

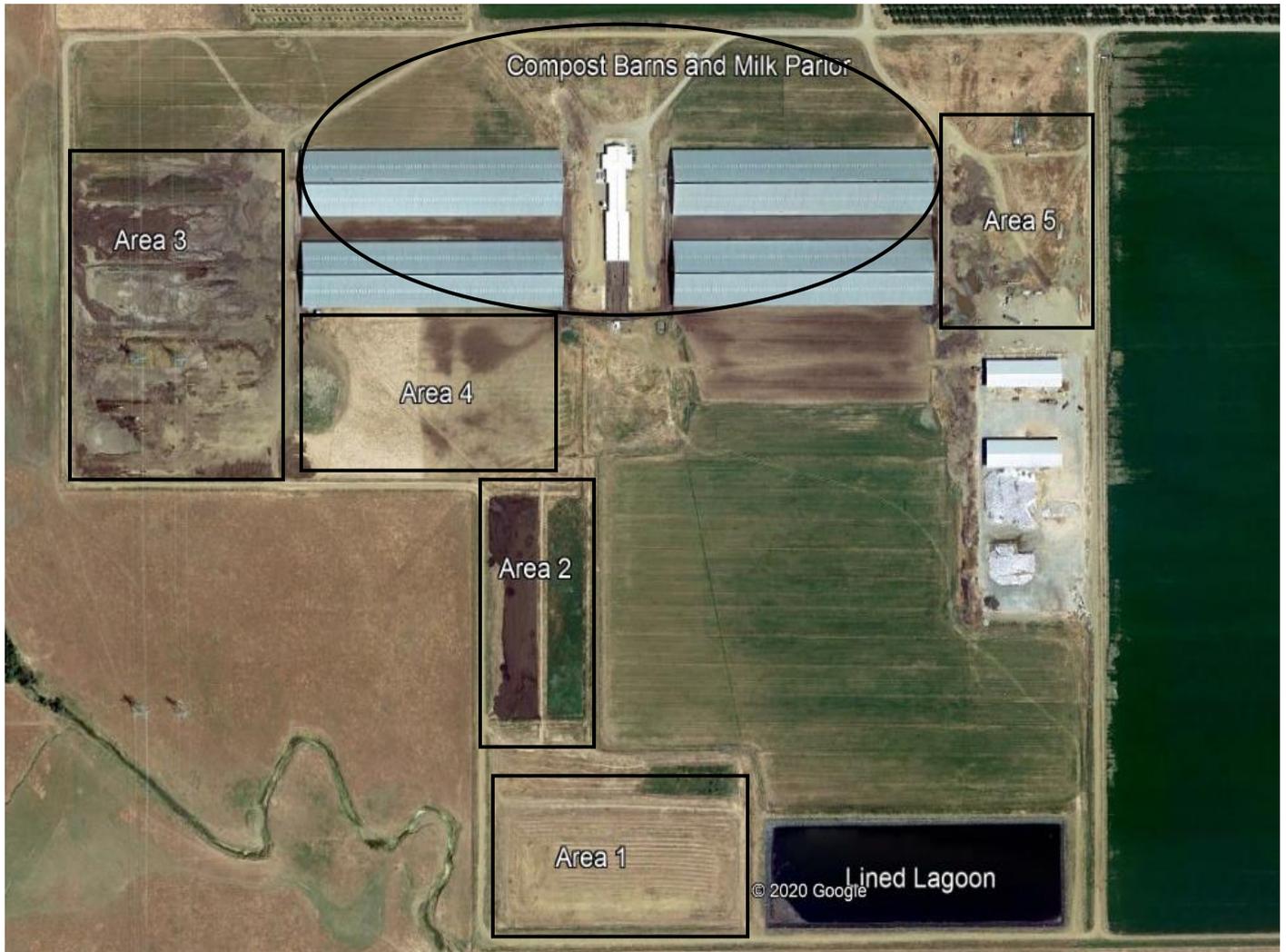
Attachment A to CDO R5-2021-XXXX
Map of Weststeyn Dairy property, including all fields

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-XXXX
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-XXXX 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

1. 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 sub-surface 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.)

2020

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.)