This monitoring and reporting program (MRP) incorporates requirements for monitoring of the wastewater treatment system. This MRP is issued pursuant to Water Code Section 13267. The Discharger shall not implement any changes to this MRP unless and until a revised MRP is issued by the Executive Officer.

All wastewater samples should be representative of the volume and nature of the discharge. The time, date, and location of each grab sample shall be recorded on the sample chain of custody form. Process wastewater flow monitoring shall be conducted continuously using a flow meter and shall be reported in cumulative gallons per day.

Field test instruments (such as those used to test pH and dissolved oxygen) may be used provided that:

1. The operator is trained in the proper use of the instrument;
2. The instruments are field calibrated prior to each monitoring event;
3. Instruments are serviced and/or calibrated per the manufacturer’s recommended frequency; and
4. Field calibration reports are submitted as described in the “Reporting” section of this MRP.

**MARINA WASTEWATER PUMPOUT DOCK MONITORING**

The Discharger shall inject an approved dye tracer on a monthly basis to test the sewage pump out system for leaks, and report whether dye was observed entering Lake Berryessa. If dye is observed, the corrective action measures shall be reported immediately. In addition, the Discharger shall record daily and report monthly the quantity of domestic waste discharged to the septic tank.

**SEPTIC TANK SOLIDS MONITORING**

The Discharger shall monitor each of the three septic tanks and report this information in the annual reports. Septic tanks shall be inspected annually as described below. In addition, the Discharger shall visually inspect the tanks for signs of damage, leakage, and/or deterioration.
Parameter | Units | Type of Measurement | Minimum Inspection | Reporting Frequency
--- | --- | --- | --- | ---
Sludge depth and scum thickness in the first compartment of each septic tank | Feet | Staff Gauge | Annually | Annually
Distance between bottom of the scum layer and bottom of outlet device | Inches | Staff Gauge | Annually | Annually
Distance between top of sludge layer and bottom of outlet device | Inches | Staff Gauge | Annually | Annually

The Discharger shall retain records of each inspection, noting the date, measured readings and calculations. The Discharger will also record when cleaning is required, the condition of the tank, and the date that cleaning or repair occurred and by whom. Copies of the Liquid Waste Hauler manifests shall be retained for review as with any other record concerning documentation of compliance with the Order.

**INFLUENT MONITORING**

Influent monitoring shall be performed at the location where influent is discharged into the stabilization ponds. Influent monitoring shall include at least the following:

<table>
<thead>
<tr>
<th>Constituent</th>
<th>Units</th>
<th>Type of Sample</th>
<th>Sampling Frequency</th>
<th>Reporting Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flow from the septic tanks</td>
<td>gpd</td>
<td>Continuous Meter</td>
<td>Daily</td>
<td>Monthly</td>
</tr>
<tr>
<td>Flow from the marina wastewater pump out dock</td>
<td>gpd</td>
<td>Continuous Meter</td>
<td>Daily</td>
<td>Monthly</td>
</tr>
</tbody>
</table>

1 By 1 April 2006, a flow-metering device shall be installed between the marina wastewater pump out dock and the septic tank and each of the lift stations and stabilization ponds.

**EFFLUENT MONITORING**

Effluent samples shall be collected from an established sampling station located in an area that will provide a sample representative of the water in each of the stabilization ponds. Effluent monitoring shall include at least the following:

<table>
<thead>
<tr>
<th>Constituents</th>
<th>Units</th>
<th>Type of Sample</th>
<th>Sampling Frequency</th>
<th>Reporting Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Dissolved Solids</td>
<td>mg/L</td>
<td>Grab</td>
<td>Monthly</td>
<td>Monthly</td>
</tr>
<tr>
<td>BOD$\text{}_5$</td>
<td>mg/L</td>
<td>Grab</td>
<td>Monthly</td>
<td>Monthly</td>
</tr>
<tr>
<td>Nitrate as Nitrogen</td>
<td>mg/L</td>
<td>Grab</td>
<td>Monthly</td>
<td>Monthly</td>
</tr>
<tr>
<td>Total Kjeldahl Nitrogen</td>
<td>mg/L</td>
<td>Grab</td>
<td>Monthly</td>
<td>Monthly</td>
</tr>
<tr>
<td>Ammonia</td>
<td>mg/L</td>
<td>Grab</td>
<td>Monthly</td>
<td>Monthly</td>
</tr>
<tr>
<td>Phenols</td>
<td>mg/L</td>
<td>Grab</td>
<td>Monthly</td>
<td>Monthly</td>
</tr>
<tr>
<td>Formaldehyde</td>
<td>mg/L</td>
<td>Grab</td>
<td>Monthly</td>
<td>Monthly</td>
</tr>
</tbody>
</table>
Constituents | Units | Type of Sample | Sampling Frequency | Reporting Frequency
--- | --- | --- | --- | ---
Zinc$^2$ | mg/L | Grab | Monthly | Monthly
Standard Minerals$^3$ | mg/L | Grab | Annually | Annually

$^1$ 5-day Biochemical Oxygen Demand
$^2$ Travel Trailer and Houseboat dump station constituents to be collected from Pond Nos. 1 and 2.
$^3$ Standard Minerals shall include, at a minimum, the following elements and compounds: Boron, Calcium, Iron, Magnesium, Manganese, Sodium, Potassium, Chloride, Sulfate, Total Alkalinity (including alkalinity series), and Hardness.

**POND MONITORING**

Samples shall be collected from an established sampling station located in an area that will provide a sample representative of the water in each of the stabilization ponds. Freeboard shall be measured vertically from the surface of the pond water to the lowest elevation of the surrounding berm and shall be measured to the nearest 0.1 feet. Monitoring of each of the ponds shall include, at a minimum, the following:

<table>
<thead>
<tr>
<th>Constituents</th>
<th>Units</th>
<th>Type of Sample</th>
<th>Sampling Frequency</th>
<th>Reporting Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dissolved Oxygen$^{1,3}$</td>
<td>mg/L</td>
<td>Grab</td>
<td>Weekly</td>
<td>Monthly</td>
</tr>
<tr>
<td>pH$^2$</td>
<td>pH Units</td>
<td>Grab</td>
<td>Weekly</td>
<td>Monthly</td>
</tr>
<tr>
<td>Freeboard</td>
<td>0.1 feet</td>
<td>Measurement</td>
<td>Weekly</td>
<td>Monthly</td>
</tr>
<tr>
<td>Berm Seepage$^2$</td>
<td>NA</td>
<td>Observation</td>
<td>Weekly</td>
<td>Monthly</td>
</tr>
<tr>
<td>Odors$^4$</td>
<td>--</td>
<td>Observation</td>
<td>Weekly</td>
<td>Monthly</td>
</tr>
</tbody>
</table>

$^1$ Samples shall be collected at a depth of one foot, opposite the inlet. Samples shall be collected between 0700 and 0900 hours.
$^2$ Containment levees shall be observed for signs of seepage or surfacing water along the exterior toe of the levees. If surfacing water is found, then a sample shall be collected and tested for total coliform organisms and total dissolved solids.
$^3$ Handheld meter may be used.
$^4$ The presence of strong or unusual odors shall be reported.

**SLUDGE MONITORING**

In accordance with EPA’s POTW Sludge Sampling and Analysis Guidance Document, August 1989, a composite sample of sludge shall be collected when removed from the evaporation/percolation pond and tested for the following metals: Cadmium, Copper, Nickel, Chromium, Lead, and Zinc. Sampling records shall be retained for a minimum of five years. A log shall be kept of sludge quantities generated and of handling and disposal activities. The frequency of entries is discretionary; however, the log should be complete enough to serve as a basis for part of the annual report.

**REPORTING**

In reporting monitoring data, the Discharger shall arrange the data in tabular form so that the date, sample type (e.g., effluent, pond, etc.), and reported analytical result for each sample are readily
discernible. The data shall be summarized in such a manner to clearly illustrate compliance with waste discharge requirements and spatial or temporal trends, as applicable. The results of any monitoring done more frequently than required at the locations specified in the Monitoring and Reporting Program shall be reported in the next scheduled monitoring report.

**A. Monthly Monitoring Reports**

Monthly reports shall be submitted to the Regional Board on the 1st day of the second month following sampling (i.e. the January Report is due by 1 March). At a minimum, the reports shall include:

1. Results of the marina pump out station, influent, effluent, and pond monitoring;
2. Results of the monthly dye tracer testing;
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. If requested by staff, copies of laboratory analytical report(s); and
5. A calibration log verifying calibration of all hand held monitoring instruments and devices used to comply with the prescribed monitoring program.

**B. Annual Report**

An Annual Report shall be prepared as the December monthly monitoring report. The Annual Report will include all monitoring data required in the monthly schedule. The Annual Report shall be submitted to the Regional Board by 1 February each year. In addition to the data normally presented, the Annual Report shall include the following:

1. The contents of the regular monthly report for the last month and quarter of the year, respectively;
2. If requested by staff, tabular and graphical summaries of all data collected during the year;
3. Results of the annual effluent monitoring;
4. Annual summary of the septic tank inspections for the year, including the number of tanks which were cleaned and from compilation of Liquid Waste Hauler Manifests, the volumes of waste removed from the tanks;
5. A statement of when the O&M Manual was last reviewed for adequacy, and a description of any changes made during the year;
6. A summary of the inspections, repair activities, and pipeline replacements which were performed on the effluent collection system during the previous year;
7. A statement regarding whether the flow meter was calibrated during the year; and

8. A discussion of any compliance issues or violations and corrective actions taken, as well as any planned or proposed actions needed to bring the discharge into full compliance with the waste discharge requirements.

A letter transmitting the self-monitoring reports shall accompany each report. Such a letter shall include a discussion of requirement violations found during the reporting period, and actions taken or planned for correcting noted 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 transmittal letter shall contain a statement by the discharger, or the discharger's authorized agent, under penalty of perjury, that to the best of the signer's knowledge the report is true, accurate and complete.

The Discharger shall implement the above monitoring program as of the date of this Order.

Ordered by: KENNETH D. LANDAU, Acting Executive Officer

Original Signed by

2-7-2006

GJC:12-May-06