California Regional Water Quality Control Board
Central Valley Region
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Environmental
Protection

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4 February 2005

CERTIFIED MAIL
7004 1160 0000 0143 9239

Mr. Chris Rufer, President
The Morning Star Packing Company L.P.
724 Main Street
Woodland, CA 95695

TRANSMITTAL OF ADOPTED CEASE AND DESIST ORDER, THE MORNING STAR PACKING COMPANY L.P., COLUSA COUNTY

Cease and Desist Order (CDO) No. R5-2005-0003 for the Morning Star Packing Company L.P. was adopted by the California Regional Water Quality Control Board, Central Valley Region at its 27 January 2005 meeting.

Please note that the CDO contains new discharge specifications and a compliance schedule with specific dues dates for technical reports. Most of the new discharge specifications are effective **immediately**. The first scheduled report due date is **1 March 2005**, when you must submit the *2005 Cropping Plan*.

In order to conserve paper and reduce mailing costs, a paper copy of the order has been sent only to the Discharger. Interested parties are advised that the full text of this order is available on the Regional Board's web site at http://www.swrcb.ca.gov/rwqcb5/adopted_orders. Anyone without access to the Internet who needs a paper copy of the order can obtain one by calling Regional Board staff.

If you have any questions regarding the CDO, please call Anne Olson at (916) 464-4740.

Wendy Wyels

WENDY S. WYELS, Supervisor
Title 27 and WDR Units

Enclosure Adopted Cease and Desist Order

cc w/o enc: see attached list

John Norton, Enforcement Unit, State Water Resources Control Board, Sacramento
Brett Gomes, Department of Fish and Game, Colusa
Emmit Lenihan, Department of Fish and Game, Yuba City
Janna Herren, Department of Fish and Game, Rancho Cordova
Alan Nack, Department of Fish and Game, Rio Vista
Mike Peters, U.S. Fish and Wildlife Service, Willows
Kevin Backus, Colusa County Environmental Health Department, Colusa
Bill Menke, Glenn-Colusa Irrigation District, Willows
Andy Hitchings, Somach, Simmons and Dunn, Sacramento
Jeffory Scharff, Law Office of Jeffory Scharff, Sacramento
Rich Rostomily, Morning Star Packing Company, Woodland
Mark Haywood, Morning Star Packing Company, Williams

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

CEASE AND DESIST ORDER NO. R5-2005-0003

FOR
THE MORNING STAR PACKING COMPANY L.P.
THE MORNING STAR TOMATO PACKING PLANT
COLUSA COUNTY

The Regional Water Quality Control Board, Central Valley Region, (hereafter referred to as "Regional Board") finds that:

1. The Discharger owns and operates The Morning Star Tomato Packing Plant near the town of Williams, in Colusa County. The facility and wastewater disposal lands are in Sections 19, 20, 29, and 30, T15N, R2W, MDB&M.

2. The facility is regulated by Waste Discharge Requirements (WDRs) Order No. 95-160, adopted by the Regional Board on 23 June 1995.

3. The tomato packing season lasts from approximately June to mid-October. During the 2004 season, the plant operated for 90 days. Tomatoes are received in trucks, transported into the facility by flumes, and are then processed into tomato paste.

4. Wastewater is generated by transporting the tomatoes through the flumes (discharged to the settling pond), through the evaporation system (discharged to the cooling pond), and by the cleaning of equipment (discharged to the irrigation system). The WDRs allow a discharge of 4.3 million gallons per day (mgd) of flume water into the settling pond, and a discharge of 58 mgd of evaporative water into the cooling water pond.

5. According to the WDRs, wastewater is to be applied to 670 acres of cropland and will be used as irrigation supply. Tailwater is to be returned to the irrigation system. During the 2004 season, the Discharger applied wastewater to only 180 acres on a regular cycle. The rest of the fields received little or no wastewater.

6. The Discharger calculates the flow of wastewater and waste constituent loadings to the cropland by estimating the flow from the settling pond and plant floor, a method that is inadequate to determine true flows and constituent loadings to each field. In addition, the Discharger discharges some process wastewater into the cooling pond, which is also used to irrigate the fields. The waste constituent loadings from this source are also unknown due to uncertainty in flow measurement accuracy. In September 2004, the Discharger stated that flow meters would be installed before the 2005 processing season.

7. On 9 September 2003, the Executive Officer issued a request for technical reports pursuant to Section 13267 of the California Water Code because the Discharger was not complying with the groundwater monitoring requirements set forth in Monitoring and Reporting Program (MRP) No. 95-160. The groundwater monitoring reports showed evidence of groundwater degradation from the settling pond, but the groundwater monitoring well network was not sufficient to allow determination of whether the land application areas are also a potential or actual source of groundwater degradation. In addition, the MRP was not consistent with MRPs recently adopted by

the Regional Board for other similarly situated food processors. The letter included a draft revised MRP and required that additional monitoring wells be installed. The final Revised MRP was transmitted to the Discharger on 28 October 2003.

8. On 15 March 2004, staff notified the Discharger that the Monitoring Well Installation Workplan was inadequate. The workplan had been submitted on 30 December 2003 in compliance with the request for reports. Because the workplan was not responsive to the original request, staff required that it be resubmitted by 1 May 2004. A revised workplan was subsequently received and approved by staff, and the Monitoring Well Installation Report was submitted on 30 August 2004, in compliance with the Executive Officer's request. The quarterly monitoring report for the third quarter of 2004 was submitted on 1 November 2004. The report complied with the revised MRP.

Violations of the WDRs

9. Discharge Prohibition No. A.1 of WDRs Order No. 95-160 states: *Discharge of wastes to surface waters or surface water drainage courses is prohibited.*

10. Discharge Prohibition No. A.2 of WDRs Order No. 95-160 states: *Bypass or overflow of untreated or partially treated waste is prohibited.*

11. Between 13 September and 6 October 2004, staff had numerous conversations with the Department of Fish and Game, the Glenn-Colusa Irrigation District (GCID), and the Discharger regarding alleged discharges of wastewater to surface water at the Morning Star facility in 2004. Staff conducted one inspection in September and two inspections in October, and on 24 September 2004 issued a Notice of Violation (NOV) for the off-site discharge of waste. Based on the Discharger's 30 September 2004 response to the NOV and interviews with GCID and DFG, there were at least eight known discharges of wastewater from the Morning Star property during the 2004 processing season, as shown on the table below. These discharges are a violation of Discharge Prohibitions No. A.1 and A.2. Although not detailed in the table, staff also received credible eyewitness reports of off-property discharges from a break in a pipeline and/or head ditch overflows at field MS-11.

Date	Description	Cause
14 August 2004	Wastewater spilled from field MS-6 into private drain that traverses the site and flows to GCID system	Gopher hole
17 September 2004	Tailwater return ditch overflowed (between fields MS-6 and MS-14) into private drain that traverses the site and flows to GCID system	Tailwater lift pump turned off

Date	Description	Cause
21 September 2004	Tailwater overflowed concrete weir into drain along east property boundary (flows into GCID system) (discharge occurred previous night)	Unknown
24 September 2004	Tailwater overflowed concrete weir into drain along east property boundary (flows into GCID system)	Unknown
26 September 2004	Tailwater overflowed concrete weir into drain along east property boundary (flows into GCID system)	Blown fuse on the tailwater lift pump
27 September 2004	Tailwater overflowed concrete weir into drain along east property boundary (flows into GCID system)	Unknown
28 September 2004	Tailwater overflowed concrete weir into drain along east property boundary (flows into GCID system)	Unknown
29 September 2004	Tailwater overflowed concrete weir into drain along east property boundary (flows into GCID system)	Tailwater lift pump malfunction

The Discharger acknowledges only that some of the above spills occurred. However, Regional Board staff received reports of all of the spills from credible eyewitnesses.

12. As a result of conversations with the Discharger in September and October 2004 and a review of the Discharger's monitoring reports, staff learned that the total land area receiving wastewater in a regular irrigation cycle was only 180 acres (fields MS-5, MS-6, MS-14, MS-15, MS-16, MS-17, MS-21, and MS-24) during the 2004 season. This is because the remainder of the land had been planted with late-season crops and the application of wastewater would have prevented their harvest. In addition, staff learned that Morning Star has not applied wastewater to the land owned by Mr. Gobel since 1995. Therefore, according to a field map provided by the Discharger, the maximum land available for wastewater application since 1995 is 554 acres instead of the 670 acres described in the WDRs. However, the Discharger does not wish to remove the Gobel property from the WDRs.

13. Discharge Specification No. B.3 of WDRs Order No. 95-160 states: "*...the dissolved oxygen content in the upper zone (1 foot) of wastewater in ponds and the irrigation distribution system shall not be less than 1.0 mg/l.*" A dissolved oxygen level of at least 1.0 mg/l is required to prevent nuisance odor conditions.

14. A review of the Discharger's July and August 2004 weekly dissolved oxygen monitoring results shows that it was unable to maintain the required 1.0 mg/l dissolved oxygen (DO) level in the settling pond between 26 July 2004 and 23 August 2004. This is a violation of Discharge Specification No. B.3. However, the monthly monitoring report for September 2004 indicates that that average DO was 3 mg/L.

15. Dissolved oxygen monitoring was conducted in previous years on a monthly, instead of the current weekly, basis. A review of those monitoring reports show that the dissolved oxygen in the settling pond fell below 1.0 mg/l during some months each year. In response to a 9 September 2003 NOV regarding a nuisance odor complaint, the Discharger stated that it is unable to prevent odors other than by diluting the settling pond with fresh water

16. A review of the monthly monitoring reports for July through November 2004 shows that the fields that were regularly irrigated received more nitrogen and salt than is reasonably expected to be consumed by the crop. Nitrogen loadings to fields MS-5, MS-6, MS-14, MS-15, MS-16, MS-17, and MS-21 ranged from 296 to 811 pounds per acre, and TDS loadings for those fields ranged from 5,600 to 14,800 pounds per acre. Few crops can consume more than 400 pounds of nitrogen per acre per year.

17. First encountered groundwater is found at six to ten feet below ground surface, and over-application of nutrients and salts will lead to groundwater degradation, a violation of the WDRs. The Discharger was not conducting groundwater monitoring in accordance with its WDRs and received a NOV in September 2003, which required the installation of additional monitoring wells and improved sampling and reporting. The Revised MRP was finalized in October 2003, but the Discharger only recently installed additional wells within the cropland as requested, and has submitted only one complete groundwater monitoring report under the revised MRP. However, based on groundwater monitoring data from monitoring wells in use since 1995, including one sampling event for the new wells, it appears that groundwater beneath the facility and land application areas has been degraded. Specifically, the concentrations of calcium, chloride, nitrate, sulfate and total dissolved solids reported for the downgradient wells are significantly greater than those reported for the upgradient monitoring well. Combined with salinity monitoring data for the process wastewater, this constitutes evidence of groundwater degradation.

Regulatory Considerations

18. The Regional Board's Water Quality Control Plan for the Sacramento and San Joaquin River Basins (Basin Plan) designates beneficial uses, includes water quality objectives to protect the beneficial uses, and includes implementation plans to implement the water quality objectives.

19. Surface water drainage from the facility is to the Glenn-Colusa Irrigation District Canal system, which is tributary to the Colusa Basin Drain. The beneficial uses of the Colusa Basin Drain, as stated in the Basin Plan, are agricultural supply; water contact recreation; noncontact water recreation; warm freshwater habitat, cold freshwater habitat; migration of aquatic organisms; spawning, reproduction, and/or early development; and wildlife habitat.

20. The beneficial uses of underlying groundwater are municipal and domestic water supply, agricultural supply, industrial service supply, and industrial process supply.

21. Section 13301 of the California Water Code states in part: "When a Regional Board finds that a discharge of waste is taking place or threatening to take place in violation of the requirements or discharge prohibitions prescribed by the regional board or the state board, the board may issue an order to cease and desist and direct that those persons not complying with the requirements or discharge prohibitions (a) comply forthwith, (b) comply in accordance with a time schedule set by the board, or (c) in the event of a threatened violation, take appropriate remedial or preventive action."

22. As described in Finding No. 11, the Discharger has discharged waste into waters of the state in violation of waste discharge requirements, and has caused waste to be discharged or deposited where it has discharged into waters of the state and created a condition of pollution or nuisance.

23. Section 13267(b) of the California Water Code states: " In conducting an investigation specified in subdivision (a), the regional board may require that any person who has discharged, discharges, or is suspected of having discharged or discharging, or who proposes to discharge waste within its region, or any citizen or domiciliary, or political agency or entity of this state who has discharged, discharges, or is suspected of having discharged or discharging, or who proposes to discharge, waste outside of its region that could affect the quality of waters within its region shall furnish, under penalty of perjury, technical or monitoring program reports which the regional board requires. The burden, including costs, of these reports shall bear a reasonable relationship to the need for the report and the benefits to be obtained from the reports. In requiring those reports, the regional board shall provide the person with a written explanation with regard to the need for the reports, and shall identify the evidence that supports requiring that person to provide the reports."

24. The technical reports required by this Order are necessary to assure compliance with WDR Order No. 95-160 and to assure protection of public health and safety. The Discharger owns and operates the facility that discharges the waste subject to this Order.

25. The issuance of this Order is an enforcement action by a regulatory agency and is exempt from the provisions of the California Environmental Quality Act, pursuant to Section 15321(a)(2), Title 14, California Code of Regulations.

26. On 27 January 2005, in Rancho Cordova, California, after due notice to the Discharger and all other affected persons, the Regional Board conducted a public hearing at which evidence was received to consider a Cease and Desist Order.

27. Any person affected by this action of the Regional Board may petition the State Water Resources Control Board to review the action in accordance with Section 2050 through 2068, Title 23, California Code of Regulations. The petition must be received by the State Water Resources Control Board, Office of Chief Counsel, P.O. Box 100, Sacramento, CA, 95812-0100, within 30 days of the date on which the Regional Board action took place. Copies of the law and regulations applicable to filing petitions are available at www.swrcb.ca.gov/water_laws/index.html and also will be provided upon request.

IT IS HEREBY ORDERED that pursuant to Sections 13301 and 13267 of the California Water Code, The Morning Star Packing Company L.P., its agents, successors, and assigns, shall in accordance with the following tasks and time schedule, implement the following measures and identify and implement all

improvements required to ensure long-term compliance with WDRs No. 95-160 or any revisions to those WDRs.

Any person signing a document submitted under this Order shall make the following certification:

> *"I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my knowledge and on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment."*

1. The Discharger shall **immediately** comply with all aspects of WDRs Order No. 95-160 (or subsequent WDRs that rescind and replace Order No. 95-160).

2. Effective **immediately**, the Discharger shall comply with the following requirements:
   a. The discharge of wastewater, and tailwater or storm water containing waste to surface water drainage courses is prohibited.
   b. **Effective 1 June 2005**, there shall at least two feet of freeboard at the concrete weir during periods when wastewater is being used for irrigation and/or when tailwater in the ditch results from irrigation with wastewater.
   c. Irrigation water, regardless of the source, shall be applied at agronomic rates for the crops grown. The frequency and depth of irrigation shall be determined based on actual weather conditions and crop needs.
   d. Nitrogen and other nutrients, regardless of the source, shall be applied at agronomic rates for the crops grown. All nitrogen applied shall be considered "plant available".
   e. Loading rates for biochemical oxygen demand (BOD) shall not exceed 100 pounds per acre per day or 300 pounds per acre per irrigation cycle.
   f. To comply with Discharge Specification No. B.5 of the WDRs, irrigation and drainage ditches shall be maintained free of weeds and aquatic plants.

3. **Effective 1 June 2005**, and continuing until the Executive Officer determines that this action is no longer necessary due to system improvements, the Discharger shall measure the freeboard at the upstream face of the concrete weir in the drain east of Field MS-5. Measurements shall be made once daily and the data shall be reported in the monthly monitoring reports submitted pursuant to the MRP. The monthly monitoring report shall also document any releases of storm water over the weir, including the date(s), time(s), and estimated volume of the overflow. A single grab sample of the overflow shall be obtained once during each discrete overflow event. The samples shall be submitted to an analytical laboratory and tested for BOD, TDS, FDS (fixed or inorganic dissolved solids), and total nitrogen. The analytical data shall be included in the monthly monitoring report.

4. By **1 March 2005**, the Discharger shall submit a *2005 Cropping Plan.* The Plan shall describe how the fields will be planted with suitable crops and managed such that:
   a. Use of the available cropland is maximized;

b. The crops are established prior to the beginning of the discharge season; and

c. The crops are actively growing throughout the discharge season.

Loadings for the following shall be calculated for both the packing season and on an annual basis, and the report shall include all supporting calculations.

a. Hydraulic loading (gpd, inches/month), including evapotranspiration rates, wastewater flows, freshwater flows, and tailwater return;

b. Maximum and average BOD_5 loadings (lbs/acre/day) using actual acreage and wastewater volumes applied on each day of discharge; and

c. Nitrogen loading (lbs/acre/year) using actual acreage and wastewater volumes applied on each day of discharge, assuming no denitrification and including the use of any commercial fertilizers.

d. Total dissolved solids (TDS) loading (lbs/acre/year) using actual acreage and wastewater volumes applied on each day of discharge.

5. By **1 April 2005**, the Discharger shall submit a *Dissolved Oxygen Compliance Report*. The report shall contain (a) a feasibility study of methods to ensure that the waste in the settling pond continually meets the conditions of Discharge Specification No. B.3, and (b) the preferred alternative for achieving compliance. If the preferred alternative is the addition of fresh water, then the report shall clearly show the anticipated volume of freshwater to be added to the pond, whether the Discharger has the ability to properly manage and dispose of the increased wastewater flow, and the management changes from previous years that will result in a dissolved oxygen of 1.0 mg/l at all times. The preferred alternative shall be implemented prior to the 2005 packing season.

6. By **1 May 2005,** the Discharger shall submit a workplan for a *Salinity Reduction Study*, which includes the following minimum elements:

a. A discussion of all chemicals used at the facility; food processing additives; cleaning and sanitation procedures; and waste disposal practices for any boiler blowdown, ion exchange reject, or reverse osmosis reject;

b. Chemical characterization and estimated generation rate for each identified waste stream;

c. Methods available to reduce the concentration of total dissolved solids in each wastewater stream discharged to the settling pond and cooling pond (including, but not limited to treatment and segregation with offsite disposal);

d. Provide calculations estimating the mass of salinity removed by the crops.

7. By **1 May 2005,** the Discharger shall submit a *Flow Metering Systems Improvements Report*. For each of the following required flow monitoring points, the report shall completely describe the design, construction, and operation of flow metering systems that provide continuous, direct flow measurement and accurate calculation of daily total flows: combined flow from the settling pond and plant floor, flow from the cooling water pond, and the total flow (including fresh GCID water) applied to the cropland. Additionally, by **15 August 2005**, the Discharger shall submit a final report verifying that the metering systems are adequate and fully operational. The report shall also described how the metering systems will be used in conjunction with appropriate wastewater

sampling stations (whether existing or new) to ensure accurate calculation of waste constituent loadings.

8. By **1 May 2005**, the Discharger shall submit a *Field MS-11 Irrigation System Report.* The report shall document the management and/or physical changes that have been made to the manner in which wastewater is supplied to Field MS-11. The report shall document that the changes will prevent any residual wastewater or wastewater solids in the head ditch from being discharged off-site when the fresh water is supplied to the downstream farmer.

9. By **1 November 2005**, the Discharger shall submit the *Results of the Salinity Reduction Study*. The report shall contain a discussion of each element listed in No. 6, above.

10. By **30 December 2005**, the Discharger shall submit a *Background Groundwater Quality Study and Groundwater Impacts Assessment Report*. For each groundwater monitoring parameter/constituent identified in the MRP, the report shall present a summary of all historical monitoring data, calcaulation of the concentration in background monitoring wells, and comparison of background groundwater quality to that in wells used to monitor the ponds and land application areas. The report shall include at least the following:

    a. A narrative discussion of the hydrogeology of the processing facility and land application areas, including subsurface stratigraphy, soil infiltration characteristics, depth to groundwater, groundwater gradient, and seasonal gradient variations over the previous three years. Include boring legs and geologic cross-sections illustrating the subsurface conditions.

    b. Groundwater elevation contour maps for (at least) each of the preceding eight monitoring events.

    c. Historical summary data tables for each well for all monitored constituents.

    d. Concentration vs. time graphs for each constituent listed in the revised MRP. Each graph shall represent the results for a single constituent, and multiple wells may be plotted on a single graph.

    e. Statistically based definition of the site-specific background concentration for each of the constituents listed in the revised MRP.

    f. A narrative analysis of spatial and temporal trends for each of the constituents listed in the revised MRP with respect to established background concentrations.

    g. A statistically based evaluation of monitoring data using an appropriate data analysis method as described in Title 27, Section 20415(e)(7-9) to determine whether groundwater quality has been degraded.

    h. If any established background concentrations have been exceeded, a specific plan for source control and a corrective action program and time schedule to assure compliance with the WDRs.

11. By **30 December 2005,** the Discharger shall submit a *Report of Waste Discharge (RWD)* to allow staff to prepare updated Waste Discharge Requirements. The RWD shall include a detailed description of all improvements required to comply with this Order and prevent groundwater degradation, including those already implemented and those planned for future implementation.

Specifically, the RWD shall describe improvements (existing and proposed) to achieve the following objectives:

a. Provide an irrigation system that is protected from accidental overflow and ensures even distribution of applied water to each field.

b. Provide a tailwater management system that does not rely on any recycling or storage within drains that discharge to surface waters.

c. Provide a wastewater and/or tailwater storage system adequate to ensure compliance with the WDRs and this Order. Specifically, during the processing season fields shall not be irrigated 24 hours prior to forecasted precipitation, during precipitation, 24 hours after precipitation, or when the surface soil is saturated.

d. Provide treatment as necessary to ensure agronomic application rates for nutrients.

e. Provide treatment and/or control to ensure that salts are applied at rates consistent with expected crop uptake and background groundwater quality.

f. Provide treatment and/or control to prevent nuisance odors.

The implementation schedule for completion of all proposed improvements shall not exceed **270 days**. The RWD shall include a Form 200 (available on the Internet at http://www.swrcb.ca.gov/sbforms/form200.pdf) and a technical report responding to the attached Additional Questions (Attachment A of this Order). The technical report shall be prepared under the direct supervision of a California Registered Civil Engineer, and shall be signed and stamped by that professional.

12. **Beginning 1 May 2005**, and by the first day of the second month following each calendar quarter **(i.e., by 1 February, 1 May, 1 August, and 1 November each year)**, the Discharger shall submit a progress report describing the work completed to date regarding each of the reporting requirements described above.

In addition to the above, the Discharger shall comply with all applicable provisions of the California Water Code that are not specifically referred to in this Order. All technical reports required herein 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 persons registered to practice in California pursuant to California Business and Professions Code, sections 6735, 7835, and 7835.1. 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.

If, in the opinion of the Executive Officer, the Discharger fails to comply with the provisions of this Order, the Executive Officer may refer this matter to the Attorney General for judicial enforcement or may issue a complaint for administrative civil liability.

Failure to comply with this Order may result in the assessment of an Administrative Civil Liability up to $1,000 or up to $10,000 per day of violation, depending on the violation, pursuant to the California Water

Code, including sections 13268, 13350, and 13385. The Regional Board reserves its right to take any enforcement actions authorized by law.

I, THOMAS R. PINKOS, 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 27 January 2005.

Thomas R Pinkos

THOMAS R. PINKOS, Executive Officer

Attachment A: Additional Questions
ALO: 3 February 2005

AMENDED