

California Regional Water Quality Control Board  
North Coast Region

ORDER NO. R1-2014-0034

REQUIRING THE RUSSIAN RIVER COUNTY SANITATION DISTRICT  
AND SONOMA COUNTY WATER AGENCY WASTEWATER TREATMENT FACILITY  
TO CEASE AND DESIST FROM DISCHARGING OR THREATENING  
TO DISCHARGE EFFLUENT IN VIOLATION OF  
WASTE DISCHARGE REQUIREMENTS ORDER NO. R1-2014-0002  
WDID No. 1B820450SON

Sonoma County

The Regional Water Quality Control Board, North Coast Region (hereinafter Regional Water Board), finds that:

1. The Russian River County Sanitation District and the Sonoma County Water Agency (hereinafter Permittee) own and operate a municipal wastewater treatment facility (Facility) located in Guerneville, California adjacent to the Russian River. The Facility provides advanced wastewater treatment and consists of a collection system, coarse screening and aerated grit removal, three extended aeration activated sludge basins, three secondary clarifiers, two tertiary filters, and ultraviolet light disinfection. Design treatment capacities are 0.71 million gallons per day (mgd) (average dry weather flow) and 3.5 mgd (maximum sustained peak flow).
2. The Permittee discharges disinfected advanced treated effluent to the Russian River during the period of October 1 through May 14 (Discharge Point 002). During the dry weather season, disinfected advanced treated effluent is recycled for irrigation at the 43-acre Northwood Golf Course (Discharge Point 004). Treated effluent in excess of the golf course's need is disposed of by spray irrigation on 17 acres of forest land adjacent to the wastewater treatment plant (Discharge Point 003) and owned by Roger and Michele Burch (hereinafter Burch property). The Burch property consists of approximately 4 acres on steep slopes above the wastewater treatment plant and approximately 13 acres of flatter land between the wastewater treatment plant and the Russian River.
3. The Facility was previously regulated by Waste Discharge Requirements (WDRs), Order No. R1-2009-0003, adopted by the Regional Water Board on January 29, 2009. Order No. R1-2009-0003 included discharge prohibitions, effluent limitations, surface water and groundwater receiving water limitations and compliance provisions. The Order included specific requirements for the Permittee to monitor effluent as well as groundwater beneath the Burch property for nitrate, total dissolved solids (TDS), sodium, chloride, and aluminum. The Order also included interim limitations and a compliance schedule for the Permittee to achieve compliance with final discharge specifications for nitrate, ammonia, TDS, sodium, chloride, and aluminum that became effective on March 20, 2014.

4. The Facility is currently regulated by WDRs, Order No. R1-2014-0002, National Pollutant Discharge Elimination System (NPDES) Permit No. CA0024058, WDID No. 1B820450SON, adopted by the Regional Water Board on March 13, 2014 with an effective date of May 1, 2014. Order No. R1-2014-0002 includes discharge prohibitions, effluent limitations, surface water and groundwater receiving water limitations, and compliance provisions. The Order includes land discharge specifications for TDS, sodium, aluminum, and pH that became effective on March 20, 2014, and interim effluent limitations and a compliance schedule for nitrate requiring the Permittee to comply with final effluent limitations for nitrate by December 1, 2014. The Order requires the Permittee to monitor effluent and groundwater beneath the Burch Property for nitrate, TDS, sodium, chloride, and aluminum.

The discharge specifications for TDS and sodium of 500 mg/L and 60 mg/L, respectively, are based on state and federal secondary maximum contaminant levels (MCLs) for taste and odor in drinking water. For nitrate, the average monthly discharge specification of 10 mg/L is based on state and federal primary MCL for protection of human health in drinking water and the maximum daily discharge specification of 20 mg/L is based on a statistical calculation. The discharge specification of 1.0 mg/L for aluminum is based on the state primary MCL for protection of human health in drinking water. The discharge specification for pH of 6.0 to 9.0 is based on the federal technology-based standards for secondary treatment for protection of groundwater when discharging to land.

5. Section 13301 of the California Water Code states “When a regional board finds that a discharge of waste is taking place, or threatening to take place, in violation of requirements or discharge prohibitions prescribed by the regional board or the state board, the board may issue an order to cease and desist and direct that those persons not complying with the requirements or discharge prohibitions (a) comply forthwith, (b) comply in accordance with a time schedule set by the board, or (c) in the event of a threatened violation, take appropriate remedial or preventative action.”
6. The Permittee is violating or threatening to violate the following terms in Order No. R1-2014-0002:

### **III. DISCHARGE PROHIBITIONS**

- A. The discharge of any waste not disclosed by the Permittee or not within the reasonable contemplation of the Regional Water Board is prohibited.
- B. Creation of pollution, contamination, or nuisance, as defined by section 13050 of the Water Code, is prohibited.

#### IV. EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS

##### B. Land Discharge Specifications – Discharge Point 003

1. The Permittee shall maintain compliance with the following limitations at Discharge Point 003, with compliance measured at Monitoring Location LND-001, as described in the attached MRP, Attachment E.

**Table 7. Land Discharge Specifications**

Parameter	Units	Discharge Specifications	
		Average Monthly <sup>1</sup>	Maximum Daily <sup>1</sup>
Nitrate (as N)	mg/L	10	20
Total Dissolved Solids	mg/L	500	---
Sodium	mg/L	60	---
Aluminum	mg/L	1.0	---
pH	standard units	6.0 – 9.0	
Table Notes:			
1. See Definitions in Attachment A and Compliance Determination discussion in section VII of this Order.			

#### V. Receiving Water Limitations

##### B. Groundwater Limitations

1. The collection, treatment, storage, and disposal of wastewater shall not cause a statistically significant degradation of groundwater quality unless a technical evaluation is performed that demonstrates that any degradation that could reasonably be expected to occur, after implementation of all regulatory requirements (e.g., title 27, best practicable treatment and control) and reasonable best management practices (BMPs), will not violate groundwater quality objectives or cause impacts to beneficial uses of groundwater.
2. The collection, treatment, storage, and disposal of treated wastewater shall not cause alterations of groundwater that result in chemical concentrations in groundwater in excess of limits specified in title 22, division 4, chapter 15, articles 4, sections 64431 (Tables 2 and 3) and 64444, and the Basin Plan.
4. The collection, treatment, storage, and disposal of treated wastewater shall not cause groundwater to contain taste- and odor-producing substances in concentrations that cause nuisance or adversely affect beneficial uses.
7. During the term of Order No. R1-2009-0003, the Permittee monitored treated disinfected effluent for a number of wastewater pollutants, including nitrate, TDS, sodium, chloride, aluminum, and pH. The monitoring data revealed that the effluent contains nitrate, TDS, and sodium at levels that will cause, have the reasonable

potential to cause, or contribute to an excursion above water quality objectives for these pollutants. The data collected between April 2009 and February 2014 consists of 59 samples. The data reveals that nitrate is present in the Permittee's effluent at levels ranging from 6.9 to 47 mg/L with 54 samples exceeding the final average monthly discharge specification of 10 mg/L and 45 samples exceeding the final maximum daily discharge specification of 20 mg/L. The data also revealed that TDS is present in the Permittee's effluent at concentrations ranging from 240 mg/L to 580 mg/L, with 14 samples exceeding the final average monthly discharge specification of 500 mg/L. The data also revealed that sodium is present in the Permittee's effluent at concentrations ranging from 21 mg/L to 68 mg/L, with 3 samples exceeding the final average monthly discharge specification of 60 mg/L.

8. During the term of Order No. R1-2009-0003, the Permittee monitored groundwater in the vicinity of the Burch Property, using three existing shallow groundwater wells. The upgradient well, GW-003, is located at the entrance to the wastewater treatment plant property, approximately 500 feet upgradient of the land disposal area on the lower Burch property. An intermediate well, GW-002, is located at the upgradient edge of the lower Burch irrigation area. A downgradient well, GW-001, is located in the lower Burch irrigation area approximately 225 downgradient of Monitoring Well GW-002. Monitoring data collected during the term of Order No. R2-2009-0003 revealed higher concentrations of wastewater pollutants, including nitrate, TDS, sodium, chloride, and aluminum, and lower levels of pH in Monitoring Well GW-001 in comparison to concentrations of the same pollutants in Monitoring Well GW-003 on a seasonal basis.

In addition, monitoring data revealed concentrations of some wastewater pollutants in groundwater that exceeded applicable water quality objectives. Groundwater was sampled 49 times between August 2009 and February 2014 and analyzed for nitrate, TDS, sodium, aluminum, chloride, ammonia, and depth to groundwater. Groundwater monitoring data reveals that groundwater at MW-001 exceeded the nitrate water quality objective of 10 mg/L 25 times and that groundwater at MW-001 and MW-002 exceeded the aluminum water quality objective 11 and 8 times, respectively.

9. As stated in Finding 2, above, the Permittee utilizes the Burch property to dispose of treated effluent that is in excess of the irrigation needs at the Northwood Golf Course. While irrigation of the golf course is performed at hydraulic agronomic rates (e.g., rates that do not exceed the water needs of the vegetation), irrigation on the Burch property is generally performed at greater than hydraulic agronomic rates (e.g., at rates that exceed the water needs of the vegetation.) The Permittee irrigates the golf course year-round during dry periods and utilizes the Burch property from mid-May through mid-October each year. A review of the Permittee's monitoring reports reveals that for the period of 2009 through 2013, the Permittee applied an average of 28.2 million gallons per year to the Burch property (upper and lower), with an average of 22.7 MG per year being applied to the lower Burch property and 5.5 MG per year being applied to the upper Burch property. This calculates to an average of 61 inches per year over the entire irrigation area, 64 inches per year to the lower irrigation area and 51 inches per year to the upper area. Mean area rainfall in this area is approximately 50 inches per year. The irrigation water is being applied to

vegetation (primarily redwood and coniferous trees) that does not need the water. Irrigation of the lower Burch property may result in saturated conditions and ponding of wastewater. It appears that evapotranspiration rates are lower than wastewater application rates. Ponded water creates nuisance conditions conducive to the proliferation of mosquitoes and other disease vectors.

10. Order No. R1-2014-0002 also includes a special study requirement for the Permittee to conduct an assimilative capacity evaluation to determine the percent of the available assimilative capacity of nitrogen and salt in groundwater that is utilized by the existing land disposal and reclamation use sites and to submit a written report documenting the results of the assimilative capacity analysis by October 1, 2014. The results of the assimilative capacity analysis are pertinent to the assessment of compliance with receiving water limitations for groundwater that is addressed in this CDO.
11. When the Permittee submitted a Report of Waste Discharge (ROWD) on June 20, 2013, the Permittee included an infeasibility study and request for an extension of the schedule to comply with final effluent limitations for nitrate. The Permittee requested that the March 20, 2014 compliance date be extended to October 1, 2014. At the time that the ROWD was submitted, the Permittee anticipated that compliance with discharge specifications for TDS and sodium would be achieved by discontinuing use of chlorine for disinfection. However, monitoring data collected by the Permittee following completion of an ultraviolet light disinfection system in October 2012 has shown that TDS is still present in the effluent at concentrations that exceed the final discharge specification. The Permittee has monitored its effluent 17 times between October 2012 and February 2014, and the data reveals TDS ranging from 270 mg/L to 540 mg/L with five samples exceeding the final discharge specification of 500 mg/L. In addition, seven of the sample results fall between 460 and 500 mg/L. This data demonstrates that the Permittee currently cannot reliably meet the final discharge specification.
12. On January 27, 2014, the Permittee submitted a letter commenting on the December 26, 2013 public review draft of Order No. R1-2014-0002. The Permittee's letter states that it is unable to comply with final effluent limitations for TDS and sodium which are currently in effect pursuant to Order No. R1-2014-0002 and requested that the Regional Water Board adopt a cease and desist order (CDO) for the Facility that allows time to investigate source control options, treatment process changes, and disposal procedures that will bring the effluent into compliance with permit requirements and ensure that groundwater objectives are consistently met. The Permittee's effluent monitoring data, discussed in Finding 7, above, demonstrates that the Facility currently does not comply with final discharge specifications for TDS and sodium.
13. On February 13, 2014, a failure of the Permittee's force main near the Vacation Beach lift station resulted in a discharge of greater than 100,000 gallons of raw sewage to the Russian River. The force main rupture was caused by hydrogen sulfide corrosion over time and may have been exacerbated by an improperly functioning air valve. This event revealed the vulnerability of the Permittee's collection system to spills,

particularly spills related to the Permittee's force mains adjacent to lift stations. The Permittee submitted a technical report on March 31, 2014 and an addendum on June 27, 2014, that documents that the Permittee took immediate action to correct the cause of the spill by repairing the ruptured force main and identifies future planned actions that the Permittee is committed to implementing to avoid future spills, including a system evaluation to identify the existence of air valves and assess the force main. Projects the Permittee has underway include assessing vulnerabilities associated with natural hazards (e.g., floods and earthquakes) and hydraulic modeling and master planning for the collection system. Follow-up repairs and preventive work in the collection system are a high priority for water quality protection.

14. On May 12, 2014, the Permittee submitted a letter (Russian River County Sanitation District Proposed Tasks to Address Force Main and Collection System Vulnerabilities) that contains additional information related to the Permittee's plan for assessing and correcting problems in the collection system. Based on the recent rupture of the Permittee's force main adjacent to the Vacation Beach Lift Station and preliminary findings of a natural hazard vulnerability assessment of the Permittee's facilities, the Permittee has identified the need to complete a more detailed Natural Hazard Assessment and completion of a Collection System Master Plan. The Permittee anticipates that large investments to the collection system are needed to reduce the potential for catastrophic damage and threats to public health and the environment from a large-magnitude earthquake.
15. The Permittee's May 12, 2014 letter states that \$9,000,000 was spent since 2010 for completion of the UV disinfection system and toward the BNR project. These projects have expended the Permittee's capital project funding capacity and reduced the Permittee's fund reserves below prudent levels. The letter states that the cost of completing upgrades and repairs to the collection system are estimated at \$10,000,000 to \$20,000,000. The Permittee proposes to increase the ability to fund capital projects by incrementally raising rates over the rate of inflation for the next 10 years. This plan is anticipated to allow for the funding of collection system projects, without the burden of debt, beginning in about five or six years. The Permittee's long-term goal is to increase the annual amount of funds available to allow the construction of collection system improvement projects every two to three years. Such a plan would allow the most vulnerable components of the collection system to be replaced in about 20 years. The availability of grant funding could reduce the time to replace the most vulnerable pipelines and facilities. If the Permittee's assessment of the force mains (Finding 13) reveals significant degradation, debt could be secured to perform critical projects on an expedited basis.
16. The compliance schedules in this Order provide the Permittee with more time and flexibility than would otherwise be afforded in order to allow the Permittee to make important improvements to the collection system in parallel to assessing and correcting issues related to the land disposal and reclamation systems. The spill that resulted from the force main failure will be addressed in more detail in a separate enforcement action.

17. This Order requires the Permittee to comply with interim effluent limitations for TDS and sodium (Requirement 1). These interim limitations are intended to ensure that the Permittee maintains at least its existing performance while completing all tasks required by the compliance schedules. The interim limitations are based on the demonstrated performance of the Facility, based on monitoring data collected during the term of Order No. R1-2009-0003.
18. The compliance schedule for TDS and sodium in Requirement 2 of this Order accounts for the uncertainty in determining effective measures necessary to achieve compliance with final effluent limitations for TDS and sodium. This Order allows time for the Permittee to first evaluate treatment plant modifications (e.g., operations and chemical additions, effect of BNR upgrade on reduction of TDS), before requiring further actions outside of the treatment plant (e.g., source control, infiltration study) which are likely to be more costly and take more time to explore and implement. The compliance schedule is based on reasonably expected times needed to evaluate potential compliance measures in a step-wise manner. The Regional Water Board may wish to revisit these assumptions as more information becomes available from the Permittee's evaluations.
19. The schedule for demonstration of compliance with discharge prohibitions in Requirement 3 of this Order, accounts for the uncertainty related to the extent of non-compliance with the discharge prohibitions identified in Finding 6 of this Order and the nature of measures necessary to achieve compliance.
20. The schedule for demonstration of compliance with receiving water limitations for groundwater in Requirement 4 of this Order, accounts for the uncertainty related to the extent of non-compliance with the receiving water limitations for groundwater identified in Finding 6 of this Order and the nature of measures necessary to achieve compliance. The Order is structured to require the Permittee to follow the compliance schedule for receiving water limitations for groundwater in Requirement 4 of this Order, if the evaluation of groundwater conducted pursuant to Requirement 2 of this Order does not demonstrate compliance with the receiving water limitations for groundwater.
21. The Regional Water Board recognizes that the Permittee has expended significant effort and financial resources over the last 10 years with the completion of the Third Unit Processes project in 2006 which increased the wet-weather wastewater treatment facility capacity from 1.2 to 3.5 mgd, the completion of the ultraviolet light disinfection process in October 2012, and the BNR project that will be completed in October 2014.
22. Pursuant to Water Code section 13389 and section 15321 of title 14 of the California Code of Regulations, this is an enforcement action for violations and threatened violations of waste discharge requirements, and as such is exempt from the requirements of the California Environmental Quality Act (Public Resources Code sections 21000-21177).

23. On August 14, 2014, after due notice to the Permittee and all other interested persons, the Regional Water Board conducted a public hearing and received evidence regarding this Order.
24. Any person affected by this action of the 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 Title 23, California Code of Regulations, Section 2050. The petition must be received by the State Water Board within 30 days of the date of this Order. Copies of the law and regulations applicable to filing petitions will be provided upon request. In addition to filing a petition with the State Water Board, any person affected by this Order may request the Regional Water Board to reconsider this Order. To be timely, such request must be made within 30 days of the date of this Order. Note that even if reconsideration by the Regional Water Board is sought, filing a petition with the State Water Board within the 30-day period is necessary to preserve the petitioner's legal rights. If you choose to request reconsideration of this Order or file a petition with the State Water Board, be advised that you must comply with the Order while your request for reconsideration and/or petition is being considered.

THEREFORE, IT IS HEREBY ORDERED, that pursuant to Water Code sections 13300 and 13301, the Permittee shall cease discharging waste contrary to the prohibitions, effluent limitations, and receiving water limitations identified in Finding 6, above, and comply with the following requirements:

1. The Permittee shall comply with the following interim land discharge specifications:

Parameter	Units	Discharge Specification Average Monthly <sup>1</sup>
Total Dissolved Solids	mg/L	677
Sodium	mg/L	83

2. The Permittee shall cease and desist from discharging and threatening to discharge waste in violation of section IV.B of Order No. R1-2014-0002 (NPDES Permit No. CA0024058) described in Finding 6 of this CDO by implementing the following compliance schedule for TDS and sodium in order to achieve compliance with TDS and sodium land discharge specifications:

**Compliance Tasks and Schedule to Achieve Compliance with Final Discharge Specifications for Total Dissolved Solids and Sodium and to Assess Receiving Water Limitations for Groundwater**

Task	Task Description	Compliance Date
A	The Permittee shall evaluate wastewater treatment facility (WWTF) operations and chemical additions to determine if TDS, sodium, and chloride are added to wastewater during	February 1 2015 to May 30, 2015 (evaluation)

<sup>1</sup> Interim discharge specifications were calculated using a statistical approach to determine the 95<sup>th</sup> percentile limit (at the upper 95 percent confidence bound) of a lognormal sample distribution.



<b>Task</b>	<b>Task Description</b>	<b>Compliance Date</b>
	treatment and/or storage. The Permittee shall submit a written report that includes the results of the WWTF operational assessment.	August 1, 2015 (submit report)
B	<p>Upon completion of the Permittee's biological nutrient removal (BNR) upgrade, the Permittee shall conduct performance monitoring to determine if improved removal of nitrate results in compliance with TDS discharge specifications. The Permittee shall submit a written report that summarizes the monitoring results and whether or not compliance with the TDS discharge specification has been achieved.</p> <p>The written report shall also summarize the results of groundwater monitoring conducted pursuant Waste Discharge Requirements Order No. R1-2014-0002<sup>2</sup> for the period of October 1, 2014 through December 31, 2015 as well as historic groundwater sampling data. The written report shall include a technical evaluation of compliance with Receiving Water Limitation V.B of Order No. R1-2014-0002 and identified in Finding 6 of this CDO<sup>3</sup> and shall include a comparison of groundwater conditions before and after completion of the BNR upgrade. The groundwater technical evaluation must demonstrate either that the disposal of treated wastewater does not result in degradation of groundwater or that any degradation that could reasonably be expected to occur after implementation of all regulatory requirements (e.g., title 27, best practicable treatment and control) and reasonable best management practices will not violate groundwater quality objectives or cause impacts to beneficial uses of groundwater.</p>	<p>October 1, 2014 to December 31, 2015 (performance monitoring)</p> <p>March 15, 2016 (submit report)</p>
C	If compliance is not achieved upon the completion of Tasks A and B, the Permittee shall conduct a survey of homeowners, retail establishments, commercial businesses, and medical facilities in the WWTF service area to determine how TDS, sodium, and chloride are added to the wastewater. The Permittee shall	<p>January 1, 2016 to April 30, 2016 (survey)</p> <p>July 15, 2016 (submit report)</p>

<sup>2</sup> Order No. R1-2014-0002 requires monthly groundwater monitoring for pH, nitrate, TDS, sodium, chloride, aluminum, and depth to groundwater.

<sup>3</sup> The assimilative capacity analysis required pursuant to Provision VI.C.2.c of WDR Order No. R1-2014-0002 may also provide data necessary for this technical evaluation.

<b>Task</b>	<b>Task Description</b>	<b>Compliance Date</b>
	submit a written report that includes the results of the salinity survey.	
D	If compliance is not achieved upon the completion of Tasks A and B, the Permittee shall conduct sampling to determine where source control efforts should be implemented using results of the service area survey and WWTF assessment. Water supply sources, raw wastewater at various locations in the collection system, WWTF influent, WWTF inter-process locations, WWTF effluent, and recycled water shall be sampled to identify and assess contributions of TDS, sodium, and chloride. The Permittee shall submit a written report that includes the analytical results and recommended next steps to address the sources of salinity identified.	July 1, 2016 to June 30, 2017 (conduct testing and compile results)  September 1, 2017 (submit report)
E	If necessary, the Permittee shall conduct infiltration and inflow (I/I) studies in targeted areas to identify locations where poor quality, shallow groundwater may be infiltrating the collection system. The Permittee shall evaluate and prioritize identified locations for future capital project work. The Permittee shall submit a written report that identifies a plan for rehabilitation of problems identified in the collection system and a schedule for completing the rehabilitation work.	July 1, 2016 to October 1, 2016 (I/I studies)  September 1, 2017 (submit report)
F	If water softeners are identified as a significant source of TDS, sodium, and chloride, the Permittee shall evaluate the feasibility of adopting an ordinance that bans use of self-regenerating water softeners. The Permittee shall submit a written report on the feasibility and projected effectiveness of a water softener ban.	June 1, 2017 to January 31, 2018 (develop language, discuss with community leaders)  April 1, 2018 (submit report)
G	The Permittee shall implement control activities that are identified as a result of assessments and studies conducted as described in Tasks A-F. The Permittee shall submit annual progress reports.	May 1, 2016 to January 31, 2018 (implementation)  Annually beginning September 1, 2016 (progress reports)
H	The Permittee shall submit a final report on activities conducted pursuant to this CDO compliance schedule that includes an assessment of compliance with permit requirements and an	October 30, 2018 (with Report of Waste Discharge)

<b>Task</b>	<b>Task Description</b>	<b>Compliance Date</b>
	approach for regulating operations during the next permit term.	

3. The Permittee shall cease and desist from discharging and threatening to discharge waste in violation of Prohibition III.B of Order No. R1-2014-0002 (NPDES Permit No. CA0024058) described in Finding 6 of this CDO by implementing the following compliance schedule:

<b>Task</b>	<b>Task Description</b>	<b>Compliance Date</b>
A	The Permittee shall submit a work plan for assessing whether nuisance conditions (e.g., ponding that is conducive to mosquito breeding, odors, etc.) are present in the land disposal area on the lower Burch property (Discharge Point 003 of WDR Order No. R1-2014-0002) and the extent of any nuisance conditions identified. The work plan shall identify tasks and milestones and a time schedule for completing the assessment work during the 2015 irrigation season and for addressing any nuisance conditions identified and achieving compliance with Discharge Prohibition III.B of Order No. R1-2014-0002.	December 14, 2014 (submit workplan)
B	The Permittee shall submit a written report describing the results of the assessment of nuisance conditions. The written report shall identify mitigation measures proposed or taken to abate nuisance conditions and include a time schedule for achieving compliance with Discharge Prohibition III.B of Order No. R1-2014-0002. The Permittee shall demonstrate that the time schedule for achieving is as short as practicable.	December 31, 2015

4. Upon completion of performance monitoring of the BNR upgrade and concurrent groundwater monitoring, as required by Requirement 2, Task B, immediately above, and if groundwater monitoring does not demonstrate compliance with groundwater receiving water limitations in WDR Order No. R1-2014-0002, the Permittee shall comply with one of the following compliance schedules in order to ensure compliance with discharge prohibitions and receiving water limitations for groundwater, identified in Finding 6 of this CDO.

a. Hydrogeologic Study

<b>Task</b>	<b>Task Description</b>	<b>Compliance Date</b>
---	The Permittee shall conduct all work under the direction of a California registered engineer or geologist experienced in pollution investigation in accordance with all laws. All necessary permits shall be obtained.	---
A	<p>The Permittee shall submit, for Executive Officer approval, a work plan for a hydrogeologic study to determine the fate and transport of wastewater pollutants, including, but not limited to, total dissolved solids, sodium, chloride, nitrate, aluminum, and pH discharged to the Permittee's land disposal system on the Burch property.</p> <p>The work plan proposal shall contain milestones and a time schedule for completion of the study. The study time schedule shall be as short as practicable, and in no case, extend beyond three years. The study time schedule shall include provision for the submittal of semi-annual progress reports.</p>	August 14, 2016

OR

b. Plan to Expand Reclamation and/or to Modify Existing Discharge Operations

<b>Task</b>	<b>Task Description</b>	<b>Compliance Date</b>
A	The Permittee shall submit a written commitment to expand reclamation and/or to modify the existing land discharge operation to ensure compliance with the discharge prohibitions and groundwater receiving water limitations identified in Finding 6 of this CDO. The commitment shall include a schedule of tasks necessary to identify and evaluate options for expanding the reclamation system and for implementing a reclamation expansion plan and a time schedule for implementing the proposed tasks. The Permittee shall include written justification that demonstrates that the proposed time schedule is as short as practicable.	August 14, 2016

5. In the interim period for the Permittee to achieve full compliance with Order No. R1-2014-0002, 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. R1-2014-0002 or any future waste discharge requirements issued for the Facility.
6. If, for any reason, the Permittee is unable to perform any activity or submit any documentation in compliance with the deadlines set forth in Requirements 2 through 4, above, the Permittee may request, in writing, that the Regional Water Board grant an extension of the time. The extension request shall include justification for the delay. An extension may be granted by the Regional Water Board Executive Officer for good cause, in which case this Order will be accordingly revised in writing.
7. If the Executive Officer of the Regional Water Board finds that the Permittee fails to comply with the provisions of this Order, the 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 13350 and 13385. The Regional Water Board reserves the right to take any enforcement actions authorized by law.
8. After the Permittee has satisfactorily completed all tasks identified in this CDO, the Regional Water Board Executive Officer will issue a letter to document that all obligations under this CDO have been satisfied.

### **CERTIFICATION**

I, Matthias St. John, Executive Officer, do hereby certify that the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, North Coast Region, on August 14, 2014.

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Matthias St. John  
Executive Officer