

June 9, 2008

Diana Messina
Senior Engineer
California Regional Water Quality Control Board, Central Valley Region
11020 Sun Center Drive, Suite 200
Rancho Cordova, CA 95670-6114

Re: City of Colusa NPDES Permit N0. CA0078999
Tentative Draft Comments

Dear Ms. Messina,

Please accept this letter containing comments regarding the City of Colusa NPDES permit renewal (Tentative Draft for CA0078999). The City has authorized ECO:LOGIC to review the Tentative Draft and provide comments on their behalf.

Comment 1

Table 4, Page 3 – Wastewater Treatment Plant physical address is 2820 Will S. Green Road, Colusa CA 95932; mailing address for the facility is 425 Webster Street, Colusa, CA 95932. Same comment for FACT SHEET, Table F-1, Page F-3.

Comment 2

FINDING II.H, Table 5, Page 6 - The MUN designation has been applied to the unnamed tributary to Powell Slough, which is a tributary to the Colusa Basin Drain. The MUN designation has resulted in the assignment of numerous effluent limitations that will ultimately require significant expenditure by the City for studies, monitoring, and compliance assurance. However, the MUN designation is likely not applicable to this discharge. The current permit (Order No. R5-2002-0020) contains Finding 7 as follows:

“The beneficial uses of the unnamed tributary to Powell Slough are not specifically identified in the Basin Plan. The unnamed tributary to Powell Slough is a tributary to Powell Slough, the Colusa Through, and the Colusa Basin Drain. The Colusa Basin Drain is the first body of water downstream of the unnamed tributary to Powell Slough for which the Basin Plan has identified existing and potential beneficial uses. The beneficial uses of the Colusa Basin Drain, as defined in Table II-1 of the Basin Plan, are agricultural irrigation, agricultural stock watering, body contact water recreation, canoeing and rafting, warm freshwater aquatic habitat, cold freshwater aquatic habitat, warm fish migration habitat, warm spawning habitat, and wildlife habitat. Other beneficial uses identified in the Basin Plan apply to the unnamed tributary to Powell Slough, including groundwater recharge and freshwater

replenishment. Upon review of the flow conditions, habitat values, and beneficial uses of the unnamed tributary to Powell Slough, the Board finds that the beneficial uses identified in the Basin Plan are applicable to the unnamed tributary to Powell Slough.”

Fact Sheet, Page 2, of the current permit further states:

“State Water Resources Control Board Resolution No. 88-63 “Sources of Drinking Water” provides that “All surface and groundwaters of the State are considered to be suitable, or potentially suitable, for municipal or domestic water supply and should be so designated by the Regional Board with exception of: ...2.b. The water is in system designed or modified for the primary purpose of conveying or holding agricultural drainage waters...”. The unnamed water bodies through which Colusa’s wastewater flows were constructed for the purpose of conveying agricultural drainage waters. Therefore, the unnamed water body and Powell Slough could likely meet the criteria for a municipal exemption under Resolution 88-63.”

Because Findings were historically made that the MUN designation was not appropriate, it appears reasonable that the MUN designation continues to be inapplicable based primarily on the following factors:

- (1) In absence of the discharge, the unnamed tributary to Powell Slough and Powell Slough are ephemeral. As such, a drinking water supply cannot be developed.
- (2) The Department of Health Services does not allow drinking water supplies containing effluent in a ratio exceeding 20 parts receiving water to 1 part effluent. Therefore, with the addition of the discharge, the unnamed tributary to Powell Slough and Powell Slough would continue to be unsuited as a municipal water supply.
- (3) The unnamed tributary to Powell Slough and Powell Slough are tributaries to the Colusa Basin Drain. Per the Basin Plan, the MUN designation does not apply to the Colusa Basin Drain.
- (4) Previous Orders have concurred that the MUN designation is not applicable.

We believe insufficient justification has been presented in the Tentative Permit to justify a change in the MUN beneficial use designation of the unnamed tributary to Powell Slough. Accordingly, it is requested that the permit be modified to remove the MUN beneficial use designation and that the effluent limitations be revised accordingly.

Comment 3

EFFLUENT LIMITATION IV.A.1.a, Table 6, Page 9: The City agrees with the applicability of the Maximum Daily aluminum effluent limitation at 750 µg/L. The average monthly limitation based on SIP procedures should be 330 µg/L (only two significant digits are required). The City requests a footnote in the effluent limitations table that compliance with the MDEL, based on the monitoring frequency of 1/month, is sufficient to discern compliance with the average monthly limitation of 330 µg/L. Only in an instance that aluminum is monitored more frequently than 1/month should reported values be averaged and compared to the AMEL.

The maximum daily and average monthly effluent limitations are based on a statistical analysis revolving around a single water quality criterion (e.g., 750 µg/L) using an equivalent effluent dataset. The only difference is the use of two different averaging periods. Thus, both limitations are equivalent after normalizing for the averaging period. The monitoring frequency, however, is insufficient to differentiate between the two criteria.

Aluminum analysis is sufficiently complex that the results are not returned from the laboratory within a time period sufficient to allow for additional sampling to demonstrate compliance with the average monthly limitation should the single daily value be found to exceed the monthly average limitation. A single data point is insufficient to discern monthly average compliance alone. This discharge is a minor discharge, and additional monitoring does not justify the expense when EPA statistical procedures suggest that compliance with the maximum day limitation is equivalent to compliance with the average month limitation.

Similarly, it is reasonable that if the maximum day limitation is violated at some point, then the monthly average limitation would also be violated. Thus, a violation of the maximum day limitation would constitute a simultaneous violation of the monthly average limitation.

Comment 4

EFFLUENT LIMITATION IV.A.1.a, Table 6, Page 9: Entry in the column for Units of the Total Coliform Organisms appear to be a typographic error. Also footnote 2 does not refer to any of the entries in the Table.

Comment 5

EFFLUENT LIMITATION IV.A.1.i, Page 12: Final effluent limitation for total residual chlorine was assigned in the tentative permit. The City is in process of constructing a UV disinfection system that will replace the previously used chlorination/dechlorination system. The City requests that the chlorine limit be assigned only until the UV system becomes operational and the chlorination system is decommissioned.

Comment 6

PROVISIONS VI. C.1: Final effluent limitations for chlorodibromomethane, dichlorobromomethane, total THMs, aluminum, iron, and manganese have been assigned IV.A.1, Pages 11 and 12. The City is in process of constructing a tertiary filtration and UV disinfection system that will provide filtration and replace the previously used chlorination/dechlorination system, respectively. The City requests that the Reopener Provision be added in section VI. C (Page 20, 21) for these constituents coupled with the addition of all these constituents to the Constituents Study Provision (PROVISIONS VI. C.2.e, Pages 26). Upon review of the additional monitoring data, the City requests that this permit be reopened and the effluent limitations and monitoring requirements for these constituents be removed if reasonable potential to violate standards no longer exists. This change would be consistent with Federal anti-backsliding provisions of 40 CFR 122.44(1)12 and 122.62(a)(16).

Comment 7

PROVISIONS VI. C.2.e, Pages 27: The schedule for the constituents study requires to initiate monitoring “on the first day of the next calendar month following permit adoption date.” This schedule is likely to not be practicable as the permit can be adopted as early as July 31 or August 1, and the treatment plant upgrades will not be completed until end of August at the earliest. The City requests that the monitoring language be modified to require for the monitoring to be initiated as early as possible after the permit adoption but no later than 50 days from the date of the adoption.

Comment 8

PROVISIONS VI. C.2.f, Pages 27: The provision requires the Discharger to evaluate feasibility of using reclaimed water for beneficial reuse. The City completed and submitted to the RWQCB in 2004 an Amended Wastewater Facilities Plan that evaluated Land Disposal and Reclamation alternatives for secondary and tertiary effluent. In addition, the City submitted to the RWQCB a Report of Waste Discharge in 2006 that evaluated Land Disposal and Reclamation options for the Colusa WWTP. The City requests that this provision be removed from the permit as the previous work satisfies the requirements of the provision.

Comment 9

PROVISIONS VI. C.3, Pages 27: The provision requires the Discharger to prepare a Pollution Prevention Plan (PPP) for copper, foaming agents, nitrate and nitrite. The City completed and submitted to the RWQCB in February 2008 a PPP for copper. Therefore, the City requests that the copper PPP requirement be removed from the permit. In addition, the City requests that the requirement for the nitrate and nitrite PPP be removed from the permit since source control and pollution prevention for these constituents is not feasible. Nitrate and nitrite are products of the ammonia decomposition through the nitrification process at the WWTP. Source control of ammonia is not feasible and, typically, is not required. Table E-10 in MRP (page E-14) refers to these PPPs and should be modified if the copper and nitrate/nitrite PPPs requirements are removed from the permit.

Comment 10

COMPLIANCE DETERMINATION VII.G, Page 33: In this paragraph the City is required to use continuous monitoring analyzers for measurement of the chlorine residual in the effluent. The City currently operates chlorine disinfection system but does not own continuous monitoring equipment. By the time the permit is adopted and comes into effect, the City plans on using its new UV system for disinfection of effluent and abandoning the chlorine system. The City requests that the requirement for continuous monitoring analyzers be removed from the permit.

Comment 11

ATTACHMENT C: Flow schematic for the upgraded WWTP is missing a return line from the Monthly Equalization Basin to the Headworks. Also effluent from the Daily Equalization Basin will not be discharge directly to the unnamed tributary to the Powell Slough; therefore, the arrow after Re-aeration Basin to the Daily Equalization Basin should only go in one direction.

Comment 12

MRP - MONITORING LOCATIONS, II, Table E-1, Page E-2: The City requests that the EFF-001 monitoring location be at the Effluent Pump Station not at the discharge to unnamed tributary to the Powell Slough, as the discharge location is not at the WWTP site and is sometimes inaccessible during wet weather conditions.

Comment 13

MRP – INFLUENT MONITORING REQUIREMENTS, III, Table E-2, Page E-2: Footnotes to the table appear to be incomplete due to typographical error.

Comment 14

MRP – EFFLUENT MONITORING REQUIREMENTS, IV, Table E-3, Page E-3: The City requests that the Total Residual Chlorine sampling be conducted as grab samples (as currently done) and the sampling be discontinued upon taking the chlorine disinfection system out of services.

Comment 15

MRP – RECEIVING WATER MONITORING REQUIREMENTS, VIII, Table E-5, Page E-8: The permit requires sampling of the receiving water for Priority Pollutants. Please, clarify at which of the four receiving water monitoring stations the sampling shall be conducted.

Comment 16

FACT SHEET, FACILITY DESCRIPTION, II.D, Page F-7: The permit describes a CLO issued in 2003. A second CLO, not mentioned in the permit, was issued in 2008.

Comment 17

FACT SHEET, APPLICABLE PLANS, POLICIES, AND REGULATIONS, III, D, 1, Page F-10: The permit states in the second paragraph, first sentence, that “Diazinon and molinate were not detected in the effluent.” The third sentence of the paragraph mistakenly says that diazinon and molinate were not monitored by the City. Please, revise the third sentence to remove diazinon and molinate from the list of constituents that were not monitored.

Comment 18

FACT SHEET, RATIONALE FOR EFFLUENT LIMITATIONS, IV. C. 3. j, Page F-21: Last sentence of the second paragraph states that “...the method detection limit was 50 ug/L, which is greater than MEC.” While the statement is correct, it appears that the intent was to point out that the method detection limit of 50 ug/L is greater than criterion concentration.

Comment 19

FACT SHEET, RATIONALE FOR EFFLUENT LIMITATIONS, IV. C. 3, w, Page F-29-31: The tentative permit refers to a single sampling event of the Powell Slough. Powell Slough was not sampled by the City. Instead, the City sampled Colusa Basin Drain on 5 August 2002 and 15 October 2002. The City is not requesting an assimilative capacity from either Powell Slough or Colusa Basin Drain, so the factual mistake shall not affect limit calculations.

Comment 20

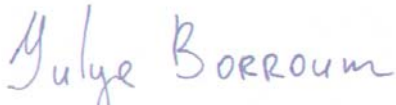
FACT SHEET, RATIONALE FOR EFFLUENT LIMITATIONS, IV. C. 4. b, Table F-11, Page F-38: Mass load limitations in these tables are based on old flow of 0.8 MGD. Please, revise to reflect 0.7 MGD flow.

Comment 21

FACT SHEET, RATIONALE FOR PROVISIONS, VII. B.1.d, Page F-53: Please add chlorodibromomethane, dichlorobromomethane, total THMs, aluminum, iron, and manganese to the Reopener Provision Rationale per Comment 6.

Thank you for consideration of these comments prior to issuance of the Final Order. Please feel free to contact me to discuss these comments or if you have further questions.

Sincerely,
ECO:LOGIC Engineering



Yulya Borroum, P.E.

cc: Robert Hickey, Colusa City Manager, City of Colusa
Robert Emerick, Ph.D., P.E., ECO:LOGIC Engineering