

Response to Written Comments

In Consideration of Waste Discharge Requirements Order No. R1-2014-0013, Renewal of National Pollutant Discharge Elimination System (NPDES) Permit for the Loleta Community Services District Wastewater Treatment Facility

Regional Water Quality Control Board, North Coast Region
May 8, 2014

Comment Letters Received

One e-mail from each the Loleta Community Services District and the US Environmental Protection Agency were received timely regarding the draft Waste Discharge Requirements/NPDES permit for the Loleta Community Services District Wastewater Treatment Facility. The correspondence identified as A and B below have been attached to this response (Attachments A and B). Some comments resulted in clerical edits or clarifications. All other comments and clarifications received are summarized and followed by staff response in this document.

- A. Loleta Community Service District, February 27, 2014, e-mail signed by Marcus Drumm, General Manager
- B. US Environmental Protection Agency, March 14, 2014, e-mail signed by Elizabeth Sablad, NPDES Permits Office

A. Loleta Community Services District

Comment 1: Attachment A: Definitions – please add the following: Industrial Waste Survey (IWS), WQBEL, technology based effluent limitation (TBEL?): or refer to Attachment F.V.B., SMR, DMR, WDR, NPDES

Response 1: The first time an acronym is used within the draft permit, it is immediately preceded by the terms it describes. The full description of water quality based effluent limitations and technology based effluent limitations are contained in the draft permit Attachment F under sections with those titles and can be most readily identified by using the table of contents.

Comment 2: Attachment E: Please move V. Whole Effluent Toxicity move to after IX. Other Monitoring.

Response 2: The order in which information is presented in the draft permit follows a template used for all NPDES permits. In order to maintain consistency, Whole Effluent

Toxicity information will remain in section V of the Monitoring and Reporting Program (MRP) Attachment E.

Comment 3: *Page E-5: V.A.1, 2, 5, B.1,2 Change sampling points to new names: INF-001, INT-001, EFF-001, etc. Page E-5,6: V.A.1., B.1 Table E-4 should be Table E-3.*

Response 3: Staff appreciates the identification of these typographical errors. Discharge monitoring points have been corrected to be consistent with Table E-1 of the MRP and the toxicity section V. now correctly refers to Table E-3.

Comment 4: *Page E-10: Please insert page break before section B.*

Response 4: Prior to finalization of the adopted permit, our staff will carefully review the page breaks within the document in order to ensure spacing is consistent with a professional presentation of the information.

Comment 5: *Page F-3: address of WWTF per Humboldt County recorder is 2656 Eel River Drive.*

Response 5: This correction has been made to the draft permit.

Comment 6: *p. 6 nitrate limit but no ammonia limit?- denitrification often seeks to limit total nitrogen by balancing sum of nitrate and ammonia. So as total nitrogen goes down ammonia goes up.*

Response 6: As we discussed on March 11th, due to the current operating conditions at the Loleta WWTF it appears that nitrification is nearly complete, transforming nitrogen into nitrate. As a result, the WWTF has no reasonable potential at this time by which we would establish an effluent limitation for ammonia. However, the draft Order does require monthly monitoring for ammonia. If future operational changes to mitigate nitrate concentrations result in increased concentrations of ammonia in the effluent above what is needed to protect beneficial uses, then the permit may be reopened to establish ammonia limitations.

Comment 7: *p.10 TRE workplan submitted within 90 days of the effective date of this order. Just checking.*

Response 7: The due date has been changed to indicate a Toxicity Reduction Evaluation (TRE) workplan due within 180 days of the effective date of the Order.

Comment 8: *p.12 O& Maintenance manual requirements. Is this boilerplate?*

Response 8: The language and requirements contain in the draft permit for Operation and Maintenance manuals are routine requirements applied to wastewater treatment facilities.

Comment 9: *Section E: CTR testing required at 3 locations: influent, effluent, and stormwater pipe (upstream). However, hardness testing is required only for effluent and upstream. Is that right?*

Response 9: Influent monitoring for the 126 California Toxic Rule (CTR) priority pollutants is not necessary at the Loleta WWTF given the size and character of the community discharging into the system. This requirement has been removed from the draft permit.

Comment 10: *E-14: Annual Report for each calendar year. I thought we were going to try for financial year Jul 1-Jun 30.*

Response 10: This change to the monitoring cycle is under review for consistency with administrative processes. If no conflicts are identified the change will be granted.

Comment 11: *This permit requires continuous monitoring of upstream pipe flow with daily totalization?*

Response 11: Yes.

Comment 12: *p.11 Pollutant minimization program vs. TRE. Is this just the difference between toxics rule and acute/chronic testing?*

Response 12: A pollutant minimization program may be required by the Executive Officer if a specific pollutant of concern is identified in the effluent. A TRE is automatically triggered when whole effluent toxicity is identified, the cause of which may not be correlated directly to a specific pollutant. The activities in a Pollutant Minimization Program and a TRE may overlap or be similar in nature.

Comment 13: *p.13 Section 5(b) Source Control.*

Response 13: Consistent with the response above, influent monitoring for the 126 priority pollutants is not necessary at the Loleta WWTF given the size and character of the community discharging into the system. The source control requirements have been modified to remove this monitoring requirement from the draft permit.

Comment 14: *p.16 section 5(f) Biosolids Management – notification that facility will reach capacity within 4 years?*

Response 14: The capacity notification section IX.V.f. is independent of the biosolids section IX.5.d. requirements. However, in review of the capacity section, staff identified typographical errors. The draft permit previously indicated the WWTF was at capacity. This does not apply to the Loleta WWTF. Therefore section IX.5.f. has been changed to require notification to the Regional Water Board when the Loleta WWTF is within four years of reaching treatment capacity.

Comment 15: *F-11: The CSD would like to confirm that the following Discharge Prohibitions are the same issues that have already been discussed between the CSD and staff:*

- F. The average daily dry weather flow of waste through the treatment plant shall not exceed 0.081 MGD, measured daily and averaged over a calendar month. The average wet weather flow of waste through the treatment plant shall not exceed 0.143 MGD, measured daily and averaged over a calendar month.*

- G. *Discharges of waste to the Eel River and its tributaries including wetlands, are prohibited during the period of May 15 through September 30 each year.*
- H. *During the period of October 1 through May 14, discharges of wastewater shall not exceed one percent of the flow of the receiving water. During the period of October 1 through May 14, of each year, discharges of wastewater to the wetland, tributary to an unnamed slough and the Eel River, shall not exceed one percent of the flow into the wetland, as measured at the storm water conveyance pipe prior to mixing with effluent from the WWTF. In no case shall the total volume of treated wastewater discharged in a calendar month exceed one percent of the total volume of storm water measured in the same calendar month.*

Response 15: Yes. Discharge Prohibitions F, G, and H are the new or altered prohibitions which we have previously discussed. Regional Water Board staff continues to be concerned regarding the Loleta WWTF's ability to comply with these prohibitions. As such, these will be presented to our Board during the adoption hearing as actual or potential future compliance challenges.

Comment 16: *Acute and chronic: just one test per year; no limitation on when the test is perform; no requirement of background water flow; no determination of most sensitive species for acute toxicity testing; no determination of most sensitive species for chronic toxicity testing.*

Response 16: Yes. The CSD's review of the changes to the whole effluent toxicity section is accurate. Given Prohibition G, which is restated above, discharges from EFF-001 are authorized only between October 1 and May 14 each year. Annual testing should be conducted during the period of authorized discharge.

B. US Environmental Protection Agency

Comment 17: *Table F-4 shows RP has been determined for ammonia; however, the permit does not include effluent limits for ammonia. Pursuant to 40 CFR 122.44(d), if there is RP, effluent limits must be included in the permit.*

Response 17: The units in Table F-4 were mis-matched and therefore lead to an incorrect result for reasonable potential. This mistake was previously corrected in other portions of the permit (ie. Effluent Limitations), but did not get corrected previously in Table F-4. Table F-4 has been corrected to accurately reflect that ammonia concentrations at the Loleta WWTF are below the most stringent 2013 water quality criteria for the protection of aquatic life.

Comment 18: *Table F-9 shows RP for chronic toxicity; however, the previous effluent limit of 1.0 TUC has been removed due to the SB Order on the SIP. Pursuant to the SB Order, the permit should include a narrative effluent limit for chronic toxicity. For example, "there shall be no chronic toxicity in the discharge."*

Response 18: The following language has been added to the section IV. Effluent Limitations:

As measured at Monitoring Location M-001, there shall be no chronic toxicity in the effluent when discharging to the wetland, which is tributary to a slough and the Eel River. Compliance with this effluent limitation shall be determined in accordance with Sections V.B and V.C of the MRP (Attachment E).

Comment 19: *The top of page F-24 states that the SB Order found, "it is not appropriate to include final numeric effluent limitations for chronic toxicity in NPDES permits for POTWs." This is incorrect, as the Order did not go that far. As described on page F-23, it stated, "We therefore decline to make a determination here regarding the propriety of the final numeric effluent limitations for chronic toxicity contained in these permits." Please clarify this sentence.*

Response 19: The language on page F-24 has been modified to state the following:

However, the State Water Board found in WQO-2003-012 that, while premature to determine appropriate statewide final numeric effluent limitations for chronic toxicity in NPDES permits for POTWs, permits must contain a narrative effluent limitation, numeric benchmarks for triggering accelerated monitoring, rigorous Toxicity Reduction Evaluation (TRE)/Toxicity Identification Evaluation (TIE) conditions, and a reopener to establish numeric effluent limitations for either chronic toxicity or the chemical(s) causing toxicity. This Order includes a narrative chronic toxicity effluent limitation and a reopener that allows the Regional Water Board to reopen the permit and include a numeric chronic toxicity limitation, a new acute toxicity limitation, and/or a limitation for a specific toxicant identified in the TRE.

Comment 20: *Based on the information in Tables F-5 and F-6, it appears that the LTA used to calculate the WQBELs for copper was not the lowest LTA. Please clarify.*

Response 20: Upon review of the data and spreadsheet used to calculate reasonable potential for metals, staff has identified several technical mistakes. These mistakes resulted from application of a water effects ratio not applicable to the Loleta WWTF and use of the former reasonable potential methodology, not accounting for the 2006 Study (Emerick, R.W.; Booroum, Y.; & Pedri, J.E., 2006. California and National Toxics Rule Implementation and Development of Protective Hardness Based Metal Effluent Limitations, WEFTEC, Chicago, Ill.), which calculates a single protective limitation for each hardness dependent metal. As a result, numerous corrections have been made not only to Tables F-5 and F-6, but throughout the draft permit. Final Effluent limitations for copper have been corrected to reflect an average monthly effluent limitation (AMEL) of 7.6 ug/L and a maximum daily effluent limitation (MDEL) of 15.3 ug/L.