

# **EXHIBIT 1**

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
CENTRAL VALLEY REGION

ORDER NO. 99-100

NPDES NO. CA0084239

WASTE DISCHARGE REQUIREMENTS  
FOR  
MALAGA COUNTY WATER DISTRICT  
WASTEWATER TREATMENT FACILITY  
FRESNO COUNTY

The California Regional Water Quality Control Board, Central Valley Region (hereafter Board), finds that:

1. Malaga County Water District (CWD), hereafter Discharger, submitted a Report of Waste Discharge (RWD), dated 2 September 1997, and applied for authorization to discharge waste under the National Pollutant Discharge Elimination System (NPDES). Tertiary-treated effluent from the wastewater treatment facility (WWTF) will be discharged to the Fresno Irrigation District Central Canal, a water of the United States, at Latitude 36E40'43" North and Longitude 119E44'41" East (Discharge 001). Secondary-treated effluent will continue to be disposed of in the existing evaporation/percolation (disposal) ponds (Discharge 002). The Discharger submitted supplemental information dated 9 October 1997 and 4 September 1998. Board staff determined the application to be complete on 9 October 1997. The Discharger previously submitted a RWD, dated 13 January 1995, due to the proposed addition of a significant discharger (Dole Dried Fruit and Nut Co.) and for improvements to the WWTF. The Dole plant ceased operations in March 1997.
2. The WWTF is approximately one mile west of Malaga at the northwest corner of Central and Maple Avenues on 36 acres of property (Assessor's Parcel Nos. 330-100-05 and 330-100-07) owned by the Discharger in the southwest quarter of Section 25, T14S, R20E, MDB&M, as shown on Attachment A, attached hereto and part of this Order.
3. Waste Discharge Requirements (WDRs) Order No. 85-157, adopted by the Board on 28 June 1985, prescribes requirements for a discharge of 1.65 million gallons per day (mgd) from the WWTF to disposal ponds and to ten acres for irrigation of alfalfa. The ten acres have since been converted to disposal ponds. Order No. 85-157 is neither adequate nor consistent with the Board's plans and policies and does not describe or allow the proposed canal discharge.
4. The WWTF provides sewerage service to approximately 1000 residents and various light industries in the unincorporated community of Malaga. Non-domestic sewage comprises approximately 83 percent of the influent. The WWTF is an extended aeration activated sludge plant providing secondary treatment to combined domestic and light industrial waste. Recent upgrades include new blowers, an additional aeration tank, a new air diffusion system, new clarifier equipment, and a computerized plant control and monitoring system. Existing treatment design capacity is 1.2 mgd, and will remain unchanged under this Order.

**A. Discharge Prohibitions:**

1. Discharging treated wastewater of a character different from that specified in Finding Nos. 9 and 11, or at a location or in a manner different from that specified in Finding Nos. 1 and 6, is prohibited
2. Bypassing or overflowing untreated or partially treated wastewater is prohibited, except as allowed by Standard Provision A.13.
3. Discharging waste classified as 'hazardous,' as defined in Section 2521(a) of Title 23, CCR, Section 2510, et seq., or 'designated,' as defined in Section 13173 of the California Water Code, is prohibited.

**B. General Discharge Specifications:**

1. Monthly average daily flow shall not exceed 1.2 mgd.
2. Effluent shall have a pH between 6.0 and 9.0 pH units.
3. Effluent EC shall not exceed that of the source water plus 500  $\mu$ mhos/cm, or 1000  $\mu$ mhos/cm, whichever is less.
4. Objectionable odors originating at this facility shall not be perceivable beyond the limits of the wastewater treatment and pond disposal areas, or at the outfall to the Central Canal.
5. Public contact with treated and untreated wastewater at the treatment and disposal areas shall be precluded through such means as fences and signs, or acceptable alternatives.
6. The WWTF shall be designed, constructed, operated, and maintained to prevent inundation or washout due to floods with a 100-year return frequency.

**C. Discharge 001 (Central Canal) Specifications:**

1. The monthly average daily discharge to the Central Canal shall not exceed 0.35 mgd.
2. The arithmetic mean of BOD<sub>5</sub> and TSS in effluent samples collected over a monthly period shall not exceed 10 percent of the arithmetic mean of the values for influent samples collected at approximately the same times during the same period (90 percent removal).
3. Effluent concentrations shall not exceed the following limits:

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<u>Constituent</u>	<u>Units</u>	<u>Monthly Average</u>	<u>7-Day Median</u>	<u>Daily Maximum</u>
BOD <sub>5</sub>	mg/l	20		40
	lb/day	58		117
TSS	mg/l	20		40
	lb/day	58		117
SS	ml/l	0.2		0.5
NH <sub>3</sub> -N	mg/l	2		
	lb/day	5.8		
<u>B</u>	mg/l	0.4		
	lb/day	1.2		
<u>Cl</u>	mg/l	175		
	lb/day	511		
<u>Na</u>	mg/l	175		
	lb/day	511		
Carbonate + Bicarbonate (as CaCO <sub>3</sub> )	mg/l	50		
	lb/day	146		
Turbidity	NTU	2		5
TCO	MPN/100 ml		2.2	240 <sup>1</sup>
Total Residual Chlorine	mg/l			0.1

<sup>1</sup> Shall not exceed 240 MPN/100 ml in more than one sample in any 30-day period.

4. Disinfection shall include chlorination with a chlorine contact time of at least 90 minutes and a chlorine concentration of 5 mg/l or greater at all times.

**D. Discharge 002 (Disposal Ponds) Specifications:**

1. Effluent concentrations shall not exceed the following limits:

<u>Constituent</u>	<u>Units</u>	<u>Monthly Average</u>	<u>Daily Maximum</u>
BOD <sub>5</sub>	mg/l	40	80
TSS	mg/l	40	80
SS	ml/l	0.2	1.0

2. Dissolved oxygen in the upper zone (1 foot) of wastewater in the disposal ponds shall not be less than 1.0 mg/l.
3. Freeboard in disposal ponds shall never be less than 2 feet (measured vertically).

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<u>Constituent</u>	<u>Units</u>	<u>Sample Type</u>	<u>Frequency<sup>1</sup></u>
TSS	mg/l	Grab	Weekly
Dissolved Oxygen (DO)	mg/l	Grab	Weekly
Ammonia <sup>3</sup>	mg/l	Grab	Quarterly <sup>2</sup>
Total Coliform Organisms (TCO)	MPN/100 ml	Grab	Quarterly
Nitrate (NO <sub>3</sub> -N)	mg/l	Grab	Quarterly
VOCs <sup>4</sup>	µg/l	Grab	Quarterly
Metals <sup>5</sup>	µg/l	Grab	Quarterly
Pesticides <sup>6</sup>	µg/l	Grab	Quarterly
Minerals <sup>7</sup>	mg/l	Grab	Annually

<sup>1</sup> If results appear to violate effluent limitations, but sampling frequency is not sufficient to validate violation, or indicates a violation and potential upset of the treatment process, the frequency shall be increased to confirm the magnitude and duration of violation, if any, and aid in identification and resolution of the problem.

<sup>2</sup> Flow shall be monitored continuously and recorded daily.

<sup>3</sup> Report as total ammonia nitrogen.

<sup>4</sup> EPA 600 series methods, in accordance with 40 CFR 136.3.

<sup>5</sup> Aluminum, antimony, arsenic, barium, beryllium, boron, cadmium, chromium, cobalt, copper, iron, lead, manganese, mercury, molybdenum, nickel, selenium, silver, thallium, tin, titanium, zinc.

<sup>6</sup> EPA Methods 606 & 608, or 625, in accordance with 40 CFR 136.3.

<sup>7</sup> Minerals shall include at least total dissolved solids, chloride, sulfate, bicarbonate alkalinity, carbonate alkalinity, calcium, magnesium, potassium, sodium, boron, iron, phosphate, manganese, and all major anions and cations. Analyses should be accompanied by an anion-cation balance demonstrating that analyses are complete.

### TERTIARY EFFLUENT (001) MONITORING

Tertiary effluent samples shall be collected just prior to discharge to the Central Canal. Samples shall be representative of the volume and nature of the discharge. Time of collection of grab samples shall be recorded. Monitoring shall include at least the following:

<u>Constituent</u>	<u>Units</u>	<u>Sample Type</u>	<u>Frequency<sup>1</sup></u>
Flow	mgd	metered	Continuous <sup>2</sup> 0.35
SS	ml/l	Grab	Weekly 0.5/0.2
pH	pH units	Grab	Daily
EC	µmhos/cm	Grab	Daily
Temperature	°F	Grab	Daily
Total Residual Chlorine	mg/l	Grab	Daily 0.1
BOD <sub>5</sub>	mg/l	Grab	Weekly 40/20
TSS	mg/l	Grab	Weekly 40/20

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<u>Constituent</u>	<u>Units</u>	<u>Sample Type</u>	<u>Frequency</u> <sup>1</sup>
DO	mg/l	Grab	Weekly
Ammonia <sup>3</sup>	mg/l	Grab	Weekly 2.0 (mon ave)
TCO	MPN/100 ml	Grab	Weekly 2.2 (7 days median) 240-Daily
NO <sub>3</sub> -N	mg/l	Grab	Weekly
Total Nitrogen	mg/l	Grab	Weekly
Total Phosphorous	mg/l	Grab	Weekly
Turbidity	NTU	Grab	Weekly 2/5
Minerals	mg/l	Grab	Annually

- <sup>1</sup> If results appear to violate effluent limitations, but sampling frequency is not sufficient to validate violation, or indicates a violation and potential upset of the treatment process, the frequency shall be increased to confirm the magnitude and duration of violation, if any, and aid in identification and resolution of the problem.
- <sup>2</sup> Flow shall be monitored continuously and recorded daily.
- <sup>3</sup> Report as total ammonia nitrogen; record pH at time of collection.

**EVAPORATION/PERCOLATION POND MONITORING**

Permanent markers shall be placed in the evaporation/percolation ponds with calibration indicating the water level at design capacity and available operational freeboard. In addition, the Discharger shall inspect the conditions of the ponds once per week and write visual observations of potential problems in a bound log book. Notations shall include observations of whether weeds are developing in the water or along the bank, and their locations; whether dead algae, vegetation, scum or debris are accumulating on the pond surface, and their location; whether burrowing animals or insects are present; and the color of the pond. A copy of the entries made in the log each month shall be submitted with the monitoring report the following month. Where the operation and maintenance (O&M) manual requires remedial action, the Discharger shall briefly explain the action taken or to be taken to correct the discrepancy. Pond monitoring shall include the following:

<u>Constituent</u>	<u>Units</u>	<u>Sample Type</u>	<u>Frequency</u> <sup>1</sup>
Freeboard	feet <sup>2</sup>	Observation	Weekly 7.2 ft
DO <sup>3</sup>	mg/l	Grab	Weekly 7.0

- <sup>1</sup> Should sampling indicate a violation or threatened violation of the terms of this Order or should the WWTF effluent storage reservoir produce objectionable odors, the monitoring frequency for the subject pond shall be increased to daily until violations, threatened violations, and/or odor-producing conditions are resolved.
- <sup>2</sup> To the nearest tenth foot.
- <sup>3</sup> Samples shall be collected from a depth of one foot, opposite the inlet, between 0800 and 0900 hours.