

**Regional Water Quality Control Board  
Central Valley Region  
Board Meeting – 13 December 2024**

**Response To Written Comments for the  
Hughson Nut, Inc.  
Hughson Nut Processing Facility  
Merced County  
Tentative Waste Discharge Requirements**

At a public hearing scheduled on 13 December 2024, the Regional Water Quality Control Board, Central Valley Region (Central Valley Water Board) will consider the adoption of new Waste Discharge Requirements (WDRs) for the Hughson Nut, Inc., Hughson Nut Processing Facility (Facility) for the discharge of process wastewater to a seven-acre land application area in Merced County.

This document contains responses to written comments received from interested persons regarding the tentative WDRs (TWDRs) and Monitoring and Reporting Program (TMRP) circulated on 11 October 2024. Written comments from interested parties were required to be received by the Central Valley Water Board by 5:00 p.m. on 12 November 2024 to receive full consideration. Comments were received by Olam Food Ingredients (OFI), the parent company of Hughson Nut, Inc. and Ms. Jo Anne Kipps.

Written comments are summarized below, followed by responses from Central Valley Water Board staff. In addition, staff made a few minor changes to the TWDRs and TMRP to improve clarity and fix typographical errors identified by staff and the commentor(s).

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**OFI COMMENTS**

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**Comment #1 (TWDRs):** Although the RWD (Report of Waste Discharge) references a conservative nitrogen uptake rate for almonds of 130 lbs/ac, we request that this rate be updated to 200 lbs/ac, which is publicly available in the Western Fertilizer Handbook and aligns with Finding 13 in these draft WDRs. The Hughson Nut Verduga permit (R5-2014-0059) provides an example of using the 200 lbs/ac nitrogen uptake rate for almonds. The higher uptake rate would allow Hughson Nut more flexibility while also relying on publicly available reference values.

**Response:** Staff revised Table 4 and Finding 58.b to reflect the theoretical crop nitrogen uptake of 200 lbs/ac for almonds, consistent with the published nitrogen uptake rate identified by the Western Fertilizer Handbook.

**Comment #2 (TWDRs):** [The] 8,500 gpd referenced in Table 3-1 of the RWD is calculated from an average daily flow of current conditions not a maximum or peak daily flow. Recommend this limit be removed or set as an average daily flow to provide more operational flexibility. Consider taking the peak flow measured of 11,000 gpd at the

current annual flow of 1.97 MG and expand it to 14,000 gpd at the future 2.5 MG flow limit.

**Response:** Staff contacted OFI to discuss the request, and OFI provided additional information regarding peak daily flows, which showed the Facility peaked around 11,000 gpd in January 2023. Staff concur with the request to provide operational flexibility at the Facility. As a result, staff revised the maximum daily flow limit to 14,000 gpd based on the ratio of the observed maximum daily flow (11,000 gpd) and the current annual flow (2 MGY) adjusted for the future anticipated annual flow (2.5 MGY).

**Comment #3 (TMRP):** We recommend revising [the] requirement to "providing analytical reports upon request". Not including analytical lab reports simplifies reports and reduces file size for transmission.

**RESPONSE:** The requirement to include laboratory analytical reports is consistent with other recent MRPs adopted by the Central Valley Water Board and provides staff the ability to confirm the accuracy of data submitted in the self-monitoring reports. No changes were made to the MRP based on this comment.

**Comment #4 (TMRP):** Most EPA references regarding sampling/analysis for trace metals recommend filtration with 0.45-micron filter prior to preservation. We also checked with our Brown and Caldwell Treatability Lab, who work closely with analytical labs like Eurofins and Pace Analytical, and they indicated their standard practice for dissolved metals is using a 0.45-micron filter. At times they may do stepwise filtering (starting with 1.5-micron and then 0.45-micron) if they see clogging by the 0.45 right away, but that procedure is not typical. We recommend revising Note 5 text to "Samples shall be filtered with a 0.45-micron filter prior to preservation, digestion, and analysis". It will be easier for sampling staff to only have one filter size on hand as well.

**RESPONSE:** The Sacramento River and San Joaquin River Basin Plan requires that for determining compliance with Secondary Maximum Contaminant Levels (MCLs), samples must be passed through a 1.5-micron filter. This approach is intended to approximate the level of treatment normally applied to raw surface water sources. This requirement was included as part of Resolution R5-2020-0057, *Revisions to the Amendments to the Water Quality Control Plans for The Sacramento River and San Joaquin River Basins and the Tulare Lake Basin To Incorporate A Central Valley-Wide Salt and Nitrate Control Program*. This resolution includes a section titled "Application of Secondary Maximum Contaminant Levels to Protect Municipal and Domestic Supply." In this section, the Resolution includes the following language that was added to both Basin Plans:

*For receiving waters that are not exempt from surface water treatment requirements (i.e. 40 CFR Part 141, Subparts H, P, T & W), compliance with the*

*Secondary Maximum Contaminant Levels for aluminum, copper, iron, manganese, silver, zinc, color and turbidity in Table 64449-A will be determined from samples that have been passed through a 1.5-micron filter to reduce filterable residue...*

In accordance with the Basin Plan, as amended by Resolution R5-2020-0057, no changes were made to the MRP based on this comment.

**Comment #5 (TMRP):** Irrigation water monitoring is for nitrate as nitrogen, however, nitrogen loading from supplemental irrigation is based on total nitrogen. Is this the intent?

**RESPONSE:** Staff revised Table 4 to reflect irrigation water monitoring for total nitrogen, instead of nitrate as nitrogen, to coincide with Table 5's land application area monitoring and loading calculations.

**Comment #6 (TMRP):** Is the intent to sample for "Total" or "Dissolved" arsenic, iron, and manganese? Note that dissolved arsenic, dissolved iron, and dissolved manganese are already included in the general minerals' suite.

**RESPONSE:** See staff's response to comment four. Dissolved samples should be collected for constituents such as arsenic, iron, and manganese. Samples for dissolved iron and dissolved manganese should be collected using a 1.5 micron filter.

**Comment #7 (TMRP):** Confirm the request is to calculate and report the "monthly average daily flow" which is the total volume of wastewater in a month, divided by the number of days in that month, expressed in mgd.

**RESPONSE:** Staff revised section III.B.1. in the TMRP to clarify that "monthly average daily flows" shall be reported in Fourth Quarter Monitoring Reports.

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## **MS. JOANNE KIPPS COMMENTS**

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**Comment #1 (TWDRs):** If APB Partners, LLC was not formed until 2006, why does the tentative order name it as the legal entity that acquired the Facility in 2002? Also, OFI was formed in 2020, so was its predecessor, Olam International Limited that apparently acquired a 100% interest in HNI in 2019. Please consider revising Findings 1 and 2 to indicate the purchaser of HNI in 2019 as Olam International Limited and that OFI, formed in 2020, currently has 100% interest in HNI. And, even if OFI has a 100% interest in HNI, since HNI is a California corporation, shouldn't the tentative order name HNI as discharger, or at least both OFI and HNI as co-dischargers? Identifying OFI as discharger because it has 100% interest in HNI implies that WDRs are supposed to identify as discharger(s) all entities that have an interest in the company that owns and operates the discharging facility. And, what role does APB Partners, LLC currently play, if any, in the ownership of the Facility, the Facility property, or both?

**RESPONSE:** Hughson Nut, Inc. (HNI) owns and operates the Hughson Nut Processing Facility (Facility); therefore, staff revised the tentative WDRs and MRP to list HNI as the Discharger. Regarding AFP Partners, LLC (APB), APB was reportedly the owner of the fabrication and welding shop across the street and is not involved in the property or operation of the Facility. Staff also revised Findings 1 and 2 to reflect this information.

**Comment #2 (TWDRs):** Did the Regional Board adopt Name Change Resolutions for WDRs 98-012 and WDRs R5-2014-0059? If so, please update CIWQS to reflect this. If not, consider proposing the appropriate name changes in a future Name Change Resolution.

**RESPONSE:** The Central Valley Water Board has not adopted Change Resolutions for either WDRs Orders No. 98-012 nor R5-2014-0059. However, staff will work with the dischargers to adopt the appropriate name changes if needed.

**Comment #3 (TWDRs):** If the Facility existed since 1983, how did HNI dispose of nut processing wastewater before constructing the wastewater disposal pond in 2013? And, who certified the Form 200, an official of HNI or OFI?

**RESPONSE:** Staff are unsure of how HNI disposed of nut processing wastewater prior to 2013. The Form 200 was certified by Scott Swinney, the HNI Facility plant manager. According to the Discharger, in approximately 2016 steam pasteurizer and boilers were installed at the Facility. Prior to this, no wet-wash sanitation reportedly took place at the Facility and it is unclear what discharges (if any) occurred at the Facility.

**Comment #4 (TWDRs):** The discharge of nut processing wastewater to the wastewater pond does represent a discharge to land. Please revise Finding 13 to read: "...is not regularly applied to land the LAA, ...." Please explain how the Discharger will achieve compliance with Land Application Area Specification G.2 using just a portable pump and hose. Consider including a provision requiring the Discharger to submit a proposed plan for a wastewater delivery system or method that, once implemented, will consistently assure its ability to comply with this specification.

**RESPONSE:** Staff made the requested revision to Finding 13 (now Finding 14). Regarding the irrigation of the land application area, the Discharger intends to irrigate via flood irrigation. The discharge to the land application area will need to be applied in a manner that complies with Land Application Area Specification G.2. To ensure the Discharger applies wastewater in accordance with the WDRs, staff revised the tentative WDRs to require the Discharger to prepare and implement a Wastewater and Nutrient Management Plan (Provision J.7).

**Comment #5 (TWDRs):** Please confirm the accuracy of the estimated 0.9 inch/month percolation rate for the unlined pond, which is constructed in Delhi sand. If staff accepts

as accurate the estimated 0.9 inch/month pond percolation rate in the tentative order, please explain (1) why the estimated percolation rate is so much less than the hydraulic conductivities of the limiting layers of Delhi sand cited in Finding 27, and (2) how a bottom sludge layer of nut processing solids in the unlined pond can reduce wastewater percolation to a rate lower than the hydraulic conductivity standard in the General Winery Order?

**RESPONSE:** The limited percolation proposed in the RWD appears to be inconsistent with the saturated hydraulic conductivity of Delhi sand in which it was constructed. Thus, the mention of the estimated percolation rate in the tentative WDR Findings was removed. Furthermore, the tentative WDRs require the Discharger to develop a Facility Storage and Treatment Evaluation Report (Report). The Report requires the Discharger to propose a Liner Installation Workplan to properly line the storage pond to limit potential percolation of process wastewater or to install above ground storage tanks to adequately store process wastewater (Provision J.5.a). Alternatively, the Discharge may propose a treatment system to reduce the potential impact of the Facility's effluent on underlying groundwater. Staff also added Discharge Specifications F.6 and F.7 shown below:

6. ***By 1 January 2027, in accordance with Provision J.5, all wastewater shall be contained in above ground storage tanks or stored on an engineered lined surface. The engineered lined surface shall meet a hydraulic conductivity standard of  $1 \times 10^{-6}$  centimeters per second or less using one of the following:***
  - a. *A compacted clay liner, with a minimum clay thickness of two feet.*
  - b. *A Portland cement concrete liner, designed to minimize cracking and infiltration.*
  - c. *A synthetic liner, consisting of a 40 thousandths of an inch (mil) synthetic geomembrane or a 60-mil high-density polyethylene liner installed over a prepared base or a secondary clay or concrete liner.*
  - d. *An equivalent engineered alternative proposed in the Facility Storage and Treatment Evaluation Report (Provision J.5) approved by the Executive Officer.*

*The Discharger may alternatively demonstrate compliance with this provision, in accordance with Provision J.5, by providing adequate treatment of the Facility discharge (demonstrated through the submittal of a new RWD).*

7. *If the Discharger installs an engineered lined surface to store wastewater, the Discharger shall regularly inspect the liner condition of all lined effluent*

*storage pond(s) as required in the MRP. The Discharger shall maintain and repair the liner as necessary to ensure the integrity of the pond liner is maintained and leakage from the liner is minimized. Necessary repairs shall be completed in reasonable timeframes that are consistent with the severity of the impairment and potential for impact to water quality.*

**Comment #6 (TWDRs):** Please confirm whether the RWD's water balances assumed the entire Facility's wastewater flow would be applied to the LAA for crop irrigation? If the water balances did include annual volumes of wastewater disposed of by evaporation and percolation in the unlined pond, did the RWD provide estimates for the loadings of biochemical oxygen demand (BOD) and total nitrogen in wastewater percolating from the unlined pond?

**RESPONSE:** The RWDs water balances assume evaporative and "other" losses; however, a majority of the flow would be applied to the LAA for irrigation of almonds. *Table 3-5 – Storage Pond Dimensional Information* of the RWD estimates zero percolation from the unlined storage pond. Therefore, the RWD did not provide any estimated loadings of BOD and total nitrogen in wastewater percolating from the unlined storage pond. However, as discussed above, Provision J.5 now requires the Discharger to modify the storage of the process wastewater either by lining the pond, utilizing above ground storage tanks, or providing adequate treatment of the wastewater before discharging the wastewater to the unlined storage pond. Also, the tentative WDRs (Provision J.7) now requires the submittal of a Wastewater and Nutrient Management Plan that describes how process wastewater will be applied to the LAA in accordance with the WDRs.

**Comment #7 (TWDRs):** Please confirm whether in the past the Discharger used a portable pump and hose to apply impounded nut processing wastewater to the 7-acre LAA. If discharge to the LAA was infrequent, or if it didn't occur at all, please revise the tentative order to disclose that in the past the entire Facility nut processing wastewater discharge flow was disposed of via percolation and evaporation in the unlined pond. And, revise the tentative order to disclose the estimated loadings of FDS, total nitrogen, and BOD to the 0.16-acre pond at the authorized 2.5-MGY discharge flow rate.

**RESPONSE:** Finding 8 was added to the WDRs to state that in the past, process wastewater was disposed of through evaporation/percolation. See response to previous comments regarding the pond, specifically the response to comment five and the requirements of Provision J.5.a.

**Comment #8 (TWDRs):** Please revise the tentative order to include (1) an accurate characterization of the current discharge to groundwater of wastewater impounded in the unlined pond, (2) a discharge specification establishing a hydraulic conductivity standard of  $1 \times 10^{-6}$  cm/s for all surface impoundments of nut processing wastewater, (3) a requirement to periodically monitor pond liner integrity (at least once every five years), and (4) a provision for establishing a compliance time schedule for the Discharger to

equip the pond with a liner meeting the order's hydraulic conductivity standard. Revise the tentative order elsewhere as appropriate to reflect these changes.

**RESPONSE:** See the responses to the previous comments.

**Comment #9 (TWDRs):** Finding 30 indicates a portion of Facility storm water is discharged to the Ward Canal while Finding 70 indicates otherwise. Please clarify. Isn't Ward Canal considered a surface water? Isn't a discharge of storm water to Ward Canal an off-site discharge? Again, please clarify. Also, does the Ward Canal terminate or otherwise discharge to a surface water of the United States, or a tributary thereof?

**RESPONSE:** Staff confirmed with the Discharger that stormwater is sometimes discharged to the Ward Canal to relieve the stormwater pond . The Discharger is currently working with the Merced Irrigation District to direct stormwater to the Ward Canal on a more frequent and permanent basis. The Standard Industrial Classification (SIC) Code currently listed for the Facility is SIC 0723: Crop Preparation Services for Market, Except Cotton Ginning. This SIC Code does not require coverage under the State Water Resources Control Board's National Pollutant Discharge Elimination System (NPDES) Order WQ 2014-0057-WDQ, General Permit for Storm Water Discharges Associated With Industrial Activities.

Staff also revised Discharge Prohibition B.1. as shown below:

### **Discharge Prohibitions**

1. Discharge of process wastewater to surface waters or surface water drainage courses is prohibited.

**Comment #10 (TMRP):** Please revise the Monitoring and Reporting Program to increase pond monitoring frequency from monthly to twice monthly for EC, BOD<sub>5</sub>, Nitrate (as N), TKN, Total Nitrogen, TDS, and FDS. And, because the discharge appears to have elevated concentrations of dissolved iron and dissolved manganese, add these two constituents to the aforementioned suite of constituents. Also consider adding Sodium and Chloride to Table 3's constituents monitored annually in the Facility's source water, as it appears that wastewater generated from nut processing contains elevated concentrations of these two constituents. That way, staff can have the data necessary to monitor the incremental increase over source water of these two primary salt constituents in the discharge. Consider it a best practicable control measure.

Given that the discharge to the unlined pond has probably already unreasonably degraded groundwater, a sampling frequency of at least quarterly should be imposed and only reduced after three years to semi-annually provided the reduced frequency will still be representative of groundwater depth and quality.

**RESPONSE:** The MRP was revised to increase the pond monitoring frequency to twice monthly for EC, BOD<sub>5</sub>, Nitrate (as Nitrogen), TKN, Total Nitrogen, TDS, and FDS. Iron and manganese are already included in the General Minerals suite of constituents, so they were not added separately. Sodium and Chloride were added to Table 3.

Since the tentative WDRs now require the Discharger to either properly line and maintain the process wastewater pond, store the wastewater in above ground storage tanks, or provided a treatment system to reduce the potential impact of the Facility's effluent on underlying groundwater, the Facility's threat to impact underlying groundwater is significantly mitigated. The tentative WDRs furthermore require the Discharger to prepare and implement a Wastewater and Nutrient Management Plan to ensure the Discharger is complying with the Land Application Area Specifications. Lastly, the Discharger is participating in the Prioritization and Optimization Study for the Salt Control Program and intends to participate in the Nitrate Management Zone for the Nitrate Control Program. Therefore, the requirements to install and monitor groundwater monitoring wells were removed from the tentative WDRs and MRP.