Response to Written Comments
and
Staff Initiated Changes

Proposed Order No. R1-2017-0013
Waste Discharge Requirements and Water Recycling Requirements
for Virginia Dare Winery Wastewater Treatment Facility
Sonoma County

October 19, 2017

Comment Letter Received
The deadline for submittal of public comments regarding Proposed Order No. R1-2017-0013, Waste Discharge Requirements and Water Recycling Requirements for Virginia Dare Winery Wastewater Treatment Facility the North Coast Region was August 14, 2017. Timely comments were submitted by Essential Engineering Services, on behalf of the Discharger, Virginia Dare Winery.

Each comment is followed by the Staff response. When the Discharger's comment is quoted exactly, the text is included in italics. Where appropriate, revisions were made to the draft Order in response to the Discharger's comments and are described by section number. Added text is identified by underline, and deleted text is identified by strike through in this Response to Comments document.

Use of the term "Draft Order" refers to the public review draft. Use of the term "Proposed Order" refers to the post-public review version of the Order that will be presented to the North Coast Regional Water Quality Control Board (Regional Water Board).

A. Comments and Responses

1. Request to remove reference to septic tank and remove septic tank maintenance and monitoring requirements

Desire to remove language regarding septic tank maintenance as there isn't one present and we wouldn't want things to get too confusing trying to track an element that doesn't exist.

Propose changing tank description from "septic tank" to "pump tank", removing section IX.B.3 of the Draft Order, and removing section VI.A of the Monitoring and Reporting Program (MRP).

Response: The submitted *Engineering Report for the Treatment and Reuse of Wastewater for the Virginia Dare Winery* (Engineering Report), dated January 29, 2016, and the submitted *Title 22 Engineering Report* (Title 22 Report) dated March 31, 2017, identify the tank structure that is located downstream of the grease interceptor and upstream of the domestic waste pump station as a septic tank. According to the Engineering Report and the Title 22 Report the purpose of the tank is to allow

settlement of coarse and suspended solids. Effluent from the tank flows by gravity to the pump station where it is directed to the domestic waste treatment system. The tank is additionally identified as a solids separation tank on the wastewater system schematic provided as an enclosure to the Engineering Report and the Title 22 Report. Neither the Engineering Report nor the Title 22 Report identify the tank as the pump tank.

The Proposed Order has been revised to identify the subject tank structure as the solids separation tank, which is consistent with the submitted wastewater schematic.

Section IX.B.3 of the Draft Order requires the pumping of the tank when specific scum and sludge layer conditions have been met. Because the subject tank is not being managed as a septic tank these septic tank specific requirements are not needed. Any domestic waste solids captured in the solids separation tank shall be removed and disposed of in accordance with applicable federal and State regulations, as per Section IX.B.2 of the Proposed Order.

Section IX.B.3 of the Draft Order has been removed and Section IX.B.2 of the Proposed Order has been revised to read as follows:

> Domestic waste solids shall be removed from the screens, sumps, ponds, grease interceptor and solids separation tanks as needed to ensure optimal treatment plant operation. The removed solids shall be disposed of in accordance with applicable federal and State regulations.

Section VI.A of the MRP requires the annual monitoring and reporting of the scum and sludge layers in the septic tank, to establish compliance with Section IX.B.3 of the Draft Order. Because Section IX.B.3 of the Draft Order has been removed, Section VI.A of the MRP has been revised below to document compliance with the solids removal requirements of Section IX.B.2 of the Proposed Order.

A. Domestic Waste Septic Solids Separation Tank Domestic Waste Solids Sludge and Scum. The Discharger shall monitor the volume of solids sludge and scum in the domestic wastewater septic solids separation tank as follows:

Table D-8 Septic Solids Separation Tank Sludge and Scum Monitoring

Parameter	Units	Sample Type	Monitoring Frequency
Sludge Solids depth and scum thickness in each compartment of septic solids separation tank	Feet	Staff Gauge	Annually

2. Request for Removal of Nitrate monitoring

Desire to remove nitrate monitoring as a constituent for compliance. For T22 recycled water, there is typically no requirement to meet specific nitrate concentrations and usually only applies to monitoring wells and diluent water. Even if the facility did want to use well water as diluent water (normally not needed as there is too much process wastewater), the test submitted (6.1 mg/L) in the T22 engineering report showed the facility is under the proposed 10 mg/L level but it's just one more thing to monitor for and should not be an ongoing testing cost born by the facility. Winery process wastewater typically has very low nitrate concentrations and is significantly more flow than the domestic wastewater flows generated onsite. In addition, the facility is bound by antidegradation policy requirements within the WDR's (section G) which would apply should there be an atypical presence of high nitrate concentration from the discharged effluent which threaten groundwater sources.

Response: Nitrate is a constituent of concern in domestic wastewater and can pose a risk to drinking water supplies. The Maximum Contaminant Level (MCL) for nitrate as N in drinking water is 10mg/L. The Engineering Report and the Title 22 Report identified the concentration of Nitrate in the treated effluent as ranging between 0-10mg/L.

The previous MRP did not require the monitoring of nitrate in the discharged effluent. As such, there is no historical monitoring data that may be statistically evaluated to assess a discharge effluent concentration.

The quarterly monitoring of nitrate is intended to both demonstrate the effectiveness of the treatment system and the non-exceedance of the MCL for nitrate as N, the water quality objective. No changes to the monitoring requirements for Nitrate has been made. In the future, the Discharger may request that the Regional Water Board reduce or eliminate the nitrate monitoring based on a lack of detection of nitrate and/or consistent concentrations being reported at a levels significantly less than the MCL.

3. Request for change to Pond Free Board requirement.

Desire to retain the 1' freeboard requirement that is present in the current WDR's. This provides more flexibility in managing pond operations.

Response: Pond 1 and Pond 2 historically have been operated to maintain a minimum of 1 foot of free board as per provision 9 of Waste Discharge Requirements Order No. 96-56. Self monitoring reports demonstrate how this 1 foot minimum free board provision was able to accommodate rainfall events and protected against overflows.

Section VII.B of the Proposed Order was revised as follows:

Freeboard in Pond 1 and Pond 2 shall never be less than ~~2~~ ~~feet~~ 1 foot as measured vertically from the water surface to the top of the berm.