Regional Water Quality Control Board
Central Valley Region Board Meeting
17/18 February 2022

Response to Written Comments for the
Eriksson, LLC
Ingleby US Pistachio Plant
Fresno County
Tentative Waste Discharge Requirements

At a public hearing scheduled for 17/18 February 2022, the Regional Water Quality Control Board, Central Valley Region, (Central Valley Water Board) will consider adoption of waste discharge requirements for the Eriksson, LLC, Ingleby US Pistachio Plant (Facility) in Fresno County. This document contains responses to written comments received from interested persons regarding the tentative waste discharge requirements (TWDRs) circulated on 10 December 2021. Written comments were required by public notice to be received by the Central Valley Water Board by 10 January 2022 to receive full consideration. Comments were received from Craig Hartman with Hartman Consulting on behalf of Eriksson, LLC (or Eriksson).

Written comments are summarized below, followed by responses from Central Valley Water Board staff. Specific changes are shown in strikeout and bolded text. In addition, staff has made a few minor changes to the TWDRs to improve clarity and fix typographical errors.

ERIKSSON'S COMMENTS

ERIKSSON COMMENT #1: For Finding 6, Eriksson requests the meter be defined as Processing Meter in Attachment C.

RESPONSE: The following sentence was added at the end of Finding 6:

6. …**Flow limits shall be monitored at the Processing Meter as shown in Attachment C.**

ERIKSSON COMMENT #2: For Finding 17, the source water data summarized in Table 2 needs to be corrected. The nitrite + nitrate data was incorrectly reported in the 2020 Annual Report.

RESPONSE: The TWDRs have been modified to reflect this change.

ERIKSSON COMMENT #3: Finding 19 of the TWDRs describe the backwash water discharge that staff identified during the 9 November 2021 inspection. Eriksson comments provide additional information on the backwash and where it will be discharged to.

RESPONSE: Staff has modified Finding 19 as follows based on the information provided:

19. As part of the Inspection Report issued on 9 November 2021, Central Valley Water Board staff requested additional information on the water treatment system including volume and frequency of backwash. On 9 December 2021, the

Discharger indicated that they plan to divert the backwash discharge to the Lined Settling Pond where it will be mixed with the process wastewater and dispersed to the LAA. ~~but did not provide sufficient details on the water treatment system and backwash water quality as requested. This Order includes a provision requiring the Discharge to submit a Backwash Characterization Report that must characterize the backwash quality and includes details on the volume, frequency, and disposal of backwash water form the water treatment system and how it will be managed.~~ **According to the Discharger, the backwash water accounts for about 1% of the water used at the Facility. During the processing season, the system will be backwashed about once every 3.5 days. Approximately 9,500 gallons of backwash water will be discharged to the Lined Settling Pond where it will be blended with the process wastewater and irrigation water before being sent to the LAA. During the off-season, the water treatment system will be backwashed about once a month and the backwash water will be sent to the Lined Settling Pond and allowed to evaporate.**

In addition, staff has removed Provision H.5 requiring submittal of a Backwash Characterization Report. Furthermore, the Backwash Monitoring requirements in the tentative Monitoring and Reporting Program (MRP) has been modified as shown in the response to Comment #5 below.

ERIKSSON COMMENT #4: Finding 29 of the TWDRs and Table 5 summarize the projected annual loading rates and crop uptake rates. Eriksson comments the reference used for crop uptake rates (Western Fertilizer Handbook) is out of date, and there is more recent data from the UC Davis California Department of Food and Agriculture (UC/CDFA) that shows that the nitrogen and potassium demand for pistachios is 200 to 300 lbs/acre/year. Reference link provided:

https://www.cdfa.ca.gov/is/ffldrs/frep/FertilizationGuidelines/Pistachio.html

RESPONSE: For pistachio processing facilities, the Central Valley Water Board typically includes the Western Fertilizer Handbook nitrogen and potassium crop uptake rates. We understand the Discharger's reluctance to use uptake rates for almonds in place of pistachios. However, the 2017 Report of Waste Discharge originally submitted for the Facility used the Western Fertilizer Handbook nitrogen and potassium uptake rates (for almonds) for the proposed pistachio crops as part of the loading rate analysis. Furthermore, the majority of the wastewater land application area is not planted with pistachios. For non-pistachio crops, it is appropriate to use the listed uptake rates in the Western Fertilizer Handbook (i.e., pasture grass, sorghum, and corn). Nevertheless, staff has made the following changes to Table 5 and the footnotes in Finding 29 to reflect the data from the UC/CDFA.

Table 1. Projected Nitrogen & Potassium Loading Rates & Crop Uptake Rates

Constituent	Loading Rate for 450 acres of LAA	Loading Rate for 930 acres of LAA	Pasture Crop Uptake Rate (see 1 below)	Corn & Sorghum Crop Uptake Rate (see 1 below)	Pistachios Crop Uptake Rate (see 2 below)
Total Nitrogen (lbs/ac/yr)	138	67	115	250	160-300
Potassium (lbs/ac/yr)	276	133	150	200-240	140-300

1. Information on nitrogen and potassium requirements for pasture grasses, sorghum, and corn were taken from the Western Fertilizer Handbook, 8th Edition.

2. **The Western Fertilizer Handbook does not provide data on crop requirements for pistachios specifically. However, data for a similar nut tree, such as almonds, estimates nitrogen and potassium requirements around 200 lbs/ac/yr and 100-200 lbs/ac/yr, respectively. More recent studies by UC Davis California Department of Food and Agriculture (UC/CDFA) (https://www.cdfa.ca.gov/is/ffldrs/frep/FertilizationGuidelines/Pistachio.html) for pistachios shows nitrogen requirements ranging from about 160-300 lbs/ac/yr and potassium requirements ranging from 140-300 lbs/ac/yr depending on soil conditions and whether it is an "on" or "off" year**. ~~For pistachios, there is insufficient data available so nitrogen and potassium requirements are based on data for a similar nut crop (almonds).~~

ERIKSSON COMMENT #5: Erikson provided various comments on the tentative MRP, which are summarized below with staff's responses.

a. Include a description of flow meters used at the Facility (Processing Meter or Discharge Meter) in Table 1 and for the footnotes for both Influent and Effluent Monitoring Section (Table 2 and Table 3).

   RESPONSE: The MRP has been modified to reflect this change.

b. Change the flow monitoring frequency in the Influent and Effluent Monitoring Sections (Tables 2 and 3) from Continuous to "Daily When in Use."

   RESPONSE: Both the influent and effluent flow meters should operate continuously when water is flowing through the system. The monitoring instructions in the description above Tables 2 and 3 in the MRP clearly state that influent monitoring and effluent monitoring is only required during the processing season. Therefore, no change was made.

c. Remove the pH and EC monitoring requirements for the Influent Monitoring Section (Table 2).

RESPONSE: Influent Monitoring Location INF-001 is the only monitoring location where samples of the Facility's effluent (without blending) can be taken. Therefore, monitoring of select constituents at Monitoring Location INF-001 provides a characterization of the Facility's process water prior to any blending. Monitoring the influent for pH and EC can be done relatively quickly and easily with a handheld field meter (i.e., does not need to be sent to a laboratory for analysis) so weekly sampling should not pose a significant hardship to the Discharger. In addition, this data will be useful in determining the necessary blending ratio with irrigation water to comply with the TWDRs Land Application Specifications. Therefore, no change was made.

d. Modify the requirement for freeboard in the Pond Monitoring Section II.C (Table 4) to specify Freeboard shall be monitored visually to the nearest inch to maintain 1 foot of freeboard.

RESPONSE: Table 4 has been revised to allow freeboard measurements to the nearest inch. Furthermore, the following language has been modified in the Pond Monitoring Section II.C.:

The Discharger shall monitor the Lined Settling Pond (PND-001) when wastewater is present. Freeboard shall be **visually monitored** ~~measured to the nearest 0.1 foot~~ vertically from the surface of the water to the lowest elevation of the berm **to maintain one foot of freeboard. Marks may be made on the liner, or a measuring stick may be used to record visual measurements**…

e. Remove requirements for monitoring of the Backwash Monitoring based on additional information regarding disposal in the Lined Settling Pond.

RESPONSE: An initial characterization of the backwash discharge is needed. Furthermore, ongoing monitoring of the backwash discharge is necessary to ensure the backwash discharge quality does not significantly change over time. The Backwash Monitoring in the tentative MRP Section E has been modified as follows:

E. BACKWASH MONITORING (BK-001)

The Discharger shall monitor the backwash water from the water treatment system during backwash events. Backwash monitoring shall include at least the following:

Table 2. Backwash Monitoring (BK-001)

Constituent/Parameter	Units	Sample Type	Frequency
Flow	gallons	Meter (see 1 below)	Continuous
pH	std. units	Grab	~~Once per Event~~ **1/Month and 2/Year (see 2 below)**
EC	µmhos/cm	Grab	~~Once per Event~~ **1/Month**

Constituent/Parameter	Units	Sample Type	Frequency
			and 2/Year (see 2 below)
General Minerals	mg/L	Grab	Once/~~3~~ **5** years (see ~~2~~ **3** below)
Arsenic	µg/L	Grab	Once/~~3~~ **5** years (see ~~2~~ **3** below)

1. Flow measurements may be based on flow meter readings or estimated based on pump run time or similar approved method. The method of measurement including data used in calculations must be specified.
2. **Samples of the backwash water shall be collected once a month during a backwash event for one year. Thereafter, samples of the backwash waster shall be collected twice per year in March and September during a backwash event.**
3. Samples shall be collected once every ~~three~~ **five** years starting in 2022.

~~In addition, following each backwash event the Discharger shall monitor the discharge area for evidence of erosion, runoff, and nuisance/odor conditions.~~