

**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. R3-2008-0042**

(Waste Discharger Identification No. 3 270113001)

**FOR  
THE CITY OF SOLEDAD  
WATER RECYCLING FACILITY  
MONTEREY COUNTY**

This Monitoring and Reporting Program Requirements Order (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 Permit Order No. R3-2008-0042. The City of Soledad is subject to the MRP because it discharges recycled water. This MRP is necessary to assure that the discharge of recycled water complies with the requirements of the Master Reclamation Permit and are protective of public health and the environment.

**SUPPLIER REQUIREMENTS**

**A. WATER SUPPLY MONITORING**

1. The Supplier shall submit water quality data representing the quality of the supply water used by the City of Soledad and the California Department of Correction Prisons located in Soledad. The data shall include all chemicals and parameters that are required to be part of a Health & Safety Code §116470 Consumer Confidence Report.

**B. INFLUENT MONITORING**

1. Representative samples of the treatment facility influent shall be collected and analyzed for the constituents/parameters and at the frequencies specified in the following table:

| <b>Constituent/Parameter<sup>a</sup></b> | <b>Units</b> | <b>Sample Type<sup>b</sup></b> | <b>Sampling Frequency<sup>c</sup></b> |
|--|--------------|--------------------------------|---------------------------------------|
| pH                                       | Units        | Grab                           | Weekly                                |
| BOD <sub>5</sub>                         | mg/L         | 24-hour composite              | Weekly                                |
| Settleable Solids                        | mg/l         | 24-hour composite              | Weekly                                |
| Total Suspended Solids                   | mg/L         | 24-hour composite              | Weekly                                |
| Total Nitrogen (as N)                    | mg/L         | Grab                           | Monthly                               |
| Nitrate (as Nitrogen)                    | mg/l         | Grab                           | Monthly                               |
| Ammonia (as N)                           | mg/L         | Grab                           | Monthly                               |
| Sulfate                                  | mg/L         | Grab                           | Quarterly                             |
| Boron                                    | mg/L         | Grab                           | Quarterly                             |
| Total Dissolved Solids                   | mg/L         | Grab                           | Quarterly                             |
| Sodium                                   | mg/L         | Grab                           | Quarterly                             |
| Chloride                                 | mg/L         | Grab                           | Quarterly                             |

Notes:

- a. 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.
- b. Composite samples shall be flow weighted. 24-hour composite samples shall be collected on a Monday through Sunday rotating schedule and subsequent monthly sampling events shall be separated by at least 16 days and no greater than 30 days.
- c. Quarterly monitoring shall be conducted in January, April, July, and October.

**C. EFFLUENT MONITORING**

1. Representative samples of treatment facility effluent shall be collected<sup>a</sup> and analyzed for the constituents/parameters and at the frequency specified below for each treatment facility:

| Constituent/Parameter <sup>b</sup>      | Units      | Sample Type <sup>c</sup>       | Sampling Frequency     |
|---|------------|--------------------------------|------------------------|
| Min Daily Flow                          | gal/day    | Metered                        | Continuous             |
| Max Daily Flow                          | gal/day    | Metered                        | Continuous             |
| Average Daily Flow                      | gal/day    | Calculated                     | Daily                  |
| Turbidity                               | NTU        | Metered                        | Continuous             |
| Total Chlorine Residual <sup>d, e</sup> | mg/L       | Metered                        | Continuous             |
| Coliform                                | MPN/100 ml | Grab                           | Daily                  |
| BOD <sub>5</sub>                        | mg/L       | 24-hour composite <sup>c</sup> | Weekly <sup>f</sup>    |
| Total Suspended Solids                  | mg/L       | 24-hour composite <sup>c</sup> | Weekly <sup>f</sup>    |
| pH                                      | Units      | Grab                           | Weekly <sup>f</sup>    |
| Total Nitrogen (as N)                   | mg/L       | Grab                           | Quarterly <sup>g</sup> |
| Nitrate (as N)                          | mg/L       | Grab                           | Quarterly <sup>g</sup> |
| Nitrite (as Nitrogen)                   | mg/l       | Grab                           | Quarterly <sup>g</sup> |
| Ammonia (as N)                          | mg/L       | Grab                           | Quarterly <sup>g</sup> |
| Total Kjeldahl Nitrogen (as N)          | mg/l       | Grab                           | Quarterly <sup>g</sup> |
| Total Dissolved Solids                  | mg/L       | Grab                           | Quarterly <sup>g</sup> |
| Sodium                                  | mg/L       | Grab                           | Quarterly <sup>g</sup> |
| Chloride                                | mg/L       | Grab                           | Quarterly <sup>g</sup> |
| Sulfate                                 | mg/L       | Grab                           | Quarterly <sup>g</sup> |
| Boron                                   | mg/L       | Grab                           | Quarterly <sup>g</sup> |
| Aluminum                                | mg/l       | Grab                           | Annually <sup>h</sup>  |
| Antimony                                | mg/l       | Grab                           | Annually <sup>h</sup>  |
| Arsenic                                 | mg/l       | Grab                           | Annually <sup>h</sup>  |
| Barium                                  | mg/l       | Grab                           | Annually <sup>h</sup>  |
| Beryllium                               | mg/l       | Grab                           | Annually <sup>h</sup>  |
| Cadmium                                 | mg/l       | Grab                           | Annually <sup>h</sup>  |
| Chromium                                | mg/l       | Grab                           | Annually <sup>h</sup>  |
| Copper                                  | mg/l       | Grab                           | Annually <sup>h</sup>  |
| Cyanide                                 | mg/l       | Grab                           | Annually <sup>h</sup>  |
| Flouride                                | mg/l       | Grab                           | Annually <sup>h</sup>  |
| Lead                                    | mg/l       | Grab                           | Annually <sup>h</sup>  |
| Mercury                                 | mg/l       | Grab                           | Annually <sup>h</sup>  |

|            |      |      |                           |
|------------|------|------|---------------------------|
| Nickel     | mg/l | Grab | Annually <sup>h</sup>     |
| Selenium   | mg/l | Grab | Annually <sup>h</sup>     |
| Thalium    | mg/l | Grab | Annually <sup>h</sup>     |
| Zinc       | mg/l | Grab | Annually <sup>h</sup>     |
| VOCs       | mg/l | Grab | Once/5 Years <sup>i</sup> |
| PCBs       | mg/l | Grab | Once/5 Years <sup>i</sup> |
| Pesticides | mg/l | Grab | Once/5 Years <sup>i</sup> |

Notes:

- a. Sampling shall occur immediately following the final treatment process (i.e. disinfection or dechlorination as applicable) unless noted otherwise
- b. 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.
- c. Composite samples shall be flow weighted. 24-hour composite samples shall be collected on a Monday through Sunday rotating schedule and subsequent monthly sampling events shall be separated by at least 16 days and no greater than 30 days.
- d. Shall be compared to the chlorine residual required to achieve a minimum CT value of 450 milligram-minutes per liter.
- e. Chlorine residual monitoring is not required for ultraviolet (UV) disinfection. The Executive Officer may require alternative sampling and reporting requirements for UV disinfection based on manufacturer and DHS recommendations to achieve minimum disinfection.
- f. Weekly samples shall be collected on a Monday through Sunday rotating schedule. Subsequent monthly sampling events shall be separated by at least 16 days and no greater than 30 days.
- g. Quarterly monitoring shall be conducted in January, April, July, and October
- h. Annual monitoring shall be conducted in July
- i. Once/5 Years monitoring shall commence in July 2009

**D. STORAGE FACILITY MONITORING**

Recycled water storage areas shall be inspected daily. Weekly visual inspections will be allowable for storage reservoirs fitted with reliable electronic remote depth gauging systems. Notes shall be kept of observations and shall be summarized in annual monitoring reports. In the event of impending freeboard violation, storage pond overflow, or backflow into the treatment plant, the Distributor (and Users as appropriate), Executive Officer, and the Department of Health Services shall be notified immediately.

**E. SOLIDS/BIOSOLIDS MONITORING**

1. The following information shall be submitted with the Annual Report required by Standard Provision C.16:
  - a. Annual biosolids removed in dry tons and percent solids.
  - b. If appropriate, a narrative description of biosolids dewatering and other treatment processes, including process parameters. For example, if drying beds are used, report depth of application and drying time. If composting is used, report the temperature achieved and duration.
  - c. A description of disposal methods, including the following information as applicable related to the disposal methods used at the facility. If more than one method is used,

include the percentage and tonnage of annual biosolids production disposed by each method.

- i. For landfill disposal include: 1) the Water Board WDR numbers that regulate the landfills used, 2) the present classifications of the landfills used, and 3) the names and locations of the facilities receiving biosolids.
  - ii. For land application include: 1) the location of the site(s), 2) the Water Board's WDR numbers that regulate the site(s), 3) the application rate in lbs/acre/year (specify wet or dry), and 4) subsequent uses of the land.
  - iii. For offsite application by a licensed hauler and composter include: 1) the name, address and USEPA license number of the hauler and composter.
- d. Copies of analytical data required by other agencies (i.e. USEPA or County Health Department) and licensed disposal facilities (i.e. landfill, land application, or composting facility) for the previous year.

### **DISTRIBUTOR REQUIREMENTS**

#### **F. 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 R3-2008-0042. 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 Water Board and California Department of Public Health 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 California Department of Public Health 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. R3-2006-0041<sup>1</sup>.
5. The Distributor in coordination with the Users, water purveyor, and California Department of Public Health 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>2</sup>

---

<sup>2</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-

6. Each individual User Reclaimed Water Site Supervisor shall provide quarterly updates to the Distributor 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.
7. The Distributor shall compile and conduct quarterly reviews of the applied recycled water flows to identify unusual usage behavior or significant changes. The Distributor shall conduct and document follow-up investigations if patterns change dramatically.

## G. GROUNDWATER MONITORING

1. Representative samples of groundwater shall be collected from shallow wells<sup>a</sup> upgradient and downgradient of disposal areas. To ascertain compliance with waste discharge requirements 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:

| Constituent/Parameter <sup>b</sup> | Units | Sample Type | Sampling Frequency     |
|------------------------------------|-------|-------------|------------------------|
| Depth to Water                     | Feet  | Measured    | Quarterly <sup>c</sup> |
| 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                                 | --    | Grab        | Quarterly              |
| Total Dissolved Solids             | mg/L  | Grab        | Quarterly              |
| Sodium                             | mg/L  | Grab        | Quarterly              |
| Chloride                           | mg/L  | Grab        | Quarterly              |
| Sulfate                            | mg/L  | Grab        | Quarterly              |
| Boron                              | mg/L  | Grab        | Quarterly              |

Notes:

- a) 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
- b) 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.
- c) Quarterly monitoring shall be conducted in January, April, July, and October

Based on review of available groundwater data the Executive Officer may request geologic and hydrogeologic documentation to ascertain whether the existing monitoring well network is sufficient to verify compliance with waste discharge requirements and whether additional monitoring wells are required

---

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.

## H. REPORTING

1. The Distributor shall submit **Quarterly** monitoring reports summarizing reclaimed water use at each reuse site and shall including a list of the reuse sites with the name, location and brief description of each reuse site, the total amount of reclaimed water supplied to each reuse site, and the name of the hydrologic areas underlying each reuse site [Required pursuant to California Water Code Section 13523.1(b)(5)]. The Quarterly monitoring reports shall be submitted as follows:

| Monitoring Occurring in... | Shall be reported by...  |
|----------------------------|--------------------------|
| January 1 – March 31       | April 30 <sup>th</sup>   |
| April 1 – June 30          | July 31 <sup>st</sup>    |
| July 1 – September 30      | October 31 <sup>st</sup> |
| October 1 – December 31    | January 31 <sup>st</sup> |

2. The Distributor shall submit annual reports by January 31<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 monitoring reports shall contain at a minimum:
  - a. Documentation of the use area and groundwater monitoring requirements listed above;
  - b. A list of Users accompanied by 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 Distributor/User Requirements;
  - e. The Salt Management Program report as specified in Distributor/User Requirements; and,
  - f. An up-to-date copy of the Rules and Regulations for Recycled Water Users and a standard copy of the Recycled Water Use Permit issued to the Users as specified in Individual Recycled Water Use Permits.
3. The 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 User list, use area map, and recycled water application summary table shall be cross-referenced for easy evaluation.
4. The Distributor shall report any adverse conditions or non-compliance with Order No. R3-2008-0042 potentially endangering public health or the environment to the Water Board (805/549-3147), California Department of Public Health (831/655-6939), and any other agencies as appropriate 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.

## SUPPLIER AND DISTRIBUTOR REQUIREMENTS

### I. PROVISIONS

1. All quarterly monitoring shall be performed any time during the monitoring quarter (calendar quarter), but samples representative of two consecutive quarterly periods must be separated by at least one month. 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. In cases where effluent limits are set below the lowest achievable practical quantitation limits, constituents not detected at the practical quantitation limit will be considered in compliance with effluent limitations.
3. All samples collected shall be tracked and submitted under chain of custody and analyzed by a laboratory certified by California Department of Public Health 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 a copy of each monitoring report along with a completed copy of the attached monitoring and reporting program transmittal sheet to:

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

### J. IMPLEMENTATION

1. This monitoring and reporting program shall be implemented immediately. However the Supplier and Distributor will be allowed a two-month grace period to procure equipment and establish new sampling protocols and sampling locations as necessary for new monitoring requirements contained within this Monitoring and Reporting Program.
2. The Executive Officer may revise this MRP as appropriate.

Ordered By:

\_\_\_\_\_  
Executive Officer

TJK

126-01

E-file: S:\WDR\WDR Facilities\Monterey Co\City of Soledad WWTP\Reclamation Requirements\MRP.doc

Paper File: City of Soledad.