CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
COLORADO RIVER BASIN REGION

ORDER NO. R7-2009-0055

WASTE DISCHARGE REQUIREMENTS
FOR
WM. BOLTHOUSE FARMS, INC., WESTMORLAND WASHOUT FACILITY,
OWNER/OPERATOR
CARROT RINSING FACILITY
Westmorland – Imperial County

The California Regional Water Quality Control Board, Colorado River Basin Region (Regional Water Board), finds that:

Discharger

1. Wm. Bolthouse Farms Inc., (hereinafter referred to as the Discharger), 7200 East Brundage Lane, Bakersfield, CA 93307, submitted a Report of Waste Discharge and engineering report on February 5, 2009, to obtain Waste Discharge Requirements (WDRs) for a new carrot rinsing facility (hereinafter referred to as the Facility) located at 5337 Lack Road, Westmorland, California 92283.

2. The Discharger owns and operates the Facility and proposes to discharge approximately 44,200 gallons per day (gpd) of wastewater, into an onsite, unlined evaporation/percolation pond located in a portion of the North ½ of Section 8, T13S, R13E, SBB&M. A site map (Attachment A) is incorporated herein and made a part of this Order.

Facility

3. The Facility will be operational for 6 months out of the year from February through July (operational season) with most of the production taking place between March and June of each year. The Facility will be idle the remaining 6 months of the year.

4. The wastewater consists of rinse water from washing carrots as they come from the fields. The carrots that are rinsed at the Facility have been mechanically harvested with the top leafy part trimmed off leaving a ¼ inch high leafy stem on the carrot top. The whole carrot with the remaining petioles will be loaded into trailers and transported to the Facility where they will be unloaded and rinsed to remove soil and further reduce transportation costs.

5. No chemicals or additives are used in the carrot rinsing process or recycling system.

6. Sanitary wastewater will be handled using portable toilets which will be cleaned twice a week during the operational season.

7. Bottled drinking water, provided by the Discharger, will be the only source of potable water at the site.

8. The Facility's wastewater system consists of a recycling system (mud pit, settling ponds and recycle pump pond), and an evaporation/percolation pond. A schematic of the carrot rinsing process (Attachment B) is incorporated herein and made a part of this Order.

9. The Discharger intends to fill the recycling system with 48 acre-feet (15,640,800 gallons) of fresh water from the Trifolium 8 Lateral Canal at the beginning of each operational season.

10. Trucks that enter the facility will be unloaded onto a flume where the carrots are rinsed using water from the recycle system. The carrots are then placed onto a conveyor where they are sprayed with fresh water from the Trifolium 8 Lateral Canal for a finishing rinse before being transported off-site for further processing. The finishing rinse is applied at the rate of 40 gallons per minute (gpm) for up to 3 hours a day resulting in up to 7,200 gpd of fresh water being added to the recycling system.

11. The facility intends to rinse an average of 80 trucks per day which each contain 50 tons of carrots. It is estimated that soils, having an approximate specific gravity of 2.6, will account for as much as 20 percent of the gross weight of the carrots. The Discharger anticipates that approximately 37,000 gpd of soil (800 tons per day) of soil will be added to the recycling system.

12. The volume of wastewater being discharged to the evaporation/percolation pond will be approximately equal to the sum of the volume of recycling system water that is being displaced by the soil particles removed from the carrots as described in Finding 11 and by the fresh water being used for the finishing rinse as described in Finding 10 - which totals approximately 44,200 gpd.

Site Characteristics

13. The Discharger reports that the site slopes from southeast to northwest at about 5 feet per mile (0.0009 ft/ft). The elevation of the project site is approximately 175 feet below mean sea level (msl).

14. The site is bordered on the east by the Trifolium 8 Drain on the west side of Lack Road and the Trifolium 8 Lateral Canal on the east side of Lack Road. The Trifolium 9 Drain is located near the southwest corner of the site.

15. The Discharger reports that the majority of soils at the site have been characterized by the Natural Resources Conservation Service (NRCS) to be very fine sandy loam, with an infiltration rate of less than 0.06 inches per hour.

16. The Discharger performed a geotechnical investigation of the site in August 2007 and submitted a report as part of the ROWD. Five 8-inch borings were drilled to a depth of 16.5 feet. One sample, collected at a depth of 5 feet in the northwest corner of the site and classified as silty clay (SC), was analyzed for hydraulic conductivity. The reported result was 1.8×10^{-8} centimeters per second (2.6×10^{-5} inches per hour).

17. An existing tile drainage system, located approximately 3 to 4 feet under portions of the site that discharges into the Trifolium 9 Drain, will be modified by the Discharger to become a peripheral tile drainage system that will intercept shallow groundwater around the site and prevent it from migrating beneath the site. The agricultural drainage water that is collected in the modified tile drain system will continue to discharge into the Trifolium 9 Drain.

18. The Discharger will install a new and separate tile drainage system under the recycling system and evaporation/percolation pond to collect any wastewater that might percolate through the unlined ponds to prevent it from reaching the groundwater. Any wastewater collected in the new tile drainage system will be pumped into the settling ponds and recycled.

19. The Discharger has performed a water balance that predicts that water levels in the evaporation/percolation pond will remain below 1.0 foot throughout the operational season during a 100- year annual precipitation event.

Groundwater

20. Groundwater in the vicinity of the Facility generally flows northward to the Salton Sea, and is typically located from 6 to 14 feet below ground surface (bgs). The Discharger installed a temporary piezometer at the site and recorded a one-time depth-to-groundwater measurement of 8.8 feet.

21. The Discharger collected two shallow groundwater samples from a backhoe trench pit at two different locations at the site. A partial list of the results of the groundwater monitoring analysis follows in Table 1:

Constituent	Units	Sample 1 (North)	Sample 2 (South)
TDS	mg/l	1700	14000
Nitrate as NO_3	mg/l	80	35
Sulphate	mg/l	640	3400
Nitrate + Nitrite as N	mg/l	18	8.1

Table 1 – Partial results of shallow groundwater analysis performed by Discharger

22. The Water Quality Control Plan for the Colorado River Basin Region of California (Basin Plan), adopted on November 17, 1993, designates the beneficial uses of ground and surface waters in this Region.

23. The Facility is located in the Imperial Hydrologic Unit. The designated beneficial uses of groundwater in the Imperial Hydrologic Unit are:

    a. Municipal Supply (MUN)
    b. Industrial Supply (IND)

24. Within the Imperial Valley area of the Imperial Hydrologic Unit, much of the groundwater is too saline for municipal use.

Regional Characteristics

25. The Facility is located in the Imperial Valley portion of the Salton Trough physiographic province. The Salton Trough is a topographic and geologic structural depression resulting

from large scale regional faulting. The trough is bounded on the northeast by the San Andreas Fault and Chocolate Mountains, and on the southwest by the Peninsular Range and faults of the San Jacinto Fault Zone. The Salton Trough represents the northward extension of the Gulf of California, containing both marine and non-marine sediments since the Miocene Epoch. Tectonic activity that formed the trough is a continuing process as evidenced by deformed recent sedimentary deposits and high levels of seismicity.

26. The Imperial Valley is directly underlain by lacustrine deposits, which consist of interbedded lenticular and tabular silt, sand, and clay. The Late Pleistocene to Holocene lake deposits are probably less than 100 feet thick and derived from periodic flooding of the Colorado River, which intermittently formed a fresh water lake (Lake Cahuilla). Older deposits consist of Miocene to Pleistocene non-marine and marine sediments deposited during intrusions of the Gulf of California. Basement rock consisting of Mesozoic granite and Paleozoic metamorphic rocks are estimated to exist at depths between 15,000 and 20,000 feet.

27. The average annual rainfall in the area, averaged over a 90-year period from 1914 – 2004, is 2.88 inches per year. The average annual rainfall averaged over the same period for the 6-month operational season (February 1 – July 31) is 0.85 inches per year.

28. The average annual pan evaporation in the area, averaged over a 78-year period from 1927 – 2005 is 105.25 inches (8.77 feet) per year. The average annual pan evaporation averaged over the same period for the 6-month operational season (February 1 – July 31) is 64.04 inches (5.33 feet) per year.

Anti-degradation Policy

29. State Water Resources Control Board (State Water Board) Resolution No. 68-16 ("Policy with Respect to Maintaining High Quality Waters of the State"; hereafter Resolution No. 68-16) requires a Regional Water Board, in regulating the discharge of waste, to maintain high quality waters of the state (i.e., background water quality) until it is demonstrated that any change in quality will be consistent with maximum benefit to the people of the State, will not unreasonably affect beneficial uses, and will not result in water quality less than that described in plans and policies (e.g., violation of any water quality objective). The discharge is required to meet WDRs that result in the best practicable treatment or control (BPTC) of the discharge necessary to assure pollution or nuisance will not occur, and the highest water quality consistent with maximum benefit to the people will be maintained

30. Some degradation of groundwater from the recycling system and evaporation/percolation pond is consistent with Resolution No. 68-16, provided degradation:

    a. Is confined to a reasonable area;
    b. Is minimized by means of full implementation, regular maintenance, and optimal operation of BPTC measures; and
    c. Does not result in water quality less than that prescribed in the applicable basin plan, including violation of any water quality objective.

31. The discharge of carrot rinse water to the evaporation/percolation pond, as permitted herein, reflects best practicable treatment and control. The BPTC measures assure that the discharge does not create a condition of pollution or nuisance, and that the highest

water quality defined by the physical and chemical nature of the local groundwater will be maintained, which is consistent with the anti-degradation provisions of Resolution No. 68-

32. The recycling system and evaporation/percolation pond will be:

    a. constructed outside the 100-year floodplain;
    b. underlain with a tile drainage system to intercept any waste water that might otherwise percolate into the groundwater;
    c. operated and maintained with a minimum of two (2) feet of freeboard at all times; and
    d. dried out at the end of each operational season. Soil particles that accumulate in the recycling system and evaporation/percolation pond will be removed and reused or disposed of at an approved off-site location as needed before the operational season begins

33. The constituents in agricultural wastewater that present the greatest risk to groundwater are pesticides, nutrients, and dissolved salts (TDS). The WDRs contained in this Order minimize the risk of degradation to areal groundwater. The proposed project contributes to economic development in the area and reduces energy consumption and vehicle emissions. These factors are consistent with maximum benefit to the people of the State. Accordingly, the discharge as authorized is consistent with the anti-degradation provisions of Resolution No. 68-16.

California Environmental Quality Act

34. The Imperial County Planning Department (Department) is the Lead Agency, as that term is defined in the California Environmental Quality Act (CEQA) (Pub. Resources Code § 21000 et seq.), for conducting the environmental review required under CEQA for the Westmorland Washout Facility Project (Project). As Lead Agency, the Department concluded, based on the Initial Study it conducted, that no significant environmental impacts would occur in connection with the proposed Project. Accordingly, the Department prepared a draft Negative Declaration for the Project. The Imperial County Planning Commission certified the Negative Declaration during a meeting held on September 24, 2008. The Regional Water Board has reviewed the Negative Declaration, Initial Study, and relevant Project documents distributed for public review and comment. Based on its review, the Regional Water Board has concluded that compliance with these WDRs should prevent or mitigate to a less than significant level any potential water quality impacts associated with the Project.

35. The Board has notified the Discharger and all known interested agencies and persons of its intent to issue WDRs for this Facility, and has provided them with an opportunity for a public meeting and an opportunity to submit comments.

36. The Board, in a public meeting, heard and considered all comments pertaining to this discharge.

IT IS HEREBY ORDERED, that Board Order No. 94-051 is rescinded, and in order to meet the provisions contained in Division 7 of the CWC and regulations adopted thereunder, the Discharger shall comply with the following:

A. Effluent Limitations

1. The hydrogen ion (pH) of the recycled water shall be maintained within the limits of 6.0 to 9.0.

2. The average daily wastewater flow to the evaporation/percolation ponds shall not exceed 45,000 gpd.

3. The TDS concentration in the recycling pond shall not exceed 2,500 mg/l.

B. Specifications

1. The treatment or disposal of wastes at this facility shall not cause pollution or nuisance as defined in Sections 13050 of Division 7 of the CWC.

2. A minimum depth of freeboard of two (2) feet shall be maintained at all times in all surface impoundments.

3. The Discharger shall notify the Regional Water Board prior to the removal of pond sediments if maintenance is required during the operational season. Routine maintenance of the recycling system and evaporation/percolation pond shall be performed during the non-operational season, when the ponds are dry, if possible.

4. Sediments removed from the recycling system and evaporation/percolation pond shall be disposed of in an appropriate waste management facility or reused in a manner that is approved, in writing, by the Regional Water Board's Executive Officer.

5. The recycling system and evaporation/percolation pond shall be protected from any washout, erosion, or inundation which could occur as a result of floods having a predicted frequency of once in 100 years.

6. Ponds shall be managed to prevent breeding of mosquitoes as follows:

    a. An erosion control program shall be implemented to assure that small coves and irregularities are not created around the inside slopes of the pond.
    b. Weeds shall be minimized through control of water depth, harvesting, and other methods that are protective of water quality.
    c. Dead algae, vegetation, and debris shall not accumulate on the water surface.

7. The discharge shall not cause degradation of any ground or surface water.

8. Discharge into the evaporation/percolation pond shall cease in event of any failure in the system that threatens the beneficial water uses.

C. Prohibitions

1. The direct discharge of any wastewater to any surface water or surface drainage courses is prohibited.

2. The discharge of process wastewater to a location or in a manner different from that described in Findings No. 8-12 above is prohibited.

3. The discharge or deposit of hazardous waste (as defined in Title 27 of the California Code of Regulations), and other wastes that pose a potential threat to water quality at this facility is prohibited.

D. Provisions

1. The Discharger shall comply with "Monitoring and Reporting Program No. R7-2009-0055 and future revisions thereto, as specified by the Regional Water Board's Executive Officer.

2. Prior to any change in ownership or management of this operation, the Discharger shall transmit a copy of this Board Order to the succeeding owner/operator, and forward a copy of the transmittal letter to the Regional Water Board.

3. Prior to any modifications in this facility, which would result in material change in the quality or quantity of discharge, or any material change in the location of the discharge, the Discharger shall report all pertinent information in writing to the Regional Water Board and obtain revised requirements before any modifications are implemented.

4. The Discharger shall ensure that all site-operating personnel are familiar with the content of this Board Order, and shall maintain a copy of this Board Order at the site.

5. This Board Order does not authorize violation of any federal, state, or local laws or regulations.

6. The Regional Water Board will review this Board Order periodically and may revise requirements when necessary.

7. The Discharger shall allow the Regional Water Board, or an authorized representative, upon presentation of credentials and other documents as may be required by law, to:

    a. Enter upon the premises regulated by this Board Order, or the place where records must be kept under the conditions of this Board Order;
    b. Have access to and copy, at reasonable times, any records that shall be kept under the conditions of this Board Order;
    c. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Board Order; and
    d. Sample or monitor at reasonable times, for the purpose of assuring compliance with this Board Order or as otherwise authorized by the CWC, any substances or parameters at this location.

8. The Discharger shall comply with all of the conditions of this Board Order. Any noncompliance with this Board Order constitutes a violation of the Porter-Cologne Water Quality Control Act and is grounds for enforcement action.

9. This Board Order does not convey any property rights of any sort or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of federal, state, or local laws or regulations.

10. Unless otherwise approved by the Regional Water Board's Executive Officer, all analyses shall be conducted at a laboratory certified for such analyses by the California Department of Public Health. All analyses shall be conducted in accordance with the latest edition of

"Guidelines Establishing Test Procedures for Analysis of Pollutants", promulgated by the United States Environmental Protection Agency.

11. The Discharger is the responsible party for the WDRs, and the monitoring and reporting program for the facility. The Discharger shall comply with all conditions of these WDRs. Violations may result in enforcement actions, including Regional Water Board Orders or court orders, requiring corrective action or imposing civil monetary liability or in modification or revocation of these WDRs by the Regional Water Board.

12. The Discharger shall retain records of all monitoring information including all calibration and maintenance records, copies of all reports required by this Board Order, and records of all data used to complete the application for this Board Order. Records shall be maintained for a minimum of three (3) years from the date of the sample, measurement, report, or application. This period may be extended during the course of any unresolved litigation regarding this discharge or when requested by the Regional Water Board's Executive Officer.

13. Records of monitoring information shall include:

    a. The date, exact place, and time of sampling and measurements.
    b. The individual(s) who performed the sampling or measurements.
    c. The date(s) analyses were performed.
    d. The individual(s) who performed the analysis.
    e. The analytical techniques or methods used.
    f. The result of such analysis.

14. The Discharger shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances), that are installed or used by the Discharger to achieve compliance with conditions of this Board Order.

15. The Discharger shall furnish, under penalty of perjury, technical monitoring program reports, and such reports shall be submitted in accordance with the specifications prepared by the Regional Water Board's Executive Officer. Such specifications are subject to periodic revisions as may by warranted.

16. Ponds shall have sufficient capacity to accommodate allowable wastewater flow, design seasonal precipitation, ancillary inflow, and infiltration during the non-irrigation season. Design seasonal precipitation shall be based on total annual precipitation using a return period of 100 years, distributed monthly in accordance with historical rainfall patterns.

17. The Discharger shall report any noncompliance that is likely to endanger human health or the environment, within 24 hours of becoming aware of its occurrence. The incident shall be reported to the Regional Water Board Office and to the Office of Emergency Services. During non-business hours, the Discharger shall leave a message on the Regional Water Board's voice mail. The Office of Emergency Services is operational 24 hours a day. A written report shall be submitted to this office, within five (5) business days of the Discharger becoming aware of the incident. The report shall contain a description of the noncompliance, its causes, the 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 recurrences. All intentional or accidental spills exceeding 1,000 gallons shall be reported as required by this provision.

I, Robert Perdue, 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, Colorado River Basin Region, on May 21, 2009.

Original signed by

ROBERT PERDUE
Executive Officer