

**Response to Written Comments
and
Staff Initiated Changes**

**Draft Waste Discharge Requirements Order No. R1-2017-0005
National Pollutant Discharge Elimination System (NPDES)
for the City of Fortuna Wastewater Treatment Plant**

**Regional Water Quality Control Board, North Coast Region
August 17, 2017**

Comment Letter Received

The deadline for submission of public comments regarding draft Waste Discharge Requirements for Order No. R1-2017-0005, National Pollutant Discharge Elimination System Permit (Draft Permit) for the City of Fortuna Wastewater Treatment Facility was December 16, 2016. The City of Fortuna (Permittee) provided timely comments.

To facilitate and better organize comments and responses, Regional Water Board staff (Staff) grouped several of the Permittee's comments by topic and other comments are responded to individually. Each topically grouped or individual comment is assigned an item number (1, 2, 6.a, etc.) that is not to be confused with the Permittee's Comment numbers. Comments grouped by topic indicate which comments are being addressed and responded to by including the Permittee's comment number in parentheses following the bold type statement identifying the topic or permit section addressed by the comment.

Each topical or individual comment is followed by the Staff response. When the Permittee's comment is quoted exactly, the text is included in italics. Where appropriate, text to be added in response to the Permittee's comments is described by section number. Where added text is included word for word, text to be added is identified by underline, and text to be deleted is identified by strike through in this Response to Comments document.

Use of the term "Draft Permit" refers to the public review draft. Use of the term "Proposed Permit" refers to the post-public review version of the permit that will be presented to the North Coast Regional Water Quality Control Board (Regional Water Board).

A. Topical Comments and Responses

1. Determination that the Percolation Ponds (EFF-003) are Hydrologically Connected to Waters of the United States (Cover Letter, 101, 103, 104).

The Permittee acknowledges that the Draft Permit reclassifies the discharge of wastewater to the percolation ponds as an NPDES discharge and requests a companion Cease and Desist Order (CDO) or Time Schedule Order (TSO) to allow upgrades to the Treatment Facility and modifications to the discharge location that will result in full compliance with the Proposed Permit.

In addition, the Permittee states that there has been no conclusive evidence of hydrologic connection between the percolation ponds and the Eel River and studies need to be completed to show a hydrologic connection. The Permittee also states that “[hydrologic connection] *is an issue on appeal in the County of Maui and is unclear in the law*”.

Response: Staff has long noted that the percolation ponds that the Permittee uses for their dry season wastewater disposal are within the gravels of the Eel River and Permittee staff have discussed with Staff that the percolation ponds are occasionally inundated by the Eel River flows during the wet season. Staff became concerned that the percolation ponds may be hydrologically connected to Waters of the United States either through the underflow of the Eel River, groundwater connection, or through periodic surface connection. In response to this concern and in order to demonstrate compliance with the Water Quality Control Plan for the North Coast Region seasonal discharge prohibition (May 15 through September 30), the Regional Water Board adopted NPDES Permit Order No. R1-2007-0007, which required a special study to evaluate the hydrologic connectivity of the percolation ponds to the Eel River and Strongs Creek. The study requirement included in NPDES Permit Order No. R1-2007-0007 provided two options for compliance. The first option allowed for the development of a workplan to investigate:

1. current and/or projected surveyed elevations of pond features referenced to mean sea level (e.g., pond bottom, peak water surface level) and nearby surface water features (e.g., channel bed, top of bank, seasonal average and maximum water surface elevations);
2. site specific lithology;
3. depth to groundwater across seasonal variations;
4. seasonal groundwater gradients;
5. transmissivity of areal soil; and
6. concentration gradients of targeted wastewater constituents measured at various points extending away from the disposal area towards the Eel River.

A report describing findings and conclusions of the study was to be submitted by February 1, 2011. If the study demonstrated connectivity between the percolation ponds and the Eel River, the Permittee was to submit a written proposal for Executive Officer approval to study alternatives to comply with the Basin Plan discharge prohibition by August 1, 2011.

The second option allowed the Permittee to submit a written commitment to modify existing disposal methods in order to ensure compliance with the Basin Plan seasonal discharge prohibition by August 1, 2008. The written commitment was to include a preliminary schedule of tasks necessary to develop a subsequent detailed study plan containing milestones and a time schedule for selection and implementation of an alternative disposal method during the discharge prohibition season. By February 1, 2010,

the Permittee was to submit a written proposal to study disposal alternatives to comply with the Basin Plan seasonal discharge prohibition.

All of the description of the preceding studies and correspondence below is to demonstrate that the Permittee has been in agreement with the requirements to either study the connectivity of the percolation ponds with surface waters or to move the current discharge location during the seasonal discharge prohibition since well before the drafting of this current Permit. Furthermore, the Permittee has committed, on multiple occasions, to modify the existing disposal methods of the treatment plant.

On February 1, 2008, the Permittee submitted a workplan that included a Hydrogeologic Evaluation Workplan (HEW). The HEW included evaluations of the site topography, pond bottom elevations, channel bottom and bankfull elevations of the Eel River, Rohner Creek and Strongs Creek. In addition, the HEW proposed to include groundwater and surface water monitoring, six new groundwater monitoring wells, statistical assessment of background groundwater and surface water data, site lithology, and percolation rates in the ponds. The schedule for the HEW included a completion date of February 1, 2011.

On August 29, 2008, the Permittee submitted a modified workplan and a request for a workplan amendment. The Permittee proposed "to conduct a preliminary study to determine the fate and transport of the wastewater effluent during discharges to the percolation ponds adjacent to the Eel River. This study proposed to test receiving waters at four locations for constituents normally found in wastewater effluent. Background testing will be done on both the Eel River and Strongs Creek at the confluence of Rohner Creek. Constituents proposed for testing at this time are nitrate, phosphate, chloride, pH, TDS and conductivity. These tests are proposed to be done on a two week basis for a period of up to twelve months until it is determined that further test are no longer necessary.

If it is determined that none of these constituents are found in sufficient amounts to show a direct link to the river, the city will propose that a groundwater monitoring plan be formulated to take a closer look at the interaction between the perk ponds and the river. This will most likely require the installation of monitoring wells."

Data submitted with this email show elevated concentrations of phosphorus at the monitoring location closest to the percolation ponds. The results of the sampling indicated that the highest concentrations of pollutants were coming from the sampling performed in Strongs Creek. The limited sample size for each sample location led to inconclusive results regarding the connectivity of the percolation ponds.

A Hydrologic Study Initial Assessment (HSIA) was submitted on April 5, 2010, as an update to the 2008 workplan. The objectives of the workplan were twofold: (1) map the location of the Eel River underflow within the channel gravel deposits beneath down stream of the percolation ponds; and (2) map the effluent flow paths within the first 300-feet of the percolation ponds. The workplan was partially implemented but a final report was never submitted to the Regional Water Board.

On November 22, 2010, the Permittee submitted a Request for Cease and Desist Order (Request) related to requirements within Order No. R1-2007-0007. Bullet number 2 in the Executive Summary states “In order to meet the seasonal discharge prohibition, **the City hereby commits to modify existing disposal methods** in order to ensure compliance with the Basin Plan seasonal discharge prohibitions. This commitment will result in a feasibility study and implementation of an alternative discharge point for the City’s treated wastewater effluent during the seasonal prohibition of discharge to surface waters in within the Basin.”

The Request also included an Exhibit B that included an update on Seasonal Discharge Prohibition Compliance Schedule. The Compliance Schedule had a final compliance date of October 1, 2017.

On September 1, 2011, the Permittee submitted a compliance schedule update. The update coincided with the adoption of their new NPDES permit. The update states, “In order to meet the seasonal discharge restrictions, **the City hereby commits to modifying existing disposal methods** in order to ensure compliance with the Basin Plan seasonal discharge prohibitions. This commitment will result in a technical report and implementation of a modified or alternative discharge point for the City’s treated wastewater effluent during the seasonal prohibition (summertime) of discharge to surface waters within the Basin. The full compliance schedule is presented in Exhibit A.”

Exhibit A includes a compliance schedule with a final completion date of November 30, 2022.

Staff have worked diligently with the Permittee to provide compliance schedules for studies to understand the connectivity of the percolation ponds to surface waters. The City has not completed some of these studies and tasks included by past compliance schedules. Staff are drafting a Time Schedule Order (TSO) to provide the Permittee with updated tasks and compliance dates additional time to meet the requirements of the seasonal discharge prohibition. The TSO (see Item 3) will be brought before the Regional Water Board for adoption concurrent with the Proposed Permit.

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

2. Request for Dilution Credits/Mixing Zone (Cover letter, 13, 109)

The Permittee asserts that water quality-based limits should reflect dilution credits up to 100:1 dilution because discharges are only allowed when effluent is 1% of the receiving water flow.

Response: The Basin Plan requirement for discharges not to exceed one percent of the receiving stream's flow is a flow limitation, not a dilution credit. The flow limitation requirement ensures protection of the receiving water at the end of pipe. This flow limitation was established in the Basin Plan beginning in the 1970s based on Department of Health Services, Office of Drinking Water (now the State Water Board Division of Drinking Water) view that discharges of wastewater to surface waters used for drinking water should not be allowed to occur if reasonable alternatives are available and that where reasonable alternatives are not available, discharges should be limited to one percent of the receiving water flow to ensure human health protection (*April 21, 1993, DHS letter from Bruce Burton to Theresa Wistrom, Regional Water Board Staff*). This flow limitation provides protection of all beneficial uses in a receiving stream.

The State Water Board *Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California* (State Implementation Policy or SIP) allows regional boards, on a discretionary basis, to establish and determine compliance with priority pollutant criteria/objectives or the toxicity objective by granting mixing zones and dilution credits to dischargers in accordance with the provisions of the SIP. A mixing zone is established based on a dilution study to establish the mixing characteristics of the effluent with the receiving water and to demonstrate that allowance of a mixing zone is protective of beneficial uses. When authorized, a mixing zone must be as small as practicable and cannot adversely impact beneficial uses. The Permittee has not submitted a formal request for a mixing zone. Should the Regional Board find that a mixing zone is warranted in the future, the Permittee would need to submit a work plan for review and approval by the Executive Officer prior to initiating a mixing zone study. This important step would ensure coordinated expectations between Staff and the Permittee.

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

3. Requests to Modify Chronic Toxicity Test Procedures and Statistics (Cover letter, 21, 36, 54, 76, 81, 83, 85, 86, 87, 88, 89, 130, 131, 132, 133)

- a. The Permittee asserts that the Regional Board doesn't have the authority to use un-promulgated chronic toxicity test procedures and that only test methods and procedures endorsed by the U.S. EPA and included in Part 136 of the Code of Regulations can be required. In addition, the Permittee asserts that the State Water Board's Order No. 2003-0012 is precedential, and the Regional Water Board has no authority to deviate from the requirements of that Order, which require a narrative

limit for chronic toxicity if reasonable potential exists, and a numeric trigger based on chronic toxicity units with credit for dilution. In addition, the Permittee suggests changes to the acute and chronic toxicity language in MRP sections V.A.6, V.A.9, V.B.11, V.B.13, V.B.17, V.B.18, and V.C.2 of the Draft Permit to remove requirements to use the TST statistical approach.

- b. In Comment 130, the Permittee states that they believe that the Draft Permit establishes numeric chronic toxicity effluent limitations even though it states the intent to establish a narrative chronic toxicity effluent limitation.

Response: Regional Board staff believes that the TST is an appropriate hypothesis-testing approach for analyzing Whole Effluent Toxicity (WET) data.

- a. Use of the TST approach for assessing the results of WET data is consistent with the State Water Resources Control Board's proposed toxicity amendment to the *Water Quality Control Plan for Enclosed Bays and Estuaries of California* (Draft Toxicity Policy) which will standardize regulation of aquatic toxicity for all non-oceanic surface waters. The TST approach is also supported by the U.S. EPA in the published guidance document titled, *National Pollutant Discharge Elimination System Test of Significant Toxicity Implementation Document* (EPA 833-R-10-003, June 2010), in which they recommend that "Permitting authorities should consider adding the TST approach to their implementation procedures for analyzing valid WET data for their current NPDES WET Program." Moreover, the U.S. EPA WET Test Method cited in this NPDES permit, *Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Marine and Estuarine Organisms* (EPA-821-R-02-014, October 2002, section 9.4.1.2), recognizes that, "the statistical methods in this manual are not the only possible methods of statistical analysis."

The TST approach was determined by a U.S. EPA peer review to be reasonable and defensible. The State Water Board also initiated an academic peer review focusing on the TST approach for its Draft Toxicity Policy. The peer review concluded that the TST is a "...major advance from the currently compromised No Observed Effect Concentration (NOEC) approach," and "... is statistically sound, reduces burden associated with the assays, and, by structuring the assay around a hypothesis of significant toxicity, provides incentive for precision in assay performance." In addition, the State Water Board published a report (*Effluent, Stormwater, and Ambient Toxicity Test Drive Analysis of the Test of Significant Toxicity [TST]*, 2011) that compared the results of over 3,000 completed toxicity tests using both the TST and traditional NOEC approach, among others. The analysis showed that the results of the NOEC and TST are generally the same, but that the TST correctly identified truly non-toxic samples more often than the NOEC approach.

The TST approach is considered more rigorous than the NOEC hypothesis test because it: (1) provides a definitive value on whether a sample is toxic or not at the concentration of effluent in the receiving water after mixing, referred to as the in-stream waste concentration (IWC), rather than an interpreted value as determined by the NOEC approach, and (2) is simpler to use than traditional hypothesis methods and point estimate techniques. In addition, because the TST approach requires only two sets of observations, the effluent's IWC and the control concentration, instead of the usual five-concentration test, the Permittee may realize cost savings for each chronic toxicity test conducted. The TST language in the Proposed Permit currently requires the five-concentration test because 40 C.F.R. part 136 currently requires use of the five-concentration test design for toxicity testing. Nonetheless, cost savings should be realized in the form of time and effort saved to conduct the statistical analysis on two concentrations (control and 100% effluent) instead of five concentrations.

The Proposed Permit retains the requirement for the Permittee to use the TST approach for analyzing toxicity data. In addition, all reporting requirements identified in MRP section V.B.9 ensure completeness of reporting the data. Until the State Water Board Toxicity Policy is adopted, accelerated monitoring data must be evaluated using the NOEC statistical approach.

In addition, the Draft Permit Section V.B of the MRP did not restart the subsections at number 1 as the Permittee suggested. The subsections started at number 10 in the Draft Permit. The subsections numbers were reset to start V.B.1. in the Proposed Permit.

- b. Language in the Proposed Permit has been modified to provide clarification that the TST "Pass/Fail" endpoint is a trigger and not a numeric effluent limitation. The proposed changes are as follows:

Effluent Limitation IV.A.1.e has been modified to read as follows: "**Chronic Toxicity.** As measured at Monitoring Location EFF-001 and EFF-003, there shall be no chronic toxicity in the effluent when discharging to the Lower Eel River. Compliance with this narrative chronic toxicity effluent limitation shall be determined in accordance with section VII.J of this Order and sections V.B and V.C of the MRP (Attachment E).

The Compliance Determination language in section VII.J of the Proposed Permit has been modified as follows: "Compliance with the accelerated monitoring and TRE provisions specified in the MRP (Attachment E, sections V.B.8 and V.C) shall constitute compliance with the narrative chronic toxicity requirement specified as Effluent Limitation IV.A.1.E. The MRP, section V.B.6.a, further describes how a determination of Pass/Fail shall be made."

The Accelerated Monitoring Requirements language in MRP section V.B.8 of the Proposed Permit has been modified to read as follows, “~~The trigger for a Accelerated monitoring for chronic toxicity is exceeded-triggered~~ when a chronic toxicity test, analyzed using the TST approach, results in “Fail” and the “Percent Effect” is ≥ 0.50 .”

Fact Sheet section IV.C.5.c has been modified as follows, “This Order also includes a narrative chronic toxicity limitation as required by State Board Order No. WQO 2003-012. ~~Chronic WET limitations will be established if future monitoring results demonstrate that discharges from the Facility are causing or contributing to chronic toxicity in the receiving water.~~”

Until such time that numeric effluent limitations are established for chronic toxicity, the Pass/Fail endpoint is being used strictly as a trigger that requires initiation of accelerated monitoring and potential implementation of a toxicity reduction evaluation (TRE).

4. Reasonable Potential Analyses for Acute Toxicity, Chronic Toxicity, Heptachlor Epoxide, Chlorodibromomethane (CDBM), and Ammonia and Requests for Removal of Effluent Limitations (15, 16, 17, 19, 21, 105, 123, 125, 127)

The Permittee included comments expressing concerns about the reasonable potential analysis included in the permit as follows:

- a. Acute Toxicity (19, 84, 123, 127).** The Permittee is concerned that the Draft Permit does not include a discussion of reasonable potential for acute toxicity and believes that data collected during the last five years demonstrates that there is no reasonable potential for acute toxicity. The Permittee requests that effluent limitations for acute toxicity be removed and replaced by an acute toxicity trigger.

Response: Acute toxicity effluent limitations are included in all permits for municipal wastewater treatment plants to ensure compliance with the Basin Plan water quality objective for toxicity which states “... effluent limits based upon acute bioassays of effluents will be prescribed” and at a minimum, “...compliance with this objective shall be evaluated with a 96-hour bioassay.” Based on a review of acute toxicity data submitted by the Permittee during the term of the previous Order, which demonstrated compliance with the acute toxicity effluent limitation, Regional Board staff reduced the monitoring frequency for acute toxicity from monthly to quarterly in the Draft and Proposed Permit.

No changes were made to the Proposed Permit in response to these comments.

- b. Chronic Toxicity (21, 86, 121, 124):** The Permittee made the following comments regarding the chronic toxicity reasonable potential analysis:

- i. the chronic toxicity reasonable potential analysis should be based only on the last three years of data;
- ii. there does not appear to be reasonable potential for chronic toxicity, since there was only one issue related to foaming and that was resolved.
- iii. the reopener provision in the Draft Permit would allow the permit to be reopened to add chronic toxicity effluent limitations if needed in the future.
- iv. the methods and statistics being prescribed in MRP section V.B.13 are not contained in the approved methods document, *Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Water to Freshwater Organisms*, U.S. EPA Report No. EPA-821-R-02-013).
- v. *“Since the limits for chlorine and ammonia are stated to protect against toxicity, no toxicity limit is required. 40 C.F.R. §122.44(d)(1)(v). Toxicity monitoring and a narrative effluent limit and trigger are all that should be required per the State Water Board’s precedential order [identified in Item 2.a above].”*

Response: There are no regulations that limit the use of data used for an RPA to the last three years. In fact, the SIP, section 1.2 states, “When implementing the provisions of this Policy, the RWQCB shall use all available, valid, relevant, representative data and information, as determined by the RWQCB.” In addition, U.S. EPA Form 2A, Part E, Toxicity Testing Data states, “At a minimum, these [toxicity testing] results must include quarterly testing for a 12-month period within the past 1 year Or the results from four tests performed at least annually in the four and one-half years prior to the application”

The Regional Water Board found that there is reasonable potential for chronic toxicity based on the finding that *Ceriodaphnia Dubia* chronic toxicity tests resulted in exceedance of the chronic toxicity trigger of 1 TUc in six sampling events between April 19, 2011 and February 3, 2017, and results in the six samples with exceedances ranging from 1.3 TUc to 2 TUc. The Permittee conducted a toxicity identification evaluation (TIE) during April 2013 in response to elevated toxicity found during routine annual toxicity monitoring performed in March 2013. The Regional Water Board has properly established reasonable potential for chronic toxicity in the Proposed Permit, and as a result the Proposed Permit includes a narrative chronic toxicity effluent limitation. The reopener provision in the Proposed Permit could be used in the future, if needed, to add a numeric effluent limitation for chronic toxicity, or other pollutants

The chronic toxicity methods identified in MRP section V.B.13 of the Draft Permit are contained in the U.S. EPA Methods Manual and recognizes that, “the statistical methods in this manual are not the only possible methods of statistical analysis.” and that there are many other statistical methods that have been proposed and considered. Since the time that the Methods Manual was published (1995), the U.S. EPA published the *National Pollutant Discharge Elimination System Test of Significant Toxicity Implementation Document* (EPA 833-R-10-003, June 2010), in which they recommend that “Permitting authorities should consider adding the TST approach to their implementation procedures for analyzing valid WET data for their current NPDES WET Program.”

The Proposed Permit establishes a narrative effluent limitation for chronic toxicity as established by State Water Board Order No. 2003-0012. The determination of “Pass” or “Fail” utilizing the TST is an appropriate method of determining compliance with the narrative effluent limitation. In addition, if future chronic toxicity tests reveal toxicity, it is essential that the Permittee comply with the accelerated monitoring requirements in the Proposed Permit.

- c. Settleable Solids and Other Conventional Pollutants (123). *Fact Sheet section IV.C.3.c. Reasonable Potential Determination.*** The Permittee states that a reasonable potential analysis is required for all pollutants, yet there is no RPA for toxicity, settleable solids, and other conventional pollutants.

Response: A reasonable potential analysis is required to establish the need for effluent limitations for water quality-based effluent limitations, but not for technology-based effluent limitations like BOD, TSS, and settleable solids. The Permittee did not identify the specific conventional pollutants referenced, however, as explained in section IV.B of the Fact Sheet of the Proposed Permit, effluent limitations for the conventional pollutants BOD, TSS, and pH are established as required by 40 CFR § 133.105.

The settleable solids effluent limits are based on levels of treatment that are attainable from secondary treatment facilities and is further based on the Basin Plan water quality objective prohibiting bottom deposits and the sediment impairment in the Lower Eel River.

Based on past performance, Regional Water Board staff believe the Permittee should have no problem meeting any of the technology-based effluent limitations established in the Proposed Permit.

Fact Sheet section IV.C.3.iii, Settleable Solids (last sentence) has been modified as follows, “This limitation is based on the water quality objective prohibiting bottom

deposits for all surface waters of the North Coast Region established by the Basin Plan and is needed due to the 303(d) listing for sediment in the Lower Eel River."

- d. Heptachlor Epoxide (16, 126)** The Permittee states that reasonable potential was based on one sample in a five year period. The Permittee does not believe that an effluent limit should be established based on a single sample and proposes a 12-month period of continued monitoring and that a "conditional limit" be established after that 12-month period of monitoring only if there is another exceedance of the Water Quality Objective.

Response: Section 1.3 of the SIP discusses the steps required in determining water quality-based effluent limitations for priority pollutants. A Priority Pollutant will have reasonable potential if the Maximum Effluent Concentration (MEC) is greater than the most stringent water quality criterion (C) or if the effluent sample detects the pollutant and the observed maximum ambient background (B) concentration is greater than C.

The CTR establishes a water quality objective for the protection of human health for heptachlor epoxide of 0.0001 µg/L. The Permittee sampled the effluent for heptachlor epoxide one time, on February 11, 2015. The result of this single sampling event was 0.012 µg/L. The Permittee sampled for Heptachlor epoxide once in the receiving water with a maximum concentration of 0.013 µg/L. A determination of reasonable potential for Heptachlor Epoxide based on an MEC of 0.012 µg/L and a B of 0.013 exceeding a C of 0.0001 µg/L.

The Proposed Permit has been modified to include language for tiered monitoring for heptachlor epoxide. Tiered monitoring can allow a reduction in the monitoring frequency provided that compliance with effluent limitations is determined for the proposed timeframe. Table E-4 has been modified to include table note 14 in respect to heptachlor epoxide monitoring. Table E-4 note 14 states "Monitoring may be reduced to annually if the Permittee complies with the effluent limitation, as stated in Order section IV.A.1.a, for 24 consecutive months."

- e. Chlorodibromomethane (Cover Letter, 15, 105, 125, 138):** The Permittee states that there is no reasonable potential (RP) for Chlorodibromomethane (CDBM). The Permittee states that none of the samples submitted taken during the term of Order No. R1-2011-0004 detected CDBM. The use of chlorine for disinfection does not change the fact that there is no RP and the CDBM effluent limit should be removed.

Response: Staff concurs with the Permittee that none of the samples, for discharge point 001, taken during the term of Order No. R1-2011-0004, detected CDBM above the Water Quality Objective of 0.401 ug/L. The Permittee started using chloramines

in the disinfection process around 2012 and believes that this process alteration allows for better control of the formation of CDBM.

Furthermore, the addition of a continuous chlorine analyzer to the chlorine contact basin would allow the Permittee to better monitor and control the chlorine dosing. Proper chlorine dosing is critical to both a reduction in coliform for necessary disinfection and to limit the formation of disinfection by-products.

The Proposed Permit has been modified to remove CDBM as an effluent limitation in Order section IV.A.1.a, Fact Sheet section IV.C.3.c and Fact Sheet section IV.C.4. The Proposed Permit does still require the Permittee to monitor monthly for CDBM.

- f. Total Nitrate (17, 48, 49, 122):** The Permittee states that the Rio Dell Draft Permit has a single limit for total nitrogen of 10 mg/L as a monthly average. The Permittee believes permits should be consistent and that the approach in the Rio Dell permit has a better approach. The Permittee also proposed a compliance schedule with interim effluent limitations to comply with ammonia and nitrate final effluent limitations.

Response: Nitrate is known to cause adverse health effects in humans. For waters designated as domestic or municipal supply, the Basin Plan (Chapter 3) adopts the MCLs, established by Division of Drinking Water (DDW) for the protection of public water supplies at title 22 of the CCR, sections 64431 (Inorganic Chemicals) and 64444 (Organic Chemicals), as applicable water quality criteria. The MCL for nitrate (10 mg/L as N) is therefore applicable as a water quality criterion.

The Proposed Permit includes interim effluent limitations and a compliance schedule for total nitrate. The Permittee has averaged 17 mg/L total nitrate, on 65 samples, when discharging to both EFF-001 and EFF-003 during the previous permit term. The Permittee plans to upgrade the treatment system in order to meet the final effluent limitations for total nitrate and total ammonia.

Due to the reasonable potential for total nitrate, as sampled in the effluent, the Proposed Permit will retain the final effluent limitation for total nitrate but now includes a compliance schedule and an interim effluent limitations for nitrate and ammonia.

- 5. Request to Remove Flow Limits (9, 99) Discharge Prohibition III.H. (Average Dry Weather Flow)** *Regarding the 1.5 MGD maximum, This is a parameter the City has no control over. This could cause upsets to the treatment process if we divert the excess and bring it back later. It will have to be treated at one time or another. Flow is not required to be regulated under federal law, and in fact case law disallows EPA from regulating flow. Thus, there is no federal law reason for including this requirement. In addition, the*

reason in the fact sheet for this is to maintain compliance with effluent limits. However, the Water Boards cannot prescribe the manner of compliance under Water Code section 13360(a). Because the flows cannot be controlled, the effluent limits on constituents of concern should control. This requirement should be removed.

Response: The establishment of flow limits is not specifying manner of compliance, as asserted by the Permittee. Wastewater treatment facilities are designed to handle flows that are identified through an engineering analysis to ensure that the treatment process can achieve prescribed effluent limitations based on knowledge of the anticipated character of the influent, including organic loadings (BOD) and solids (total suspended solids) and to ensure that the facility can hydraulically handle wet weather flows. In addition, any request to increase flows above that, which was previously permitted, would require an antidegradation analysis to demonstrate that the increased flow would not adversely impact beneficial uses of the receiving water. The Proposed Permit establishes discharge prohibitions for average dry weather and peak wet weather flows that are based on design flow data submitted to the Regional Board by the Permittee. The Permittee's claim that flow cannot be controlled is not a reason not to regulate flow. The Permittee cannot control the exact composition of the influent to its Facility either. The Facility is designed to handle a range of flows and influent compositions based on historic data, and all effluent limits and flow limits in the Proposed Permit are based on the design data.

The compliance determination for Discharge Prohibition III.H., in Section VII.K. of the Draft Permit, states: "Compliance with the average dry weather flow prohibition in section III.H of this Order will be determined once each calendar year by evaluating all flow data collected in a calendar year. The flow through the facility, measured daily and averaged monthly, must be 1.5 mgd or less for the month with the lowest average monthly flow."

In 2016, the Permittee had an influent flow of less than 1.5 mgd in during dry weather months. The Permittee can easily comply with this Discharge Prohibition. No changes were made to the Proposed Permit in response to this comment.

- 6. Internal Chlorine Residual Requirements (25, 91). Effluent Limitations and Discharge Specifications IV.D.1.:** *The 1.5 mg/L minimum was removed in favor of this language "the total residual chlorine concentration shall be maintained at a level that ensures the discharge meets the total coliform effluent limitation at the end of the disinfection process for discharges" It's assumed that "meets the effluent limitation" means that we pass our coliform test? If we are complying with the coliform limitation, isn't that proof that we are maintaining a level that ensures compliance. We should not need to install a continuous analyzer to demonstrate what we've already demonstrated by not failing coliform tests. This violates the Water Code prohibition on the Water Board prescribing manner of compliance under section 13360(a). The City can comply with*

coliform in any legal manner. Further, requiring minimum chlorine residual can adversely impact ability to meet disinfection byproducts. For these reasons, these [internal monitoring] requirements [for chlorine residual] should be removed.

Response: The internal monitoring requirement for chlorine residual is needed to demonstrate that the disinfection system is being operated properly to ensure reduction of coliform to meet effluent limitations in the Proposed Permit. The Proposed Permit requires the Permittee to monitor coliform once a week. This monitoring frequency has been set as the minimum frequency needed to demonstrate compliance with coliform effluent limitations, but it only provides a single snapshot each week. The Regional Board relies on the Permittee demonstrating that an adequate chlorine residual is being maintained throughout each day, in place of requiring the Permittee to monitor coliform more frequently. Past permits have required the Permittee to maintain a minimum chlorine residual of 1.5 mg/L. Regional Board staff recognize that the amount of residual needed to ensure a proper coliform reduction varies based on the characteristics of the effluent and the design and management of the chlorination system and that requiring a specific minimum level may cause the Permittee to create chlorine disinfection by-products such as dichlorobromomethane, chlorodibromomethane, and Haloacetic Acids as a result of maintaining a higher residual than necessary to achieve adequate disinfection.

The requirement to demonstrate continuous chlorine residual has been retained in Order section IV.D.1 of the Proposed Permit.

- 7. Municipal and Domestic Supply (MUN) Beneficial Use (13, 108):** The Permittee states that MUN is not at existing use downstream of their discharge and that there is no need to include effluent limitations to protect MUN. The Permittee requests identification of MUN uses downstream of the Facility.

Response: Beneficial uses identified in the *Water Quality Control Plan for the North Coast Region* (Basin Plan) apply to existing and potential, as well as past, present and future uses. The Basin Plan establishes the MUN beneficial use for all North Coast Region waterbodies that are suitable, or potentially suitable for municipal and domestic water supply, unless the water body does not meet the conditions established in the State Water Board Resolution 88-63, *Sources of Drinking Water Policy* (Policy). The Policy identifies the following conditions that exempt a water body as a source of drinking water: the total dissolved solids (TDS) exceed 3,000 mg/L (5,000 uS/cm, electrical conductivity) and it is not reasonably expected by regional boards to supply a public water system; there is contamination, either by natural processes or by human activity (unrelated to the specific pollution incident), that cannot reasonably be treated for domestic use using either Best Management Practices or best economically achievable treatment practices; or the water source does not provide sufficient water to

supply a single well capable of producing an average, sustained yield of 200 gallons per day.

Furthermore, the Basin Plan uses the federal definitions of existing and potential to identify beneficial uses for waterbodies. Existing uses are those uses that were attained in a waterbody on or after November 28, 1975 (the date of the first Water Quality Standards Regulation published by USEPA in 40 CFR part 131.3(e)). Potential uses are established for any of the following reasons: (1) the use existed prior to November 28, 1975; (2) plans already exist to put the water to that use; (3) conditions make such future use likely; (4) the water has been identified as a potential source of drinking water based on the quality and quantity available per the Policy; (5) existing water quality does not support these uses, but remedial measures may lead to attainment in the future; or (6) there is insufficient information to support the use as existing, however, the potential for the use exists and upon future review, the potential designation may be re-designated as existing.

The Basin Plan correctly identifies MUN beneficial use for the Lower Eel River based on the Policy and federal definitions. Downstream of Fortuna, Palmer Creek CSD's water supply intakes are from wells adjacent to the Eel River and the groundwater could be influenced by flows from the Eel River. Domestic water supply by individual property owners utilizing relatively shallow groundwater wells adjacent to the Eel River are also likely to occur.

Once a use has been designated for a particular waterbody or segment, that use may not be removed from the water quality standards except under specific conditions. To remove a designated use, the state must demonstrate that attaining that use is not feasible because of any one of six factors listed in 40 C.F.R. §131.10(g) that prevent the attainment of the use, including the presence of naturally occurring pollutant concentrations; natural, ephemeral, intermittent or low flow conditions or water levels; human caused conditions or sources of pollution that cannot be remediated; dams, diversions or other types of hydrologic modifications; physical conditions related to the natural features of the water body that are unrelated to water quality; and controls more stringent than those required by the federal regulations would result in substantial and widespread economic and social impact.

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

B. Permit Comments and Responses

- 1. Discharge Locations (1, 12, 18, 78).** The Permittee states that the GPS coordinates for EFF-001 and EFF-003 are incorrect. In addition, the Permittee states that there should only be one monitoring location for discharges to EFF-001 and EFF-003, as they sample at the splitter valve near the operations building for both discharge locations. The

Permittee also questioned how the sampling for coliform could be performed when discharging to EFF-003.

Response: Regional Water Board staff acknowledge that the coordinates for EFF-001 and EFF-003 are inaccurate and have inserted the provided coordinates in Table 2. of the Proposed Permit. Regional Water Board staff finds that it is clearer to assign unique monitoring location names (EFF-001 and EFF-003) to recognize that there are two approved discharge locations, even though monitoring samples are taken from the same location. Furthermore, sampling for coliform can be performed at EFF-003 when discharging to the Percolation Ponds.

The coordinates for the discharge locations were changed in Table 2 to accurately identify the locations in the Proposed Permit in response to this comment.

- 2. Table 3. Administrative Information (2).** The Order effective date should be April 28th under the 1989 MOU with EPA.

Response: The MOU with EPA requires a minimum of 50 days between the permit adoption date and the permit effective date. The permit effective date is greater than 50 days in order to have the new permit requirements begin at the beginning of a month. No changes were made to the Proposed Permit in response to this comment, however, the Proposed Permit has been modified to reflect the new adoption, effective, and ROWD due dates.

- 3. Findings II.A and II.C (3, 4, 5).** The Permittee suggested editorial changes to both Findings, stating that Finding II.A contains duplication and needs to describe federal and state law in separate sentences and that Finding II.C needs to be modified identify additional permit sections that implement state law only.

Response: The language in these Findings is standard language from the Statewide permit template that has been vetted through a thorough technical and legal review. Minor modifications have been made to Finding II.C so that this Finding reads identically to the Statewide permit template language. Finding II.C does require that Regional Board staff carefully review the permit to properly identify permit sections that implement state law only. In response to this comment, Regional Board staff re-reviewed all permit language and determined that a few additional permit sections implement state law and have modified Finding II.C accordingly. Finding II.C of the Proposed Permit has been modified to read as follows: **“Provisions and Requirements Implementing State Law.** The provisions/requirements in subsections III.E, III.F, III.J, IV.B- IV.D., V.B, and VI.C.5.a, VI.C.5.d, and VI.C.5.e of this Order and sections VI, VII, VIII.C, IX.A, and X.E. of the Monitoring and Reporting Program are included to implement state law only.

- 4. Discharge Prohibition III.A. (6, 115)** The Permittee requests that Discharge Prohibition III.A be modified to apply to planned discharges because *you cannot disclose an unplanned or emergency discharge, and these discharges are covered by other prohibitions.*

Response: The Fact Sheet language in IV.A.1 of the Fact Sheet that explains this discharge prohibition makes it clear that this prohibition is aimed at the disclosure of constituents that may be in the discharge and is not aimed at the nature of the discharge itself (e.g., whether it is planned/unplanned, permitted/unauthorized). The Regional Board recognizes that an unplanned or emergency discharge cannot be disclosed in advance, and the Proposed Permit includes language that applies to the reporting of unplanned and emergency discharges if they occur.

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

- 5. Discharge Prohibitions III.E and III.G. (7, 8, 115).** The Permittee is requesting removal of these two discharge prohibitions stating that Discharge Prohibition III.E (related to sanitary sewer overflows) duplicates Discharge Prohibitions III.B and III.D and that Discharge Prohibition III.G duplicates Discharge Prohibition III.A.

Response: Discharge Prohibitions III.E and III.G are standard Regional Board requirements – the details of each prohibition have been found to be necessary to ensure that permittees understand the limits of what and where they can discharge. Prohibition III.E regarding sanitary sewer overflows was found to be necessary because the statewide collection system General Order (Order WQO No. 2006-0003) prohibitions only relate to SSO discharges that reach waters of the United States. Discharge Prohibition III.E expands upon the General Order to prohibit SSOs to waters of the state and to land where such SSO causes conditions of pollution, contamination, or nuisance.

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

- 6. Discharge Prohibition III.I. (10).** The Permittee would like the word “direct” to be included in this prohibition so that it will only prohibit direct discharges.

Response: Section 4 of the North Coast Basin Plan (Basin Plan) discusses Discharge Prohibitions for point source discharges in the North Coastal Basin. Discharge Prohibition 3 for the North Coastal Basin states, “The Mad and the Eel Rivers and their tributaries during the period May 15 through September 30 and during all other periods when the waste discharge flow is greater than one percent of the receiving stream's flow as set forth in NPDES permits.”

The Basin Plan does not identify this prohibition in regards to direct versus indirect discharges. The Permittee is responsible for all direct and indirect discharges to the Eel River and its tributaries. No changes were made to the Proposed Permit.

- 7. Discharge Prohibition III.J. (11, 115).** The Permittee requests clarification on how discharges from the Facility can be adjusted daily and requests that the permit be revised to allow flows to be averaged over a month only.

Response: Discharge Prohibition III.J requires that discharges from the Permittee's Facility not exceed one percent of the flow of the Lower Eel River. This Prohibition further describes how Regional Water Board staff assesses compliance with the one percent dilution rate. The Proposed Permit allows the Permittee to comply with the one percent requirement as a monthly average measured by the sum of the flows at the United States Geological Survey (USGS) Station 11477000 in the Eel River near Scotia and at USGS Station 11478500 in the Van Duzen River near Bridgeville. The Permittee must read the stations at least once daily, and the daily discharge flow rate must be set to be no greater than one percent of the flow of the rivers at the time of the flow gage readings. In order to adjust daily, The Permittee's operator(s) must go to the USGS websites for [11477000](#) and [11478500](#) daily to check the reported flow for the gages. The discharge flow rate must be set to be discharging at or below one percent of the gages flow readings. Since the gage data is reported in cubic feet per second (cfs), and the Permittee reports discharge flows in MGD, a calculation must be done to convert cfs to an equivalent MGD value. If the Permittee's staff needs assistance in understanding this description of how to adjust the flow rate daily or the conversion calculation, Regional Board staff are available to provide assistance.

It is inappropriate for the Proposed Permit to be revised to allow flows to be averaged over a month only due to the fact that Lower Eel River flows vary greatly, there is no way to know in advance how much flow will be available in the Lower Eel River over the course of the month, and basing the dilution rate on monthly averages only could allow for discharges well in exceedance of one percent during parts of the month. Regional Board staff also reviewed recent discharge flow data submitted by the Permittee, and it appears that during most of the allowable discharge season, the Permittee's flows are quite low relative to the flows in the Lower Eel River, thus making it unlikely that the Permittee would exceed the one percent flow limitation. Nonetheless, it is easy to obtain the daily data to demonstrate that this is the case, and it is the Permittee's responsibility under the Proposed Permit to provide all data necessary to demonstrate compliance.

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

- 8. Effluent Limitations, Table 4 (13, 14, 120, 122). Request to modify effluent limitations for human health protection:** *Limits for POTWs are supposed to be*

monthly and weekly averages. The Fact Sheet does not explain why weekly averages are impracticable as required by 40 C.F.R. §122.45(d)(2). There is no impracticability analysis to justify daily limits, which are not required for POTWs.

Because discharges are only allowed when effluent is 1% of the flow, the water quality-based limits should reflect dilution credits up to 100:1 dilution. In addition, for the human health criteria, these should only be monthly average limits because there is no acute need for a daily or short term limit because those criteria are set for 70 years of exposure. Finally, there is no MUN use downstream of this discharge, so there is no need to include effluent limitations to protect MUN.

Response: This response focuses on the underlined portions of this comment. The part of this comment related to dilution credits, is addressed in the response to Item A.1, above, and the part of the comment related to the MUN use is addressed in the response to Item A.8, above.

40 C.F.R. §122.45(d)(2) does state that permit limits shall be stated as average weekly and average monthly discharge limitations, unless impracticable, for POTWs. 40 C.F.R. § 103.102 provides detailed specifications for establishing effluent limitations for the technology-based constituents, BOD, TSS, and pH. Effluent limitations for BOD, TSS, and pH in Effluent Limitations IV.A.1.a, Table 4 and IV.A.1.b of the Draft Permit were established as required by 40 C.F.R. § 103.102, and have been retained in the Proposed Permit. These sections of the federal regulations apply to technology-based effluent limitations, not to water quality-based effluent limitations.

For water quality-based effluent limitations for toxic pollutants, Section 5.2.3 of the EPA *Technical Support Document for Water Quality-based Toxic Controls* states “in lieu of an Average Weekly Limit (AWL) for POTWs, EPA recommends establishing an Maximum Daily Limit (MDL) (or a maximum test result for chronic toxicity) for toxic pollutants and pollutant parameters in water quality permitting. This is appropriate for at least two reasons. First, the basis for the 7-day average for POTWs derives from the secondary treatment requirements. This basis is not related to the need for assuring achievement of water quality standards. Second, a 7-day average, which could comprise up to seven or more daily samples, could average out peak toxic concentrations and therefore the discharge’s potential for causing acute toxic effects would be missed. A MDL, which is measured by a grab sample, would be toxicologically protective of potential acute toxicity impacts.”

Section 1.4 of the State Implementation Policy (SIP) states that maximum daily effluent limitations shall be used for POTWs in place of average weekly effluent limitations for Water Quality Based Effluent Limitations. The SIP procedure of calculating an AMEL and an MDEL applies to all CTR pollutants, both those that are for protection of aquatic life and those that are for the protection of human health.

Table 4 also establishes effluent limitations for one parameter that is for the protection of human health and is based on Title 22 Drinking Water MCLs and are not CTR pollutants: Total Nitrogen. For this parameter, the Regional Board recognizes that the criteria for this parameter is based on chronic (long-term) exposure, and thus agree that it is appropriate to establish average monthly effluent limitations only.

The Maximum Daily Effluent Limitation for Nitrogen has been removed in the Proposed Permit.

9. **Effluent Limitations, Section IV.A.1.d (20).** The permittee requests clarification on when the quarterly sampling events for chronic toxicity should be performed now that EFF-001 and EFF-003 are considered surface water discharges.

Response: Acute Toxicity Monitoring will be performed quarterly as listed in Table E-7 of the Monitoring and Reporting Program (MRP). The following language has been added to Table E-7 to clarify when the quarterly sampling shall occur.

| Sampling Frequency | Monitoring Period Begins On... | Monitoring Period | SMR Due Date |
|--------------------|---|---|--|
| Quarterly | Closest of January 1, April 1, July 1, or October 1 following (or on) permit effective date | January through March April through June July through September October through December | First day of second calendar month following the end of each quarter (February 1, May 1, August 1, November 1) |

Samples may be taken from EFF-001 when discharging to Strongs Creek or from EFF-003 when discharging to the Percolation Ponds.

10. Effluent Limitations, Section IV.A.1.d (22). The Permittee requests clarification on when to sample the receiving water for chronic toxicity tests.

Response: Chronic Toxicity testing is required annually in the Draft Permit. Receiving water sampling shall be performed on the appropriate receiving water body when discharging out of Discharge Point 001 or 003. If the Permittee is discharging to Discharge Point 003 when chronic toxicity sampling is performed, then the Permittee should sample from RSW-003.

11. Other Requirements IV.D. (24). The Permittee requests that this section be changed to “Other Non-Effluent Limit Requirements”, stating that it needs to be clear that these requirements do not constitute effluent limits and are not subject to mandatory minimum penalties (MMPs).

Response: The title of this section does not need to be changed to clarify that requirements in this section of the Proposed Permit are not effluent limits subject to MMPs, as this section has been added to Order Finding II.C, to identify it as a requirement that implements state law only. It is interesting to note that some of the Permittee’s comments requested removal of all requirements that are included in this section. Staff has addressed the Permittee’s request for removal of the chlorine residual monitoring requirements in this section in its response to Item A.6, above.

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

12. Receiving Water Limitations V.A, V.A.1, V.A.10, V.A.13, V.A.17, (26, 27, 28, 29, 31). The Permittee is requesting modifications to the receiving water language based on the

Permittee's interpretation of the Basin Plan and requests that the receiving water language closely track the Basin Plan and be consistent throughout the receiving water limitation section.

Response: The receiving water limitations included in the Proposed Permit are consistent with the Basin Plan. Due to the fact that the Proposed Permit applies effluent limitations at the end of the discharge point, in order to protect the receiving water immediately at the end-of-pipe, receiving water limitations that refer to parameters that have water quality objectives do not apply just to the receiving water, but to the effluent discharge too, therefore, it is not appropriate to add the words "receiving water" to Receiving Water Limitations V.A.14, V.A.17, or V.A.18 per the Permittee's request.

In specific response to Comment 27, which applies to Receiving Water Limitation V.A.1 regarding dissolved oxygen, Table 3-1 of the North Coast Basin Plan identifies a 50% lower limit of 10.0 mg/L for dissolved oxygen for the Eel River.

In specific response to Comment 29, which applies to Receiving Water Limitation V.A.13 regarding temperature, the North Coast Basin Plan states: "The natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses." The Permittee has not demonstrated to the Regional Board that such an alteration in temperature does not adversely affect beneficial uses, particularly the COLD Beneficial Use.

Regional Board staff has modified the Proposed Permit in response to some of the Permittee's comments as follows:

- i. The words "Discharges from the Facility shall not cause the following in the receiving water:" (Comment 26) have been removed; and
- ii. A minor modification to the wording of Receiving Water Limitation V.A.10 was made as follows: "The discharge shall not contain substances in concentrations that result in deposition of material ~~cause bottom deposits~~ in receiving waters to the extent that such deposits cause nuisance or adversely affect beneficial uses." (Comment 28). This modified language is more consistent with how the Basin Plan narrative objective for settleable material reads.

13. Receiving Water Limitations V.A.15, V.A.18, V.B.2, and V.B.3 (30, 32, 34, 35, 119, 122). *MCLs are set as annual averages for drinking water and were not initially intended to be used as Water Quality Objectives (WQOs). If used for WQOs, then they need to mirror those requirements as annual averages.*

Response: The State Water Board's *A Compilation of Water Quality Goals* (page 11) states, "Drinking water MCLs are directly applicable to water supply systems and at the tap and are enforceable by SWRCB and local health departments. California MCLs, both Primary and Secondary, are directly applicable to groundwater and surface water resources when they are specifically referenced as water quality objectives in the pertinent Water Quality Control Plan (or Basin Plan). Where fully health protective, MCLs may also be used to interpret narrative water quality objectives prohibiting toxicity to humans in water designated as a source of drinking water (municipal and domestic supply) in the Water Quality Control Plan." The Basin Plan establishes Title 22 drinking water maximum contaminant levels as water quality objectives that must not be exceeded in the receiving water. These MCLs are applied at end-of-pipe, to ensure protection of the entire receiving water.

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

14. Receiving Water Limitation V.B.1 (33). This is not a Basin Plan or even a true antidegradation requirement. Further, title 27 is not necessarily required for wastewater facilities otherwise in compliance. This section should be removed.

Response: This groundwater limitation is necessary to ensure that reasonable best management practices are implemented during the collection, treatment, storage, and disposal of wastewater to ensure protection of groundwater. "Title 27" has been replaced with "Basin Plan" because the Basin Plan contains beneficial uses and water quality objectives for groundwater.

15. Source Control and Pretreatment Provision VI.C.5. (37, 38, 41, 42, 43, 44, 45, 95, 96, 97, 137). The Permittee states that the City has no industrial users, thus source control requirements are not needed and expresses concern that it is unclear how the Permittee is to implement the prohibitions listed without adding language stating that it is to be implemented through the Permittee's sewer use ordinance.

Response: Eel River Resource Recovery is the Eel River Valley's largest full-service resource recovery and waste collection company. EPA promulgated the Centralized Waste Treatment (CWT) Effluent Guidelines and Standards ([40 CFR Part 437](#)) in 2000 and amended the rule in 2003. The regulations cover discharges from facilities that treat or recover metal-bearing, oily, and organic wastes, wastewater, or used material received from off-site.

Covered wastestreams include materials received from off-site, solubilization water, used oil/emulsion breaking wastewater, tanker truck/drum/roll-off box washes, equipment washes, air pollution control waters, laboratory-derived wastewater, wastewater from on-site industrial waste combustors, landfills, and contaminated stormwater.

Eel River Resource Recovery currently treats their storm water via an oil-water separator and discharges the treated wastewater to Strongs Creek. The truck wash water is discharged to the sanitary sewer system. There are also multiple jewelers and dentists in town that could be discharging metals and mercury to the sewer system. The Permittee needs to be aware on metal finishing or plating operations at each jeweler and if at each dental facility uses amalgam separators to properly dispose of mercury.

A Significant Industrial User (SIU) is defined by 40 CFR 403.3(v) as “All Industrial Users subject to categorical Pretreatment Standards under 40 CFR 403.6 and 40 CFR Chapter I, subchapter N (known as Categorical Industrial Users). Any other Industrial User that discharges an average of 25,000 gallons per day (gpd) or more of process wastewater to the POTW (excluding sanitary, noncontact cooling, and boiler blowdown wastewater); contributes a process wastestream that makes up five percent or more of the average dry-weather hydraulic or organic capacity of the POTW treatment plant; or is designated as such by the Control Authority on the basis that the Industrial User has a reasonable potential to adversely affect the POTW’s operation; or for violating any Pretreatment Standard or Requirement.”

After review of the Industries in the area and communication with the Chief Plant Operator and Public Works Director, Staff has agreed to remove the Source Control and Pretreatment studies included in section VI.C.2.b. of the Proposed Permit and the Industrial Waste Survey included in section VI.C.5.b of the Proposed Permit based on the fact that no industry appears to meet the requirements of an SIU.

Staff does urge the Permittee to properly monitor industries that come into the area, develop a Sewer Use Ordinance to establish legal authority to regulate discharges to the sewer system and to perform a local limits study to determine if particular pollutants are having an adverse impact on the treatment plant.

16. Pollutant Minimization Program (PMP) Provision VI.C.3.a. (39, 40). The Permittee asks if a PMP can be done with a 13267 Order instead of being required by the Executive Officer. The Permittee also requests clarification on when the annual status report for the PMP will be required to be submitted.

Response: Language from Provision VI.C.3.a. is standard language that is included in all NPDES permits. Since language has already been developed for implementation of the PMP in the Proposed Permit, a 13267 Order is not necessary.

In addition, an annual status report will need to be submitted only if/when the Executive Officer requires the Permittee to develop and implement a PMP. Written

notice will be provided to the Permittee to develop and implement a PMP. No changes were made to the Proposed Permit.

17. Storm Water Provision VI.C.6.a. (47, 112). The requirement to include BMPs to control the run-on of storm water is beyond the scope of this wastewater permit. Furthermore, there is no authority to include BMPs to control storm water run-on in wastewater discharge permits.

Response: Staff concurs that the identified language is not necessary because run-on is minimal and the storm water that does come onto the facility is directed to the overflow basin and pumped back through the treatment plant. This language has been removed from Order section VI.C.6.a. and MRP section X.D.2 of the Proposed Permit.

18. Compliance Determination sections VII.C. (50). *Violations [of effluent limitations] can only be assessed after due process and a review of the evidence to see if there are any defenses or other information to make it not a "violation."*

Response: An effluent limit exceedance is initially reported as a violation in electronic Self-Monitoring Reports. Violations of effluent limits are subject to Mandatory Minimum Penalties as described in Sections 13385(h) and 13385(i). Effluent limit violations are only reversed in cases where it can be clearly demonstrated that a sample result is not representative of effluent quality with clear, defensible documentation, such as quality assurance/quality control data that confirms sample contamination.

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

19. Attachment A, Definitions (51, 52, 53, 54). The Permittee is requesting that definitions for Enclosed Bays, Effective Concentration, Inhibition Concentration, and Test of Significant Toxicity be removed from the permit stating that the Enclosed Bays definition is not relevant and that the other three are unnecessary because they aren't applicable.

Response: Regional Board staff carefully reviewed the definitions section of the permit. Each of the words identified by the Permittee was retained because they are used in the permit document. "Enclosed Bays" is used in the definition of Inland Surface Waters and in the MRP and Fact Sheet which references policies that apply to both inland surface waters and enclosed bays and estuaries. The Regional Board will retain the requirement to use the TST for evaluating toxicity results, but even so, "effective concentration" and "inhibition concentration" are referred to in the MRP language as "EC" and "IC". These definitions have been retained in the Proposed Permit.

The Proposed Permit has been modified to identify the acronyms "EC" and "IC" subsequent to the definitions.

- C. Process Flow Chart Comment and Response (55).** The Permittee states that clarifiers 1 through 3 are no longer in service and that diagram needs to be updated.

Response: The Permittee as part of their Report of Waste Discharge submitted the process flow charts in Attachment C. The Permittee may submit updated charts and Staff will update Attachment C.

- D. Standard Provisions Comments and Responses (56 – 74).** The Permittee noted that Sections IV.C.7, V.F.7, V.I.4 and VII.N. need to be formatted to be consistent with numbering in the rest of Attachment D. Additionally, a Sections VIII through XIII are duplicates of Sections II through VII. The duplicate sections should be removed.

Response: Regional Water Board Staff thank the Permittee for pointing out these errors. The Proposed Permit has changed the numbering in the above mentioned sections and has removed the duplicate sections.

E. Monitoring and Reporting Program Comments and Responses

- 1. General Monitoring Provisions I.A, Wastewater Monitoring Provision (75).** The permittee requests clarification on weather proportional sampling devices need to be approved by the Executive Officer for the new permit term.

Response: If the currently approved proportional sampling device has not been replaced, then there is no need to get the device re-approved. If the Permittee changes the proportional sampling device, then approval of the new device would be required.

- 2. General Monitoring Provision I.E, Minimum Levels (ML) and Reporting Levels (RL), Table E-1. Test Methods and Minimum Levels for Priority Pollutants (77).** It is unclear why this table is needed as [the MLs] are listed in the SIP and apply to all CTR constituents, not just [the ones listed in Table E-1].

Response: The Permittee is correct in stating that the SIP includes MLs for all CTR constituents. Regional Board staff includes this summary table identifying the MLs for constituents that the Permittee is required to routinely monitor for to ensure that the proper MLs are used. Recently, State Water Board staff modified standard language related to MLs and RLs requiring Permittee's comply with the federal Sufficiently Sensitive Test Methods Rule that was promulgated in August 2014. General Monitoring Provision I.E of the MRP has been modified to include the revised standard language to clarify the federal requirement for permittees to use sufficiently sensitive EPA-approved analytical methods when quantifying the presence of pollutants in a discharge and for the permitting authority to prescribe that only sufficiently sensitive EPA-approved methods be used for analyses of pollutants or pollutant parameters

under a permit. Incorporation of the permit language incorporating the Sufficiently Sensitive Test Methods Rule eliminates the need to include a list of test methods and minimum levels. In addition, Table E-1 of the Draft Permit has been removed from the Proposed Permit.

- 3. Monitoring Locations, Section II, Table E-2. (79).** The historic information regarding Discharge Point 002/Monitoring Location EFF-002 is irrelevant and should be removed.

Response: Although there are no longer requirements in the Proposed Permit that apply to Discharge Point 002 now that discharge from the old chlorine contact basin is no longer done, Regional Board staff find it beneficial to retain a reference to this location in Table E-1 (formerly Table E-2) to retain the historical significance of the monitoring location and to ensure that this discharge point number and monitoring location number are not assigned to a new discharge in the future. It is important to retire the identifiers used for the old chlorine contact basin to ensure that data entered into record for that location does not get confused with data from a uniquely different discharge point in the future.

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

- 4. California Toxics Rule (CTR) Monitoring Requirements, Table E-4 (80, 139).** Table E-4 requires CTR monitoring twice per permit term. The Permittee points out that Attachment F, Section VII.B.1.d. (Rationale for Monitoring and Reporting Requirements) is in conflict with Table E-4 as language in Attachment F of the Draft Permit states "Effluent monitoring requirements for the CTR priority pollutants has been retained from Order No. R1-2011-0004 once per permit term at Monitoring Location EFF-001."

Response: Staff intended to increase the CTR monitoring to twice per permit term in the Draft Permit. The Proposed Permit has modified Attachment F, Section VII.B.1.d. to state "Effluent monitoring requirements for the CTR priority pollutants has been retained from Order No. R1-2011-0004 ~~once~~ and increased to twice per permit term at Monitoring Location EFF-001. The increase in monitoring from once per permit term to twice per permit term is necessary to generate adequate data to perform reasonable potential analysis (RPA) for future permits."

The Permittee took exception to RPA being performed on Heptachlor Epoxide, see Item A.3.d above, with only one sample taken in five years. Increasing the monitoring for CTR pollutants will allow a larger sample size for determination of Priority Pollutants in the next permit cycle.

- 5. Acute Toxicity Testing, Species Sensitivity Screening (82, 128).** The Permittee requests clarification whether they need to perform all the sampling that is required in

Section V.A.5. of the Draft Permit or previous results suffice. The Permittee believes they have already shown the most sensitive species.

Response: Constituents in the Permittee’s effluent and the receiving water can change over time, which can cause different species to become the most sensitive to acute toxicity. Therefore, species sensitivity screening will still be required in the Proposed Permit.

6. Receiving Water Monitoring Requirements, Table E-5, Aluminum Monitoring Frequency (90, 93, 111). The Permittee states that the aluminum criteria being used requests clarification on when samples should be taken “Twice per permit term.”

Response: Table E-7 has been updated to include a monitoring period of Twice per permit term. The intent of taking a sample twice per permit term is to spread out the sampling events. Sampling events should take place at least two years apart. The previous sentence will be added as a table note to Table E-7 along with the following language.

| Sampling Frequency | Monitoring Period Begins On... | Monitoring Period | SMR Due Date |
|---------------------------|---------------------------------------|--------------------------|-------------------------------------|
| Twice per permit term | Permit effective date | All | 180 days prior to permit expiration |

7. Reporting Requirements, Discharge Monitoring Reports (DMRs) (94). The Permittee notes that the change in submittal of DMRs to quarterly is new as they now submit them monthly. The Permittee is also requesting clarification on if they are required to submit DMRs in the summer as well.

Response: Staff has been making a change from monthly SMR submittals to Quarterly SMR submittals when renewing NPDES permits. Section X.B.2. of the MRP has been modified as follows, “The Permittee shall submit ~~monthly~~quarterly SMRs including the results of all required monitoring using U.S. EPA approved test methods or other test methods specified in this Order.”

The Permittee will be required to submit DMRs whenever they discharge to Water of the U.S. Since the Regional Water Board now considers discharges to EFF-003 Waters of the U.S., the Permittee will need to submit a DMR quarterly, along with their SMR submittals.

F. Fact Sheet Comments and Responses

- 1. Permit Information, Table F-1. Facility Information (98).** The Permittee states that Doug Culbert should be the “Authorized Person to Sign and Submit Reports” and not Merritt Perry.

Response: The information has been updated to reflect Doug Culbert in the above section of Table F-1.

- 2. Fact Sheet, Section I.B, Permit Information, Need to Explain Delay in Permit Issuance (100).** *Need to explain delay in permit reissuance and that current permit still applicable.*

Response: Delays in permit reissuance may occur due to heavy Regional Board staff permit reissuance workloads. Further delays may occur when additional time is needed to respond to extensive comments and work with a permittee toward addressing those concerns. The federal regulations allow administrative continuance of an existing, expired permit, provided that the Permittee submitted its Report of Waste Discharge by the date required in the existing permit. Since the Permittee submitted its ROWD in a timely manner, the 2011 permit was administratively extended.

Fact Sheet section I.B (second sentence) of the Proposed Permit has been modified to make note of the administrative extension and reads as follows, “The Permittee was previously regulated by Order No. R1-2011-0004 and NPDES Permit No. CA0022730 adopted on January 28, 2011, and expired on January 26, 2016, and has been administratively continued since then.”

- 3. Fact Sheet section III.C.6, Antidegradation Policy (110).** *A 1968 Resolution cannot incorporate a future policy.*

Response: State Water Board Resolution No. 68-16 (Statement of Policy with Respect to Maintaining High Quality Waters in California) is deemed to incorporate federal antidegradation regulations. The antidegradation policy language in the Proposed Permit is standard language in NPDES permits in the State of California. Regional Board staff made minor modifications to section III.C.6 of the Fact Sheet to make this antidegradation policy finding identical to the most current statewide standard language that has been vetted through legal review.

- 4. Fact Sheet section III.D, Impaired Water Bodies on CWA 303(d) List (111).** The Permittee states, “*It is likely that the aluminum criteria being used is inappropriate Western water and soils. The Central Valley has stopped using the EPA guidance because naturally occurring levels prevent attainment of those Criteria.*”

Response: As explained in section VII.B.1.e of the Fact Sheet, monitoring for aluminum is needed to gather sufficient data to determine if the Permittee's Facility has the potential of discharging effluent containing aluminum at concentrations that exceed applicable water quality objectives for aluminum in light of the facts that the Lower Eel River is listed on the U.S. EPA 303(d) list as impaired for aluminum. The MRP establishes a twice per permit term monitoring frequency for aluminum to determine the contribution to the aluminum impairment in the Lower Eel River.

Section VII.B.1.e of the Fact Sheet has been modified as follows:

This Order establishes a new monitoring requirement for aluminum in order to gather data needed to evaluate reasonable potential for aluminum. As previously described in section III.D of this Fact Sheet, the Lower Eel River is listed on the U.S. EPA 303(d) list as impaired for aluminum, ~~and the Permittee uses an aluminum-based polymer in the Facility.~~

- 5. Fact Sheet section III.E.3 and III.E.5, Other Plans, Policies, and Regulations (113, 114).** *This Order should not require coverage under another permit that is a separately enforceable program. This [section III.E.3] needs to be worded like the SSO WDR – that the permittee has coverage under it, but it is separate. We don't want citizen suits for biosolids issues related to a different permit under this permit.*

Response: Section III.E.3 of the Fact Sheet in the Proposed Permit has been modified to read as follows, "The ~~Order requires the~~ Permittee ~~to~~ must obtain coverage under Order No. 2004-0012-DWQ prior to any removal of biosolids from the Facility that will be land disposed on property owned or controlled by the Permittee."

Section III.E.5 of the Fact Sheet in the Proposed Permit has been modified to read as follows, "~~This Order requires the~~ Permittee must ~~to~~ maintain coverage under Order WQ 2015-0121-DWQ for any composting operations at the Facility.

- 6. Fact Sheet section IV.A.1, Discharge Prohibition III.A. (116):** The Permittee states that language included in the last paragraph of this section in the Draft Permit is mixing permit shield and notice requirements and proposes language changes.

Response: The last paragraph in section IV.A.1. of the Fact Sheet for the Proposed Permit has been removed to be consistent with the same section in the Rio Dell Proposed Permit.

- 7. Fact Sheet section IV.B.1, Scope and Authority (117).** The Permittee correctly points out that Best Professional Judgement was quoted incorrectly in accordance with 40 C.F.R. section 125.3. The Proposed Permit has been modified to read as follows:

Section 301(b) of the CWA and implementing U.S. EPA permit regulations at 40 C.F.R. section 122.44 require that permits include conditions meeting applicable technology-based requirements at a minimum, and any more stringent effluent limitations necessary to meet applicable water quality standards. The discharge authorized by this Order must meet minimum federal technology-based requirements based on Secondary Treatment Standards at 40 C.F.R. ~~part 133 and Best Professional Judgement (BPJ) in accordance with 40 C.F.R. section 125.3.~~

G. Other Comments

1. **Section IV.C, Water Recycling Specifications and Requirements (23).** *The previous section is not numbered, so this should be consistent.*

Response: The Proposed Permit has been modified as follows:

C. Water Recycling Specifications and Requirements – Not Applicable

- ~~1.~~ This Order does not authorize discharges of recycled water.

2. **Section VI.C.5.c.iii, Sludge Disposal and Handling Requirements (46).** The Permittee states that they have *“been advised by our local agency that Title 14 Div 7 of the CCR supersedes 40 CFR part 503. No mention of Title 14 Div 7 in this permit stating this. Title 14 sampling standards are more strict. I’d like to see some mention of it here so we have guidance on what regulations to perform.”*

Response: For the purposes of the Proposed Permit, the disposal of biosolids to land is regulated under 40 CFR part 503.

3. **Attachment F Section II.A, Facility Description (102).** The Permittee requests a modification to language describing processes when influent flows exceed 4 million gallons per day.

Response: The Proposed Permit has been modified to read as follows:

When influent flows exceed 3 to 4 mgd, influent ~~is~~ can be partially diverted to an emergency overflow basin ~~equalization ponds to ensure a constant flow rate.~~

4. **Attachment F. Table F-3, Historic Effluent Limitations and Monitoring Data – Discharge Point 003 (106).** The Permittee states that there is not table note 4 description.

Response: Table note 4 in Table F-3 is a historic error that was carried over from the previous permit. Table note 4 in Table F-3 has been removed in the Proposed Permit.

- 5. Attachment F. Table F-4, Basin Plan Beneficial Uses (107).** The Permittee requests that the Strongs Creek uses should be deleted and only include the Eel River.

Response: Since Strongs Creek is a tributary of the Eel River, and tributaries carry the same Beneficial Uses as the designated main stem, then the redundant row describing Strongs Creek Beneficial uses has been removed from Table F-4 of the Proposed Permit.

- 6. Attachment F. Section IV.B.1, Technology-Based Effluent Limitations (118).** The Permittee added language to provide "*extra justification for no mass-based limits.*"

Response: Section IV.B.2.c. of the Draft Permit provides justification for not requiring mass-based limitations for BOD, TSS and pH. No changes were made to the Proposed Permit.

- 7. Attachment F. Section IV.C.5.a, Acute Aquatic Toxicity Water Quality-Based Effluent Limitation (129).** The Permittee points out that this section states Attachment E requires monthly acute WET monitoring, when it actually requires quarterly monitoring.

Response: Language in the Proposed Permit has been modified as follows:

This Order requires the Permittee to conduct a screening test using a vertebrate and invertebrate species. After the screening test is completed, monitoring can be reduced to the most sensitive species. Attachment E of this Order requires ~~monthly~~ quarterly acute WET monitoring.

- 8. Attachment F. Section IV.F, Land Discharge Specifications and Requirements (134).** The Permittee states this section contradicts language on page F-5 of the Draft Permit that states the Percolation Ponds are not a land discharge.

Response: Section IV.F of the Fact Sheet has been removed since discharge to EFF-003 are now considered discharge to Waters of the U.S.

- 9. Attachment F. Section IV.H.1, Residual Chlorine (135).** The Permittee requests clarification on whether the residual chlorine levels can change relative to changing effluent conditions. The Permittee also asks if there will ever be a standard for residual chlorine levels, inside the chlorine contact chamber or if the residual chlorine level will be able to fluctuate throughout the permit term.

Response: Past permits have required the Permittee to maintain a minimum chlorine residual of 1.5 mg/L. Regional Board staff recognize that the amount of residual needed to ensure a proper coliform reduction varies based on the characteristics of the effluent and the design and management of the chlorination system. Requiring a specific

minimum level may cause the Permittee to create chlorine disinfection by-products such as dichlorobromomethane, chlorodibromomethane, and Haloacetic Acids as a result of maintaining a higher residual than necessary to achieve adequate disinfection. A continuous chlorine analyzer installed in the chlorine contact chamber (CCC) would allow the Permittee to better monitor the chlorine dose inside the CCC and ensure proper disinfection.

10. Attachment F. Section VI.B.1.c, Whole Effluent Toxicity Reopener Provision (136).

The Permittee asks if they need to perform Whole Effluent Toxicity testing if no toxicity is present.

Response: Whole Effluent Toxicity (WET) testing is required for both acute and chronic toxicity testing as required in Table E-3. The Proposed permit currently requires chronic WET testing to be conducted annually and acute WET testing to be conducted quarterly. Section E.V.A. and E.V.B discuss acute and chronic WET testing requirements.