

**Regional Water Quality Control Board  
Central Valley Region  
Board Meeting –8/9 June 2017**

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RESPONSE TO WRITTEN COMMENTS ON  
WASTE DISCHARGE REQUIREMENTS FOR  
J. G. BOSWELL COMPANY  
CORCORAN TOMATO PROCESSING FACILITY  
KINGS COUNTY

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At a public hearing scheduled for 8/9 June 2017, the Regional Water Quality Control Board, Central Valley Region ([Central Valley Water Board](#)) will consider adopting revised Waste Discharge Requirements ([WDRs](#)) for the discharge of tomato processing wastewater to adjacent farmland from the J. G. Boswell Company's ([J. G. Boswell](#)) Corcoran Tomato processing facility. This document contains the response to written comments received from J. G. Boswell. Written comments from interested parties were required to be received by the Central Valley Water Board by 5:00 p.m. on 28 April 2017 in order to receive full consideration. Comments were received from J. G. Boswell on 20 April 2017.

Staff has made some minor changes to the tentative WDRs based on the comments to increase clarity and fix typographical errors. Similar changes were made to the draft Monitoring and Reporting Program ([MRP](#)) and the Information Sheet for consistency between the three documents. Where specific changes are presented below, additions are in bold text and deletions are in bold strike-out.

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**J. G. BOSWELL COMPANY – Comments to tentative WDRs**

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Below are J. G. Boswell's comments to the Tentative WDRs, MRP, and Information Sheet followed by Central Valley Water Board staff's responses.

**J. G. BOSWELL – COMMENT 1: WDRs, Finding 7.** Finding 7 of the WDRs contains in part the following:

*The tomatoes are then unloaded and rinsed with fresh water and then conveyed in a flume using condensate water from the evaporative cooling towers to the sorting area.*

J. G. Boswell is requesting that Finding 7 be modified by adding "and fresh water" after evaporative cooling towers.

**RESPONSE 1:** Central Valley Water Board staff modified Finding 7 of the WDRs as follows:

The tomatoes are then unloaded and rinsed with fresh water and then conveyed in a flume using condensate water from the evaporative cooling towers **and fresh water** to the sorting area

**J. G. BOSWELL – COMMENT 2: WDRs, Finding 11.** J. G. Boswell notes that Finding 11 of the WDRs lists the volume of just the wastewater (1.4 million gallons per day [mgd]) that may be discharged, but not the volume of the "blended process wastewater and fresh water." J. G. Boswell is requesting Finding 11 be modified to include the volume of the blended process wastewater.

**RESPONSE 2:** Central Valley Water Board staff modified Finding 11 of the WDRs as follows:

J.G. Boswell may discharge up to 1.4 million gallons per day (mgd) **of process wastewater and up to 4.5 mgd of total discharge** during the processing season **which includes fresh water and process wastewater blended onsite.**

**J. G. BOSWELL – COMMENT 3: WDRs, Finding 12** J. G. Boswell requests Finding 12 be modified slightly for clarity.

**RESPONSE 3:** Central Valley Water Board staff modified Finding 12 as follows:

In 2016, the average daily discharge of **process** wastewater was 0.45 mgd with a daily maximum of 0.81 mgd, well below the 1.4 mgd limit. In 2016, about 824 acre-feet of irrigation water including facility tomato processing wastewater (effluent) was applied to 684 acres for an average application of 1.20 feet of irrigation water. The average daily flow of effluent plus the blended water **discharged from the Facility** was 2.9 mgd and the maximum amount of effluent plus the blended water on any single day was 3.45 mgd. The blending ratio of fresh water to plant effluent was 5:1, which is more than the minimum of 1:1 blending.

**J. G. BOSWELL – COMMENT 4: WDRs, Finding 44.b** J. G. Boswell requests the term “agronomic” be modified for clarity in sections that address applying wastewater to the land application areas. Finding 44.b has been modified to reflect the total volume of the blended wastewater discharge.

**RESPONSE 4:** Central Valley Water Board staff modified Finding 44.b as follows:

- b. For nitrogen, this Order limits the application of wastewater **to be consistent with crop demand agronomic rates** for both nutrient and hydraulic loading. Total nitrogen loading estimates indicate the discharge will add about 45 lbs/ac/yr to the land application areas (farmlands) used to grow crops such as Sudan grass that has the potential to utilize up to 180 lbs/ac/yr of nitrogen. The crops grown in the land application areas will require additional nitrogen fertilizer to grow the crop. The discharge, if applied **consistently with crop demands at agronomic rates**, should not contribute to an increase of nitrogen in groundwater.

Similar edits were made to Finding 46.f.

**J. G. BOSWELL – COMMENT 5: WDRs, Finding 48** J. G. Boswell requests Finding 48 be modified for clarity regarding the total volume of the blended discharge.

**RESPONSE 5:** Central Valley Water Board staff appreciate the comment, but have determined that Finding 48 is unnecessary, and have deleted the Finding.

**J. G. BOSWELL – COMMENT 6: WDRs, Finding 59.a** J. G. Boswell requests Finding 59.a be modified to reflect the total volume of the blended wastewater discharge.

**RESPONSE 6:** Central Valley Water Board staff appreciate the comment, but have determined that Finding 59.a is unnecessary, and have deleted the Finding.

**J. G. BOSWELL – COMMENT 7: WDRs, Finding 59.d** J. G. Boswell requests Finding 59.d be modified for clarity.

**RESPONSE 7:** Central Valley Water Board staff appreciate the comment, but have determined that Finding 59.d is unnecessary, and have deleted the Finding.

**J. G. BOSWELL – COMMENT 8: WDRs, Effluent Limitation B.1.** J. G. Boswell requests Effluent Limitation B.1 be modified to reflect the total volume of the blended wastewater discharge at the Facility.

**RESPONSE 8:** Central Valley Water Board staff modified Effluent Limitation B.1 as follows:

During the processing season (typically mid-July through mid-October), the monthly average discharge flow of **process wastewater blended with freshwater** to the lined retention pond shall not exceed **4.5 1.4** mgd. **The process wastewater may not comprise more than 1.4 mgd of the total flow.** The volume shall be determined at DIS-01 as described in Monitoring and Reporting Program R5-2017-XXXX.

**J. G. BOSWELL – COMMENT 9: WDRs, Discharge Specification C.7.** J. G. Boswell requests Discharge Specification C.7 be modified to remove the reference to staff gauge.

**RESPONSE 9:** Central Valley Water Board staff modified the third sentence of Discharge Specification C.7 as follows:

As a means of management and to discern compliance with this requirement, J.G. Boswell shall install and maintain in each pond **a permanent staff gauge with** calibration marks that clearly show the water level at design capacity and enable determination of available operational freeboard.

**J. G. BOSWELL – COMMENT 10: WDRs, Land Application Area Specification E.1** - J. G. Boswell requests the wording in Land Application Area Specification E.1 be modified for clarity.

**RESPONSE 10:** Central Valley Water Board staff modified Land Application Area Specification E.1 as follows:

1. Application of waste constituents to the land application areas shall be **consistent with crop demands at reasonable agronomic rates** to preclude creation of a nuisance or unreasonable degradation of groundwater, considering the crop, soil, climate, and irrigation management system. The annual nutritive loading of the land application areas, including the nutritive value of organic and chemical fertilizers and of the wastewater shall **be consistent with crop demands not exceed the annual** crop demand.

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#### **J. G. BOSWELL COMPANY – Comments to tentative MRP**

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**J. G. BOSWELL – COMMENT 11: MRP, Table page 2.** The MRP includes discharge location monitoring point DIS-02. DIS-02 was included to require J.G. Boswell to measure all of the irrigation water as if the water was generated and discharged from a single location. J. G. Boswell notes that irrigation water is discharged by numerous portable water pumps to the land application areas at numerous locations and states that it is not economically feasible to require flow meters on every pump. J.G. Boswell proposes to calculate its water usage as it currently does from pump usage and duration. J.G. Boswell requests discharge location DIS-02 be removed.

**RESPONSE 11:** Central Valley Water Board staff deleted the discharge monitoring location DIS-02 from the MRP as follows:

Monitoring Point Name	Monitoring Location Description
DIS-01 <del>and DIS-02</del>	During the processing season (typically about 90 days from mid-July through mid-September), a location where the volume/flow of <b>the blended</b> wastewater can be measured prior to discharge to the wastewater retention pond (DIS-01). <del>During the non-processing season, a location or locations where the volume/flow of irrigation waters (from any source) can be measured prior to discharge to the land application areas (DIS-02).</del>

The first paragraph in the Effluent/Irrigation Water Monitoring Section was also modified to remove reference to DIS-02 as follows:

During the processing season (typically from mid-July through mid-September), the Discharger shall monitor the volume of blended wastewater and irrigation water (from any source) discharged to the collection sump within the facility at DIS-01. During the remainder of the year (non-processing season), the Discharger shall **calculate** ~~monitor~~ the volume of the irrigation water discharged to the land application areas **that received the blended wastewater. at DIS-02.**

**J. G. BOSWELL – COMMENT 12: MRP, Reporting, Page 4.** J. G. Boswell requests the Annual Monitoring report be due by 1 February of each year to allow time to get all of the required information.

**RESPONSE 12:** Central Valley Water Board staff changed the due date to 1 February as requested and modified the due date listed in the Reporting section of the MRP as follows:

All monitoring results shall be tabulated and submitted in an Annual Monitoring Report, which shall be due by 1 **February** ~~December~~ **of the following each** year.

**J. G. BOSWELL – COMMENT 13: MRP – Solids Reporting 2.d. Page 7.** J. G. Boswell notes that the solids sold as cattle feed are sold to one distributor (Mesa Verde) who then sells the solids to other buyers for packaging. Solids Reporting requirement 2.d required J. G. Boswell to identify the end location of the solids. J.G. Boswell is requesting they not have to investigate the final disposition of the solids used for animal feed.

**RESPONSE 13:** Central Valley Water Board staff modified Solids Reporting 2.d as follows:

- d. For animal feed, include the **volume sold as animal feed and to whom it was sold** ~~location of the site~~, and **if applicable**, the Order number of any WDRs that regulate it.

**J. G. BOSWELL – COMMENT 14: MRP, Land Application Area Reporting 7.c and 7.d.** J. G. Boswell requests the Land Application Area Reporting requirements on page 7 be modified to reduce the redundancy of the requirements.

**RESPONSE 14:** Central Valley Water Board staff modified Land Application Area Reporting 7.a through 7.d as follows:

7. A monthly balance for the **application period (processing season) and** reporting year that includes:
  - a. ~~Monthly~~ **The** average  $ET_0$  (observed evapotranspiration) – Information sources include California Irrigation Management Information System (CIMIS) <http://www.cimis.water.ca.gov/>
  - b. ~~Monthly~~ **c** Crop uptake
    - i. Crop water utilization rates are available from a variety of publications available from the local University of California Davis extension office.
    - ii. Irrigation efficiency – Frequently, engineers include a factor for irrigation efficiency such that the application rate is slightly greater than the crop utilization rate. A conservative design does not include this value.
  - c. ~~Monthly average precipitation – this data is available at~~  
~~<http://www.cimis.water.ca.gov/> or~~  
~~<http://www.ncdc.noaa.gov/oa/climate/online/ccd/nrmlprcp.html>.~~
  - d. ~~Monthly average and annual average discharge flow rate.~~