

# LINCOLN-SMD1 WASTEWATER AUTHORITY

Attn: Josh Palmer  
 Central Valley Regional Water Quality Control Board  
 11020 Sun Center Drive #200  
 Rancho Cordova, CA 95670  
 Via Email

03/23/2023

## **Reference: Comments on Tentative Order Amending Waste Discharge Requirements Order R5-2018-0081 NPDES Permit CA0084476**

The City of Lincoln (City) Wastewater Treatment and Reclamation Facility (WWTRF) is operated under Central Valley Regional Water Quality Control Board (Regional Board) Order R5-2018-0081 National Pollutant Discharge Elimination System (NPDES) Permit CA0084476 (Order). It should be noted that the ownership of the WWTRF and its permits will soon be transferred to the Lincoln-SMD1 Wastewater Authority (LISWA). On February 21, 2023, the City received California Regional Water Quality Control Board, Central Valley Region Tentative Order R5-2023-XXXX Amending Waste Discharge Requirements Order R5-2018-0081 National Pollutant Discharge Elimination System (NPDES) Permit CA0084476 for City of Lincoln Wastewater Treatment and Reclamation Facility, Placer County (hereafter referred to as the "Tentative Order"). The Tentative Order is based on the findings of the report titled, *City of Lincoln Auburn Ravine Site-Specific Final Temperature Study per TSO R5-2019-1003*, prepared by Stantec Consulting Services Inc. (Stantec) and submitted on December 23, 2021 (hereafter referred to as the "Temperature Study", and provided in Attachment A). The Cover Letter sent with the Tentative Order notes that comments are to be submitted to the Regional Board no later than 5:00 pm on March 23, 2023. The following comments with associated rationales are hereby submitted for the Regional Board's consideration.

### **Finding 13**

*Comment:* Suggest revising the last sentence of Finding 13 as follows:

- Current language: "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 a limit of 68 °F between

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1 October through 31 May is sufficient to protect Chinook salmon or steelhead migration.”

- Proposed language: “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.”

*Rationale:* It is suggested to revise Finding 13 to more accurately reflect the results of the Temperature Study, as presented in Finding 14.

#### **Finding 14 and Order Revision Item 1.c.**

*Comment:* Suggest revising Tentative Order Finding 14 and Order revision Item 1.c. by 1) clarifying that the 7-day average of daily maximums is a running average of all days, not just effluent discharge days and 2) adding “item d.” to the proposed receiving water temperature limitations to clarify how effluent impacts on water temperature are to be regulated in those rare instances when ambient stream temperatures are high. Suggested language is provided below.

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:
- 68 °F on a 7-day running average of daily maximums basis from 1 October through 31 December;
  - 64 °F on a 7-day running average of daily maximums basis from 1 January through 31 May;
  - 5 °F over the ambient background temperature as a daily average for period from 1 June through 30 September; or
  - 5 °F over the ambient background temperature as a daily average if the ambient background temperature measured at RSW-001 exceeds 68 °F on a 7-day running average of daily maximums basis from 1 October through 31 December, or 64 °F on a 7-day running average of daily maximums basis from 1 January through 31 May.

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*Rationale:* The revision is requested to 1) clarify how the 7-day average of daily maximums is to be calculated and 2) include the "Clarifier" limitation included in the Temperature Study, the results of which were approved by the California Department of Fish and Wildlife (DFW) and the National Marine Fisheries Service (NMFS). The email correspondence showing DFW and NMFS approvals of the proposed temperature limitations from the Temperature Study is provided in Attachment B.

**Order Revision Item 1.e.**

*Comment:* Suggest replacing Order revision Item 1.e with the below language.

- Proposed language:
 

**Temperature Receiving Water Limitation (Section V.A.15).** Compliance with the temperature receiving water limitation for the 5°F increase or decrease 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. The annual average temperature increase compared to the ambient stream temperature shall be assessed on a calendar year basis, for all days, regardless of whether effluent discharge is occurring. 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 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. The 7-day average of daily maximums shall be a running average, regardless of whether effluent discharge is occurring. On days when the ambient background temperature measured at Monitoring Location RSW-001 as a 7-day running average of daily maximums exceeds 68°F from 1 October to 31 December or 64°F from 1 January to 31 May, these temperature limitations (Temperature Receiving Water Limitation 15.a and 15.b) no longer apply at Monitoring Location RSW-002 for these respective days. Instead, on these respective days, Temperature Receiving Water Limitation 15.d. applies wherein 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 average daily temperature measured at Monitoring Location RSW-001 compared to the downstream average daily temperature measured at Monitoring Location RSW-002, with consideration of effluent quality to evaluate whether effluent discharge caused the temperature change.

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*Rationale:* This language is in concert with the concept of "exposure" provided by the United States Environmental Protection Agency (EPA) in developing the 68°F and 64°F criteria. Even when effluent is not discharged, the fish are still exposed to the water, its temperature, and its effect of the entire stream's ecology. Generally, when effluent is not being discharged, the stream is cooler and the fish are provided with relief per EPA's discussion and guidance. However, on rarer occasions in this small stream with little to no reliable base flow, the effluent may provide the fish with relief. To the concepts of fish exposure and protection, all days count regardless of whether effluent discharge is occurring.

Because EPA's temperature guidance is based on running 7-day blocks of exposure, receiving water daily temperature at RSW-002 must be monitored and reported daily from 1 October through 31 May, regardless of whether effluent discharge is occurring. Because proposed temperature limitation 15.d (the "Clarifier" limitation regarding events when ambient receiving water is warm) requires knowledge of daily average water temperature at RSW-001, water temperature at RSW-001 must also be measured from 1 October through 31 May, regardless of whether effluent discharge is occurring. This requires amendment to Order Table E-6:

1. The temperature sample type must be "Meter". A continuously recording meter is necessary to capture daily maximum temperatures as well as to calculate daily average temperatures, both needed for the proposed amendments.
2. The temperature minimum sampling frequency must be "Continuous".
3. A footnote needs to be added to Table E-6 specifying that temperature monitoring occurs from 1 October through 31 May regardless of whether effluent discharge is occurring.

Based on EPA's "exposure" concept and the need to incorporate all temperature data in compliance assessments from 1 October through 31 May to protect the salmonids, we believe it is reasonable to extend this concept to the remaining four months of the year (June through September) and base the average annual temperature impact assessment on all days of the calendar year, not just discharge days. This is an important concept because the effluent discharge from 1 October through 31 May may/will increase stream temperature by more than 5°F at times, especially in cold drought periods (note water year 2022 was a warm drought). In droughts, the effluent maintains flow in Auburn Ravine Creek for all aquatic life, and the proposed thermal limits still protect salmonids. For the proposed receiving water limitations to work, the zero temperature increases on no discharge days are thought to be necessary (in relatively rare events, e.g., cold droughts) to average out the greater than 5°F increases that may occur from time-to-time in the 1 October through 31 May period.

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Thank you for the opportunity to provide comments. Please feel free to contact us with any questions you might have regarding this submittal, or if you require additional information. The City/LiSWA appreciate the efforts you and your staff have made to work closely with the City/LiSWA to amend the Order.

Sincerely,

Gary Hengst, Plant Manager/CPO (Stantec Consulting Services, Inc.),



CC: Angela Frost (City of Lincoln), Gabe Aronow (Stantec Consulting Services, Inc.), Kelly McGartland (Stantec Consulting Services, Inc.), George Barber, (General Manager LiSWA) and Sean Scully (City Manager, City of Lincoln)

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# Attachment A

City of Lincoln Auburn Ravine Site-Specific Final  
Temperature Study per TSO R5-2019-1003 (Stantec,  
December 2021)

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# Attachment B

## Email Correspondence with DFW and NMFS

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