ATTACHMENT H

**SODICITY ASSESSMENT AND MANAGEMENT PLAN**

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD

**SAN FRANCISCO BAY REGION**

For the General Waste Discharge Requirements for

Discharges of Winery Waste to Land Within the San Francisco Bay Region

Order No. R2-2017-Xxx

1. **PURPOSE**

The purpose of the Sodicity Assessment and Management Plan is:

1. To determine whether the combination of the sodium adsorption ration and electrical conductivity levels of the treated wastewater (effluent) discharged by land surface application, irrigation, or shallow subsurface irrigation (such as buried drip irrigation) will negatively impact soil conditions that provide additional treatment of the effluent.
2. To identify wastewater management and discharge practices, which the Discharger shall implement, to minimize adverse impacts to the soil and groundwater from the land application of the winery process wastewater.
3. **WHEN IT IS DUE**

Dischargers in Tier 2 and Tier 3 that discharge greater than 1,500 gpd on a monthly average that have exceeded the Numeric Action Level for the sodium adsorption ratio and electrical conductivity as listed in the Order section IV *Effluent Limitations and Numeric Action Levels* **Table 11 three times** during a rolling **12-month period,** shall conduct a site‑specific Sodicity Assessment and Management Plan in accordance with the guidelines provided herein. The Sodicity Assessment and Management Plan is **due with the quarterly monitoring report** following the third exceedance of the Numeric Action Level for the combination of sodium adsorption ratio and electrical conductivity.

1. **REQUIRED COMPONENTS**

At a minimum, the Sodicity Assessment shall contain the following components:

1. **Contact Information**

The name and phone number of the:

1. Facility owner,
2. Facility operator who is responsible for implementing the Sodicity Assessment (if different from the owner),
3. Developer of the Sodicity Assessment, and
4. **Facility and Land Application Area Information**

The following information shall be included:

1. Name of the facility,
2. Facility address,
3. Assessor’s Parcel Number(s) for the facility location and land application area,
4. Total acreage of the land application area,
5. Soil type(s) in the discharge area. Soil type can be identified online via the University of California Davis Soil Web at <http://casoilresource.lawr.ucdavis.edu/gmap/> or the Natural Resources Conservation Service Web Soil Survey at <http://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm>.
6. **Maps and Drawings**
7. One or more aerial photos or scaled map drawings showing the entire land application area.
8. **Proposed Conditions and Practices**
   1. The Sodicity Assessment must describe how and when process wastewater is applied to the land application area(s).
   2. Winery wastewater Sodium Adsorption Ratio and the electrical conductivity levels.
   3. Plan for mitigation efforts that will be implemented to manage the sodium accumulation. Additional information on management approaches to mitigate sodium accumulation is accessible at the Food and Agriculture Organization of the United Nations, http://www.fao.org/docrep/003/T0234E/T0234E04.htm.
9. **RECORD-KEEPING AND SODICITY ASSESSMENT REVIEW**
10. The Discharger shall maintain records for each land application area.
11. All records must be available for Regional Water Board staff review during inspections.
12. The Discharger shall provide a list of resources and data sources that were used in the Sodicity Assessment.
13. The data and calculations may be reviewed by Regional Water Board staff, and the Regional Water Board retains the authority to require revisions and improvements to the Sodicity Assessment and Management Plan.