

**Note: This document has been prepared by the
Central Valley Water Board's Prosecution Team**

ITEM: 15

SUBJECT: Morning Star Packing Company, L.P. and Fred Gobel; The
Morning Star Tomato Packing Plant, Colusa County

BOARD ACTION: *Consideration of a Cease and Desist Order (CDO)*

FACILITY
BACKGROUND: The Morning Star Packing Company, L.P. owns and operates a
tomato processing facility (Facility) near the city of Williams in
Colusa County. The Williams Facility processes approximately
630 tons of tomatoes per hour, and is the largest tomato
processing plant in California. Processing generally occurs from
June to mid-October each year. Morning Star also owns 600
acres of cropland associated with the Williams Facility. Fred
Gobel owns 95 acres of cropland nearby. Morning Star and Fred
Gobel¹ are referred to as "Discharger".

In 2005, the Board issued a Cease and Desist Order to the same
Dischargers (Morning Star and Gobel) for violations of the 1995
WDRs, including discharges of waste to surface waters, failure to
comply with the dissolved oxygen limit in the wastewater pond,
groundwater degradation, and excessive application of nitrogen
and salts to the cropland. The Discharger submitted reports and
made improvements; however, compliance with the CDO's
nitrogen and BOD loading rates was inconsistent. The 2005
CDO was rescinded after adoption of the 2013 WDRs.

The Facility is currently regulated under WDRs Order R5-2013-
0144. The WDRs prescribe requirements for the discharge of
industrial wastewater to land. According to the 2013 WDRs,
there are five wastewater streams: water softener reject,
condensate from the evaporation process, boiler blowdown, plant
cleaning water, and tomato waste generated in the flume system.
Tomato waste enters the Settling Pond, while the water softener
reject, condensate, and boiler blowdown are directed to the
Cooling Pond. Wastewater generated from sanitation or cleaning
activities flows directly into ditches. The wastewater from all
three sources is land applied to 695 acres of cropland (known as
the land application areas or LAAs) at agronomic rates as
authorized by the 2013 WDRs.

In mid-August 2015, Board staff began receiving odor complaints
from the surrounding community. As a result of information
gathered during the fall of 2015, Board staff determined that the
Discharger has committed multiple violations of the 2013 WDRs:

¹ It is noted that Mr. Gobel is named in the WDRs because he owns 95 acres of cropland to which the wastewater may be applied. However, Morning Star did not reach a lease agreement with Mr. Gobel in 2015 and therefore wastewater was not applied to his land. Mr. Gobel has not responded to any aspect of the tentative CDO.

- Unpermitted expansion of the Cooling Pond from 60 acres to 100 acres;
- Unpermitted expansion of the Settling Pond from 5 acre-feet in volume to 10.16 acre-feet;
- Removal of 90.5 acres of cropland;
- Unauthorized discharge of organic waste to the Cooling Pond;
- Creation of objectionable off-site odors;
- Failure to maintain adequate dissolved oxygen concentrations in the Settling Pond and Cooling Pond;
- Violation of the BOD and nitrogen mass loading limits for the cropland;
- Groundwater pollution by manganese;
- Solid waste management violations, including the unauthorized production of silage; and
- Storm water violations.

The Prosecution Team issued a Tentative CDO which required the Discharger to take actions to return to strict compliance with the 2013 WDRs. These actions included restoring the Cooling Pond and Settling Pond to the size described in the WDRs, restoring the 90.5 acres of cropland, ceasing to produce silage on-site, making facility improvements to comply with the dissolved oxygen pond limit, preventing overloading the cropland with BOD and nitrogen, and taking specific steps to prevent off-site odors.

Morning Star strongly objected to the Tentative CDO's requirement to restore its ponds and cropland and stop producing silage. Morning Star has provided a number of technical documents to show how it could appropriately manage its wastewater and solid waste with its current configuration. In response, the Prosecution Team has revised the proposed CDO to incorporate Morning Star's proposals.

INTENT OF
PROPOSED CDO

It is the Prosecution Team's intent to provide the Discharger with a choice regarding its path of compliance with the 2013 WDRs. The Discharger may either (a) make facility improvements and operational changes to strictly comply with the 2013 WDRs or (b) continue to operate the Facility as currently built- in a manner not authorized by the current WDRs- but with limitations to protect water quality and requirements to collect the data necessary to submit a new Report of Waste Discharge (ROWD) to revise the WDRs. Due to the seasonal variability of Morning Star's operations, it is anticipated that three years of data collection would be needed before Morning Star would submit a ROWD and apply for revised WDRs. Therefore, if the Discharger elects option (b), it is anticipated that this CDO would be effective for

approximately four years. New WDRs may or may not permit Morning Star to continue the current operations as provisionally allowed under this Order.

HIGHLIGHTS OF THE PROPOSED CDO

Expansion of the Cooling Pond and reduction of 90.5 acres of cropland

With respect to the Cooling Pond, this Order provides Morning Star with a choice to either: (a) restore the Cooling Pond to meet the size and location described in the 2013 WDRs or (b) operate the Cooling Pond consistent with the underlying intent of the 2013 WDRs, i.e., in a manner that protects water quality, while collecting data for a new ROWD and amended WDRs for the current operations. If option (b) is selected, then the Discharger would be required to measure the influent flow, collect influent and pond samples, and install at least two more groundwater monitoring wells.

With respect to the land application areas, the proposed Order provides Morning Star with a choice of either (a) restoring the LAA to 695 acres or (b) complying with a reduced flow limit. The flow limits in the 2013 WDRs are based on the availability of 695 acres of cropland for irrigation. However, Morning Star proposed that it not be required to irrigate on the 695 acres of cropland identified in the 2013 WDRs, and instead be allowed to continue using the 485 acres it presently has available. In exchange, Morning Star proposed that 2013 WDRs daily flow limit of 4.3 million gallons per day (mgd) be reduced to 3.0 mgd, based on the corresponding 31% reduction in cropland. If the Discharger chooses to implement option (b), then the proposed Order would reduce both the daily maximum and the total annual flow limits in the 2013 WDRs by 31%. In addition, the proposed Order states that regardless of the BOD concentration of the wastewater and the volume of wastewater produced, Morning Star must still meet its BOD loading limit of 100 pounds BOD/ac/day/irrigation cycle and its nitrogen loading limit of crop demand.

Unpermitted Expansion of the Settling Pond

The proposed Order provides Morning Star with a choice to either: (a) restore the Settling Pond to meet the size and location described in the 2013 WDRs or (b) operate the Settling Pond consistent with the underlying intent of the 2013 WDRs, i.e., in a manner that protects water quality, while collecting data for a new ROWD and amended WDRs for the current operations. If Morning Star elects to keep the Settling Pond at the expanded size, then it will be required to monitor for additional constituents both in the pond and in the groundwater monitoring wells associated with the Settling Pond.

Unauthorized discharge of organic waste into the Cooling Pond

Neither the 1995 WDRs nor the 2013 WDRs allow the discharge of organic waste (tomato byproducts) into the Cooling Pond. However, Board staff has recently learned that organic waste is contained within the evaporator condensate and that this material is discharged to the Cooling Pond. The 2013 WDRs do not contain monitoring to determine the magnitude of the organic waste discharged, nor does it consider the potential impacts of this waste on the groundwater underlying the Cooling Pond.

The proposed Order provides Morning Star with a choice to either: (a) stop discharging organic waste into the Cooling Pond or (b) comply with an interim BOD pond guideline of 20 mg/L. This interim guideline is intended to minimize the amount of organics discharged to the Cooling Pond to a concentration assumed to be similar to what is currently discharged. It is also intended to protect underlying groundwater quality during the period before the WDRs are updated. The 20 mg/L BOD guideline is not intended to be an effluent limit but is a guideline for the concentrations within the pond, after the pond water has been aerated. If Morning Star does not meet the guideline in 2016, then it will need to take actions to meet it in 2017.

Odor Violations

Board staff received numerous odor complaints about Morning Star's operations in 2015. The proposed Order requires Morning Star to implement its proposed actions to reduce odors: adding aeration to the Cooling Pond, use surrogates to predict wastewater BOD concentrations prior to application, and improved screening prior to the 2016 season. Morning Star's technical document recommends installation of sprinkler systems to more evenly distribute the wastewater on cropland, but the Prosecution Team understands that Morning Star will not commit to this action for 2016. Therefore, this Order requires that Morning Star submit a report evaluating when and how sprinkler irrigation can be used on its cropland. This Order also requires Morning Star to take actions to prevent stagnant water in the irrigation ditches and to cease using wastewater to irrigate rice fields. Finally, this Order requires Morning Star to implement a real-time odor monitoring program and to take immediate actions if there are any off-site odors.

Dissolved Oxygen Violations

The proposed Order requires the Discharger to install a sufficient number of aerators in the Cooling Pond and Settling Pond such that dissolved oxygen is maintained above 1.0 mg/L and off-site odors due to the ponds are prevented. In addition, this Order requires the collection of daily DO measurements and clarifies the

DO limit in the 2013 WDRs.

BOD and Nitrogen Mass Loading Violations

The 2013 WDRs (and previous CDO) contain a BOD effluent limit of 100 pounds per acre per day as an irrigation cycle average. Morning Star has violated this limit numerous times in in 2015, as well as in previous years. An elevated BOD loading rate will cause anaerobic conditions in the soil, solubilizing iron and manganese, and leading to groundwater impacts.

Morning Star has recently stated that errors were made in calculating the BOD loading rates. Therefore, this proposed Order requires Morning Star to submit revised 2014 and 2015 monitoring reports with the correct calculations for BOD loading. In addition, if Morning Star does not follow its consultant's recommendations for irrigation cycle drying times, then the monthly monitoring reports are to describe why the recommendations weren't followed. In addition, the proposed Order requires that Morning Star implement its proposal to use two surrogates to manage BOD loading, and to submit a report describing the changes it will make to ensure that it meets the nitrogen loading and BOD loading limits.

Groundwater Pollution

The proposed Order requires that Morning Star take immediate steps to reduce the manganese pollution in the groundwater, including reducing the BOD loading to its fields and submitting a report describing its actions. Alternatively, Morning Star may attempt to show that the manganese pollution may be due to factors other than the disposal of wastewater.

With respect to the exceedance of the TDS groundwater trigger limit, the proposed Order requires that the reports already required by the WDRs be submitted, and that Morning Star evaluate the use of ADOX 750 (an odor reducing agent) as a contributor to TDS in the groundwater.

Solid Waste Management Violations

With respect to the tomato solids in the irrigation ditches, the proposed Order requires that Morning Star take measures to prevent this discharge, conduct daily monitoring, and on a daily basis, remove and appropriately dispose of any tomatoes in the irrigation ditches.

With respect to the application of residual solids onto land, the proposed Order requires that the Discharger submit the *Residual Solids Management Plan* required by the WDRs.

With respect to the unauthorized production of silage, the proposed Order provides the Discharger with a choice to either: (a) remove the existing silage and stop producing any more or (b) construct a silage leachate and storm water collection system such that this waste is collected, contained, and disposed of in a manner that protects water quality. In addition, the Discharge would be expected to monitor the leachate and silage-related activities.

Storm Water Violations

Morning Star failed to obtain coverage under the State Water Resources Control Board's General Permit for Storm Water Discharges Associated with Construction Activity (Order 2009-0009-DWQ) for its 2015 construction projects. The proposed Order requires that Morning Star submit a Notice of Intent for any future construction project that meets the conditions for coverage under the Construction General Permit.

It is not clear whether or not Morning Star should be covered under the General Permit for Industrial Storm Water Discharges Associated with Industrial Activities (NPDES General Permit CAS000001). Morning Star submitted a Notice of Non-Applicability but it is incomplete. This proposed Order requires that Morning Star submit the outstanding information, and if necessary, apply for coverage under the General Permit.

ISSUES

The Prosecution Team anticipates that Morning Star will choose the options that allow it to continue its current operations with restrictions to protect water quality. At the time this summary sheet was prepared, the Discharger had not yet had an opportunity to review the revised tentative CDO. The Prosecution Team does not know if the Discharger still has concerns with the proposed Order, but if so, the Prosecution Team will continue to meet with Morning Star and will entertain proposed revisions, as long as they will ensure that water quality is protected during the interim period before new WDRs are adopted.

SUMMARY:

The proposed Cease and Desist Order provides Morning Star with a choice regarding its path of compliance with the 2013 WDRs. The Discharger may either (a) make facility improvements and operational changes to strictly comply with the 2013 WDRs or (b) continue to operate the Facility as currently built- in a manner not authorized by the current WDRs- but with limitations to protect water quality and requirements to collect the data necessary to submit a new ROWD to revise the WDRs.

RECOMMENDATION: The Prosecution Team recommends that the Board adopt the Cease and Desist Order as proposed.

Mgmt. Review WSW
Legal Review MeO

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