Central Valley Regional Water Quality Control Board
27/28 April 2023 Board Meeting

Response to Comments
for
City of Lincoln Wastewater Treatment and Reclamation Facility
Order Amending Waste Discharge Requirements Order R5-2018-0081

The following are Central Valley Regional Water Quality Control Board (Central Valley Water Board) staff responses to comments submitted by interested persons and parties regarding the tentative Amendment to Waste Discharge Requirements (WDRs), National Pollutant Discharge Elimination System (NPDES) Permit CA0084476 for the City of Lincoln (Discharger), Wastewater Treatment and Reclamation Facility (Facility). The Facility discharges to Auburn Ravine Creek which flows to East Side Canal, Natomas Cross Canal, and ultimately discharges to the Sacramento River, a water of the United States.

The Amendment to the NPDES Permit was issued for a 30-day public comment period on 21 February 2023 with comments due by 23 March 2023. The Central Valley Water Board received public comments regarding the amending Permit from the Discharger. Some changes were made to the proposed Amendment based on comments received.

The submitted comments were accepted into the record, and are summarized below, followed by Central Valley Water Board staff responses.

CITY OF LINCOLN (DISCHARGER) COMMENTS

1. **Receiving Water Temperature Limitation and Compliance Determination Language**
   The Discharger suggests clarifying that the receiving water temperature limitation 7-day average of daily maximums is a rolling average and add a fourth receiving water temperature limitation that addressed when the upstream receiving water temperature is above the downstream temperature limitation. The Discharger also provided suggested language for the Compliance Determination section of the Waste Discharge Requirements to address compliance determination for both items.

   RESPONSE: Central Valley Water Board Staff concur with defining the 7-day average as a rolling average and have replaced Finding 14 and Item 1.c of the Amending Order with the following:

   14. Based on these findings, the Study proposed site-specific receiving water temperature limits for Auburn Ravine Creek. The discharge shall not cause the following in Auburn Ravine Creek:

15. *Temperature. The annual average temperature to increase more than 5 °F compared to the ambient stream temperature and shall not cause the receiving stream temperature to rise above:*

    a. *68 °F on a 7-day running average of daily maximums basis from 1 October through 31 December;*

    b. *64 °F on a 7-day running average of daily maximums basis from 1 January through 31 May; or*

    c. *5 °F over the ambient background temperature as a daily average for the period from 1 June through 30 September.*

The seven-day average of daily maximums was proposed instead of the previous limits of monthly average, weekly median and daily maximum because EPA determined it to be a good indicator of both chronic and acute thermal stress.

c. **Waste Discharge Requirements, Section V. RECEIVING WATER LIMITATIONS**. Remove the text in Section V.A.15 and replace it with following:

15. **Temperature.** The annual average temperature to increase more than 5 °F compared to the ambient stream temperature and shall not cause the receiving stream temperature to rise above:

    a. 68 °F on a 7-day running average of daily maximums basis from 1 October through 31 December;

    b. 64 °F on a 7-day running average of daily maximums basis from 1 January through 31 May; or

    c. 5 °F over the ambient background temperature as a daily average for the period from 1 June through 30 September.

As for including a receiving water temperature limitation for when the upstream receiving water temperature is above the downstream limitation between 1 October and 31 May, Staff acknowledge that there could be a scenario where this occurs; however, the additional limitation suggested by the Discharger can be categorized as a “floating limit”, which is a limit without a predetermined numerical value that is defined by the characteristics of the receiving water or effluent (in this case receiving water) at the time the compliance sample is collected. The practice of including floating limits in Central Valley Water Board permits has been discontinued since 2004 and fixed or seasonal limits have been included in permits in their place. This practice is consistent with State Water Board Order WQO 2004-0013 (*Yuba City*) and the State Implementation Plan (SIP), where the Central Valley Water Board generally establishes fixed or seasonal effluent limitations which consider representative conditions of the

effluent and receiving water in order to ensure reasonable protection of applicable beneficial uses.

To address the issue of compliance with the receiving water temperature limitation where the upstream receiving water temperature is above the downstream limitation, staff have included the following revised language for the Compliance Determination section of Order R5-2008-0081, which is Item 1.e of the Amending Order as shown below. The revision uses the five-degree delta between the upstream and downstream receiving water monitoring locations as recommend by the Discharger's *City of Lincoln Auburn Ravine Site-Specific Final Temperature Study per TSO R5-2019-1003 (Stantec, 2021)*, which was approved by the California Department of Fish and Wildlife (DFW) and National Marine Fisheries Service (NMFS) to determine compliance under this scenario. Definition of the 7-day average of daily maximums as a rolling average and the note about allowing sampling while not discharging from comment 3 was also added to Item 1.e:

e. **Waste Discharge Requirements, Section VII. COMPLIANCE DETERMINATION.** Remove the text in Section VII.I and replace it with the following:

   Temperature Receiving Water Limitation (Section V.A.15). Compliance with the temperature receiving water limitation for the 5°F increase in ambient stream temperature will be determined based on the difference in the temperature measured at Monitoring Location RSW-001 compared to the downstream temperature measured at Monitoring Location RSW-002, with consideration of effluent quality to evaluate whether effluent discharge caused the change. Compliance with the temperature receiving water limitations of 68°F from 1 October to 31 December and 64°F from 1 January to 31 May on a 7-day running average of daily maximums will be measured at Monitoring Location RSW-002, with consideration of effluent and upstream receiving water quality to evaluate whether effluent discharge caused the violation.

   1. **Seven-day Running Average of Daily Maximums.** The 7-day running average of daily temperature maximums shall be calculated when there has been 1 or more discharges within a 7-day period. The 7-day running average of daily temperature maximums shall be determined from the daily maximums collected at Monitoring Location RSW-002 for all samples collected over the past 7-days whether discharge occurred or not. For example, if temperature samples were collected on Monday, Wednesday and Friday but discharge only occurred on Wednesday and Friday, the Discharger should determine the 7-day running average of daily maximums from the data collected

on Monday, Wednesday and Friday. If there has been no discharge over the past 7 days or more, then compliance reporting for the 7-day running averages of daily maximums is not required.

2. **Upstream Temperature Exceeds Downstream Temperature Limit.** For each day the daily maximum temperature at the upstream monitoring location (RSW-001) exceeds 68°F from 1 October to 31 December or 64°F from 1 January to 31 May, the Discharger shall determine compliance for that day with the 5°F increase between RSW-001 and RSW-002 instead of the corresponding receiving water temperature limitation of 68°F from 1 October to 31 December or 64°F from 1 January to 31 May as 7-day running average of daily maximums as required by sections V.A.15.a and b of Order R5-2018-0081-01.

2. Receiving Water Temperature Monitoring Frequency

The Discharger requests that Central Valley Water Board make the following changes to the Monitoring and Reporting Program, Table E-6. Receiving Water Monitoring for receiving water temperature monitoring:

- Change sample type from “grab” to “meter”;
- Change sample frequency from “1/week” to “continuous”; and,
- Add a footnote that receiving water monitoring should also be conducted when discharge is not occurring.

RESPONSE: Central Valley Water Board Staff do not concur with modifying the receiving water temperature monitoring requirements. The once per week sampling frequency is the minimum sampling frequency required by the Monitoring and Reporting Program (MRP) that is needed to determine compliance with the Receiving Water Temperature Limitations. Therefore, Staff are maintaining the existing requirements of the MRP for receiving water temperature monitoring.

If the Discharger determines that collecting more frequent samples than is required by the MRP improves operational efficiencies or helps maintain compliance with the receiving water temperature limits due to variability of the temperatures, then additional samples may be collected without violating the requirements of Order R5-2018-0081-01. Central Valley Water Board Staff also have concerns about requiring continuous monitoring when it is not required for compliance since it can put an unnecessary burden on the Discharger’s staff to immediately respond to any issues with the continuous temperature monitoring probes. This can result in unneeded health and safety issues for Discharger staff along with possible violations of the permit during the time that the probe is down, especially if replacement parts are not readily available.

See Comment Response 1 for the response to the request to add a footnote that receiving water monitoring should be conducted when discharge is not occurring.

3. Editorial Comment

The Discharger requests that Central Valley Water Board staff revise the last sentence of Finding 13 to describe the results of the Temperature Study more accurately.

RESPONSE: Staff concur and Finding 13 of proposed amending Order has been revised to reflect the results of the Temperature Study as shown below:

13. The Study found that habitat conditions in the Auburn Ravine Creek below the Facility's outfall were not suitable for Chinook salmon or steelhead spawning and rearing, and the reach only functioned as a migration corridor for adults and juveniles. This is primarily because the reach does not contain suitable spawning habitat, and summer stream temperatures routinely exceed thermal preferences for both species. For these reasons DFW and NMFS concurred that a receiving water temperature limit of 58 °F to protect spawning and rearing between 1 October through 31 May is overly conservative and that limits of 68 °F between 1 October through 31 December and 64 °F between 1 January through 31 May are sufficient to protect Chinook salmon or steelhead migration.