

**Regional Water Quality Control Board
Central Valley Region
Board Meeting – 25/26 October 2007**

**Response to Written Comments for SK Foods, Lemoore Tomato Processing Facility,
Kings County
Tentative Waste Discharge Requirements**

At a public hearing scheduled for 25/26 October 2007, the Regional Water Quality Control Board, Central Valley Region (Regional Water Board) will consider adoption of Revised Waste Discharge Requirements Order No. R5-2007-XXXX for the SK Foods, Lemoore Tomato Processing Facility (Facility) for the discharge of wastewater to a nearby 2,600 acre Use Area. This document contains responses to written comments received from interested parties regarding the Tentative Waste Discharge Requirements (TWDRs) circulated on 29 August 2007. Written comments from interested parties were required by public notice to be received by the Regional Water Board by 14 September 2007 to receive full consideration. Written comments were received from:

1. Brown and Caldwell, Rancho Cordova, 14 September 2007.
2. Mr. John Howe, Stratford, 9 September 2007.

Written comments from the above interested parties are summarized below, followed by the response of the Regional Water Board staff.

BROWN AND CALDWELL

BC – COMMENT 1: BC notes that Finding No. 8 of the TWDRs should be changed from “..8 mgd” to “8 million gallons”.

RESPONSE: Comment noted and the TWDRs has been amended as indicated.

BC – COMMENT 2: BC notes that the term “*WWTF*” is used throughout the text and recommends replacement with “*processing facility, use area, or land application area,*” as appropriate.

RESPONSE: Comment noted and the term “*WWTF*” has been replaced with either “*tomato processing facility*” or “*Use Area,*” as appropriate.

BC – COMMENT 3: BC comments that Finding No. 30 of the TWDRs lists “*seven piezometers*” that will be used to record depth to groundwater data and request that number be reduced to three.

RESPONSE: The comment was noted and the TWDRs have been amended as indicated due the Discharger having recently installed an 11 well groundwater monitoring well network. The groundwater monitoring well network in conjunction with the three piezometers provide sufficient monitoring points for the Discharger to assess mounding and the direction of groundwater flow in response to the discharge of wastewater to the Use Area.

BC – COMMENTS 4 & 5: BC notes that *“Discharge Specifications C.3 and C.4 of the TWDRs should be changed to C.4 and C.5,”* respectively.

RESPONSE: Comments noted and the TWDRs have been amended as indicated.

BC – COMMENT 6: BC indicates that *“the blending of wastewater with fresh water at a ratio of 1:1 may not be possible due to supplemental water availability.”* BC states that hydraulic loading will be documented in monthly monitoring reports and if nuisance conditions are observed, they will be documented and additional mitigation measures will be initiated.

RESPONSE: Regional Water Board staff do not concur with this comment and the TWDRs will require blending of wastewater with freshwater. The Discharger indicated in its Report of Waste Discharge (RWD) that blending with supplemental water would occur and this was incorporated into the Initial Study and Negative Declaration adopted by the Regional Water Board (Initial Study, page 1, Introduction, 4th paragraph; Initial Study, page 12, Hydrology and Water Quality, VIII b); RWD, 3.4.1, Hydraulic Loading Analysis, 4th paragraph; RWD, 3.4.3, and Organic Loading Analysis, 4th paragraph). It is necessary to evenly distribute wastewater over a sufficient area of land to reduce the instantaneous loading on soil and the potential for nuisance odors.

Discharge of wastewater began in July 2007 and odor and conditions have already been reported and observed. The Discharger noted that blending of wastewater began in August of 2007, even though discharge began in July 2007. The discharge of wastewater in July without blending corresponds to odor complaints by the neighbor, Mr. Howe, in July and August 2007. Mr. Howe also alleges odor issues in September 2007. These conditions were further substantiated during an inspection by Regional Water Board staff on 28 August 2007, during which stagnant standing water and odors were observed.

Provision G.11, does allow for the Discharger to propose other operational measures for Executive Officer approval that will ensure even distribution of wastewater and ensure the loading on the Use Area is consistent with the loading from blended water.

BC – COMMENT 7: BC indicates that Section E., Solids Specifications of the TWDR does not expressly state that the permanent disposal and/or reuse of screened solids from the tomato processing facility at the Use Area is allowed. BC requests Section E contain the statement *“In the event the current off-site solids disposal option”* (used as cattle feed) *“ceases, the screenings will be land applied to a portion of the 2,600-acre Use Area.”*

RESPONSE: The following was added to Solids Specification E.3: *“Screenings may be land applied to a portion of the 2,600-acre Use Area provided that, at least 60 days prior to application, the Discharger submits a loading analysis that demonstrates the land application of solids will not cause an exceedance of any specification (particularly Discharge Specification C,3) or groundwater limitation of this Order.”*

BC – COMMENT 8: BC notes that Footnote 3 to the Groundwater Monitoring Table on page 4 of the Monitoring and Reporting Program does not apply and should be removed.

RESPONSE: Comment noted and the MRP has been amended as indicated.

MR. JOHN HOWE

MR. HOWE – COMMENT 1: Mr. Howe notes the location of his residence to the Use Area, and notes his concern is primarily the odor factor from the discharge.

RESPONSE: Comment noted.

MR. HOWE – COMMENT 2: Regarding Attachment B to the TWDRs, Facility Process Flow Diagram, Mr. Howe notes that it contains a notation indicating a source of fresh water for the project will be the Lemoore Canal. Mr. Howe states *“water from the Lemoore Canal can not be used on the Land Application Site.”*

RESPONSE: The comment is not water quality issue, but is a water rights issue. Reference to the *“Lemoore Canal”* has been changed to *“canal”* on Attachment B.

MR. HOWE – COMMENT 3: Regarding Findings 10 and 19 of the TWDRs, Mr. Howe notes each finding references blending of wastewater with fresh water and states *“I have not seen any blending of irrigation water with discharge water during my limited visits to the discharge site this summer as called out in Discharge Specification C.4., and stated in paragraph (finding) 19.”*

RESPONSE: See response to BC comment No. 6.

MR. HOWE – COMMENT 4: Regarding Finding 8 and Discharge Specification C.4. of the TWDRs, Mr. Howe expresses concern regarding the estimated 400,000 gallon per day discharge from the Food Process line indicating such a small volume will be difficult to deal with and recommending it be discharged to the City of Lemoore’s wastewater treatment plant during periods of heavy rains or lack of a suitable crop to irrigate.

RESPONSE: An additional Discharge Specification (C.6.) has been added stating *Wastewater will not be discharged to the Use Area during periods of heavy rain or when surface soils are saturated to a point that would restrict the ability to infiltrate into the soils or cause wastewater to stand for greater than 48 hours.*

MR. HOWE – COMMENT 5: Regarding Finding 10 the TWDR, Mr. Howe notes there are no aeration requirements for the wastewater. Additionally, Mr. Howe request the Discharger collect major solids spills and dispose of them offsite rather than washing such spills down a drain.

RESPONSE: Provision G.10 of the TWDR states that “as a means of discerning compliance with *Discharge Specification C.2*, the dissolved oxygen (DO) content in the upper zone (1 foot) of blended water in the irrigation canal should not be less than 1.0 mg/L” and requires that if odors are observed, the Discharger shall remedy the low DO condition.

Regarding the cleanup of solids spills, Regional Water Board staff concurs that spills of solids shall be collected and directed to the solids disposal options (cattle feed or land application). Some solids will likely enter the drains, but all solids leaving the tomato processing facility are to be screened before discharge to remove large particles from the waste stream.

MR. HOWE – COMMENT 6: Regarding Findings 12 and 18 of the TWDRs, Mr. Howe states the paragraph indicating the current pipeline can supply the entire 2,600-acre Use Area is incorrect.”

RESPONSE: Comment researched and Finding 12 of the TWDRs has been amended to read as follows: *The new pipe discharges into an irrigation ditch that currently supplies the eastern half of the 2,600-acre Use Area. Additional pipeline(s) are planned to deliver the wastewater to the western half of the Use Area as the flow increases. More pipeline improvements are planned for 2008 to allow the Discharger to increase its flows to 4.5 mgd.*

MR. HOWE – COMMENT 7: Regarding Finding 15 of the TWDRs, Mr. Howe expresses doubt of the ability to apply 4-inches per day to the Use Area and notes careful salt management will be required to continue to grow crops.

RESPONSE: Using 4-inches as a water utilization rate conservatively estimates the potential biochemical oxygen demand (BOD) and salt loading to near surface soils and underlying groundwater. Actual applications will be less than 4-inches per day (as discussed in Finding 16) and result in less loading than what was used to provide the estimate.

MR. HOWE – COMMENT 8: Regarding Finding No. 16, Mr. Howe doubts the BOD loading rates as presented due to observed odors at his residence in July, August, and September 2007.

RESPONSE: See response to BC Comment No. 6 regarding blending wastewater with freshwater.

MR. HOWE – COMMENT 9: Regarding Finding No. 17 of the TWDRs, Mr. Howe states he doubts the list of crops listed in the Finding are complete.

RESPONSE: The list may was not intended to be a complete list as addressed in Finding 40. The Discharger has provided supplemental information that it plans to grow other crops such as sorghum and organic processing tomatoes in addition to those indicated.

MR. HOWE – COMMENT 10: Regarding Finding 23 of the TWDRs, Mr. Howe states that the soils are not very well drained accounting for the high water tables in the area.

RESPONSE: The information presented is from the USDA Natural Resources Conservation Services *Soil Survey for Kings County California*. Drainage characteristics for the Panoche Clay Loam are listed as “well drained,” while that for the Lethent Series are listed as “moderately well drained.” The TWDR has been amended to include moderately well drained.

MR. HOWE – COMMENT 11: Mr. Howe concludes that his primary concern is the odor from the discharge and states that the true solution is to treat the water before discharge. Another method Mr. Howe recommends is requiring discharge of wastewater to all 2,600 acres.

RESPONSE: Organic overloading of the Use Area and allowing water to stand for more than a day or two are the most likely conditions that would lead to odor problems. The TWDRs contain a BOD loading limit of 100 lb/acre/day and that wastewater be blended before being applied, or that the Discharge implement other approve operational measures to ensure even distribution. The TWDRs also require that the wastewater be applied at agronomic rates and that all applied irrigation water must infiltrate completely within 48 hours.

At current flows, the Discharger can apply to less than 2,600 acres and comply with the requirements in the TWDRs. As flows approach the 4.5 mgd limit, it will be necessary for the Discharger to utilize the entire 2,600-acre Use Area.