## CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD SAN FRANCISCO BAY REGION

## TENTATIVE CEASE AND DESIST ORDER No. R2-2016-00XX

## CITY OF ST. HELENA WASTEWATER TREATMENT AND RECLAMATION PLANT

**WHEREAS** the California Regional Water Quality Control Board, San Francisco Bay Region (Regional Water Board), finds the following:

- 1. The City of St. Helena (Discharger) owns and operates the City of St. Helena Wastewater Treatment and Reclamation Plant (Plant), located at 1 Chaix/Thomann Lane, St. Helena, Napa County. The Plant provides secondary treatment for domestic and commercial wastewater from the City of St. Helena. The Plant has an average dry weather treatment capacity of 0.5 million gallons per day (MGD) and can treat up to 2.8 MGD during wet weather. Plant treatment processes include a comminuter (solids grinder), a series of treatment ponds, chlorine disinfection, and dechlorination (by natural decomposition or ascorbic acid addition).
- 2. During dry weather conditions, the Plant discharges to spray irrigation fields in accordance with waste discharge requirements (Order No. 87-090). During wet weather, when the irrigation fields are saturated and discharge is necessary, the Plant discharges to the Napa River in accordance with NPDES permit No. CA0038016 (Order No. R2-2016-00XX) (hereinafter, the 2016 NPDES Permit).
- 3. Basin Plan Table 4-1, Discharge Prohibition 1, prohibits discharges to non-tidal waters. The Napa River is non-tidal in the vicinity of St. Helena. Basin Plan section 4.2 provides for exceptions to Basin Plan Discharge Prohibition 1 under certain circumstances, including when an inordinate burden would be placed on the Discharger relative to the beneficial uses protected, and an equivalent level of environmental protection can be achieved by alternate means. In reissuing the 2016 NPDES Permit, the Regional Water Board found that requiring the Discharger to build an outfall to non-tidal waters (over 40 miles away) or to not discharge under any circumstances, including wet weather, would impose an undue burden. In granting the exception, the Regional Water Board determined that the Discharger must provide equivalent protection when discharging to the Napa River by providing advanced secondary treatment. Therefore, the 2016 NPDES Permit imposed new, more stringent biochemical oxygen demand (BOD) and total suspended solids (TSS) effluent limitations reflective of advanced secondary treatment:

**Table 1: NPDES Permit BOD and TSS Effluent Limits** 

	Weekly Average	Monthly Average
BOD	25	15
TSS	20	15

Abbreviations:

BOD = biochemical oxygen demand TSS = total dissolved solids

- 4. The Plant is currently designed to provide only secondary treatment, not advanced secondary treatment. Plant effluent monitoring data from January 2010 through August 2015 show many instances when the Discharger would not immediately comply with the new BOD and TSS effluent limitations. Of the 161 days when BOD and TSS samples were collected (140 days when discharging to the irrigation fields and 21 days when discharging to the river), 84 results were above the new monthly average BOD limit, 47 were above the new weekly maximum BOD limit, 118 were above the new monthly average TSS limit, and 96 were above the new weekly average TSS limit.
- 5. The Plant currently relies on a series of treatment ponds that use aerobic and anaerobic bacteria to reduce organic matter concentrations. To meet the new BOD and TSS effluent limitations in the 2016 NPDES Permit, the Discharger will likely need to incorporate filtration or another process into its treatment system. Such a process could offer an added benefit if the effluent met requirements for unrestricted recycled water use. In its May 2006 "Plant Upgrade and Water Recycling Design Memorandum," the Discharger identified about 65 acres of turf and 4,700 acres of vineyard area that could potentially be irrigated with recycled water. Of this 4,700 acres, 1,148 acres of vineyard area are within the City of Calistoga limits.
- 6. In its March 2015 Wastewater Facilities Evaluation Update (Bennett Engineering Services), the Discharger described several potential modifications it could make to improve Plant performance. While the report did not analyze the feasibility of the various options to achieve advanced secondary treatment, it provided three recommendations: (1) construct solids management systems outside the treatment train to manage solids accumulation (in Pond 1) within design recommendations, (2) automate disinfection and de-chlorination during river discharges, and (3) construct a rock filter system between Pond 3 and the disinfection facility to improve removal of TSS from algae growth in the ponds. If implemented, the construction of a rock filter system could facilitate compliance with the 2016 Permit effluent limits.
- 7. Water Code section 13301 authorizes the Regional Water Board to issue a cease and desist order when it finds that a waste discharge is taking place, or threatening to take place, in violation of requirements or discharge prohibitions prescribed by the Regional Water Board.
- **8.** Because the Discharger will violate or threatens to violate the effluent limits in the 2016 NPDES Permit shown in Table 1, this Cease and Desist Order is necessary to ensure that the Discharger achieves compliance. This Order establishes interim requirements and a time schedule for the Discharger to complete necessary actions to address its imminent and threatened violations.
- **9.** Pursuant to Water Code section 13385(j)(3), mandatory minimum penalties required by Water Code sections 13385(h) and (i) do not apply when a discharger complies with a cease and desist order issued pursuant to Water Code section 13301 if the following conditions are met:
  - **a.** The cease and desist order specifies actions the discharger must take to correct the violations that would otherwise be subject to mandatory minimum penalties;

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- **b.** The discharger is unable to consistently comply with effluent limits because the effluent limits are new, more stringent, or modified regulatory requirements; new or modified control measures are necessary to comply with the effluent limits; 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 of no more than five years for bringing the discharge into compliance. The time schedule must be as short as possible, taking into account the technological, operational, and economic factors that affect the design, development, and implementation of the control measures necessary to comply with the effluent limitations. If the time schedule exceeds one year, it must include interim requirements and the dates for their achievement. The interim requirements must include effluent limitations for the pollutants of concern, and actions and milestones leading to compliance with the limitations; and
- **d.** The discharger has prepared and is implementing in a timely and proper manner a pollution prevention plan pursuant to Water Code section 13263.3.
- **10.** Based on Water Code section 13385(j)(3), mandatory minimum penalties required by Water Code sections 13385(h) and (i) do not apply for the following reasons:
  - **a.** This Cease and Desist Order (Provisions 1 and 2 below) specifies actions the Discharger must take to correct the violations that would otherwise be subject to mandatory minimum penalties.
  - **b.** As explained in Finding 4, above, the Discharger is unable to consistently comply with the new, more stringent effluent limits in the 2016 NPDES permit. Moreover, any control measures necessary to comply with the effluent limits (described in Findings 5 and 6, above) cannot be designed, installed, and put into operation within 30 calendar days.
  - c. This Cease and Desist Order (Provision 2, below) establishes a time schedule of no more than five years for bringing the discharge into compliance. The time schedule is as short as possible because it is the minimum amount of time necessary for the Discharger to modify or rebuild its treatment plant to comply with its effluent limits. As specified in Table 2, the Discharger must evaluate its potential alternatives, and then fund, design, and construct the selected alternative. These tasks are likely to take the time that the time schedule allots.
    - Although the time schedule exceeds one year, this Cease and Desist Order (Provisions 1 and 2, below) imposes interim requirements that include interim BOD and TSS effluent limitations and actions and milestones leading to compliance with the limitations.
  - **d.** The Discharger has prepared and is implementing a pollution prevention plan pursuant to permit requirements. The Discharger's pollution prevention plan meets the substantive requirements of Water Code section 13263.3. The pollution prevention plan aims to reduce influent concentrations of all pollutants of concern.

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- **11.** The interim effluent limits in Table 2 are based on the NPDES permit effluent limits in place prior to adoption of the 2016 NPDES Permit (i.e., those in Order No. R2-2010-0105). They are intended to ensure that the Discharger maintains at least its existing performance while completing all tasks the time schedule requires.
- **12.** This Cease and Desist Order is an enforcement action and, as such, is exempt from the provisions of the California Environmental Quality Act (Public Resources Code § 21000 et seq.) in accordance with Title 14 of the California Code of Regulations, section 15321.
- **13.** The Regional Water Board notified the Discharger and other interested parties of its intent to consider adoption of this Cease and Desist Order, and provided an opportunity to submit written comments and appear at a public hearing. The Regional Water Board, in a public hearing, heard and considered all comments.

**IT IS HEREBY ORDERED**, in accordance with Water Code section 13301, that the Discharger shall cease and desist from discharging and threatening to discharge wastes in violation of the NPDES permit by complying with the following provisions:

**1.** <u>Interim Effluent Limitations.</u> The Discharger shall comply with the following interim effluent limits:

**Table 2: Interim BOD and TSS Effluent Limits** 

	Weekly Average (mg/L)	Monthly Average (mg/L)
BOD	45	30
TSS	45	30

Unit:

mg/L = milligrams per liter

Abbreviations:

BOD = biochemical oxygen demand TSS = total dissolved solids

2. <u>Tasks and Time Schedule</u>. The Discharger shall complete the actions listed in Table 3 in accordance with the time schedule provided therein. The Discharger shall implement all actions set forth for each deliverable. Upon a written request from the Discharger, with justification, the Executive Officer may modify the deadlines for tasks e through g to account for delays beyond the reasonable control of the Discharger, such as permitting delays by other agencies.

**Table 3: Tasks and Time Schedule** 

	Task	Deadline
a.	Submit a Draft Feasibility Study that analyzes various options to modify or rebuild the Plant so that the discharge will meet the NPDES permit effluent limits in Table 1. The study shall analyze all of the options described in the March 2015 Wastewater Facilities Evaluation Update and include other options that would achieve advanced secondary treatment. For each option considered, evaluate (i) the anticipated effectiveness and reliability of the treatment, (ii) the amount of time it will take to implement, (iii) the ability to produce recycled water (recycled water uses to be considered shall include those that offset local potable water use or provide environmental enhancement, including but not limited to turf and vineyard irrigation) or the additional efforts required to produce such recycled water, and	September 1, 2016

Task		Deadline
	(iv) the costs.	
b.	Submit a Final Feasibility Study that addresses any Executive Officer comments on the Draft Feasibility Study and identifies a preferred option.	December 1, 2016
c.	Submit a Draft Workplan for construction of the preferred option identified in task b and a schedule for implementation. Include a plan and schedule for funding the project.	June 1, 2016
d.	Submit a Final Workplan that addresses any Executive Officer comments on the Draft Workplan required by task c.	September 1, 2016
e.	Submit notification documenting the beginning of construction.	September 1, 2018
f.	Submit documentation of the completion of construction and begin operation of the new treatment system.	March 1, 2020
g.	Submit a report evaluating the effectiveness of the new treatment system and whether the new system is likely to meet the requirements of the NPDES permit. If the new system appears unlikely to meet the requirements of the NPDES permit, identify and implement measures to ensure compliance.	May 31, 2020
h.	Achieve full compliance with the 2016 NPDES Permit effluent limitations listed in Table 1 of this Cease and Desist Order.	February 28, 2021

- **3.** Consequences of Non-Compliance. If the Discharger fails to comply with the provisions of this Cease and Desist Order, the Executive Officer is hereby authorized to request the Attorney General to take appropriate actions against the Discharger in accordance with Water Code sections 13331 and 13350. Such actions may include judicial injunctive and civil remedies and/or administrative civil liabilities.
- **4.** Force Majeure. If the Discharger is delayed, interrupted, or prevented from meeting the provisions and time schedules of this Cease and Desist Order due to a force majeure, the Discharger shall notify the Executive Officer in writing within ten days of the date the Discharger first knows of the force majeure. The Discharger shall demonstrate that timely compliance with the Cease and Desist Order or any affected deadlines will be actually and necessarily delayed, and that it has taken measures to avoid or mitigate the delay by exercising all reasonable precautions and efforts, whether before or after the occurrence of the force majeure.
- 5. Mandatory Minimum Penalties. Violations of the NPDES permit effluent limitations listed in Table 1 shall not be subject to the mandatory minimum penalties required by Water Code sections 13385(h) and (i) as long as the Discharger complies with this Cease and Desist Order in its entirety. If the Discharger fails to comply with this Cease and Desist Order in any way, including but not limited to any interim effluent limitation in Table 2 or any requirement of Table 3, the Discharger shall be subject to mandatory minimum penalties for all NPDES permit violations for the entire calendar month during which the Cease and Desist

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<sup>&</sup>lt;sup>1</sup> A "force majeure" is an event that could not have been anticipated by and is beyond the control of the Discharger, such as an act of God; earthquake, flood, or other natural disaster; civil disturbance or strike; fire or explosion; declared war within the United States; embargo; or other event of similar import and character. "Force majeure" does not include delays caused by funding, contractor performance, equipment delivery and quality, weather, permitting, other construction-related issues, CEQA challenges, initiative litigation, adverse legislation, or legal matters (with the exception of an injunction issued by a court of law specifically preventing construction from occurring).

Order non-compliance occurs. If the Discharger returns to compliance, violations of the NPDES permit effluent limitations in Table 1 shall again not be subject to mandatory minimum penalties as of the first day of the month following the return to full compliance.

**6.** Effective Date. This Cease and Desist Order shall become effective on the effective date of the 2016 NPDES Permit.

I, Bruce H. Wolfe, Executive Officer, do hereby certify the foregoing is a full, true, and correct copy of a Cease and Desist Order adopted by the California Regional Water Quality Control Board, San Francisco Bay Region, on \_\_\_\_\_\_\_\_.

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Bruce H. Wolfe Executive Officer