California Regional Water Quality Control Board
North Coast Region

TIME SCHEDULE ORDER No. R1-2018-0037
TO PROVIDE TIME SCHEDULES TO COMPLY WITH
ORDER No. R1-2018-0002

FORESTVILLE WASTEWATER TREATMENT, RECYCLING, AND DISPOSAL FACILITY
NPDES No. CA0023043

WDID No. 1B83100OSON
Sonoma County

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

1. The Forestville Water District (Permittee) is the owner and operator of the Forestville Wastewater Treatment, Recycling, and Disposal Facility (Facility), a publicly owned treatment works, which discharges tertiary treated wastewater under Waste Discharge Requirements (WDRs) contained in Order No. R1-2018-0002 (Permit) beginning on September 1, 2018, adopted by the Regional Water Board on July 11, 2018. The Permit also serves as a National Pollutant Discharge Elimination System (NPDES) permit (NPDES No. CA0022748). The Permit contains discharge prohibitions, effluent and receiving water limitations, compliance provisions, and monitoring and reporting requirements, including the continuation of final effluent limitations for nitrate and cyanide and new final effluent limitations for ammonia. The Permit also includes a new requirement that limits the discharge to one percent of the flow of Jones Creek, a tributary to Green Valley Creek, thence the Russian River.

2. The Permittee was previously regulated under WDR Order No. R1-2012-0012 (previous permit), adopted by the Regional Water Board on January 19, 2012.

3. The Facility serves a population of 930 residential, commercial, and institutional users in the town of Forestville and nearby Mirabel Heights Zone of Benefit area. The Facility is designed to treat an average dry weather flow of 0.130 million gallons per day (mgd), and a peak weekly wet weather flow of 0.576 mgd. The treatment system consists of headworks, an aeration pond (also known as the South Pond), a settling

pond (also known as the North Pond), microfiltration, chlorine disinfection with sodium hypochlorite, and dechlorination with sodium bisulfite. Treated wastewater is discharged to an approximately 3.25 million gallon effluent storage pond used for storage of advanced treated wastewater prior to discharge to Jones Creek or the Permittee's recycled water system.

4. The Permit 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 Permittee to monitor its effluent for CTR constituents that may have reasonable potential to cause or contribute to an excursion above a water quality criterion or objective applicable to the receiving water.

5. Pursuant to federal regulations at section 122.44(d)(1)(i), title 40 of the Code of Federal Regulation (CFR), NPDES permit effluent limitations must control all pollutants which are or may be discharged at a level that will cause or have the reasonable potential to cause or contribute to an in-stream excursion above any State water quality standard, including any narrative water quality criteria. Beneficial uses, together with their corresponding water quality objectives or promulgated water quality criteria, can be defined per federal regulations as water quality standards.

6. The Regional Water Board adopted the *Water Quality Control Plan for the North Coast Region* (hereinafter Basin Plan), which designates beneficial uses, establishes water quality objectives, and contains implementation programs and policies to achieve those objectives for all waters addressed through the Basin Plan. The Basin Plan identifies present and potential beneficial uses for the Russian River, to which Jones Creek and Green Valley Creek are tributary.

7. The Permit implements provisions of the Basin Plan by requiring the Permittee to monitor its effluent for certain CTR and certain non-CTR constituents (e.g., ammonia and nitrate) that may have reasonable potential to cause or contribute to an excursion above a water quality criterion or objective applicable to the receiving water. The Basin Plan also includes a narrative toxicity objective that requires all waters to be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. This Basin Plan objective is applicable because ammonia and cyanide are toxic to aquatic life and must be controlled in order to prevent toxicity.

8. The Permit further implements provisions of the Basin Plan that limit discharges to the Russian River and its tributaries to the period of October 1 through May 14 (seasonal discharge prohibition) and to no more than one percent of the flow of the receiving water (discharge rate limitation). Historically, including in the previous permit, the Permittee was allowed to discharge to Jones Creek based on one percent of the flow of Green Valley Creek. The Permittee had never been required to submit

the information required by the Basin Plan for an exception to the Basin Plan discharge rate limitation. The previous permit required the Permittee to make a formal request for an exception to the discharge rate limitation. The Permittee's formal request was submitted with its Report of Waste Discharge on June 1, 2016 and included an analysis of treatment facility reliability, protection of beneficial uses of Jones Creek, disposal alternatives, and antidegradation, as required by the Basin Plan. The exception request included an analysis of compliance with effluent and receiving water limits in the permit that showed that the Facility currently causes increases of ammonia, nitrate, and temperature downstream of the discharge and decreases in dissolved oxygen. For this reason, the Regional Water Board denied the Permittee's request for an exception to the discharge rate limitation until the Permittee achieves compliance with these effluent limitations. The Permit limits the Permittee's discharge of disinfected tertiary treated effluent after dechlorination to one percent of the flow of Jones Creek and to the period of October 1 through May 14 in accordance with the Basin Plan.

9. The Permittee is violating or threatening to violate, the following terms in Order Number R1-2018-0002:

III. DISCHARGE PROHIBITIONS

J. During the period from October 1 through May 14, discharges of treated wastewater to Jones Creek, tributary to the Russian River via Green Valley Creek, shall not exceed one percent of the flow of Jones Creek.

IV. EFFLUENT LIMITATIONS AND DISCHARGE PROHIBITIONS

A. Effluent Limitation – Discharge Points 001 and 002

2. Final Effluent Limitations – Discharge Point 002

a. The discharge of treated wastewater shall maintain compliance with the following limitations at Discharge Point 002, with compliance measured at Monitoring Location EFF-002 as described in the Monitoring and Reporting Program (MRP) (Attachment E).

Table 5. Effluent Limitations – Discharge Point 002 - Monitoring Location EFF-002

Parameter	Units	Effluent Limitations[1]				
		Average Monthly	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
Cyanide	µg/L	4.4	--	7.9	--	--
Ammonia Nitrogen	mg/L	1.7	--	5.0	--	--
Nitrate Nitrogen, Total (as N)	mg/L	10	--	--	--	--

10. Untreated domestic wastewater contains ammonia. Nitrification is a biological process that converts ammonia to nitrite and nitrate. Denitrification is a process that converts nitrate to nitrite or nitric oxide and then to nitrous oxide or nitrogen gas, which is then released to the atmosphere. Depending on the degree of nitrification and/or denitrification in a wastewater treatment process, there can be varying levels of ammonia and nitrate. There can also be concentrations of nitrite and organic nitrogen, however, these are usually found at lower concentrations than nitrate or ammonia. The Permittee does not currently use nitrification to remove ammonia from the waste stream (by converting it to nitrate). Inadequate or incomplete denitrification may result in the discharge of ammonia to the receiving stream. Ammonia is known to cause toxicity to aquatic organisms in surface waters. Discharges of ammonia would violate the Basin Plan narrative toxicity objective. The discharge also contains concentrations of nitrate that exceed the primary drinking water maximum contaminant level of 10 mg/L established by the State Water Board, Division of Drinking Water for the protection of human health.

11. Cyanide can be found in municipal wastewater influent and is usually a result of industrial discharges. Cyanide may also be produced in the chlorination process in under some circumstances. In addition, municipal wastewater discharges occasionally exceed cyanide effluent limitations based on analytical results from standard U.S. EPA methods. It is widely believed that the approved U.S. EPA methods used to measure cyanide in wastewater effluent are prone to interferences that are unpredictable and difficult to mitigate related to the presence of certain interferences parameters including, but not limited to, residual chlorine, chloramines, nitrite, nitrate, sulfide, thiocyanate and/or the use of sodium hydroxide (NaOH) preservative. Effluent monitoring results intermittently show concentrations of cyanide that exceed CTR water quality criterion for the protection of aquatic life.

12. Data collected during the term of the previous permit demonstrated reasonable potential for ammonia based on 20 of 24 sample results exceeding the lowest water quality objective for ammonia of 1.86 mg/L (that is based on temperature and pH at the time of sample collection), for nitrate based on 2 of 24 sample results exceeding the water quality objective of 10 mg/L, and for cyanide based on 12 of 24 sample results exceeding the water quality objective of 5.2 µg/L. The maximum effluent concentrations for ammonia, nitrate, and cyanide, are 18 mg/L, 19 mg/L, and 13 µg/L, respectively. Based on the results of the reasonable potential analysis, Order No. R1-2018-0002 establishes new effluent limitations for ammonia and retains effluent limitations for nitrate and cyanide from the previous permit.

13. On November 3, 2017, the Permittee submitted a letter that contains an analysis of the Permittee's inability to immediately comply with ammonia, nitrate, and cyanide effluent limitations, requests for a compliance schedule, interim limitations, and protection from mandatory minimum penalties, and includes a schedule of proposed actions and time frames to achieve compliance with ammonia, nitrate, and cyanide

effluent limitations, and the one percent discharge limitation identified in Finding 9, above.

14. The Permittee's letter includes a proposal to address the ammonia/nitrate issue systematically, in accordance with the time schedule included in Requirement 3 of this Order by conducting a study that will include monitoring of nitrogen species throughout the treatment plant to fully understand the basis for developing viable solutions. The Permittee will use the results from the nitrogen monitoring program to identify potential operational modifications and infrastructure improvements. The Permittee proposes to implement operational modifications prior to the consideration of more costly infrastructure improvements.

Since nitrate is formed during the treatment of ammonia (See Finding 10), the Permittee plans to study the potential for operational modifications to remove both forms of nitrogen simultaneously. Since treatment for ammonia will result in varying nitrate concentrations, the Permittee must evaluate and assess the feasibility of various alternatives to reduce ammonia and nitrate concentrations. Operational modifications that may be necessary to comply with the ammonia effluent limitations can be expected to temporarily increase nitrate concentrations until such time as the Facility is able to consistently nitrify and denitrify to remove both ammonia and nitrate to acceptable concentrations. In accordance with Water Code section 13385(j)(3), the Regional Water Board finds that, based on the relationship between ammonia and nitrate, the Permittee will not be able to consistently comply with the final effluent limitations for nitrate during treatment modifications to reduce ammonia discharges. The limitations for ammonia are new requirements that become applicable on the effective date of Order No. R1-2018-0002 (September 1, 2018), and new or modified control measures that cannot be designed, installed, and put into operation within 30 calendar days are necessary in order to comply with the limitation. The Permittee's evaluation of operational control measures to reduce ammonia will have a direct impact on nitrate concentrations in the treatment process and effluent and may result in temporary increases in nitrate concentrations above the final effluent limitations in Order No. R1-2018-0002.

15. The Permittee's November 3, 2017, letter also requested consideration of a modified effluent/sampling protocol for cyanide and a compliance schedule for compliance with cyanide effluent limitations with an emphasis developing an alternative test procedure by conducting a cyanide hold time study.[1] Regional Water Board staff have reviewed the available scientific literature regarding analysis of cyanide in municipal

[1] The proposed study would require United States Environmental Protection Agency (U.S. EPA) approval and would involve conducting an investigation to determine the influence of sodium hydroxide preservative by testing for free and total cyanide in preserved and unpreserved samples of effluent and using the resultant data to determine the validity of extending the unpreserved sample hold time up to several hours to allow transportation of samples to a certified laboratory. The intent of the Study would be to determine if cyanide exceedances are due to the preservative rather than the Permittee's effluent.

wastewater, specifically related to analytical methods, interferences, and formation, and have determined that further monitoring and evaluation of the Permittee's wastewater discharge are necessary prior to conducting a cyanide hold time study.

a. In 2012 U.S. EPA revised 40 C.F.R. part 136 to include approved analytical methods for forms of cyanide that are toxic to aquatic life. Order No. R1-2018-0002 allows the Permittee, at its discretion, to monitor for the form of cyanide that is toxic to aquatic life (weak acid dissociable cyanide), rather than total cyanide. If monitoring for weak acid dissociable cyanide results in compliance with effluent limitations, the Permittee will not need to initiate the tasks identified in the compliance schedule for cyanide included in Requirement 4 of this Order.

b. The time schedule for cyanide compliance included in Requirement 4 of this Order requires the Permittee to notify the Regional Water Board Executive Officer if cyanide monitoring conducted pursuant to Order No. R1-2018-0002 reveals further exceedances of cyanide effluent limitations and to submit a work plan identifying a plan to further evaluate the cause of cyanide exceedances. The work plan must address other common issues related to cyanide, including, but not limited to, evaluation of potential interferences, and may include a proposal for a cyanide hold-time study.

16. The Permittee further proposes to comply with Discharge Prohibition III.J identified in Finding 9, above, once the Permittee is able to comply with ammonia, nitrate, and cyanide effluent limitations, as further described in Requirement 5 of this Order.

17. Regional Water Board staff reviewed the Permittee's November 3, 2017, letter and concurs with the Permittee's assessment that it is infeasible to comply with final effluent limitations for ammonia, nitrate, and cyanide and that the Permittee's proposed schedule (with some modifications proposed by Regional Water Board staff) is designed to bring the waste discharge into compliance with final effluent limitations for ammonia, nitrate, and cyanide in the shortest time frame possible. Regional Water Board staff modified the Permittee's proposal for cyanide as described in Finding 15, above, and revised the proposed schedule for ammonia and nitrate to include a task for California Environmental Quality Act (CEQA) review, thus adding another year to the compliance schedule.

18. California 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."

19. This Order provides a compliance schedule for the Permittee to develop, submit, and implement methods of compliance, including developing and implementing pollution prevention activities or constructing necessary treatment facilities to meet the new effluent limitations for ammonia and the retained effluent limitations for nitrate and cyanide.

20. 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.

21. 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.

22. Pursuant to Water Code section 13385(j)(3), mandatory minimum penalties (MMPs) will not apply to future violations of final effluent limitations for ammonia and nitrate and the one-percent discharge rate requirement if:

a. A time schedule order is issued on or after July 1, 2000, and specifies the actions that the discharger 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 discharger 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 discharger [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.

23. Because this Order establishes a compliance schedule to address anticipated future violations of final ammonia and nitrate effluent limitations, and the one percent discharge rate requirement, after making specific findings and setting interim effluent limitations, in accordance with the Water Code section 13385(j)(3) and the terms of this Order, no MMPs will be assessed for violations of the final ammonia and nitrate effluent limitations or violations of the one percent discharge rate limitation as stipulated in Finding 24, below. Specifically, the Regional Water Board finds that:

a. The time schedule order is being issued after July 1, 2000, and specifies the actions the Permittee is required to take to correct the violations of the final ammonia and nitrate effluent limitations in section IV.A.2.a and Discharge Prohibition III. J of Order No. R1-2018-0002, as set out in Finding 9, above.

b. The final effluent limitations for ammonia and nitrate, and discharge rate limitation established in Order No. R1-2018-0002 are more stringent than those required pursuant to Order No. R1-2012-0012. The Permittee will not be able to consistently comply with final effluent limitations for ammonia and nitrate or the discharge rate limitation because new or modified control measures will be needed for the Permittee to comply, and the new or modified control measures are dependent on the completion of actions that will take more than 30 calendar days to complete.

c. This Order establishes interim effluent limitations for ammonia and nitrate in Requirement 1 and for the discharge rate limitation in Requirement 2, and establishes compliance schedules for bringing the Facility into compliance with final effluent limitations for ammonia and nitrate (Requirement 3) and the discharge rate limitation (Requirement 5) in the Permit that are as short as possible.

d. This Order requires the Permittee to prepare and implement a pollution prevention plan in order to reduce the impacts when the discharge exceeds the final effluent limitations for ammonia and nitrate during the compliance period.

24. Accordingly, the Regional Water Board finds that MMPs for violations of the discharge rate limitation in Discharge Prohibition III.J, or for violations of final ammonia and nitrate effluent limitations when discharging to Jones Creek at Monitoring Location EFF-002 as specified in Effluent Limitations section IV.A.2.a of Order No. R1-2018-0002 do not apply through March 1, 2026, so long as the Permittee complies with the interim effluent limitations contained in Requirements 1 and 2, and the compliance schedules contained in Requirements 3 and 5 of this Order. If an interim effluent limit contained in this Order is exceeded, then the Permittee is 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).

25. The Regional Water Board further finds that the Water Code does not provide for protection from MMPs for violations of final cyanide effluent limitations when discharging to Jones Creek at Monitoring Location EFF-002 because the final effluent limitations for cyanide in Order No. R1-2018-0002 do not meet any of the required conditions for MMP protection as specified in Water Code section 13385(j)(3)(b)(i)-(iv). The final effluent limitations for cyanide are retained from the previous Order and are applicable immediately.

26. The compliance schedules established in this Order are intended to be as short as possible.

The compliance schedule for ammonia and nitrate accounts for the interrelationship between ammonia and nitrate, the time necessary to evaluate Facility performance with respect to ammonia and nitrate removal, and the time necessary to evaluate and assess other alternatives. The Regional Water Board may wish to revisit these timeframes as more information becomes available.

The compliance schedule for cyanide will be triggered if monitoring utilizing the modified protocol described in Finding 15.a. of this Order reveals continued exceedances of final cyanide effluent limitations. This Order requires compliance with cyanide effluent limitations at the earliest possible date.

The compliance schedule for the discharge rate limitation accounts for the need for the permittee to demonstrate compliance with ammonia, nitrate, and cyanide effluent limitations prior to the Permittee requesting an exception to the Basin Plan discharge rate limitation.

27. This Order requires the Permittee to comply with interim effluent limitations for ammonia and nitrate. The SIP requires that interim limitations for CTR pollutants to

be based on past performance or limits in previous orders, whichever is more stringent. It is appropriate to apply this approach for establishing interim effluent limitations for non-CTR pollutants. Interim effluent limitations for ammonia and nitrate established in Requirement 1 of this Order were derived based on Facility performance using available effluent monitoring data at Monitoring Location EFF-002, the point of discharge to Jones Creek. Using methodology described in the U.S. EPA Technical Support Document for Water Quality-based Toxics Control (TSD), the 95th percentile concentrations of each pollutant were calculated and compared to the maximum sample result for data collected during the term of Order No. R1-2012-0012 (March 2012 through May 2017). The calculated 95th percentile and maximum sample results are as follows:

Constituent	Calculated 95th Percentile	Maximum Sample Result
Ammonia	23	18
Nitrate	24	19

For both constituents, the maximum sample result was less than the calculated 95th percentile concentration, therefore all interim limitations in this Order reflect past performance. The interim limitations in this Order are intended to ensure that the Permittee maintains at least its existing performance while completing all tasks required by the compliance schedules.

28. This Order requires the Permittee to comply with an interim discharge rate limitation for discharges to Jones Creek at Discharge Point 002. The interim discharge rate limitation in Requirement 2 of this Order requires the Permittee to achieve past performance by meeting the discharge rate limitation from Order No. R1-2012-0012 that limits the Permittee to discharging at a rate not to exceed one percent of the flow of Green Valley Creek.

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

30. 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 California Water Code section 13300, 13267 and 13383, the Permittee shall comply with the following requirements to prevent violations of Order No. R1-2018-0002:

1. The Permittee shall comply with the following interim effluent limitations in the interim period established by this Order for the Permittee to achieve compliance with final effluent limitations set forth in Effluent Limitation IV.A.2.a of Order No. R1-2018-0002:

Parameter	Units	Average Monthly Effluent Limitation
Ammonia	mg/L	18
Nitrate	mg/L	19

2. The Permittee shall comply with the following interim discharge rate limitation in the interim period established by this Order for the Permittee to achieve compliance with Discharge Prohibition III.J of Order No. R1-2018-0002:

   During the period from October 1 through May 14, discharges of treated wastewater to Jones Creek, tributary to the Russian River via Green Valley Creek, shall not exceed one percent of the flow of Green Valley Creek, as measured at the Iron Horse Bridge. For the purposes of this Order, compliance with this discharge prohibition shall be determined as follows:

   1. The discharge of advanced treated wastewater shall be adjusted at least once daily to avoid exceeding, to the extent practicable, one percent of the most recent daily flow measurement of Green Valley Creek at Iron Horse Bridge. Daily flow shall be based on flow meter comparisons reasonably read between the hours of 12:01 am and 12:00 midnight; and
   2. In no case shall the total volume of advanced treated wastewater discharged in a calendar month exceed one percent of the total volume of Green Valley Creek at Iron Horse Bridge in the same calendar month. At the beginning of the discharge season, the monthly flow volume comparisons shall be based on the date when the discharge commenced to the end of the calendar month. At the end of the discharge season, the monthly flow volume comparisons shall be based on the first day of the calendar month to the date when the discharge ceased for the season.

3. The Permittee shall implement the tasks in the following compliance schedule in order to achieve compliance with final effluent limitations for ammonia and nitrate in Effluent Limitation IV.A.2.a of Order No. R1-2018-0002 at the earliest possible date in accordance with the following schedule:

Task	Task Description	Compliance Date
A	Submit Ammonia and Nitrate Study Work Plan and schedule of implementation for Regional Water Board Executive Officer approval. Implement Work Plan per approved schedule.	**January 1, 2019**
B	Submit a Pollution Prevention Plan for Regional Water Board Executive Officer approval that identifies measures that the Permittee will take to minimize the potential impacts when the discharge exceeds the final effluent limitations for ammonia or nitrate during the compliance period. The pollution prevention plan shall address all of the elements identified in Water Code section 13263.3(d)(3)(A-I). The Permittee shall implement the pollution prevention plan in accordance with the approved schedule.	**July 1, 2019**
C	Secure funding for monitoring and assessment tasks identified in Tasks D, E, and F, and provide the Regional Water Board Executive Officer with documentation regarding the funding source(s).	**January 1, 2020**
D	Conduct and complete monitoring program for nitrogen species throughout WWTF locations identified in the approved Ammonia and Nitrate Study Work Plan.	**January 1, 2021**
E	Prepare and submit Preliminary Ammonia and Nitrate Assessment Report for Regional Water Board Executive Officer Approval. The Report will include: 1. Summary of data collected to date; 2. Evaluation of treatment facility performance with regard to ammonia and nitrate approval; 3. Evaluation of potential operational modifications that can result in compliance with ammonia and nitrate effluent limitations; 4. Evaluation of potential infrastructure improvements and upgrades that can result in compliance with ammonia and nitrate effluent limitations; and 5. Identification of recommended operational modifications and, if necessary, infrastructure improvements/upgrades to meet effluent limitations.	**October 1, 2021**

Task	Task Description	Compliance Date
F	Implement, monitor, and report on operational modifications identified in the Preliminary Assessment Report.	**October 1, 2022**
G	If operational modifications are unsuccessful, select recommended infrastructure improvement option identified in the Preliminary Assessment Report and submit 60% design plans.	**October 1, 2023**
H	Complete the California Environmental Quality Act (CEQA) process and submit to the Regional Water Board Executive Officer, documentation of certification of the final CEQA document and approval by the Permittee's Board of Directors.	**October 1, 2024**
I	Bid and construct recommended infrastructure improvements	**October 1, 2025**
J	Achieve compliance with final effluent limitations for ammonia and nitrate as required by WDR No. R1-2018-0002 (Effluent Limitation IV.A.2.a, Table 5), or future renewal of the WDR Order.	**March 1, 2026**

4. The Permittee shall implement the tasks in the following compliance schedule, if cyanide monitoring conducted pursuant to WDR Order No. R1-2018-0002 reveals any exceedances of the cyanide effluent limitations in Order No. R1-2018-0002, in order to achieve compliance with final effluent limitations for cyanide in Effluent Limitation IV.A.2.a of Order No. R1-2018-0002 at the earliest possible date in accordance with the following schedule:

Task	Task Description	Compliance Date
A	If cyanide monitoring conducted pursuant to Order No. R1-2018-0002 reveals exceedances of the cyanide effluent limitations in Order No. R1-2018-0002, the Permittee shall notify the Regional Water Board Executive Officer in writing within one week of receiving the monitoring results.	**Within one week of receiving monitoring results revealing exceedance of cyanide effluent limitations**
B	Within 6 months of the Permittee notifying Regional Water Board staff that cyanide monitoring utilizing the revised protocol demonstrate that cyanide effluent limitations in Order No. R1-2018-0002 are being exceeded, the Permittee shall submit a work plan for Regional Water Board Executive Officer approval, identifying a plan to conduct a study (hereafter	**Within 6 months of the written notification identified in Task A**

Task	Task Description	Compliance Date
	"Cyanide Study") that (1) evaluates whether there are any discharges of cyanide to the Facility; (2) identifies cyanide sources in the effluent from the Facility, including an evaluation/study to determine whether cyanide is being formed within the Facility with a particular focus on the chlorination disinfection process; and (3) determines whether sampling and analytical Quality Assurance procedures are interfering with the validity of cyanide laboratory results of wastewater samples that were collected, preserved, and analyzed in accordance with 40 C.F.R. part 136 and as recommended by U.S. EPA. The work plan shall identify detailed tasks and a time schedule for completing the Cyanide Study. The Permittee shall implement the work plan in accordance with a schedule approved by the Regional Water Board Executive Officer.	

5. The Permittee shall implement the tasks in the following compliance schedule in order to achieve compliance with Discharge Prohibition III.J of Order No. R1-2018-0002 at the earliest possible date in accordance with the following schedule:

Task	Task Description	Compliance Date
A	Upon completion of tasks identified in Requirements 3 and 4 to achieve and demonstrate compliance with ammonia, nitrate, and cyanide effluent limitations, submit a request for an exception to the Basin Plan discharge rate requirement with an analysis of effluent and receiving water data that demonstrates that the Permittee's discharge complies with all effluent limitations and protects receiving waters of Jones Creek.	**March 1, 2026**
B	Alternatively, the Permittee may submit a report containing an analysis of alternatives to discharging to Jones Creek and a plan and schedule for implementing an alternative discharge plan.	**March 1, 2026**

6. Pursuant to Water Code section 13385 (j)(3)(C)(i), for the purposes of mandatory minimum penalty protection, the Regional Water Board may grant a time schedule to bring a waste discharge into compliance with permit effluent limitations that does not exceed five years. As reflected by the task descriptions and completion dates specified in Requirements 3 and 5, above, projects to bring the discharge into compliance with effluent limitations are anticipated to take longer than five years to implement. While this Order requires completion of the tasks by the dates specified,

this Order does not provide protection from mandatory minimum penalties for any effluent limit violations that occur beyond five years from the date of adoption of this Order. The Regional Water Board may, however, pursuant to Water Code section 13385 (j)(3)(C)(ii)(II), provide additional protection from mandatory minimum penalties and extend the time schedule for a maximum of five additional years. The Regional Water Board may grant the extension following a public hearing and a showing that the discharger is making diligent progress toward bringing the discharge into compliance and the discharger demonstrates that additional time is necessary to comply with the final effluent limitations. For purposes of protection from mandatory minimum penalties, it is the Permittee's responsibility to submit a request for a time schedule extension to the Regional Water Board Executive Officer. To ensure that the Regional Water Board has adequate time to consider the request and hold a public hearing on the matter, the request must be submitted with adequate documentation to support it no later than 120 days before the five-year mandatory minimum penalty period expires under this Order.

7. In the interim period until the Permittee can achieve full compliance with Order No. R1-2018-0002, the Permittee shall operate and maintain, as efficiently as possible, all facilities and systems necessary to comply with all prohibitions, effluent limitations and requirements identified in Order No. R1-2018-0002 or any future waste discharge requirements issued for the Facility.

8. If the Permittee is unable to perform any activity or submit any documentation in compliance with the deadlines set forth in Requirements 3, 4, and 5, above, the Permittee may request, in writing, an extension of the time. The extension request shall include justification for the delay and shall be submitted at least thirty days prior to the respective deadline to be considered complete and timely.

9. If the Regional Water Board Executive Officer finds that the Permittee fails to comply with the provisions of this Order, the Regional Water Board Executive Officer 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 13385. The Regional Water Board reserves the right to take any enforcement actions authorized by law.

10. Any person aggrieved by this action of the North Coast Water Board may petition the State Water Board to review the action in accordance with CWC section 13320 and California Code of Regulations, title 23, sections 2050 and following. 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 at:

https://www.waterboards.ca.gov/public_notices/petitions/water_quality/ or will be provided upon request.

Ordered by: _____
Matthias St. John
Executive Officer

18_0037_Forestville_TSO