CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

ORDER NO. R5-2009-0045

INDIVIDUAL WASTE DISCHARGE REQUIREMENTS
FOR
GILBERT ALSTON, JOHN ALSTON AND ELSIE SEWALD,
DBA ALSTON FARMS DAIRY NO. 2
TEHAMA COUNTY

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

Findings

Facility Owner & Location

1. The Alston Farms Dairy No. 2 (hereafter "facility") is owned by Elsie Sewald and operated by Gilbert Alston. In addition, John Alston owns a portion of the land application area. Elsie Sewald, John Alston, and Gilbert Alston are collectively hereafter "Discharger." The facility is located in portions of Sections 23, 26, and 27, Township 23N, Range 03W, Mount Diablo Base & Meridian, at 22954 Christian Road, Orland, Tehama County (see Attachment A, which is hereby made part of this Order).

2. The facility operated as a dairy from 1976 until 2002. Since 2002 the facility has operated as rangeland.

3. The facility is not currently regulated under Order No. R5-2007-0035, Waste Discharge Requirements General Order for Existing Milk Cow Dairies (hereafter "General Order") because the facility was not operating as a dairy in October 2005. Pursuant to Finding 2 of the General Order, the Order does not apply to such facilities.

Facility Description

4. The Discharger milks 400 cows and has up to 450 dry cows and bred heifers. The dry cows and bred heifers will not be housed in the barns. No calves will be housed onsite. The total herd size at the facility is 850 Jersey animals. The maximum herd size at the facility is 850 animals based on the Initial Study and Mitigated Negative Declaration. The maximum number and type of animals will not exceed the numbers given in this Finding.

5. The facility is located on 571 acres, 137 of which are owned by John Alston and 434 of which are leased from Elsie Sewald. Land under agricultural production at the facility is located on Assessor's Parcel Numbers 089-230-05-1, 089-300-13-1, 089-300-14-1, 089-290-19-1, and 089-300-03-1. Of the 571 acres at the facility, 3 acres are production area and 568 acres are cropland. Of the 568 acres of cropland, 92.2 acres currently receive solid manure, 158.8 acres currently receive liquid manure, 181.6 acres may receive solid manure in the future, and 138.3 acres will never receive solid or liquid manure. Of the cropland, 74.1 acres are cropped in oats, 111.8 acres are cropped in wheat, 21.2 acres are double cropped in oats and sudan hay, and 207.8 acres are pasture. Manure solids are used on the cropland or for bedding.

6. The dairy production area includes exercise pens, freestall barns, milking parlor, holding pens, areas for potential future manure storage and drying areas, hay and commodity storage pads, and the storage lagoon (See Attachment B).

7. The facility is located outside the 100-year floodplain.

Waste Production

8. Waste produced at the facility consists of wastewater from facility wash down operations and storm water containing manure, urine, milk products, spoiled feed material, bedding (litter), soil, and cleaning compounds. Solid wastes are also produced at the facility and primarily consist of manure with additional fractions of spoiled feed, bedding material and soil. However, solid wastes will not be collected separately but will be managed through the flush system.

9. An estimated 3,000 gallons per day (gpd) of clean water from the on-site water supply wells is used to wash down the holding pen, wash pen, and milking parlor floors, rinse the cows, and wash down miscellaneous dairy equipment. Over 120 days, the volume of barn wastewater generated will be 360,000 gallons. One hundred twenty days (December 1 through March 30) is the maximum amount of time that waste needs to be stored at the facility between land applications.

10. Operation of the dairy is estimated to generate 28,690 gallons of manure wastewater over 120 days for the 400 milk cows that are housed in the barns.

11. Rainfall onto impervious areas of the facility, onto the ponds, and onto corrals is estimated at 670,784 gallons over the December through March storage period, using average rainfall figures and including rainfall from one 25-year, 24-hour storm.

12. The total amount of wastewater requiring storage over the 120-day maximum storage period, after removing losses due to evaporation from the wastewater storage lagoon and adding one 25-year 24-hour storm, is 881,706 gallons.

Wastewater Pond

13. Wastewater generated at the facility is conveyed via flush lanes to the wastewater storage lagoon, where it is then used for irrigation of the land application area and used to flush.

14. The facility has one existing earthen wastewater storage lagoon. The wastewater storage lagoon has dimensions of 190 feet long by 191 feet wide. The lagoon is 11 feet deep and has a 1:1 side slope. As a mitigation measure, the existing lagoon will be lined with a synthetic liner or the existing lagoon will be replaced by a new wastewater storage lagoon with a synthetic liner by 31 December 2009. The total storage capacity of the existing wastewater storage lagoon, allowing for two feet of freeboard, is 1,462,831 gallons. The design of the synthetic liner will be provided in a Lagoon Design Report that will be approved by the Executive Officer prior to the commencement of construction.

15. The existing wastewater storage lagoon has been constructed, and any new lagoon will be constructed, to handle runoff from storm events above and beyond a 25-year, 24-hour storm as long as it is properly managed throughout the year.

Groundwater Monitoring

16. The Discharger will install a monitoring well system by **1 March 2010** to characterize groundwater flow direction and gradient beneath the site, and characterize groundwater quality downgradient of the corrals, downgradient of the storage lagoon, and upgradient and downgradient of the cropland. These new wells, and any additional groundwater monitoring wells required in the future, will be installed in accordance with Attachment D. In addition, the Discharger monitors existing domestic and agricultural production wells for changes in water quality.

17. Groundwater samples were collected at the dairy facility in November 2008 from the irrigation and domestic wells. Groundwater results showed that nitrate-nitrogen levels were below the Maximum Contaminant Level (MCL) and Electrical Conductivity was below the secondary MCL in all wells sampled. Depth to groundwater in the area ranged from 40 to 60 feet below ground surface. Groundwater flow was determined to be to the southeast.

Land Application Area

18. Wastewater generated at the facility will be applied to land owned and/or operated by the dairy at agronomic rates as described in a certified Nutrient Management Plan that complies with Attachment C. Any manure solids applied to land application areas will be applied at agronomic rates as described in a certified Nutrient Management Plan.

19. All land application areas that receive wastewater are either bermed or have a tailwater recovery system.

20. All fields, ditches, and pipelines exposed to wastewater are flushed with clean water during the last irrigation or usage of the season to remove any waste residue.

California Environmental Quality Act

21. The Central Valley Regional Water Quality Control Board is the lead agency for purposes of the California Environmental Quality Act (CEQA). A Mitigated Negative Declaration for this project was submitted to the California State Clearing House for distribution on 19 February 2009. The Central Valley Water Board adopted the final Mitigated Negative Declaration on 24 April 2009. The Mitigated Negative Declaration identified mitigation measures to lessen or avoid significant effects on the environment. This Order incorporates mitigation measures identified in the Mitigated Negative Declaration that are within the Board's jurisdiction, specifically the installation of groundwater monitoring wells and a newly-lined wastewater lagoon. This Order includes requirements to assure compliance with the Porter-Cologne Water Quality Control Act and the applicable Water Quality Control Plan for the Sacramento and San Joaquin River Basins (4th Ed. Revised October 2007) (Basin Plan). This Order prohibits discharges of waste to surface water and prevents degradation of groundwater.

General Findings

22. This Order regulates the storage, management, and disposal of wastes on the dairy production area and land application area to protect the beneficial uses of underlying ground water and the surface waters that receive discharges from the facility.

23. For the purposes of this Order, "waste" includes, but is not limited to, manure, leachate, wastewater and any water, precipitation or rainfall runoff that contacts raw materials, products, or byproducts such as manure, compost piles, feed, silage, milk, bedding, pesticides, or soils. Wastewater is defined as water directly or indirectly used in operation of a milk cow dairy for any or all of the following; washing, cleaning, or flushing pens, barns, manure pits, or other dairy facilities; washing or spray cooling of animals; or dust control and includes any water or precipitation and precipitation runoff which comes into contact with any raw materials, products, or byproducts including, feed, milk, bedding, or cropland. Storm water is defined as storm water runoff, surface runoff, and drainage.

24. State Water Resources Control Board Resolution 68-16 ("Statement of Policy with Respect to Maintaining High Quality of Waters in California") (Resolution 68-16) requires that the Board maintain the high quality of waters of the State unless it has been demonstrated that any change will be consistent with

maximum benefit to the people of the State, will not unreasonably affect present and anticipated beneficial uses of such water, and will not result in water quality less than that prescribed in the policies. Any activity which produces or may produce waste must be required to meet waste discharge requirements which will result in the best practicable treatment or control (BPTC) of the discharge necessary to assure that a pollution or nuisance will not occur and that the highest water quality consistent with maximum benefit to the people of the State will be maintained. This Order is consistent with Resolution 68-16. It does not authorize degradation of waters of the State. It prohibits the discharge of waste to surface waters from the production area; it prohibits the discharge of waste to surface waters from the land application area; and it prohibits degradation of surface and groundwater. This Order requires the Discharger to meet requirements that constitute best practicable treatment or control. Groundwater monitoring will be conducted at the facility. This Order requires the Discharger to meet waste discharge and land application specifications, monitoring and reporting requirements, and other provisions.

25. This Order does not authorize violation of any federal, state, or local law or regulation. The requirements prescribed herein do not authorize the commission of any act causing injury to the property of another, nor protect the Discharger from his liabilities under federal, state, or local law.

26. As stated in California Water Code Section 13263(g), the discharge of waste into waters of the State is a privilege, not a right, and this Order does not create a vested right to continue the discharge of waste. Failure to prevent conditions that create or threaten to create pollution or nuisance will be sufficient reason to modify, revoke, or enforce this Order, as well as prohibit further discharge.

27. If not controlled or retained, surface water drainage from the area flows into Moore Creek or Sour Grass Creek. Both of these creeks are tributary to the Sacramento River. Beneficial uses of the Sacramento River are: municipal, industrial supply, agricultural supply, recreation, fresh water habitat, fish migration, fish spawning, and wildlife habitat.

28. Beneficial uses of groundwater in the surrounding area are domestic, municipal, industrial, and agricultural supply.

29. The Board adopted a Water Quality Control Plan for the Sacramento and San Joaquin River Basins (4th Ed. Revised October 2007) (Basin Plan) that designates beneficial uses, establishes water quality objectives, and contains implementation programs and policies to achieve those objectives for all waters addressed through the Plan. These requirements are consistent with the Basin Plan.

30. These requirements are consistent with Title 27, Division 2, Chapter 7, Subchapter 2, California Code of Regulations, regulating confined animal facilities.

31. On **26 February 20099**, the Board notified the discharger and interested parties of its intent to issue Waste Discharge Requirements for this discharge and has provided them with a copy of the proposed Order and an opportunity to submit written comments.

32. After considering all comments pertaining to this Order during a public hearing on **24 April 2009** this Order was found consistent with the above findings.

IT IS HEREBY ORDERED that Else Sewald, Gilbert Alston, and John Alston, dba Alston Farms Dairy No. 2, its owners, tenants, agents, successors, and assigns, pursuant to California Water Code Sections 13260, 13263, and 13267 and in order to meet the provisions contained in Division 7 of the California Water Code and regulations and policies adopted thereunder shall comply with the following;

A. Prohibitions

1. The discharge of waste other than as defined in Finding 23 above or from septic tanks, or of hazardous waste, as defined in the California Water Code Section 13173 and Title 23 CCR Section 2521 (a), respectively, is prohibited.

2. The direct or indirect discharge of waste and/or storm water from the production area to surface waters is prohibited.

3. The discharge of wastewater to surface waters from a land application area is prohibited. Irrigation supply water that comes into contact or is blended with waste or wastewater shall be considered wastewater under this Prohibition.

4. The discharge of storm water to surface water from a land application area where manure or wastewater has been applied is prohibited unless the land application area has been managed consistent with a certified Nutrient Management Plan.

5. The disposal of waste not generated by on-site animal production activities is prohibited except where a Report of Waste Discharge for the disposal has been submitted to the Executive Officer and the Central Valley Water Board has issued or waived waste discharge requirements (WDRs).

6. The application of wastewater to a land application area before, during, or after a storm event that would result in runoff of the applied water is prohibited.

7. The discharge of waste from the facility to surface waters which causes or contributes to an exceedance of any applicable water quality objective in the

Basin Plan or any applicable state or federal water quality criteria, or a violation of any applicable state or federal policies or regulations is prohibited.

8. The collection, treatment, storage, discharge or disposal of waste from the facility that results in pollution or nuisance is prohibited.

9. The disposal of dead animals in any liquid manure or wastewater system is prohibited. The disposal of dead animals at the facility is prohibited except when federal, state or local officials declare a State of Emergency and where all other options for disposal have been pursued and failed and the onsite disposal complies with all state and local policies for disposal of dead animals.

10. All animals shall be prohibited from entering any surface water within the animal confinement area (Title 27 CCR Section 22561).

11. The application of waste to lands not owned, leased, or controlled by the Discharger without written permission from the landowner or in a manner not approved by the Executive Officer, is prohibited.

12. The land application of manure or wastewater to land application areas for other than nutrient recycling is prohibited.

13. The use of manure to construct containment structures or to repair, replace, improve, or raise existing containment structures is prohibited.

14. The direct discharge of wastewater into groundwater via backflow through water supply or irrigation supply wells is prohibited.

15. Storing waste in a wastewater retention system that does not meet the requirements described in Waste Discharge Specification B.3 is prohibited after 1 January 2010.

16. The operation of the facility without a wastewater storage lagoon meeting the requirements of this Order is prohibited after 1 January 2010.

B. Specifications

Waste Discharge Specifications

1. 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, (2) contamination or pollution of surface water or groundwater, (3) a condition of nuisance, (4) exceedance of water quality objectives, or (5) unreasonably

affect beneficial uses (as defined by the California Water Code Section 13050).

2. The wastewater storage lagoon at the facility shall be operated and maintained to be protective of water quality. If at any time the design, construction, operation, and/or maintenance of the lagoons and/or ponds is not protective of water quality, the Discharger shall notify the Board and propose modifications in accordance with Required Reports and Notices F.1.b.

3. Prior to the lining or replacement of the existing storage lagoon; construction of any new lagoon or settling pond; or in the event that the design, construction, operation and/or maintenance of the lagoons and/or ponds is not protective of water quality the Discharger shall submit a design for review and approval by the Executive Officer. The design shall conform to either of the options described below:

   i. Tier 1: A pond designed to consist of a double liner constructed with 60-mil high density polyethylene or material of equivalent durability with a leachate collection and removal system (constructed in accordance with Section 20340 of Title 27) between the two liners will be considered to be consistent with Resolution 68-16. Review for ponds designed to this standard will be conducted in less than 30 days of receipt of a complete design plan package submitted to the Board.

   b. Tier 2: A pond designed in accordance with California Natural Resource Conservation Service (NRCS) Conservation Practice Standard 313 or equivalent and which the Discharger must demonstrate through submittal of technical reports that the alternative design is protective of groundwater quality as required in Specification B.4 below.

4. Prior to commencement of construction described in Specification B.3, Discharger shall submit a design report for review and approval by the Executive Officer prepared by, or under the direct supervision of, and certified by, a Civil Engineer who is registered pursuant to California law or other person as may be permitted under the provisions of the California Business and Professions Code to assume responsible charge of such work. The design report shall include the following:

   a. Design calculations demonstrating that adequate containment will be achieved.

   b. Details on the liner and leachate collection and removal system (if appropriate) materials,

c. A schedule for construction and certification of completion,

d. A construction quality assurance plan describing testing and observations needed to document construction of the pond in accordance with the design and Sections 20323 and 20324 of Title 27,

e. An operations and maintenance plan for the pond, and

f. Unless waived by the Executive Officer, a technical report and groundwater model that demonstrates the proposed pond is in compliance with the groundwater limitations in this Order, including calculations that demonstrate the amount and quality of seepage from the proposed pond and its effect on water quality.

5. Prior to the placement of waste in any enlarged existing settling, storage, or retention pond or any such newly constructed pond, the Discharger shall submit a post construction report prepared by, or under the direct supervision of, and certified by, a Civil Engineer who is registered pursuant to California law or other person as may be permitted under the provisions of the California Business and Professions Code to assume responsible charge of such work. Waste shall not be placed into the pond until the Executive Officer notifies the Discharger in writing that the post construction report is acceptable. The post construction report shall include: (1) verification that the pond meets the requirements of this Order including documentation of the results of the construction quality assurance testing and observations, (2) certification that the pond was constructed as designed and (3) as-built diagrams.

6. The facility shall have lagoons and conveyance structures that are designed, constructed, operated, and maintained to retain all facility wastewater generated during the storage period (maximum period of time anticipated between land application of wastewater), together with all precipitation on and drainage through manured areas, up to and including during a 25-year, 24-hour storm.

7. The level of waste in the storage lagoon at the facility shall be kept a minimum of two (2) feet from the top of the pond. Less freeboard may be approved by the Executive Officer when a Civil Engineer who is registered pursuant to California law, or other person as may be permitted under the provisions of the California Business and Professions Code to assume responsible charge of such work, demonstrates that the structural integrity of the pond will be maintained with the proposed freeboard.

8. The wastewater storage lagoon at the facility shall be managed and maintained to prevent breeding of mosquitoes and other vectors. In particular,

a. Small coves and irregularities shall not be allowed around the perimeter of the water surface;

b. Weeds shall be minimized through control of water depth, harvesting, or other appropriate method;

c. Dead algae, vegetation, and debris shall not accumulate on the water surface; and

d. Management shall be in accordance with the requirements of the Mosquito Abatement District.

9. All precipitation and surface drainage from outside of the facility (i.e., “run on”) shall be diverted away from any manured areas unless such drainage is fully contained (Title 27 Section 22562(b)).

10. Ponds and lagoons designated to contain the 25-year, 24-hour storm event runoff must have a depth marker that clearly indicates the minimum capacity necessary to contain the runoff and direct precipitation from a 25-year, 24-hour storm event.

11. All roofs, buildings, and non-manured areas located in the production area at the facility shall be constructed or otherwise designed so that clean rainwater, including roof drainage, is diverted away from manured areas, including corrals and waste containment facilities, unless such drainage is fully contained in the wastewater retention system (Title 27 Section 22562(b)).

12. The milk parlor, animal confinement area (including corrals), 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 and to minimize standing water and the infiltration of water into the underlying soils. The Discharger shall, at a minimum of once per year, backfill any slope loss with compacted, non-manured material to maintain pre-existing slopes.

13. 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, conveyance of wastewater from the storage lagoon to the land application area, irrigation return water management, or temporary control of accidental spills.

Land Application Specifications

14. Land application of all waste from the facility shall be conducted in accordance with a field-by-field Nutrient Management Plan which shall be

submitted no later than **1 July 2009.** The Discharger shall submit and follow a certified Nutrient Management Plan that meets the requirements in Attachment C. A Nutrient Management Plan that meets the requirements in Attachment C is consistent with Resolution No. 68-16. Land application of wastes at the facility shall not pollute underlying groundwater or cause the underlying groundwater to contain any waste constituent, degradation product, or any constituent of soil mobilized by the interactions between applied waste and soil or soil biota, to exceed the groundwater prohibitions and specifications set forth in this Order. The Nutrient Management Plan shall be modified within 90 days if monitoring shows that discharge from the land application is degrading ground water or fails to comply with surface water quality objectives or criteria. The modifications must be designed to bring the facility into compliance with this Order.

15. The Discharger shall have a written agreement with each third party that receives wastewater from the Discharger for its own use. Each written agreement shall be included in the Discharger's Nutrient Management Plan and Annual Report. The written agreement(s) shall be effective until the third party is covered under waste discharge requirements or a waiver of waste discharge requirements that are adopted by the Central Valley Water Board and that are specific to the application of the Discharger's wastewater to land under the third party's control. The written agreement shall:

    a. Clearly identify:

        i. The Discharger and dairy facility from which the wastewater originates,

        ii. The third party that will control the application of the wastewater to land application areas,

        iii. The Assessor's Parcel Number(s) and the acreage(s) of the land application areas where the wastewater will be applied, and

        iv. The types of crops to be fertilized with the wastewater.

    b. Include an agreement by the third party to:

        i. Use the wastewater at agronomic rates appropriate for the crops to be grown, and

        ii. Prevent the runoff to surface waters of wastewater, storm water or irrigation supply water that is blended with wastewater.

    c. Include a certification statement, as specified in General Reporting

Requirements in C.7 of the Standard Provision and Reporting Requirements (which is attached to and made part of this Order), which is signed by both the Discharger and third party.

16. 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.

17. Land application areas that receive dry manure shall be managed through implementation of erosion control measures to minimize erosion and must be consistent with a certified Nutrient Management Plan.

18. All wastewater applied to land application areas must infiltrate completely within 72 hours after application.

19. Wastewater shall not be applied to land application areas during periods when the soil is at or above field moisture capacity unless consistent with a certified Nutrient Management Plan.

20. Manure and wastewater shall not be applied closer than 100 feet to any down gradient surface waters, open tile line intake structures, sinkholes, or other conduits to surface waters, unless a 35-foot wide vegetated buffer or physical barrier is substituted for the 100-foot setback or alternative conservation practices or field-specific conditions will provide pollutant reductions equivalent or better than the reductions achieved by the 100-foot setback. Because some of the domestic and agricultural wells at the facility are currently within 100 feet of locations where manure and/or wastewater is land applied, the Discharger will evaluate each of the wells to determine what type of preventative measures are necessary for each well to avoid contamination from manure and/or wastewater. The evaluation and report shall be prepared by, or under the direct supervision of, and certified by, a Civil Engineer who is registered pursuant to California law or other person as may be permitted under the provisions of the California Business and Professions Code to assume responsible charge of such work. The results of this evaluation shall be included as part of the certified Nutrient Management Plan, which is due **1 July 2009**. Any preventive or corrective measures outlined in the final report shall be made by **1 October 2009**.

21. 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.

22. Waste and land application areas shall be managed to prevent contamination of crops grown for human consumption. The term “crops grown for human consumption” refers only to crops that will not undergo subsequent

processing which adequately removes potential microbial danger to consumers.

C. Interim Groundwater Limitations

1. These interim groundwater limitations are to be applied at the shallowest groundwater beneath the facility. These limitations are based on current limited information on groundwater quality at the site, but they may or may not reflect the appropriate final groundwater limitations for this site. Final limitations will be established following the collection and analysis of 8 quarterly samples from the four groundwater monitoring wells. Samples shall be analyzed for the constituents outlined in the Monitoring and Reporting Program Order No. R5-2009-0045. Release of waste constituents from any treatment, storage, or disposal component associated with the facility shall not cause or contribute to groundwater:

    a. Containing constituent concentrations in excess of the concentrations specified below or background quality:

        i. Nitrate as nitrogen of 2.1 mg/L (background);

        ii. Electrical Conductivity of 500 umhos/cm (background);

    b. Containing taste or odor-producing constituents, toxic substances, or any other constituents, in concentrations that cause nuisance or adversely affect beneficial uses.

D. Provisions

1. The Discharger shall comply with the *Standard Provisions and Reporting Requirements for Individual Waste Discharge Requirements for Dairies in the Sacramento and San Joaquin River Basins* (Standard Provisions) dated **August 2007**, which is attached to and made part of this Order.

2. The Discharger shall comply with all applicable provisions of the California Water Code, Title 27 CCR, and the applicable Water Quality Control Plans.

3. The Discharger shall comply with the attached Monitoring and Reporting Program No. R5-2009-0045 which is part of this Order, and future revisions thereto as specified by the Board or the Executive Officer.

4. The number of animals shall not be increased above the maximum herd size stated in Finding No. 4 until the Discharger submits a new Report of Waste Discharge (ROWD) and the Regional Board has issued new Waste Discharge Requirements. The ROWD shall clearly demonstrate that the increase in animals will not constitute a threat to water quality.

5. The Discharger shall submit a complete Report of Waste Discharge in accordance with the California Water Code Section 13260 at least 140 days

prior to any material change or proposed change in the character, location, or volume of the discharge, including any expansion of the facility or development of any treatment technology, or construction of an anaerobic digester.

6. In the event of any change in control or ownership of land or waste discharge facilities presently owned or controlled by the Discharger, the Discharger shall notify the succeeding owner or operator of the existence of this Order by letter, a copy of which shall be forwarded to the Board.

7. The Board will review this Order periodically and may revise requirements when necessary.

8. If site conditions threaten to violate Specification B.1 or Prohibition A.2, the Discharger shall take immediate action to preclude the violation, documenting the condition and all corrective actions. Such actions shall be summarized in the annual monitoring report. Alterations of the Waste Management Plan (see Required Reports and Notices F1.b) for the production area to avoid a recurrence shall be submitted as a modification to the Waste Management Plan.

9. If a discharge of waste creates, or threatens to create, significant objectionable odors or nuisance odor and vector conditions, enforcement and/or revocation of coverage under this Order may result.

10. The Discharger shall comply with all requirements of this Order and all terms, conditions, and limitations specified by the Executive Officer.

11. Any instance of noncompliance with this Order constitutes a violation of the California Water Code and its regulations. Such noncompliance is grounds for enforcement action, and/or termination of the authorization to discharge.

12. The Discharger must maintain coverage under this Order or a subsequent revision to this Order until all manure, wastewater, and animal waste impacted soil, including soil within the retention pond(s), is disposed of or utilized in a manner which does not pose a threat to surface water or groundwater quality or create a condition of nuisance. At least 90 days before seeking to terminate coverage under this Order, the Discharger must submit to the Executive Officer a closure plan that ensures protection of surface water and groundwater. No more than 30 days after completion of site closure, the Discharger shall submit a closure report which documents that all closure activities were completed as proposed and approved in the closure plan. Coverage under this Order will not be terminated until cleanup is complete.

13. This Order shall become effective upon adoption by the Board.

14. The Discharger must comply with all conditions of this Order, including timely submittal of technical and monitoring reports as directed by the Executive Officer. Accordingly, the Discharger shall submit to the Board on or before each report due date the specified document or, if an action is specified, a written report detailing evidence of compliance with the task. If noncompliance is being reported, the reasons for such noncompliance shall be stated, plus an estimate of the date when the Discharger will be in compliance. The Discharger shall notify the Central Valley Water Board by letter when it returns to compliance with the time schedule. Violations may result in enforcement action, including Board or court orders requiring corrective action or imposing civil monetary liability.

15. Technical reports required by this Order must be certified by an appropriately licensed professional as required in this Order and its Attachments. If the Executive Officer provides comments on any technical report, the Discharger will be required to address those comments.

16. The Discharger shall maintain a copy of this Order at the site so as to be available at all times to site-operating personnel. The Discharger, landowner and his/her designee shall be familiar with the content of this Order.

E. Permit Reopening, Revision, Revocation, and Re-Issuance

1. If more stringent applicable water quality standards are adopted in the Basin Plan, the Board may revise and modify this Order in accordance with such standards.

2. This Order may be reopened to address any changes in state plans, policies, or regulations that would affect the water quality requirements for the discharges and as authorized by state law.

F. Required Reports and Notices

I. Discharger must prepare and submit the following pursuant to Water Code Section 13267 in accordance with this Order:

   a. The Discharger shall submit Annual Reports, Groundwater Reports, and Storm Water Reports as described in the Monitoring and Reporting Program.

   b. **Waste Management Plan:** The Discharger has submitted a Waste Management Plan that describes and evaluates the facility's design, construction, operation, and maintenance for flood protection and waste containment. If, in the course of operation the Discharger or the Board determines that the design, construction, operation, and/or maintenance of

the dairy facility is not protective of water quality, the Discharger must notify the Board and propose modifications and a schedule for modifications that will bring the dairy facility into compliance. Certification that the modifications have been implemented shall be submitted to the Executive Officer within 30 days of completion of the modifications.

c. **Nutrient Management Plan:** By **1 July 2009**, the Discharger will provide a field-by-field Nutrient Management Plan to the Regional Board. The Plan must be maintained at the dairy, submitted to the Executive Officer upon request and must provide for protection of both surface water and groundwater. The Nutrient Management Plan shall be updated as necessary or if the Executive Officer requests that additional information be included. Groundwater monitoring will be used to determine if implementation of the Nutrient Management Plan is protective of groundwater quality.

d. **Wastewater Lagoon Design Report:** By **1 July 2009**, the Discharger shall submit a design report for either the installation of a new lined wastewater lagoon or the lining of the existing lagoon. The design report shall meet the requirements of this Order as specified in Waste Discharge Specifications B.3 and B.4.

e. **Salinity Report**: By **1 July 2009** the Discharger shall submit a report that identifies sources of salt in waste generated at the dairy, evaluates measures that can be taken to minimize salt in the dairy waste, and includes a commitment to implement measures identified to minimize salt in the dairy waste. If a third party (for example, the California Dairy Quality Assurance Program) produces an industry-wide report that is acceptable to the Executive Officer, the Discharger may refer to that report rather than generating his own report, but must certify that the appropriate measures will be implemented to reduce salt in his dairy waste.

f. **Wastewater Lagoon Post Construction Report:** By **31 December 2009**, the Discharger shall submit a post construction report for the newly installed wastewater lagoon. The post construction report shall meet the requirements of this Order as specified in Waste Discharge Specification B.5.

g. **Monitoring Well Installation Completion Report:** By **1 June 2010**, the Discharger shall submit a completion report for the four monitoring wells installed, and certification that the first round of ground water sampling for these wells has been completed. The Monitoring Well Installation Completion Report shall meet the requirements of this Order as specified in Attachment D.

G. Reporting Provisions

1. All annual reports or information submitted to the Board shall be signed and certified in accordance with C.7 and C.8 of the Standard Provisions.

2. The Discharger shall submit all reports as specified in the attached Monitoring and Reporting Program No. R5-2009-0045.

3. The Discharger shall furnish, within a reasonable time, any information the Board may request, to determine whether cause exists for modifying, revoking, and reissuing, or terminating this Order. The Discharger shall, upon request, also furnish to the Board copies of records required to be kept by this Order.

4. All reports prepared and submitted to the Executive Officer in accordance with the terms of this Order shall be available for public inspection at the offices of the Board.

H. Record Keeping

The Discharger shall create, maintain for five years, and make available to the Board upon request by the Executive Officer any reports or records required by this Order including those required under Monitoring and Reporting Program No. R5-2009-0045.

I, PAMELA C. CREEDON, 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 24 April 2009.

_____

PAMELA C. CREEDON, Executive Officer

Pump
Tailwater
Milking Parlor Washwater
Surface Water Flow Direction
Area Draining To Tailwater Pond
Pond
Tailwater Pond
Abandoned Residence
Freestall Barn
Hay Storage
Milking Complex
Abandoned Natural Gas Facility
Old Dilapidated Barn
Residence
Shop
Project Boundary

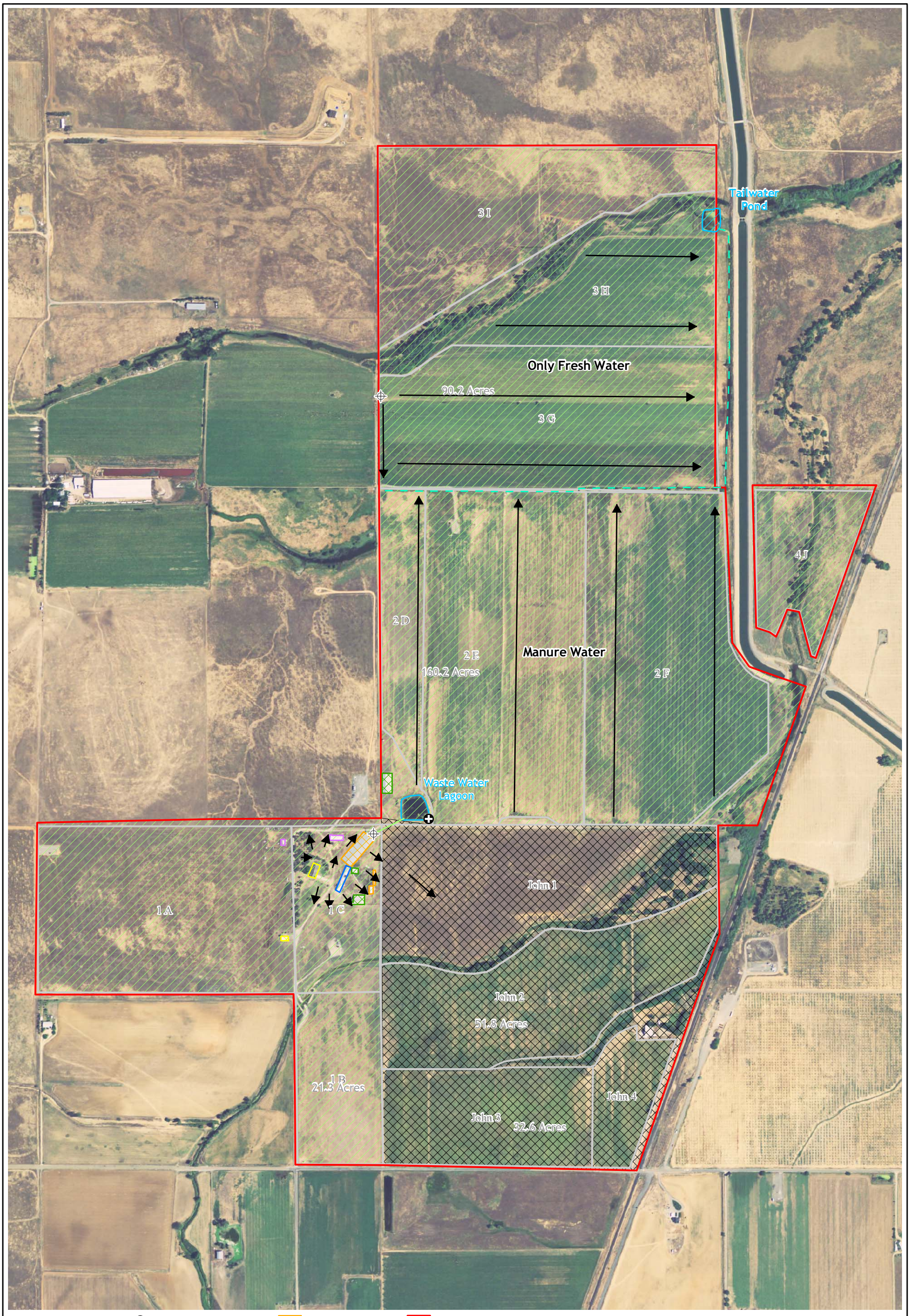
0 85 170 340 Feet

VESTRA

SOURCE: NAIP 2005

Attachment B2: Alston Farms Dairy #2
Production Area Map
22954 Christian Rd
Orland, Tehama County
Sections 23, 26, and 27
Township 23N, Range 03W

P:\GIS\70824\Figures\70824_Figure4B_CorralArea_SitePlan.mxd



Pump
Well
Flow Direction
Milking Parlor Washwater
Tailwater
Abandoned Residence
Freestall Barn
Hay Storage
Milking Complex
Old Dilapidated Barn
Residence
Shop
Project Boundary
Field Boundary
Leased from Elsie Sewald
Original Alston Dairy Property (John Alston)

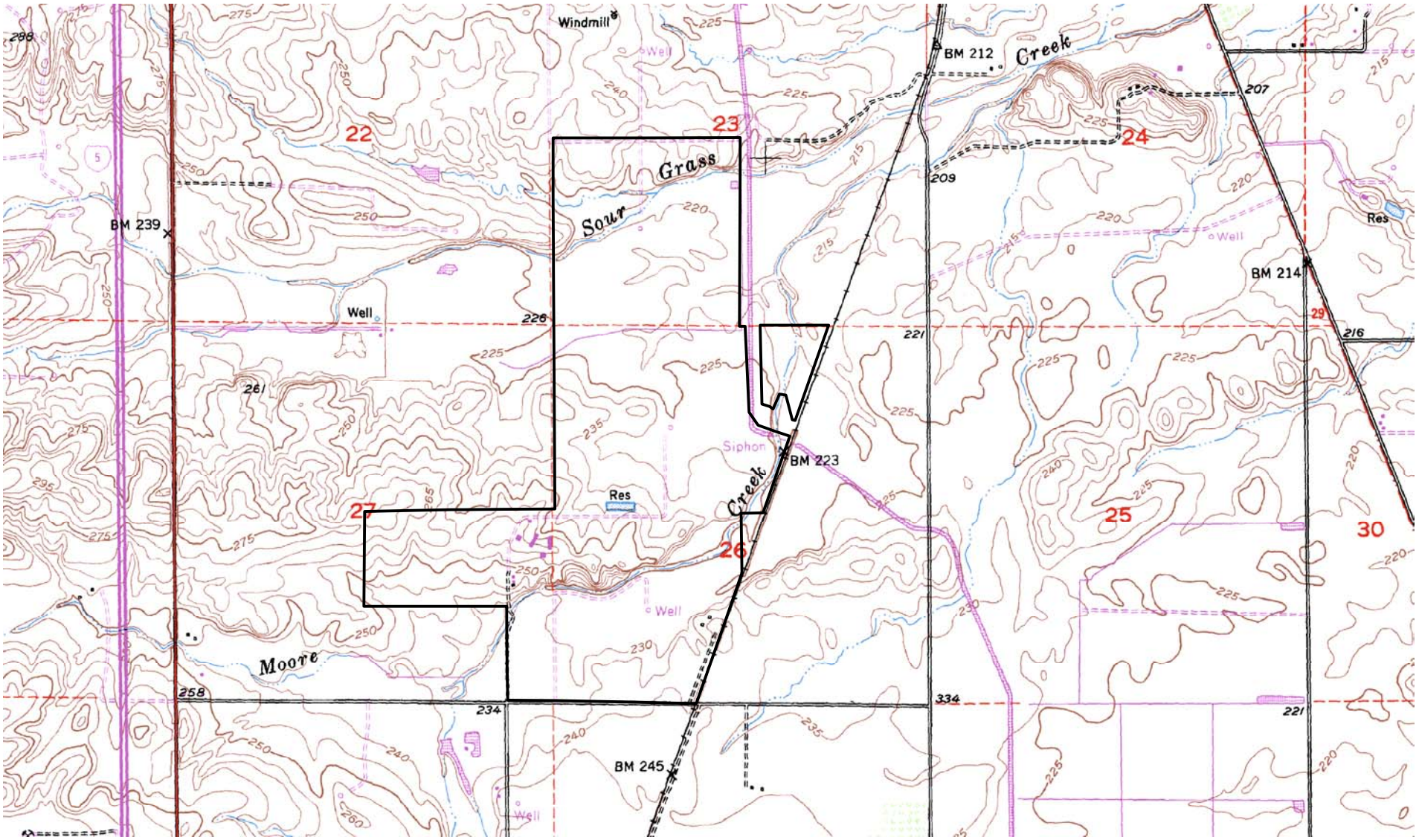
0 350 700 1,400 Feet

VESTRA

SOURCE: NAIP 2005

Attachment B1:
Alston Farms Dairy #2 Site Map
22954 Christian Rd
Orland, Tehama County
Sections 23, 26, and 27
Township 23N, Range 03W

P:\GIS\70824\Figures\70824_Figure4A_SitePlan.mxd



Project Boundary

VESTRA

SOURCE: USGS 7.5' TOPOGRAPHIC MAP, KIRKWOOD QUADRANGLE

0 1,000 2,000 4,000 Feet

Attachment A: Alston Farms Dairy #2
Topographic Map
22954 Christian Rd
Orland, Tehama County
Sections 23, 26, and 27
Township 23N, Range 03W

P:\GIS\70824\Figures\70824_Figure2_USGS-Topo.mxd

ATTACHMENT C

Nutrient Management Plan Provisions
And
Technical Standards For Nutrient Management

Individual Waste Discharge Requirements Order No. R5-2009-0045
For
Elsie Sewald, Gilbert Alston, and John Alston
DBA Alston Dairy Farms Dairy No. 2, Tehama County

Owners and operators of milk cow dairies (Dischargers) who apply manure, bedding, or wastewater to land for nutrient recycling are required to develop and implement management practices that control nutrient losses and that are described in a Nutrient Management Plan (NMP). The purpose of the NMP is to budget and manage the nutrients applied to the land application area(s) considering all sources of nutrients, crop requirements, soil types, climate, and local conditions in order to prevent adverse impacts to surface water and groundwater quality. The NMP must take the site-specific conditions into consideration in identifying steps that will minimize nutrient movement through surface runoff or leaching past the root zone.

The Discharger will prepare a NMP by 1 July 2009 which contains the elements listed below under Contents of a Nutrient Management Plan and is in conformance with the applicable Technical Standards for Nutrient Management (Technical Standards), also listed below. These provisions in the NMP must be updated as necessary in response to changing conditions, monitoring results and other factors. Implementation of the Nutrient Management Plan meets the requirements of Resolution No. 68-16.

The NMP and any revisions to the NMP must be developed and signed by a specialist who is certified in developing nutrient management plans. A certified specialist is a Professional Soil Scientist, Professional Agronomist, or Crop Advisor certified by the American Society of Agronomy or a Technical Service Provider certified in nutrient management in California by the Natural Resources Conservation Service (NRCS). The Executive Officer may approve alternative proposed specialists. The NMP will only be considered certified if it is prepared and signed by one of these parties.

The NMP is linked to other sections of the WDRs. The Monitoring and Reporting Program specifies minimum amounts of monitoring that must be conducted at the dairy. As indicated below, this information must be used to make management decisions related to nutrient management and to determine if revisions to the NMP are needed. Likewise, the timing and amounts of wastewater applications to crops must be known to correctly calculate the amount of storage needed in holding ponds.

Wastes and land application areas shall be managed to prevent contamination of crops grown for human consumption. The term "crops grown for human consumption" refers only to crops that will not undergo subsequent processing which adequately removes potential microbial danger to consumers.

Contents of a Nutrient Management Plan

Dairy Facility Assessment
The NMP will include the annual Dairy Facility Assessments and the annual monitoring reports as required by Monitoring and Reporting Program No. R5-2009-0045. Copies of these assessments shall be maintained for 10 years.

The NMP identifies the name and address of the dairy, the dairy operator, and legal owner of the dairy property and contains all of the following elements to demonstrate that the Discharger can control nutrient losses that may impact surface water or groundwater quality and comply with the requirements of the Order and the Technical Standards for Nutrient Management (Technical Standards). <u>These elements shall be updated as conditions change at the facility:</u>

I. Land Application Area Information

A. Identification of each land application area (under the Discharger's control, whether it is owned, rented, or leased, to which manure or wastewater from the production area is or may be applied for nutrient recycling)on a single published base map (topographic map or aerial photo) at an appropriate scale which includes:

1. A field identification system (Assessor's Parcel Number); land application area by name or number; total acreage of each land application area; crops grown; indication if each land application area is owned, rented, or leased by the Discharger; indication what type of waste is applied (solid manure only, wastewater only, or both solid manure and wastewater); drainage flow direction in each field, nearby surface waters, and storm water discharge points; tailwater and storm water drainage controls; subsurface (tile) drainage systems (including discharge points and lateral extent) if installed; irrigation supply wells and groundwater monitoring wells; sampling locations for discharges of storm water to surface water from the field; and

2. Wastewater conveyance structures, discharge points and discharge mixing points with irrigation water supplies; pumping facilities; flow meter locations; drainage ditches and canals,

culverts, drainage controls (berms, levees, etc.), and drainage easements.

B. Copies of written agreements with third parties that receive wastewater for their own use from the Discharger's dairy.

C. Identification of each field that is both under the control of the Discharger and within five miles of the dairy where neither wastewater nor manure is applied. Each field shall be identified on a single published base map at an appropriate scale by the following**:**

1. Assessor's Parcel Number.

2. Total acreage.

3. Information on who owns or leases the field.

Note: The NMP must be updated and the Regional Board notified in writing before waste is applied to the lands identified this section.

II. Sampling and Analysis (see Technical Standard I below)

Identify the sampling methods, sampling frequency, and analyses to be conducted for soil, manure, wastewater, irrigation water, and plant tissue analysis (Technical Standard I below).

III. Nutrient Budget (see Technical Standard V below)

The NMP contains a nutrient budget for each land application area. The nutrient budget establishes planned rates of nutrient applications for each crop based on soil test results, manure and wastewater analyses, irrigation water analyses, crop nutrient requirements and patterns, seasonal and climatic conditions, the use and timing of irrigation water, and the nutrient application restrictions listed in Technical Standards V.A through V.D below. The Nutrient Budget includes the following:

A. The rate of application and the basis for the application rate of manure and wastewater for each crop in each land application area (also considering sources of nutrients other than manure or wastewater) to meet each crop's needs without exceeding the application rates specified in Technical Standard V.B below.

B. The timing of applications for each crop in each land application area and the basis for the timing (Technical Standard V.C below). The maximum period of time anticipated between land application events

(storage period) based on proper timing and compliance with Technical Standard V.C. below. .

C. The method of manure and wastewater application for each crop in each land application area (Technical Standard V.D below).

D. If phosphorus and/or potassium applications exceed the amount of these elements removed from the land application area in the harvested portion of the crop, the soil and crop tissue analyses shall be reviewed by an agronomist at least every five years. If this review determines that the buildup of phosphorus or potassium threatens to reduce the long-term productivity of the soil or the yield, quality or use of the crops grown, application rates will be adjusted downward to prevent or correct the problem.

IV. Setbacks, Buffers, and Other Alternatives to Protect Surface Water (see Technical Standard VII below)

A. Identify all potential surface waters or conduits to surface water that are within 100 feet of any land application area.

B. For each land application area that is within 100 feet of a surface water or a conduit to surface water, identify the setback, vegetated buffer, or other alternative practice that will be implemented to protect surface water (Technical Standard VII below).

V. Field Risk Assessment (see Technical Standard VIII below)

Evaluate the effectiveness of management practices used to control the discharge of waste constituents from land application areas using the water quality monitoring results.

VI. Record-Keeping (see Technical Standard IX below)

Identify the records that will be maintained for each land application area identified in I.A above.

VII. Nutrient Management Plan Review (see Technical Standard X below)

A. Identify the schedule for review and revisions to the NMP.

B. Identify the person who will conduct the NMP review and revisions.

Technical Standards for Nutrient Management

The Discharger shall comply with the following Technical Standards for Nutrient Management in the implementation of the Nutrient Management Plan (NMP).

I. Sampling and Analysis

Soil, manure, wastewater, irrigation water, and plant tissue shall be monitored, sampled, and analyzed as required in Monitoring and Reporting Program No. R5-2009-0045, and any future revisions thereto. The results of these analyses shall be used during the implementation of the NMP.

II. Crop Requirements

A. Realistic yield goals for each crop in each land application area shall be established. For new crops or varieties, industry yield recommendations may be used until documented yield information is available.

B. Each crop's nutrient requirements for nitrogen, phosphorus, and potassium shall be determined based on recommendations from the University of California, *Western Fertilizer Handbook* (9th Edition), or from historic crop nutrient removal.

III. Available Nutrients

A. All sources of nutrients (nitrogen, phosphorus, and potassium) available for each crop in each land application area shall be identified prior to land applications. Potential nutrient sources include, but are not limited to, manure, wastewater, irrigation water, commercial fertilizers, soil, and previous crops.

B. Nutrient values of soil, manure, wastewater, and irrigation water shall be determined based on laboratory analysis. "Book values" for manure and wastewater may be used for planning of waste applications during the first two years during initial implementation of the NMP if necessary. Acceptable book values are those values recognized by American Society of Agricultural and Biological Engineers (ASABE), the NRCS, and/or the University of California that accurately estimate the nutrient content of the material. The nutrient content of commercial fertilizers shall be derived from California Department of Food and Agriculture published values.

C. Nutrient credit from previous legume crops shall be determined by methods acceptable to the University of California Cooperative Extension, the Natural Resources Conservation Service (NRCS), or a specialist certified in developing nutrient management plans.

IV. Overall Nutrient Balance

If the NMP shows that the nutrients generated by the dairy exceed the amount needed for crop production in the land application area, the Discharger must implement management practices (such as offsite removal of the excess nutrients, treatment, or storage) that will prevent impacts to surface water or groundwater quality due to excess nutrients.

V. Nutrient Budget

The NMP's nutrient budget includes planned rates of nutrient applications for each crop that do not exceed the crop's requirements for total nitrogen considering the stage of crop growth and that also considers all nutrient sources, climatic conditions, the irrigation schedule, and the application limitations in the Order, and A through D below.

A. General Standards for Nutrient Applications

1. Plans for nutrient management shall specify the form, source, amount, timing, and method of application of nutrients on each land application area to minimize nitrogen and/or phosphorus movement to surface and/or ground waters to the extent necessary to meet the provisions of the Order.

2. Where crop material is not removed from the land application area, waste applications are not allowed. For example, if a pasture is not grazed or mowed (and cuttings removed from the land application area), waste shall not be applied to the pasture.

3. Manure and/or wastewater will be applied to the land application area for use by the first crop covered by the NMP only to the extent that soil tests indicate a need for nitrogen application.

4. Supplementary commercial fertilizer(s) and/or soil amendments may be added when the application of nutrients contained in manure and/or wastewater alone is not sufficient to meet the crop needs, as long as these applications do not exceed provisions of the Order.

5. Nutrient applications to a crop shall not be made prior to the harvest of the previous crop except where the reason for such applications is provided in the NMP.

6. Water applications shall not exceed the amount needed for efficient crop production.

7. Nutrients shall be applied in such a manner as not to degrade the soil's structure, chemical properties, or biological condition.

B. Nutrient Application Rates

1. General

a. Planned rates of nutrient application shall be determined based on soil test results, crop tissue test results, nutrient credits, manure and wastewater analysis, crop requirements and growth stage, seasonal and climatic conditions, and use and timing of irrigation water. Actual applications of nitrogen to any crop shall be limited to the amounts specified below.

b. Nutrient application rates shall not attempt to approach a site's maximum ability to contain one or more nutrients through soil adsorption. Excess applications or applications that cause soil imbalances should be avoided. Excess manure nutrients generated by the Discharger must be handled by export to a good steward of the manure, or the development of alternative uses.

2. Nitrogen

a. Total nitrogen applications to a land application area prior to and during the growing of a crop will be based on pre-plant or pre-side dress soil analysis to establish residual nitrogen remaining in the field from the previous crop to establish early season nitrogen applications. Pre-plant or side dress nitrogen applications will not exceed the estimated total crop use as established by the nutrient management plan. Except as allowed below, application rates shall not result in total nitrogen applied to the land application areas exceeding 1.4 times the nitrogen that will be removed from the field in the harvested portion of the crop. At no time will application rates result in total nitrogen applied to the land application areas exceeding 1.65 times the nitrogen that will be removed

from the field in the harvested portion of the crop. Additional applications of nitrogen, up to the 1.65 figure, are allowable if the following conditions are met:

i. Plant tissue testing has been conducted and it indicates that additional nitrogen is required to obtain a crop yield typical for the soils and other local conditions;

ii. The amount of additional nitrogen applied is based on the plant tissue testing and is consistent with University of California Cooperative Extension written guidelines or written recommendations from a professional agronomist;

iii. The form, timing, and method of application facilitates timely nitrogen availability to the crop; and

iv. Records are maintained documenting the need for additional applications.

3. Phosphorus and Potassium

Phosphorus and potassium may be applied in excess of crop uptake rates. If, however, monitoring indicates that levels of these elements are causing adverse impacts, corrective action must be taken. Cessation of applications may be necessary until crop uptake and harvest has reduced the concentration in the soil.

C. Nutrient Application Timing

1. Wastewater application is not the same as irrigation. Wastewater application scheduling should be based on the nutrient needs of the crop, the daily water use of the crop, the water holding capacity of the soil, and the lower limit of soil moisture for each crop and soil.

2. Wastewater shall not be applied when soils are saturated. During the rainy season rainfall can exceed crop water demand. However, the application of wastewater is allowable if tests show that there is an agronomic need and current conditions indicate that threat of nitrate leaching is minimal.

3. The timing of nutrient application must correspond as closely as possible with plant nutrient uptake characteristics, while

considering cropping system limitations, weather and climatic conditions, and land application area accessibility.

4. Nutrient applications for spring-seeded crops shall be timed to avoid surface runoff and leaching by winter rainfall.

5. Except for orchards and vineyards, nutrients shall not be applied during periods when a crop is dormant.

D. Nutrient Application Methods

The Discharger shall apply nutrient materials uniformly to application areas or as prescribed by precision agricultural techniques.

VI. Wastewater Management on Land Application Areas

Control of water and wastewater applications and runoff is a part of proper nutrient management since water transports nutrients, salts, and other constituents from cropland to groundwater and surface water. The Discharger shall comply with the provisions of the Order which place requirements on applications of manure and wastewater to, and runoff from, cropland.

VII. Setbacks and Vegetated Buffer

A. A setback is a specified distance from surface waters or potential conduits to surface waters where manure and wastewater may not be land applied, but where crops may continue to be grown.

B. A vegetated buffer is a narrow, permanent strip of dense perennial vegetation where no crops are grown and which is established parallel to the contours of and perpendicular to the dominant slope of the land application area for the purposes of slowing water runoff, enhancing water infiltration, trapping pollutants bound to sediment, and minimizing the risk of any potential nutrients or pollutants from leaving the land application area and reaching surface waters.

C. Practices and management activities for vegetated buffers include the following:

1. Removal of vegetation in vegetated buffers will be in accordance with site production limitations, rate of plant growth, and the physiological needs of the plants.

2. Do not mow below the recommended height for the plant species.

3. Maintain adequate ground cover and plant density to maintain or improve filtering capacity of the vegetation

4. Maintain adequate ground cover, litter, and canopy to maintain or improve infiltration and soil condition.

5. Periodic rest from mechanical harvesting may be needed to maintain or restore the desired plant community following episodic events such as drought.

6. When weeds are a significant problem, implement pest management to protect the desired plant communities.

7. Prevent channels from forming.

VIII. Field Risk Assessment

The results of the Storm Water Monitoring for each land application area required by Monitoring and Reporting Program No. R5-2009-0045 shall be used by the Discharger to assess the movement of nitrogen and phosphorus from each land application area where manure and/or wastewater is applied. The Discharger will follow guidelines provided by the Regional Board in conducting these assessments.

IX. Record-Keeping

The Discharger shall maintain records for each land application area as required in the Record-Keeping Requirements of Monitoring and Reporting Program No. R5-2009-0045.

X. Nutrient Management Plan Review

A. The NMP shall be updated when discharges from any land application area exceed water quality objectives, a nutrient source has changed, site-specific information has become available to replace default values used in the overall nutrient balance or the nutrient budget, or nitrogen application rates in any land application area exceed the rates specified in Technical Standard V.B.

B. The NMP shall be updated prior to any anticipated changes that would affect the overall nutrient balance or the nutrient budget such as, but not limited to, a crop rotation change, changes in the available cropland, or the changes in the volume of wastewater generated.

C. The Discharger shall review the NMP at least once every five years and notify the Regional Board in the annual report of any proposed changes that would affect the NMP.

ATTACHMENT D

Monitoring Well Installation And Sampling Plan
And
Monitoring Well Installation Completion Report
For
Dairies with Individual Waste Discharge Requirements
In the Sacramento and San Joaquin River Basins
August 2007

A Monitoring Well Installation and Sampling Plan (MWISP) must be submitted by the Discharger prior to installation of groundwater monitoring wells. At a minimum, the MWISP must contain all of the information listed below. Wells may be installed after the Executive Officer notifies the Discharger in writing that the MWISP is acceptable. The Order also requires the Discharger to submit a Monitoring Well Installation Completion Report (MWICR) within 45 days after completion of any monitoring well. At a minimum, the MWICR must summarize the field activities, as described below. All plans and reports must be signed and stamped by a California Registered Geologist, Certified Engineering Geologist, or Professional Engineer with experience in hydrogeology.

General Requirements

1. The Discharger shall install sufficient monitoring wells to:

    a. Characterize groundwater flow direction and gradient beneath the site;

    b. Characterize natural background (unaffected by the Discharger or others) groundwater quality upgradient of the facility; and

    c. Characterize groundwater quality downgradient of the corrals, downgradient of the retention ponds, and downgradient of the land application areas.

2. It may be necessary to install more than one upgradient monitoring well (i.e., for the production area and the land application area). The Executive Officer may order more extensive monitoring based on site-specific conditions.

3. Prior to installation of additional monitoring wells, the Discharger shall submit to the Executive Officer a Monitoring Well Installation and Sampling Plan (MWISP) (see Attachment D) and schedule prepared under the direct supervision of, and certified by, a California registered civil engineer or a California registered geologist with experience in hydrogeology. Installation of monitoring wells shall not begin until the Executive Officer notifies the Discharger in writing that the MWISP is acceptable.

4. All monitoring wells shall be constructed in a manner that maintains the integrity of the monitoring well borehole and prevents the well from acting as a conduit for pollutant/contaminant transport. The sampling interval of each monitoring well shall be appropriately screened and fitted with an appropriate filter pack to enable collection of representative groundwater samples of the first encountered groundwater.

5. The construction and destruction of monitoring wells and supply wells shall be in accordance with the standards under *Water Wells* and *Monitoring Wells* in the *California Well Standards Bulletin 74-90 (June 1991)* and *Bulletin 74-81 (December 1981),* adopted by the Department of Water Resources (DWR). Should any county or local agency adopt more stringent standards than that adopted by the DWR, then these local standards shall supercede the Well Standard of DWR, and the Discharger shall comply with the more stringent standards.

6. The horizontal and vertical position of each monitoring well shall be determined by a registered land surveyor or other qualified professional. The horizontal position of each monitoring well shall be measured with one-foot lateral accuracy using the North American Datum 1983 (NAD83 datum). The vertical elevations of each monitoring well shall be referenced to the North American Vertical Datum 1988 (NAVD88 datum) to an absolute accuracy of at least 0.5 feet and a relative accuracy between monitoring wells of 0.01 feet.

7. Within 45 days after completion of any monitoring well, the Discharger shall submit to the Executive Officer a Monitoring Well Installation Completion Report (MWICR) (see Attachment D) prepared under the direct supervision of, and certified by, a California registered civil engineer or a California registered geologist with experience in hydrogeology.

8. Groundwater samples from monitoring wells shall be collected as specified in an approved Monitoring Well Installation and Sampling Plan.

Monitoring Well Installation and Sampling Plan

At a minimum, the MWISP must contain all of the information listed below.

A. General Information:

1. Topographic map showing any existing nearby (about 2000 feet) domestic, irrigation, and municipal supply wells and monitoring wells, utilities, surface water bodies, drainage courses and their tributaries/destinations, and other major physical and man-made features, as appropriate.

2. Site plan showing proposed well locations, other existing wells, unused and/or abandoned wells, major physical site structures (such as corrals, freestall barns, milking barns, feed storage areas, etc.), waste handling facilities (including solid separation basins, retention ponds, manure storage areas), irrigated cropland and pasture, and on-site surface water features.

3. Rationale for the number of proposed monitoring wells, their locations and depths, and identification of anticipated depth to groundwater.

4. Local permitting information (as required for drilling, well seals, boring/well abandonment).

5. Drilling details, including methods and types of equipment for drilling and logging activities. Equipment decontamination procedures (as appropriate) should be described.

6. Health and Safety Plan.

B. Proposed Drilling Details:

1. Drilling techniques

2. Well logging method

C. Proposed Monitoring Well Design: All proposed well construction information must be displayed on a construction diagram or schematic to identify the following:

1. Well depth

2. Borehole depth and diameter

3. Well construction materials

4. Casing material and diameter – include conductor casing, if appropriate

5. Location and length of perforation interval, size of perforations, and rationale

6. Location and thickness of filter pack, type and size of filter pack material, and rationale
7. Location and thickness of bentonite seal

8. Location, thickness, and type of annular seal

9. Surface seal depth and material

10. Type of well cap(s)

11. Type of well surface completion

12. Well protection devices (such as below-grade water tight-vaults, locking steel monument, bollards, etc.)

D. Proposed Monitoring Well Development:

1. Schedule for development (at least seven days after well completion)

2. Method of development

3. Method of determining when development is complete

4. Parameters to be monitored during development

5. Method for storage and disposal of development water

E. Proposed Surveying:

1. How horizontal and vertical position of each monitoring well will be determined

2. The accuracy of horizontal and vertical measurements to be obtained

3. The California licensed professional (licensed land surveyor or civil engineer) to perform the survey

F. Proposed Groundwater Monitoring:

1. Schedule (at least 48 hours after well development)

2. Depth to groundwater measuring equipment (e.g., electric sounder or chalked tape capable of ±0.01-foot measurements)

3. Well purging method, equipment, and amount of purge water

4. Sample collection (e.g., bottles and preservation methods), handling procedures, and holding times

5. Quality assurance/quality control (QA/QC) procedures (as appropriate)

6. Analytical procedures

7. Equipment decontamination procedures (as appropriate)

G. Proposed Schedule:

1. Fieldwork

2. Laboratory analyses

3. Report submittal

Monitoring Well Installation Completion Report

At a minimum, the MWICR shall summarize the field activities as described below.

A. General Information:

1. Brief overview of field activities including well installation summary (such as number, depths), and description and resolution of difficulties encountered during field program.

2. Topographic map showing any existing nearby domestic, irrigation, and municipal supply wells and monitoring wells, utilities, surface water bodies, drainage courses and their tributaries/destinations, and other major physical and man-made features.

3. Site plan showing monitoring well locations, other existing wells, unused and/or abandoned wells, major physical site structures (such as corrals, freestall barns, milking barns, feed storage areas, etc.), waste handling facilities (including solid separation basins, retention ponds, manure storage areas), land application area(s), and on-site surface water features.

4. Period of field activities and milestone events (e.g., distinguish between dates of well installation, development, and sampling)

B. Monitoring Well Construction:

1. Number and depths of monitoring wells installed

2. Monitoring well identification (i.e., numbers)

3. Date(s) of drilling and well installation

4. Description of monitoring well locations including field-implemented changes (from proposed locations) due to physical obstacles or safety hazards

5. Description of drilling and construction, including equipment, methods, and difficulties encountered (such as hole collapse, lost circulation, need for fishing)

6. Name of drilling company, driller, and logger (site geologist to be identified)

7. Driller's/Lithologic log

8. As-builts for each monitoring well with the following details:
   a. Well identification
   b. Total borehole and well depth
   c. Date of installation
   d. Boring diameter
   e. Casing material and diameter (include conductor casing, if appropriate)
   f. Location and thickness of slotted casing, perforation size
   g. Location, thickness, type, and size of filter pack
   h. Location and thickness of bentonite seal
   i. Location, thickness, and type of annular seal

j. Depth of surface seal
k. Type of well cap
l. Type of surface completion
m. Depth to water (note any rises in water level from initial measurement) and date of measurement
n. Well elevation (measuring point to nearest ± 0.01 foot) at top of casing
o. Well protection device (such as below-grade water tight vaults, stovepipe, bollards, etc)

9. All depth to groundwater measurements during field program

10. Field notes from drilling, installation, and surveying activities (e.g., all subcontractor dailies, as appropriate)

11. Construction summary table of pertinent information such as date of installation, well depth, casing diameter, screen interval, bentonite seal interval, and well elevation

C. Monitoring Well Development:

1. Date(s) and time of development

2. Name of developer

3. Method of development

4. Methods used to identify completion of development

5. Development log: volume of water purged and measurements of temperature, pH and electrical conductivity during and after development

6. Disposal of development water

7. Field notes (such a bailing to dryness, recovery time, number of development cycles)

D. Monitoring Well Survey

1. Identify coordinate system or reference points used

2. Description of measuring points (i.e. ground surface, top of casing, etc.)

3. Horizontal and vertical coordinates of well casing with cap removed

4. Name, license number, and signature of California licensed professional who conducted survey

5. Surveyor’s field notes

6. Tabulated survey data

ATTACHMENT E

Manure/Wastewater Tracking Manifest
For
Alston Farms Dairy No. 2, Tehama County

Instructions:

1) Complete one manifest for each hauling event, for each destination. A hauling event may last for several days, as long as the manure is being hauled to the same destination.
2) If there are multiple destinations, **complete a separate form for each destination**.
3) The operator must obtain the signature of the hauler upon completion of each manure-hauling event.
4) The operator shall submit copies of manure/process wastewater tracking manifest(s) with the Annual Monitoring Report.

Operator Information:

Name of Operator: Gilbert L. Alston

Name of Dairy Facility: Alston Farms Dairy No. 2

Facility Address: 22954 Christian Rd, Orland, CA 95963

Contact Person Name and Phone Number:

_____

Name Phone Number

Manure/Wastewater Hauler Information:

Name of Hauling Company and Contact Person:

_____

Hauling Company

_____

Number and Street City Zip Code

_____

Contact Person Phone Number

Destination Information:
Composting Facility / Broker / Farmer / Other (identify) _____ (please circle one)

Destination Address or Assessor's Parcel Number:

_____
Number and Street City Zip Code Assessor's Parcel Number

Contact information of party that receives the manure or wastewater:

Name of Company (if applicable): _____
Contact Person:
_____

Mailing Address: _____
Number and Street City Zip Code
Phone Number: _____

Dates Hauled: _____ _____

Amount Hauled:
Enter the amount of manure hauled in tons or cubic yards (indicate the units used), the manure solids content (if amount reported in tons) or manure density (if amount reported in cubic yards), and the method used to calculate the amount:

Manure: _____Tons or Cubic Yards (indicate which units used)
Manure Solids Content (if amount reported in tons): _____
Manure Density (if amount reported in cubic yards): _____
Method used to determine amount of manure:
_____

Enter the amount of wastewater hauled in gallons and the method used to determine the amount.

Wastewater: _____ Gallons
Method used to determine volume of wastewater:
_____

Written Agreement:
Does the Operator have a written agreement (in compliance with Land Application Specification 22 of Waste Discharge Requirements Order No. ____) with any party that receives wastewater from the Operator for its own use? (please check one)

____ Yes _____ No

Certification:
I declare under the penalty of law that I personally examined and am familiar with the information submitted in this document, and that based 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 a fine and imprisonment for knowing violations.

Operator's Signature: _____ Date: _____

Hauler's Signature: _____ Date: _____

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

MONITORING AND REPORTING PROGRAM NO. R5-2009-0045

IINDIVIDUAL WASTE DISCHARGE REQUIREMENTS ORDER NO. R5-2009-0045
FOR
ELSIE SEWALD, GILBERT ALSTON, AND JOHN ALSTON
DBA ALSTON FARMS DAIRY NO. 2
TEHAMA COUNTY

This Monitoring and Reporting Program (MRP) is issued pursuant to California Water Code (CWC) Section 13267. The Discharger shall not implement any changes to this MRP unless a revised MRP is issued by the Executive Officer.

This MRP includes Monitoring, Record-Keeping, and Reporting requirements. Monitoring requirements include monitoring of discharges of storm water and groundwater monitoring in order to determine if the Discharger's dairy is in compliance with the discharge limitations of Waste Discharge Requirements Order No. R5-2009-0045 (Order).

Monitoring requirements also include monitoring of nutrients applied to, and removed from, land application areas in order for the Discharger to implement a Nutrient Management Plan that will minimize leaching of nutrients and salts to groundwater and transport of these constituents to surface water. For fields where liquid and solid manure are not applied, nutrient monitoring is not required. Should waste be applied to these fields in the future, nutrient monitoring must begin immediately.

In addition, monitoring requirements include periodic visual inspections of the dairy to ensure the dairy is being operated and maintained to ensure continued compliance with the Order.

This MRP requires the Discharger to keep and maintain records for five years of the monitoring activities for the production and land application areas and to prepare and submit reports containing the results of specified monitoring as indicated below. Records must be maintained for all fields as necessary, regardless of manure application.

Except where indicated, all monitoring must begin immediately. Note that some types of events require that a report be submitted to the Central Valley Water Board within 24 hours (see Section C).

The Discharger must follow sampling and analytical procedures approved by the Executive Officer. Approved procedures will be posted on the Board's web site and copies may be obtained by contacting staff. The Discharger may submit alternative

procedures for consideration, but must receive written approval from the Executive Officer before using them.

The Discharger shall conduct monitoring, record-keeping, and reporting as specified below.

A. MONITORING REQUIREMENTS

Visual Inspections

As soon as the dairy begins operations, the Discharger shall conduct and record the inspections specified in Table 1 below and maintain records of the results on-site for a period of five years.

Table 1. INSPECTIONS
Production Area Weekly during the wet season (1 October to 31 May) and monthly between 1 June and 30 September: Inspect all waste storage areas and note any conditions or changes that could result in discharges to surface water and/or from property under control of the Discharger. Note whether freeboard within each liquid storage structure is less than, equal to, or greater than the minimum two feet required. During and after each significant storm event[1]: Visual inspections of storm water containment structures for discharge, freeboard, berm integrity, cracking, slumping, erosion, excess vegetation, animal burrows, and seepage. Monthly on the 1st day of each month: Photograph each pond showing the current freeboard on that date. All photos shall be dated and maintained as part of the discharger's record.
Land Application Areas Immediately before each wastewater application begins: Inspect the land application area and note the condition of land application berms including rodent holes, piping, and bank erosion. Verify that any field valves are correctly set to preclude off-property or accidental discharges of wastewater. Daily when wastewater is being applied: Inspect the land application area and note the condition of land application berms including rodent holes, piping, and bank erosion; the presence (or lack) of field saturation, ponding, erosion, runoff (including tailwater discharges from the end of fields, pipes, or other conveyances), and nuisance conditions; and the conditions of any vegetated buffers or alternative conservation practices.

[1] A significant storm event is defined as a storm event that results in continuous runoff of storm water for a minimum of one hour, or intermittent runoff for a minimum of three hours in a 12-hour period.

Nutrient Monitoring

The Discharger shall monitor wastewater, manure, and plant tissue produced at the facility, soil in each land application area, and irrigation water used on each land application area for the constituents and at the frequency as specified in Table 2 below. This monitoring is for nutrient management, shall begin when the dairy begins operations, and will be used to refine the Nutrient Management Plan. The Discharger is encouraged to collect and use additional data, as necessary, to refine nutrient management.

Table 2. NUTRIENT MONITORING
Wastewater Each application: Record the volume (gallons or acre-inches) and date of wastewater application to each land application area. Quarterly during one application event: Field measurement of electrical conductivity. Laboratory analyses for nitrate-nitrogen (only when retention pond is aerated), ammonium-nitrogen, total Kjeldahl nitrogen, total phosphorus, potassium, and total dissolved solids. Annually for the first two years of operation: Laboratory analyses for general minerals (calcium, magnesium, sodium, bicarbonate, carbonate, sulfate, and chloride).
Manure Each application to each land application area: Record the total volume (cubic yards) applied and density (grams per liter) or total weight (tons) applied and percent moisture. Once within 12 months: Laboratory analyses for general minerals (calcium, magnesium, sodium, bicarbonate, carbonate, sulfate, and chloride). Twice per year: Laboratory analyses for total nitrogen, total phosphorus, potassium, total dissolved solids and density (if volume manure applied is reported) or percent moisture (if weight manure applied is reported). Each offsite export of manure: Record the total volume (cubic yards) exported and density (grams per liter) or total weight (tons) exported and percent moisture. Laboratory analyses for density (if volume manure exported is reported) or percent moisture (if weight manure exported is reported). Annually: Record the total dry weight (tons) of manure applied annually to each land application area and the total dry weight (tons) of manure exported offsite.
Plant Tissue At harvest: Record the total weight (tons) and percent wet weight or volume (cubic yards) and density

Table 2. NUTRIENT MONITORING
(grams per liter) of harvested material removed from each land application area. Laboratory analyses for total nitrogen, phosphorus, and potassium (expressed on a dry weight basis), and percent wet weight (if weight of harvested material is reported) or density (if volume of harvested material is reported). The following test is only required if the Discharger wants to add fertilizer in excess of 1.4 times the nitrogen expected to be removed by the harvested portion of the crop (See Attachment C for details): Mid-season, if necessary to assess the need for additional nitrogen fertilizer during the growing season. Laboratory analyses for total nitrogen, expressed on a dry weight basis.
Soil Beginning in the summer of 2009 and then once every 5 years from each land application area: Laboratory analyses for: Total phosphorus ***The following soil tests are recommended but not required:*** Spring pre-plant for each crop: Laboratory analyses for: 0 to 1 foot depth: Nitrate-nitrogen and organic matter. 1 to 2 foot depth: Nitrate-nitrogen. Fall pre-plant for each crop: Laboratory analyses for: 0 to 1 foot: Electrical conductivity, nitrate-nitrogen, soluble phosphorus, potassium and organic matter. 1 to 2 foot: Nitrate-nitrogen. 2 to 3 foot: Nitrate-nitrogen.
Irrigation Water[2] Each irrigation event for each land application area: Record volume (gallons or acre-inches) and source (well or canal) of irrigation water applied and dates applied. One irrigation event during each irrigation season during actual irrigation events: For each irrigation water source (well and canal): Electrical conductivity and total nitrogen.[3] Data collected to satisfy the groundwater monitoring requirements (below) will satisfy this requirement if the irrigation water source is local groundwater.

Monitoring of Surface Runoff

The Discharger shall monitor discharges of storm water from the land application area for the constituents and at the frequency as specified in Table 3 below.

[2] The Discharger shall monitor irrigation water (from each water well source and canal) that is used on all land application areas.
[3] In lieu of sampling the irrigation water, the Discharger may provide equivalent data from the local irrigation district. The results of the initial chemical testing of the irrigation water shall be included in the initial annual report as specified in the Annual Reporting section under Reporting Requirements C, below. The Discharger may propose in the annual report to reduce the constituents and/or sampling frequency of irrigation water based on the previous year's data.

Table 3. DISCHARGE MONITORING
Storm Water Discharges to Surface Water from Each Land Application Area[4] First storm event of the wet season[5] and during peak storm season (typically February)[6] each year from one third of the land application areas[7] with the land application areas sampled rotated each year[8]: Record date, time, approximate volume, duration, location, and ultimate destination of the discharge. Field measurements of the discharge for electrical conductivity, temperature, pH, total ammonia-nitrogen, and unionized ammonia-nitrogen. Laboratory analyses of the discharge for nitrate-nitrogen, phosphorus, turbidity, and total and fecal coliform.

1. If conditions are not safe for sampling, the Discharger must provide documentation of why samples could not be collected and analyzed. For example, the Discharger may be unable to collect samples during dangerous weather conditions (such as local flooding, high winds, tornados, electrical storms, etc.). However, once the dangerous conditions have passed, the Discharger shall collect a sample of the discharge or, if the discharge has ceased, from the waste management unit from which the discharge occurred.

2. Sample analyses shall be conducted by a laboratory certified for such analyses by the California Department of Health Services. These laboratory analyses shall be conducted in accordance with the Title 40 Code of Federal Regulations Part 136 (*Guidelines Establishing Test Procedures for the Analysis of Pollutants*) or other test methods approved by the Executive Officer.

3. The rationale for all discharge sampling locations shall be included in the Storm Water Report.

4. Manure, wastewater, tailwater, or stormwater shall not be discharged from the production area, and manure, tailwater, or wastewater shall not be discharged from the land application area. If there is any discharge from the production area, or any discharge of manure, tailwater or wastewater from the land application area, the discharge shall be reported and measured pursuant to the Priority Reporting of Significant Events requirements (See Reporting Requirements C, below)

[4] Sample locations must be chosen such that the samples are representative of the quality and quantity of storm water discharged.
[5] This sample shall be taken from the first storm event of the season that produces significant storm water discharge such as would occur during continuous storm water runoff for a minimum of one hour, or intermittent storm water runoff for a minimum of three hours in a 12-hour period.
[6] This sample shall be taken during a storm event that produces significant storm water discharge and that is preceded by at least three days of dry weather. The sample shall be taken during the first hour of the discharge.
[7] One land application area shall be sampled for Dischargers that have one to three land application areas, two land application areas shall be sampled for Dischargers that have four to six land application areas, etc.
[8] The Discharger may propose in the annual storm water report to reduce the constituents and/or sampling frequency of storm water discharges to surface water from any land application area based on the previous year's data (see Storm Water Reporting below).

Groundwater Monitoring

The Discharger shall sample the 2 domestic and 2 agricultural supply wells and the 4 monitoring wells, once installed, to characterize existing groundwater quality. This monitoring, shall be conducted at the frequency and for the parameters specified in Table 4 below.

Table 4. GROUNDWATER MONITORING
Domestic and Agricultural Supply Wells Semiannually at time of expected highest and lowest water table levels: Field measurements of electrical conductivity. Laboratory analyses of nitrate-nitrogen. Annually: Laboratory analyses for general minerals (calcium, magnesium, sodium, bicarbonate, carbonate, sulfate, and chloride) , ammonium-nitrogen, total dissolved solids, and fecal coliform.
Monitoring Wells ***Monitoring Wells*** Semiannually at the times of expected highest and lowest water table levels: Field measurements of electrical conductivity and pH. Laboratory analyses for nitrate-nitrogen, ammonium-nitrogen, total dissolved solids, fecal coliform, phosphorus, and potassium. For the first two years after installation of monitoring wells, at times midway between semiannual sampling: Field measurements of electrical conductivity. Laboratory analyses for nitrate-nitrogen and total dissolved solids Quarterly for first two years, then annually: Laboratory analyses for general minerals (calcium, magnesium, sodium, bicarbonate, carbonate, sulfate, and chloride).

1. Groundwater samples from domestic wells shall be collected from the tap nearest to the pressure tank (and before the pressure tank if possible) after water has been pumped from this tap for 10 to 20 minutes. Groundwater samples from agricultural supply wells shall be collected after the pump has run for a minimum of 30 minutes or after at least three well volumes have been purged from the well.

2. Prior to any pre-sample purging, the depth of groundwater shall be measured form a surveyed reference point to the nearest 0.01 foot in each well.

3. Monitoring of the domestic and agricultural supply wells may be reduced after one year of data are provided to the Executive Officer.

4. Constituents analyzed in the monitoring wells may be reduced after two rounds of samplings have been completed and the results provided to the Executive Officer.

5. Prior to installation of additional monitoring wells, the Discharger shall submit to the Executive Officer a Monitoring Well Installation and Sampling Plan (MWISP) (see Attachment D) and schedule prepared under the direct supervision of, and certified by, a California registered civil engineer or a California registered geologist with experience in hydrogeology. Installation of monitoring wells shall not begin until the Executive Officer notifies the Discharger in writing that the MWISP is acceptable

6. Within 45 days after completion of any monitoring well, the Discharger shall submit to the Executive Officer a Monitoring Well Installation Completion Report (MWICR) (see Attachment D) prepared under the direct supervision of, and certified by, a California registered civil engineer or a California registered geologist with experience in hydrogeology.

7. Groundwater samples from monitoring wells shall be collected as specified in an approved Monitoring Well Installation and Sampling Plan.

General Monitoring Requirements

1. The Discharger shall comply with all the “Requirements Specifically for Monitoring Programs and Monitoring Reports” as specified in the Standard Provisions and Reporting Requirements.

2. The sampling procedures listed in this MRP are standards currently recognized by the Central Valley Water Board. When special procedures appear to be necessary, the Discharger may request approval of alternative sampling procedures for nutrient management. The Executive Officer will review such requests and if adequate justification is provided, may approve the requested alternative sampling procedures.

3. The Discharger shall use clean sample containers and sample handling, storage, and preservation methods that are accepted or recommended by the selected analytical laboratory or, as appropriate, in accordance with approved United States Environmental Protection Agency analytical methods.

4. All samples collected shall be representative of the volume and nature of the material being sampled.

5. All sample containers shall be labeled and records maintained to show the time and date of collection as well as the person collecting the sample and the sample location.

6. All samples collected for laboratory analyses shall be preserved and submitted to the laboratory within the required holding time appropriate for the analytical method used and the constituents analyzed.

7. All samples submitted to a laboratory for analyses shall be identified in a properly completed and signed Chain of Custody form.

8. For field test instruments used for pH and electrical conductivity:

   a. The operator shall be trained in the proper use and maintenance of the instruments;

   b. The instruments shall be field calibrated prior to each monitoring event; and

   c. Instruments shall be serviced and/or calibrated by the manufacturer at the recommended frequency.

B. RECORD-KEEPING REQUIREMENTS

The Discharger shall maintain on-site for a period of five years from the date they are created all information as follows:

1. All information necessary to document implementation and management of the minimum elements of the nutrient management plan (NMP);

2. All records for the production area including;

   a. Records documenting the inspections required under the Monitoring Provisions above.

   b. Records documenting any corrective actions taken to correct deficiencies noted as a result of the inspections required in the Monitoring Provisions above. Deficiencies not corrected in 30 days must be accompanied by an explanation of the factors preventing immediate correction;

   c. Records of the date, time, and estimated volume of any overflow;

   d. Records of mortality management and practices;

   e. Steps and dates when action is taken to correct unauthorized releases as reported in accordance with Priority Reporting of Significant Events below; and

   f. Records of monitoring activities and laboratory analyses conducted as required in Standard Provisions and Reporting Requirements, D.5.

3. All records for the land application area including:

a. Expected and actual crop yields;

b. Identification of crop, acreage, and dates of planting and harvest for each field;

c. Dates, locations, and approximate weight and moisture content, or volume and density, of manure applied to each field;

d. Dates, locations, and volume of wastewater applied to each field;

e. Weather conditions at time of manure and wastewater applications and for 24 hours prior to and following applications;

f. Records documenting the inspections conducted as required under the Monitoring Provisions above;

g. Dates, locations, and test methods for soil, manure, wastewater, irrigation water, and plant tissue sampling;

h. Results from manure, wastewater, irrigation water, soil, plant tissue, and storm water sampling;

i. Explanation for the basis for determining manure or wastewater application rates, as provided in the Technical Standards for Nutrient Management established by the Order (Attachment C);

j. Calculations showing the total nitrogen, phosphorus, and potassium to be applied to each field, including sources other than manure or wastewater;

k. Total amount of nitrogen, phosphorus, and potassium actually applied to each field, including documentation of calculations for the total amount applied;

l. The method(s) used to apply manure and/or wastewater;

m. Dates of manure and/or wastewater application equipment inspections;

n. Records documenting any corrective actions taken to correct deficiencies noted as a result of the inspections required in the Monitoring Provisions above. Deficiencies not corrected in 30 days must be accompanied by an explanation of the factors preventing immediate correction; and

o. Records of monitoring activities and laboratory analyses conducted as required in Standard Provisions and Reporting Requirements, D.5.

p. Records of all discharges other than storm water from the land application area that have occurred during the annual reporting period, including the date, time, approximate volume, location, source of discharge (i.e., tailwater, wastewater, or blended wastewater).

4. A copy of the Discharger's site-specific NMP;

5. All Manure/ Wastewater Tracking Manifest forms (Attachment E) which include information on the manure hauler, destination of the manure, dates hauled, amount hauled, and certification; and

6. All analyses of manure, wastewater, irrigation water, soil, plant tissue, surface water, storm water, and groundwater.

C. REPORTING REQUIREMENTS

Priority Reporting of Significant Events (Prompt Action Required)

The Discharger shall report any noncompliance that endangers human health or the environment or any noncompliance with Prohibitions A.1, A.2, A.3, A.4, A.5, A.6., A.7., A.8, A.11, and A.12 in the Order, within 24 hours of becoming aware of its occurrence. The incident shall be reported to the Central Valley Water Board Office, local environmental health department, and to the California Office of Emergency Services (OES). During non-business hours, the Discharger shall leave a message on the Board's voice mail. The message shall include the time, date, place, and nature of the noncompliance, the name and number of the reporting person, and shall be recorded in writing by the Discharger. The OES is operational 24 hours a day. The Discharger shall collect a sample of the discharge, refrigerate it, and provide it to the Board upon request. A written report shall be submitted to the Board office **within two weeks** of the Discharger becoming aware of the incident. The report shall contain a description of the noncompliance, its causes, duration, and the actual or anticipated time for achieving compliance. The report shall include complete details of the steps that the Discharger has taken or intends to take, in order to prevent recurrence. All intentional or accidental spills shall be reported as required by this provision. The written submission shall contain:

1. The approximate date, time, and location of the noncompliance including a description of the ultimate destination of any unauthorized discharge and the flow path of such discharge to a receiving water body;

2. A description of the noncompliance and its cause;

3. The flow rate, volume, and duration of any discharge involved in the noncompliance;

4. The amount of precipitation (in inches) the day of any discharge and for each of the seven days preceding the discharge;

5. The period of noncompliance, including dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and

6. A time schedule and a plan to implement corrective actions necessary to prevent the recurrence of such noncompliance.

Annual Reporting

By January 15 of each year, the Discharger will submit an Annual Report containing the information on facility operations outlined in the Monitoring and Reporting program and covering the period from 1 November through 31 October of the previous year. The initial annual report will cover the period through 31 October 2009. The initial annual report will also include documentation from a trained professional that no cross connections exist between the waste management system and any water supply or irrigation well, as required under Prohibition A.14 of the Order. The initial annual report will include results of irrigation water monitoring and an assessment as to whether the amount of nitrogen in the irrigation water is sufficient to require inclusion of nitrogen from the irrigation water into the NMP. If the quantity of nitrogen in the irrigation water is negligible, the Discharger, as part of the annual report, may request a reduction in the testing of the irrigation water for nitrogen.

The annual report shall be completed on an annual report form provided by the Executive Officer (available on the Central Valley Water Board website at http://www.waterboards.ca.gov/centralvalley/available_documents/index.html#confined) and shall include all the information as specified below.

1. Identification of the beginning and end dates of the annual reporting period;

2. An Annual Dairy Facility Assessment using the tool provided by the Executive Officer or any future revisions thereto;

3. Number and type of animals, whether in open confinement or housed under roof;

4. Estimated amount of total manure (tons) and wastewater (gallons or acre-inches) generated by the facility during the annual reporting period and a calculation of the nitrogen, phosphorus, potassium, and total salt content of this waste;

5. Estimated amount of total manure (tons) and wastewater (gallons or acre-inches) applied to each land application area during the annual reporting period and a calculation of the nitrogen, phosphorus, potassium, and total salt content of this waste;

6. Estimated amount of total manure (tons) and wastewater (gallons or acre-inches) transferred to other persons by the facility during the annual reporting period and a calculation of the nitrogen, phosphorus, potassium, and total salt content of this waste;

7. A map showing the location and number of acres of each field on the dairy and whether each field was or was not used for land application of manure and/or wastewater during the annual reporting period;

8. Summary of all discharges from the production area that occurred during the annual reporting period, including date, time, location, approximate volume, a map showing discharge, ultimate destination of the discharge, and method of measuring discharge flows;

9. Summary of all storm water discharges from the land application area during the annual reporting period, including the date, time, duration, location, a map showing the discharge and sample locations, ultimate destination of the discharge, and rationale for sample locations;

10. Summary of all discharges other than storm water from the land application area that have occurred during the annual reporting period, including the date, time, approximate volume, location, source of discharge (i.e., tailwater, wastewater, or blended wastewater), a map showing the discharge locations, ultimate destination of the discharge, and method of measuring discharge flows;

11. A statement indicating if the NMP has been updated and whether the current version of the facility's NMP was developed or approved by a certified nutrient management planner as specified in Attachment C of the Order;

12. Copies of all manure/ wastewater tracking manifests for the reporting period;

13. Copies of all written agreements with each third party that receives wastewater from the Discharger for its own use from the Discharger;

14. Copies of laboratory analyses of all storm water samples, including chain-of-custody forms and laboratory quality assurance/quality control results;

15. Tabulated analytical data for samples of manure, wastewater, irrigation water, soil, and plant tissue. The data shall be tabulated to clearly show sample

dates, constituents analyzed, constituent concentrations, and detection limits; and

16. Results of the Record-Keeping Requirements for the production and land application areas specified in Record-Keeping Requirements B.2.b, B.2.c, B.3.a, B.3.b, B.3.c, B.3.d, B.3.e, B.3.j., B.3.k, and B.3.n above.

Groundwater Reporting

By 30 June 2010, and annually thereafter, the Discharger shall report the results of all groundwater monitoring. Groundwater monitoring reports shall include all laboratory analyses (including chain-of-custody forms and laboratory quality assurance/quality control results) and tabular and graphical summaries of the monitoring data. Data shall be tabulated to clearly show the sample dates, constituents analyzed, constituent concentrations, detection limits, depth to groundwater, and groundwater elevations. Graphical summaries of groundwater gradients and flow directions shall also be included. Each groundwater monitoring report shall include a summary data table of all historical and current groundwater elevations and analytical results. The submittal shall include a description of the statistical or non-statistical methods used in evaluating the groundwater monitoring data. The methods must be approved by the Executive Officer. The groundwater monitoring reports shall be certified by a California registered professional as specified in General Reporting Requirements C.9 of the Standard Provisions and Reporting Requirements of the Order.

Storm Water Reporting

By 30 June 2010, and annually thereafter, the Discharger shall submit an annual report that details the results of the previous year's storm water monitoring, including the Discharger's preparation for the upcoming wet season for all land application areas. The annual report shall include a map showing all sample locations for all land application areas, rationale for all sampling locations, the results (including the laboratory analyses, chain of custody forms, and laboratory quality assurance/quality control results) of all samples of storm water, an assessment of the storm water monitoring results, an explanation for any pollutants found in storm water from any land application area, and any modifications made to the facility or sampling plan in response to pollutants detected in storm water. The annual report must also include documentation if no significant discharge of storm water occurred from the land application area(s) or if it was not possible to collect any of the required samples or perform visual observations due to adverse climatic conditions.

If the storm water monitoring for any land application area indicates pollutants have not been detected in storm water samples, the Discharger may propose to the Executive Officer to reduce the constituents and/or sampling frequency for that area.

General Reporting Requirements

1. The results of any monitoring conducted more frequently than required at the locations specified herein shall be reported to the Central Valley Water Board.

2. Laboratory analyses for manure, wastewater, and soil shall be submitted to the Central Valley Water Board upon request by the Executive Officer.

3. Each report shall be signed by the Discharger or a duly authorized representative as specified in the General Reporting Requirements C.7 of the Standard Provisions and Reporting Requirements (SPRR), and shall contain the following statement:

   "*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 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.*"

4. Submit reports to:

   California Regional Water Quality Control Board
   Central Valley Region
   11020 Sun Center Drive #200
   Rancho Cordova, CA 95670
   Attention: Confined Animal Regulatory Unit

ORDERED BY:

_____
PAMELA C. CREEDON, Executive Officer

_____
Date

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

STANDARD PROVISIONS AND REPORTING REQUIREMENTS
FOR INDIVIDUAL WASTE DISCHARGE REQUIREMENTS
FOR
DAIRIES IN THE SACRAMENTO AND SAN JOAQUIN RIVER BASINS
AUGUST 2007

A. Introduction

1. These Standard Provisions and Reporting Requirements (SPRR) are applicable to milk cow dairies that are regulated pursuant to the provisions of Title 27 California Code of Regulations (CCR) Division 2, Subdivision 1, Chapter 7, Subchapter 2, Sections 22560 et seq.

2. Any violation of the Order constitutes a violation of the California Water Code and, therefore, may result in enforcement action.

3. If there is any conflicting or contradictory language between the Order, the Monitoring and Reporting Program (MRP) associated with the Order, or the SPRR, then language in the Order shall govern over the MRP and the SPRR, and language in the MRP shall govern over the SPRR.

B. Standard Provisions

1. The requirements prescribed in the Order do not authorize the commission of any act causing injury to the property of another, or protect the Discharger from liabilities under federal, state, or local laws.

2. The Discharger shall comply with all federal, state, county, and local laws and regulations pertaining to the discharge of wastes from the facility that are at least as stringent as the requirements of the Order.

3. All discharges from the facility must comply with the lawful requirements of municipalities, counties, drainage districts, and other local agencies regarding discharges of storm water to storm drain systems or to other courses under their jurisdiction that are at least as stringent as the requirements of the Order.

4. The Order does not convey any property rights or exclusive privileges.

5. The provisions of the Order are severable. If any provision of the Order is held invalid, the remainder of the Order shall not be affected.

6. The Discharger shall take all reasonable steps to minimize any adverse impact to the waters of the State resulting from noncompliance with the Order. Such steps shall include accelerated or additional monitoring as necessary to determine the nature and impact of the noncompliance.

7. The fact that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the Order shall not be a defense for violations of the Order by the Discharger.

8. The filing of a request by the Discharger for modification, revocation and reissuance, or termination of the Order, or notification of planned changes or anticipated noncompliance, does not stay any condition of the Order.

9. The Order is not transferable to any person except after notice to the Central Valley Water Board. The Central Valley Water Board may modify or revoke and reissue the Order to change the name of the Discharger and incorporate such other requirements as may be necessary under the California Water Code.

10. The Discharger shall provide to the Executive Officer, within a reasonable time, any information which the Executive Officer may request to determine whether cause exists for modifying, revoking, and reissuing, or terminating the Discharger's coverage under the Order or to determine compliance with the Order. The Discharger shall also provide to the Executive Officer upon request, copies of records required by the Order to be kept.

11. After notice and opportunity for a hearing, the Order may be terminated or modified for cause, including but not limited to:

    a. Violation of any term or condition contained in the Order;

    b. Obtaining the Order by misrepresentation, or failure to disclose fully all relevant facts;

    c. A change in any condition that results in either a temporary or permanent need to reduce or eliminate the authorized discharge; or

    d. A material change in the character, location, or volume of discharge.

12. The Order may be modified if new state statutes or regulations are promulgated, and if more stringent applicable water quality standards are approved pursuant to Title 27 of the CCR, or as adopted into the Central Valley Water Board *Water Quality Control Plans* (Basin Plans) *for the Sacramento River and San Joaquin River Basins (4th Ed).* The Order may also be modified for incorporation of land application plans, and/or changes in the waste application to cropland.

13. The Central Valley Water Board may review and revise the Order at any time upon application of any affected person or by motion of the Regional Board.

14. The Discharger shall ensure compliance with existing and/or future promulgated standards that apply to the discharge.

15. The Discharger shall permit representatives of the Central Valley Water Board and the State Water Resources Control Board (State Water Board), upon presentations of credentials at reasonable hours, to:

    a. Enter premises where wastes are treated, stored, or disposed and where any records required by the Order are kept;

    b. Copy any records required to be kept under terms and conditions of the Order;

    c. Inspect facilities, equipment (monitoring and control), practices, or operations regulated or required by the Order; and

    d. Sample, photograph, and/or video tape any discharge, waste, waste management unit, or monitoring device.

16. The Discharger shall properly operate and maintain in good working order any facility, unit, system, or monitoring device installed to achieve compliance with the Order. Proper operation and maintenance includes best practicable treatment and controls, and the appropriate quality assurance procedures.

17. Animal waste storage areas and containment structures shall be designed, constructed, and maintained to limit, to the greatest extent possible, infiltration, inundation, erosion, slope failure, washout, overtopping, by-pass, and overflow.

18. Setbacks or separation distances contained under Water Wells, Section 8, Part II, in the *California Well Standards, Supplemental Bulletin 74-90 (June 1991)*, and *Bulletin 94-81 (December 1981),* California Department of Water Resources (DWR), shall be maintained for the installation of all monitoring wells and groundwater supply wells at existing dairies. A setback of 100 feet is required between supply wells and animal enclosures in the production area. A minimum setback of 100 feet, or other control structures (such as housing, berming, grading), shall be required for the protection of existing wells or new wells installed in the cropland. If a county or local agency adopts more stringent setback standards than that adopted by the DWR, then these local standards shall carry precedence over the Well Standards of DWR, and the Discharger shall comply with the more stringent standards.

19. Following any storm event that causes the freeboard of any wastewater holding pond to be less than one (1) foot for below-grade ponds, or two (2) feet for above-grade ponds, the Discharger shall take action as soon as possible to provide the appropriate freeboard in the wastewater holding pond.

20. For any electrically operated equipment at the facility, the failure of which would cause loss of control or containment of waste materials, or violation of this Order, the Discharger shall employ safeguards to prevent loss of control over wastes or violation of this Order. Such safeguards may include alternate power sources, standby generators, standby pumps, additional storage capacity, modified operating procedures, or other means.

C. General Reporting Requirements

1. The Discharger shall give at least 60 days advance notice to the Central Valley Water Board of any planned changes in the ownership or control of the facility.

2. In the event of any change in control or ownership of land or waste discharge facilities presently owned or controlled by the Discharger, the Discharger shall notify the succeeding owner or operator of the existence of the Order by letter at least 60 days in advance of such change, a copy of which shall be immediately forwarded to the appropriate Central Valley Water Board office listed below in the General Reporting Requirements C.11.

3. To assume operation under the Order, any succeeding owner or operator must request, in writing, that the Executive Officer transfer coverage under the Order. The Central Valley Water Board will provide a form for this request that will allow the succeeding owner or operator to provide their full legal name, address and telephone number of the persons responsible for contact with the Central Valley Water Board and a responsibility statement and a signed statement in compliance with General Reporting Requirement C.7 below. The form will also include a statement for signature that the new owner or operator assumes full responsibility for compliance with the Order and that the new owner or operator will implement the Waste Management Plan and the NMP prepared by the preceding owner or operator. Transfer of the Order shall be approved or disapproved in writing by the Executive Officer. The succeeding owner or operator is not authorized to discharge under the Order and is subject to enforcement until written approval of the coverage transfer from the Executive Officer.

4. The Executive Officer may require the Discharger to submit technical reports pursuant to the Order and California Water Code Section 13267.

5. The Discharger shall identify any information that may be considered to be confidential under State law and not subject to disclosure under Public Records Act. The Discharger shall identify the basis of confidentiality. If the Executive Officer cannot identify a reasonable basis for treating the information as confidential, the Executive Officer will notify the Discharger that the information will be placed in the public file unless the Central Valley Water Board receives, within 10 calendar days, a written request from the Discharger to keep the information confidential containing a satisfactory explanation supporting the information's confidentiality.

6. Except for data determined to be exempt from disclosure under the Public Records Act (California Government Code Sections 6275 to 6276), and data determined to be confidential under Section 13267(b)(2) of the California Water Code, all reports prepared in accordance with the Order and submitted to the Executive Officer shall be available for public inspection at the offices of the Central Valley Water Board. Data on waste discharges, water quality, meteorology, geology, and hydrogeology shall not be considered confidential.

7. All technical reports and monitoring program reports shall be accompanied by a cover letter with the certification specified in C.8 below and be signed by a person identified below:

   a. For a sole proprietorship: by the proprietor;

   b. For a partnership: by a general partner;

   c. For a corporation: by a principal executive officer of at least the level of senior vice-president; or

   d. A duly authorized representative if:

      (1) The authorization is made in writing by a person described in Subsection a, b, or c of this provision;

      (2) The authorization specifies either an individual or a position having responsibility for the overall operation of the facility, such as the position of manager. A duly authorized representative may thus be either a named individual or an individual occupying a named position; and

      (3) The written authorization is submitted to the Central Valley Water Board.

8. Each person, as specified in C.7 above, signing a report required by the Order or other information requested by the Central Valley Water Board 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 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."

9. In addition to Item C.7 above, all technical reports required in the Order that involve planning, investigation, evaluation, or design, or other work requiring interpretation and proper application of engineering or geologic sciences, shall be prepared by, or under the direction of, and signed by persons registered to practice in California pursuant to California Business and Professions Code, Sections 6735, 7835, and 7835.1 or federal officers and employees who are exempt from these Sections by California Business and Professions Code, Section 6739 or 7836. To demonstrate compliance with Title 16 CCR, Sections 415 and 3065, all technical reports must contain a statement of the qualifications of the responsible registered professional(s). As required by these laws, completed technical reports must bear the signature(s) and seal(s) of the registered professional(s) in a manner such that all work can be clearly attributed to the professional responsible for the work.

10. The Discharger shall file a Report of Waste Discharge with the Central Valley Water Board at least 140 days before making any material change in the character, location, or volume of the discharge. A material change includes, but is not limited to, the following:

    a. The addition of a new wastewater that results in a change in the character of the waste;

    b. Significantly changing the disposal or waste application method or location;

    c. Significantly changing the method of treatment;

    d. Increasing the discharge flow beyond that specified in the Order; and/or

    e. Expanding existing herd size beyond the maximum herd size listed in the Order.

11. All reports shall be submitted to the following address:

    For facilities in Butte, Lassen, Modoc, Plumas, Tehama, and Shasta counties, submit reports to:

    California Regional Water Quality Control Board
    Central Valley Region
    415 Knollcrest Drive, Suite 100
    Redding, CA 96002
    Attention: Confined Animal Regulatory Unit

    For facilities in all other counties, submit reports to:

    California Regional Water Quality Control Board
    Central Valley Region
    11020 Sun Center Drive #200
    Rancho Cordova, CA 95670
    Attention: Confined Animal Regulatory Unit

D. Requirements Specifically for Monitoring Programs and Monitoring Reports

1. The Discharger shall file self-monitoring reports and/or technical reports in accordance with the detailed specifications contained in the MRP attached to the Order.

2. The Discharger shall maintain a written monitoring program sufficient to assure compliance with the terms of the Order. Anyone performing monitoring on behalf of the Discharger shall be familiar with the written program.

3. The monitoring program shall include observation practices, sampling procedures, and analytical methods designed to ensure that monitoring results provide a reliable indication of water quality at all monitoring points.

4. All instruments and devices used by the Discharger for the monitoring program shall be properly maintained and shall be calibrated as recommended by the manufacturer and at least once annually to ensure their continued accuracy.

5. The Discharger shall retain records of all monitoring information, including all calibration and maintenance records, copies of all reports required by the Order, and records of all data used to complete the reports. Records shall be maintained for a minimum of five years from the date of sample, measurement, report, or application. Records shall also be maintained after facility operations cease if wastes that pose a threat to water quality remain at the site. This five-year period may be extended during the course of any unresolved litigation regarding the discharge or when requested in writing by the Central Valley Water Board Executive Officer.

   a. Records of on-site monitoring activities shall include the:

      (1) Date that observations were recorded, measurements were made, or samples were collected;

      (2) Name and signature of the individual(s) who made the observations, made and recorded the measurements, or conducted the sampling;

      (3) Location of measurements or sample collection;

      (4) Procedures used for measurements or sample collection;

      (5) Unique identifying number assigned to each sample; and

      (6) Method of sample preservation utilized.

   b. Records of laboratory analyses shall include the:

      (1) Results for the analyses performed on the samples that were submitted;

      (2) Chain-of-custody forms used for sample transport and submission;

      (3) Form that records the date that samples were received by the laboratory and specifies the analytical tests requested;

      (4) Name, address, and phone number of the laboratory which performed the analysis;

      (5) Analytical methods used;

(6) Date(s) analyses were performed;

(7) Identity of individual(s) who performed the analyses or the lab manager; and

(8) Results for the quality control/quality assurance (QA/QC) program for the analyses performed.

E. Enforcement

1. California Water Code Section 13350 provides that any person who violates WDRs or a provision of the California Water Code is subject to civil liability of up to $5,000 per day or $15,000 per day of violation, or when the violation involves the discharge of pollutants, is subject to civil liability of up to $10 per gallon, or $20 per gallon; or some combination thereof, depending on the violation, or upon the combination of violations. In addition, there are a number of other enforcement provisions that may apply to violation of the Order.

INFORMATION SHEET

Waste Discharge Requirements Order No. R5-2009-0045
Elsie Sewald, Gilbert Alston, and John Alston, DBA, Alston Farms Dairy No. 2
Tehama County

INTRODUCTION

Gilbert Alston leases the Alston Farms Dairy No. 2 from Elsie Sewald. In addition, land owned by John Alston is incorporated into Alston Farms Dairy No. 2. The facility is located in Orland in Tehama County and has not been operated as a dairy since 2002. Since it was not operating as a dairy in 2005, it was not covered under the General Order for Existing Milk Cow Dairies. In 2008, the Alstons began the process to restart the facility as a dairy. Individual Waste Discharge Requirements are required for any dairy that was not operating as of 17 October 2005.

Alston Farms Dairy No. 2 operated as a dairy from 1976 until 2002. Since 2002, the facility has been rangeland. The maximum herd size (Jerseys) at the dairy after operation begins will be 850 animals: 400 milking cows, and up to 450 dry cows and bred heifers. There will be no calves housed at the dairy. The dairy includes a milking parlor, freestall barns, corrals, room for future manure storage and drying areas, a wastewater storage lagoon, and feed storage areas. Wastewater is land-applied to 158.8 of the 517 acres for agricultural production. Solid manure is used onsite as bedding.

The Central Valley Regional Water Quality Control Board was the lead agency for CEQA. A Mitigated Negative Declaration was prepared for the project and circulated through the California State Clearing House on 19 February 2009. The final Mitigated Negative Declaration was adopted by the Central Valley Regional Water Quality Control Board on 24 April 2009.

These Waste Discharge Requirements will permit Alston Farms Dairy No. 2 to operate as a dairy once again and to house the number of cows allowed under the approved Mitigated Negative Declaration. The facilities constructed at the dairy are all sized to house the number of animals allowed under the Mitigated Negative Declaration. A Report of Waste Discharge dated 4 March 2008 has been submitted for the dairy. Additional information has been submitted to the Regional Board including portions of the Nutrient Management Plan, a Waste Management Plan, and a Monitoring Well Installation and Sampling Plan.

CURRENT CONDITIONS

The site of the dairy is zoned Exclusive Agriculture or Upland Agriculture. The property is characteristic of the valley floor conditions, with steady rolling hills supporting introduced annual grasslands and sparse trees. The site is underlain

by soils comprised of the Kimball, Corning-Newville, Cortina, Hillgate, Arbuckle, Riverwash, and Altamont soils.

WASTE GENERATION AT FACILITY

Waste produced at the facility consists of wastewater from facility wash down operations and storm water containing manure, urine, milk products, spoiled feed material, bedding (litter), soil, and cleaning compounds. Solid wastes are also produced at the facility and primarily consist of manure with additional fractions of spoiled feed, bedding material and soil. An estimated 3,000 gallons per day (gpd) of clean water from the on-site water supply wells is used to wash down the holding pen, wash pen, and milking parlor floors, rinse the cows, and wash down miscellaneous dairy equipment. Over 120 days, the volume of barn wastewater generated will be 360,000 gallons. One hundred twenty days (December 1 through March 30) is the maximum amount of time that waste needs to be stored at the facility between land applications. Operation of the dairy is estimated to generate 28,690 gallons of manure wastewater over 120 days for the 400 milk cows that are housed in the barns. Rainfall onto impervious areas of the facility, onto the ponds, and onto corrals is estimated at 670,784 gallons over the December through March storage period, using average rainfall figures and including rainfall from one 25-year, 24-hour storm.

The total amount of wastewater requiring storage over the 120-day maximum storage period, after removing losses due to evaporation and adding one 25-year 24-hour storm, is 881,706 gallons.

WASTE MANAGEMENT AT FACILITY

Wastewater is conveyed into the wastewater storage lagoon. The existing wastewater storage lagoon has dimensions of 190 feet long by 191 feet wide and 11 deep, with side slopes of 1:1. The total storage capacity of the wastewater storage lagoon, allowing for two feet of freeboard is 1,462,831 gallons.

As part of the Mitigated Negative Declaration, the Discharger is required to install a synthetic liner in the existing wastewater storage lagoon or install a new lined lagoon by 31 December 2009. At present, the Discharger intends to use the current wastewater lagoon until a new lagoon with a liner can be installed. The new lagoon or lining of the existing lagoon will be designed and constructed to meet the requirements set forth in the Order.

LAND APPLICATION OF WASTEWATER TO CROPS

Wastewater and solid manure will be applied to land at agronomic rates to grow oats, wheat, sudan hay, and pasture in accordance with a certified Nutrient Management Plan.

All fields that receive solid manure or liquid wastewater have tailwater recovery systems or are bermed.

The Order requires that solid manure and wastewater samples be collected and analyzed, and the tons of solid manure and volume of wastewater applied to each field determined. This information will be used to refine the Nutrient Management Plan on an ongoing basis.

The dates and volume of each irrigation application (without wastewater) will be recorded. These data are used to ensure that wastewater is not applied when the ground is at or above field moisture capacity, and to limit the flushing of nutrients below the root zone due to excessive application of irrigation water. In addition, samples of the irrigation water are tested to determine if there are nitrogen compounds present in the groundwater such that the Nutrient Management Plan should be amended to reflect nitrogen added from the irrigation water.

Soil monitoring and plant tissue monitoring are also required and the results used to further refine the Nutrient Management Plan.

GROUND WATER AND SURFACE WATER MONITORING PROVISIONS

There are two existing agricultural supply wells and two domestic wells on the property. Four monitoring wells will be installed by 1 March 2010, unless an extension is granted by the Executive Officer. These wells monitor upgradient groundwater quality (unaffected by dairy operations) and groundwater downgradient of the location of corrals, land application areas, and the wastewater storage lagoons. The Order requires sampling of these wells. Regional ground water flow is to the southeast towards the Sacramento River and the depth to groundwater in the area ranged from 40 to 60 feet below ground surface.

Sampling of the domestic and agricultural wells was conducted in November 2008. The results indicate that groundwater at the dairy is not above the Maximum Contaminant Levels (MCLs) for Electrical Conductivity or Nitrate-Nitrogen. Samples for additional constituents will be collected as indicated below.

The domestic and agricultural wells at the facility will be sampled semiannually for at least one year for electrical conductivity and nitrate-nitrogen, and at least once for general minerals, ammonia-nitrogen, total dissolved solids, and fecal coliform. The monitoring wells will be sampled quarterly for two years and then semiannually thereafter, for electrical conductivity, pH, nitrate-nitrogen, ammonium-nitrogen, total dissolved solids, fecal coliform, phosphorous, and potassium; and quarterly for two years and annually thereafter, for general minerals. Prior to any pre-sample purging, the depth of groundwater shall be

measured from a surveyed reference point (anticipated to be the top of each well vault) to the nearest 0.01 foot in each well.

Because all fields receiving solid manure or liquid wastewater have tailwater recovery systems or are bermed, it is not anticipated that there will be off-property discharges of waste, which would be in violation of the Water Code. It is expected that, if the Nutrient Management Plan and other conditions of the Order regarding waste application are followed, any discharges of storm water from fields receiving solid manure or wastewater should not contain significant quantities of waste constituents. To verify this, representative samples of storm water will be collected from a portion of the fields each year to determine if waste constituents are present. Storm water monitoring will be adjusted based on the results from these samples.

REPORTING REQUIREMENTS

By January 15 of each year, the Discharger will submit an Annual Report containing the information on facility operations outlined in the Monitoring and Reporting program and covering the period from 1 November through 31 October of the previous year. The initial annual report will cover the period from the date that operation starts through 31 October 2009. The initial annual report will also include documentation from a trained professional that no cross connections exist between the waste management system and any water supply or irrigation well.

By 30 June 2010, and annually thereafter, the Discharger will submit the results of storm water monitoring and storm water monitoring conducted pursuant to the Monitoring and Reporting Program.

In the event of any noncompliance with the requirements of the Order that endangers human health or the environment, or any noncompliance with the prohibitions in the Order as listed in the Noncompliance Reporting provisions of the Monitoring and Reporting Program, the Discharger shall notify the Board within 24 hours of becoming aware of the occurrence. Information about the situation shall be collected and submitted in accordance with the Priority Reporting of Significant Events requirements in the Monitoring and Reporting Program.

APPLICABLE WATER QUALITY STANDARDS

The Central Valley Water Board has adopted a Water Quality Control Plan (Basin Plan) for the Sacramento River and San Joaquin River Basins (4th ed.). This Basin Plan designates the beneficial uses of groundwater and surface waters of the Region, specifies water quality objectives to protect those uses, and includes implementation programs for achieving water quality objectives. The Basin Plan also includes plans and policies of the State Water Board incorporated by

reference, including State Water Board Resolution No. 68-16 (*Statement of Policy with Respect to Maintaining High Quality Waters in California*), State Water Board Resolution 88-63 (*Sources of Drinking Water Policy*), and State Water Board Resolution No. 92-49 (*Policies and Procedures for Investigation and Cleanup or Abatement of Discharges Under Water Code Section 13304*).

Beneficial Uses of Surface Water and Groundwater

Pursuant to Chapter II of the Basin Plan, the beneficial uses of surface water may include: municipal and domestic supply; agricultural supply; agricultural stock watering; industrial process supply; industrial service supply; hydro-power generation; body contact water recreation; canoeing and rafting; other non-body contact water recreation; warm freshwater aquatic habitat; cold freshwater aquatic habitat; warm fish migration habitat; cold fish migration habitat; warm spawning habitat; cold spawning habitat; wildlife habitat; navigation; rare, threatened, and endangered species; groundwater recharge; freshwater replenishment; aquaculture; and preservation of biological habitats of special significance. The Basin Plan contains a Table that lists the surface water bodies and the beneficial uses and where not listed, the Basin Plan designates beneficial uses based on the waters to which they are tributary or applicable state or federal requirements. These beneficial uses are protected in this Order by, among other requirements, the prohibition of a direct or indirect discharge of waste and/or storm water from the production area to surface waters, the prohibition of discharge of wastewater to surface waters from cropland, the prohibition of any discharge of storm water to surface water from the land application areas unless the land application area has been managed consistent with a certified Nutrient Management Plan, and the prohibition of discharge of waste from existing milk cow dairies to surface waters which causes or contributes to an exceedance of any applicable water quality objective in the Basin Plan or any applicable state or federal water quality criteria, or a violation of any applicable state or federal policies or regulations.

Chapter II of the Sacramento River and San Joaquin River Basin Plan states: "*Unless otherwise designated by the Regional Water Board, all groundwaters in the Region are considered as suitable or potentially suitable, at a minimum, for municipal and domestic water supply, agricultural supply, industrial service supply, and industrial process supply*." These beneficial uses are protected in this Order by, among other requirements, the specification that the discharge of waste at an existing milk cow dairy shall not cause a violation of water quality objectives or cause pollution or nuisance.

Water Quality Objectives

Pursuant to the California Water Code Section 13263(a), WDRs must implement the Basin Plans, which require consideration of the beneficial uses of water, water quality objectives reasonably required to protect the beneficial uses, other waste discharges, the need to prevent nuisance conditions in the disposal area, and the receiving water. The water quality objectives are implemented in WDRs

consistent with the Basin Plan's *Policy for Application of Water Quality Objectives*. The Basin Plan requires that WDRs apply the most stringent objective for each constituent to ensure that discharges do not cause adverse affects to any beneficial use.

Water quality objectives are the limits or levels of water quality constituents or characteristics that are established for the reasonable protection of beneficial uses of water or the prevention of nuisance within a specific area. Water quality objectives apply to all waters within a surface water or groundwater resource for which beneficial uses have been designated. Water quality objectives are listed separately for surface water and groundwater in Chapter III of the Basin Plan and are either numeric or narrative.

The primary waste constituents of concern due to discharges of waste from dairies are ammonia, nitrates, phosphorus, chloride, boron, salts, pathogens, and organic matter. The discharge of waste from dairies must not cause surface water or groundwater to exceed the applicable water quality objectives for those constituents.

Water Quality Objectives and Federal Criteria for Surface Water[1]
Water quality objectives that apply to surface water include, but are not limited to, (1) the numeric objectives, including the bacteria objective, the chemical constituents objective (includes listed chemicals and state drinking water standards, i.e., maximum contaminant levels (MCLs) promulgated in Title 22 CCR Division 4, Chapter 15 Sections 64431 and 64444 that are applicable through the Basin Plan to waters designated as municipal and domestic supply), dissolved oxygen objectives, pH objectives, and the salinity objectives; and (2) the narrative objectives, including the biostimulatory substances objective, the chemical constituents objective, and the toxicity objective. The Basin Plan also contains numeric water quality objectives that apply to specifically identified water bodies, including for example, electrical conductivity objectives for the Delta.

Federal water quality criteria that apply to surface water are contained in federal regulations referred to as the California Toxics Rule and the National Toxics Rule. See 40 CFR Sections 131.36 and 131.38.

Water Quality Objectives for Groundwater
Water quality objectives that apply to groundwater include, but are not limited to, (1) numeric objectives, including the bacteria objective and the chemical constituents objective (includes state MCLs promulgated in Title 22 CCR Division

[1] It is important to note that this Order prohibits the direct or indirect discharge of waste and/or storm water from the production area to surface waters, the discharge of wastewater to surface waters from cropland, and requires the monitoring of discharges of storm water to surface water from the land application areas where manure or process wastewater has been applied as well as implementation of a certified Nutrient Management Plan.

4, Chapter 15 Section 64431 and 64444 and are applicable through the Basin Plan to municipal and domestic supply), and (2) narrative objectives including the chemical constituents, taste and odor, and toxicity objectives.

Implementation of Water Quality Objectives

The Basin Plan includes an implementation program for water quality objectives called the *Policy for Application of Water Quality Objectives*, which applies to implementation of both numeric and narrative water qualtiy objectives. To evaluate compliance with narrative objectives, the Policy requires the Regional Board to consider, on a case-by-case basis, various factors and information, including direct evidence of beneficial use impacts (e.g., a fish kill), information submitted by the discharger and other interested parties (e.g., levels that constitute natural background or site-specific conditions, such as soil types), and "*relevant numerical criteria and guidelines developed and/or published by other agencies and organizations*", such as the State Water Resources Control Board, California Department of Health Services, Department of Fish and Game, and the United States Environmental Protection Agency (USEPA). The Policy requires the Regional Board to consider this information and determine what specific numerical limit is "relevant and appropriate" to the situation at hand, and, therefore should be used in determining compliance with the narrative objective.

Narrative Water Quality Objectives

Some of the considerations of relevant numerical criteria and guidelines developed or published by other agencies and organizations include:

Agriculture

The Basin Plan contains a narrative chemical constituents objective for both groundwater and surface water that states that "*[waters] shall not contain chemical constituents in concentrations that adversely affect beneficial uses.*" This objective applies to the protection of agricultural beneficial uses. Relevant numerical criteria and guidelines for agricultural uses of groundwater are included in publications from the National Academy of Sciences, the University of California Cooperative Extension, and the Food and Agricultural Organization of the United Nations. This information is summarized in a 1985 publication *Water Quality for Agriculture, Food and Agriculture Organization of the United Nations - Irrigation and Drainage Paper No. 29*, (hereafter U.N. Guidelines) and includes detailed information to evaluate the quality of irrigation water necessary to sustain various crops.

The major constituents used to assess the quality of water for beneficial uses of irrigated agriculture are salinity (expressed as total dissolved solids, or TDS), boron, chloride, and sodium. Salinity reduces crop growth by reducing the ability of plant roots to absorb water. Boron is an essential element in very low concentrations but can become toxic to plants when concentrations in water even slightly exceed the amount required for optimal growth. While boron sensitivity appears to affect a wide variety of crops, sodium and chloride toxicities are

mostly limited to tree crops and woody perennials (e.g., citrus, stone-fruit, and vineyard). A predominance of sodium relative to other ions in irrigation water may also disperse soil aggregates, which in turn, affects virtually all crops by decreasing the permeability of the soil to water and air.

Nitrogen in the form of nitrate and ammonium can also affect some nitrogen sensitive crops such as sugar beets, grapes, apricots, citrus, avocado, and some grain crops. Production of nitrogen sensitive crops may be affected at nitrogen concentrations above 5 mg/L nitrate (as nitrogen) or ammonium-nitrogen.

The University of California report titled “Managing Dairy Manure in the Central Valley of California” determined through both in-field studies and modeling simulations (ENVIRO-GRO) that 1.4 to 1.65 times the crop uptake was the lowest nitrogen application rate that would still allow good crop yields. Specifically the report states that, “investigations of the crop N recovery in several field experiments showed that the appropriate N loading rate that minimizes N leaching and maximizes N harvest is between 140 to 150% of the N harvested and computer models indicated a somewhat larger range of 140% to 165%.” The report also indicated that a nitrogen “loading rate of 1.4 to 1.65 times the crop N harvest removal are practical and…achievable if the production field is properly managed.” If a crop fails, all of the nitrogen applied is available as runoff or goes to groundwater. Therefore, an NMP incorporating the 1.4 to 1.65 standard is currently considered BPTC for control of nitrogen to groundwater and surface water. In addition, groundwater monitoring will be used to verify the effectiveness of the NMP.

The U.N. Guidelines conclude that salt tolerance of crops and yield reductions can vary depending on various factors, such as irrigation management, the crop being grown, and the site conditions. The U.N. Guidelines recommend that a site-specific assessment be conducted to determine if water quality above or below the U.N. Guidelines would provide protection of irrigated agricultural uses. The U.N. Guidelines divide water quality characteristics as having “No Problem – Increasing Problems – Severe Problems” and show numerical criteria that protect a full range of crops and would likely be protective under all irrigated agricultural uses. The numerical criteria for agricultural irrigation use are:

Problem and Related Constituent	No Problem	Increasing Problems
Salinity of irrigation water (micromhos per centimeter (µmhos/cm))	< 700	700 – 3,000
Salinity of irrigation water (total dissolved solids (mg/L))	< 450	450 – 2,000
Specific Ion Toxicity		
From ROOT absorption		
Sodium (mg/L)	< 69	69 – 207
Chloride (mg/L)	< 142	142 – 355
Boron (mg/L)	< 0.7	0.7 – 3.0
From FOLIAR absorption		
Sodium (mg/L)	< 69	> 69
Chloride (mg/L)	< 106	> 106
Miscellaneous		
NH_4-N (mg/L) (for sensitive crops)	< 5	5 – 30
NO_3-N (mg/L) (for sensitive crops)	< 5	5 – 30
HCO_3 (mg/L) (only with overhead sprinklers)	< 90	90 – 520
pH	normal range =	6.5 – 8.4

In determining the concentrations of the constituents listed above that will not result in adverse affects on agricultural beneficial uses in a given area, multiple criteria can apply. While the most stringent concentration becomes the constraining criterion, it is not necessarily the concentration that is required to protect all crops typically grown in the area. The U.N. Guidelines reflect the highest tolerable level of quality necessary to sustain the most sensitive crops but those crops may or may not be grown in the area. An evaluation of the existing crops grown in an area and crops that could be grown in that area is necessary to determine what the most stringent water quality criteria are that will protect all beneficial uses of water in that area. The highest water quality that is reasonable must be maintained.

Animal Drinking Water
As shown in the U.N. Guidelines, water quality needed to protect dairy animal drinking water uses are less sensitive than irrigated agriculture for all constituents shown above.

Municipal and Domestic Supply
With respect to water quality needed to protect municipal and domestic supply, the Basin Plan contains the narrative taste or odor objective that state in summary that waters shall not contain taste- or odor-producing substances in concentrations that cause nuisance, adversely affects any beneficial use, or impart undesirable tastes or odors in fish flesh or other edible products. Waste from a dairy contains organic nitrogen, a decomposition by-product of which is ammonia, a taste-producing substance that, if present in excessive concentrations, can adversely affect the beneficial use of groundwater for municipal and domestic supply. J.E. Amoore and E. Hautala have determined an

odor threshold for ammonia-nitrogen of 1.5 mg/L (*Odor as an Aid to Chemical Safety: Odor Thresholds Compared with Threshold Limit Values and Volatilities for 214 Industrial Chemicals in Air and Water Dilution*, Journal of Applied Toxicology, Vol. 3, No. 6 (1983)). While this numeric level is a value that is to be met at the point of use (i.e., the tap, rather than the receiving water), the Basin Plans state that "[w]ater quality objectives apply to all waters within a surface water or ground water resource for which beneficial uses have been designated, rather than at an intake, wellhead or other point of consumption." In accordance with the *Policy on Application of Water Quality Objectives*, it is relevant, appropriate, and reasonable to use this numeric level of 1.5 mg/L ammonia-nitrogen to protect beneficial use of area groundwaters and surface waters for human consumption.

Aquatic Life
Ammonia is known to cause toxicity to aquatic organisms in surface waters. Waste from a dairy contains both ammonia and un-ionized ammonia, both of which can cause impact to aquatic life. The US EPA has established Ambient Water Quality Criteria for Ammonia for the protection of freshwater aquatic life. These criteria include an acute criterion (1-hour average) for total ammonia (including ionized and un-ionized ammonia) that is dependent on pH and fish species and a chronic criterion (30-day average) that is dependent on pH and temperature, and at temperatures less than 15 degrees centigrade (59° F) is also dependent on fish species. For freshwater aquatic life protection, the acute criterion for total ammonia-nitrogen ranges from 0.885 (at pH 9.0) to 32.6 (at pH 6.5) milligrams nitrogen per liter (mg N/L) when salmonids are present and from 1.32 (at pH 9.0) to 48.4 (at pH 6.5) mg N/L when salmonids are absent. The chronic criterion for total ammonia-nitrogen ranges from 0.179 (at pH 9.0) to 10.8 (at pH 6.5). These criteria are based on total (un-ionized plus ionized) ammonia.

The California Department of Fish and Game criteria to protect freshwater aquatic life is 0.02 mg/L un-ionized ammonia. The equilibrium between un-ionized and ionized ammonia is controlled by temperature and pH. The California Department of Fish and Game determines the concentration of un-ionized ammonia based on the known percentage of un-ionized ammonia in a concentration of total ammonia at a given temperature and pH.

Numeric Water Quality Objectives
Maximum Contaminant Levels (Drinking Water Standards)
The Basin Plan's incorporation of MCLs by reference is prospective to incorporate changes to MCLs as changes in Title 22 CCR take effect. Should a change occur to an MCL and that MCL thereby becomes the most or more stringent objective, implementation of the changed objective would be affected through reopening of this Order.

Water Quality Objectives for Bacteria

The majority of waste collected at a dairy is fecal matter or manure. This waste contains pathogenic bacteria and can impact water quality if not properly handled. The Basin Plan contains numeric water quality objectives for bacteria in surface waters and in groundwater. For surface water, the Basin Plan specifies that "*[i]n waters designated for contact recreation (REC-1), the fecal coliform concentration based on a minimum of not less than five samples for any 30-day period shall not exceed a geometric mean of 200/100 ml, nor shall more than ten percent of the total number of samples taken during any 30-day period exceed 400/100 ml."* For groundwater, the Basin Plan specifies that "*[i]n ground waters used for domestic or municipal supply the most probable number of coliform organisms over any seven-day period shall be less than 2.2/100 ml.*"

Receiving Water Limitations for Dairies

The numeric water quality objectives and numeric limits that are relevant and appropriate to implement narrative water quality objectives applicable to the primary waste constituents of concern in discharges of waste at dairy facilities that could affect groundwater and surface water are as follows: For groundwater, the most stringent limitations to implement narrative and numeric water quality objectives are for total coliform 2.2/100 milliliter (ml), for ammonia-nitrogen 1.5 mg/L, for boron 0.7 mg/L, for chloride 106 mg/L, for nitrate-nitrogen 5 mg/L, for EC 700 µmhos/cm, and for TDS 450 mg/L. For surface water, the most stringent limitations to implement narrative and numeric water quality objectives and criteria are for total coliform 2.2/100 ml, for chloride 106 mg/L, for nitrate-nitrogen 5 mg/L, for EC 700 umhos/cm, and for TDS 450 mg/L. For surface water, the appropriate limitation for ammonia is 0.02 mg/L un-ionized ammonia or a concentration of total ammonia determined by the pH and fish species, whichever is less. Less stringent limitations may apply to different areas but can only be determined through a site-specific assessment. The Discharger may propose the application of less stringent limitations for consideration in the Monitoring and Reporting Program. Dairy waste may include other waste constituents not mentioned here. This Order requires the discharge to comply with all water quality objectives and federal water quality critiera for surface waters applicable to the discharge.

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

RESOLUTION NO. R5-2009-0045

APPROVING THE INITIAL ENVIRONMENTAL STUDY
AND
ADOPTING A MITIGATED NEGATIVE DECLARATION
FOR
GILBERT ALSTON, JOHN ALSTON AND ELSIE SEWALD,
DBA ALSTON FARMS DAIRY NO. 2
TEHAMA COUNTY

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

1. A Report of Waste Discharge was submitted to the Regional Board on 4 March 2008 for the re-opening of Alston Farms Dairy No. 2. Alston Farms Dairy No. 2 is located at 22954 Christian Road, Orland, Tehama County and is owned by Elsie Sewald and operated by Gilbert Alston. In addition, John Alston owns a portion of the land application area. Elsie Sewald, John Alston, and Gilbert Alston are collectively hereafter "Discharger."

2. The facility is not currently regulated under Order No. R5-2007-0035, Waste Discharge Requirements General Order for Existing Milk Cow Dairies (hereafter "General Order") because the facility was not operating as a dairy in October 2005. Pursuant to Finding 2. of the General Order, the Order does not apply to such facilities.

3. The proposed dairy operation requires issuance of Waste Discharge Requirements (WDRs) by the Central Valley Water Board and compliance with the California Environmental Quality Act (CEQA).

4. The Central Valley Water Board has assumed the lead agency role for this project under CEQA and an Initial Environmental Study in accordance with Title 14, California Code of Regulations, Section 15063, Guidelines for the Implementation of the California Environmental Quality Act and a Mitigated Negative Declaration in accordance with Title 14, California Code of Regulations, Section 15070, et seq. has been prepared by VESTRA Resources, Incorporated on behalf of the Discharger.

5. The Initial Environmental Study preliminarily identified potentially significant environmental impacts caused by the operation of the dairy by the migration of contaminants from the dairy production area and/or land application area into the underlying soil and groundwater. The proposed Waste Discharge Requirements (WDRs) require installation of groundwater monitoring wells, retrofitting of the wastewater lagoon with a synthetic liner, and the completion of a field-by-field Nutrient Management Plan. The Monitoring and Reporting Program (MRP) attached to the WDRs requires groundwater monitoring, as well as monitoring to confirm that the

Nutrient Management Plan is being implemented appropriately. Complying with the WDRs and MRP should insure that surface water and groundwater are protected.

6. The Central Valley Water Board transmitted the Proposed Mitigated Negative Declaration, the supporting Initial Environmental Study, and proposed WDRs to all agencies and persons known to be interested in this matter.

7. Copies of the Mitigated Negative Declaration and supporting Initial Environmental Study were transmitted to the State Clearinghouse (SCH No. 2009022060) and copies were made available to all agencies and persons known to be interested in this matter, initiating the public review and comment period.

8. The record of proceedings for this project is located at the Rancho Cordova office of the Central Valley Water Board.

9. The Central Valley Water Board received no comments regarding the proposed project, Initial Environmental Study, or proposed Mitigated Negative Declaration.

10. The Central Valley Water Board considered all written comments timely received and testimony and evidence at a public hearing held on 23 April 2009, in Rancho Cordova, California, and good cause was found to approve the Initial Study and adopt a Mitigated Negative Declaration.

THEREFORE BE IT RESOLVED, that pursuant to Section 21080, et seq. of the California Public Resources Code, the Central Valley Water Board:

1. Finds the Mitigated Negative Declaration reflects the independent judgment and analysis of the Regional Board.

2. Finds, based on the whole record (including the Initial Study and all comments timely received), that there is no substantial evidence that the project will have a significant effect on the environment.

3. Approves the Initial Environmental Study and adopts the Mitigated Negative Declaration for Alston Farms Dairy No. 2 for the re-opening of the dairy facility near the city of Orland.

I, PAMELA C. CREEDON, Executive Officer, do hereby certify the foregoing is a full, true, and correct copy of a Resolution adopted by the California Regional Water Quality Control Board, Central Valley Region, on 24 April 2009.

_____
PAMELA C. CREEDON, Executive Officer

California Regional Water Quality Control Board
Central Valley Region
Karl E. Longley, ScD, P.E., Chair

Linda S. Adams
Secretary for
Environmental Protection

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Arnold Schwarzenegger
Governor

4 May 2009

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Mr. John Alston
1010 Highway 99W
Orland, CA 95963

Certified Mail Number
7007 0710 0004 3787 1824

Ms. Elsie Sewald
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NOTICE OF ADOPTION
OF
INDIVIDUAL WASTE DISCHARGE REQUIREMENTS ORDER
FOR
GILBERT ALSTON, JOHN ALSTON AND ELSIE SEWALD,
DBA ALSTON FARMS DAIRY NO. 2
TEHAMA COUNTY

Waste Discharge Requirements (WDRs) Order No. R5-2009-0045 for Alston Farms Dairy
No. 2 was adopted by the California Regional Water Quality Control Board, Central Valley Region at its meeting on 24 April 2009.

In order to conserve paper and reduce mailing costs, a paper copy of the order has been sent only to the owner and operator of the facility. The full text of this order is available on the Regional Water Board's website at www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders. Anyone without access to the Internet who needs a paper copy of the order can obtain one by calling Regional Water Board staff.

If you have any questions, please contact Jennifer LaBay at (916) 464-4735.

Charlene Herbst
Senior Engineering Geologist
Confined Animal Facility Regulatory Unit

Enclosure: Adopted Individual Waste Discharge Requirements Order

cc: See Next Page

cc: (Letter Only)

Lori Okun, OCC, State Water Resources Control Board, Sacramento, CA
Ben Letton, Central Valley Regional Water Quality Control Board, Redding, CA
Wendy Johnston, VESTRA Resources, Inc., Redding, CA
Tim Potanovic, Tehama County Environmental Health, Red Bluff, CA
George Robson, Tehama County Planning, Red Bluff, CA
Southern Pacific Trans Co., Omaha, NE
Mathew and Megan Alston, Orland, CA
Roy W Klingenberg Trustee, Chico, CA
Chas Vandoorn, Corning, CA
Margaret D. Poteet, Bethany, OK
Jack R Wood Trustee, Sacramento, CA
Patricia B Michaels Trustee, Los Gatos, CA
Geo A Etal Poncia TRS, Orland, CA
Maxine D. Dunlop, Fresno, CA
Rajinder S. Chohan, Yuba City, CA
Geo Edward Archer, Flournoy, CA
Norman and Kenneth Zimmerman, Orland, CA