. A16: Section 1.5.3. of the Draft Permit's MRP discusses reporting levels and minimum levels. The City reiterates its comment that the proposal of effluent limits for analytes such as cyanide, that are not technologically feasible, puts a level of liability on the permittee that is unacceptable. Please consider limits that are obtainable.

Response to Comment No. A16: As identified in Response to Comment A9, Regional Water Board staff have applied the 31:1 dilution factor to the calculation of final effluent limitations for alpha-Endosulfan and cyanide, resulting in higher effluent limitations for these constituents that are achievable for the Permittee, based on the Facility's past treatment performance. No further changes have been made in response to this comment.

Comment No. A17: Table E-3 of the Draft Permit's MRP requires a composite sample for cyanide. Grab samples are generally recommended for cyanide according to the research the City has performed. Please change the sample type for this analyte.

Response to Comment No. A17: Regional Water Board staff recognize the City's concerns regarding using composite samples for cyanide and concur that grab samples are appropriate for cyanide monitoring. Table E-3 of the Proposed Order's Monitoring and Reporting Program has been modified as shown in Response to Comment A15.

Comment No. A18: Table E-3 of the Draft Permit's MRP applies Footnote 10 is applied to the Ammonia Impact Ratio, which appears to be incorrect. Please remove this reference.

Response to Comment No. A18: The City is correct in that Table Note 10 was misapplied to the Ammonia Impact Ratio in Table E-3. This reference has been removed.

Comment No. A19: Footnote 11, within Table E-3 of the Draft Permit's MRP, discusses the addition of Receiving Water Testing for annual CTR pollutant testing. The City has concerns about the receiving water sampling location RSW-001 (Chevron Dock), as it is a privately-owned dock at a secured facility to which the City lacks unimpeded access. Access can be limited by many factors including safety, ships offloading, and Chevron personnel availability. The weekly Enterococcus sampling from the Chevron dock is infeasible due to access issues, as well as the fact that sterile sampling technique would be nearly impossible due to the dock being 20 feet above the surface of the water. The City would like to find an alternate site for the physical sampling required by the proposed new permit. Therefore, the City requests that within the time period specified in the permit, the City be permitted to propose to the Regional Board potential candidate sampling sites, including a preferred site, for approval by the Executive Officer. The permit should also include a requirement that the City commence sampling in a fixed time period after approval of a viable sampling site by the Executive Officer.

Response to Comment No. A19: Following receipt of the City's comment letter, Regional Water Board staff requested that the City identify alternative receiving water monitoring locations to be evaluated for inclusion in the Proposed NPDES Permit. The City proposed the use of the CeNCOOS Humboldt Shore Station located at the Chevron Dock (Monitoring Location RSW-001) for the automated sensor data for pH, salinity, chlorophyll, temperature, turbidity, and dissolved oxygen. The City then proposed the use of the Samoa Boat Ramp (Proposed Monitoring Location RSW-002) for weekly Enterococcus samples, and the dock at United States Coast Guard Station Humboldt Bay (proposed Monitoring Location RSW-003) for annual receiving water monitoring. Regional Water Board staff are agreeable with the proposed locations.

Table E-1 of the Proposed Order's Monitoring and Reporting Program has been modified as follows:

Table E-1. Monitoring Station Locations

Discharge Point Name	Monitoring Location Name	Monitoring Location Description[1]
--	INF-001	Influent wastewater prior to treatment and following all significant input of waste to the treatment system and consisting of wastewater from both the collection system and septage receiving station.
--	INT-001	Effluent prior to discharge to the Overflow Marsh.
--	INT-002	Wastewater bypassing secondary treatment.
001	EFF-001	Location where representative samples of treated wastewater, to be discharged to Humboldt Bay at Discharge Point 001, can be collected at a point after treatment and before contact with the receiving water. Latitude: 40.77333° Longitude: -124.21250°
--	RSW-001	CeNCOOS Humboldt Shore Station[2].
--	RSW-002	Location where representative samples of receiving water can be collected from the Samoa Boat Ramp. Latitude: 40.771757° Longitude: -124.212297°
--	RSW-003	Location where representative samples of receiving water can be collected from the Coast Guard Station Humboldt Bay dock. Latitude: 40.767065° Longitude: -124.217122°
--	SEP-001	Septage receiving station after complete mixing of septage wastes and prior to INF-001.
--	BIO-001	A representative sample of the sludge or biosolids generated when removed for disposal.

Table Notes

1. The North latitude and West longitude information in Table E-1 are approximate for administrative purposes.
2. The Humboldt Shore Station is located on the Chevron dock and is maintained by Humboldt State University. This station has been active since November 2012 and is the replacement system of the previous water quality station at Dock B. - Additional information related to the Humboldt Shore Station can be accessed at the following website. http://www.cencoos.org/data/shore/humboldt. Should the Permittee choose to do so, they may propose and participate in group monitoring for the receiving water after receiving written approval from the Executive Officer.

Table E-4 of the Proposed Order's Monitoring and Reporting Program has been modified as follows:

Table E-4. Receiving Water Monitoring – Monitoring Location RSW-001

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Chlorophyll	µg/L	Sensor[1]	Monthly[2]	--
Dissolved Oxygen	mg/L	Sensor[1]	Monthly[2]	--
pH	standard units	Sensor[1]	Monthly[2]	--
Salinity	PSS[3]	Sensor[1]	Monthly[2]	--
Temperature	˚C	Sensor[1]	Monthly[2]	--
Turbidity	NTU	Sensor[1]	Monthly[2]	--
~~Enterococci Bacteria~~	~~cfu/100 mL~~	~~Grab~~	~~Weekly~~	~~Part 136[4]~~
~~CTR Priority Pollutants[5]~~	~~µg/L~~	~~24-hr Composite[6]~~	~~Annually~~	~~Part 136[4,7]~~

Table Notes

1. Receiving water monitoring data is collected by sensors, in real-time, through the CeNCOOS program at the Humboldt Bay Shore Station.
2. Each month the Permittee shall report the ~~median~~ mean monthly value for each monitored parameter.
3. Practical Salinity Scale of 1978 (PSS-78)
4. ~~Pollutants shall be analyzed using the analytical methods described in 40 C.F.R. part 136 or by methods approved by the Regional Water Board or State Water Board, such as with the current edition of Standard Methods for Examination of Water and Wastewater (American Public Health Administration).~~
5. ~~Those pollutants identified by the California Toxics Rule at 40 C.F.R. section 131.38. The Permittee is not required to sample and analyze for asbestos. Hardness shall be monitored concurrently with the priority pollutant sample. Holding times for unpreserved cyanide shall not exceed one hour.~~
6. ~~CTR priority pollutant samples shall be collected using 24-hour composite sampling, except for pollutants that are volatile. Samples for volatile pollutants may be collected as a grab sample.~~
7. ~~Analytical methods shall achieve the minimum levels (ML) specified in Appendix 4 of the SIP and, in accordance with section 2.4 of the SIP, the Permittee shall report the ML and MDL for each sample result~~

Sections 8.2 and 8.3 have been added to the Proposed Order's Monitoring and Reporting Program as follows:

8.2 Monitoring Location RSW-002

8.2.1 The Permittee shall monitor Humboldt Bay at the Samoa Boat Ramp, Monitoring Location RSW-002, as follows:

Table E 5. Receiving Water Monitoring – Monitoring Location RSW-002

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Enterococci Bacteria	cfu/100 mL	Grab	Weekly	Part 136[1]

Table Notes

1. Pollutants shall be analyzed using the analytical methods described in 40 C.F.R. part 136 or by methods approved by the Regional Water Board or State Water Board, such as with the current edition of Standard Methods for Examination of Water and Wastewater (American Public Health Administration).

8.3. Monitoring Location RSW-003

8.3.1 The Permittee shall monitor Humboldt Bay at the Coast Guard Station Humboldt Bay dock, Monitoring Location RSW-003, as follows:

Table E-6. Receiving Water Monitoring – Monitoring Location RSW-003

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
pH	Standard units	Grab	Annually[5]	Part 136[1,4]
Hardness	mg/L	Grab	Annually[5]	Part 136[1,4]
CTR Priority Pollutants[2]	µg/L	24-hr Composite[3]	Annually[5]	Part 136[1,4]

Table Notes

1. Pollutants shall be analyzed using the analytical methods described in 40 C.F.R. part 136 or by methods approved by the Regional Water Board or State Water Board, such as with the current edition of Standard Methods for Examination of Water and Wastewater (American Public Health Administration).
2. Those pollutants identified by the California Toxics Rule at 40 C.F.R. section 131.38. The Permittee is not required to sample and analyze for asbestos. Hardness shall be monitored concurrently with the priority pollutant sample. Holding times for unpreserved cyanide shall not exceed one hour.

Parameter	**Units**	**Sample Type**	**Minimum Sampling Frequency**	**Required Analytical Test Method**
3. CTR priority pollutant samples shall be collected using 24-hour composite sampling, except for pollutants that are volatile. Samples for volatile pollutants may be collected as a grab sample. 4. Analytical methods shall achieve the minimum levels (ML) specified in Appendix 4 of the SIP and, in accordance with section 2.4 of the SIP, the Permittee shall report the ML and MDL for each sample result. 5. Hardness, pH, and receiving water CTR priority pollutant monitoring samples shall be collected concurrently with effluent CTR Priority Pollutants samples.				

Section 9.6 of the Proposed Order's Monitoring and Reporting Program has been modified as follows:

9.6. **Visual Monitoring – Monitoring Locations EFF-001 and ~~RSW-001~~ RSW-002**

Visual observations of the discharge (Monitoring Location EFF-001) and the receiving water (Monitoring Location ~~RSW-001~~ RSW-002) shall be recorded monthly and on the first day of each intermittent discharge. Visual monitoring shall include, but not be limited to, observations for floating materials, coloration, objectionable aquatic growths, oil and grease films, and odors. Visual observations shall be recorded and included in the Permittee's quarterly SMRs.

Section 7.6.1 of the Proposed Order's Fact Sheet has been modified as follows:

7.6.1. **Surface Water**

Receiving water monitoring requirements have been retained from Order No. R1-2016-0001 to better characterize the receiving water. Receiving water monitoring is conducted using equipment currently in place at the Chevron dock, accessed from the CeNCOOS website (http://www.cencoos.org/data/shore/humboldt). Additional bay monitoring locations have been identified within this Order at both the Samoa Boat Dock and the United States Coast Guard Station Humboldt Bay dock for new receiving water monitoring requirements ~~will be evaluated at a future date based upon data collected from this monitoring station and other information submitted during the term of this Order.~~ Should they so choose, and after they receive approval from the Executive Officer, the Permittee may propose and participate in group monitoring of the receiving water with other Permittee's discharging to Humboldt Bay.

Comment No. A20: Please amend Table E-3 of the Draft Permit's MRP to provide for quarterly toxicity monitoring.

Response to Comment No. A20: See Response to Comment No. A13. No further changes have been made to the Proposed Order in response to this comment.

Comment No. A21: Table E-4 of the Draft Permit's MRP lists testing requirements for receiving waters RSW-001. As discussed above, this site will be difficult to access and may not be appropriate for weekly bacterial sampling or annual composited samples. The City requests that the permit be amended as described in Comment No. A19 above.

Response to Comment No. A21: The Proposed Order has been revised to address this comment as discussed in Response to Comment No. A19. No further changes were made to the Proposed Order in response to this comment.

Comment No. A22: Table Note 2 of Table E-4 of the Draft Permit's MRP asks for median values from the automated sampling that happens on the Chevron dock at location RSW-001. Due to how the data is presented to the City from this site, median values are not available. Mean data is easily accessible. Please adjust accordingly.

Response to Comment No. A22: Regional Water Board staff have reviewed the CeNCOOS website and agree that mean data is readily available while median data is not. Furthermore, staff feel that the statistical difference between the mean and median values for these data sets is unlikely to be significant, and that because compliance with the Proposed Order's Receiving Water Limitations is discretionary and would require a more detailed review of the data to determine cause or culpability, that the use of mean data values would be allowable. Table E-4 of the Proposed Order has been modified to indicate that the Permittee shall report the mean monthly value for each monitored parameter, as shown in Response to Comment No. A19.

Comment No. A23: Please correct the spelling of macrocystis pyrifera (misspelled as pyrifen) within Section 6.3.1.3.

Response to Comment No. A23: The identified correction has been made.

Comment No. A24: Section 4.3.3.1.2. mentions the protection of freshwater. Please be advised that the discharge location is not located in a freshwater environment.

Response to Comment No. A24: Regional Water Board staff agree that Section 4.3.3.1.2 misidentifies the included requirements as being for the protection of freshwater. The included effluent limitations for enterococci remain correct but are included to protect all waters where the salinity is greater than 1 ppth more than 5 percent of the time. Section 4.3.3.1.2 of the proposed Order's Fact Sheet has been updated as follows:

4.3.3.1.2. **Enterococci Coliform**

On August 7, 2018, the State Water Board adopted Part 3 of the Water Quality Control Plan for Inland Surface Waters, Enclosed Bays, and Estuaries of California – Bacteria Provisions and a Water Quality Standards Variance Policy (Statewide Bacteria Provisions), which establishes water quality objectives for reasonable protection of people that recreate within all surface waters, enclosed bays, and estuaries of the state that have the water contact recreation beneficial use (REC-1). In accordance with the water quality objectives outlined in the Statewide Bacteria Provisions for the protection of ~~freshwaters~~ waters where salinity is greater than 1 ppth more than 5 percent of the time and used for water contact recreation, Order No. R1-2023-0016 establishes the following effluent limitations for enterococci bacteria:

Comment No. A25: Section 10.1.1.3. requires the City to perform a Local Limits study. The City performed a Local Limits study during the current permit cycle that has not been accepted by the Water Board. Please consider accepting the current study and deleting this provision.

Response to Comment No. A25: As required by 40 CFR part 122.44 (j)(2)(ii), a written technical evaluation of the need to revise local limits is required after permit issuance or reissuance. Consequently, a Local Limits Study is required for each new Permit term regardless of the status of the previous study being accepted by the Regional Water Board.

Additionally, the Previous Permit did not require Executive Officer approval for the Local Limits Study. The Permittee submitted their Local Limits Study on June 28, 2018. Staff responded with questions about the Study on March 21, 2019, and was provided a subsequent response from the Permittee on May 1, 2020. Further communication from Staff was sent to the Permittee on March 22, 2021. Staff has determined that the Permittee met the requirements to submit a Local Limits Study during the previous permit term.

Furthermore, Chapter 7 of the EPA Local Limits Development Guidance document states, EPA recommends that a periodic evaluation of local limits be tied to the permit cycle and that more detailed evaluations be conducted on an “as needed” basis. Chapter 7 provides guidance on two means to meet this requirement depending on the conditions at the POTW; either by conducting a local limits reviews and detailed re-evaluations, or by comparing the current headworks loadings with the maximum allowable headworks loading (MAHL) and examine any recent violations. EPA suggests, when plant conditions have changed, that the detailed re-evaluation be conducted. The detailed re-evaluation should include an in-depth look at all the data, criteria, and assumptions on which local limits are based to determine whether any changes affecting the local limits have occurred.

The Permittee has not made notification of planned changes to the Facility's treatment processes, therefore a re-evaluation is not anticipated to be necessary. As such, the Permittee may simply review their current Local Limits and compare the Facility's current headworks loading to the MAHL. If changes to the current Local Limits are needed, then the Permittee will need to submit those changes as part of the required Local Limits Study. If no changes to the current Local Limits are needed, then the required Local Limits Study should document the process and conclude that no changes are needed.

Comment No. A26: Sections 1.2 and 1.5 of the Draft Permit's Fact Sheet (Attachment F) refer to the current permit as being expired, which is not believed to be accurate. As described in Section 1.5 of the Fact Sheet, the current permit has been automatically continued pending reissuance of the new permit. As this was a matter of legal contention in the recent litigation, the City requests that Sections 1.2 and 1.5 be revised accordingly to reflect that the current permit has been automatically extended pending issuance of the new permit. Please consider acknowledging in the first sentence of Section 1.2 that the City "*timely* filed a *complete* report of waste discharge . . ." Please also consider amending the second sentence of Section 1.2 to read as follows: "*The Regional Board confirmed that the Permittee's timely submitted application was a complete application when the Regional Board reviewed it in December of 2021*." In addition, please add the following sentence at the end of Section 1.5: "*The Permittee has met those requirements and the current permit remains in effect until the new permit replaces it.*"

Response to Comment No. A26: Regional Water Board staff have updated Section 1.3 of the proposed Order's Fact Sheet to better identify that Order No. R1-2016-0001 has been administratively extended after the City submitted a timely and complete Report of Waste Discharge. Section 1.3 of the Proposed Order's Fact Sheet has been modified as follows:

~~1.4.~~ 1.3 The Permittee filed a report of waste discharge (ROWD) and submitted an application for reissuance of its waste discharge requirements (WDRs) and NPDES permit on December 1, 2020. The application was deemed complete on December 5, 2021. Submittal of a complete ROWD allowed for Order No. R1-2016-0001 to be automatically administratively extended and remain in effect until the revised NPDES permit can be adopted.

Comment No. A27: Section 2.1.1. of the Draft Permit's Fact Sheet includes discussion of the Cease and Desist Order, is confusing, and should be clarified (as discussed in Comment No. A6 above).

Response to Comment No. A27: Section 2.1.1 of the Proposed Order's Fact Sheet has been modified as noted in Response to Comment No. A5 above.

Comment No. A28: Section 2.3.1. of the Draft Permit's Fact Sheet discusses the City's significant efforts to work with the Regional Board staff to obtain an exception to the EBEP. On page F-7, the City does not believe that the second full paragraph is an accurate statement of the history of that effort. The City requests that the Regional Board delete the last two sentence of this paragraph, stating with "It was determine . . ." and replace those sentences with the following: "*Regional Board staff originally believed that the Project might qualify as an exception to the EBEP discharge prohibition, and confirmed that view with the Permittee both orally and in writing. Based on this view, the Permittee invested funds in the design, project acquisition and permitting for the Project. Subsequently, Regional Board staff determined that they did not believe the Project could meet the criteria for an exception to the EBEP. Nevertheless, the Permittee decided to continue to pursue the Project. Because the Project has benefits to the water quality in Humboldt Bay, completion of the Project is included as part of the compliance schedule and is a justification to provide the Permittee with additional time to comply with Discharge Prohibition 3.1 as provided in the Order*."

Response to Comment No. A28: Regional Water Board staff agree that the proposed change provides further clarity regarding the development and fate of the enhancement project and have accepted this change. Section 2.3.1 of the Proposed Order's fact Sheet has been modified as follows:

> The Permittee had previously pursued an exception to the EBEP discharge prohibition (Discharge Prohibition 3.1. in this Order) through construction of the Elk River Estuary Enhancement Project. ~~It was determined that the Project did not meet the criteria for an exception to the EBEP. However, the Project was included as part of the compliance schedule to provide the Permittee additional time to come into compliance with Discharge Prohibition 3.1.~~ Regional Board staff originally believed that the Project might qualify as an exception to the EBEP discharge prohibition and confirmed that view with the Permittee both orally and in writing. Based on this view, the Permittee invested funds in the design, project acquisition and permitting for the Project. Subsequently, it was determined that the Project would not meet the criteria for an exception to the EBEP. Nevertheless, the Permittee decided to continue to pursue the Project. Because the Project has benefits to the water quality in Humboldt Bay, completion of the Project is included as part of the compliance schedule and is a justification to provide the Permittee with additional time to comply with Discharge Prohibition 3.1 as provided in the Order.

Comment No. A29: Section 4.1.1. This Section provides additional rationale for Discharge Prohibition 3.1. The second and three paragraphs on page F-23 of this Section seem to be out of place and be applicable to Discharge Prohibition 3.5. Please delete these paragraphs and replace them with information directly related to EBEP compliance, including the City's proposed language contained in comment C.4.(c) above.

Response to Comment No. A29: The identified paragraphs included in the Draft Order were indeed related to Discharge Prohibition 3.5 and not 3.1 and have been removed. Additionally, updated language has been provided to correctly describe the circumstances leading to this Discharge Prohibition. The Proposed Order has been modified as follows:

4.1.1. **Discharge Prohibition 3.1.** The discharge of waste to Humboldt Bay is prohibited unless it complies with the State Board, Water Quality Control Policy for the Enclosed Bays and Estuaries of California (1974, 1995).

This prohibition is retained from Order. No. R1-2016-0001. ~~However, a~~As described in section 2.3 of this Fact Sheet~~,~~ and based on the Permittee's 2014 Effluent Discharge Study, the discharge is not completely conveyed to the Pacific Ocean and the discharge does not qualify as an ocean discharge subject to the Ocean Plan but rather a bay discharge subject to the Enclosed Bays and Estuaries Policy (EBEP).

~~The Regional Water Board adopted Resolution No. 80-10 which concluded that the Permittee's ebb-tide discharge to Humboldt Bay implements the Basin Plan and the Enclosed Bays and Estuaries Policy because all effluent was conveyed to the Pacific Ocean. This Resolution was based on modeling and tidal monitoring with a dye study completed in 1979. Thus, since 1981, the Regional Water Board has viewed discharge to Humboldt Bay at the Facility as an Ocean Discharge. The Permittee has discharged to Humboldt Bay since 1981.~~

~~40 C.F.R. section 122.41(m) defines a bypass as "…the intentional diversion of waste streams from any portion of a treatment facility." Further, 40 C.F.R. section 122.41(m)(2) states that bypass may only be allowed under the condition that it "…does not cause effluent limitations to be exceeded, but only if it is also for essential maintenance to assure efficient operation." Chapter III, section 7 of the Bays and Estuaries Policy states, "The discharge or by-passing of untreated waste to bays and estuaries shall be prohibited." The current operations at the Facility include the intentional diversions around the secondary treatment portion of the treatment facility (including the trickling filters, solids contact, and secondary clarification units). Further, these intentional diversions are not for the essential maintenance of the treatment facility, but instead are used to manage peak hydraulic flows to the Facility. The Permittee's January 7, 2014 Feasibility Analysis for Treating Peak Wet Weather Discharges (Feasibility Analysis) acknowledges the significant increase in the Facility's peak wet weather flows as a result of rainfall-derived infiltration and inflow.~~

~~In accordance with the NPDES regulations at 40 C.F.R. section 122.41(m) and chapter III, section 7 of the Bays and Estuaries Policy, this Order, consistent with Order No. R1-2016-0001, does not allow the discharge of untreated or partially treated waste, including the bypass of secondary treatment when influent flows~~

~~exceed the trickling filter capacity. It is recognized that high influent flows may still result in a bypass as described above, and that the Permittee will be in immediate noncompliance with this prohibition. As a result, a compliance schedule has been included in this Order to bring the Permittee back into compliance with discharge prohibition 3.5.~~

Comment No. A30: Regarding Section 4.3.2.4. of the Draft Permit's Fact Sheet, please advise how the 31:1 dilution factor for ammonia will be implemented and how this dilution factor will be extended to other constituents.

Response to Comment No. A30: As identified in Response to Comment No. A7, Attachment H, the Example Ammonia Impact Ratio (AIR) Calculator has been updated to allow for the 31:1 dilution ratio. Additionally, Section 4.3.2.4 of the Proposed Order's Fact Sheet identifies that based on Staff review, the dilution modeling documented in the 2021 *Enclosed Bays and Estuaries Compliance Feasibility Study: Evaluation of Ammonia Toxicity during Elk River Wastewater Effluent Mixing in Humboldt Bay* prepared by the City was adequate to support the authorization of dilution credits for ammonia, cyanide, and alpha-Endosulfan. The Regional Water Board may, upon request from the City, consider the application of the 31:1 dilution credit to other constituents, but only on a case-by-case basis and after considering all factors regarding each individual constituent (such as potential for bioaccumulation).

Comment No. A31: Section 4.3.4.1. of the Draft Permit's Fact Sheet outlines the first step for effluent concentration allowance for certain constituents, including ammonia. It inaccurately states that the dilution credit is 0, as the discharge does not qualify for a dilution credit. Please revise to reference the 31:1 dilution ratio included in Section 4.3.2.4.

Response to Comment No. A31: Section 4.3.4.1 of the Draft Permit's Fact Sheet correctly identifies that the dilution credit is equal to zero, as the discharge does not qualify for a dilution credit. This section further identifies that for ammonia, a dilution credit of 31:1 is applicable, as the dilution modeling documented in the 2021 *Enclosed Bays and Estuaries Compliance Feasibility Study: Evaluation of Ammonia Toxicity during Elk River Wastewater Effluent Mixing in Humboldt Bay* prepared by the City was adequate to support the authorization of a dilution credit for ammonia. As the State Implementation Policy allows for dilution credits to be limited or denied on a pollutant-by-pollutant basis, the Proposed Order has been further revised to indicate that the 31:1 dilution credit is also applicable to cyanide and alpha-endosulfan, as discussed in Response to Comment No. A9. As the identified dilution credit is not valid for any other pollutants besides those that have been listed, the Proposed Order will continue to indicate that a dilution credit of 0 applies. No changes were made to the proposed Order based on this comment.

Comment No. A32: Please clarify how the dilution ratio will be used to calculate the AIR.

Response to Comment No. A32: As described in Response to Comment No. A7, Attachment H, the Example Ammonia Impact Ratio (AIR) Calculator has been updated to allow for the 31:1 dilution ratio.

B. Humboldt Community Services District (HCSD) Comments

Comment No. B1: HCSD identifies in their comment letter that they are the contracted owner of 32.1 percent of the Greater Eureka Area Wastewater Project (GEAWP) and as such, is responsible for 32.1 percent of the operations, maintenance and improvement costs associated with the Facility. HCSD further states that they are committed to compliance with the regulations and restrictions imposed by the Clean Water Act and the Enclosed Bays and Estuaries Policy, but has concerns about the expanding timeline, lack of definitive direction from the Regional Water Board, and the potential of expanded scope and costs associated with compliance. HCSD requests that the Regional Water Board is clear regarding what compliance with the Enclosed Bays and Estuaries Plan means so that the City of Eureka and HCSD can plan thoughtfully and collaboratively to achieve compliance and optimize the competing objectives of cost and environmental protection.

Response to Comment No. B1: Compliance with the Enclosed Bays and Estuaries Policy means that that discharge to Humboldt Bay may not be allowed unless the discharge itself enhances the quality of the receiving water above which that would occur in the absence of the discharge. The compliance schedule included in the Proposed Order provides the necessary guidance for the City to develop and evaluate compliance options, and establishes a timeline to identify and implement its preferred project to comply with the EBEP subject to Regional Board concurrence. No changes were made to the Proposed Permit in response to this comment.

Comment No. B2: HCSD requests that the Regional Water Board commit to a formal process and timeline for review and approval of interim documents and provide a defined time schedule for the Regional Water Board to act upon submissions.

Response to Comment No. B2: As discussed within Response to Comment A1, the Regional Water Board will strive to promptly review and respond to all documents submitted for Executive Officer approval during the term of the Proposed Permit. If the Permittee, or other outside party, feels that an interim deliverable has been overlooked or has not been responded to in a timely fashion, they may initiate further contact with the Regional Water Board's staff, staff's supervisor, Executive Officer, and/or the Board itself to request prioritization. No changes have been made to the Proposed Permit based on this comment.

Comment No. B3: HCSD requests that the Regional Water provides them with copies of the public comments received regarding the Draft NPDES Permit and the Regional Water Board's response to these. HCSD further requests that they be notified of changes made to the draft NPDES Permit and to receive copies of future submittals and

Regional Water Board responses/determinations regarding the compliance with the compliance schedules included within the NPDES Permit.

Response to Comment No. B3: Regional Water Board staff have made available to HCSD copies of all comment letters received, and a summary of all changes made to the Proposed NPDES Permit. Comment letters and written responses to public comments submitted for the Draft Permit are also made available to the public as part of the board meeting agenda. Furthermore, staff have identified HCSD as an interested party for this Facility in CIWQS and identified them to be copied on future correspondences related to the Facility. No changes were made to the Proposed Permit in response to this comment.

C. Humboldt Baykeeper Comments

Comment No. C1: The Humboldt Baykeeper identifies that the City of Eureka appeared to be meeting all the deadlines in Cease and Desist Order No. R1-2016-0012 and strongly urges the Regional Board to modify the included compliance schedule to reflect the federal court deadline of October 1, 2031.

Response to Comment No. C1: The compliance schedule included in the Proposed Order, while similar in intent and purpose to portions of the consent decree, is an independent set of requirements that include tasks and corresponding due dates for bringing the Permittee into compliance with the Enclosed Bays and Estuaries Policy. The final compliance date included in the Proposed Order is appropriate considering that a preferred compliance option has not been chosen and that the proposed alternative final compliance date of October 1, 2031 target may not be feasible for the yet to be determined compliance option. The October 1, 2031 date as provided for in the Consent Decree was not proposed by, nor is it binding on the Regional Water Board because it was not a party to, nor was it consulted on the terms of the Consent Decree. No changes were made to the Proposed Permit in response to this comment.

Comment No. C2: The Humboldt Baykeeper requests that the compliance schedule included in the NPDES Permit also includes a study to determine if injection of sewage effluent into deep injection wells, as required in the Consent Decree.

Response to Comment No. C2: As indicated in Response to Comment C1 above, the consent decree is not binding on the Regional Water Board. The compliance schedule included in the Proposed Order, while similar in intent and purpose to portions of the consent decree, is an independent set of requirements that include tasks and corresponding due dates for bringing the Permittee into compliance with the Enclosed Bays and Estuaries Policy. The Permittee may evaluate alternative methods, such as the injection of sewage effluent into deep injection wells, as part of the City's alternatives analysis. As discussed in Response No. C1, the Regional Water Board is not bound to approve or consider only those options presented in the Consent Decree. As the regulatory agency with oversight over the facility's discharges to Humboldt Bay,

the Regional Water Board will independently evaluate the City's compliance options. The Regional Water Board will not constrain the City to only those compliance methods outlined in the Consent Decree. The City may propose and develop a range of compliance methods, and the Regional Water Board may approve any method so long as the Regional Water Board determines that the method will result in the City's compliance. No changes have been made to the Proposed Permit based on this comment.

Comment No. C3: The Humboldt Baykeeper identifies that the Draft NPDES Permit does not include a prohibition on sanitary sewer overflows, and requests that the new NPDES Permit includes the following language from Section III.F. of the 2016 NPDES permit (Order No. R1-2016-0001):

> Any sanitary sewer overflow (SSO) that results in a discharge of untreated or partially treated wastewater to (a) waters of the state or (b) land that creates pollution, contamination, or nuisance, as defined in Water Code section 13050 is prohibited.

Response to Comment No. C3: Sanitary Sewer Overflows are separately regulated under the Statewide Waste Discharge Requirements General Order for Sanitary Sewer Systems, Order No. WQ 2022-0103-DWQ, and retention of the identified sanitary sewer overflow prohibition is duplicative and unnecessary. No changes have been made to the Proposed Permit based on this comment.

Comment No. C4: The Humboldt Baykeeper identifies that Sea level is rising more than twice as fast in the Humboldt Bay area as in the rest of California due to tectonic subsidence. Planning for rising groundwater as well as sea level is essential for critical public infrastructure projects in low-lying areas such as wastewater treatment facilities. Given the lifespan of the project and its location, it may need to be designed to accommodate more than three feet of sea level rise.

Response to Comment No. C4: Regional Water Board staff acknowledge the Humboldt Baykeeper's concern regarding sea level rise. The City of Eureka submitted a Climate Change Readiness Study in 2020 that identified an anticipated mid-century sea level rise of 3.3 feet and a late-century sea level rise of 6.6 feet, indicating that they are identifying comparable magnitudes of sea level rise when determining mitigation options and future facility improvements. No changes have been made to the Proposed Permit based on this comment.

D. Ecological Rights Foundation (EcoRights) Comments

Comment No. D1: EcoRights identifies that the City of Eureka submitted their Report of Waste Discharge in advance of the of the current NPDES Permit's expiration date of July 21, 2021. It is further stated that the Regional Water Board's inaction to renew this

NPDES permit has created regulatory and legal uncertainty as to what the City must do in the long term to comply with the Clean Water Act, and that any further prolonged delay from the Regional Water Board in issuing the next NPDES Permit will hamper the City in making investment decisions related to an improved collection and treatment system. EcoRights urges the Regional Board not to further delay a hearing on the Draft Permit and to make a decision at or promptly after that October 2023 meeting.

Response to Comment No. D1: This comment has been noted.

Comment No. D2: EcoRights supports the Regional Board's proposal to include compliance schedule provisions, which are presently set forth in Section 6.3.6.3. of the Draft Permit. However, EcoRights feels that these compliance schedule provisions are unduly lenient and should be revised. EcoRights urges the Regional Board to consider the requirements and timeline included in the January 2023 consent decree that the City entered into in EcoRights' federal court Clean Water Act citizen suit, *Ecological Rights Foundation v. City of Eureka*, No. 4:22-cv-01459-JST (N.D. Cal. January 27, 2023) (Dkt. 40) (Consent Decree). EcoRights further provides a comparison of provisions from the Consent Decree and the Draft Permit, with respect to specific tasks, level of detail, and task specific due dates that they would like to have updated within the Draft Permit to harmonize these documents. EcoRights again urges the Regional Board to amend Section 6.3.6.3 of the Draft Permit to adopt an approach to Feasibility Study implementation analogous to that in the Consent Decree and suggests that the final compliance date specified by the Draft Permit's compliance schedule is not consistent with diligent environmental protection and is at odds with the schedule that the City and the environmental community agreed to during Consent Decree negotiations.

Response to Comment No. D2: As discussed in Response to Comment No. C1, The Regional Water Board was not a party to, nor consulted on the terms of the Consent Decree. The Regional Water Board must independently evaluate permit compliance and the appropriate regulatory approach to compliance. The compliance schedule included in the Proposed Order, while similar in intent and purpose to portions of the consent decree, is an independent set of requirements that include tasks and corresponding due dates for bringing the Permittee into compliance with the Enclosed Bays and Estuaries Policy. Furthermore, the Proposed Order does not prohibit the early completion of tasks that may additionally fulfill requirements of the consent decree. No changes have been made to the Proposed Permit based on this comment.

Comment No. D3: EcoRights indicates that Section 6.3.6.2 of the Draft Permit, intended to rescind and replace CDO No. R1-2016-0012, as revised on June 18, 2020 by Modification Order No. R1-2020-0020, is problematic in that it no longer requires the implementation of the Wet Weather Improvement Plan, but only that the City evaluate a report on the implementation and effectiveness. EcoRights requests that the Regional Water Board correct this problem either by deleting the language from the Draft Permit rescinding the CDO or including a requirement for the continued implementation of the Wet Weather Improvement Plan within Section 6.3.6.2 of the Draft Permit.

Response to Comment No. D3: To address uncertainty regarding continued implementation of the Wet Weather Improvement Plan, the compliance schedule in Section 6.3.6.2 of the Proposed Order has been modified as follows:

Task	Task Description	Due Date
1	Implementation of the *Wet Weather Improvement Plan, City of Eureka Wastewater Collection and Treatment Systems, CDO Task 1B: Order R1-2016-0012* submitted by the City on March 31, 2017, and as approved by the Regional Water Board in their letter dated June 29,2017.	Ongoing
~~1~~2	The Permittee shall evaluate and report on the implementation and effectiveness of its Wet Weather Improvement Plan. Elements to be included in the report include, but are not limited to, progress on private sewer lateral programs and status of capital improvement projects. If delays in the implementation of programs and infrastructure projects occurs, the Permittee shall describe obstacles encountered and recommended corrective action/ solution(s) implemented or being considered to resolve and ensure program/project implementation. The Permittee shall include information from the satellite agencies to the extent that information is available.	July 1, 2024, and annually thereafter until Task 2 is completed
~~2~~3	Discharges of untreated or partially treated waste shall be eliminated	July 1, 2028

Comment No. D4: EcoRights identifies that the Regional Water Board's current NPDES Permit for the Facility includes the following prohibition on sanitary sewer overflows:

> "III.F. Any sanitary sewer overflow (SSO) that results in a discharge of untreated or partially treated wastewater to (a) waters of the state or (b) land that creates pollution, contamination, or nuisance, as defined in Water Code section 13050 is prohibited.

EcoRights suggests that the Regional Water Board's Proposed Permit backslides in omitting this prohibition from the list of Discharge Prohibitions in Section 3 of the Permit and requests that the Regional Water Board retain this prohibition.

Response to Comment No. D4: See Response to Comment No. C3. No changes were made to the Proposed Order in response to this comment.

Comment No. D5: EcoRights suggests the Compliance Determination provisions related to acute and chronic toxicity in Section 7.9 have the effect of negating these effluent limitations, allowing the City to discharge acutely and chronically toxic effluent without being in violation of the permit, thus rendering the whole effluent toxicity limitations effectively a nullity.

Response to Comment No. D5: The compliance determination provisions within Section 7.9 of the Draft Order and related to acute and chronic toxicity are independent provisions that must each be adhered to and are not offered as alternative methods to demonstrate compliance in place of each other. Section 7.9.3. of the Draft Permit is included to provide enforceability of the acute and chronic toxicity testing requirements included in Sections 5.1. and 5.2 of the Draft Permit's MRP. No changes were made to the Proposed Order in response to this comment.

Comment No. D6: EcoRights suggests that the identified method to treat effluent "detected but not quantified" (DNQ) results within Sections 7.1.2 and 7.2 of the Draft Order is erroneous and inimical to environmental protection. EcoRights then provides descriptions of the State Water Board's ND/DNQ Guidance and a discussion of EPA's view on how DNQ results should be dealt with. To avoid the problem of under evaluating environmental risks by ignoring DNQ results, EcoRights urges the Regional Water Board to use the alternate method to assign a quantified value to DNQ sample results:

> "Policy When Detectable But Non-quantifiable Residues Are Found If a sample contains detectable, yet nonquantifiable residues, i.e., residues falling between the LOD and the LOQ. OPP recommends that such samples typically be represented numerically in the refined exposure assessment as ½ LOQ when assessing both acute and chronic risk. This science policy is consistent with the extensively peer reviewed "OPPTS Test Guidelines Series 875 - Occupational and Residential Exposure" which states that ½ LOQ should be used to represent samples bearing detectable residues between the LOD and LOQ. This is also consistent with the USDA Pesticide Data Program's (PDP) policy for reporting these values: residues detected at >LOD but [less than] LOQ by the PDP program are reported as 1/2 half LOQ."

Response to Comment No. D6: The proposed Order requires the Permittee to report all DNQ results as described in the State Implementation Policy (SIP) and per the State Water Board's ND/DNQ Guidance document. DNQ results are used by Regional Water Board staff when conducting a reasonable potential analysis.

Sections 7.1.2 and 7.2 of the Proposed Order are related to determining compliance with effluent limitations and not conducting risk assessments. Per the SIP, dischargers

shall be deemed out of compliance with an effluent limitation, if the concentration of the priority pollutant in the monitoring sample is greater than the effluent limitation and greater than or equal to the reporting limit. If a sample result, or the arithmetic mean or median of multiple sample results, is below the reporting limit, and there is evidence that the priority pollutant is present in the effluent above an effluent limitation, such as a DNQ sample result, and the discharger conducts a pollutant minimization program (as required in Section 6.3.2.1 of the Proposed Order), the discharger shall not be deemed out of compliance. Additionally, the Regional Water Board has discretion to consider if any data are inappropriate or insufficient for use in implementing the SIP. No changes were made to the Proposed Order in response to this comment.

E. California Department of Public Health Comments

Comment No. E1: Section 6.3.5.2, Footnote 5 – We request the contact information for our unit is updated to "Preharvest Shellfish Unit, Environmental Management Branch, 510-412-4635, shellfishpreharvest@cdph.ca.gov". This is the program supervisor line and an email address which will notify all program staff members at once.

Response to Comment No. E1: Staff have determined that this is an appropriate update, and the Proposed Order has been modified as follows:

> [5] ~~Steve Etter,~~ Preharvest Shellfish Unit, Environmental Management Branch, 510-412-4635 ~~916-715-3563~~, shellfishpreharvest@cdph.ca.gov ~~Steve.Etter@cdph.ca.gov, or current representative~~.

Comment No. E2: Section 6.3.5.2.1 – We request "Hog Island Oyster Company" be added as an immediately notified party. We suggest adding "and any entity with a shellfish growing area certificate issued by CDPH/PSU" to capture new companies approved for operations between WDR renewal cycles.

Response to Comment No. E2: Staff have determined that this is an appropriate update, and the Proposed Order has been modified as follows:

6.3.5.2.1. Notify both the Regional Water Board, Pacific Shellfish – Humboldt LLC, North Bay Shellfish LLC, Aqua Rodeo Farms, Hog Island Oyster Company, ~~and~~ Humboldt Bay Oyster Company, any entity with a shellfish growing area certificate issued by CDPH/PSU, and CDPH/PSU immediately, and notify ~~CDPH/PSU and~~ the Humboldt County Environmental Health Department (EHD) as soon as possible, of any sewage spill, collection system bypass, or malfunction of a WWTP which results in a potential or actual discharge of raw or incompletely treated sewage to Humboldt Bay or its tributaries.

Comment No. E3: Section 6.3.5.2.1 - We request CDPH/PSU be moved to the list of parties to be notified "immediately", instead of "as soon as possible". CDPH/PSU needs to be notified immediately as the program must determine if the commercial growing areas need to be closed in response to the listed pollution events.

Response to Comment No. E3: Staff have determined that this is an appropriate update, and the Proposed Order has been modified as indicated in Response to Comment No. E2, above.

Comment No. E4: Section 10.6.2 – We request you add a reference here to the notification procedures for sewage spills listed in Section 6.3.5.2, since they are in addition to the requirements outlined in Water Quality Order 2022-0103-DWQ.

Response to Comment No. E4: Staff have determined that this is an appropriate update, and Section 10.6.2 of the Proposed Order's monitoring and reporting program has been modified as follows:

10.6.2. **Sanitary Sewer Overflows.** Notification and reporting of sanitary sewer overflows is conducted in accordance with the requirements of Order No. 2022-0103-DWQ (Statewide General WDRs for Sanitary Sewer Systems), which is not incorporated herein by reference, and any revisions thereto. Sanitary sewer overflows may also result in notification requirements per the Humboldt Bay Management Plan, as identified in section 6.3.5.2 of this Order.

Comment No. E5: Attachment A, Definitions – We request the definition of "Shellfish" be updated from "Organisms identified by the California Department of Public Health as shellfish for public health purposes (i.e., mussels, clams and oysters)." to "All species of bivalve mollusks, including clams, oysters, mussels and scallops." We also request reference to our agency is removed from this definition. Shellfish as defined by the Shellfish Harvesting beneficial use in the Water Quality Control Plan includes harvesting for commercial and sport purposes. Our agency does not regulate shellfish harvested for sport purposes (biotoxin advisories excepted). Therefore, we request a more general definition is utilized.

Response to Comment No. E5: Staff have determined that this is an appropriate update, and the definition for Shellfish within the Proposed Order has been modified as follows:

Shellfish
~~Organisms identified by the California Department of Public Health as shellfish for public health purposes (i.e., mussels, clams and oysters).~~ All species of bivalve mollusks, including clams, oysters, mussels and scallops.

Staff Initiated Changes:

The following sections describe changes made to the Draft Order, initiated by Regional Water Board staff to update and provide clarification to the Proposed Order. The modified sections are identified by their section numbers as indicated in the Proposed Order. Regional Water Board staff met virtually with the Permittee on August 25, 2023 to discuss the changes made to the Draft Permit and the Permittee did not have any objections to the proposed changes.

1. Regional Water Board staff identified that Sections 4.1.1.4 and 4.1.1.5 of the Draft Order inadvertently created narrative effluent limitations for Acute and Chronic Aquatic Toxicity for the discharge. Additionally, it was identified that the second sentence within each of these sections, that references the applicable compliance determination section of the Proposed Order is not necessary and should be removed for clarity. Furthermore, staff identified that Section 4.1.1.4.2 and 4.1.1.5.2 inadvertently mislabeled the Median Monthly Effluent Limitation (MMEL) as the Maximum Monthly Effluent Limitation within the Draft Order. As such, Sections 4.1.1.4 and 4.1.1.5, and their corresponding subsections, of the Proposed Order have been updated as follows:

4.1.1.4 **Acute Aquatic Toxicity.** To determine compliance with the water quality objective for toxicity in the Basin Plan, the discharge, as measured at Monitoring Location EFF-001, shall meet the following effluent limitations: ~~As measured at Monitoring Location EFF-001, there shall be no acute aquatic toxicity in treated wastewater discharged to Humboldt Bay at Discharge Point 001. Compliance with this acute aquatic toxicity effluent limitation shall be determined in accordance with section 7.9 of this Order and sections 5.1 of the MRP, Attachment E of this Order.~~

4.1.1.4.1. **Maximum Daily Effluent Limitation (MDEL)**

No acute aquatic toxicity test shall result in a “fail” at the IWC for the survival endpoint and a percent effect for the survival endpoint greater than or equal to 50 percent.

4.1.1.4.2. ~~**Maximum**~~ **Median Monthly Effluent Limitation (MMEL)**

No more than one acute aquatic toxicity test initiated in a calendar month shall result in a “fail” at the IWC for the survival endpoint.

4.1.1.5. **Chronic Aquatic Toxicity.** To determine compliance with the water quality objective for toxicity in the Basin Plan, the discharge, as measured at Monitoring Location EFF-001, shall meet the following effluent limitations: ~~As measured at Monitoring Location EFF-001, there shall be no chronic aquatic~~

~~toxicity in treated wastewater discharged to Humboldt Bay at Discharge Point 001. Compliance with this chronic aquatic toxicity effluent limitation shall be determined in accordance with section 7.9 of this Order and sections 5.2 of the MRP, Attachment E of this Order.~~

4.1.1.5.1. Maximum Daily Effluent Limitation (MDEL)

No chronic aquatic toxicity test shall result in a "fail" at the IWC for any sub-lethal endpoint measured in the test and a percent effect for that sub-lethal endpoint greater than or equal to 50 percent.

4.1.1.5.2. ~~Maximum~~ Median Monthly Effluent Limitation (MMEL)

No more than one chronic aquatic toxicity test initiated in a calendar month shall result in a "fail" at the IWC for any endpoint.

1. Regional Water Board staff modified Section 8.3 of the Proposed Permit's Fact Sheet to correctly identify the Board meeting location as being at the Eureka City Hall Council Chambers. The Proposed Order was modified as follows:

8.3. **Public Hearing**

The Regional Water Board held a public hearing on the tentative WDRs during its regular Board meeting on the following date and time and at the following location:

Date: **October 5-6, 2023**
Time: 9:00 a.m. or as announced in the Regional Water Board's agenda
Location: ~~Regional Water Board Hearing Room~~
Eureka City Hall Council Chambers
~~5550 Skylane Boulevard, Suite~~ A 531 K Street
~~Santa Rosa, CA 95403~~ Eureka, CA 95501