

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
LAHONTAN REGION

**BOARD ORDER NO. R6V-2004-0024-A1**  
**WDID NO. 6A090089000**

AMENDED NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT

FOR

**TAHOE KEYS PROPERTY OWNERS ASSOCIATION**  
**LAGOON AND MARINA WATER CIRCULATION SYSTEM**

El Dorado County

The California Regional Water Quality Control Board, Lahontan Region (Water Board), finds:

1. Discharger and Facility

The following Discharger is authorized to discharge in accordance with the conditions set forth in Order R6T-2004-0024 and so revised in this Order:

|   |   |
|---|---|
| <b>Discharger</b>                         | Tahoe Keys Property Owners Association  |
| <b>Name of Facility</b>                   | Lagoon and Marina Water Circulation System  |
| <b>Facility Address</b>                   | 356 Ala Wai Blvd.   |
|   | South Lake Tahoe, CA 96150  |
|   | El Dorado County  |
| <b>Facility Contact, Title, and Phone</b> | Greg Trischler, Water Quality Supervisor, (530)542-6444   |
| <b>Mailing Address</b>                    | Same as Facility address  |
| <b>Type of Facility</b>                   | Water Circulation System  |
| <b>Facility Design Flow</b>               | All the Facility circulation pumps, if operated simultaneously, have a flow capacity of 60 mgd. |

2. Order History and Reason for Action

On June 9, 2004, the Water Board adopted Board Order No. R6T-2004-0024, which updated the requirements for the Facility. Board Order No. R6T-2004-0024 requires that the Discharger sample weekly during operation of the recirculation system. Reviewed weekly laboratory results detect no significant weekly variation and the Discharger has requested a reduction in required sampling. This Order amends Board Order No. R6T-2004-0024 to reduce sampling frequency from weekly to monthly for all parameters except for Total Kjeldahl Nitrogen, Total Phosphorus, Acid Soluble Aluminum, and Fecal Coliform during operation of the recirculation system.

3. California Environmental Quality Act

This amended Order involves operation of an existing pollutant source and, as such, is statutorily exempt from the provisions of the California Environmental Quality Act (CEQA, Public Resources Code 21000, et seq.) in accordance with CEQA Guidelines, Section 15263.

4. Notice to Interested Parties and Public

The Water Board has notified the Dischargers and all known interested parties and persons of its intent to amend the Order to reduce sampling frequency from weekly to monthly during operation of the recirculation system.

5. Consideration of Comments

The Water Board, in a public meeting, heard and considered all comments pertaining to this Order amendment.

**IT IS HEREBY ORDERED** that the Discharger, in order to meet the provisions contained in Division 7 of the California Water Code, and regulations adopted there under, and the provisions of the Federal Clean Water Act, as amended, and regulations and guidelines adopted thereunder, shall comply with the following:

Monitoring and Reporting Program No. R6T-2004-0024, as attached to Board Order No. R6T-2004-0024, is amended to reduce sampling frequency from weekly to monthly for all parameters except for Total Kjeldahl Nitrogen, Total Phosphorus, Acid Soluble Aluminum, and Fecal Coliform, as provided in the attached Monitoring and Reporting Program No. R6T-2004-0024-A1.

I, Harold J. Singer, Executive Officer, do hereby certify that the foregoing is a full, true, and correct copy of an order adopted by the California Regional Water Quality Control Board, Lahontan Region, on April 12, 2006.



HAROLD J. SINGER  
EXECUTIVE OFFICER

Attachment A: Monitoring and Reporting Program No. R6T-2004-0024A1

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
LAHONTAN REGION

**MONITORING AND REPORTING PROGRAM NO. R6T-2004-0024-A1**  
**WDID NO. 6A090089000**  
**NPDES NO. CA0103021**

**FOR**

**TAHOE KEYS PROPERTY OWNERS ASSOCIATION**  
**LAGOON WATER CIRCULATION SYSTEM**

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El Dorado County

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**I. MONITORING**

The following monitoring program shall be implemented.

**A. General Information**

1. General Provisions: This Monitoring and Reporting Program (MRP) includes requirements for monitoring and reporting water quality data as required under NPDES No. CA0103021. The Discharger shall comply with *General Provisions for Monitoring and Reporting*, dated September 1, 1994, which is included as Attachment "1" and made part of this Monitoring and Reporting Program.
2. California Toxics Rule (CTR) Requirements: The Discharger is collecting water quality data to comply with CTR requirements. If Water Board staff determine that effluent limitations are appropriate for certain constituents, the Permit will be reopened in accordance with Provision II of Board Order No. R6T-2004-0024 and effluent limitations in the Permit will be revised. The Discharger shall comply with CTR monitoring requirements as outlined in Attachments "2," "3" and "4" which are made part of this Monitoring and Reporting Program.

The intake water pumped from the lagoons (Intake Point W) and from the marina (Intake Point E) may, or may not be, considered representative of the receiving water (Discharge Points 1 through 13). The Discharger may therefore request that the Water Board consider granting intake water credits in accordance with the SIP, Section 1.4.4. In determining whether to grant intake water credits, the Water Board will consider all relevant water quality information available. If the Discharger has or knows of such information that it wishes to be considered, that information shall be provided by the Discharger to the Water Board. While this information is

not specifically required, the burden of proof shall be on the Discharger to demonstrate that any intake credits requested are based on historic water quality.

3. **Monitoring:** The purpose of water quality monitoring is to detect changes in the physical and chemical conditions in the waters as a result of Facility operations, and to monitor compliance with waste discharge requirements. Because the numerous Facility components may readily be taken in and out of operation, it is the intent of this sampling program to provide comprehensive monitoring while minimizing duplicative sampling requirements as a result of overlaps and lapses in the operation of Facility equipment. For the purposes of this monitoring program, “weekly thereafter” means a monitoring frequency of seven (7) days, and “monthly thereafter” means a monitoring frequency of thirty (30) days.
4. **Practical Quantitation Limits:** Because of the unique nature of waters in the Lake Tahoe Basin, exceptional analytical testing capabilities for nutrients and other contaminants are generally required to assure compliance with water quality standards and non-degradation objectives specified in the *Water Quality Control Plan for the Lahontan Region* and the NPDES Permit for the Facility. Practical Quantitation Limits, or PQLs, for chemical analyses are therefore specified herein. Values for PQLs (which are analytical reporting limits) are typically 4 to 5 times higher than minimum detection limits, or MDLs. PQLs shall be, at a minimum, as sensitive as the more restrictive of those required for analysis of pollutants (40 Code of Federal Regulations, Part 136), or analysis of drinking water (California Code of Regulations, Title 22, Division 4, Chapter 15; or 40 Code of Federal Regulations, Part 141).
5. **Sampling Locations:** Water quality sampling locations are specified in Attachment “B” of the NPDES permit. Samples shall be collected within 10 feet of the referenced sampling location.
6. **Sampling Locations – Lagoon and Marina Water Quality Monitoring When Circulation System is Not in Operation:** The following sampling stations shall be established to monitor the quality of the surface water as shown on Attachment “B” of the NPDES permit when the circulation system is not in operation: the West Side Pump Station intake (W); the East Side Pump Station intake (E); a discharge point near the West Channel ingress/egress (3); and a discharge point in a cove furthest from West Channel (13).

7. Sampling Locations – Lagoon and Marina Water Quality Monitoring When the Circulation System is in Operation: The following sampling stations shall be established to monitor the quality of the lagoons and marina water as shown on Attachment “B” of the NPDES permit when the circulation system is in operation: A single sampling station shall be established to monitor the quality of the circulated water discharged from points 1 through 13. To obtain representative samples of waters discharged to the lagoon and/or marina, the sampling location shall be downstream of the intersection of the pipelines from the West Side Pump Station and the East Side Pump Station, and upstream of discharge point 12. This location shall be referred to as discharge monitoring point D, as indicated schematically by the letter D, as shown in Attachment “B” of the NPDES permit.  
  
Individual sampling stations shall be established to monitor the quality of the circulated water discharged from points C1 through C6. To obtain representative samples of waters discharged to the lagoon through these discharge points, samples shall be taken at each discharge point that is operational, except that no samples shall be required to be taken at discharge points C5 or C6, and when discharge points C2 and C3 are operating simultaneously a sample need only be taken at point C2.
8. Sampling Locations – Lake Tahoe Water Quality Monitoring: Sampling stations shall also be established to monitor the quality of Lake Tahoe and compare it to the water quality inside the lagoons and marina. Sampling points shall be established inside and outside the lagoons and marina, at the West Channel and East Channel. These sampling points shall be designated L (for a point at the West Channel inside the lagoons) and LLT (for a point at the West Channel outside of the lagoons in Lake Tahoe) and M (for a point at the East Channel inside the marina) and MLT (for a point at the East Channel outside of the marina in Lake Tahoe).
9. Sample Type: Representative grab samples of waters to be analyzed shall be considered sufficient for the purposes of this monitoring program.
10. Analysis of Samples: All analyses shall be performed in accordance with the current edition of *Standard Methods for the Examination of Water and Wastewater*. Laboratories shall be certified by the California State Department of Health Services to perform such analyses, or by a laboratory approved by the Executive Officer.

**B. Water Quality Monitoring**

1. Water Quality Monitoring When Circulation System is Not in Operation

- a. Water quality monitoring data shall be collected quarterly when the circulation system is **not** in operation for the purpose of establishing background water quality prior to a circulation period and to detect water quality degradation from non-point sources. The water quality sampling locations are described above in Section I.A.6 and are shown in Attachment “B” of the NPDES permit. All water samples shall be analyzed for the constituents in Table 1 and Table 2. Attachment “5” summarizes where and when monitoring data shall be collected when the circulation system is not in operation.
- b. Samples shall be collected quarterly from locations E, W, 3 and 13 not more than 15 days prior to each of the following dates: January 15, April 15, July 15, and October 15. Samples need not be collected if substantial ice cover in the sampling location is documented or during months when the circulation system is operated. When samples cannot be collected on the predetermined quarterly date due to weather or other conditions the Discharger shall make every attempt to collect samples within 15 days before or after the due date. If a sample could not be collected during that 30-day period, the Discharger shall submit a report stating the reason why sample data was not collected during that time.

2. Water Quality Monitoring When Circulation System is in Operation

- a. When the circulation system is in operation water quality monitoring data shall be collected at least once every seven calendar days (weekly) for the parameters in Table 1 and at least once every thirty calendar days (monthly) for the parameters in Table 2. The sampling locations are described above in Section I.A.7 and are shown in Attachment “B” of the NPDES permit. All weekly water samples shall be analyzed for the constituents in Table 1 and all monthly water samples shall be analyzed for the constituents in Table 2. Attachment “5” summarizes where samples should be taken depending on which component of the circulation system is in operation.
- b. The circulation system includes the East Side Pump Station and the West Side Pump Station that discharge at points 1 through 13, and five circulation pumps that discharge at points C1 through C5.

Discharge points 6 and 7 are located in the marina. The circulation system provides a wide degree of flexibility to operate different configurations of pumps and discharge outlets as needed. The sampling locations are described above in Section I.A.7 and shown in Attachment "B" of the NPDES permit. All weekly water samples shall be analyzed for the constituents in Table 1 and all monthly water samples shall be analyzed for the constituents in Table 2. Requirements for sampling discharges at the various system components when operational are specified below.

Operation of West Side Pump Station and/or East Side Pump Station: If the West Side Pump Station and/or the East Side Pump Station are in operation and discharging through any of the 13 discharge points (1-13) discharge samples shall be collected at monitoring location D weekly for the parameters in Table 1 and monthly for the parameters in Table 2 during operation of the circulation system.

Operation of Discharge Outfalls C1-C6: When any of the discharge outfalls C1, C2, C3, C4, C5, or C6 are operated, water samples shall be collected weekly for the parameters in Table 1 and monthly for the parameters in Table 2 during operation of the circulation system. Samples shall be collected from any location(s) where a discharge will occur, with these exceptions:

- circulation discharge points C5 and C6 need not be sampled
- if circulation discharge points C2 and C3 are both simultaneously operated, samples shall be collected only from discharge point C2

Operation of Marina Discharge Outfalls 6 and 7: When either of the two discharge outlets in the marina are operated, water samples shall be collected weekly for the parameters in Table 1 and monthly for the parameters in Table 2 during operation of the circulation system. Samples shall be collected from any location where a discharge will occur, with this exception: if discharge points 6 and 7 are both simultaneously operated, samples need be collected only at discharge point 7.

- c. When any component of the circulation system is in operation water samples shall be collected within one week prior to circulation system startup and the day following circulation system

shutdown. Pre- and Post-operational water quality sampling shall be in addition to the required weekly and monthly sampling described above in Sections I.B.2 (a) and (b). Samples shall be collected at monitoring locations L, LLT, M, and MLT. The sampling locations are described above in Section I.A.8 and shown in Attachment “B” of the NPDES permit. All water samples shall be analyzed for the constituents in Table 1 and Table 2.

3. Water Quality Monitoring During Holiday Weekends

- a. Water samples shall also be collected on a single day no more than two days prior and no more than two days after the July 4<sup>th</sup> holiday and the Labor Day holiday, regardless of whether the circulation system is in operation. The sampling locations are described above in Section I.A.7 and I.A.8 and are shown in Attachment “B” of the NPDES permit. All water samples shall be analyzed for the constituents in Table 1 and Table 2.

4. Monitoring Parameters

Weekly water quality samples shall be collected for each of the parameters in Table 1 and monthly water quality samples shall be collected for each of the parameters Table 2.

Table 1: Weekly Monitoring Parameters

| <b>PARAMETER</b>        | <b>UNITS</b> | <b>PQL</b>     |
|-------------------------|--------------|----------------|
| Total Kjeldahl Nitrogen | Mg/l as N    | 0.08 mg/l as N |
| Total Phosphorus        | µg/l as P    | 8 µg/l as P    |
| Acid Soluble Aluminum   | µg/l         | 10 µg/l        |
| Fecal Coliform          | CFU          | 1 CFU          |



Table 2: Monthly Monitoring Parameters

| PARAMETER                | UNITS     | PQL              |
|--------------------------|-----------|------------------|
| Turbidity                | NTU       | 0.1 NTU          |
| pH                       | pH units  | 0.01 units       |
| Temperature              | °F or °C  | 0.2 °F or 0.1 °C |
| Total Suspended Solids   | mg/l      | 1.0 mg/l         |
| Total Dissolved Solids   | mg/l      | 10 mg/l          |
| Nitrate/Nitrite Nitrogen | mg/l as N | 0.01 mg/l as N   |
| Ammonia Nitrogen         | mg/l as N | 0.01 mg/l as N   |
| Oil and Grease           | mg/l      | 2 mg/l           |
| <b>PAHs</b>              |           |                  |
| Acenaphtene              | µg/l      | 0.03 µg/l        |
| Acenaphthylene           | µg/l      | 0.03 µg/l        |
| Anthracend               | µg/l      | 0.03 µg/l        |
| benz(a)anthracene        | µg/l      | 0.03 µg/l        |
| benzo(a)pyrene           | µg/l      | 0.08 µg/l        |
| benzo(b,k)fluoranthene   | µg/l      | 0.10 µg/l        |
| benzo(g,h,i)perylene     | µg/l      | 0.10 µg/l        |
| chrysene                 | µg/l      | 0.04 µg/l        |
| dibenzo(a,h)anthracene   | µg/l      | 0.10 µg/l        |
| flouoranthene            | µg/l      | 0.03 µg/l        |
| fluorene                 | µg/l      | 0.03 µg/l        |
| indeno(1,23-cd)pyrene    | µg/l      | 0.10 µg/l        |
| naphthalene              | µg/l      | 0.02 µg/l        |
| phenanthrene             | µg/l      | 0.02 µg/l        |
| pyrene                   | µg/l      | 0.02 µg/l        |
| <b>BTEX</b>              |           |                  |
| Benzene                  | µg/l      | 0.1 µg/l         |
| Toluene                  | µg/l      | 0.5 µg/l         |
| Ethylbenzene             | µg/l      | 0.5 µg/l         |
| Total Xylenes            | µg/l      | 0.5 µg/l         |

Aluminum analyses shall be conducted using the acid-soluble measurement, operationally defined as the aluminum that passes through a 0.45  $\mu\text{m}$  membrane filter after the sample has been acidified to a pH between 1.5 and 2.0 with nitric acid. The acidified solution may then be analyzed for dissolved aluminum in accordance with any USEPA-approved, or equivalent, standard method that achieves the PQL.

**C. Flow Monitoring**

The Discharger shall keep a log or permanent record of the following:

1. Average daily flow rate at monitoring location D during operation of the East Side Pump Station and/or West Side Pump Station, in millions of gallons per day.
2. Total volume of water discharged at monitoring location D during operation of the East Side Pump Station and/or West Side Pump Station in millions of gallons.
3. Estimated volume of water, in millions of gallons, discharged on a daily and monthly basis from each of the following locations: 6, 7, C1, C2, C3, C4, C5, and C6.

**D. Operations and Maintenance**

The Discharger shall keep a log or permanent record of the following:

1. For any Facility pump, the dates and hours of operation, the pump number or name, and the rated or estimated flow rate(s) during operation.
2. The calibration of any flow measuring devices.

**II. REPORTING**

**A. Report Format & Content**

1. The Discharger shall arrange the monitoring data in a concise form to clearly show compliance or non-compliance with each discharge specification to facilitate review by Water Board staff. All violations of requirements shall be clearly described. The Discharger shall note and explain any occurrence of noncompliance with any waste discharge requirement. If there are no violations to report, the Discharger shall certify that fact in writing. This report shall include a summary of

operational problems and maintenance activities as described in Section I.D., above.

2. For every item where the requirements are not met, the Discharger shall submit a statement of the actions taken or proposed which will bring the discharge into full compliance with requirements at the earliest time and submit a timetable for completion. **Any omission of data should be accompanied by an explanation and plan to obtain the omitted data.**
3. All reports shall be signed by a responsible officer or duly authorized representative of the Discharger, shall include the name and contact information for a person knowledgeable about the contents of the report, and shall be submitted under penalty of perjury.

**B. Reporting and Submittal Periods**

1. Quarterly monitoring reports shall be submitted annually not later than:  
**January 1** (covering the preceding period from Sept. 1 to Nov. 30)  
**April 1** (covering the preceding period from Dec. 1 to Feb. 28/29)  
**July 1** (covering the preceding period from March 1 to May 31)  
**October 1** (covering the preceding period from June 1 to Aug. 31)
2. Quarterly monitoring reports shall include a summary of water quality monitoring data in the format described in Section II.A above. Water quality data submitted by the Discharger shall be designated as Water Quality Data – Circulation System NOT in Operation and Water Quality – Circulation System in Operation. All sampling events occurring during the reporting periods shall be clearly organized and presented in that quarter's monitoring report.

**C. Operations and Maintenance Reporting Requirements**

A brief summary of maintenance activities and any operational problems shall be submitted to the Water Board with each monitoring report. The summary shall discuss:

1. Any modification or additions to the water circulation system
2. Any major maintenance conducted on the water circulation system.
3. Any major problems occurring in the water circulation system.
4. The calibration of any measuring devices.

5. Aquatic plant removal operations conducted by the Discharger during the monitoring period. The estimated quantity of aquatic plants mechanically removed from the lagoon and/or marina during the monitoring period shall be reported with a map indicating the general locations of any aquatic plant removal activities. Quantities shall be indicated by the estimated volume (in cubic yards or cubic meters) of freshly harvested plant matter.

Ordered by: \_\_\_\_\_



Dated: April 12, 2006

HAROLD J. SINGER  
EXECUTIVE OFFICER

- Attachments:
1. General Provisions for Monitoring and Reporting (September 1, 1994)
  2. CTR Constituents to be Monitored
  3. Dioxin and Furan CTR Sampling
  4. Reporting Requirements for CTR Monitoring
  5. Sampling Matrix