

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION**

**ORDER R5-2023-XXXX
RESCISSION OF CEASE AND DESIST ORDER
R5-2020-0047**

FOR

**GERMANO AND JACINTA SOARES
GERMANO SOARES DAIRY #1
STANISLAUS COUNTY**

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

1. On 15 October 2020, the Central Valley Water Board adopted Cease and Desist Order R5-2020-0047 (CDO) issued to Germano and Jacinta Soares (collectively, Discharger) based on alleged violations of *Reissued Waste Discharge Requirements General Order for Existing Milk Cow Dairies*, Order R5-2013-0122 (Dairy General Order) at the Germano Soares Dairy #1 (Dairy).

2. The CDO required the Discharger to complete a number of tasks and comply with the Dairy General Order, as summarized below:
 - a. Dairy General Order: The Discharger was required to comply with all aspects of the Dairy General Order, including subsequent revisions thereto, and including the prohibitions against discharges of wastewater to surface waters, the application of waste to lands not owned, leased, or controlled by the Discharger, the application of solid manure or wastewater to land for any purpose other than nutrient recycling, the expansion of the Dairy's herd size beyond the permitted number of cows (i.e., 1,409 mature cows), and the use of manure to construct containment features. (CDO, Req. 1.)

 - b. Corrals:
 - i. The Discharger was required to comply with the Operations and Maintenance (O&M) Plan found in the Dairy's 2019 Waste Management Plan (WMP) (or subsequent revisions). In particular, by **1 November of each year**, excess solid manure was to be removed from the corrals, and the corrals were to be graded to promote drainage to a point(s) at which leachate could be collected and pumped to a wastewater pond. (CDO, Req. 3(a).)

- ii. By 1 November 2020, the Discharger was to complete the work first promised in 2013 (see CDO, Finding 18), namely, installing a pump and piping such that leachate from all corrals was collected and transferred to a wastewater pond. The pump(s) was to be operated whenever necessary to minimize standing water within 72 hours after a rainfall. (CDO, Req. 3(b).)
 - iii. The October Enhanced Report (due by 10 November each year) was to include text and photographs documenting that items 2.i and 2.ii (above) had been completed. The report was to also describe where the removed manure was stored. (CDO, Req. 3(c).)
 - iv. The drainage of leachate from the corrals onto cropland is prohibited. (CDO, Req. 3(d).)
- c. Feed Storage Area: By **1 November 2020**, the Discharger was to complete the installation of a pump and piping such that leachate from the feed storage area was collected and transferred to a wastewater pond. The pump(s) was to be operated whenever necessary to minimize standing water within 72 hours after a rainfall. (CDO, Req. 4(a).)
- d. Wastewater Ponds:
- i. The Discharger was required to comply with the O&M Plan found in the Dairy's 2019 WMP (or subsequent revisions). In particular, by **1 November 2020**, all four ponds were to be drawn down to the minimum operating level of one foot and sludge was to be agitated and pumped out when it accumulated to a thickness of two feet. By **1 November of subsequent years**, the Discharger was to comply with the revised O&M Plan's minimum operating level and sludge removal levels. For any year, if the Discharger failed to draw the ponds down to the freeboard listed in the O&M Plan, then the Discharger was to submit the *Contingency Plan* listed in CDO Requirement 5(e). (CDO, Req. 5(a).)
 - ii. Manure removed from the ponds was to be handled in accordance with the conditions of the Dairy General Order, including the requirement that leachate is collected and diverted to a retention pond, and that infiltration of leachate is minimized. Manure may only be stored on a low permeability pad; storage on cropland or within temporary ponds is prohibited. (CDO, Req. 5(b).)

- iii. By **1 November 2020**, any solid manure currently stored in cropland or any area other than a low permeability pad (including the manure stored in and/or used to construct the unpermitted ponds in late 2018) was to be removed and either hauled off-site, applied to cropland, or moved to a low permeability pad. (CDO, Req. 5(c).)
- iv. The October Enhanced Report (due by **10 November each year**) was to include text and photographs documenting that CDO Requirements 5(a) and 5(c) had been completed and describing where the solid manure was stored. (CDO, Req. 5(d).)
- v. A *Contingency Plan* was to be submitted by **10 November each year** if either of the following occurred: (A) the wastewater ponds were not drawn down to the minimum operating level of one foot and if more than two feet of solids remain in any pond as of 1 November 2020, or (B) by 1 November of subsequent years, if the wastewater ponds were not drawn down to the minimum operating level or solids were not removed as described in an O&M Plan included in a revised WMP. The *Contingency Plan* was to describe how the Discharger would manage wastewater during the upcoming winter in conformance with the Dairy General Order. The *Contingency Plan* was to include a temporary reduction of the herd size and hauling of wastewater off-site as options. (CDO, Req. 5(e).)

e. Flow Meter:

- i. By **1 March 2021**, the Discharger was to submit a *Flow Meter Installation Workplan* to complete the work agreed to in the 2002 Stipulated Judgment. The document was to be prepared by a California Registered Civil Engineer and was to propose the installation of a flow meter on each pond from which wastewater is pumped to the cropland. The flow meter was to be a type specific for dairy waste and be used to accurately determine the volume of wastewater applied to cropland. Upon approval of the Executive Officer, the Discharger was to install the flow meter. (CDO, Req. 6(a).)
- ii. By **1 September 2021**, the Discharger was to submit a *Flow Meter Installation Report*, prepared by an appropriate professional, documenting

that the approved flow meter was installed, calibrated, and was operational. (CDO, Req. 6(b).)

f. Implementing and Updating the Waste Management Plan (WMP):

- i. By **1 July 2021**, the Discharger was to submit a *Pond Sizing and Freeboard Marker Report*, prepared by an appropriate professional. (CDO, Req. 7(a).)
- ii. By **1 September 2021**, the Discharger was to submit an *Updated Waste Management Plan* and associated *Operation and Maintenance Plan* that contains the information listed in Attachment B to the Dairy General Order. The document was to be prepared by an appropriate professional, as described in Attachment B of the Dairy General Order. In particular, the Updated WMP was to consider wastewater flows for the maximum allowed herd (1,409 mature cows), the volume of the four wastewater ponds as documented in the *Pond Sizing and Freeboard Marker Report*, the practical minimum freeboard for each pond, any constraints placed by the NMP, and the Dairy General Order's requirements regarding the application of dairy waste to cropland for nutrient recycling. (CDO, Req. 7(b).)

g. Implementing the Nutrient Management Plan (NMP):

- i. Consistent with the Dairy General Order, wastewater and solids were to only be applied to cropland in conformance with an NMP that incorporates the technical requirements of Attachment C of the Dairy General Order. (CDO, Req. 8(a).)
- ii. Item C.2 of Attachment C to the Dairy General Order states that wastewater shall not be applied to cropland when soils are saturated unless certain conditions are met. If the Discharger determines that wastewater must be applied to the cropland when it is saturated, then a specialist (as described in Attachment C of the Dairy General Order) must first conduct tissue and/or soil tests to show that there is an agronomic need for such application and that the threat of nitrate leaching is minimal. If such an application occurs, then the Discharger was to submit an *Agronomic Need Report*, prepared by the specialist, documenting the tests, the volume of wastewater applied, and the amount of nitrogen applied. The *Agronomic Need Report* was to be submitted with the *Enhanced Monitoring Report* (CDO, Req. 10) immediately following the wastewater application to saturated soils. (CDO, Req. 8(b).)

- iii. On an annual basis, the Discharger was to export at least as many pounds of nitrogen in manure solids as shown in its NMP. Unless the 2018 NMP is revised, the Discharger was to follow the NMP by applying wastewater to double-cropped corn and oats on 235 acres. If the NMP is revised, the Discharger was to follow the cropping descriptions and acreage in the new document. (CDO, Req. 8(c).)
- iv. The Discharger was to collect soil samples once per year, prior to planting the spring crop. For each field that receives process wastewater (currently fields #1 through #10), samples shall be collected at two locations and from two depths at each location (0-24", and 24-36"). 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. (CDO, Req. 8(d).)
- v. By 1 February 2021 the Discharger was to submit and immediately implement a Plant Tissue Sampling Protocol for the Dairy. The Protocol was to be developed by a Professional Soil Scientist, Professional Agronomist, Crop Advisor certified by the American Society of Agronomy, or Technical Services Provider certified in nutrient management in California by the National Resources Conservation Service. (CDO, Req. 8(e).)
- vi. By 1 July 2021, and each subsequent 1 July (as long as the Order is in effect), the Discharger was to submit an *Enhanced Annual Report*. (CDO, Req. 8(f).)

h. Depth to Groundwater Monitoring:

- i. By 1 March 2021, the Discharger was to submit a Piezometer Installation and Sampling Workplan (PISW) prepared by a California Registered Civil Engineer or California Registered Geologist with experience in hydrogeology. The PISW was to propose the placement of at least five four piezometers (at least two at the western ponds and at least two at the eastern ponds), located such that depth to groundwater beneath the ponds may be determined. The PISW was to contain the information found in Attachment C of CDO R5-2020-0047. Monitoring was to consist of depth to groundwater measurements and may be performed manually using an electronic sounder or automatically using a dedicated water level transducer. Upon approval by Executive Officer, the piezometers were to be installed, surveyed, and sampled. (CDO, Req. 9(a).)

- ii. By 1 September 2021, the Discharger was to submit a Piezometer Installation Completion Report (PICR) prepared by a California Registered Civil Engineer or California Registered Geologist with experience in hydrogeology. The PICR was to document that the piezometers were installed per the approved workplan and include a description of piezometer construction activities, boring logs, construction details, map showing the placement and identification number of piezometer, survey results, and the results of the first depth to groundwater monitoring event. (CDO, Req. 9(b).)
 - iii. Depth to groundwater monitoring was to be conducted quarterly in the following months: March, June, September, and December. The first monitoring event was to be completed as part of the piezometer installation (CDO, Req. 9(b)); therefore, the first monitoring under this paragraph was to begin in September 2021. Results were to be submitted by the 10th day of the following month (i.e., by 10 April, 10 July, 10 October, and 10 January) and may be combined with the monthly reports due under Item 10. The reports were to be prepared by a California Registered Civil Engineer or California Registered Geologist with experience in hydrogeology and were to contain a description of how the monitoring was conducted, tabulated data for the event, historical tabulated data, a gradient map for the event, and a determination as to whether the lowest point of any of the wastewater ponds is within the high groundwater. (The elevation of the lowest point of each pond will be found in the report due under CDO Requirement 7(a). (CDO, Req. 9(c).)
 - iv. If a quarterly monitoring report contains the determination that the lowest point of any of the wastewater ponds is at or below the highest anticipated elevation of groundwater (i.e., the bottom of the pond is within groundwater), then within 90 days of the determination, the Discharger shall submit a Groundwater Remediation Workplan. This Groundwater Remediation Workplan shall be prepared by a California Registered Civil Engineer or California Registered Geologist with experience in hydrogeology and shall contain a proposal for action(s) such that the Discharger shall permanently maintain separation between the lowest point of each pond and the highest anticipated elevation of groundwater. The plan shall be implemented upon approval of the Executive Officer. (CDO, Req. 9(d).)
- i. Enhanced Monitoring and Reporting:
- i. Beginning the first month after adoption of the CDO, and continuing until the CDO is rescinded, the Discharger was to complete the following Enhanced Monitoring and Reporting, in addition to that required by the Dairy General Order. The Discharger was to submit monitoring reports according to the schedule in the table below. The reports were to contain the results of all monitoring required by the CDO. The reports were to contain both tabulated

results and, as described in each part below.

- ii. The October Enhanced Report (due by November 10) were to also include the results of the work and photographs as required by CDO Requirements 3 (Corrals), 4 (Feed Storage Area), and 5 (Wastewater Ponds).
 - iii. The March, June, September, and December Enhanced Reports (due by April 10, July 10, October 10, and January 10 of each year) were to also include the results of the depth-to-groundwater monitoring required by CDO Requirement 9(c).
 - iv. If an Agronomic Need Report is prepared (CDO, Req. 8(b)) then it shall be submitted with the monthly or quarterly report immediately following the wastewater application to saturated soils. (CDO, Req. 10.)
3. The Discharger has completed all tasks required by the CDO. On 25 January 2022, Central Valley Water Board staff inspected the Dairy, and the following was noted:
- a. Dairy General Order-required operational documents were adequate.
 - b. The updated, signed Waste Management Plan required by the CDO was submitted.
 - c. Wastewater Pond #1 had approximately 4.0-feet of freeboard with no signs of rodent damage or significant erosion.
 - d. Wastewater Pond #2 had approximately 2.0-feet freeboard with no signs of rodent damage or significant erosion.
 - e. Wastewater Pond #3 had approximately 3.0-feet of freeboard with no signs of rodent damage or significant erosion.
 - f. Wastewater Pond #4 had approximately 3.0-feet of freeboard with no signs of rodent damage or significant erosion.
 - g. Corrals were in adequate condition and contained.
 - h. The feed storage area was dry.
 - i. The solid manure storage area was dry.
 - j. Central Valley Water Board staff confirmed four (4) piezometers have been installed per the locations outlined in the Central Valley Water Board-approved Piezometer Installation and Sampling Plan dated 4 September 2021.
4. On 3 January 2023, Central Valley Water Board staff inspected the Dairy, and the following was noted:
- a. Dairy General Order-required operational documents were in order and adequate.
 - b. The Piezometer Installation Completion Report and first monitoring results were submitted.

- c. Wastewater Pond #1 had approximately 3.0-feet of freeboard.
 - d. Wastewater Pond #2 had approximately 2.0-feet freeboard.
 - e. Wastewater Pond #3 had approximately 2.0-feet of freeboard.
 - f. Wastewater Pond #4 had approximately 4.0-feet of freeboard.
 - g. Corrals were graded with a moderate amount of manure (not excessive).
 - h. The feed storage area was contained with minimum standing water (all on concrete).
 - i. The solid manure storage was contained with a moderate amount of standing water.
 - j. Cropland was in good condition (no obvious lagoon dumps, no solid manure being stored on cropland).
 - k. The remainder of the dairy was in adequate condition.
5. The Central Valley Water Board has notified the Discharger and interested agencies and persons of its intent to rescind CDO R5-2020-0047 and has provided them with an opportunity for them to submit their written comments and recommendations prior to the 12/13 October 2023 Board meeting where this item will be considered.
6. This Order is exempt from the provisions of the California Environmental Quality Act (Pub. Res. Code, § 21000 et seq.) in accordance with California Code of Regulations, title 14, section 15321(a)(2).
7. The Central Valley Water Board, in a public meeting, heard and considered all comments and evidence pertaining to this matter.
8. 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 law and regulations applicable to filing petitions may be found on the Internet at https://www.waterboards.ca.gov/public_notices/petitions/water_quality/ or will be provided upon request.

IT IS HEREBY ORDERED that Cease and Desist Order R5-2020-0047 is rescinded.

I, PATRICK PULUPA, Executive Officer, do hereby certify the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, Central Valley Region on 12 October 2023.

PATRICK PULUPA, Executive Officer