

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
CENTRAL VALLEY REGION

MONITORING AND REPORTING PROGRAM NO. R5-2008-\_\_\_\_  
FOR  
J. G. BOSWELL COMPANY  
CORCORAN TOMATO PROCESSING FACILITY  
KINGS COUNTY

This Monitoring and Reporting Program (MRP) is required pursuant to California Water Code section 13267.

The Discharger shall not implement any changes to this MRP unless and until the Regional Board adopts or the Executive Officer issues a revised MRP. Changes to sample location shall be established with concurrence of Regional Water Board staff, and a description of the revised stations shall be submitted for approval by the Executive Officer. All samples should be representative of the volume and nature of the discharge or matrix of material sampled. The time, date, and location of each sample shall be recorded on the sample chain of custody form. All analyses shall be performed in accordance with Standard Provisions and Reporting Requirements for Waste Discharge Requirements, dated 1 March 1991. The results of analyses performed in accordance with specified test procedures, taken more frequently than required at the locations specified in this MRP, shall be reported to the Regional Water Board and used in determining compliance.

Field test instruments (such as pH) may be used provided that:

1. the operator is trained in the proper use of the instrument;
2. the instruments are calibrated prior to each use;
3. instruments are serviced and/or calibrated by the manufacturer at the recommended frequency; and
4. field calibration reports are submitted as described in the "Reporting" section of this MRP.

Each laboratory report shall clearly identify the following:

1. analytical method;
2. measured value;
3. units;
4. what constituent a value is reported as;
5. method detection limit (MDL);
6. reporting limit (RL) (i.e., a practical quantitation limit or PQL);
7. documentation of cation/balance for general minerals analysis of supply water and groundwater samples.

All laboratory results shall be reported down to the MDL. Non-detect results shall be reported as less than the MDL (<MDL). Results above the MDL, but below the concentration of the lowest calibration standard for multipoint calibration methods or below the reporting limit for other methods, shall be flagged as estimated.

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Analytical procedures shall comply with the methods and holding times specified in: *Methods for Chemical Analysis of Water and Wastes* (EPA-600/4-79-020, 1983); *Methods for Determination of Inorganic Substances in Environmental Samples* (EPA/600/R-93/100, 1993); *Standard Methods for the Examination of Water and Wastewater, 20<sup>th</sup> Edition* (WEF, APHA, AWWA); and *Soil, Plant and Water Reference Methods for the Western Region, 2003, 2<sup>nd</sup> Edition* (hereafter Western Region Methods).

If monitoring consistently shows no significant variation in magnitude of a constituent concentration after at least 12 months of monitoring, the Discharger may request the MRP be revised to reduce monitoring frequency. The proposal must include adequate technical justification for reduction in monitoring frequency.

### DISCHARGE (EFFLUENT) MONITORING

During the processing season (July through October), the Discharger shall collect wastewater samples at a point in the system following the processing of tomatoes but before discharge to the Use Area. Time of collection of a grab sample shall be recorded. Effluent monitoring shall include the following:

<u>Constituent/Parameter</u>	<u>Units</u>	<u>Type</u>	<u>Frequency</u>
Daily Flow <sup>1</sup>	gal/day	Continuous	Daily
Dissolved Oxygen	mg/L	Grab	Daily
Electrical Conductivity	µmhos/cm	24 hr – Composite <sup>2</sup>	Weekly
pH	pH units	24 hr – Composite	Weekly
BOD <sub>5</sub> <sup>3</sup>	mg/L	24 hr – Composite	Weekly
Total Suspended Solids (TSS)	mg/L	24 hr – Composite	Weekly
Total Kjeldahl Nitrogen (TKN)	mg/L	24 hr – Composite	Monthly
Ammonia (as NH <sub>3</sub> -N)	mg/L	24 hr – Composite	Monthly
Nitrate(as NO <sub>3</sub> -N)	mg/L	24 hr – Composite	Monthly
Total Nitrogen	mg/L	24 hr – Composite	Monthly
Inorganic TFDS <sup>4</sup>	mg/L	24 hr – Composite	Monthly
General Minerals <sup>5</sup>	mg/L	24 hr – Composite	Annually <sup>6</sup>

See footnotes on next page.

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- <sup>1</sup> Flow shall be measured using a magnetic or ultrasonic flow meter.
- <sup>2</sup> Unless otherwise approved, 24-hour composite samples shall be collected using a composite wastewater sampler synchronized with a flow meter to take flow proportional (volumetric) samples. While being composited samples shall be refrigerated at 4 °C (39.2 °F).
- <sup>3</sup> Five-day, 20°C biochemical oxygen demand (BOD<sub>5</sub>)
- <sup>4</sup> TFDS, as used in this MRP, shall be determined using EPA Test Method No. 160.1 for combined organic and inorganic TFDS and EPA Method No. 160.4 for inorganic TFDS.
- <sup>5</sup> General Minerals, as used in this MRP, shall include the constituents in the General Minerals Analyte List below.
- <sup>6</sup> In July.

**General Minerals Analyte List<sup>1</sup>**

Alkalinity (as CaCO <sub>3</sub> )	Carbonate (as CaCO <sub>3</sub> )	pH
Arsenic	Chloride	Potassium
Bicarbonate (as CaCO <sub>3</sub> )	EC	Sodium
Boron	Hardness (as CaCO <sub>3</sub> )	Sulfate
Calcium	Magnesium	TFDS

<sup>1</sup>. General Minerals Analyte lists may vary depending on the laboratory, but shall include at least the above analytes and properties. An anion cation balance shall accompany results.

**WATER SUPPLY MONITORING**

The supply water for the facility shall be monitored during the processing season (July through October) as follows:

<u>Constituent</u>	<u>Units</u>	<u>Measurement</u>	<u>Frequency</u>
EC <sup>1</sup>	µmhos/cm	Grab	Quarterly <sup>2</sup>
Nitrate (as Nitrogen)	mg/L	Grab	Quarterly <sup>2</sup>

<sup>1</sup> EC shall be reported as a flow-weighted average from all facility supply wells. Include copies of supporting calculations with monitoring reports.

<sup>2</sup> In July and October.

**USE AREA MONITORING**

During the processing season (July through October), the Discharger shall perform the following routine monitoring and loading calculations for each discrete irrigation area. Data shall be collected and submitted quarterly:

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<u>Constituent/Parameter</u>	<u>Units</u>	<u>Type</u>	<u>Frequency</u>
Wastewater application field number	N/A	N/A	Daily
Precipitation	inches <sup>1</sup>	Rain gauge <sup>2</sup>	Daily
Wastewater application area	acres	N/A	Daily
Wastewater flow	mgd	Continuous	Daily
Wastewater loading	inches/day/acre <sup>3</sup>	Calculated	Daily
Supplemental irrigation flow	mgd	Estimated	Daily
Supplemental irrigation flow	inches/day/acre <sup>3</sup>	Calculated	Daily
Total hydraulic loading rate <sup>4</sup>	Inches/day/acre <sup>3</sup>	Calculated	Daily
BOD <sub>5</sub> loading rate <sup>5</sup>			
on application day <sup>6</sup>	lbs/acre	Calculated	Daily
averaged over application cycle <sup>7</sup>	lbs/acre/day	Calculated	Daily
Monthly nitrogen loading rates <sup>8</sup>			
from wastewater	lbs/acre	Calculated	Monthly
from fertilizers	lbs/acre	Calculated	Monthly
Cumulative Annual nitrogen loading rate <sup>9</sup>	lbs/acre	Calculated	Monthly
Inorganic TDS loading rates <sup>10</sup>	lbs/acre/month	Calculated	Monthly

<sup>1</sup> Report to the nearest 0.1 inch.

<sup>2</sup> National Weather Service data from the nearest weather station is acceptable.

<sup>3</sup> Report to the nearest 0.1 inch.

<sup>4</sup> Includes total liquid application (i.e., precipitation, wastewater, and irrigation water).

<sup>5</sup> BOD<sub>5</sub> loading rates shall be calculated using the applied volume of wastewater, actual application area, and the average of the three most recent results of wastewater BOD<sub>5</sub>.

<sup>6</sup> Application day, as referred to in this MRP, shall be defined as a 24-hour period.

<sup>7</sup> Application cycle, as referred to in this MRP, shall be defined as the period (in days) of wastewater application followed by resting interval until next wastewater application.

<sup>8</sup> Wastewater nitrogen loading rates shall be calculated using the applied volume of wastewater, actual application area, and the wastewater total nitrogen.

<sup>9</sup> Starting as zero each January 1.

<sup>10</sup> Inorganic TDS loading rates shall be calculated using the applied volume of wastewater, actual application area, and the average of the three most recent results of wastewater inorganic TDS.

## REPORTING

The Discharger shall report monitoring data and information as required in this MRP and as required in the Standard Provisions.

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Monitoring data and/or discussions submitted concerning the quality of the discharge must also be signed and certified by the chief plant operator. When reports contain laboratory analyses performed by the Discharger and the chief plant operator is not in the direct line of supervision of the laboratory, reports must also be signed and certified by the chief of the laboratory.

In reporting monitoring data, the Discharger shall arrange the data in tabular form so that the date, the constituents, and the concentrations are readily discernible. The data shall be summarized in such a manner that illustrates clearly, whether the Discharger complies with waste discharge requirements. If the Discharger monitors any pollutant at the locations designated herein more frequently than is required by this Order, the results of such monitoring shall be included in the discharge monitoring report.

**A. Monthly Reports**

Daily, weekly, and monthly monitoring data shall be reported in monthly monitoring reports. Monthly monitoring reports shall be submitted to the Regional Board **by the 1<sup>st</sup> day of the second month following sampling** (i.e., the August Report is due by 1 October). At a minimum, the reports shall include:

1. Results of effluent and use area (land application) monitoring;
2. Calculated Monthly Average Daily Flow;
3. A comparison of monitoring data to the discharge specifications and an explanation of any violation of those requirements. Data shall be presented in tabular format;
4. Copies of laboratory analytical reports; and
5. A calibration log verifying calibration of all hand-held monitoring instruments and devices used to comply with the prescribed monitoring program.

**B. Quarterly Reports**

Daily, weekly, monthly, and quarterly monitoring data shall be reported in quarterly monitoring reports. Quarterly monitoring reports shall be submitted to the Regional Water Board **by the 1<sup>st</sup> day of the second month after the calendar quarter** (i.e., the 3<sup>rd</sup>

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Quarter Report is due 1 November). The monthly and quarterly reports shall be combined in months were both reports are due. At a minimum, the quarterly reports shall include:

1. Results of discharge, and use area monitoring;
2. Calculated Monthly Average Daily Flow;
3. Daily, Monthly, and Average loading calculations;
4. A comparison of monitoring data to the discharge specifications and an explanation of any violation of those requirements. Data shall be presented in tabular format;
5. Copies of laboratory analytical reports; and
6. A calibration log verifying calibration of all hand-held monitoring instruments and devices used to comply with the prescribed monitoring program.

### C. Annual Reports

An Annual Report shall be prepared as a fourth quarter monitoring report. The Annual Report will include all monitoring data required in the monthly/quarterly schedule plus the results of any annually sampled constituents (e.g., general minerals, selected metals, etc). The Annual Report shall be submitted to the Regional Board **by 1 February of the year following the year the samples were collected.** In addition to the data normally presented, the Annual Report shall include the following:

1. The names, certificate grades, and general responsibilities of all persons in charge of wastewater treatment and disposal;
2. The names and telephone numbers of persons to contact regarding the CTPF for emergency and routine situations;
3. A statement certifying when the flow meter and other monitoring instruments and devices were last calibrated, including identification of who performed the calibrations (standard Provision C.4);

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4. The most recent water supply report including laboratory data;
5. A summary of solids monitoring, including:
  - a. Annual solids production in dry tons; and
  - b. A description of the disposal methods used at the facility. If more than one method is used, include the percentage of solids production disposed of by each method.
6. A summary and discussion of the compliance record for the reporting period. If violations have occurred, the report shall also discuss the corrective actions taken and planned to bring the discharge into full compliance with this Order.

All technical reports required herein must be overseen and certified by a California registered civil engineer, certified engineering geologist, or certified hydrogeologist in accordance with California Business and Professions Code, sections 6735, 7835, and 7835.1. All reports submitted in response to this Order shall comply with the signatory requirements in Standard Provision B.3.

A transmittal letter shall accompany each self-monitoring report. The letter shall discuss any violations during the reporting period and all actions taken or planned for correcting violations, such as operation or facility modifications. If the Discharger has previously submitted a report describing corrective actions and/or a time schedule for implementing the corrective actions, reference to the previous correspondence will be satisfactory.

The Discharger shall implement the above monitoring program on the first day of the month following adoption of this Order.

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PAMELA C. CREEDON, Executive Officer

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