SECOND REVISED TENTATIVE (15 July 2021)

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD CENTRAL VALLEY REGION

CEASE AND DESIST ORDER R5-2021-0043 FOR

JG WESTSTEYN DAIRY, LP; THE WESTSTEYN 2015 IRREVOCABLE TRUST; JAKE AKA JAKOB WESTSTEYN, AS TRUSTEE OF THE WESTSTEYN 2015 IRREVOCABLE TRUST; AND GLADYS WESTSTEYN, AS TRUSTEE OF THE WESTSTEYN 2015 IRREVOCABLE

TRUST JG WESTSTEYN DAIRY GLENN COUNTY

The California Regional Water Quality Control Board, Central Valley Region, (Central Valley Water Board) finds that:

1. On 13 August 2009, the Central Valley Water Board adopted Individual Waste Discharge Requirements Order R5-2009-0082 for Bert Weststeyn and Weststeyn Dairy Farms, dba Weststeyn Dairy (WDRs). The Weststeyn Dairy is located at 5745 County Road 65 near Willows in Glenn County. The WDRs prescribe requirements for the storage, treatment, and disposal of solid manure, liquid manure, and other wastes which could impact water quality, and include a Monitoring and Reporting Program.

OWNERSHIP CHANGES

2. As stated above, the WDRs were issued to Bert Weststeyn and Weststeyn Dairy Farms, dba Weststeyn Dairy. On or about 23 December 2020, a Form 200 was submitted to reflect changes to the legal owner and operator of the Weststeyn Dairy and associated real property. The Central Valley Water Board adopted Name Change Order R5-2021-0033 at its April 2021 meeting. The Name Change Order identifies the new facility name as JG Weststeyn Dairy (Dairy), JG Weststeyn Dairy, LP as owner and operator of the Dairy, and the Weststeyn 2015 Irrevocable Trust (Trust) as the owner of the associated real property. Based on public records and discussions with the Dairy's representatives, Gladys and Jakob Weststeyn are trustees of the Trust. For purposes of this Cease and Desist Order, JG Weststeyn Dairy, LP, the Weststeyn 2015 Irrevocable Trust, and Jakob and Gladys Weststeyn (both as trustees of the Trust), are collectively known as "Dischargers."

DESCRIPTION OF FACILITY

- 3. The Report of Waste Discharge (RWD) submitted on 11 June 2009 described how the Dairy would be constructed and operated. The WDRs were prepared based on information in the RWD and were adopted by the Central Valley Water Board on 13 August 2009, prior to construction of the Dairy. The Dischargers' representative has verbally stated that in 2011, approximately 2,000 heifers and support stock were brought onto the property¹; however, a Google Earth image from March 2010 shows manure slurry flowing out of two composting barns. Regardless of whether animals were brought onto the property in 2010 or 2011, the waste management system had not been constructed by that time. Milking began in January 2017, even though the waste management system was not fully constructed². To date, the Dischargers have not constructed all the infrastructure or employed all the compost barn management practices proposed in the RWD and incorporated into the WDRs. Even so, the Dairy is populated with the maximum, or more than the maximum, number of cows allowed by the WDRs.
- 4. Page 2 of the RWD states that the "facility is planned to house 4,957 Holstein animals in six composting barns. Approximately 2,200 milking cows will be housed in 4 of the composting barns. The other support stock will be housed in 2 additional composting barns and a calf building." Finding 4 of the WDRs states that the Dischargers will milk 2,200 cows and house a total of 4,957 animals (i.e., 2,757 support stock) at the Dairy. Finding 6 of the WDRs states that dairy production area will include four milk cow barns, one dry cow barn, four heifer barns, and one baby calf pen facility; no open corrals are proposed. However, to date, the Dischargers have only constructed the four milk cow composting barns. All 2,200 milk cows and approximately 2,457 of the support stock are housed in those four barns³, contrary to what is stated in the WDRs.
- 5. The WDRs state that the 2,200 milk cows will be housed in four compost barns. As described in Findings 8 and 9, the compost barns will be covered by a roof extending across the feed lanes and the resting areas. The manure collected in the feed lanes will be dry scraped and stacked on a concrete pad, with leachate collected and sent to the wastewater lagoon. The manure and urine in the resting area will be composted by tilling twice a day and adding rice hulls or straw as needed to keep the compost dry. Curtains on the side of the barns will keep rain from wetting the compost in the resting area. The compost will be removed twice yearly and applied to cropland or sold.

¹ Source: inspection report dated 7 March 2016.

² Source: inspection report dated 11 May 2017.

³ Approximately 300 baby calf pens are located on the commodities pad.

- 6. The use of composting barns, instead of the more common flush lanes, was expected to significantly reduce the volume of wastewater generated at the Dairy. Finding 12 of the WDRs states that the total amount of wastewater requiring storage during the 120-day maximum storage period between land applications is 22.9 million gallons. Finding 14 of the WDRs states that one wastewater storage lagoon would be constructed with a capacity of 23.4 million gallons (allowing for two feet of freeboard). Therefore, if the Dairy had been built and operated as described in the WDRs, the wastewater lagoon would have more than adequate storage.
- 7. The wastewater storage lagoon is described in Finding 14 of the WDRs and was required to be 950 feet long by 290 feet wide and 18 feet deep. It was to be lined with a 60 mil HDPE liner over a low permeability subbase and was to include a gas venting system installed below the liner, with multiple vents extending through the liner near the top of the lagoon.
- 8. Finding 5 of the WDRs states that the Dairy is located on 1,382 acres, of which 1,278 acres are available for planting crops and applying dairy waste. Of this cropland, 520 acres can receive dairy wastewater and solid manure, and an additional 758 acres can only receive solid manure. The Dischargers currently have 505 acres of the solid-manure only cropland listed for sale. The land will be cropped in both double-crop and single-crop rotations.
- 9. The Dairy production area and cropland is shown on Attachments A and B, which are attached hereto and incorporated by reference into this Order. Features pertinent to the "Summary of Violations" section are also shown on these Attachments.

SUMMARY OF VIOLATIONS

10. Attachment C, which is attached hereto and incorporated by reference into this Order, contains a detailed summary of 26 Central Valley Water Board staff inspections of the Dairy that took place between 2015 and 2020. Findings 11-29, below, provide an overview of the categories of violations identified by Central Valley Water Board staff in their inspections. Findings 32-46, below, discuss Central Valley Water Board staff's review of the reports required by the WDRs. Based on the inspections and reporting and monitoring data, the Dischargers have violated the following requirements of the WDRs:

Discharge to Surface Water and Groundwater Violations

11. From 2017 to at least 2019, the Dischargers violated Prohibition A.2 which states the following: "The direct or indirect discharge of waste and/or storm water from the production

area to surface waters is prohibited." The Discharger allowed dairy wastewater to flow into a tailwater pond, which then discharged to Baker Slough, a water of the State. In addition, the Dairy did not have tailwater recovery systems, and fields adjacent to Baker Slough had sub-surface pipes, which allowed tailwater to drain into Baker Slough. (See Attachment C, Items 6j, 12, 13, 17d).

- 12. In 2018, the Dischargers violated Prohibition A.7 which states, in part, the following: "The discharge of waste from the facility to surface waters which causes...an exceedance of any state or federal water quality criteria...is prohibited." The discharge of wastewater to Baker Slough in January 2018 contained ammonia at concentrations that exceeded the US EPA chronic toxicity criterion. (See Attachment C, Item 12).
- 13. From 2017 through 2020, the Dischargers violated Specification C.1, Interim Groundwater Limitations, which specifies that the "[r]elease of waste constituents from any treatment, storage, or disposal" at the Dairy "shall not cause or contribute" to adverse impacts to groundwater. Specifically, the WDRs include two interim groundwater limitations: a limitation for nitrate as nitrogen (NO₃-N) of 10 mg/L and a limitation for electrical conductivity (EC) of 900 μmhos/cm. There are three groundwater monitoring wells at the Dairy. Although the Dischargers have not collected groundwater samples at the required frequency or from the required domestic and agricultural wells, the limited data shows that the discharge of wastewater has caused groundwater downgradient of the wastewater lagoon and compost barn to exceed the interim limitations for nitrate as nitrogen and electrical conductivity. (See Findings 45-46, below).
- 14. From 2015 through 2020, the Dischargers violated Specification B.1 which states, in part, the following: "The collection, treatment, storage, discharge, or disposal of wastes at the facility shall not result in: (1) discharge of waste constituents in a manner which could cause degradation of surface water or groundwater, [or] (2) contamination or pollution of surface water or groundwater." Among other items, the Dischargers (a) have not constructed the Dairy as described in its WDRs and is housing all support stock (except baby calves) in the same compost barns as the milk cows, causing the barns to be overloaded with manure that is not being properly disposed of, (b) have consistently stored significant volumes of wastewater and manure slurry in unpermitted, unlined basins, (c) have allowed wastewater to overflow from the lined lagoon into the gas vents, constituting a direct discharge of waste to groundwater, (d) have stored wastewater in the tailwater pond, (e) has discharged wastewater to surface water, (f) have buried dead cows on the Dairy property, (g) have adversely impacted groundwater, and (h) have overapplied nitrogen to cropland. (See Attachment C).

Wastewater Storage and Distribution Violations

- 15. From 2016 through 2020, the Dischargers violated Specification B.6 which states, in part, the following: "The facility shall have a lagoon and conveyance structures that are designed, constructed, operated, and maintained to retain all facility wastewater generated during the storage period...together with all precipitation on and drainage through manured areas, up to and including a 25-year, 24-hour storm." The Dischargers have not properly managed the lined lagoon, have generated more liquid waste than anticipated, and have not applied sufficient wastewater to cropland. Instead, the Dischargers have allowed wastewater to pond on native soil, installed a pipe and valve to direct wastewater to an unpermitted pond, allowed wastewater to overflow the unpermitted pond, inappropriately stored wastewater in the tailwater pond near Baker Slough and discharged wastewater to the 10-acre "pasture." In addition, prior to mid-2017, the permitted lined lagoon did not have the permanent pumps and piping needed to move wastewater into and out of the lagoon. (See Attachment C, Items 2c, 6c, 9c, 10a, 10b, 14a, 18e, 19a, 20c, 21c, 22b, 23c and Finding 49).
- 16. In 2019, the Dischargers violated Specification B.7, which states, in part, the following: "The level of waste in the storage lagoon at the facility shall be kept a minimum of two (2) feet from the top...." From at least February through July 2019, the Dairy's permitted lagoon had either no freeboard or one foot of freeboard. In addition, the vault used to remove groundwater from underneath the lagoon was filled with wastewater, and in July 2019, wastewater was flowing into the gas vents in the lagoon's liner, which constitutes a direct discharge of wastewater to groundwater. (See Attachment C, Items 17b, 18a, 20a).
- 17. From 2015 through 2020, the Dischargers violated Specification B.12, which states, in part, the following: "All roofs, buildings, and non-manured areas located in the production area shall be...designed so that clean rainwater, including roof drainage, is diverted away from manured areas...unless such drainage is fully contained in the wastewater retention system." Dairy wastewater has been stored in one of the designated stormwater ponds and clean stormwater has not been diverted to stormwater ponds. The Dischargers installed a valve/pipe to divert wastewater from the permitted lined lagoon to the stormwater pond. (See Attachment C, Items 6d, 6e, 18b, 20b, 21b, 22b, 23a, 25a, 26a).
- 18. From at least 2015 through 2020, the Dischargers violated Specification B.13, which states, in part, the following: "The milk parlor, animal confinement area, and manure and feed storage areas shall be designed and maintained to convey all water that has contacted animal wastes or feed to the wastewater retention system ..." The Dischargers have (a) directed wastewater from the milk parlor into a stormwater pond, and (b)

consistently placed manure slurry from the compost barns onto native soil or into unpermitted basins; leachate from these areas is not conveyed to the permitted lined lagoon. Until 2018, leachate from the commodity pad flowed to the tailwater pond instead of the permitted lined lagoon. (See Attachment C, Items 1, 2a, 6f, 6g, 9c, 10b, 14b, 15a, 15c, 16a, 17a, 17c, 17d, 17e, 18b, 18c, 19b, 20b, 20d, 21b, 21d, 22a, 23a, 23b, 23d, 25b, 25e, 26a, 26b.)

19. From at least 2017 through 2020, the Dischargers violated Specification B.14, which states, in part, the following: "Unlined ditches, swales, and/or earthen-berm channels may not be used for storage of wastewater, manure, or tailwater and may only be used for conveyance of wastewater collected in the production area to the storage lagoon..." Prior to 2018, the Dischargers consistently allowed leachate from the commodity and manure storage area to flow through unlined ditches for storage in the tailwater pond adjacent to Baker Slough. (See Attachment C, Items 6f, 10b, 14b, 15a, 17d, 18e, 19a, 20c, 21c, 22b, 23c).

Land Application of Manure Violations

- 20. From 2015 through 2020, the Dischargers violated Prohibition A.12, which states the following: "The land application of manure or wastewater to land application areas for other than nutrient recycling is prohibited." Central Valley Water Board staff inspections have consistently found that the Dischargers have placed significant amounts of manure slurry in at least four different land application areas for purposes of drying and storage. (See Attachment C, Items 1, 6g, 10a, 14c, 15c, 16a, 17c, 17f, 18c, 18d, 19b, 19d, 20d, 20e, 21d, 21e, 21f, 22c, 23d, 25b, 25c, 25d).
- 21. From at least 2017 through 2020, the Dischargers violated Specification B.17, which states, in part, the following: "The application of waste to land application areas shall be at rates that preclude development of vectors or other nuisance conditions and meet the conditions of the certified Nutrient Management Plan. Application shall be timed to minimize nitrogen movement below the root zone." The Dairy does not have an accurate Nutrient Management Plan that reflects actual nutrient application practices, and the Dischargers' nutrient applications result in violations of the WDRs' nitrogen applied-to-removed ratio requirements. In addition, the Dischargers' method of drying slurry manure resulted in multiple complaints of nuisance conditions in 2020. (See Attachment C, Items 6i and 24, and Findings 37-43).
- 22. From at least 2017 through 2020, the Dischargers violated Specification B.22, which states the following: "Animal waste (manure solids) shall not be applied for disposal to any land that is not being used to grow crops. Crops must be planted within 60 days of waste

application." The Dischargers significantly overload land near the Dairy production area with manure solids and slurry, and either does not grow a crop on these lands, or plants crops beyond the maximum 60 days from when waste was first placed. (See Attachment C, Items 2a, 9c, 10a, 14c, 15c, 16a, 17c, 17f, 17c, 17d, 19b, 19d, 20d, 20e, 21d, 21e, 21f, 22c, 23d, 25b, 25c, 25d).

Herd Violations

- 23. From 2011 to 2017, the Dischargers violated Prohibition A.9, which states, in part, the following: "The disposal of dead animals at the facility is prohibited..." In February 2016, Central Valley Water Board staff observed a significant number of dead and decaying cows at two locations on the Dairy; the Dischargers stated that all dead animals had been buried onsite since 2011. Although the Dischargers provided proof that a rendering company had been hired to remove dead animals, in 2017 Central Valley Water Board staff again observed that dead animals in various stages of decomposition had been buried near the lined lagoon. Since 2017, Water Board staff have not seen evidence that dead cows are being buried at the Dairy. (See Attachment C, Items 2b, 3, 4, 5, 10c).
- 24. In 2016, 2018, and 2019, the Dischargers violated Provision D.4, which states, in part, the following: "The number of animals shall not be increased above the maximum herd size...". Although the WDRs state that the maximum allowed herd size is 4,957 cows, the Dischargers' Annual Reports show that this limit was exceeded in 2016, 2018, and 2019. In 2016 the Dairy housed up to 5,055 cows, in 2018 the Dairy housed up to 5,425 cows, and in 2019 the Dairy housed up to 5,170 cows. (See Findings 40, 42, 43).

Compost Barn Violation

25. In 2012, the Dischargers violated Specification B.11, which states, in part, the following: "The discharger shall take pre-operation soil samples from the earthen floors of the barns and repeat the sampling after the barns have been in operation for one year...If the sampling indicates that waste constituents are moving into the soil beneath the barns, the barns will be retrofitted with concrete floors." The Dischargers did not collect pre-operation soil samples but did collect samples in 2017, after approximately seven years of use. This data was not submitted until 2020 and only consists of a laboratory report with no indication as to the location or depth of the samples. This Order requires collection of soil samples from the compost barns. If the results show that the use of the compost barns are causing waste constituents to move into the vadose zone at concentrations which have the potential to impact water quality, then the Dischargers must retrofit the barns with concrete floors as required by the WDRs. (See Attachment C, Item 6h, 7, 8h).

Reporting Violations

- 26. From 2010 through 2020, the Dischargers have violated Section F.1.b of the WDRs which states that "[t]he Discharger shall submit Annual Reports, Groundwater Reports, and Storm Water Reports as described in the Monitoring and Reporting Program." The Dischargers did not submit Annual Reports from 2010 through 2016. Since then, Annual Reports have been submitted appropriately. Between 2010 and 2016, the Dischargers did not conduct groundwater monitoring and reports were not submitted. The 2017 through 2020 Groundwater Monitoring Reports were submitted late and did not include all the required information. Lastly, the Dischargers have never conducted storm water monitoring and have never submitted storm water reports.
- 27. The Dischargers violated Section F.1.e, which requires submittal of a "Salinity Report" as a part of the first Annual Report. Neither the first Annual Report nor subsequent Annual Reports included a Salinity Report. On 23 November 2020, the Dischargers submitted an acceptable document; however, it was not signed, as required by the WDRs.
- 28. The Dischargers have violated Section F.1.i, which requires submittal of a "Setback and Buffer Analysis and Irrigation Well Study" before the first application of wastewater or manure solids to Field #2 or Field #3 and before housing animals in the barn closest to well DW-2. The Dischargers should have submitted this document in 2015 but did not do so. This Study is still outstanding.
- 29. From 2012 through 2020, the Dischargers violated Section F.1.j, which requires submittal of a "Composting Barn Soils Report" within 18 months of commencement of use of the compost barns. Google Earth images show that the compost barns were occupied in March 2010, so the Dischargers should have submitted this document in 2012 but did not do so. The Composting Barn Soils Report is outstanding, and it is no longer possible for the Dischargers to collect pre-operation samples required for the report because animals have been housed in the composting barn since approximately 2010. This Order includes alternative sampling requirements as described in Finding 25.

CLEANUP AND ABATEMENT ORDER

30. On 1 February 2018, the Assistant Executive Officer of the Central Valley Water Board issued Cleanup and Abatement Order R5-2018-0700 (CAO) to Weststeyn Dairy. The CAO was issued due to an ongoing discharge of dairy wastewater into Baker Slough, a water of the State. The CAO required that Jake Weststeyn DBA Weststeyn Dairy Farms immediately stop the discharge to Baker Slough, discontinue the use of the tailwater pond to store dairy generated wastewater, submit a workplan outlining how cropland runoff

- would be managed without use of the tailwater pond for storage, and remove all wastewater and solid manure from the tailwater pond.
- 31. In response to the CAO, the discharge of wastewater into Baker Slough in 2018 was stopped and Jake and Stephen Weststeyn submitted a workplan on behalf of the Diary to describe how they would comply with the CAO. However, subsequent Central Valley Water Board staff inspections documented two continuing violations of the CAO, in addition to the violations of the WDRs discussed above: (a) the Regional Board contends that in February 2019, the Dischargers again discharged wastewater to Baker Slough, although the Dischargers contend otherwise; and (b) the Dischargers enlarged the tailwater pond and continues to use the tailwater pond to store dairy wastewater. (Source: Attachment C, Items 17d, 18e, 19a, 20c, 21c, 22b, 23c).

REVIEW OF REPORTS SUBMITTED PER WDRS

32. Section F requires the submittal of eight separate technical reports. In addition, the WDRs require that the Dischargers prepare and implement a Waste Management Plan (WMP) and a Nutrient Management Plan (NMP). The Monitoring and Reporting Program (MRP) of the WDRs requires storm water monitoring and reporting, groundwater monitoring and reporting, and annual reports. Many of the Dischargers' reports are discussed below. It is noted that certain reports were submitted timely and found to comply with the WDRs, including the Wastewater Lagoon Design Report and the Wastewater Lagoon Construction Report. Submittals that are missing in their entirety are discussed above, in the "Reporting Violations" section.

Waste Management Plan

- 33. The purpose of the WMP is to ensure that the production area of the Dairy is designed, constructed, operated, and maintained so that dairy wastes are managed to prevent adverse impacts to groundwater and surface water quality.
- 34. The Dischargers' most recent WMP is dated 31 October 2017 (Draft WMP). It is stamped "draft" and is not signed by either the consultant who prepared it or by the Dischargers. A review of the Draft WMP finds that it contains information that is different from the Findings of the WDRs and different from what Central Valley Water Board staff have observed during inspections. Among other items, the Draft WMP calculates the required volume for the wastewater pond based solely on wastewater inflows from the milk barn, although there are also inflows from the solids separator and leachate from the commodity pad. In addition, the Draft WMP assumes that 30% of the solid manure in the waste stream will be removed by the solids separator, which is inaccurate because the solids separator does

not currently treat the milk barn wastewater and is frequently inoperable. The Draft WMP also states that the wastewater lagoon has sufficient storage capacity for the 120-day storage period but does not identify the minimum freeboard necessary on 1 November each year to provide sufficient storage.

Nutrient Management Plan

- 35. The purpose of an NMP is to budget and manage the nutrients applied to the land application areas, considering all sources of nutrients, crop requirements, soil types, climate, and local conditions in order to minimize adverse impacts to surface water and groundwater quality. Among other items, the NMP must propose nitrogen loading rates that meet the criteria in the WDRs. The amount of nitrogen applied to cropland versus the amount of nitrogen removed by the crop (the "applied-to-removed ratio") is not to exceed 1.4 unless certain conditions are met (i.e., plant tissue testing shows that additional nitrogen is needed and that the amount applied is consistent with written recommendations by a professional). Per the WDRs, the applied-to-removed ratio shall never exceed 1.65.
- 36. The most recent NMP was prepared in August 2017. It states that the Dairy includes 1,298 acres of land. Of this, the Nutrient Budget portion of the NMP shows that lagoon wastewater will be applied to 540 acres (Fields #5, #6, #8a, #8b, #9, #10a, #10b, #11, and #16). The proposed nitrogen applied-to-removed ratio for the crops grown on these fields (corn, oats, grass) ranges from 1.39 to 1.40, values which comply with the WDRs.
- 37. The WDRs require that the NMP be updated in response to exceedance of an applied-to-removed ratio. However, despite noting exceedances of the applied-to-removed ratios in the 2016, 2017, 2018, and 2019 Annual Reports, as detailed in Paragraphs 39 through 42, the Dischargers have never submitted an updated NMP. The NMP will also need to be updated when the Dischargers are in escrow for sale of the 505 acres (see Finding 8).

Annual Reports

38. The WDRs require that an Annual Report be submitted by 15 January each year, describing operations for the period of 1 November through 31 October of the previous year. Annual Reports are to describe, among other items: the number of cows; the estimated volume of solid manure and wastewater produced; the amount of solid manure and wastewater applied to the land application areas or removed from the dairy; and crops grown, their yield, and their nitrogen removal. Nitrogen applied-to-removed ratios must be calculated for each crop.

- 39. The 2016 Annual Report stated that the maximum herd size was 5,055 cows, which is greater than the herd size allowed by the WDRs. The 2016 Annual Report provided no information about the volume or nutrient content of process wastewater generated during the year and shows that process wastewater was not applied to any field, although solid manure was applied to cropland. This is consistent with staff's understanding that milking did not begin until January 2017. Nitrogen applied-to-removed ratios exceeded the 1.4 limit for the following field/crop combinations: Field #5/corn, Field #6/alfalfa, Field #10/alfalfa, Field #13/corn, and Field #15/alfalfa. Nitrogen applied-to-removed ratios exceeded the 1.65 limit for Field #8/corn and Field #9/corn.
- 40. The 2017 Annual Report states that 10.5 million gallons of wastewater was generated and applied to three crops on 180 acres. This is significantly less land than the NMP anticipated and indicates that the Dischargers likely left excess wastewater in the lagoon. Nitrogen applied-to-removed ratios exceeded the 1.4 limit for the following field/crop combinations: Field #5/corn and Field #7/sorghum. Nitrogen applied-to-removed ratios exceeded the 1.65 limit for Field #9/oats and Field #8/alfalfa.
- 41. The 2018 Annual Report states that the maximum herd size was 5,425 cows, which is greater than the herd size allowed by the WDRs. Approximately 36 million gallons of wastewater were generated and applied to two crops on 180 acres. As in 2017, significantly less wastewater was applied to cropland than anticipated in the NMP. Even so, nitrogen applied-to-removed ratios exceeded the 1.65 limit for Field #1/corn, Field #5/corn, Field #9/sorghum, and Field #10/corn.
- 42. The 2019 Annual Report states that the maximum herd size was 5,170 cows, which is greater than the herd size allowed by the WDRs. Approximately 50 million gallons of wastewater was generated and applied to four crops on 180 acres. As in previous years, significantly less wastewater was applied to cropland than anticipated in the NMP. Even so, nitrogen applied-to-removed ratios exceeded the 1.4 limit for the following field/crop combinations: Field #3/corn, Field #5/oats, Field #6/corn, Field #11/sorghum, and Field #12/sorghum. Nitrogen applied-to-removed ratios exceeded the 1.65 limit for Field #7/oats, Field #7/corn, Field #9/corn, Field #11/oats, Field #12/oats, and Field #15/oats. The Annual Report also notes the discharge to surface waters that occurred when tailwater was released from the tailwater pond into Baker Slough on 9 March 2019 (see Finding 30).
- 43. The 2020 Annual Report was due by 15 January 2021 but was not submitted until 3 March 2021. The Annual Report states that the maximum herd size was 4,300 cows. Approximately 14 million gallons of wastewater was generated and applied to 800 acres of crops. The volume of wastewater reported as generated in 2020 is significantly less than

- what was reported in 2019. According to the Annual Report, none of the nutrient applications exceeded the nitrogen applied-to-removed ratio limits found in the WDRs.
- 44. Central Valley Water Board staff have identified the following concerns based on a review of the Annual Reports: (a) it is not clear why the volume of process wastewater produced has increased from 10.5 million gallons in 2017 to 50 million gallons in 2019, even though the number of milk cows has remained the same each year; (b) in no way does the 2017 NMP reflect the actual nutrient application practices at the Dairy; (c) the Dischargers are consistently overapplying nutrients to the fields; (d) the severe overapplication of solid manure to land surrounding the compost barns is not included in the nutrient balances in the Annual Reports; and (e) the Dischargers' failure to apply wastewater to the 560 acres described in the NMP is likely a factor as to why the Dischargers constructed the unpermitted wastewater ponds described in the inspection reports. This Order requires that the Dischargers update and follow the NMP, install a flow meter, collect soil samples and analyze for nitrogen content, and provide additional records to ensure accurate and reliable data is provided in future Annual Reports.

Groundwater Monitoring

- 45. The Dischargers installed three groundwater monitoring wells and proposed to install a fourth well prior to adoption of the WDRs, but the fourth well has never been installed. This Order requires its installation. In general, MW-1 is upgradient of the Dairy, MW-2 is immediately downgradient of the wastewater lagoon, and MW-3 is downgradient of the eastern compost barns.
- 46. The WDRs contain Interim Groundwater Limitations, as noted in Finding 13. The table below contains the groundwater monitoring results reported to the Central Valley Water Board. As shown in the table, MW-2 and MW-3, which are downgradient of two of the waste disposal areas, consistently exhibit higher EC and NO₃-N concentrations than the upgradient well. In addition, the data shows that the discharge of waste at the Dairy has caused exceedances of the Interim Groundwater Limitations (Finding 13), in violation of the WDRs. The results in **bold** font exceed the Interim Groundwater Limitations of 10 mg/l for NO₃-N and 900 umhos/cm for EC.

| Date | MW-1 | | MW-2 | | MW-3 | |
|-----------|-----------------|-----------------------------|-----------------|----------------|-----------------|-----------------------------|
| | EC, umhos/cm | NO ₃ -N, mg/L | EC, umhos/cm | NO₃-N, mg/l | EC, umhos/cm | NO ₃ -N, mg/L |
| 5/23/2008 | 808 | 1.7 | 697 | 8.27 | 681 | 9.28 |

| Date | MW-1 | | MW-2 | | MW-3 | |
|-------------|------|------|-------|------|------|------|
| 1/29/2009 | | 2.0 | | 8.3 | | 8.0 |
| 4/6/2017 | 792 | 4.0 | 1,020 | 7.7 | 816 | 9.1 |
| 7/21/2017 | 772 | 6.8 | 946 | 9.6 | 856 | 2.8 |
| 11/30/2017 | 830 | 3.7 | 948 | 10.8 | 787 | 8.7 |
| 3/14/2018 | 801 | 10.6 | 928 | 9.3 | 900 | 3.7 |
| 12/14/2018 | 747 | 8.2 | 869 | 8.2 | 874 | 3.9 |
| 3/12/2019 | 777 | 10.7 | 880 | 7.6 | 948 | 6.3 |
| 9/11/2019* | 823 | 2.6 | 958 | 9.9 | 738 | 7.9 |
| 11/7/2019 | 793 | 9.4 | 1,110 | 12.6 | 918 | 3.4 |
| 10/29/2020* | 868 | 3.4 | 1,282 | 13 | 768 | 11 |
| 10/29/20 | 869 | 3.6 | 1250 | 12.8 | 790 | 11.2 |

^{*} Samples collected by Central Valley Water Board staff. Remaining data provided by Dischargers.

REGULATORY CONSIDERATIONS

- 47. The Dischargers have indicated interest in installing a DVO anaerobic digester, in part, to address the violations stemming from vacuuming slurry manure from the feed lanes. However, the WDRs do not authorize use of a digestor and Provision D.5 of the WDRs states that an RWD must be submitted at least 140 days before construction of an anaerobic digestor. This Order does not consider use of a digestor as a method to resolve certain violations. If the Central Valley Water Board adopts new or modified WDRs for this Dairy, then this Order will be modified to reflect the WDRs.
- 48. Soils within the area of the Dairy consist of clays to approximately 20 feet below ground surface, and then gravels below that. Groundwater beneath the Dairy is encountered at 16 to 19 feet below ground surface⁴. The poor waste management practices described above,

⁴ WDR Information Sheet

- and the results of groundwater monitoring demonstrate that the Dairy poses a risk to water quality in the Central Valley region.
- 49. The beneficial uses of the groundwater are defined in the Water Quality Control Plan for the California Regional Water Quality Control Board, Central Valley Region (Basin Plan) (https://www.waterboards.ca.gov/centralvalley/water_issues/basin_plans/sacsjr_201805.pd f) and discussed in the WDRs General Findings Sections 29 and 30. The beneficial uses of groundwater beneath the Dairy are municipal and domestic water supply, agricultural supply, industrial service supply, and industrial process supply. The failure to comply fully with the requirements of the WDRs threatens these beneficial uses.
- 50. Water Code section 13301 states the following: "When a regional board finds that a discharge of waste is taking place or threatening to take place in violation of requirements or discharge prohibitions prescribed by the regional board or the state board, the board may issue an order to cease and desist and direct that those persons not complying with the requirements or discharge prohibitions (a) comply forthwith, (b) comply in accordance with a time schedule set by the board, or (c) in the event of a threatened violation, take appropriate remedial or preventive action."
- 51. The Central Valley Water Board finds that a discharge of waste is taking place in violation of the requirements and discharge prohibitions of the WDRs, as described in the Findings of this Order. This Order requires the Dischargers to take appropriate remedial action and to comply in accordance with the time schedule set forth below.
- 52. Water Code section 13267, subdivision (b) states, in part, the following: "In conducting an investigation specified in subdivision (a), the regional board may require that any person who has discharged, discharges, or is suspected of having discharged or discharging, or who proposes to discharge waste within its region, or any citizen or domiciliary, or political agency or entity of this state who has discharged, discharges, or is suspected of having discharged or discharging, or who proposes to discharge, waste outside of its region that could affect the quality of waters within its region shall furnish, under penalty of perjury, technical or monitoring program reports which the regional board requires. The burden, including costs, of these reports shall bear a reasonable relationship to the need for the report and the benefits to be obtained from the reports. In requiring those reports, the regional board shall provide the person with a written explanation with regard to the need for the reports, and shall identify the evidence that supports requiring that person to provide the reports."
- 53. The Dischargers own and operate the Dairy, which is subject to the WDRs and this Cease and Desist Order. The technical and monitoring reports required by this Order are

necessary to determine compliance with the requirements in the WDRs and this Order. These reports will enable Central Valley Water Board staff to understand the impact the Dairy has on water quality and to ensure that future operations minimize degradation to groundwater. In general, the benefits to be obtained by these reports are assurances that the Dairy is complying with regulatory requirements and employing appropriate management practices regarding the waste generated on-site. The cost to produce the reports⁵ required by this Order is estimated to be \$3,320, based on rates provided by a local dairy consultant. Therefore, the burden of production of these reports is reasonable. The specific reports and costs are as follows:

- One report documenting the consulting firm hired to oversee the work and sign the nine reports requiring a California registered engineer or geologist.
 Estimated time to produce report and rate: 1 hour at \$40/hour. Total: \$40.
- One report documenting that (a) the unpermitted wastewater pipe/valve has been removed, (b) changes have been made such that wastewater and slurry manure are only stored in the lined wastewater lagoon or temporarily in the concrete transfer lanes, and (c) changes have been made such that solid and semi-solid manure is no longer stored on bare ground. Estimated time to produce report and rate: 2 hours at \$80/hour. Total: \$160.
- One report documenting that the flow meter has been installed and a permanent method is in place to irrigate at least 520 acres of cropland. Estimated time to produce report and rate: 1 hour at \$80/hour. Total: \$80.
- One report documenting (a) modification of the commodity storage pad, (b) that the manure separator has been evaluated, and (c) that manure solid/slurry has been removed from all unpermitted areas. According to the consultant, this may require modification of the WMP. However, updating the WMP is already required by the WDRs, so the cost to update the WMP does not need to be considered in this context. Estimated time to produce report and rate: 8 hours at \$80/hour. Total: \$640.

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⁵ As required by Water Code section 13267, the Central Valley Water Board must only consider the cost to *prepare* the reports. There are additional costs to complete the work necessary to prepare the reports but those costs are outside the scope of Water Code section 13267's direction to consider "the burden, including costs, of ... reports."

- Contingency Plan (only required if the Dischargers are unable to lower the wastewater lagoon to the minimum freeboard level by 1 November of each year). Estimated time to produce report and rate: 8 hours at \$80/hour. Total: \$640.
- Compost Barn Soil Report. Estimated time to produce report and rate: 8 hours at \$80/hour. Total: \$640.
- Compost Barn Retrofit Report (only required if the Compost Barn Soil Report shows that salinity has statistically increased). Estimated time to produce report and rate: 8 hours at \$100/hour. Total: \$800.
- If the Dischargers wish to construct an area to temporarily store solid manure, then a Solid Manure Storage Area Construction Workplan and a subsequent Solid Manure Storage Area Construction Report. Estimated time to produce each report and rate: 2 hours at \$80/hour per report. Total: \$320.
- 54. Issuance of this Order is exempt from the provisions of the California Environmental Quality Act (Pub. Resources Code § 21000 et seq.), in accordance with California Code of Regulations, title 14, section 15321(a)(2).
- 55. After due notice to the Dischargers and all other affected persons, the Central Valley Water Board conducted a public hearing at which evidence was received to consider this Cease and Desist Order under Water Code section 13301 in order to establish a time schedule to achieve compliance with the WDRs.

IT IS HEREBY ORDERED that, pursuant to Water Code sections 13301 and 13267, the Dischargers, their owners, tenants, agents, successors, and assigns, shall implement the following measures to comply with the WDRs at the JG Weststeyn Dairy:

1. Except as allowed below, the Dischargers shall **immediately** comply with all aspects of the WDRs. The Discharger shall submit the Annual Reports, Storm Water Reports, and Groundwater Reports as required by the Monitoring and Reporting Program in its WDRs.

2. Summary of Reports Due Under this Order

A summary of the reports required by this Order are listed below. The required content of each report is described in the following pages. To facilitate compliance, reports that are required by both this Order and the WDRs (i.e., annual reports, storm water reports, and groundwater monitoring reports) are shown.

- a. By **30 June 2021 and semi-annually thereafter**, groundwater monitoring reports containing all the information from the monitoring wells, agricultural wells, and domestic wells required by the WDRs.
- b. By **30 June 2021 and annually thereafter**, storm water monitoring reports containing all the information required by the WDRs.
- c. By **1 September 2021**, a report containing the name and contact information of the consulting firm that will oversee the work and sign all nine reports requiring a California registered engineer or geologist's signature (i.e., Items 4d, 5a, 5b, 5d, 6a, 7a, 7b, 8a, and 8c). The report shall be signed by both the Discharger and an authorized representative of the consulting firm and shall document that the firm has been retained to complete the above nine items.
- d. By **1 September 2021**: one report documenting the removal of the pipe/valve (Item 4a), and describing the changes that have been made such that wastewater and slurry manure are only stored in the lined wastewater lagoon or temporarily in the concrete transfer lanes (Item 4b).
- e. By **15 October 2021**: A report describing the changes made such that solid and semisolid manure are no longer stored on bare ground (Item 5a). In addition, an Updated WMP and an Updated NMP shall be submitted as required by the WDRs (Items 8a and 8c). All reports shall be signed by an appropriate professional.
- f. By **15 November 2021 and annually thereafter, as needed:** if the lagoon's minimum freeboard level is not met by 1 November of the relevant year, then a Contingency Plan (Item 8b).
- g. By **1 December 2021**: One report documenting that the commodity storage pad has been modified (Item 4d), that the manure separator has been evaluated (Item 5b), and that the manure solid/slurry has been removed from all unpermitted areas (Item 5c). Items 4d and 5b of this report shall be signed by a California registered engineer.
- h. By **15 January 2022 and annually thereafter**, the Annual Report containing all of the information required by the WDRs, with enhancements described in Item 9.
- i. By **1 April 2022:** one report signed by an appropriate registered professional containing (a) a Compost Barn Soil Report (Item 5d), (b) a description of the upgrades completed such that a permanent method is in place (e.g., pipeline, ditches) to irrigate Fields #6, 8a, 8b, 9, 10a, 10b, 11, and 16. (Item 4c), and (c) confirmation that the flow meter has been installed, calibrated, and is operational (Item 6a).

- j. By **1 August 2022**: one report documenting that a permanent method is in place (e.g., pipeline, ditches) to irrigate Field #5 from the lagoon.
- k. By **1 January 2023:** if the concrete pad associated with the manure separator needs to be enlarged, then a report documenting completion of the work.
- I. By **1 June 2023**: monitoring well installation workplan required by the WDRs (Item 7a). This report shall be signed by an appropriate registered professional.
- m. By **1 November 2023:** monitoring well installation report required by the WDRs (Item 7b). This report shall be signed by an appropriate registered professional.
- n. By **31 December 2024:** if the Compost Barn Soil Report shows that salinity has statistically increased, then a Compost Barn Retrofit Report.
- o. If the Dischargers wish to construct a solid manure storage pad, then a Solid Manure Storage Pad Construction Workplan and a subsequent Solid Manure Construction Report. These reports shall be signed by a California registered engineer.

3. Herd Size

a. The Dischargers shall comply at all times with the herd size limits found in Finding 4 of the WDRs, which states "[t]he maximum herd size at the facility is 4,957 Holstein cows...the maximum number of animals in each age category shall not exceed the number given in this Finding." As described in Finding 4, the Dischargers shall not house more than 2,200 milk cows, 357 dry cows, 1,000 heifers (15-24 months), 800 heifers (7-14 months), 300 heifers (4-6 months), and 300 baby calves (0-3 months) at the Dairy.

4. Wastewater

- a. The Dischargers shall **immediately** remove the pipe and valve that allows wastewater to be diverted from the lined lagoon and to flow into the unpermitted basin to the west of the lined lagoon. By **1 September 2021**, the Dischargers shall submit documentation, including photographs, showing that the pipe and valve have been removed.
- b. As of **1 September 2021**, the Dischargers are **prohibited** from storing dairy wastewater or slurry manure anywhere other than the lined wastewater lagoon, or any other detention area approved by the Central Valley Water Board Executive Officer in writing and in compliance with WDRs Order R5-2009-0082, or successor WDRs adopted for the Dairy, with the exception that the Dischargers may temporarily (for no more than 72 hours) store dairy slurry manure in concrete transfer lanes, as long as the slurry does

not spill onto soil. This prohibition includes storage of any type of dairy wastewater in the tailwater pond adjacent to Baker Slough. Tailwater may not remain in the tailwater pond for more than 72 hours following irrigation. By **1 September 2021**, the Dischargers shall submit documentation describing the changes that have been implemented to comply with this Item.

- c. Wastewater from the lined lagoon shall be used to irrigate at least 520 acres of cropland (Fields #5, 6, 8a, 8b, 9, 10a, 10b, 11, and 16), as described in the WDRs and 2017 NMP. By **1 April 2022**, the Dischargers shall submit documentation that a permanent method is in place (e.g., pipeline, ditches) to irrigate Fields #6, 8a, 8b, 9, 10a, 10b, 11, and 16 from the lagoon. By **1 August 2022**, the Dischargers shall submit documentation that a permanent method is in place (e.g., pipeline, ditches) to irrigate Field #5 from the lagoon. If a vacuum truck is used to apply semi-solid manure (slurry) to cropland then the manure shall be mechanically incorporated into the soil within 72 hours.
- d. The Dischargers shall modify the commodity storage pad to ensure that all leachate from the pad enters the lined lagoon and that no leachate ponds on ground or flows to the tailwater pond adjacent to Baker Slough. For example, the Dischargers shall prevent ponding of leachate on the south and west side of the pad (e.g., install curbs, grade the land), shall install a permanent collection sump and conveyance system from the pad to the lagoon, and shall install a permanent pump (diesel, hydraulic, or electric) to pump the leachate into the lagoon. All aspects shall be sized to handle the flows from a 25-year, 24-hour storm. By **1 December 2021**, the Dischargers shall submit a *Commodity Storage Pad Modification Report*, signed by an appropriate registered professional, documenting that the modifications have been completed.

5. Solid and Semi-Solid Manure

a. As of 1 October 2021, the Dischargers are prohibited from drying or storing any solid or semi-solid manure on unimproved bare ground, including (a) using the compost barn vacuum truck to spread manure on ground for purposes of drying or storage, spreading manure in the unpermitted basins, or spreading manure on ground that will not be planted within 60 days, and (b) allowing manure to flow off the sides of the solids separator pad. By 15 October 2021, the Dischargers shall submit documentation describing the changes that have been implemented to comply with this requirement.

The Dischargers may temporarily store solid manure that is to be land applied or exported on the Commodity Pad or on prepared soil that that meets the Tier II conditions of State Water Board Order WQ-2015-0121-DWQ (Composting General

Order), including compacted to a hydraulic conductivity of 1x10⁻⁵ cm/sec or less, bermed to prevent stormwater run-on, and sloped such that leachate will be collected and transferred to the lined wastewater lagoon. If such a pad is constructed, then the Dischargers shall first submit a Solid Manure Storage Pad Construction Workplan describing how and where the pad shall be built. Upon completion but prior to use, the Dischargers shall submit a Solid Manure Storage Pad Construction Report. The report shall describe how and where the pad was constructed and how it shall be operated, including details regarding leachate collection and transfer to the lined lagoon. The Workplan and Construction Reports shall be signed by a California registered engineer.

- b. By 1 December 2021, the Dischargers shall submit a Manure Separator Evaluation Report prepared by a registered professional engineer that evaluates the efficacy of the current manure solids separator, proposes upgrades, as needed to ensure that the separator reliably operates and removes solids from the milk barn and all four compost barn waste streams, and documents that those upgrades have been installed. In addition, the Report shall evaluate the size of the concrete pad associated with the manure separator and whether it needs to be increased such that the Dischargers will reliably comply with Item 5.a (above). If the concrete pad needs to be larger, then the report shall include a proposed schedule for the work, which cannot exceed 12 months, and a Completion Report shall be submitted by 1 January 2023. If the concrete pad does not need to be larger, then the report shall include an Operation Plan describing the routine steps the Dischargers will take to ensure compliance with Item 5.a.
- c. By **1 December 2021**, the Dischargers shall submit a report documenting that all solid/slurry manure has been removed from the unpermitted drying basins, the unpermitted pond, around the solids separator, and any other areas at which slurry manure is present at greater than agronomic rates. The removed manure shall either (a) be applied to Dairy cropland at which the nitrogen applied-to-removed ratio has not been exceeded in the past two years (i.e., may be applied to Fields #1, #2, #4, #8, #10, #13, #14, or #16), or (b) be removed from Dairy property for appropriate disposal elsewhere. All Dairy fields to which the solid manure has been applied shall be planted with a crop within 60 days. The report shall include pictures showing the areas cleaned and shall describe each location to which the manure has been moved to, and for Dairy fields, what crop will be planted and when.
- d. The Dischargers did not collect pre-operation soil samples from the compost barns as required by WDRs Provision B.11, although samples were collected in 2017 after approximately six years of operation. To comply with the intent of the WDRs, the Dischargers shall sample the soil of the compost barns to determine whether waste constituents are moving into the soil beneath the barns. Specifically, samples shall be

collected from at least three locations in each of the four barns. At each location, one sample shall be collected at 6" below native ground surface and a second sample shall be collected at 12" below native ground surface, resulting in at least 24 distinct samples. Samples shall also be collected from the same depths from at least two "background" locations in areas with a similar soil type and to which dairy waste and fertilizer has not been applied. These background locations must be approved by Central Valley Water Board staff. Each sample shall be analyzed for electrical conductivity. The Dischargers shall notify Central Valley Water Board staff at least two weeks prior to the date of sampling so that staff may collect split samples, if desired.

By 1 April 2022, the Dischargers shall submit a Compost Barns Soils Report prepared by a California registered geologist or professional engineer. The report shall contain a description of both the 2017 and 2022 sampling events (including locations measured from a permanent reference point such as the corner of a barn), the results for both events, and a comparison of results. If the 2022 results show a statistically significant increase in salinity compared to the 2017 or background samples, then the report shall include a commitment to retrofit the barns with concrete floors (as required by WDRs Specification B.11) no later than 31 December 2024. If concrete floors must be installed, then the Dischargers shall submit a Compost Barn Retrofit Report by 31 December 2024. This report must be signed by an appropriate registered professional.

6. Flow Meter

a. By 1 April 2022, the Dischargers shall submit a Flow Meter Installation Report, prepared by an appropriate professional, documenting that a flow meter has been installed at the lined lagoon, has been calibrated to accurately record the volume of wastewater that is pumped to cropland, and is operational. The flow meter shall be a type specific for dairy waste. The volume measurements obtained from the flow meter shall be used in the Annual Reports to accurately document the volume of wastewater applied to each field. The report shall be signed by an appropriate registered professional.

7. Groundwater

a. By 1 June 2023, the Dischargers shall submit a Monitoring Well Installation Workplan prepared by an appropriate registered professional (as described in Attachment D to the WDRs). The workplan must propose installation of at least one additional monitoring well on the east side of the Dairy, with the location based on waste disposal practices and the current monitoring well network. The workplan shall contain all the information

- found in Attachment D to the WDRs. The well(s) shall be installed upon the Executive Officer's approval of the workplan.
- b. By 1 November 2023, the Dischargers shall submit a Monitoring Well Installation Completion Report prepared by an appropriate registered professional (as described in Attachment D to the WDRs). The completion report shall document the installation of the approved well(s) and shall contain the information found in Attachment D of the WDRs. The additional well(s) shall be added to the monitoring network and first sampled in the fourth quarter of 2022, at the same time as the existing monitoring wells.

8. Implementing and Updating the WMP and NMP

- a. By 15 October 2021, the Dischargers shall submit an Updated WMP and associated Operation and Maintenance Plan (O&M Plan) that contains the information listed in, and conforms with, Attachment B of Order R5-2013-0122, the Reissued Waste Discharge Requirements General Order for Existing Milk Cow Dairies (Reissued General Order). The document shall be prepared by an appropriate professional, as described in Attachment B to the Reissued General Order. The Updated WMP shall reflect the upgrades required by this Order, the maximum allowed herd size, all sources of inflow into the lagoon, upgradient stormwater flows into the tailwater pond, the practical minimum freeboard for the lagoon, and any constraints placed by the NMP on Dairy operations. The WMP must describe and verify how the annual wastewater production value was calculated and explain why this value varied so significantly among recent Annual Reports. The O&M Plan must specify the minimum freeboard necessary for the lined lagoon on 1 November and include monthly target freeboard levels for each month, such that the minimum freeboard will be met by 1 November. The Updated WMP must be signed by both the registered professional who prepared it and by the Discharger.
- b. If the 1 November freeboard target for the lined lagoon (as specified in the O&M Plan) is not met in any year, then by 15 November of that year, the Dischargers shall submit a Contingency Plan describing how the Dischargers will reduce the volume of wastewater at the Dairy (which could include a reduction in herd size or wastewater exports) to maintain compliance with the WDRs and this Order. The Contingency Plan shall be implemented immediately.
- c. When the 505 acres of cropland⁶ goes into escrow or by 15 October 2021, whichever is sooner, the Dischargers shall submit an Updated NMP that contains the information listed in, and conforms to the Technical Standards of, Attachment C to the

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⁶ See Finding 8

WDRs. The Updated NMP shall be developed and signed by an appropriate professional as listed in Attachment C and shall also be signed by the Dischargers. The document shall reflect the upgrades required by this Order and shall describe management changes to ensure that the nitrogen applied-to-removed ratio does not exceed 1.4 for each field and each crop. If the 505 acres of cropland has not gone into escrow by 15 October 2021, then the NMP shall reflect current management conditions and include an addendum addressing changes that will be made when the 505 acres is sold. The Dischargers shall notify the Central Valley Water Board when the land is in escrow. The Updated NMP shall also describe the use of the vacuum truck to spread semi-solid (slurry) manure onto cropland and describe practices that will be taken to (a) ensure that manure is not over-applied and (b) that the slurry is mechanically incorporated into the soil within 72 hours.

The Updated NMP shall reflect the collection of soil samples from the cropland. For as long as this Order is in effect, the Dischargers shall collect soil samples once per year, prior to planting the fall crop. **The first soil samples shall be collected in the fall of 2021**. For each field that receives process wastewater (Fields #5, #6, #8, #9, #10, #11, and #16), samples shall be collected at two locations (approximately 10% and 90% down the run of each field) and from two depths at each location (0-24" and 24-36"). For each field, samples may be composited by depth (i.e., for a particular field, the 0-24" composite sample will consist of the 0-24" samples from the top and bottom of that field and the 24-36" composite sample will consist of the 24-36" samples from the top and bottom of the field). Samples shall be analyzed for total nitrogen. The results shall be recorded in the "existing soil nutrient content" portion of the crop nutrient budget in the Annual Report and shall be used to determine the appropriate amount of nitrogen to add to each crop.

9. Annual Reports

a. Annual Reports shall be submitted as required by the WDRs and include the information listed in Section C of the WDRs' MRP. In addition, as required by Attachment C to the WDRs, Nutrient Management Plan, Item X.A, if nitrogen application rates for any field or any crop have a nitrogen applied-to-removed ratio between 1.4 and 1.65, then the Annual Report shall include the information listed in Item V.B.2.i through iv of Attachment C. If that information is not available or if a nitrogen applied-to-removed ratio exceeds 1.65 for any reason, then the Dischargers shall submit an Updated NMP with the Annual Report. The Updated NMP shall describe management changes to ensure that nitrogen application rates do not exceed the allowable ratios.

Annual Reports shall include the results of soil sampling described in Item 8.c as "existing soil nutrient content" for each appropriate field. The laboratory analytical reports shall be included as an attachment. Annual Reports shall clearly show the dates and fields to which semi-solid (slurry) manure was applied with a vacuum truck, and shall also report the dates which the manure was mechanically incorporated into the soil.

- 10. At any time after 1 May 2025, the Dischargers may request that Central Valley Water Board staff review the Dischargers' compliance with this Order and the WDRs. If the Dischargers have been in significant compliance with both, then staff will request that the Central Valley Water Board rescind this Order. As noted in Finding 47, if the Central Valley Water Board adopts new or modified WDRs for the Dairy, then this Order will be revised to reflect the WDRs.
- 11. The Central Valley Water Board has transitioned to a paperless office. Therefore, all technical reports required by this Order must be converted to a searchable .pdf file and submitted to the Geotracker database (https://www.waterboards.ca.gov/ust/electronic_submittal/index.html). In addition, an email shall be sent to Sean Walsh at Sean.Walsh@waterboards.ca.gov stating that a document pertaining to this Order has been uploaded into Geotracker.
- 12. In accordance with California Business and Professions Code sections 6735, 7835, and 7835.1, engineering and geologic evaluations and judgments shall be performed by or under the direction of registered professionals competent and proficient in the fields pertinent to the required activities. All technical reports specified herein that contain workplans for investigations and studies, that describe the conduct of investigations and studies, or that contain technical conclusions and recommendations concerning engineering and geology shall be prepared by or under the direction of appropriately qualified professional(s), even if not explicitly stated. Each technical report submitted by the Discharger shall bear the professional's signature and stamp.
- 13. Any person signing a document submitted under this Order shall make the following certification:

"I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my knowledge and on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment." The Executive Officer or his delegee may extend the deadlines contained in this Order if the Dischargers demonstrate that circumstances beyond the Dischargers' control have created delays, provided that the Dischargers continue to undertake all appropriate measures to meet the deadlines. The Dischargers shall make any deadline extension request in writing at least 30 days prior to the deadline. The Dischargers must obtain written approval from the Executive Officer or his delegee for any departure from the time schedule shown above. Failure to obtain written approval for any departure may result in enforcement action.

If, in the opinion of the Executive Officer or his delegee, the Dischargers fails to comply with the provisions of this Order, the Executive Officer or his delegee may refer this matter to the Attorney General for judicial enforcement, may issue a complaint for administrative civil liability, or may take other enforcement actions. Failure to comply with this Order or with WDR Order R5-2009-0082 may result in the assessment of Administrative Civil Liability of up to \$10,000 per violation, per day, depending on the violation, pursuant to the Water Code, including sections 13268, 13350 and 13385. The Central Valley Water Board reserves its right to take any enforcement actions authorized by law including revocation of the WDRs and termination of the authorization to discharge waste at this Dairy.

Any person aggrieved by this action of the Central Valley Water Board may petition the State Water Board to review the action in accordance with Water Code section 13320 and California Code of Regulations, title 23, sections 2050 and following. The State Water Board must receive the petition by 5:00 p.m., 30 days after the date that this Order becomes final, except that if the thirtieth day following the date that this Order becomes final falls on a Saturday, Sunday, or state holiday, the petition must be received by the State Water Board by 5:00 p.m. on the next business day. Copies of the <u>law and regulations applicable to filing petitions</u> may be found on the Internet at:

(https://www.waterboards.ca.gov/public_notices/petitions/water_quality/) or will be provided upon request.

I, PATRICK PULUPA, Executive Officer, do hereby certify the foregoing is a full, true, and correct copy of an Order issued by the California Regional Water Quality Control Board, Central Valley Region, on 13 August 2021.

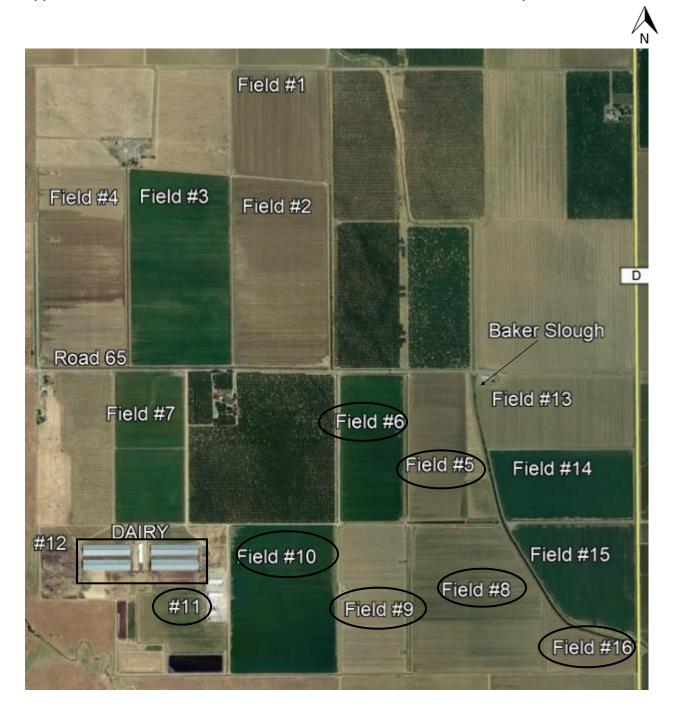
PATRICK PULUPA, Executive Officer

Attachment A: Map of Dairy including

Cropland Attachment B: Map of Production Area Attachment C: Summary of Inspections

Attachment A to CDO R5-2021-0043 Map of Weststeyn Dairy property, including all fields

According to the 2017 Nutrient Management Plan, process wastewater from the lined lagoon can be applied to the fields circled in black (Fields #5, 6, 8, 9, 10, 11, and 16). Solid manure is applied to the remainder of the fields. Field #11 is also known as "the pasture".



Adapted from Figure 1 of the 2018 Annual Groundwater Monitoring Report prepared by Provost & Pritchard for the J.G. Weststeyn Dairy.

Attachment B to CDO R5-2021-0043 Map of Weststeyn Dairy production area, including areas of multiple violations





The four compost barns and milking parlor are shown in the large oval at the top of the map. The commodity barns and storage pad are beneath Area 5. The permitted lined lagoon is the black rectangle at the bottom of the map. Central Valley Water Board staff have found continuing violations in Areas 1-5, as summarized in Attachment C to this Order:

- Area 1: Unpermitted wastewater storage pond.
- Area 2: Two unpermitted wastewater storage ponds.
- Area 3: Manure solids and slurry are pushed out of compost barns to this area.
- Area 4: Manure/slurry overflows from the manure separator into this area. In addition, vacuum trucks dump manure slurry from the compost barns into this area.

Area 5. Manure solids and slurry are pushed out of the compost barns to this area. For several years, leachate drained from this area to the tailwater pond and then Baker Slough. Currently, leachate will drain to the lined lagoon, but only if the Discharger digs a ditch and installs a portable pump.

ATTACHMENT C: SUMMARY OF INSPECTIONS

CEASE AND DESIST ORDER R5-2021-0043 JG WESTSTEYN DAIRY, GLENN COUNTY

Items 1-12 and 14-26, below, summarize the 26 inspections conducted by Central Valley Water Board staff from 2015 to 2020. Item 13 describes Cleanup and Abatement Order (CAO) R5-2018-0700 and the reports submitted in response to the CAO. The associated inspection reports are part of the record for this enforcement action.

2015

- Central Valley Water Board staff first inspected the Dairy on 22 September 2015 to determine if it was operating. Staff found that approximately 2,000 heifers were housed on-site and portions of the Dairy were still under construction. The following violation of the WDRs was identified:
 - (a) Significant amounts of slurry manure had been stored on native soil instead of a concrete pad, with no method of conveying leachate to a wastewater pond. (Source: inspection report dated 22 October 2015).

2016

- 2. On 9 February 2016, Central Valley Water Board staff inspected the Dairy. The Dairy was not yet operational because the milk parlor was still under construction. However, staff estimated that 1,000 to 1,500 support stock were being housed on-site. The following violations of the WDRs were identified:
 - (a) Manure was being composted on approximately 35 acres of native soil instead of on concrete, with no method of conveying leachate to the wastewater pond.
 - (b) Dead cows were being buried onsite; staff observed a significant number of dead and decaying cow and calf parts at two separate locations.
 - (c) Wastewater was observed ponded in a low area, instead of in the lined lagoon. (Source: inspection report dated 10 February 2016).
- 3. On 3 March 2016, Central Valley Water Board staff returned to the Dairy to speak to Jake Weststeyn. Mr. Weststeyn stated that the Dairy was populated with approximately 2,000 head of cattle in January 2011. Mr. Weststeyn estimated that 3-4 cattle die each month and stated that all dead animals have been buried on-site since January 2011. Staff observed that the dead animals present at the time of the 9 February 2016 inspection were no longer visible. Mr. Weststeyn would not provide additional information about what happened to the carcasses. (Source: inspection report dated 7 March 2016).

- 4. On 11 March 2016, the Central Valley Water Board issued a Notice of Violation (NOV) to the Discharger for failure to properly dispose of dead animals and failure to manage solid manure and process wastewater in accordance with the WDRs.
- 5. Central Valley Water Board staff inspected the Dairy on 29 March 2016, 1 April 2016, and 4 April 2016 to observe the removal of the animal carcasses and associated soil. The final load was delivered to the Artois Landfill on 4 April 2016. The Discharger provided proof on 8 April 2016 that North State Rendering had been hired to properly remove and dispose of future dead animals. (Source: inspection report dated 18 April 2016).

2017

- 6. On 6 April 2017 and 9 May 2017, Central Valley Water Board staff inspected the Dairy. The following violations of the WDRs were observed:
 - (a) The Dairy facility was not constructed as described in the WDRs. Five of the barns (the dry cow barn and the four heifer barns) as well as the baby calf pens had not been built. The support stock were housed with the milk cows in the compost barns, causing the barns to be overloaded with wet solid manure that could not be properly composted.
 - (b) The mechanical solids separator had not been installed.
 - (c) Although the lined wastewater storage lagoon was constructed, the infrastructure to move wastewater into the lagoon (sump, pump, and plumbing) and out of the lagoon (pump, plumbing, and power) had not been installed. Essentially, the Dairy was operating without a wastewater storage lagoon.
 - (d) Wastewater and slurry manure were being stored in one of the designated stormwater ponds.
 - (e) Clean stormwater was not being properly diverted to the stormwater ponds.
 - (f) Leachate from the commodity storage pad flowed via an earthen ditch to a tailwater pond adjacent to Baker Slough. The tailwater pond did not contain plumbing to convey the wastewater back to the lagoon and was hydraulically connected to Baker Slough via subsurface pipes.
 - (g) Large amounts of solid manure and slurry manure were being stored on native soil instead of a concrete pad, and leachate did not drain to the wastewater lagoon. The storage areas were in four locations: at the east and west ends of the compost barns, adjacent to the commodity storage pad, and in cropland.
 - (h) Soil samples were not collected from the composting barns prior to their initial operation.
 - (i) The Dairy did not have an accurate Nutrient Management Plan (NMP).
 - (j) The land application areas that receive wastewater did not have tailwater recovery systems because the sub-surface plumbing between the tailwater ponds and the wastewater lagoon had not been installed. In addition, fields adjacent to Baker Slough

had sub-surface pipes which allow tailwater to drain to the Slough. (Source: inspection report dated 11 May 2017).

- 7. On 31 July 2017, the Central Valley Water Board issued a NOV to the Discharger in response to the violations observed during the 6 April 2017 and 9 May 2017 inspections. The NOV required the Discharger to submit a workplan by 1 September 2017 containing a timeline for specific improvements to address the violations.
- 8. The Discharger's consultant submitted a NOV response on 1 September 2017, which attempted to clarify several issues regarding how the Dairy was operated and disputing Central Valley Water Board staff's conclusions. In its response, the Dairy indicated some plans to address its non-compliance with the WDRs and purported the following:
 - (a) Theoretically, the lagoon has always been operational and just needed a portable pump to move wastewater in or out. In July 2017, a pump was installed to pump wastewater out of the lagoon to cropland. Wastewater from the milk barn was plumbed to the lagoon since milking of cows began.
 - (b) The Discharger planned to install a manure separator and concrete pad before the winter of 2017.
 - (c) The tailwater pond near Baker Slough is actually two ponds, one for tailwater and one for irrigation water, with a "gate" between the two. The tailwater pond pump was on-site prior to construction of the Dairy.
 - (d) The WDRs do not include a timeline for buildout of the Dairy and therefore the four heifer barns, the dry cow barn, and the baby calf pens will be built sometime in the next 5 to 20 years.
 - (e) The west stormwater pond will be cleaned to native soil after the manure separator is installed by the spring 2018.
 - (f) The original Waste Management Plan (WMP), from 2009, was available at the Dairy office. An updated WMP will be submitted to the Central Valley Water Board by October 2017.
 - (g) An updated NMP is available at the Dairy office.
 - (h) The soils within the compost barns were to be sampled in September 2017 and the results included in the 2017 Annual Report.
 - (i) Manure "vacuumed" from the compost barns "which is not wastewater, has been and will be placed on native ground to dry...until the separator and concrete drying pad infrastructure is completed."

(Source: Response to NOV dated 1 September 2017)

9. Since the Discharger had indicated that an updated WMP and NMP would be available at the Dairy, on 17 August 2017, Central Valley Water Board staff visited the Dairy to review the documents, which are required by the WDRs. The following violations of the WDRs were noted:

- (a) The WMP did not reflect current conditions.
- (b) Only wastewater from the milk barn was being directed to the lined lagoon, while all other dairy generated waste was stored in four unauthorized areas: an un-permitted, unlined impoundment designated on the WMP as a 10 acre "pasture," the tailwater pond adjacent to Baker Slough, and at two manure storage areas on native soil. (Source: inspection report dated 21 August 2017).
- 10. On 1 November 2017, Central Valley Water Board staff inspected the Dairy to review site conditions prior to the upcoming rain season and to determine if the violations identified in the 31 July 2017 NOV had been corrected. Staff observed that the lined lagoon had 3-feet of freeboard and contained a significant amount of solid manure. In addition, solid manure had been removed from the areas to the west and east of the compost barns and transported off-site. Despite the noted improvements, the following violations of the WDRs were observed:
 - (a) Liquid and solid waste were still being stored in the 10 acre "pasture."
 - (b) The tailwater pond adjacent to Baker Slough was still being used to store solid manure, wastewater, and silage leachate and there was no mechanism to return this waste to the lined lagoon.
 - (c) Dead animals in various stages of decomposition had been dumped on native soil near the lined lagoon.
 - (Source: inspection report dated 14 November 2017).
- 11. On 28 November 2017, the Discharger was issued a Notice of Violation for the following violations of the WDRs: (a) storing solid manure, slurry manure, and wastewater in an unpermitted, unlined basin in the area designated in the WMP as a 10-acre pasture, (b) using the tailwater pond adjacent to Baker Slough to store solid manure, wastewater, and silage leachate, (c) storing dead animals on site, (d) allowing solid manure and wastewater to pond on native soil.

2018

- 12. On 11 January 2018 and on 25 January 2018, Central Valley Water Board staff inspected the Dairy and found, on both days, that the tailwater pond was discharging dairy wastewater into Baker Slough, a water of the State which ultimately discharges to the Sacramento National Wildlife Refuge. Samples collected on the Dairy property and from Baker Slough downstream of the discharge contained ammonia at concentrations between 4.8 and 9.1 mg/L, significantly exceeding the US EPA chronic toxicity criterion of 1.9 mg/L for aquatic life. (Source: inspection report dated 5 February 2018).
- 13. On 1 February 2018, the Assistant Executive Officer of the Central Valley Water Board issued Cleanup and Abatement Order R5-2018-0700 (CAO). The CAO required the Discharger to immediately stop the discharge of wastewater into Baker Slough,

discontinue the use of the tailwater pond to store dairy generated wastewater, submit a workplan outlining how cropland runoff will be managed without use of the tailwater pond for storage, and remove all wastewater and solid manure from the tailwater pond.

The Discharger's consultant submitted the workplan required by the CAO on 2 March 2018, stating that the goal is to avoid using the tailwater pond to mix wastewater and fresh water prior to irrigation. The report went on to indicate that a new pipeline would be installed parallel to the tailwater pond to be used as a return line from the tailwater pond to the lagoon. Mixing of fresh water and wastewater would occur in the lagoon. Tailwater that contains dairy waste would be pumped back to the lagoon or to the top of fields. The tailwater pond would be cleaned of manure by 4 May 2018, and the new pipeline would be installed by June 2018.

Central Valley Water Board staff responded to the workplan on 27 April 2018, stating that it was inadequate and that additional information was required to demonstrate that the plan was technically feasible. Staff requested that a revised work plan include surveyed elevations to show that the ditch is graded to drain to the west, details regarding the additional infrastructure needed to convey water back to the lagoon, and completion dates.

- 14. On 20 February 2018, Central Valley Water Board staff inspected the Dairy. Staff confirmed that the discharge from the tailwater pond to Baker Slough had ceased and documented that the outflow pipes were blocked with plastic tarps. The lined wastewater lagoon had 5-feet of freeboard. The screw press manure separator was installed but not operational because electricity was not available. The following violations of the WDRs were identified:
 - (a) A significant volume of wastewater was being stored in the tailwater pond and fresh water was being pumped into the pond. The Discharger stated that he was mixing the fresh water with the wastewater prior to pumping to cropland.
 - (b) At the time of the inspection, the silage and commodity storage areas were dry and no leachate was being generated; however, the Discharger had not made any improvements to prevent leachate from flowing to the tailwater pond during rain events.
 - (c) Solid manure, slurry manure, and wastewater was still being stored in the unpermitted area known as the 10-acre "pasture."
 - (Source: inspection report dated 22 February 2018).
- 15. On 9 May 2018, Central Valley Water Board staff inspected the Dairy. At the time of the inspection, the tailwater pond was not discharging to Baker Slough but staff noted that a permanent valve had not been installed and instead the Discharger was relying on plastic tarps to prevent future discharge events. Runoff from solid manure was now directed to the lined lagoon. The subsurface pipeline was under construction. The solid manure separation system was installed, and consisted of a concrete vault, screw press, and

concrete storage slab with leachate conveyed to the lagoon. The following violations of the WDRs were identified:

- (a) The silage and commodity areas were still plumbed such that leachate from these areas would flow to the tailwater pond.
- (b) An NMP was not available for review.
- (c) Solid and slurry manure were still being stored in the 10-acre "pasture." (Source: inspection report dated 14 May 2018).
- 16. On 13 June 2018 and 26 June 2018, Central Valley Water Board staff inspected the Dairy. Staff identified three remaining issues related to the CAO: a permanent valve still needed to be installed at the tailwater pond to ensure that wastewater cannot enter Baker Slough; a permanent valve needed to be installed at the silage/commodity pad conveyance ditch to ensure that leachate flows to the wastewater lagoon instead of the tailwater pond; and a permanent pump needed to be installed to pump the leachate into the wastewater lagoon. The following violations of the WDRs were identified:
 - (a) Manure and slurry were still being stored at the 10-acre "pasture," although some was being removed and spread at a depth of 6-12" to dry on land that had not been planted. (Source: inspection report dated 23 July 2018).

2019

- 17. On 28 February 2019 and 4 March 2019, Central Valley Water Board staff inspected the Dairy. The following violations of the WDRs were observed during the two inspections:
 - (a) On 28 February, the lined lagoon had zero feet freeboard and wastewater was flowing into several gas vents. A pipe and valve had been installed that allowed wastewater to be diverted from entering the lined lagoon and directed to an unpermitted earth basin adjacent to the lined lagoon.
 - (b) On 4 March, the lined lagoon had 1-foot of freeboard, while the adjacent unpermitted basin contained a significant volume wastewater. The vault that is used to evacuate groundwater from underneath the liner was filled with wastewater.
 - (c) For both the February and March inspections, staff found that the area to the east of the compost barns contained a significant amount of slurry manure stored on native soil. The Discharger explained that the vacuum truck was inoperable for an extended period and therefore manure was being pushed out of the compost barns to this unpermitted area.
 - (d) Leachate and stormwater from the area east of the compost barns, as well as the silage/commodity area, is supposed to drain to the lined lagoon but during the February inspection, wastewater was bypassing a leaking valve and flowing to the tailwater pond which in turn was discharging to Baker Slough.
 - (e) For both the February and March inspections, staff found that the concrete storage pad next to the manure separator was covered with solids and slurry manure and was

discharging to native soil.

- (f) For both the February and March inspections, staff found that large areas of the cropland were inundated with slurry manure.
- (Source: inspection report dated 29 March 2019).
- 18. On 30 April 2019, Central Valley Water Board staff inspected the Dairy. The inspection found that two improvements required by the CAO had been completed: (1) a valve was installed in the conveyance ditch east of the lined lagoon; and, (2) a valve was installed at the tailwater pond's inflow to Baker Slough. The following violations of the WDRs were identified:
 - (a) The lined lagoon had 1-foot of freeboard, and wastewater was still present in the vault used to removed groundwater from beneath the liner. (A week after the inspection, the Discharger stated that several volumes of wastewater had been pumped out of the vault.)
 - (b) Wastewater was still being diverted from the lined lagoon to the adjacent unpermitted basin. This basin was at capacity and spilling over.
 - (c) The area to the east of the compost barns still contained a significant amount of manure slurry stored on native soils.
 - (d) The mechanical separator was not operating properly. There was an extremely large amount of manure slurry on the land surrounding the mechanical separator and concrete pad; it appeared to staff that manure from the compost barns was being collected by the vacuum truck, driven a short way, and then dumped onto bare ground.
 - (e) The tailwater pond had one-foot freeboard and was being used to store wastewater. (Source: inspection report dated 3 May 2019).
- 19. On 28 May 2019, Central Valley Water Board staff inspected the Dairy. The inspection found that the lined wastewater lagoon had 2-feet of freeboard and contained a significant amount of manure solids. The following violations of the WDRs were noted:
 - (a) The tailwater pond had been expanded and was being used to store wastewater.
 - (b) Both the earth area east of the compost barns and the earth area adjacent to the silage storage area still contain solid and slurry manure stored on native soil.
 - (c) The mechanical separator was not operational.
 - (d) It appeared that manure from the compost barns was still being collected by the vacuum truck, driven a short way, and then dumped on earth near the concrete pad. (Source: inspection report dated 3 June 2019).
- 20. On 9 July 2019, Central Valley Water Board staff inspected the Dairy. The following violations of the WDRs were identified:
 - (a) The lined lagoon had zero feet of freeboard and wastewater was flowing into multiple gas vents. Wastewater was being pumped from the vault back into the lagoon.
 - (b) Wastewater and slurry manure were still being stored in the unpermitted basin adjacent to the lined lagoon.

- (c) The tailwater pond adjacent to Baker Slough was being used to store wastewater.
- (d) Both the earth area east of the compost barns and the earth area adjacent to the silage storage area still contained solid and slurry manure stored on native soil.
- (e) The mechanical manure separator was broken. It appeared that most of the solid/slurry manure was being dumped onto fields by the vacuum truck. (Source: inspection report dated 22 July 2019.)
- 21. On 22 August 2019, Central Valley Water Board staff inspected the Dairy. The lined lagoon had 3-feet of freeboard. Manure had been cleaned from the earthen area to the east of the compost barns. The following violations of the WDRs were identified:
 - (a) The vault next to the lagoon still contained wastewater.
 - (b) Wastewater and slurry manure were still being stored in the unpermitted basin adjacent to the lined lagoon.
 - (c) The tailwater pond adjacent to Baker Slough was being used to store wastewater.
 - (d) The earth area adjacent to the silage storage area still contained solid and slurry manure stored on native soil.
 - (e) The mechanical manure separator was broken. It appeared that most of the solid/slurry manure was being dumped directly onto fields by the vacuum truck.
 - (f) Some of the fields to which manure had been applied had not been planted. (Source: inspection report dated 29 August 2019.)
- 22. On 22 August 2019, Central Valley Water Board staff inspected the Dairy. The lined lagoon had 3-feet of freeboard and contained a significant amount of solid manure. The vault next to the lagoon contained water. Manure had been cleaned from the earthen areas to the east and the west of the compost barns. The following violations of the WDRs were identified:
 - (a) Wastewater and slurry manure were still being stored in the unpermitted basin adjacent to the lined lagoon.
 - (b) The tailwater pond adjacent to Baker Slough was being used to store wastewater.
 - (c) The mechanical manure separator was broken. It appeared that most of the solid/slurry manure was being dumped onto fields by the vacuum truck. Some of the fields to which manure had been applied had not been planted.

(Source: inspection report dated 12 September 2019.)

<u>2020</u>

23. On 11 March 2020, Central Valley Water Board staff inspected the Dairy. The lined lagoon had 3-feet of freeboard. The vault next to the lagoon contained water. There was no manure in the earthen area to the east of the compost barns. The field to the west of the separator had been planted with sorghum. The following violations of the WDRs were identified:

- (a) The unpermitted basin adjacent to the lagoon was dry but there was still a significant amount of manure solids on its side. The pipe/valve that directs wastewater to this unpermitted basin was still in place.
- (b) The unpermitted basins between the lagoon and the compost barns contained a significant volume of solids/slurry. Once the unpermitted basins reach capacity, the manure is pushed out to the adjacent land.
- (c) The tailwater pond adjacent to Baker Slough was being used to store wastewater.
- (d) The east side of the field to the north of the lined lagoon contained a massive amount of solid manure, which had been pushed from the compost barns or dumped from one of the unpermitted basins.

(Source: inspection report dated 23 October 2020.)

- 24. In June 2020, Central Valley Water Board staff received e-mail complaints from five neighbors of the Weststeyn Dairy. The complaints all related to a severe fly infestation which was alleged to have originated on the Weststeyn Dairy, due to the unpermitted disposal of slurry manure on bare ground. Specification B.1 of the WDRs states that the discharge of waste shall not cause nuisance conditions. (Source: five emails dated 15 June, 17 June, and 18 June 2020.)
- 25. On 10 September 2020, Central Valley Water Board staff inspected the Dairy. The lined lagoon had 3-feet of freeboard. The vault next to the lagoon contained water. The field to the west of the separator had been planted with sorghum. The following violations of the WDRs were identified:
 - (a) The unpermitted basin adjacent to the lagoon was dry but there was still a significant amount of manure solids on its side. The pipe/valve that directs wastewater to this unpermitted basin was still in place.
 - (b) The earth area to the east of the compost barn was again being used to store manure on native soil.
 - (c) Staff observed a vacuum truck applying manure slurry to the land next to the manure separator. It did not appear that the field had been planted with a crop.
 - (d) There was a significant amount of cropland that was receiving manure but appeared not to be planted.
 - (e) The unpermitted basins between the lagoon and the compost barns contained a significant volume of solids/slurry. Once a basin reaches capacity, the manure is pushed out to the adjacent land.

(Source: inspection report dated 14 September 2020.)

26. On 29 October 2020, Central Valley Water Board staff inspected the Dairy. The lined lagoon had 2-feet of freeboard. The vault next to the lagoon contained water. The tailwater pond adjacent to Baker Slough contained a minimal amount of water. It is not clear how the pond was lowered because the water level was several feet below the pump

intake pipe. Manure had been removed from the earth area east of the compost barns. The manure separator was not operating. Staff saw multiple cattle trucks, and later discovered that 1,000 heifers were being shipped to the Overland Stock Yard in Hanford for sale. The following violations of the WDRs were identified:

- (a) The unpermitted basin adjacent to the lagoon was dry but there was still a significant amount of manure solids on its side. The pipe/valve that directs wastewater to this unpermitted basin was still in place.
- (b) The unpermitted basins between the lagoon and the compost barns contained a significant volume of solids/slurry. Once a basin reaches capacity, the manure is pushed out to the adjacent land. The Dairy operator stated that the material in these basins was olive pumice, but staff's observations and photographs show that the material is manure solids. (Source: inspection report dated 30 October 2020, Overland Stock Yard sale notice for 4 November 2020.)