California Regional Water Quality Control Board
North Coast Region

TIME SCHEDULE ORDER No. R1-2022-0012
(Revised June 2, 2023)

TO PROVIDE TIME SCHEDULES TO COMPLY WITH
ORDER No. R1-2019-0005

CALIFORNIA REDWOOD COMPANY AND THE TRINITY RIVER TIMBER COMPANY
DBA NORTH FORK LUMBER COMPANY
NPDES No. CA0005932

HUMBOLDT COUNTY
WDID No. 1B80020OHUM

The California Regional Water Quality Control Board, North Coast Region (hereafter Regional Water Board), finds:

1. The California Redwood Company and the Trinity River Timber Company dba North Fork Lumber Company (Permittees) are respectively the owner and operator of the Korbel Sawmill (Facility) located in Korbel, California. The Facility was formerly owned and operated by California Redwood Company, but North Fork Lumber Company has been operating and maintaining the Facility since June 1, 2016. The Facility discharges log deck recycled sprinkler water to the North Fork Mad River in accordance with Waste Discharge Requirements (WDRs) Order No. R1-2019-0005 (Permit), adopted by the Board on April 18, 2019. The Permit also serves as the National Pollutant Discharge Elimination System (NPDES) permit (NPDES No. CA0005932). The Permit contains discharge prohibitions, effluent and receiving water limitations, compliance provisions and monitoring and reporting requirements.

2. Historically, onsite operations included sawmilling operations, lumber planing, lumber drying in kilns with an associated boiler water system, lumber storage and shipping, wet and dry log decking and sorting, and byproduct generation and management. The California Redwood Company decommissioned the boiler and kilns in August 2014 and the sawmill and planing operations in February 2015. Between May 2016 and December 2017, the mill was completely modernized, and full-time sawmill operations began in January 2018. Onsite operations now include decking and sprinkling fir logs; debarking and bucking; sawing, milling,

and planing operations; lumber storage and shipping; and by-product generation. However, the discharge of any process wastewater from the Sawmill, including process wastewater from bark removal, sawing, resawing, edging, trimming, planing, machining, and by-product manufacturing to surface waters is prohibited. The only discharge water originates from stormwater runoff and log-deck sprinkler water that is treated using settlement basins and a constructed wetland prior to discharge to the North Fork Mad River.

3. The 2019 Permit established new nickel and zinc effluent limitations that apply to the discharge of commingled sprinkler water and stormwater from the Facility. The Permittee has been unable to comply with these final effluent limitations.

4. On November 17, 2021, the Permittee submitted a Time Schedule Order Request for the Facility that asserts that the elevated metal results were caused by higher sediment loading from storm events that occurred during on-site construction work. The Permittee expressed a concern that the Facility would continue to exceed the effluent limits for nickel and zinc and requested interim effluent limitations for the remainder of the current permit term to allow completion of ongoing sediment reduction projects and a Water Effects Ratio (WER) study for nickel and zinc. A WER study could result in a water effects ratio greater than the default WER of 1.0 for each of these constituents, which, in turn, could eliminate the reasonable potential for nickel and zinc to exceed their applicable water quality objectives.

5. Historically, due to the Facility's inability to comply with copper and lead effluent limitations in their previous NPDES permit (Order No. R1-2013-0008), the then-permittee, California Redwood Company, submitted a Copper and Lead Feasibility Study on May 1, 2017, stating that despite operational modifications and treatment system improvements, the Facility could not consistently rely on the treatment system and constructed wetland to achieve compliance with the copper and lead effluent limitations established in their NPDES permit. As a result, California Redwood Company derived site-specific water quality criteria for copper and lead by conducting a WER study that concluded that the Facility's effluent has a WER value greater than 1.0 for copper and lead. The Regional Water Board incorporated the proposed WER values for both copper and lead into the current Permit to calculate site specific water quality criteria.

6. The Regional Water Board concurs that, based on the May 1, 2017, Copper and Lead Feasibility Study, the June 2018 Final Copper and Lead Water-Effect Ratio Final Report, and the November 17, 2021 Time Schedule Order Request, it is infeasible for the Permittee to immediately comply with final effluent imitations for nickel and zinc. Furthermore, Regional Water Board staff concurs that

determining a site specific WER for both nickel and zinc is an appropriate method to demonstrate that no reasonable potential exists for the Facility to exceed water quality objectives.

7. The Proposed Time Schedule Order implements provisions of the California Toxics Rule (CTR) and the Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California (State Implementation Policy or SIP) by requiring the Permittees to monitor the Facility's effluent for priority pollutants that may have reasonable potential to cause or contribute to an excursion above a water quality criterion or objective applicable to the receiving water. Section 1.2 of the SIP allows the Regional Water Board to adjust the criteria/objective for hardness-dependent metals with discharge specific WERs established in accordance with U.S. Environmental Protection Agency (U.S. EPA) guidance[1].

8. Terms in the Permit that the Permittees violate and/or threaten to violate are:

IV. EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS

A. Effluent Limitations – Discharge Point 001

1. Final Effluent Limitations – Discharge Point 001

a. The discharge of treated wastewater shall maintain compliance with the following effluent limitations at Discharge Point 001, with compliance measured at Monitoring Location EFF-001 as described in the Monitoring and Reporting Program (MRP) (Attachment E).

[1] Interim Guidance on Determination and Use of Water Effect Ratios for Metals (EPA-823-B-94-001)

Table 1: Effluent Limitations

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Parameter	Units	Average Monthly (AMEL)	Maximum Daily (MDEL)
Nickel Impact Ratio [1]	**ratio**	**1.0**	**1.0**
Zinc Impact Ratio [1]	**ratio**	**1.0**	**1.0**

Table Notes:
1. The Nickel Impact Ratio (NIR) and Zinc Impact Ratio (ZIR) are calculated as the ratio of the zinc and nickel concentration in the effluent and the applicable zinc and nickel standard (AMEL and MDEL).

9. On April 11, 2023, the Permittee submitted a letter requesting an extension of time to complete Tasks D through F of this Order which specifies a time schedule to achieve compliance with the final effluent limitations for nickel and zinc in Order No. R1-2019-0005. The letter explains the reason for the extension request as follows:

> "The tentative schedule presented in the Water Effect Ratio Study Work Plan (PER, 2022) assumed that some of the required testing could be completed at the beginning of 2022 (February–March 2022). However, as was stated in the Nickel and Zinc Annual Assessment Report (SHN, 2022), initiation of the WER study was delayed due to intermittent and unpredictable storm events following approval of the WER study work plan on March 24, 2022. Discharge from the constructed wetland at the Korbel sawmill facility is largely stormwater driven, and in order for the laboratory to initiate the study, they needed a minimum of three weeks' notice. Due to these constraints, the first event that could be performed for the WER study did not occur until January 6, 2023.
>
> In order to complete the study according to EPA's "Interim Guidance on Determination and Use of Water Effect Ratios for Metals" WER guidance procedures, there will need to be sufficient storm events and representative discharges from the constructed wetland (CWL). At this time, NFLC needs to complete a minimum of four sampling events, each event needs to be two to four weeks apart (approximately two weeks between metal samples that are different, and four weeks between samples for the same metal) to complete the study. More sampling events may be required if any complications occur during these four events. With the amount of time remaining in this discharge season, it is not feasible to

complete the study before the discharge prohibition season, which begins on May 15, 2023."

10. The Regional Water Board finds that delays of the WER study resulting from intermittent and unpredictable storm events were out of the control of the Permittee. The Regional Water Board agrees that an extension of the time schedule is reasonable and appropriate.

11. Water Code section 13300 states: "Whenever a regional board finds that a discharge of waste is taking place or threatening to take place that violates or will violate requirements prescribed by the regional board, or the state board, or that the waste collection, treatment, or disposal facilities of a discharger are approaching capacity, the board may require the discharger to submit for approval of the board, with such modifications as it may deem necessary, a detailed time schedule of specific actions the discharger shall take in order to correct or prevent a violation of requirements."

12. Water Code section 13267, subdivision (a) provides that the Regional Water Board may investigate the quality of any waters of the state within its region in connection with any action relating to the Basin Plan. Water Code section 13267, subdivision (b) provides that the Regional Water Board, in conducting an investigation, may require a discharger to furnish, under penalty of perjury, technical or monitoring program reports. The reports required by this Order, pursuant to Water Code section 13267, are necessary to ensure that the future threat to water quality created by activities at the Facility are properly assessed and controlled. Due to the importance of protecting water resources as explained herein, the costs associated with developing the required reports and work plans bear a reasonable relationship to the benefits that will be obtained from having the necessary information for the Regional Water Board to properly regulate and monitor the Facility.

13. Water Code section 13383, subdivision (a) provides the Regional Water Board may establish monitoring, inspection, entry reporting, and record keeping requirements, as authorized by section 13160, 13376, or 13377 for any person who discharges, or proposes to discharge to navigable waters. Subdivision (b) provides that the Regional Water Board may require any person subject to this section to establish and maintain monitoring equipment or methods, including, where appropriate, biological monitoring methods, sample effluent as prescribed, and provide other information as may be reasonably required.

14. Pursuant to Water Code section 13385(j)(3), mandatory minimum penalties (MMPs) will not apply to future violations of the final effluent limitations for nickel and zinc, during the term of this Order, if:

    a. A cease and desist or time schedule order is issued on or after July 1, 2000, and specifies the actions that the Permittee is required to take in order to correct the violations that would otherwise be subject to MMPs;

    b. The Regional Water Board finds that the Permittee is not able to consistently comply with one or more of the effluent limitations established in the waste discharge requirements applicable to the waste discharge because the effluent limitation is a new or more stringent regulatory requirement that has become applicable to the waste discharge after the effective date of the waste discharge requirements and after July 1, 2000, new or modified control measures are necessary in order to comply with the effluent limitation, and the new or modified control measures cannot be designed, installed, and put into operation within 30 calendar days;

    c. The Regional Water Board establishes a time schedule for bringing the waste discharge into compliance with the effluent limitations that is as short as possible, taking into account the technological, operational, and economic factors that affect the design, development, and implementation of the control measures that are necessary to comply with the effluent limitations, and where the time schedule exceeds one year, the time schedule includes interim requirements and actions and milestones leading to compliance; and

    d. The Permittee has prepared and is implementing in a timely and proper manner or is required by the regional board to prepare and implement, a pollution prevention plan pursuant to Water Code section 13263.3.

    e. Following a public hearing, and upon a showing that the discharger is making diligent progress towards bringing the waste discharge into compliance with the effluent limitation, the Regional Water Board may extend the time schedule for an additional period not exceeding five years in length, if the discharger demonstrates that the additional time is necessary to comply with the effluent limitation.

15. This Order establishes compliance schedules below that address anticipated future violations of final effluent limitations for nickel and zinc. In accordance with Water Code section 13385 (j)(3)(B) and the terms of this Order, MMPs will not be assessed for violations of the final effluent limitations for nickel and zinc as stipulated in Finding 13 above. Specifically, the Regional Water Board finds that:

a. This Order is being issued after July 1, 2000 and specifies the actions the Permittees are required to take to correct the violations of Order No. R1-2019-0005.

b. The Permittees are unable to consistently comply with the effluent limitations for nickel and zinc because new or modified control measures are needed to achieve compliance, and the new or modified control measures are dependent on the completion of a series of studies, thus the new or modified control measures cannot be designed, installed, and put into operation within 30 calendar days.

c. This Order establishes interim effluent limitations for nickel and zinc and establishes a compliance schedule for bringing the Facility into compliance with final effluent limitations for nickel and zinc in the Permit that are as short as possible.

d. Provisions VI.C.3.a of the Permit require the Permittees to develop and conduct a Pollution Minimization Program to identify and control pollutant sources including, but not limited to nickel and zinc at the Facility.

16. Accordingly, the Regional Water Board finds that MMPs for violations of final effluent limitations when discharging to the North Fork Mad River at Monitoring Location EFF-001 as specified in Effluent Limitations section IV.A.1.a of the Permit do not apply for nickel and zinc through December 1, 2025 as long as the Permittees comply with the interim effluent limitations contained in this Order. If an interim effluent limitation contained in this Order is exceeded, then the Permittees are subject to MMPs for that particular exceedance as it will no longer meet the exception in Water Code section 13385(j)(3)(B)(i)(ii).

17. The compliance schedule established in this Order is intended to be as short as possible. This Order provides a compliance schedule for the Permittees to develop and submit a WER study for nickel and zinc. The Permittees expect that the results of the WER study will support the modification or removal of effluent limitations for nickel and zine in the subsequent NPDES permit for the Facility.

18. This Order requires the Permittees to comply with interim effluent limitations for nickel and zinc. The SIP requires that interim effluent limitations for pollutants be based on past performance or limits in previous orders, whichever is more stringent. Interim effluent limitations for nickel and zinc established in this Order were derived based on Facility performance using available effluent monitoring data at Monitoring Location EFF-001, the point of discharge to the North Fork Mad River. These performance based interim effluent limitations were calculated using statistical methodology described in the U.S. EPA Technical Support

Document for Water Quality-based Toxics Control (TSD) and a statistical tool, RPCalc, developed by State Water Resources Control Board staff to assist State and Regional Water Board staff in the development of interim effluent limitations. The 95th percentile concentrations of each pollutant were calculated at the 95 percent confidence level to determine the interim Average Monthly Effluent Limitations (AMELs). The calculated AMELs were rounded to the nearest whole number.

Table 2: 95th Percentile Concentrations for Interim Effluent Limitations

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Parameter	Units	Monthly Average Effluent Limitation (AMEL)
Nickel	µg/L	79
Zinc	µg/L	100

The interim limitations in this Order are intended to ensure that the Permittees maintain at least its existing performance while implementing pollution prevention measures to improve performance to the extent possible and completing all tasks required by the compliance schedules.

19. The Regional Water Board has notified the Permittees, interested agencies and persons, of its intent to issue a Time Schedule Order in accordance with Water Code section 13167.5.

20. Issuance of this Order is exempt from the provisions of the California Environmental Quality Act (Pub. Resources Code, § 21000 et seq.) (“CEQA”) pursuant to CWC section 13389, since the adoption or modification of a NPDES permit for an existing source is statutorily exempt and this Order only serves to implement a NPDES permit. (Pacific Water Conditioning Ass’n, Inc. v. City Council of City of Riverside (1977) 73 Cal.App.3d 546, 555-556.).

IT IS HEREBY ORDERED, pursuant to Water Code section 13300, 13267 and 13383, the Permittees shall comply with the following requirements and schedule of actions to comply with the Permit:

1. The Permittees shall comply with the following interim effluent limitations in the interim period established by this Order:

Table 3: Interim Effluent Limitations

Table 23: Interim Effluent Limitations

Parameter	Units	AMEL
Nickel	µg/L	79
Zinc	µg/L	100

2. All required reports and documents shall be submitted to the Regional Water Board. The Pollutant Minimization Program requires Executive Officer approval prior to its implementation.

3. The Permittees shall implement the tasks in the following compliance schedule in order to achieve compliance with the final effluent limitations for nickel and zinc in section IV.A.1.a of the Permit at the earliest possible date in accordance with the following schedule:

Table 4: Compliance Schedule, Tasks and Dates to Achieve Compliance with the Proposed Permit

Table 34: Compliance Schedule, Tasks and Dates to Achieve Compliance with the Proposed Permit

Task	Task Description	Original Compliance Schedule Date	Revised Compliance Schedule Date
A	Submit a Water-Effects Ratio (WER) Work Plan for Executive Officer concurrence.	**March 1, 2022**	**Complete**
B	Develop and conduct a Pollution Minimization Program (PMP) as identified in Provision VI.C.3.a of the Permit.	**March 1, 2023**	**Complete**

Task	Task Description	Original Compliance Schedule Date	Revised Compliance Schedule Date
C	Submit Annual Assessment Reports identifying the status of the WER study and any current or planned projects that are intended to reduce sediment loading into the process water and stormwater collection systems. The reports shall include: - Summary of data collected to date. - Evaluation of the Facility performance with regard to metals removal and compliance with final effluent limitations. - Evaluation of the potential for operational modifications to achieve desired nickel and zinc removal. - Summary of any implemented operational modifications.	**Annually (July 1 of each year)**	**Unchanged**
D	Complete and submit the final WER study report for nickel and zinc.	**May 14, 2023**	**June 30, 2024**
E	If the WER study does not demonstrate that the discharge can comply with final effluent limitations for nickel and/or zinc, submit for Executive Officer Approval, a Feasibility Study for additional process infrastructure, alternative treatment and/or an alternative discharge proposal to achieve applicable effluent limitations. This evaluation shall include a comparison of alternative technologies, development of ranking criteria, recommendation for a preferred alternative to achieve compliance with nickel and/or zinc effluent limitations, and an updated compliance schedule and request for extension for Executive Officer approval. The updated compliance schedule shall identify all necessary tasks and dates needed to achieve compliance with applicable effluent limitations for nickel and/or zinc.	**December 1, 2023**	**December 1, 2024**

Task	Task Description	Original Compliance Schedule Date	Revised Compliance Schedule Date
F	Achieve full compliance with final nickel and zinc effluent limitations.	**December 1, 2024**	**December 1, 2025**

4. Until the Permittees can achieve full compliance with the Permit, the Permittees shall operate and maintain, as efficiently as possible, all facilities and systems necessary to comply with all prohibitions, effluent limitations and requirements identified in the Proposed Permit or any future waste discharge requirements issued for the Facility.

5. If the Permittees are unable to perform any activity or submit any documentation in compliance with the deadlines set forth in this Order the Permittees may request, in writing, that the Regional Water Board Executive Officer grant an extension of the time. The extension request shall include justification for the delay and shall be submitted at least 21 days prior to the respective deadline to be considered timely. A minor extension may be granted by the Regional Water Board Executive Officer for good cause.

6. If the Regional Water Board finds that the Permittees fail to comply with the provisions of this Order, the Regional Water Board may take all actions authorized by law, including referring the matter to the Attorney General for judicial enforcement or issuing a complaint for administrative civil liability pursuant to Water Code sections 13268, 13350, and/or 13385. The Regional Water Board reserves the right to take any enforcement actions authorized by law.

Any person aggrieved by this action of the North Coast Regional Water Board may petition the State Water Resources Control Board (State Water Board) to review the action in accordance with Water Code section 13320 and California Code of Regulations, title 23, sections 2050. The State Water Board must receive the petition by 5:00 p.m., 30 days after the date of this Order, except that if the thirtieth day following the date of this Order falls on a Saturday, Sunday, or state holiday, the petition must be received by the State Water Board by 5:00 p.m. on the next business day. Copies of the law and regulations applicable to filing petitions may be found on the Internet (https://www.waterboards.ca.gov/public_notices/petitions/water_quality/) or will be provided upon request.

Ordered by:

Valerie Quinto
Executive Officer