



Stantec Consulting Services Inc.  
3875 Atherton Road, Rocklin CA 95765-3716

March 8, 2021  
File: 184031160

**Attention: Katie Carpenter**  
Central Valley Water Board  
1685 E Street  
Fresno, CA 93706  
Katie.carpenter@waterboards.ca.gov

**Reference: Los Banos WWTF WDR and MRP Permit Number R5-2021-####, Tentative**

Dear Ms. Carpenter,

The City of Los Banos (City) has reviewed the tentative order WDR R5-2021-#### and offer the following comments:

- Under “Findings” item 55, it should be noted that for MW-1U and MW-6U results (detailed in Table 9) show fecal coliform detections in more samples than those for total coliform, which is impossible (FC is a subgroup of TC and therefore cannot be higher). The results from these wells indicate that there is an issue with lab analysis. Further, because the coliform hits were not relative to high ground water events, it is likely that they resulted from disturbed sediments in the wells or damaged well casings, and not caused by wastewater effluent (as coliform organisms do not typically migrate through fine texture soil).
- Under “Findings” item 80.a, the statement “this Order includes a groundwater limitation for nitrate (as N) of 10 mg/L” should be changed to “this Order includes a groundwater limitation for nitrate (as N) of 10 mg/L (monthly average)”
- Under “findings” item 80.b, the statement “This suggests that elevated salinity in groundwater has been present since the 1960s, when the WWTF was first constructed” should be replaced with “This suggests that elevated salinity in groundwater has been present prior to the construction of the WWTF in the 1960s.”
- Under “Requirements” item E.8, please add “or higher” to DO concentration. Statement should read “If the DO in any storage pond is below 1.0 mg/L for any single sampling event, the Discharger shall implement daily DO monitoring (excluding weekends and holidays) of that pond until the minimum DO concentration (or higher) is achieved for at least three consecutive days.”
- Under “Requirements” item E.8, please replace reference to WPRRs with “MPR part III-A.6” and change to 0.5 mg/L (as discussed below). Statement should read “If the DO in any storage pond is below 0.5 mg/L for three consecutive sampling events, the Discharger shall report the findings to the Central Valley Water Board with the quarterly monitoring reports, in accordance with MRP Part III-A.6.”
  - We request that reporting is only required when the DO concentrations fall below 0.5 mg/L because each pond takes more than three days to turn over and therefore the City will be sending in excessive reports, even when they have already implemented a corrective action to mitigate lower DO concentrations. Further, odors are not consistently generated until concentrations fall to 0.5 mg/L.

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- Under “Requirements” item E.15, as written, there are no provisions for compliance if multiple ponds are violating solids concentration at the same time. The City will not be able to remove more than one pond a year from service (in order to clean) and will need an extension of the 12-month cleaning deadline. Please incorporate provision for allowing more time than 12-months, if multiple ponds have sludge accumulation exceeding 5-percent capacity.
- Under “Requirements” item F.1, please change to “Nitrate as N of 10 mg/l monthly average”
- Under “Requirements” item F.2, please change to “2.2 MPN/100 ml median seven-day”
- Under “Requirements” item G.4, remove sections “60304(a), 60304(b), 60304(c)” from requirements, as these sections of Title 22 do not apply to the City of Los Banos recycle water use program. Los Banos WWTP is only using undisinfected secondary effluent, in compliance with 60304(d).
- Under “Requirements” item H.1, remove “clarifiers” as there are no clarifiers used on site.
- Under “Requirements” item I.2 and 3, please update with date of Order.
- Within MRP, part I.B (Table 1), there is no biosolids/sludge handling or monitoring at the site. All solids are accumulated in the bottom of the ponds over years and cleaned out periodically (often times with decades in between cleaning). Please define where BIO-001 is to be located or remove from the table.
- Within MRP, part II.B, modify footnote 1 for Table 3, to state “Report effluent flow rates required only when irrigating.” All other times, there is not effluent from the facility.
- Within MRP, part II.C, replace Table 4 sampling frequency for solids depth with “once every 5 years” (as noted in WDR requirements section E-15)
- Within MRP, part II.C, replace last part of footnote 3 (in Table 4) with “once every five years” (as noted in WDR requirements section E-15)
- Within MRP, part II.D Table 5, please add a footnote that the sampling for EC does not have to occur separately than samples already taken and used for the Drinking Water Consumer Confidence Report.
- Within MRP, part II.E, before footnote 2 (in Table 6) add “Sampling shall take place once per quarter, except as noted herein.”
- Within MRP, part II.F, modify footnote 2 to include allowable gauge at site “Either rain gauge at WWTF or National Weather Service/CIMIS data from the nearest weather station is acceptable”.
- Within MRP, part II.G there is no biosolids/sludge handling or monitoring at the site. All solids are accumulated in the bottom of the ponds over years and cleaned out periodically (often times with decades in between cleaning). Please define where BIO-001 is to be located or remove from the MRP.
- Within MRP, part II.F, modify Table 7 to define “Nitrogen Loading” as Total Nitrogen (as stated in part III.b.7).
- Within MRP, part II.F, modify Table 7 to correspond to section III of the MRP, which says that nitrogen loading is calculated monthly. Which frequency is correct, monthly or annually, and is this only applicable for when wastewater is being sent to the LAA?
- Within MRP, part II.F, modify Table 7 to define how irrigation acreage is calculated (is this an estimate?)

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- Within MRP, part III.b.7, the calculation of total nitrogen loading says to multiply  $8.345 \cdot C \cdot V$ , where  $V$  is the volume of "blended wastewater and irrigation water applied to the LAA". However, the concentration of total nitrogen ( $C$ ) collected in the wastewater effluent will not be the same as any supplemental irrigation water and therefore the volumes of the two cannot be combined to obtain a representative nitrogen loading. The calculation should be  $8.345 \cdot C_1 \cdot V_1 + 8.345 \cdot C_2 \cdot V_2$  (where subscript 1 is for wastewater volume/concentrations and 2 is for supplemental irrigation water volume/concentrations).

Please feel free to contact me to discuss any of these items further.

Regards,

**Stantec Consulting Services Inc.**



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