CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

MONITORING AND REPORTING PROGRAM R5-2015-XXXX

FOR

SUNSHINE RAISIN CORPORATION DBA NATIONAL RAISIN COMPANY
EXETER DEHYDRATING FACILITY
AND
ERNEST BEDROSIAN TRUST
TULARE COUNTY

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

The Discharger shall not implement any changes to this MRP unless and until the Central Valley Water Board adopts, or the Executive Officer issues, a revised MRP. Changes to sample location shall be established with concurrence of Central Valley Water Board staff, and a description of the revised stations shall be submitted for approval by the Executive Officer.

All samples shall be representative of the volume and nature of the discharge or matrix of material sampled. All analyses shall be performed in accordance with ***Standard Provisions and Reporting Requirements for Waste Discharge Requirements***, dated 1 March 1991 (Standard Provisions).

Field test instruments (such as pH) may be used provided that the operator is trained in the proper use of the instrument and each instrument is serviced and/or calibrated at the recommended frequency by the manufacturer or in accordance with manufacturer instructions.

Analytical procedures shall comply with the methods and holding times specified in the following: *Methods for Organic Chemical Analysis of Municipal and Industrial Wastewater* (EPA); *Test Methods for Evaluating Solid Waste* (EPA); *Methods for Chemical Analysis of Water and Wastes* (EPA); *Methods for Determination of Inorganic Substances in Environmental Samples* (EPA); *Standard Methods for the Examination of Water and Wastewater* (APHA/AWWA/WEF); and *Soil, Plant and Water Reference Methods for the Western Region* (WREP 125). Approved editions shall be those that are approved for use by the United States Environmental Protection Agency or the State Water Resources Control Board, Division of Drinking Water Environmental Laboratory Accreditation Program. The Discharger may propose alternative methods for approval by the Executive Officer.

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

A glossary of terms used within this MRP is included on page 8.

The Discharger shall monitor the following locations to demonstrate compliance with the requirements of this Order:

| Monitoring Location Name | Monitoring Location Description |
|---|---|
| **EFF-001** | Location where a representative sample of the wastewater effluent can be obtained prior to discharge to the wastewater ponds or land application area. |
| **PND-001 and PND-002** | Wastewater Ponds |
| **SPL-001** | Location where a sample of the source water for the Facility can be obtained. |
| **IW-00X** | Location where a representative sample of the supplemental irrigation water can be obtained. |

## EFFLUENT MONITORING

The Discharger shall monitor effluent at EFF-001 during the processing season for the constituents listed below. Effluent samples shall be representative of the volume and nature of the discharge. Time of collection of the samples shall be recorded. Effluent monitoring shall include at least the following:

| Frequency | Constituent/Parameter | Units | Sample Type |
|---|---|---|---|
| Continuous | Flow | mgd | Meter |
| Weekly | pH | pH Units | Grab |
| Weekly | EC | umhos/cm | Grab |
| Twice Monthly | Biochemical Oxygen Demand | mg/L | Grab |
| Monthly | Total Dissolved Solids | mg/L | Grab |
| Monthly | Fixed Dissolved Solids | mg/L | Grab |
| Monthly | Nitrate as nitrogen | mg/L | Grab |
| Monthly | Nitrite as nitrogen | mg/L | Grab |
| Monthly | Ammonia as nitrogen | mg/L | Grab |
| Monthly | Total Kjeldahl Nitrogen | mg/L | Grab |
| Monthly | Total Nitrogen | mg/L | Computed |
| Annually[1] | General Minerals[2] | various | Grab |

1. Sample to be collected in September.
2. General mineral analysis shall include, alkalinity (as CaCO3), bicarbonate (as CaCO3), boron, calcium, carbonate (CaCO3), chloride, hardness, iron, magnesium, manganese, nitrate as nitrogen, potassium, sodium, sulfate, and TDS. Samples collected for metals shall be filtered with a 0.45 micron filter prior to preservation, digestion, and analysis.

## WASTEWATER POND MONITORING

Permanent markers (e.g., staff gauges) shall be placed in all ponds. The markers shall have calibrations indicating the water level at design capacity and available operational freeboard. The Discharger shall monitor ponds PND-001 and PND-002 while wastewater is in the ponds, monitoring shall include at least the following:

| Frequency | Constituent/Parameter | Units | Sample Type |
|---|---|---|---|
| Daily | Freeboard | Feet | Observation |
| Weekly | Dissolved Oxygen[1] | mg/L | Grab[2] |

1. Do in the upper one foot of any wastewater pond or irrigation reservoir containing wastewater shall not be less than 1.0 mg/L for three consecutive sampling events. If the DO in any single pond is below 1.0 mg/L for three consecutive sampling events, the Discharger shall report the finding to the Central Valley Water Board in writing within 10 day and include a specific plan to resolve the low DO issue.
2. Do shall be measured between 8:00 am and 10:00 am and shall be taken opposite the pond inlet at a depth of approximately one foot below the pond surface.

The Discharger shall inspect the condition of the ponds weekly while wastewater is in the ponds and record visual observations in a bound logbook. Notations shall include observations of whether weeds are developing in the water or along the bank, and their location; whether grease, dead algae, vegetation, scum, or debris are accumulating on the pond surface, and their location; whether burrowing animals or insects are present; and color of the water (e.g., dark green, black, dull green, brown, etc.). A summary of the entries made in the log shall be included in the subsequent monitoring report.

## SOURCE WATER MONITORING

The Discharger shall collect samples of its source water for the Facility at SPL-001, and analyze them for the constituents specified below. If the source water is from more than one source, the results shall be presented as the flow-weighted average of all sources.

Samples of irrigation water used to irrigate the land application area shall be collected at IW-00X, and analyzed for the constituents specified below. If the irrigation water is from more than one source, the results shall be presented as the flow-weighted average of all sources.

| Frequency | Constituent/Parameter | Units | Sample Type |
|---|---|---|---|
| Supply Water | | | |
| Annually[1] | EC | mg/L | Grab |
| Annually[1] | Nitrate as nitrogen | mg/L | Grab |
| 1/three years[2] | General Minerals[2] | mg/L | Grab |
| Irrigation Water | | | |
| Annually[1] | EC | umhos/cm | Grab |

1. Samples to be collected annually in September.
2. Sample to be collected and analyzed for general minerals once every three years. Starting in September following adoption of this Order.
3. General mineral analysis shall include, alkalinity (as CaCO3), bicarbonate (as CaCO3), boron, calcium, carbonate (CaCO3), chloride, hardness, iron, magnesium, manganese, nitrate as nitrogen, potassium, sodium, sulfate, and TDS. Samples collected for metals shall be filtered with a 0.45 micron filter prior to preservation, digestion, and analysis.

## LAND APPLICATION AREA MONITORING

The Discharger shall inspect the condition of the land application area once per week when wastewater is being discharged and write visual observations in a bound logbook. Evidence of erosion, field saturation, runoff, or the presence of nuisance conditions (i.e., flies, ponding, etc.) shall be noted in the logs and included as part of the annual report.

In addition, the Discharger shall perform the following routine monitoring and loading calculations for each discrete irrigation section within the Land Application Area. The data shall be collected and presented in tabular format and shall include the following:

| Frequency | Constituent/Parameter | Units | Sample Type |
|---|---|---|---|
| Daily[1] | Application Area | Acres | n/a |
| Daily[1] | Wastewater flow | Gallons | Metered |
| Daily[1] | Wastewater loading | inches/day | Calculated |
| Daily[1] | Precipitation | inches | Rain gage[2] |
| Monthly[1] | Supplemental irrigation | Gallons | Estimated |
| Monthly[1] | Total hydraulic loading[3] | inches/acre-month | Calculated |
| BOD Loading[4] | | | |
| Daily | Day of application | lbs/acre-day | Calculated |
| Average | cycle average[5] | lbs/acre-day | Calculated |
| Nitrogen Loading[4] | | | |
| Annually | From wastewater | lbs/acre-year | Calculated |
| Annually | From fertilizers | lbs/acre-year | Calculated |
| Salt Loading[4] | | | |
| Annually | From wastewater | lbs/acre-year | Calculated |

1. When discharging and while wastewater is applied to the land application area.
2. National Weather Service or CIMIS data from the nearest weather station is acceptable.
3. Combined loading from wastewater, irrigation water, and precipitation.
4. Loading rates shall be calculated using the applied volume of wastewater, applied acreage, and average effluent concentrations for BOD, total nitrogen, and FDS.
5. The BOD loading rate shall be divided by the number of days between applications for each individual irrigation section to determine the cycle average loading rate.

## DUST CONTROL APPLICATIONS MONITORING

The Discharger shall monitor the applications of wastewater made for dust control as follows:

| Frequency | Constituent/Parameter | Units | Sample Type |
|---|---|---|---|
| Daily | Volume of Wastewater | gallons | Measured |
| Daily | Length of road | feet | Measured |
| Daily | Area of application | acres | Calculated |
| Daily | Depth of application | inches | Estimated |
| Daily | Resting period[1] | days | Calculated |

1. Time since last application.

## REPORTING

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

The Central Valley Water Board has gone to a Paperless Office System. All regulatory documents, submissions, materials, data, monitoring reports, and correspondence should be converted to a searchable Portable Document Format (PDF) and submitted electronically. Documents that are less than 50MB should be emailed to: centralvalleyfresno@waterboards.ca.gov. Documents that are 50MB or larger should be transferred to a disk and mailed to the appropriate regional water board office, in this case 1685 E Street, Fresno, CA, 93706.

To ensure that your submittals are routed to the appropriate staff, the following information block should be included in any email used to transmit documents to this office:

Program: Non-15, WDID: 5D542002001, Facility Name: Exeter Dehydrating Facility, Order: R5-2015-XXXX

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. In addition to the details specified in Standard Provision C.3, monitoring information shall include the method detection limit (MDL) and the Reporting limit (RL) or practical quantitation limit (PQL). If the regulatory limit for a given constituent is less than the RL (or PQL), then any analytical results for that constituent that are below the RL (or PQL) but above the MDL shall be reported and flagged as estimated.

Laboratory analysis reports do not need to be included in the monitoring reports; however, the laboratory reports must be retained for a minimum of three years in accordance with Standard Provision C.3.

All monitoring reports shall comply with the signatory requirements in Standard Provision B.3. For a Discharger conducting any of its own analyses, reports must also be signed and certified by the chief of the laboratory.

All monitoring reports that involve planning, investigation, evaluation, or design, or other work requiring interpretation and proper application of engineering or geologic sciences, shall be prepared by or under the direction of persons registered to practice in California pursuant to California Business and Professions Code sections 6735, 7835, and 7835.1.

In the future, the State or Central Valley Water Board may notify the Discharger to electronically submit and upload monitoring reports using the State Water Board's California Integrated Water Quality System (CIWQS) Program Web site http://www.waterboards.ca.gov/ciwqs/index.html or similar system.

**The Annual Monitoring Report** shall include the following:

**Facility Information**:

1. The names and telephone numbers of persons to contact regarding the discharge for emergency and routine situations.
2. 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).
3. A summary of any changes in processing that might affect waste characterization and/or discharge flow rates.

**Effluent Monitoring Reporting**:

1. Tabulated results of effluent monitoring specified on page 2.
2. Include calculation of the 30-day average daily flow, and annual flow for the processing season.

**Wastewater Pond Monitoring Reporting**:

1. Tabulated results of pond monitoring specified on page 3.
2. A summary of the notations made in the log book during each weekly inspection. The entire contents of the log book do not need to be submitted.

**Source Water Reporting**

1. The results of the source water monitoring for the Facility specified on page 3. If multiple sources are used the Discharger, shall calculate the flow-weighted average concentrations for the specified constituents. Results must include supporting calculations, if required.
2. The results of monitoring of irrigation water as specified on page 3. If multiple sources are used the Discharger shall provide sampling results and volume of irrigation water provided from each source.

**Land Application Area Reporting**:

1. The results of monitoring and loading calculations specified on page 4.
2. Calculation of the hydraulic load for wastewater and supplemental irrigation water to the land application area in gallons and/or acre-feet.
3. A summary of the notations made in the log book. The entire contents of the log do not need to be submitted.
4. For each week, calculation of the daily and cycle average BOD loading rate for the irrigation cycle, using the BOD results for that month.

**Dust Control Applications Monitoring Reporting:**

1. The result of monitoring and loading calculations specified on page 4.
2. Map identifying the date and the approximate location and depth of wastewater applications for dust control.

**Solids Reporting**

1. Annual production totals for solids (excluding trash and recyclables) in dry tons or cubic yards.
2. A description of disposal methods, including the following information related to the disposal methods used. If more than one method is used, include the percentage disposed of by each method.

    a. For landfill disposal, include: the name and location of the landfill, and the Order number of WDRs that regulate it.

    b. For land application, include: the location of the site (field identification), and the Order number of any WDRs that regulate it.

    c. For incineration, include: the name and location of the site where incineration occurs, the Order number of WDRs that regulate the site, the disposal method of ash, and the name and location of the facility receiving ash (if applicable).

    d. For composting, include: the location of the site, and the Order number of any WDRs that regulate it.

    e. For animal feed, include: the location of the site, and the Order number of any WDRs that regulate it.

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

Ordered by: _____

PAMELA C. CREEDON, Executive Officer

_____

(Date)

## GLOSSARY

| | |
|---|---|
| $BOD_5$ | Five-day biochemical oxygen demand |
| CBOD | Carbonaceous BOD |
| DO | Dissolved oxygen |
| EC | Electrical conductivity at 25° C |
| FDS | Fixed dissolved solids |
| NTU | Nephelometric turbidity unit |
| TKN | Total Kjeldahl nitrogen |
| TDS | Total dissolved solids |
| TSS | Total suspended solids |
| Continuous | The specified parameter shall be measured by a meter continuously. |
| 24-Hour Composite | Unless otherwise specified or approved, samples shall be a flow-proportioned composite consisting of at least eight aliquots. |
| Daily | Samples shall be collected every day. |
| Twice Weekly | Samples shall be collected at least twice per week on non-consecutive days. |
| Weekly | Samples shall be collected at least once per week. |
| Twice Monthly | Samples shall be collected at least twice per month during non-consecutive weeks. |
| Monthly | Samples shall be collected at least once per month. |
| Bimonthly | Samples shall be collected at least once every two months (i.e., six times per year) during non-consecutive months |
| Quarterly | Samples shall be collected at least once per calendar quarter. Unless otherwise specified or approved, samples shall be collected in January, April, July, and October. |
| Semiannually | Samples shall be collected at least once every six months (i.e., two times per year). Unless otherwise specified or approved, samples shall be collected in March and September. |
| Annually | Samples shall be collected at least once per year. Unless otherwise specified or approved, samples shall be collected in October. |
| mg/L | Milligrams per liter |
| mL/L | Milliliters [of solids] per liter |
| µg/L | Micrograms per liter |
| µmhos/cm | Micromhos per centimeter |
| mgd | Million gallons per day |
| MPN/100 mL | Most probable number [of organisms] per 100 milliliters |
| General Minerals | Analysis for General Minerals shall include at least the following: |

| | | | |
|---|---|---|---|
| Alkalinity (as CaCo3) | Carbonate (as CaCO3) | Magnesium | Sodium |
| Bicarbonate (as CaCO3) | Chloride | Manganese | Sulfate |
| Boron | Hardness | Nitrate ($NO_3$-N) | TDS |
| Calcium | Iron | Potassium | |

General Minerals analyses shall be accompanied by documentation of cation/anion balance.