

July 22, 2024

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Submitted via email to:

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**SUBJECT: Controlled Environment Foods Fund II (CEFF II) Tehachapi Property, LLC
Tentative WDRs and MRP Comments**

Dear Mr. Pulupa

Thank you for providing us with the opportunity to comment on the Tentative Waste Discharge Requirements (**WDRs**) and Monitoring and Reporting Program (**MRP**) for the CEFF II Tehachapi Greenhouse facility (**Facility**) in Tehachapi, California. Provost & Pritchard Consulting Group (**Provost & Pritchard**) assisted us with these comments. We have reviewed the WDRs and MRP and are requesting that the following changes be considered:

COMMENTS ON WASTE DISCHARGE REQUIREMENTS (WDRs)

Comment 1. WDR Page 3. Regulatory History. Bullet 9.

Summary of items in WDR: This item states the following: *“Waste Stream 1 – Discharge of up to 20,000 gpd of auger wastewater into an existing unlined pond. Waste Stream 2 – Discharge of up to 50,000 gpd of reverse osmosis (RO) brine water to a proposed lined storage pond prior to use as irrigation on 45 acres of land application area (LAA). Waste Stream 3 – Discharge of up to 1,000 gpd of wastewater from floor drains and equipment condensate, cogeneration, and boiler blowdown into a temporary lined collection pond, and the Discharger anticipates consolidating this waste stream with Waste Stream 2 in the future.”*

Response and Comments: For Waste Stream 1, we would like to add that the package area drains are also included in this waste stream. For Waste Stream 3, we would like greenhouse condensate to be included in this waste stream. We would also like to clarify that all three waste streams can be discharged to the new lined pond and then applied to the LAAs.

Comment 2. WDR Page 3. Facility and Discharges. Bullet 11.

Summary of items in WDR: This item states the following: *“Waste Stream 1 consists of auger discharge from the packaging facility floor drains. Most of the water is generated from the residual peatmoss utilized in the hydroponic growing beds removed during harvest. Equipment washdown also occurs during the auger dewatering process. The wastewater stream from Waste Stream 1 is stored in ten baker tanks located onsite. Waste Stream 2 consists of RO brine water from the RO process, which is currently stored in a large tank. Waste Stream 3 consists of water collected in the greenhouse floor drains and equipment condensate that is then stored and evaporated in a small, lined pond. Source water is provided using a groundwater well located onsite.”*

Response and Comments: We would like Waste Stream 1 to say, “consists of auger discharge and discharge from the packaging facility floor drains.” For Waste Stream 2, we would like to clarify that it is the source water that goes through the RO process. We would also like greenhouse condensate to be added to Waste Stream 3 (we would like this change to be made throughout the WDR).

Comment 3. WDR Page 3. Facility and Discharges. Bullet 12.

Summary of items in WDR: This item states the following: *“Available effluent and source water quality data are limited to individual samples collected on 5 October 2023. Of the effluent quality samples, one was collected from the evaporative cooler (Waste Stream 3), one from the lined pond (Waste Stream 3), one from the RO brine via a spigot (Waste Stream 2), and two samples were collected from two of the ten baker tanks (tanks number one and four: Waste Stream 1).”*

Response and Comments: We would like to clarify that the source water sample was taken from a spigot from the source water storage tank, not directly from the well. In addition, we would like to clarify that the baker tanks will be removed, and seasonal storage is to be provided by the new pond.

Comment 4. WDR Page 4. Table 1.

Summary of items in WDR: Lab Results listed in Table 1.

Response and Comments: The lab results listed in Table 1 are not consistent with the lab reports that were submitted in the initial RWD submittal. There seem to be differences due to rounding, converting from mg/L to ug/L, and averaging values. We would like the following

values (corrected lab results in red) to be placed within the table to reflect the submitted lab reports:

Constituent/Parameter	Unit	Source Water	Auger Discharge (Waste Stream #1)	RO Brine (Waste Stream #2)	Floor Drains and Condensate (Waste Stream #3)
Ammonia (as N)	mg/L	ND (RL 5.0)	ND	ND	ND
BOD	mg/L	ND (RL 3.0)	18	31	71
Chloride	mg/L	38	57	89	44
EC @ 25 C	umhos/cm	710	1,050	1,500	730
FDS	mg/L	380	590	870	340
Nitrate (as N)	mg/L	4.7	ND (RL 1.2)	8.8	25
Sulfate (as SO ₄)	mg/L	95	140	230	120
TDS	mg/L	440	685	1,000	480
TKN	mg/L	ND (RL 2.5)	3.7	1.6	49
Total Nitrogen	mg/L	4.7	4.4	10	78
TSS	mg/L	ND (RL 40)	48.5	ND	1,500
Boron	mg/L	ND (RL 0.05)	0.09	0.05	0.14
Copper	mg/L	ND (RL 0.005)	.012	ND	0.35
Iron	mg/L	ND (RL 0.10)	.805	ND	17
Manganese	mg/L	.007	0.135	0.13	0.39
Sodium	mg/L	27	45	59	32
Zinc	mg/L	ND (RL 0.005)	.017	0.0098	0.30

Comment 5. WDR Page 5. Proposed Changes to Facility and Discharge. Bullet 16.

Summary of items in WDR: This item states the following: *“The remaining 30 percent of the wastewater will be generated from the auger discharge and wastewater collected from floor drains, equipment condensate, cogeneration and boiler blowdown. The additional flows will be from a similar growing process and are anticipated to be of similar quality to the current effluent quality.”*

Response and Comments: We would like greenhouse condensate to be added to the list of contributors for the remaining 30 percent of wastewater.

Comment 6. WDR Page 5. Table 2.

Summary of items in WDR: Table 2 lists the surface area and storage capacity for the “Unlined Northwest Pond” as 88,000 square-feet and 14 MG, respectively.

Response and Comments: These values do not reflect the correct values listed in the initial RWD submittal. We would like the values for the surface area and storage capacity for the “Unlined Northwest Pond” to read as 60,000 square-feet and 1.8 MG. We would like this change to be made throughout the WDR.

Comment 7. WDR Page 6. Proposed Changes to Facility and Discharge. Bullet 21.

Summary of items in WDR: This item states the following: *“During the inspection, the Discharger stated that Waste Stream 3 would be combined with Waste Stream 2 (RO brine) in the future. However, Central Valley Water Board staff require the submittal of a revised RWD prior to changing the discharge location of Waste Stream 3.”*

Response and Comments: The samples representing Waste Discharge 3 were collected directly from the small, lined pond and evaporative cooler, and sample results were likely high due to evaporation causing the water to concentrate and/or solids accumulation. If future sampling of Waste Stream 3 demonstrates constituent concentrations are similar or less than those of Waste Stream 2, we would like an exception written into the MRP to allow the combining of Waste Streams 2 and 3 without the requirements of submitting a revised RWD.

Comment 8. WDR Page 6. Proposed Changes to Facility and Discharge. Bullet 22.

Summary of items in WDR: This item states the following: *“The existing stormwater pond has a surface area of 60,000 square feet and a storage capacity of 1.8 million gallons (MG). Stormwater is conveyed across the Facility into the stormwater pond via pipes and drains. Currently, the northwest pond receives some stormwater; however, the stormwater will be directed to the stormwater pond in the southwest. The Discharger is not required, at this time, to obtain coverage under the National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges Associated with Industrial Activities, State Water Board Order 2014-0057 DWQ, NPDES General Permit CAS000001, since all stormwater runoff is retained onsite and does not discharge into a water of the United States.”*

Response and Comments: These values do not reflect the correct stormwater pond values listed in the initial RWD submittal. The stormwater pond values should be 88,000 square-feet instead of 60,000 square-feet and 14 MG instead of 1.8 MG. Additionally, we would like the option for dust control to be added within Bullet 22. As explained in Section 1.1 Paragraph 3 of

the submitted RWD, the facility may use wastewater for dust control (mostly on dirt roads and vehicle parking areas) on the property during the dry season.

Comment 9. WDR Page 7. Table 3.

Summary of items in WDR: Land Application Areas listed in Table 3.

Response and Comments: Some of the fields listed in Table 3 are not associated with the correct APNs listed in Figure 3 of the initial RWD submittal. We would like the following values (correct fields in red) to be placed within the table to reflect the correct fields associated with each APN:

APN	Field	Assessed Acreage (ac)
448-051-65	3	18.5
448-051-66	3	18.8
448-051-67	1,3	19.7
448-051-68	1,2,3	20.0
448-051-69	1	20.0
448-051-70	1,3	20.0
Total	---	117.0

Comment 10. WDR Page 7. Land Application Areas. Bullet 24.

Summary of items in WDR: This item states the following: *“Irrigation of the LAAs will be via surface irrigation (i.e., border checks and/or furrows). Supplemental irrigation is provided by one onsite irrigation well.”*

Response and Comments: We would like the flexibility to include sprinkler or micro-irrigation as well. The use of surface, sprinkler, or micro-irrigation is dependent upon the crops grown and the farming objectives of the grower. We understand that surface irrigation is the most restrictive of the three methods regarding water quality impacts, resulting in a reduction in the BOD₅ LAA loading rate limit to 50 lbs/acre/day. Thus we would like the ability to utilize more efficient sprinkler or micro irrigation as well, so that the BOD₅ LAA loading rate limit can be the standard 100 lbs/acre/day.

Comment 11. WDR Page 7. Land Application Areas. Bullet 25.

Summary of items in WDR: This item states the following: *“According to the December 2023 RWD, the LAA will be cropped with a combination of fodder crops such as sorghum sudan grass and wheat silage, or alfalfa hay. Sorghum sudan grass is typically grown during the summer months and can be harvested multiple times. Winter wheat is typically planted during October through May and is harvested once. Alfalfa will be harvested and cut seven to eight times every 30 days between March through October.”*

Response and Comments: We propose the following clarifications regarding the listed crops, it should read "...fodder crops such as sorghum, sudan grass, and wheat silage, or alfalfa hay. For a double cropped field, sorghum silage and sudan grass would be grown during the summer months and can be harvested multiple times. Wheat would be grown in the winter and harvested once." Additionally, the verbiage for the last sentence should be reworded as "Alfalfa is typically harvested about once every 30 days between March through October and is kept on the field for multiple years."

Comment 12. WDR Page 15. Salt and Nitrate Control Programs. Bullet 61.a.

Summary of items in WDR: This item states the following: "*Sets a performance-based effluent limitation of 1,100 mg/L for FDS, calculated as a flow-weighted average concentration of Waste Streams 1 (auger discharge) and 2 (RO brine), on the discharge(s) of wastewater prior to blending with irrigation water to be sent to the LAA. The performance-based limit is based on 125% of the FDS concentration from Waste Stream 2.*"

Response and Comments: FDS requirements are based on a single sample collected for the preparation of the RWD. Due to limited data, it is difficult to establish a representative concentration limit. Salinity levels are expected to fluctuate and then stabilize once the greenhouses are at full operational capacity, the new pond is in operation, and constituent concentrations are stabilized. If the FDS limitation is exceeded, the Discharger proposes to submit a Salinity Report. The Salinity Report will include an evaluation of salinity effluent levels. The option would include a discussion of whether a mass-based limitation is more appropriate for this facility than a concentration limit.

We would like to change the performance-based effluent limitation to 1,220 mg/L for FDS. This limit would be 140% of the FDS concentration from Waste Stream 2. The current limit of 1,100 mg/L is based on the current RO system; however, a new and more efficient RO system will be installed in the fall of 2024 and the FDS concentration may increase because of it but the total pounds of FDS produced would be similar. The increased efficiency provided by the new system will assist with water conservation and may reduce the volume of brine water, which would cause the FDS concentrations to increase.

Comment 13. WDR Page 16. Table 13.

Summary of items in WDR: Constituents with Potential for Degradation listed in Table 13.

Response and Comments: The lab results listed in Table 13 are not consistent with the lab reports that were in the initial RWD submittal. We would like the following values (correct lab results in red) to be placed within the table to reflect the submitted lab reports:

Sample Source	Auger Discharge/ Waste Stream 1 (see 1 below)	RO Brine Stream 2 (see 2 below)	Source Water (see 3 below)	Regional Groundwater Quality (see 4 below)	WQO
Iron (ug/L)	805	ND	ND	780	300
Manganese (ug/L)	135	130	7	19	50

Comment 14. WDR Page 17. Antidegradation Policy. Bullet 66.4.a

Summary of items in WDR: This item states the following: *“However, the Discharger proposes to increase the LAA to the full irrigable acreage of 107 acres to reduce salt loading.”*

Response and Comments: We would like to remove “proposes to increase” and replace it with “has the flexibility to increase”. Salt loading on the LAA is only projected at this time. Actual values will be known once the greenhouse is at full capacity and the pond is equalizing the combined flows. Additionally, the total available LAA acreage is 103 acres, not 107 acres.

Comment 15. WDR Page 19. Antidegradation Policy. Bullet 67.d.

Summary of items in WDR: This item states the following: *“Solids are removed from the wastewater using an auger and disposed of offsite.”*

Response and Comments: We propose including a statement explaining that the solids can be used as a soil amendment on the LAA if determined to meet agronomic application rates. We believe it would be more appropriate to use the composted solids as a soil amendment rather than hauling them off the property. We would also like to make this change throughout the report (such as on page 28).

Comment 16. WDR Page 24. Requirements. Bullet C.

Summary of items in WDR: This item states the flow limitations as two separate limitations.

Response and Comments: We would like to combine the flow limitations from the two waste streams into one combined flow limitation of a monthly average daily flow limit of 70,000 gallons per day (gpd). It is expected that the two flow volumes will fluctuate and ultimately the goal is to discharge the combined volume to the LAA.

Comment 17. WDR Page 29-31. Requirements. Bullet I.

Summary of items in WDR: This item states the provisions and deadlines that must be submitted.

Response and Comments: We would like to propose extensions on the following plans:

- Iron and Manganese Source Evaluation and Minimization Plan: **9 months from adoption.**
 - We believe having more data (including LAA crop uptake) could help identify a source and therefore would like to have enough time to sample the wastewater after new crops are being grown in the facility. We would also like to ensure the pond is constructed so that we can collect representative samples of what will be applied to the LAA in the long-term.
- Design Report and CQA Plan: **90 from adoption.**
- Pond Operation and Maintenance Plan: **90 days from when the pond is constructed, operations start, or final designs are approved.**
- Wastewater Nutrient Management Plan: **160 days from final pond design approval.**

Comment 18. WDR Page IS. i-ii. Information Sheet.

Summary of items in WDR: The Facility and Discharge Section states: “...Treated RO water is then stored using a tank and blended with nutrients to promote plant growth.”

Response and Comments: We would like to clarify that the blending of nutrients occurs after the water is discharged from the storage tank, not in the tank.

Comment 19. WDR, Minor Administrative Edits

- a. WDR Page 8. Land Application Areas. Bullet 29: The last sentence does not address the correct table. It needs to be changed from “Table 6” to “Table 5”.
- b. WDR Page 11. Site-Specific Conditions. Bullet 43: The last sentence does not address the correct table. It needs to be changed from “Table 3” to “Table 6”.
- c. WDR Page 13. Basin Plan Implementation. Bullet 52: The verbiage needs to be changed from “WWTF” to “Facility”.
- d. Attachment B: The small, Lined Pond in between the Stormwater Pond and Unlined Pond is not included in this map. The compost area was also excluded. Please add both these items to Attachment B. Refer to Figure 2 of the initial RWD submittal for the locations.
- e. Attachment C: For Waste Stream 1 (green arrows), the box titled “Auger EFF-001” needs to also include packaging floor drain wastewater. The box titled “Northwest Unlined Pond PND-001” in Waste Stream 1 needs to also include LAA. For Waste Stream 3 (orange arrows), we would like to include “condensate” within the list of “Cogen, Boiler Blowdown, Floor Drains”.
- f. Information Sheet, Page i. Background: LAA acres needs to be changed from 107 acres of LAA to 103 acres.
- g. Information Sheet, Page ii. Bullet 1: The verbiage needs to be changed from “The wastewater is stored...” to “the wastewater will be stored”.

COMMENTS ON MONITORING AND REPORTING PROGRAM (MRP)

Comment 20. MRP Page 2. Table 1.

Summary of items in MRP: Item states the following: “*EFF-001 – Location where a representative sample of the auger discharge (Waste Stream 1) can be obtained prior to discharge to the unlined pond (PND-001). EFF-002 – Location where a representative sample of reverse osmosis (RO) brine water (Waste Stream 2) can be obtained prior to discharge to PND-002.*”

Response and Comments: All waste streams will be combined prior to land application discharge. We propose that only one comprehensive effluent sample (EFF-001) be taken from the combined waste streams prior to land application. EFF-001 should be a representative location of wastewater pumped from the ponds to the LAAs (such as a sampling port on the pressurized line). This will provide the most accurate water quality data for the wastewater applied to the LAAs and loading rate calculations.

Comment 21. MRP Page 4-5. Table 3.

Summary of items in MRP: Item states that DO is to be sampled 2/Month and the Solids Depth Measurement is to be an observation.

Response and Comments: BOD₅ laboratory results for the samples collected for the preparation of the initial submittal RWD were equal to or less than 71 mg/L, therefore, low oxygen levels in the ponds caused by the effluent are not expected. We propose to change the occurrence to 1/month for DO measurements.

Access to pond bottoms can sometimes be difficult and dangerous, especially on a synthetically lined pond (slipping hazard). Significant solids build-up can be observed from the pond edge. It is proposed that solids depth measurements be visual estimates.

Comment 22. MRP Page 5. Item II. Bullet C.

Summary of items in MRP: Item states the following: “*The source water for Facility shall be monitored. Samples shall be representative of the source water supplied to the Facility after treatment (if any). If the source water is from more than one source, the results shall be presented as a flow-weighted average of all sources.*”

Response and Comments: This item should specify that the source water sample will be pulled from the source water storage tank and that the sample is taken prior to the RO process.

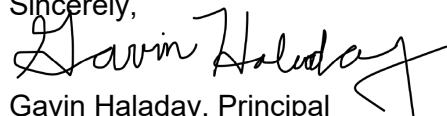
Comment 23. MRP Page 9. Item III. Bullet A.

Summary of items in MRP: Bullets 7 and 8 state that Quarterly Monitoring Reports shall include “A discussion of annual chemical usage at the Facility (e.g., chemical name, purpose, and quantity used)” and “A summary of any changes in processing that might affect waste characterization and/or discharge flow rates”, respectively.

Response and Comments: We propose to move these bullets to the 4th quarter monitoring report rather than being a part of the quarterly reports. If there is an impactful change at the Facility then a bullets 7 and 8 can be included

We appreciate the opportunity to provide comments and suggested changes on the tentative WDRs and MRP. If you have any questions regarding our suggestions or wish to discuss them further, please contact CEFF II Tehachapi Property, LLC.

Sincerely,

A handwritten signature in black ink that reads "Gavin Haladay". The signature is written in a cursive style with a long, sweeping tail on the letter 'y'.

Gavin Haladay, Principal

CEFF II Tehachapi Property, LLC

Electronic CC: Alex Mushegan, PE, Bryan Rock, PG, Cruz Romero