

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
CENTRAL COAST REGION  
895 Aerovista Place, Suite 101  
San Luis Obispo, CA 93401-7906**

**MONITORING AND REPORTING PROGRAM REQUIREMENTS  
ORDER NO. R3-2013-0010**

**(Waste Discharger Identification No. 3 411001001)**

**FOR  
COSTANOA LODGE AND CAMP  
SAN MATEO COUNTY**

This Monitoring and Reporting Program Requirements (MRP) is issued by the Regional Water Quality Control Board, Central Coast Region (Water Board) pursuant to California Water Code section 13267 and is incorporated into Master Reclamation Requirements Order No. R3-2013-0010. Reynolds Resorts, Costanoa - LLC. (hereafter "Discharger," "Supplier," "Distributor," "User," or "Supplier and Distributor") is subject to the MRP because it discharges recycled water. This MRP is necessary to ensure that the discharge of treated and recycled water complies with the requirements of the Master Reclamation Requirements and are protective of public health and the environment.

**I. SUPPLIER REQUIREMENTS**

**A. Water Supply Monitoring**

1. Representative samples of water supply wells shall be collected and analyzed for the constituents and at the frequency specified below:

**Table 1. Water Supply Monitoring Requirements**

<b>Parameter/Constituent<sup>[1][2][3]</sup></b>	<b>Units</b>	<b>Sample Type</b>	<b>Minimum Sampling and Analyzing Frequency</b>
Nitrate (as N)	mg/L	Grab	Monthly
Sodium	mg/L	Grab	Monthly
Chloride	mg/L	Grab	Monthly
Total Dissolved Solids	mg/L	Grab	Monthly
General Minerals <sup>[4]</sup>	mg/L	Grab	Annually (September)

Notes:

<sup>[1]</sup> Sampling results for the California Department of Public Health (DPH) may be submitted to satisfy these requirements.

<sup>[2]</sup> Data shall be reported as individual concentrations and calculated as flow weighted averages to represent as delivered water supply quality.

<sup>[3]</sup> Sampling for specific analytes may be reduced or discontinued upon Discharger request and Executive Officer approval for parameters/constituents for which additional data provides no benefit.

<sup>[4]</sup> General Mineral analysis shall include the following constituents: Calcium, Magnesium, Sodium, Sulfate, Carbonate, Bi-Carbonate, Chloride, Total Hardness, Total Alkalinity, Total Dissolved Solids, pH, Electrical Conductivity, Boron, Iron, and Nitrate (as N).

**B. Effluent Monitoring**

1. Representative samples of treatment facility effluent prior to storage shall be collected and analyzed for the constituents/parameters and at the frequency specified below:

**Table 2. Reclaimed Water Effluent Monitoring – Compliance Point A**

Constituent/Parameter <sup>[1]</sup>	Units	Sample Type <sup>[2]</sup>	Sampling Frequency
Minimum Daily Flow	gal/day	Metered	Continuous
Maximum Daily Flow	gal/day	Metered	Continuous
Average Daily Flow	gal/day	Calculated	Daily
Turbidity	NTU	Metered	Continuous
Total Chlorine Residual <sup>[3]</sup>	mg/L	Metered	Continuous
Total Coliform Bacteria	MPN/100 ml	Grab	Daily
BOD <sub>5</sub>	mg/L	24-hour composite <sup>[4]</sup>	Weekly <sup>[5]</sup>
Total Suspended Solids	mg/L	24-hour composite <sup>[4]</sup>	Weekly <sup>[5]</sup>
pH	Standard units	Grab	Weekly <sup>[5]</sup>
Total Nitrogen (as N)	mg/L	Grab	Monthly <sup>[6]</sup>
Ammonia (as N)	mg/L	Grab	Monthly <sup>[6]</sup>
Total Kjeldahl Nitrogen	mg/L	Grab	Monthly <sup>[6]</sup>
Nitrate (as N)	mg/L	Grab	Monthly <sup>[6]</sup>
Total Dissolved Solids	mg/L	Grab	Monthly <sup>[6]</sup>
Sodium	mg/L	Grab	Monthly <sup>[6]</sup>
Chloride	mg/L	Grab	Monthly <sup>[6]</sup>
Sulfate	mg/L	Grab	Monthly <sup>[6]</sup>
Boron	mg/L	Grab	Monthly <sup>[6]</sup>
Formaldehyde	mg/L	Grab	Monthly <sup>[6]</sup>
1,4-Dichlorobenzene	mg/L	Grab	Monthly <sup>[6]</sup>
Methanol	mg/L	Grab	Monthly <sup>[6]</sup>

## Notes:

- <sup>[1]</sup> Sampling for specific analytes may be reduced or discontinued after one year upon Discharger request and Executive Officer approval for parameters/constituents for which additional data provides no benefit.
- <sup>[2]</sup> Sampling shall occur immediately following the final treatment process (i.e., disinfection or dechlorination as applicable) unless noted otherwise.
- <sup>[3]</sup> Shall be compared to the chlorine residual required to achieve a minimum CT value of 450 milligram-minutes per liter.
- <sup>[4]</sup> Composite samples shall be flow weighted. 24-hour composite samples shall be collected on a Monday through Sunday rotating schedule.
- <sup>[5]</sup> Weekly samples shall be collected on a Monday through Sunday rotating schedule.
- <sup>[6]</sup> Monthly sampling events shall be separated by at least 16 days and no greater than 45 days.

2. Representative samples of treatment facility effluent at the reclaimed storage pond shall be collected and analyzed for the constituents/parameters and at the frequency specified below:

**Table 3. Reclaimed Water Effluent Monitoring – Compliance Point 2**

Constituent/Parameter <sup>[1]</sup>	Units	Sample Type <sup>[2]</sup>	Sampling Frequency
Total Nitrogen (as N)	mg/L	Grab	Monthly <sup>[3]</sup>
Ammonia (as N)	mg/L	Grab	Monthly <sup>[3]</sup>
Total Kjeldahl Nitrogen	mg/L	Grab	Monthly <sup>[3]</sup>
Nitrate (as N)	mg/L	Grab	Monthly <sup>[3]</sup>

## Notes:

- <sup>[1]</sup> Sampling for specific analytes may be reduced or discontinued after one year upon Discharger request and Executive Officer approval for parameters/constituents for which additional data provides no benefit.
- <sup>[2]</sup> Sampling shall occur immediately following the final treatment process (i.e., disinfection or dechlorination as applicable) unless noted otherwise.
- <sup>[3]</sup> Monthly sampling events shall be separated by at least 16 days and no greater than 45 days.

### **C. Recycled Water Storage Facility Monitoring**

The recycled water storage pond shall be inspected daily. Notes shall be kept of observations and shall be summarized in annual monitoring reports. In the event of pond overflow or backflow into the treatment plant, the Distributor (and Users as appropriate), Executive Officer, and the DPH shall be notified immediately.

### **D. Equipment Calibration**

Calibration records of flow meters and other process instrumentation performed in accordance with manufactures' recommendations and best management practices for the industry will be kept on site and made available to Regional Water Board and DPH staff upon request.

## **II. DISTRIBUTOR REQUIREMENTS**

### **A. Recycled Water Use Area Monitoring**

1. The quantity of reclaimed water distributed to each reuse site shall be recorded on a weekly basis. Total flows shall be metered or estimated based on irrigation run times and distribution system design flow rates. Total as applied flows shall be compared to Supplier effluent flow rates.
2. During periods of recycled water application the Distributor or Users, as applicable, shall inspect the irrigation use areas no less frequently than weekly to verify and document compliance with Order No R3-2013-0010. The visual inspections shall be noted in a bound inspection logbook(s) and at a minimum shall document proper sprinkler operation, runoff, erosion, saturated surface conditions, and odors. The logbook(s) shall be made available to the Regional Water Board and DPH upon request. A summary of observations made during water recycling area inspections and a brief discussion of any corrective actions taken or planned shall be included with each annual monitoring report.
3. The Distributor and Users shall coordinate with the DPH to ensure and document that backflow devices are present, tested annually by a certified individual, and repaired or replaced if found defective.
4. The Distributor shall inspect and document the operation of the reuse site irrigation systems at least quarterly to verify that the Users are operating the reuse sites in compliance with the uniform statewide reclamation criteria established pursuant to California Water Code Section 13521 and Order No. R3-2013-0010.
5. The Distributor in coordination with the Users, water purveyor, and DPH shall perform and document a cross-connection test by an appropriately certified individual on an annual basis at each reuse site where both recycled water

and potable water piping systems are utilized for irrigation or are otherwise present in proximity to each other.<sup>1</sup>

6. The Reclaimed Water Site Supervisor shall keep quarterly updates regarding irrigation frequency and flow rates, proposed system modifications, system peculiarities, and to verify employee training. The Distributor shall keep a record of all system modifications and document that all work is conducted in accordance with the Cross Connection Control Plan and applicable regulations.
8. Representative samples of groundwater shall be collected from shallow wells<sup>2</sup> upgradient and downgradient of disposal areas. To ascertain compliance with Order No. R3-2013-0010 in establishing new, or verifying existing upgradient and downgradient monitoring wells, the monitoring network shall be supported by sufficient, as determined by the Executive Officer, geologic and hydrogeologic documentation. Samples of groundwater shall be collected and analyzed for the constituents and at the frequencies specified in the following table:

**Table 4. Groundwater Monitoring**

Constituent/Parameter <sup>a</sup>	Units	Sample Type	Sampling Frequency <sup>c</sup>
Depth to Water	Ft.-BGS and Ft.-Above MSL <sup>b</sup>	Measured	Quarterly
Total Nitrogen (as N)	mg/L	Grab	Quarterly
Total Kjeldahl Nitrogen (as N)	mg/L	Grab	Quarterly
Nitrate (as N)	mg/L	Grab	Quarterly
Nitrite (as N)	mg/L	Grab	Quarterly
pH	Standard Units	Grab	Quarterly
Total Dissolved Solids	mg/L	Grab	Quarterly
Sodium	mg/L	Grab	Quarterly
Chloride	mg/L	Grab	Quarterly
Manganese	mg/L	Grab	Quarterly
Iron	mg/L	Grab	Quarterly
Boron	mg/L	Grab	Quarterly
Perchlorate	mg/L	Grab	Quarterly
Total Trihalomethanes <sup>d</sup>	mg/L	Grab	Quarterly

Notes:

- a) Sampling for specific analytes or from specific monitoring wells may be reduced or discontinued after one year upon Discharger request and Executive Officer approval for parameters/constituents for which additional data provides no benefit.
- b) Ft.-BGS = Feet Below Grade Surface, Ft.-Above MSL = Feet Above Mean Sea Level
- c) Quarterly monitoring shall be conducted in January, April, July, and October
- d) Includes the following: chloroform, bromodichloromethane, dibromochloromethane, and bromoform.

<sup>1</sup> Cross-connection tests will not be required for portions of the distribution system or reuse site areas for which no distribution system or potable water system maintenance, modifications, or additions have occurred since the last cross-connection test. The Distributor shall provide a certified statement as such for portions of the distribution system or reuse sites not tested for potential cross-connection.

<sup>2</sup> Provide well construction details for each monitoring well indicating total well depth and screen interval in depth below ground surface and elevations referenced to MSL along with the top of well casing elevation.

The Executive Officer may request geologic and hydrogeologic documentation to ascertain whether the existing monitoring well network is sufficient to verify compliance with Order No. R3-2013-0010 and whether additional monitoring wells are required based on review of available groundwater data.

### III. SUPPLIER AND DISTRIBUTOR REQUIREMENTS

#### A. Reporting

1. The Supplier and Distributor shall submit **Quarterly** self-monitoring reports to the Regional Water Board summarizing reclaimed water supplied and used at each reuse site. The quarterly self-monitoring reports shall include:
  - a. Monitoring data results for the reporting period as required by this MRP;
  - b. A list of the reuse sites with the name, location and brief description of each reuse site;
  - c. The total amount of reclaimed water supplied to each reuse site; and
  - d. The name of the hydrologic areas underlying each use site [Required pursuant to California Water Code Section 13523.1(b)(5)].

The Quarterly monitoring reports shall be submitted as follows:

Monitoring Period	Report Due Date
January 1 – March 31	May 1 <sup>st</sup>
April 1 – June 30	August 1 <sup>st</sup>
July 1 – September 30	November 1 <sup>st</sup>
October 1 – December 31	February 1 <sup>st</sup>

2. The Supplier and Distributor shall submit **Annual** self-monitoring reports to the Regional Water Board by February 1<sup>st</sup> of each year summarizing reclaimed water use, including the total volume of reclaimed water supplied, and the total number of reclaimed use sites and their locations. Reports shall include records of the Distributor's or User's reuse site inspections and results of the annual cross-connection tests. Annual self-monitoring reports shall contain at a minimum:
  - a. Documentation of the use area and groundwater monitoring requirements listed above.
  - b. A scaled map showing the recycled water use areas.
  - c. A table summarizing monthly recycled water application rates in acre-feet and gallons for each recycled water use.
  - d. The Nutrient Management Plan report as specified in MRR Order No. R3-2013-0010 Requirements.

- e. The Salinity Management Program report as specified in MRR Order No. R3-2013-0010 Requirements.
2. The annual monitoring reports shall contain all data collected or calculated over the previous annual monitoring period. All monitoring data shall be tabulated in a logical and coherent format and be accompanied by copies of laboratory analytical data sheets as applicable. The data shall be summarized in a manner that clearly illustrates compliance with the Order. The use area map and recycled water application summary table shall be cross-referenced for easy evaluation.
3. The Distributor shall report any adverse conditions or non-compliance with Order No. R3-2013-0010 potentially endangering public health or the environment to the:
  - a. Water Board (805/549-3147),
  - b. California Department of Public Health (510/620-3474),
  - c. any other agencies as appropriate.

Notice will occur within 24-hours of knowing of such conditions. A summary record of all adverse conditions or non-compliance along with corrective actions taken shall be included in each annual monitoring report.

Depending on the severity of the adverse condition or non-compliance being reported, a written report may also be required by the Water Board. The written report shall be required within five days of the initial informal reporting date and shall contain (1) a description of the non-compliance and its cause; (2) the period of non-compliance, including dates and times, and if the non-compliance has not been corrected, the anticipated time it is expected to continue; and (3) steps taken or planned to reduce, eliminate, and prevent reoccurrence of the non-compliance.

## **B. Provisions**

1. All quarterly monitoring shall be performed in January, April, July, and October during the monitoring quarter (calendar quarter). Monthly sampling shall be conducted at regularly scheduled times during each month and consecutive events should be approximately four weeks apart and no less than two weeks apart. Unless otherwise specified by the Monitoring and Reporting Program, annual sampling shall be performed any time during the calendar year, but samples representative of two consecutive annual periods must be obtained at least six months apart.
2. All monitoring must be conducted according to test procedures established by 40 Code of Federal Regulations Part 136, entitled, "Guidelines Establishing Test Procedures for Analysis of Pollutants." All sampling analyses shall be conducted at the lowest practical quantitation limits achievable under U.S. EPA specified methodology. Constituents not detected at the analytical method detection limit will be considered in compliance with effluent

limitations in cases where effluent limits are set below the analytical method detection limit.

3. All samples collected shall be tracked and submitted under chain of custody and analyzed by a laboratory certified by DPH for the specified analysis.
4. This Monitoring and Reporting Program may be revised at any time during the Permit term, as necessary, under the authority of the Executive Officer.
5. The Supplier and Distributor shall submit monitoring data and the monitoring reports electronically. The documents shall be in a searchable PDF format (less than 10 MG in size) and emailed to [centralcoast@waterboards.ca.gov](mailto:centralcoast@waterboards.ca.gov). Documents that exceed 10MB should be transferred to a disk and mailed to the Water Board at:

California Regional Water Quality Control Board  
Central Coast Region  
895 Aerovista Place, Suite 101  
San Luis Obispo, CA 93401

#### **IV. IMPLEMENTATION**

1. This monitoring and reporting program shall be implemented July 11, 2013.
2. The Executive Officer may revise this MRP as appropriate.

Ordered By:

---

Kenneth A. Harris, Jr.  
Executive Officer

CRD

126-01

Paper File: Reynolds Resorts - Costanoa, LLC.

Electronic File: S:\WDR\WDR Facilities\San Mateo County\Costanoa\New Reclamation Order\MRP R3-2013-0010.docx