State of California
California Regional Water Quality Control Board
Santa Ana Region

April 22, 2011

ITEM: *9

SUBJECT: Reissuance of Waste Discharge and Producer/User Reclamation Requirements for the City of Corona, Department of Water & Power, Water Reclamation Facility No. 2 - Order No. R8-2011-0015, Riverside County

DISCUSSION:

See attached Fact Sheet

RECOMMENDATIONS:

Adopt Order No. R8-2011-0015 as presented.

COMMENT SOLICITATION:

Comments were solicited from the discharger and the following agencies:

State Water Resources Control Board, Office of the Chief Counsel - David Rice
California Department of Public Health, San Diego - Steve Williams
Riverside County Environmental Health Services - Sandy Bunchek
Riverside County Flood Control and Water Conservation District - Jason Uhley
Santa Ana Watershed Project Authority - Celeste Cantu
Santa Ana River Dischargers Association - Ed Filadelfia
Inland Empire Waterkeeper - Autumn DeWoody
Natural Resources Defense Council - David Beckman
City of Corona, Department of Water & Power - Jonathan Daly

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD

SANTA ANA REGION

3737 Main Street, Suite 500, Riverside, California 92501-3348
Phone (951) 782-4130 - FAX (951) 781-6288– TDD (951) 782-3221

http://www.waterboards.ca.gov/santaana

ORDER NO. R8-2011-0015

WASTE DISCHARGE AND PRODUCER/USER RECLAMATION REQUIREMENTS FOR THE CITY OF CORONA, DEPARTMENT OF WATER & POWER WATER RECLAMATION FACILITY NO. 2 RIVERSIDE COUNTY

The following Discharger is subject to waste discharge and producer/user reclamation requirements as set forth in this Order:

Table 1. Discharger Information

Discharger/Operator	City of Corona, Department of Water & Power
Name of Facility	Water Reclamation Facility No. 2
Facility Address	650 E. Harrison Street, Corona, CA 92879
	Riverside County

The discharge by the City of Corona, Department of Water and Power, from the discharge points identified below is subject to waste discharge requirements as set forth in this Order:

Table 2. Discharge Locations and Recycled Water Use Areas

Discharge Point	Effluent Description	Discharge Point (Latitude)	Discharge Point (Longitude)	Receiving Water
DP-001 Land disposal	Up to 3 mgd of secondary treated and undisinfected until May 31, 2014 Up to 3 mgd of tertiary treated and disinfected after May 31, 2014	33°53'30"N	117°34'32"W	The three ponds overly the Temescal Groundwater Management Zone and are adjacent to Temescal Creek and the Prado Basin Management Zone
DP-002 Recycled water	Up to 1 mgd of tertiary treated and disinfected	33°52'58"N	117°33'24"W	Temescal Groundwater Management Zone

Table 3. Administrative Information

This Order was adopted by the Regional Water Board on:	April 22, 2011
This Order shall become effective on:	April 22, 2011

I, Kurt V. Berchtold, Executive Officer, do hereby certify that this Order with all attachments is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, Santa Ana Region, on April 22, 2011.

Kurt V. Berchtold

Kurt V. Berchtold, Executive Officer

TABLE OF CONTENTS

LIST OF TABLES

LIST OF ATTACHMENTS

I. FACILITY INFORMATION

The following Discharger is subject to waste discharge and producer/user reclamation requirements as set forth in this Order:

Table 4. Facility Information

Discharger/Operator	City of Corona, Department of Water and Power
Name of Facility	Water Reclamation Facility No. 2
Facility Address	650 E. Harrison Street, Corona, CA 92879
	Riverside County
Facility Contact, Title and Phone	Tom Moody, Operations Manager, (951) 279-3660
Mailing/Billing Address	755 Corporation Yard Way, Corona, CA 92880
Type of Facility	Wastewater Treatment Facility
Facility Design Flow - secondary treatment	3 mgd, secondary, undisinfected, currently
Facility Design Flow - tertiary treatment	3 mgd, tertiary, disinfected by May 31, 2014

II. FINDINGS

The California Regional Water Quality Control Board, Santa Ana Region (hereinafter Regional Water Board), finds:

A. **Background**. The City of Corona, Department of Water and Power (hereinafter Discharger or City) owns and operates Water Reclamation Facility No. 2 (WRF-2 or Facility), three percolation/evaporation ponds, and a recycled water distribution system in its service area. The Facility currently produces undisinfected secondary treated wastewater and discharges the wastewater to its three evaporation/percolation ponds. The discharges are currently regulated by Order No. 98-03, which was adopted on April 17, 1998. Order No. 98-03 was amended by Order No. R8-2007-0052 on September 7, 2007 to revise the total dissolved solids limits and to revise the volume of discharge to the evaporation/percolation ponds to up to 3.0 mgd.

The three evaporation/percolation ponds, and the recycled water use areas, overlie the Temescal Groundwater Management Zone (TGMZ). The ponds are also adjacent to Temescal Creek, and the Prado Basin Management Zone.

On July 20, 2009, the Regional Water Board adopted Time Schedule Order No. R8-2009-0039 (TSO). This TSO sets a time schedule for the Discharger to achieve tertiary treatment levels for discharges from WRF-2 to the ponds by May 31, 2014.

B. **Facility Description.** The treatment system employed at WRF-2 currently consists of primary and secondary wastewater treatment processes. Up to 3 mgd of undisinfected wastewater is discharged at Discharge Point 001 to three evaporation/percolation ponds overlying the Temescal Groundwater Management Zone. The ponds are adjacent to Temescal Creek and the Prado Basin Management Zone. The Discharger is required by the TSO to upgrade the quality of discharges from the facility to tertiary, disinfected treatment by May 31, 2014. Attachment B is a vicinity map showing the location of the treatment plant and percolation ponds. Attachment C is a flow schematic of the treatment system.

C. **Legal Authorities.** This Order serves as Waste Discharge Requirements (WDRs) pursuant to Article 4, Chapter 4, Division 7 of the California Water Code (commencing with section 13000).

D. **Background and Rationale for Requirements.** The requirements in this Order are based on information submitted as part of the application, and data from monitoring and reporting programs, as well as other available information. Attachment F, which contains background information and rationale for Order requirements, is hereby incorporated into this Order, and thus constitutes part of the Findings for this Order. Attachments A through E, G and H are also incorporated into this Order.

E. **California Environmental Quality Act (CEQA).** In compliance with the California Environmental Quality Act (CEQA), the Discharger completed a CEQA study for the WRF-2 tertiary filter upgrade to 1 mgd capacity. A Negative Declaration was certified by the City of Corona and a Notice of Determination was filed on April 1, 2009.

Pursuant to California Code of Regulations, Title 14, Chapter 3, Section 15096, as a responsible agency, the Regional Board is required to consider a negative declaration by the lead agency in determining whether to adopt waste discharge requirements. A responsible agency has responsibility for mitigating and avoiding only the direct and indirect environmental effects of those parts of the project, which it decides to carry out, finance, or approve. Further, the responsible agency must make findings as required by Section 15091 and, if necessary, 15093, for each and every significant impact of the project. As required by Section 15096, the Regional Board has considered the negative declaration prepared for the project in adopting these waste discharge requirements.

In the adoption of these waste discharge requirements, the Regional Board has considered those sections of the discharger's negative declaration that relate to water quality. Based on the mitigation proposed and the conditions set forth in this Order, impacts to water quality will be reduced to a less than significant level and beneficial uses will be protected. The Regional Board independently finds that changes or alterations have been required or incorporated into the project that avoid or mitigate impacts to water quality to a less than significant level.

F. Water Quality Control Plans. The Regional Water Board adopted a revised Water Quality Control Plan for the Santa Ana Region (hereinafter Basin Plan) that became effective on January 24, 1995. The Basin Plan designates beneficial uses, establishes water quality objectives, and contains implementation programs and policies to achieve those objectives for all waters in the Santa Ana Region addressed through the plan. More recently, the Basin Plan was amended significantly to incorporate revised boundaries for groundwater subbasins, now termed "management zones", new nitrate-nitrogen and TDS objectives for the new management zones, and new nitrogen and TDS management strategies applicable to both surface and ground waters. This Basin Plan Amendment was adopted by the Regional Board on January 22, 2004. The State Water Resources Control Board (State Water Board) and Office of Administrative Law (OAL) approved the Amendment on September 30, 2004 and December 23, 2004, respectively. EPA approved the surface water standards components of the N/TDS Amendment on June 20, 2007. This Order implements applicable provisions of the N/TDS Basin Plan Amendment, which, for the Discharger, results in effluent limitations that are at least as stringent as those in the current waste discharge requirements.

The three ponds and the recycled water use areas overlie the Temescal Groundwater Management Zone. As discussed in Section II.B.1. of the Fact Sheet (Attachment F), Temescal Creek and the Prado Basin Management Zones are considered as potential receiving waters for discharges from the ponds. The following table indicates beneficial uses applicable to these receiving waters:

Table 5. Basin Plan Beneficial Uses

Discharge Point	Receiving Water	Beneficial Uses Present or Potential
001 002	Temescal Groundwater MZ	a. Municipal and domestic supply, b. Agricultural supply, c. Industrial service supply, and d. Industrial process supply
001	Temescal Creek and Prado Basin MZ	a. Water contact recreation, b. Non-contact water recreation, c. Warm freshwater habitat, d. Wildlife habitat, and e. Rare, threatened or endangered species habitat

The requirements of this Order implement the Basin Plan.

1. **Total Dissolved Solids/Total Inorganic Nitrogen Offset:** The amended Basin Plan includes wasteload allocations for discharges of total dissolved solids (TDS) and total inorganic nitrogen (TIN) to the Santa Ana River system. The Basin Plan recognizes that strict compliance with TDS/TIN limits may be difficult to achieve and it describes the regulatory approach the Regional Water Board uses to address such situations. The Board incorporates offset provisions in waste discharge requirements whereby

dischargers can implement an approved program to offset TDS/TIN discharges in excess of specified TDS/TIN limits, provided that the discharger makes all reasonable efforts to improve the TDS/TIN quality of the water supply (and thereby, the wastewater). The Discharger has constructed and is operating a 15 million gallon a day groundwater desalter facility to offset the TDS/TIN discharges from the City's water reclamation facilities in order to comply with existing waste discharge requirements. Continued operation of the desalter is an acceptable offset to discharges of TDS/TIN in excess of limits specified in this order.

2. **State General Waste Discharge Requirements for Sanitary Sewer Systems.** The State Water Board issued General Waste Discharge Requirements for Sanitary Sewer Systems, Water Quality Order No. 2006-0003, on May 2, 2006, requiring public agencies that own sanitary sewer systems comprised of more than one mile of pipes or sewer lines to enroll for coverage under the General Order. The General Order requires agencies to develop sanitary sewer management plans (SSMPs) and report all sanitary sewer overflows (SSOs). The Discharger is currently enrolled under the General Order.

3. **Antidegradation Policy.** The State Water Board established California's antidegradation policy in State Water Board Resolution No. 68-16. Resolution No. 68-16 requires that existing quality of waters be maintained unless degradation is justified based on specific findings. As discussed in the Fact Sheet (Attachment F), the permitted discharge is consistent with the antidegradation provisions of State Water Board Resolution No. 68-16.

4. **Pretreatment:** The Discharger has established an approved pretreatment program. The approved pretreatment program and its components are hereby made an enforceable condition of this Order. (See also Section VI.C.5.c., below)

5. **Biosolids Requirements.** On February 19, 1993, the USEPA issued a final rule for the use and disposal of sewage sludge, 40 CFR, Part 503. This rule requires that producers of sewage sludge meet certain reporting, handling, and disposal requirements. The State of California has not been delegated the authority to implement this program, therefore, the U.S. Environmental Protection Agency is the implementing agency. As the sludge generated in the WRF-2 is treated in WRF-1, this Order does not include biosolids requirements.

6. **Monitoring and Reporting.** Water Code section 13267 authorizes the Regional Board to require technical and monitoring reports. The Monitoring and Reporting Program establishes monitoring and reporting requirements to implement federal and State requirements. This Monitoring and Reporting Program is provided in Attachment E.

7. **Notification of Interested Parties.** The Regional Water Board has notified the Discharger and interested agencies and persons of its intent to prescribe Waste Discharge Requirements for the discharge and has provided them with an opportunity to submit their written comments and recommendations. Details of the notification are provided in the Fact Sheet (Attachment F) of this Order.

8. **Consideration of Public Comment.** The Regional Water Board, in a public meeting, heard and considered all comments pertaining to the discharge. Details of the public meeting are provided in the Fact Sheet (Attachment F) of this Order.

IT IS HEREBY ORDERED, that Order No. 98-03, as amended by Order No. R8-2007-0052, is rescinded upon the effective date of this Order except for enforcement purposes, and, in order to meet the provisions contained in Division 7 of the California Water Code (commencing with section 13000) and regulations adopted thereunder, the Discharger shall comply with the requirements in this Order.

III. DISCHARGE PROHIBITIONS

A. The discharge of wastewater shall be limited to treated effluent that meets the conditions and requirements specified in Section IV.A.

B. The discharge of wastewater at DP 001, into the evaporation/percolation ponds, other than tertiary treated and disinfected wastewater is prohibited after May 31, 2014.

C. The discharge to any pond having less than one foot of freeboard is prohibited.

D. The bypass or overflow of untreated wastewater or wastes to surface waters or surface water drainage courses is prohibited.

E. The discharge of any substances in concentrations toxic to animal or plant life in the affected receiving water is prohibited.

F. The discharge of any radiological, chemical, or biological warfare agent or high level radiological waste is prohibited.

IV. EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS

A. Land Discharge Specifications – Discharge Point 001

Unless otherwise specified hereinafter, compliance with the following effluent limitations shall be measured at monitoring location M-001 as described in the attached MRP (Attachment E)

1. **Physical/Biological Limitations.** The Discharger shall maintain compliance with the following effluent limitations at DP 001:

Table 6. Physical/Biological Limitations at DP 001

Parameter	Units	Effluent Limitations	
		Average Monthly	Average Weekly
BOD_5 (until May 31, 2014)	mg/L	30	45
Total Suspended Solids (until May 31, 2014)	mg/L	30	45
BOD_5 (after May 31, 2014)	mg/L	20	30
Total Suspended Solids (after May 31, 2014)	mg/L	20	30

2. **Percent Removal.** The average monthly percent removal of BOD 5-day 20°C and total suspended solids shall not be less than 85 percent.

3. **TDS Limitations.** The discharge shall not contain concentrations of total dissolved solids that exceed the limits specified in "a." and "b.", below.

   a. The 12-month flow weighted running average total dissolved solids concentration of the discharge at Discharge Point 001 shall not exceed 770 mg/l unless:

      (1) The Discharger demonstrates to the satisfaction of the Regional Water Board's Executive Officer that:

         (a) Discharges in excess of the TDS limits are due to the quality of water supply sources utilized in the Discharger's service area, and that all reasonable steps, as agreed upon by the Executive Officer, have been taken to ensure that the best quality supplies are obtained and utilized in the Discharger's service area; or

         (b) Discharges in excess of the TDS limits are due solely to chemical additions in the treatment process needed to meet waste discharge requirements, and the Discharger has taken all steps to optimize chemical additions so as to minimize the increases; and

      (2) The Discharger implements an acceptable plan to offset discharges in excess of the TDS limits.

   b. The 12-month flow weighted running average total dissolved solids concentration of the discharge shall not exceed the 12-month flow weighted running average total dissolved solids concentration in the water supply by more than 250 mg/L unless:

(1) The Discharger demonstrates to the satisfaction of the Regional Water Board's Executive Officer that TDS discharges in excess of the 250 mg/L mineral increment are due solely to chemical additions in the treatment process needed to meet waste discharge requirements, and the Discharger has taken all steps to optimize chemical additions so as to minimize the TDS increases.

4. **Total Inorganic Nitrogen (TIN) Limitations.** The 12-month flow weighted running average TIN concentration of the combined discharge from WRF-1 and WRF-2 shall not exceed 10 mg/l unless the Discharger implements an acceptable plan to offset discharges in excess of the TIN limits.

5. **Flow Limitation.** The volume of discharge shall be limited to 3.0 MGD.

6. **pH Limitation.** The pH of the discharge shall at all times be within the range of 6.0 to 9.0 pH units.

7. **Tertiary Treatment Requirement.** After May 31, 2014, the effluent shall at all times be a filtered and subsequently disinfected wastewater (disinfected tertiary treated wastewater) and shall meet the following limitations:

   a. Turbidity of the filter effluent

      (1) When filtration is through natural undisturbed soils or a bed of filter media, the turbidity of the filtered wastewater shall not exceed any of the following:

         (a) Average of 2 Nephelometric Turbidity Units (NTU) within any 24-hour period;
         (b) 5 NTU more than 5 percent of the time in any 24-hour period; and
         (c) 10 NTU at any time.

      (2) When filtration is through a microfiltration, ultrafiltration, nanofiltration, or reverse osmosis membrane, the turbidity of the filtered wastewater shall not exceed any of the following:

         (a) 0.2 NTU more than 5 percent of the time within any calendar day; and
         (b) 0.5 NTU at any time.

   b. Disinfected wastewater shall meet the following:

      (1) The median concentration of total coliform bacteria in the disinfected effluent shall not exceed a Most Probable Number (MPN) of 2.2 per 100 milliliters (ml) utilizing the bacteriological results of the last seven days for which analysis has been completed.
      (2) The number of total coliform bacteria shall not exceed an MPN of 23 total coliform bacteria per 100 ml in more than one sample in any calendar month.

(3) No total coliform sample shall exceed an MPN of 240 total coliform bacteria per 100 ml.

(4) When the chlorine disinfection process is utilized followed by filtration, a CT (the product of total chlorine residual and modal contact time[1] measured at the same point) value of not less than 450 milligram-minutes per liter at all times with a modal contact time of at least 90 minutes, based on peak dry weather design flow shall be provided.

(5) When a disinfection process combined with the filtration process is utilized, the combined process shall demonstrate inactivation and/or removal of 99.999 percent of the plaque-forming units of F-specific bacteriophage MS2, or polio virus in the wastewater. A virus that is at least as resistant to disinfection as polio virus may be used for purposes of the demonstration.

8. **Compliance Schedule.** Compliance with the tertiary treatment limitations specified in Effluent Limitations A.1. and 7, above, shall be achieved in accordance with the following schedule:

Table 7. Compliance Time Schedule for WRF-2

Task	Compliance Date	Report of Compliance Due Date
Complete final design for WRF-2 tertiary treatment	August 28, 2012	September 1, 2012
Complete construction bids for WRF-2 tertiary treatment	November 15, 2012	December 1, 2012
Complete construction of WRF-2 tertiary treatment	April 10, 2014	May 1, 2014
Achieve full compliance	May 31, 2014	August 1, 2014

B. Recycled Water Specifications - Discharge Point 002

The discharger shall maintain compliance with the following limitations for recycled water produced and distributed for landscape irrigation or other similar uses. Compliance is to be measured at monitoring location REC-001 or other approved monitoring locations where representative samples of recycled water can be obtained for laboratory testing and analysis, as described in the attached MRP (Attachment E). The Discharger may submit for approval by the Executive Officer other monitoring location(s) not specified herein where representative samples of recycled water could be obtained for laboratory testing and analysis.

---

1 *Modal contact time shall be calculated daily based on the minimum one-hour average value in a 24-hour period.*

1. **Physical/Biological Limitations.** The Discharger shall maintain compliance with the following recycled water limitations at REC-001:

Table 8. Recycled Water Limitations at REC-001

Parameter	Units	Limitations	
		Average Monthly	Average Weekly
Biochemical Oxygen Demand 5-day @ 20°C	mg/L	20	30
Total Suspended Solids	mg/L	20	30

2. **TDS Limitations.** The 12-month flow weighted running average total dissolved solids concentration of the discharge at Discharge Point 002 shall not exceed the 770 mg/l unless:

   a. The Discharger demonstrates to the satisfaction of the Regional Water Board's Executive Officer that:

      (1) Discharges in excess of the TDS limits are due to the quality of water supply sources utilized in the Discharger's service area, and that all reasonable steps, as agreed upon by the Executive Officer, have been taken to ensure that the best quality supplies are obtained and utilized in the Discharger's service area; or

      (2) Discharges in excess of the TDS limits are due solely to chemical additions in the treatment process needed to meet waste discharge requirements, and the Discharger has taken all steps to optimize chemical additions so as to minimize the increases; and

   b. The Discharger implements an acceptable plan to offset discharges in excess of the TDS limits.

3. **Turbidity and Disinfection Requirements.** The recycled water shall all times be disinfected tertiary treated recycled water, which is a filtered and subsequently disinfected wastewater that meets the following limitations:

   a. Turbidity of the filter effluent

      (1) When filtration is through natural undisturbed soils or a bed of filter media, the turbidity of the filtered wastewater shall not exceed any of the following:

         (a) Average of 2 Nephelometric Turbidity Units (NTU) within any 24-hour period;
         (b) 5 NTU more than 5 percent of the time in any 24-hour period; and 10 NTU at any time.

      (2) When filtration[2] is through a microfiltration, ultrafiltration, nanofiltration, or reverse osmosis membrane, the turbidity of the filtered wastewater shall not exceed any of the following:

         (a) 0.2 Nephelometric Turbidity Units (NTU) more than 5 percent of the time within any calendar day; and
         (b) 0.5 NTU at any time.

   b. Disinfected wastewater shall meet the following:

      (1). The median concentration of total coliform bacteria in the disinfected effluent shall not exceed a Most Probable Number (MPN) of 2.2 per 100 milliliters (ml) utilizing the bacteriological results of the last seven days for which analysis has been completed.
      (2) The number of total coliform organism shall not exceed an MPN of 23 total coliform bacteria per 100 ml in more than one sample in any calendar month.
      (3) No total coliform sample shall exceed an MPN of 240 total coliform bacteria per 100 ml.
      (4) When chlorine disinfection process is utilized followed by filtration, a CT (the product of total chlorine residual and modal contact time[3] measured at the same point) value of not less than 450 milligram-minutes per liter at all times with a modal contact time of at least 90 minutes, based on peak dry weather design flow shall be provided.

---

2 *For recycled water use, other acceptable filtration technology that complies with Title 22 of the California Code of Regulations and approved by the California Department of Public Health may be used. Compliance determination will be based on CDPH guidance.*

3 *Modal contact time shall be calculated daily based on the minimum one-hour average value in a 24-hour period.*

(5) When a disinfection process combined with the filtration process is utilized, the combined process shall demonstrate inactivation and/or removal of 99.999 percent of the plaque-forming units of F-specific bacteriophage MS2, or polio virus in the wastewater. A virus that is at least as resistant to disinfection as polio virus may be used for purposes of the demonstration.

4. The pH of the recycled water shall at all times be within the range of 6.0 to 9.0 pH units.

5. The Discharger shall be responsible for assuring that recycled water is delivered and utilized in conformance with this Order and the recycling criteria contained in Title 22, Division 4, Chapter 3, Sections 60301 through 60355, California Code of Regulations.

6. The Discharger shall establish and enforce Rules and Regulations for Recycled Water users, governing the design and construction of recycled water use facilities and the use of recycled water in accordance with the uniform statewide recycling criteria established pursuant to California Water Code section 13521.

   a. Use of recycled water by the Discharger shall be consistent with its Rules and Regulations for Recycled Water Use.

   b. Any revisions made to the Rules and Regulations shall be subject to the review of the Regional Water Board, the California Department of Public Health, and the County Environmental Health Department. The revised Rules and Regulations or a letter certifying that the Discharger's Rules and Regulations contain the updated provisions in this Order, shall be submitted to the Regional Water Board within 60 days of adoption of this Order by the Regional Water Board.

7. The Discharger shall conduct periodic inspections of recycled water reuse sites to monitor compliance with the Discharger's Rules and Regulations for Recycled Water Use, this Order, and the uniform statewide reclamation criteria established pursuant to California Water Code section 13521.

8. The storage, delivery, or use of recycled water shall not individually or collectively, directly or indirectly, result in a pollution or nuisance, or adversely affect water quality, as defined in the California Water Code.

9. Recycled water shall not be delivered to any new use site until the California Department of Public Health grants approval for that site. The discharger shall provide a copy of the CDPH approval letter to the Regional Water Board within 30-days of the approval notice.

10. Prior to the delivering of recycled water to any schools, hospitals, or other unique use sites[4], the Discharger shall submit to the California Department of Public Health for review and approval a report containing the following information:

    a. The average number of persons estimated to be served at each use site area on a daily basis.
    b. The specific boundaries of the proposed use site area including a map showing the location of each facility, drinking water fountain, and impoundment to be used.
    c. The person or persons responsible for operation of the recycled water system at each use area.
    d. The specific use to be made of the recycled water at each use area.
    e. The methods to be used to assure that the installation and operation of the recycled system will not result in cross connections between the recycled water and potable water piping systems. This shall include a description of the pressure, dye or other test methods to be used to test the system.
    f. Plans and specifications which include the following:
        (1). Proposed piping system to be used.
        (2) Pipe locations of both the recycled and potable systems.
        (3) Type and location of the outlets and plumbing fixtures that will be accessible to the public.
        (4) The methods and devices to be used to prevent backflow of recycled water into the potable water system.
        (5) Plan notes relating to specific installation and use requirements.

11. The Discharger shall require each user to designate an on-site supervisor responsible for the operation of the recycled water distribution system within the recycled water use area. The supervisor shall be responsible for enforcing this Order, prevention of potential hazards, the installation, operation and maintenance of the distribution system, maintenance of the distribution and irrigation system plans in "as-built" form, and for the distribution of the recycled wastewater in accordance with this Order.

---

4 *Unique use sites are those sites where conditions are not routine and may involve controversy and raise public concerns.*

V. RECEIVING WATER LIMITATIONS AND SPECIFICATIONS

A. Surface Water Limitations

The discharge of waste or use of recycled water shall not cause any surface waters to be degraded, cause water quality objectives to be exceeded, unreasonably affect beneficial uses, or cause a condition of pollution or nuisance.

B. Groundwater Limitations

The discharge of waste or use of recycled water shall not cause the underlying groundwater to be degraded, cause water quality objectives to be exceeded, unreasonably affect beneficial uses, or cause a condition of pollution or nuisance.

VI. PROVISIONS

A. Standard Provisions

1. Failure to comply with provisions or requirements of this Order, or violation of other applicable laws or regulations governing discharges from this facility, may subject the Discharger to administrative or civil liabilities, criminal penalties, and/or other enforcement remedies to ensure compliance. Additionally, certain violations may subject the Discharger to civil or criminal enforcement from appropriate local, state, or federal law enforcement entities.

2. In the event the Discharger does not comply or will be unable to comply for any reason with any prohibition, discharge limitation, or receiving water limitation of this Order, the Discharger shall notify the Regional Water Board by telephone at (951) 782-4130 within 24 hours of having knowledge of such noncompliance, and shall confirm this notification in the monthly Self-Monitoring Report, unless the Regional Water Board waives confirmation or requires, orally or in writing, a written notification within five business days. The written notification shall state the nature, time, duration, and cause of noncompliance, and shall describe the measures being taken to remedy the current noncompliance and, prevent recurrence including, where applicable, a schedule of implementation. Other noncompliance requires written notification as above at the time of the normal monitoring report.

3. Neither the treatment nor the discharge of pollutants shall create a pollution, contamination, or nuisance as defined by section 13050 of the CWC.

4. The Discharger shall take all reasonable steps to minimize or correct any adverse impact on the environment resulting from noncompliance with this Order, including such accelerated or additional monitoring as may be necessary to determine the nature and impact of the noncomplying discharge.

5. This Order may be modified, revoked and reissued, or terminated for cause including, but not limited to, the following.

   a. Violation of any terms or conditions of this Order;
   b. Obtaining this Order by misrepresentation or failure to disclose fully all relevant facts.

6. The Discharger shall file with the Regional Water Board a Report of Waste Discharge at least 140 days before making any material change in the character, location, or volume of the discharge. A material change includes, but is not limited to, the following:

   a. Significantly changing the disposal method or location, such as changing the disposal to another drainage area or water body.
   b. Significantly changing the method of treatment.
   c. Increasing the discharge flow beyond that specified in this Order.

7. The provisions of this Order are severable, and if any provision of this Order, or the application of any provision of this Order to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this Order, shall not be affected thereby.

8. The Discharger shall maintain a copy of this Order at the site so that it is available to site operating personnel at all times. Key operating personnel shall be familiar with its content.

9. The Discharger shall optimize chemical additions needed in the treatment process to meet waste discharge requirements so as to minimize total dissolved solid increases in the treated wastewater.

10. Collected screenings, sludge, and other solids removed from liquid wastes shall be disposed of in a manner approved by the Regional Water Board's Executive Officer.

11. In the event of any change in control or ownership of land or waste discharge facility presently owned or controlled by the Discharger, the Discharger shall notify the succeeding owner or operator of the existence of this Order by letter, a copy of which shall be forwarded to the Regional Water Board.

12. The treatment facilities shall be designed, constructed, operated, and maintained to prevent inundation or washout due to floods with a 100-year return frequency.

13. The Regional Water Board and other authorized representatives shall be allowed:

a. Entry upon premises where a regulated facility or activity is located or conducted, or where records are kept under the conditions of this Order;
b. Access to copy any records that are kept under the conditions of the Order;
c. To inspect any facility, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Order; and
d. To photograph, sample and monitor for the purpose of assuring compliance with this Order, or as otherwise authorized by the Water Code.

B. Monitoring and Reporting Program Requirements (MRP)

The Discharger shall comply with the MRP, and future revisions thereto, in Attachment E of this Order. This monitoring and reporting program may be modified by the Executive Officer at any time during the term of this Order, and may include a reduction or an increase in the number of parameters to be monitored, the frequency of the monitoring or the number and size of samples to be collected. Any increase in the number of parameters to be monitored, the frequency of the monitoring or the number and size of samples to be collected may be reduced back to the levels specified in the original monitoring and reporting program at the discretion of the Executive Officer.

C. Special Provisions

1. Reopener Provisions – Not applicable

2. Special Studies, Technical Reports and Additional Monitoring Requirements

a. By June 1, 2011, the Discharger shall submit for approval by the Executive Officer, a report that details the manner in which sampling, monitoring and reporting will be performed as required in the Order.

3. Best Management Practices and Pollution Prevention

a. Pollutant Minimization Program

(1) The Discharger shall develop and conduct a Pollutant Minimization Program (PMP) as further described below when there is evidence (e.g., sample results reported as DNQ when the effluent limitation is less than the MDL, sample results from analytical methods more sensitive than those methods required by this Order, presence of whole effluent toxicity, health advisories for fish consumption, results of benthic or aquatic organism tissue sampling) that a priority pollutant is present in the effluent above an effluent limitation and either:

(a) A sample result is reported as DNQ and the effluent limitation is less than the RL; or
(b) A sample result is reported as ND and the effluent limitation is less than the MDL.

(2) The PMP shall include, but not be limited to, the following actions and submittals acceptable to the Regional Water Board:

(a) An annual review and semi-annual monitoring of potential sources of the reportable priority pollutant(s), which may include fish tissue monitoring and other bio-uptake sampling;
(b) Quarterly monitoring for the reportable priority pollutant(s) in the influent to the wastewater treatment system;
(c) Submittal of a control strategy designed to proceed toward the goal of maintaining concentrations of the reportable priority pollutant(s) in the effluent at or below the effluent limitation;
(d) Implementation of appropriate cost-effective control measures for the reportable priority pollutant(s), consistent with the control strategy; and
(e) An annual status report that shall be sent to the Regional Water Board including:

i. All PMP monitoring results for the previous year;
ii. A list of potential sources of the reportable priority pollutant(s);
iii. A summary of all actions undertaken pursuant to the control strategy; and
iv. A description of actions to be taken in the following year.

4. Construction, Operation and Maintenance Specifications

a. The Discharger's wastewater treatment plant shall be supervised and operated by persons possessing certificates of appropriate grade pursuant to Title 23, Division 3, Chapter 14, California Code of Regulations.

b. The Discharger shall provide safeguards to assure that should there be reduction, loss, or failure of electric power, the Discharger will comply with the requirements of this Order.

c. The Discharger shall update as necessary, the "Operation and Maintenance Manual (O&M Manual)" which it has developed for the treatment facility to conform to latest plant changes and requirements. The O&M Manual shall be readily available to operating personnel onsite. The O&M Manual shall include the following:

(1) The treatment plant table of organization showing the number of employees, duties and qualifications and plant attendance schedules (daily, weekends and holidays, part-time, etc). The description should include documentation that the personnel are knowledgeable and qualified to operate the treatment facility so as to achieve the required level of treatment at all times.

(2) Detailed description of safe and effective operation and maintenance of treatment processes, process control instrumentation and equipment.
(3) Description of laboratory and quality assurance procedures.
(4) Process and equipment inspection and maintenance schedules.
(5) Description of safeguards to assure that, should there be reduction, loss, or failure of electric power, the Discharger will be able to comply with requirements of this Order.
(6) Description of preventive (fail-safe) and contingency (response and cleanup) plans for controlling accidental discharges, and for minimizing the effect of such events. These plans shall identify the possible sources (such as loading and storage areas, power outage, waste treatment unit failure, process equipment failure, tank and piping failure) of accidental discharges, untreated or partially treated waste bypass, and polluted drainage.

5. Special Provisions for Municipal Facilities (POTWs Only)

a. Sewer Collection System Requirements: The Discharger's collection system is part of the system that is subject to this Order. As such, the Discharger must properly operate and maintain its collection system (40 C.F.R. § 122.41(e)). The Discharger must report any non-compliance (40 C.F.R. § 122.41(l)(6) and (7)) and mitigate any discharge from the Discharger's collection system in violation of this Order (40 C.F.R. § 122.41(d)).

Furthermore, the General Waste Discharge Requirements for Collection System Agencies (Order No. 2006-0003 DWQ) contains requirements for operation and maintenance of collection systems and for reporting and mitigating sanitary sewer overflows. While the Discharger must comply with both Order No. 2006-0003 DWQ and this Order, the General Collection System WDR more clearly and specifically stipulates requirements for operation and maintenance and for reporting and mitigating sanitary sewer overflows. The Discharger and other governmental agencies that are discharging wastewater into the facility are required to obtain enrollment for regulation under Order No. 2006-0003-DWQ.

b. Sludge Disposal Requirements

(1) Collected screenings, sludge, and other solids removed from liquid wastes shall be disposed of in a manner that is consistent with State Water Board and Integrated Waste Management Board's joint regulations (Title 27) of the California Code of Regulations and approved by the Regional Water Board's Executive Officer.
(2) The use and disposal of biosolids shall comply with existing Federal and State laws and regulations, including permitting requirements and technical standards included in 40 CFR 503.
(3) Any proposed change in biosolids use or disposal practice from a previously approved practice should be reported to the Executive Officer and EPA Regional Administrator at least 90 days in advance of the change.

(4) The Discharger shall take all reasonable steps to minimize or prevent any discharge or biosolids use or disposal that has the potential of adversely affecting human health or the environment.

c. Pretreatment Program Requirements

(1) The Discharger[5] shall update as necessary and implement the approved pretreatment program and its components as described in Section II.I., above.

(2) The Discharger shall update as necessary the appropriate contractual agreements with all governmental agencies[6]. The contractual agreements shall give the Discharger the authority to implement and enforce the approved pretreatment program within the sewer service areas of the treatment facility. The Discharger shall assure that any other steps necessary to provide this implementation and enforcement authority (e.g. adoption of ordinances, etc.) are taken by all governmental agencies. If a governmental agency has an EPA approved pretreatment program for any portion of the service area of the treatment facility, the Discharger's pretreatment program shall contain provisions ensuring that that governmental agency's program is implemented. In the event that any agency discharging to Discharger's facility fails to effectively implement its individual EPA approved pretreatment program, the Discharger shall implement and enforce its approved program within that agency's service area.

(3) The Discharger shall ensure that the POTW[7] pretreatment program for all contributory agencies discharging to the Discharger's treatment facility are implemented and enforced. The Discharger shall be responsible and liable for the performance of all Control Authority pretreatment requirements contained in 40 CFR 403, including any subsequent regulatory revisions to Part 403. Where Part 403 or subsequent revisions place mandatory actions upon the Discharger as Control Authority but does not specify a timetable for completion of the actions, the Discharger shall submit for approval of the Regional Water Board's Executive Officer, a schedule for implementation of the required actions and shall implement the approved schedule. The schedule for implementation shall be submitted within six months from the date that such mandatory actions are established. For violations of pretreatment requirements, the Discharger shall be subject to enforcement actions, penalties, fines and other remedies by the EPA, or other appropriate parties, as provided in the CWA, as amended (33 USC 1351 et seq.). The EPA or the Regional Water Board may also initiate enforcement action against an

---

5 *For purposes of the pretreatment program, Discharger is synonymous to Control Authority as defined in 40 CFR 403.12*

6 *Member agencies and sewering agencies discharging wastewater into the Facility.*

7 *Publicly owned treatment works.*

industrial user (IU) for non-compliance with applicable standards and requirements as provided in the CWA.

(4) The Discharger shall perform the pretreatment functions as required in 40 CFR Part 403 including, but not limited to:

(a) Enforce the pretreatment requirements under 40 CFR 403.5 and 403.6;

(b) Implement the necessary legal authorities as provided in 40 CFR 403.8(f)(1);

(c) Implement the programmatic functions as provided in 40 CFR 403.8(f)(2);

(d) Publish a list of significant non-compliance as required by 40 CFR 403.8(f)(2)(vii); and

(e) Provide the requisite funding and personnel to implement the pretreatment program as provided in 40 CFR 403.8(f)(3).

(5) The following wastes shall not be introduced into the treatment works:

(a) Wastes which create a fire or explosion hazard in the treatment works;

(b) Wastes which will cause corrosive structural damage to treatment works, but, in no case, wastes with a pH lower than 5.0 unless the works are designed to accommodate such wastes;

(c) Wastes at a flow rate and/or pollutant discharge rate which is excessive over relatively short time periods so that there is a treatment process upset and subsequent loss of treatment efficiency;

(d) Solid or viscous wastes in amounts that would cause obstruction to the flow in sewers or otherwise interfere with the proper operation of the treatment works.

(6) The Discharger shall ensure compliance with any existing or future pretreatment standard promulgated by EPA under Section 307 of the CWA or amendments thereto for any discharge to the municipal system.

(7) The Discharger shall comply with effluent standards or prohibitions established under Section 307(a) of the CWA for toxic pollutants within the time provided in the regulations that establish these standards or prohibitions, even if this Order has not yet been modified to incorporate the requirement.

(8) The Discharger shall require each user not in compliance with any pretreatment standard to submit periodic notice (over intervals not to exceed nine months) of progress toward compliance with applicable toxic and pretreatment standards developed pursuant to the CWA or amendments thereto. The Discharger shall forward a copy of such notice to the Regional Water Board and to the EPA Regional Administrator.

VII. COMPLIANCE DETERMINATION

Compliance with the effluent limitations contained in Section IV of this Order will be determined as specified below:

A. General.
Compliance with effluent limitations for pollutants shall be determined using sample reporting protocols defined in the MRP and Attachment A of this Order. For purposes of reporting and administrative enforcement by the Regional and State Water Boards, the Discharger shall be deemed out of compliance with effluent limitations if the concentration of the pollutant in the monitoring sample is greater than the effluent limitation and greater than or equal to the minimum level (ML) as shown in Attachment H.

B. Average Monthly Effluent Limitation (AMEL).
If the average (or when applicable, the median determined by subsection F below for multiple sample data) of daily discharges over a calendar month exceeds the AMEL for a given parameter, this will represent a single violation, though the Discharger will be considered out of compliance for each day of that month for that parameter (e.g., resulting in 31 days of non-compliance in a 31-day month). If only a single sample is taken during the calendar month and the analytical result for that sample exceeds the AMEL, the Discharger will be considered out of compliance for that calendar month. The Discharger will only be considered out of compliance for days when the discharge occurs. For any one calendar month during which no sample (daily discharge) is taken, no compliance determination can be made for that calendar month.

C. Average Weekly Effluent Limitation (AWEL).
If the average (or when applicable, the median for multiple sample data, see Attachment E Section X.B.5.) of daily discharges over a calendar week exceeds the AWEL for a given parameter, this will represent a single violation, though the Discharger may be considered out of compliance for each day of that week for that parameter, resulting in 7 days of non-compliance. If only a single sample is taken during the calendar week and the analytical result for that sample exceeds the AWEL, the Discharger may be considered out of compliance for that calendar week. The Discharger will only be considered out of compliance for days when the discharge occurs. For any one calendar week during which no sample (daily discharge) is taken, no compliance determination can be made for that calendar week.

D. Maximum Daily Effluent Limitation (MDEL).
If a daily discharge or when applicable, the median determined by subsection B above for multiple sample data of a daily discharge exceeds the MDEL for a given parameter, the Discharger will be considered out of compliance for that parameter for that 1 day only within the reporting period. For any 1 day during which no sample is taken, no compliance determination can be made for that day.

E. 12-Month Running Average Effluent Limitation (12-MRAEL).
Compliance with the 12-month flow weighted running average limitations under Discharge Specification IV.A.3., IV.A.4., and IV.B.2. shall be determined by the arithmetic mean of the last twelve monthly averages.

F. Multiple Sample Data.
When determining compliance with an AMEL for toxic pollutants and more than one sample result is available in a month, the Discharger shall compute the arithmetic mean unless the data set contains one or more reported determinations of "Detected, but Not Quantified" (DNQ) or "Not Detected" (ND). In those cases, the Discharger shall compute the median in place of the arithmetic mean in accordance with the following procedure:

1. The data set shall be ranked from low to high, ranking the reported ND determinations lowest, DNQ determinations next, followed by quantified values (if any). The order of the individual ND or DNQ determinations is unimportant.

2. The median value of the data set shall be determined. If the data set has an odd number of data points, then the median is the middle value. If the data set has an even number of data points, then the median is the average of the two values around the middle unless one or both of the points are ND or DNQ, in which case the median value shall be the lower of the two data points where DNQ is lower than a value and ND is lower than DNQ.

G. TDS Increment Limit.
Compliance with Discharge Specifications IV.A.3.b. shall be based on flow weighted TDS water supply quality. The Discharger shall provide the necessary calculations showing the overall TDS water supply quality.

H. Compliance Determination.
Compliance determinations shall be based on available analyses for the time interval associated with the effluent limitation. Where only one sample analysis is available in a specified time interval (e. g., monthly or weekly average), that sample shall serve to characterize the discharge for the entire interval. If quarterly sample results show noncompliance with the average monthly limit and that sample result is used for compliance determinations for each month of the quarter, then three separate violations of the average monthly limit shall be deemed to have occurred.

ATTACHMENT A – DEFINITIONS

Arithmetic Mean (μ), also called the average, is the sum of measured values divided by the number of samples. For ambient water concentrations, the arithmetic mean is calculated as follows:

Arithmetic mean = $\mu = \Sigma x / n$
where: Σx is the sum of the measured ambient water concentrations, and
n is the number of samples.

Average Monthly Effluent Limitation (AMEL): the highest allowable average of daily discharges over a calendar month, calculated as the sum of all daily discharges measured during a calendar month divided by the number of daily discharges measured during that month.

Average Weekly Effluent Limitation (AWEL): the highest allowable average of daily discharges over a calendar week (Sunday through Saturday), calculated as the sum of all daily discharges measured during a calendar week divided by the number of daily discharges measured during that week.

Best Management Practices (BMPs) are methods, measures, or practices designed and selected to reduce or eliminate the discharge of pollutants to surface waters from point and nonpoint source discharges including storm water. BMPs include structural and non-structural controls, and operation and maintenance procedures, which can be applied before, during, and/or after pollution producing activities.

Bioaccumulative pollutants are those substances taken up by an organism from its surrounding medium through gill membranes, epithelial tissue, or from food and subsequently concentrated and retained in the body of the organism.

Carcinogenic pollutants are substances that are known to cause cancer in living organisms.

Daily Discharge: Daily Discharge is defined as either: (1) the total mass of the constituent discharged over the calendar day (12:00 am through 11:59 pm) or any 24-hour period that reasonably represents a calendar day for purposes of sampling (as specified in the permit), for a constituent with limitations expressed in units of mass or; (2) the unweighted arithmetic mean measurement of the constituent over the day for a constituent with limitations expressed in other units of measurement (e.g., concentration).

The daily discharge may be determined by the analytical results of a composite sample taken over the course of one day (a calendar day or other 24-hour period defined as a day) or by the arithmetic mean of analytical results from one or more grab samples taken over the course of the day.

Detected, but Not Quantified (DNQ) are those sample results less than the RL, but greater than or equal to the laboratory's MDL.

Estimated Chemical Concentration is the estimated chemical concentration that results from the confirmed detection of the substance by the analytical method below the ML value.

Existing Discharger means any discharger that is not a new discharger. An existing discharger includes an "increasing discharger" (i.e., an existing facility with treatment systems in place for its current discharge that is or will be expanding, upgrading, or modifying its existing permitted discharge after the effective date of this Policy).

Infeasible means not capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, legal, social, and technological factors.

Inland Surface Waters are all surface waters of the State that do not include the ocean, enclosed bays, or estuaries.

Instantaneous Maximum Effluent Limitation: the highest allowable value for any single grab sample or aliquot (i.e., each grab sample or aliquot is independently compared to the instantaneous maximum limitation).

Instantaneous Minimum Effluent Limitation: the lowest allowable value for any single grab sample or aliquot (i.e., each grab sample or aliquot is independently compared to the instantaneous minimum limitation).

Maximum Daily Flow is the maximum flow sample of all samples collected in a calendar day.

Maximum Daily Effluent Limitation (MDEL) means the highest allowable daily discharge of a pollutant, over a calendar day (or 24-hour period). For pollutants with limitations expressed in units of mass, the daily discharge is calculated as the total mass of the pollutant discharged over the day. For pollutants with limitations expressed in other units of measurement, the daily discharge is calculated as the arithmetic mean measurement of the pollutant over the day.

MEC: Maximum Effluent Concentration.

Median is the middle measurement in a set of data. The median of a set of data is found by first arranging the measurements in order of magnitude (either increasing or decreasing order). If the number of measurements (n) is odd, then the median = $X_{(n+1)/2}$. If n is even, then the median = $(X_{n/2} + X_{(n/2)+1})/2$ (i.e., the midpoint between the $n/2$ and $n/2+1$).

Method Detection Limit (MDL) is the minimum concentration of a substance that can be measured and reported with 99 percent confidence that the analyte concentration is greater than zero, as defined in 40 CFR 136, Appendix B, revised as of May 14, 1999.

Minimum Level (ML) is the concentration at which the entire analytical system must give a recognizable signal and acceptable calibration point. The ML is the concentration in a sample that is equivalent to the concentration of the lowest calibration standard analyzed by a specific

analytical procedure, assuming that all the method specified sample weights, volumes, and processing steps have been followed.

Not Detected (ND) are those sample results less than the laboratory's MDL.

Persistent pollutants are substances for which degradation or decomposition in the environment is nonexistent or very slow.

Pollutant Minimization Program (PMP) means waste minimization and pollution prevention actions that include, but are not limited to, product substitution, waste stream recycling, alternative waste management methods, and education of the public and businesses. The goal of the PMP shall be to reduce all potential sources of a priority pollutant(s) through pollutant minimization (control) strategies, including pollution prevention measures as appropriate, to maintain the effluent concentration at or below the water quality-based effluent limitation. Pollution prevention measures may be particularly appropriate for persistent bioaccumulative priority pollutants where there is evidence that beneficial uses are being impacted. The Regional Water Board may consider cost-effectiveness when establishing the requirements of a PMP. The completion and implementation of a Pollution Prevention Plan, if required pursuant to CWC Section 13263.3(d), shall be considered to fulfill the PMP requirements. The following reporting protocols and definitions are used in determining the need to conduct a Pollution Minimization Program (PMP). Reporting protocols in the Monitoring and Reporting Program, Attachment E, Section X.B.4 describe sample results that are to be reported as Detected but Not Quantified (DNQ) or Not Detected (ND). Definitions for a Minimum Level (ML) and Method Detection Limit (MDL) are provided in Attachment A. A Reporting Level (RL) is the ML associated with an analytical method selected by the Discharger that is authorized for monitoring effluent limitations under this Order.

Pollution Prevention means any action that causes a net reduction in the use or generation of a hazardous substance or other pollutant that is discharged into water and includes, but is not limited to, input change, operational improvement, production process change, and product reformulation (as defined in Water Code Section 13263.3). Pollution prevention does not include actions that merely shift a pollutant in wastewater from one environmental medium to another environmental medium, unless clear environmental benefits of such an approach are identified to the satisfaction of the SWRCB or RWQCB.

Process Optimization means minor changes to the existing facility and treatment plant operations that optimize the effectiveness of the existing treatment processes.

Public Entity includes the federal government or a state, county, city and county, city, district, public authority, or public agency.

Reporting Level (RL) is the ML corresponding to an approved analytical method for reporting a sample result that is selected either from Appendix 4 of the SIP by the Regional Water Board in accordance with Section 2.4.2 of the SIP or established in accordance with Section 2.4.3 of the SIP. The ML is based on the proper application of method-based analytical procedures for sample preparation and the absence of any matrix interferences. Other factors may be applied to the ML depending on the specific sample preparation steps employed. For example, the treatment typically applied in cases where there are matrix-effects is to dilute the sample or sample aliquot by a factor of ten. In such cases, this additional factor must be applied to the ML in the computation of the RL.

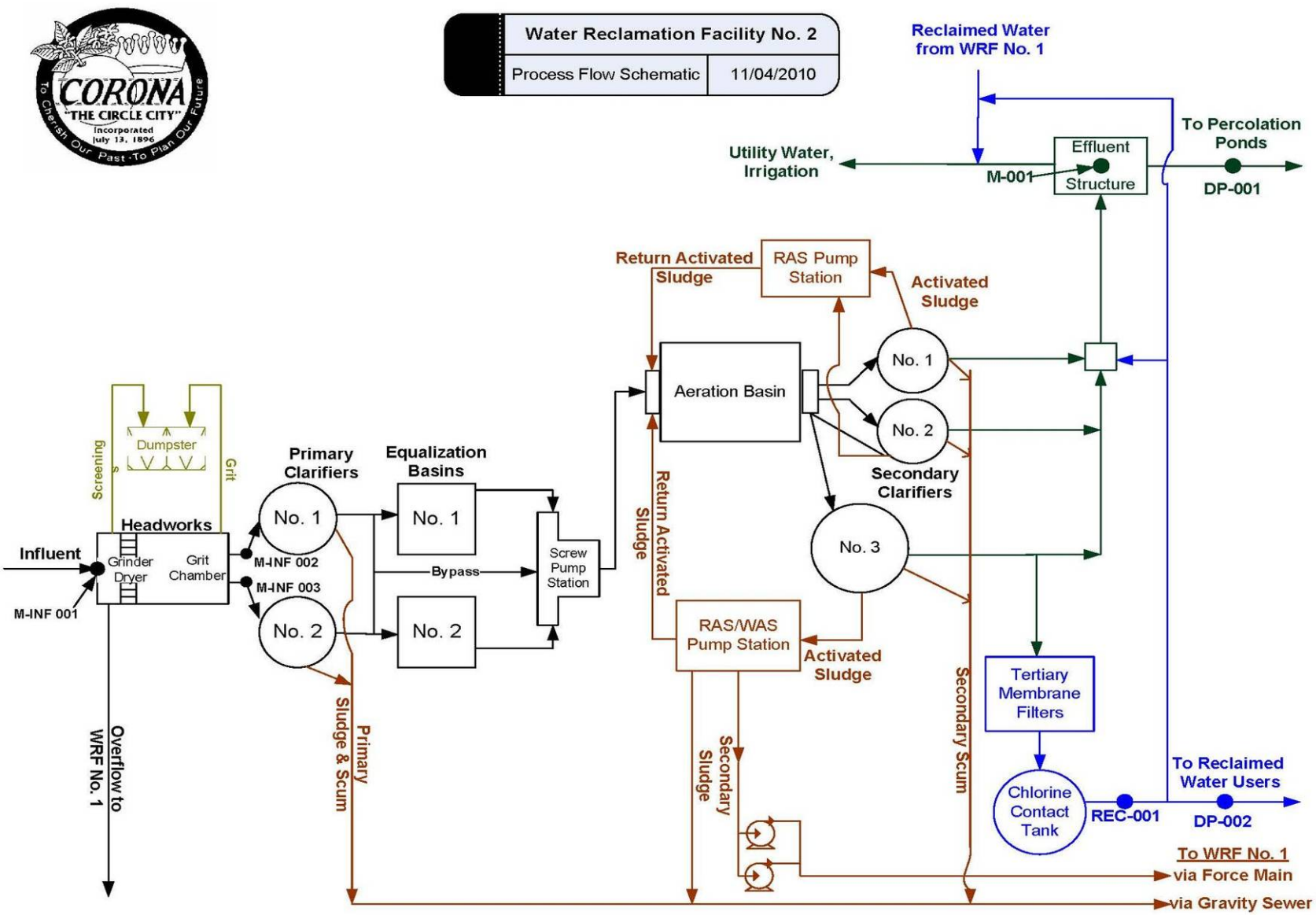
Source of Drinking Water is any water designated as municipal or domestic supply (MUN) in a RWQCB basin plan.

12-Month Running Average Effluent Limitation (12-MRAEL): the highest allowable average of monthly discharges over last twelve months, calculated as the sum of all monthly discharges measured during last twelve months divided by the number of monthly discharges measured during that time period.

Attachment B1 -- WRF-2 Location Map

Attachment B2 - Vicinity / Aerial Map of Water Reclamation Facility No. 2

Attachment C – Secondary/Tertiary Recycled Water System Flow Schematic



Attachment E – Monitoring and Reporting Program

Table of Contents

List of Tables

ATTACHMENT E – MONITORING AND REPORTING PROGRAM

California Water Code Section 13267 authorizes the Regional Water Board to require technical and monitoring reports. This MRP establishes monitoring and reporting requirements that implement the federal and California regulations.

I. GENERAL MONITORING PROVISIONS

A. General Monitoring Provision

1. All sampling, sample preservation, and analytical procedures shall be in accordance with the current approved edition of "*Standard Methods for the Examination of Water and Wastewater*" (American Public Health Association) and/or 40 CFR Part 136 approved methods unless otherwise specified by the Executive Officer of the Regional Water Board.

2. Chemical, bacteriological, and bioassay analyses shall be conducted at a laboratory certified for such analyses by the California Department of Public Health in accordance with the provision of Water Code Section 13176, and must include quality assurance/quality control data with their reports, or at laboratories approved by the Executive Officer of the Regional Water Board.

3. Whenever the Discharger monitors any pollutant at a specified monitoring location more frequently than is required by this Order, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the discharge monitoring report specified by this Order.

4. For every item of monitoring data where the requirements are not met, the monitoring report shall include a statement discussing the reasons for noncompliance, the actions undertaken or proposed that will bring the discharge into full compliance with requirements at the earliest time, and an estimate of the date when the Discharger will be in compliance. The Discharger shall notify the Regional Water Board by letter when compliance with the time schedule has been achieved.

5. The Discharger shall assure that records of all monitoring information are maintained and accessible for a period of at least five years from the date of the sample, report, or application. This period of retention shall be extended during the course of any unresolved litigation regarding this discharge or by the request of the Regional Water Board at any time. Records of monitoring information shall include:

    a. The laboratory which performed the analyses;
    b. The date(s) analyses were performed;
    c. The individual(s) who performed the analyses;
    d. The modification(s) to analytical techniques or methods used;
    e. All sampling and analytical results, including

(1) Units of measurement used;
(2) Minimum reporting level (RL) for the analysis or the minimum level (ML) as determined in Attachment H;
(3) Results less than the reporting level (RL) or the minimum level (ML), but above the method detection limit (MDL);
(4) Data qualifiers and a description of the qualifiers;
(5) Quality control test results (and a written copy of the laboratory quality assurance plan);
(6) Dilution factors, if used; and
(7) Sample matrix type.

f. All monitoring equipment calibration and maintenance records;
g. All original strip charts from continuous monitoring devices;
h. All data used to complete the application for this Order; and,
i. Copies of all reports required by this Order.
j. Electronic data and information generated by the Supervisory Control and Data Acquisition (SCADA) System.

6. The flow measurement system shall be calibrated at least once per year or more frequently, to ensure continued accuracy.

7. All monitoring instruments and devices used by the Discharger to fulfill the prescribed monitoring program shall be properly maintained and calibrated as necessary to ensure their continued accuracy. In the event that continuous monitoring equipment is out of service for greater than a 24-hour period, the Discharger shall obtain a representative grab sample each day the equipment is out of service. The Discharger shall correct the cause(s) of failure of the continuous monitoring equipment as soon as practicable. In its monitoring report, the Discharger shall specify the period(s) during which the equipment was out of service and if the problem has not been corrected, shall identify the steps which the Discharger is taking or proposes to take to bring the equipment back into service and the schedule for these actions.

8. Monitoring and reporting shall be in accordance with the following:

   a. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.

   b. The monitoring and reporting of influent, effluent, and sludge shall be done more frequently as necessary to maintain compliance with this Order and or as specified in this order.

   c. A "grab" sample is defined as any individual sample collected in less than 15 minutes.

d. A composite sample is defined as a combination of no fewer than eight individual grab samples obtained over the specified sampling period. The volume of each individual grab sample shall be proportional to the discharge flow rate at the time of sampling. The compositing period shall equal the specific sampling period, or 24 hours, if no period is specified.

e. Daily samples shall be collected on each day of the week.

f. Weekly samples shall be collected on any representative day during a week.

g. Monthly samples shall be collected on any representative day of each month.

h. Quarterly samples: A representative sample shall be taken on any representative day of January, April, July, and October and test results shall be reported in either micrograms/liter (ug/L) or milligrams/liter (mg/L), as appropriate, by the first day of the second month following the reporting period.

i. Semi-annual samples shall be collected in January and July.

j. Annual samples shall be collected in accordance with the following schedule:

Table 1. Annual Sampling Schedule

Year	Annual Samples
2011	July
2012	October
2013	January
2014	April
2015	July
2016	October
2017	January
2018	April
2019	July
2020	October

II. MONITORING LOCATIONS

The Discharger shall establish the following monitoring locations to demonstrate compliance with the effluent limitations, discharge specifications, and other requirements in this Order.

Table 2. Monitoring Station Locations

Discharge Point Name	Monitoring Location Name	Monitoring Location Description	Latitude	Longitude
	M-INF 001	WRF-2 influent at the headworks	33°52'51"N	117°33'22"W
	M-INF 002	WRF-2 influent Flow at Primary Clarifier No. 1	33°52'51"N	117°33'22"W
	M-INF 003	WRF-2 influent Flow at Primary Clarifier No. 2	33°52'51"N	117°33'22"W
DP 001	M-001	WRF-2 effluent to ponds	33°52'58"N	117°33'23"W
DP 002	REC-001	WRF-2 Recycled Water Effluent	To be decided	To be decided

III. INFLUENT MONITORING REQUIREMENTS

A. Influent Monitoring

1. The Discharger shall monitor the influent to WRF-2 at the influent monitoring station location M-INF 001 specified in Table 2, above, for the following constituents, except flow. The influent flow shall be metered at M-INF 002 and M-INF 003.

Table 3. Influent Monitoring

Parameter	Units	Sample Type	Minimum Sampling Frequency
Flow[1]	mgd	Recorder/Totalizer	Continuous
pH	pH Units	Recorder	Continuous
Specific Conductance	µmhos/cm	Recorder	Continuous
BOD_5	mg/L	Composite	Daily
Total Suspended Solids	mg/L	Composite	Daily
Total Dissolved Solids	mg/L	Composite	Monthly

[1] *The reported influent flow shall be the summation of the two flow readings minus the flow of sludge to WRF No. 1. The sludge flow shall be included as part of WRF No. 1 influent flow.*

Table 3. Influent Monitoring

Parameter	Units	Sample Type	Minimum Sampling Frequency
Total Inorganic Nitrogen	mg/L	Composite	Monthly
Ammonia-Nitrogen	mg/L	Composite	Monthly
Total Hardness	mg/L	Composite	Quarterly
Arsenic	µg/L	Composite	Quarterly
Total Cadmium	µg/L	Composite	Quarterly
Total Chromium	µg/L	Composite	Quarterly
Total Copper	µg/L	Composite	Quarterly
Total Lead	µg/L	Composite	Quarterly
Total Mercury	µg/L	Composite	Quarterly
Total Nickel	µg/L	Composite	Quarterly
Total Selenium	µg/L	Composite	Quarterly
Total Silver	µg/L	Composite	Quarterly
Total Zinc	µg/L	Composite	Quarterly
Cyanide, free	µg/L	Grab	Quarterly
Boron	mg/L	Composite	Annually
Chloride	mg/L	Composite	Annually
Fluoride	mg/L	Composite	Annually
Sulfate	mg/L	Composite	Annually

IV. LAND DISCHARGE MONITORING REQUIREMENTS

A. Effluent Monitoring Location M-001

1. The Discharger shall monitor the treated effluent discharged at DP 001 at monitoring station location M-001 as specified for Land Discharge Monitoring Location in Table 2, above, for the following constituents.

Table 4. Effluent Monitoring at M-001

Parameter	Units	Sample Type	Minimum Sampling Frequency
Flow	mgd	Recorder/ Totalizer	Continuous

Table 4. Effluent Monitoring at M-001

Parameter	Units	Sample Type	Minimum Sampling Frequency
Specific Conductance	µmhos/cm	Recorder	Continuous
pH	pH units	"	Continuous
Turbidity[2]	NTU	Recorder	Continuous
Coliform[2]	MPN/100mL	grab	Daily
BOD_5	mg/L	Composite	Daily
Suspended Solids	mg/L	Composite	Daily
Total Dissolved Solids	mg/L	Composite	Monthly
Total Hardness	mg/L	Composite	Monthly
Total Inorganic Nitrogen	mg/L	Composite	Monthly
Total Organic Carbon	mg/L	Composite	Monthly
Bicarbonate	mg/L	Composite	Quarterly
Boron	mg/L	Composite	Quarterly
Calcium	mg/L	Composite	Quarterly
Carbonate	mg/L	Composite	Quarterly
Chloride	mg/L	Composite	Quarterly
Fluoride	mg/L	Composite	Quarterly
Sodium	mg/L	Composite	Quarterly
Sulfate	mg/L	Composite	Quarterly
Aluminum	µg/L	Composite	Quarterly
Antimony	µg/L	Composite	Quarterly
Arsenic	µg/L	Composite	Quarterly
Barium	µg/L	Composite	Quarterly
Total Cadmium	µg/L	Composite	Quarterly
Total Chromium	µg/L	Composite	Quarterly
Total Copper	µg/L	Composite	Quarterly
Cyanide, free	µg/L	Grab	Quarterly
Total Lead	µg/L	Composite	Quarterly
Total Mercury	µg/L	Composite	Quarterly
Total Nickel	µg/L	Composite	Quarterly
Total Selenium	µg/L	Composite	Quarterly
Total Silver	µg/L	Composite	Quarterly

[2]. *Applicable only to tertiary treated wastewater.*

Table 4. Effluent Monitoring at M-001

Parameter	Units	Sample Type	Minimum Sampling Frequency
Total Zinc	µg/L	Composite	Quarterly
Perchlorate	µg/L	Composite	Quarterly
Volatile organic portion of MCLs List for Drinking Water Contaminations (See Attachment "G")	µg/L	Grab	Annually (see IV.A.2., below)
Remaining pollutants on MCLs List (See Attachment "G")	µg/L	Composite	Annually (see IV.A.2., below)

2. The monitoring frequency for those pollutants that are detected during the required monitoring at a concentration equal to or greater than the concentration specified for that pollutant in Table 1 of Attachment G shall be accelerated to quarterly for one year. To return to the monitoring frequency specified, the Discharger shall request and receive approval from the Regional Water Board's Executive Officer or designee.

V. RECLAMATION MONITORING REQUIREMENTS

A. Recycled Water Monitoring Location REC-001

1. The Discharger shall monitor the recycled water discharged into its distribution system at monitoring station location REC-001, as specified for Reclamation Monitoring Location in Table 2., above, for the following constituents.

Table 5. Reclamation Monitoring at REC-001

Parameter	Units	Sample Type	Minimum Sampling & Testing Frequency
Flow	mgd	Recorder/Totalizer	Continuous
pH	Standard units	Recorder/Totalizer	Continuous
CT[3]	mg/L-min	Calculation	Continuous

[3] *CT is the product of total chlorine residual and modal contact time measured at the same point.*

Table 5. Reclamation Monitoring at REC-001

Parameter	Units	Sample Type	Minimum Sampling & Testing Frequency
Turbidity[4]	NTU	Recorder	Continuous
Coliform Organisms	MPN per 100 mL	Grab	Daily
BOD_5	mg/L	Composite	Weekly
Total Suspended Solids	mg/L	Composite	Weekly
TDS	mg/L	Composite	Monthly
TIN	mg/L	Composite	Monthly

B. Monitoring Users

Whenever recycled water is supplied to a user, the Discharger shall record on a permanent log: the volume of recycled water supplied; the user of recycled water; the locations of those sites; the type of use (e.g. irrigation, industrial, etc); and the dates at which water is supplied.

The Discharger shall submit a quarterly report summarizing recycled water use, including the total amount of reclaimed water supplied, the total number of reclaimed water use sites, and the locations of those sites.

VI. RECEIVING WATER MONITORING REQUIREMENTS – NOT APPLICABLE

VII. OTHER MONITORING REQUIREMENTS

A. Biosolids Monitoring

1. The Discharger shall maintain a permanent log of solids hauled away from the treatment facilities for use/disposal elsewhere, including the date hauled, the volume or weight (in dry tons), type (screening, grit, raw sludge, biosolids), application (agricultural, composting, etc), and destination. The disposal of biosolids from WRF-2 to WRF-1 shall be reported quarterly.

---

[4] *Turbidity analysis shall be continuous, performed by a continuous recording turbidimeter. Compliance with the daily average operating filter effluent turbidity shall be determined by averaging the levels of recorded turbidity taken at a minimum of four-hour intervals over a 24-hour period. The results of the daily average turbidity determinations shall be reported monthly. Turbidity samples shall be collected after filtration units but before chlorination.*

B. Water Supply Monitoring

1. In August of each year, a sample of each source of the water supplied to the sewered area shall be obtained and analyzed for total dissolved solids concentration expressed in "mg/L".

2. Monthly reports shall be submitted stating the amount (in percentage, or acre-feet, or million gallons) supplied to the sewered area from each source of water and the resulting flow-weighted water supply quality for total dissolved solids.

C. Pretreatment Monitoring and Reporting

1. The Discharger shall submit to the Regional Water Board and the EPA Region 9, a quarterly compliance status report. The quarterly compliance status reports shall cover the periods January 1 - March 31, April 1 - June 30, July 1 - September 30, and October 1 - December 31. Each report shall be submitted by the end of the month following the quarter, except that the report for October 1 - December 31 may be included in the annual report. This quarterly reporting requirement shall commence for the first full quarter following issuance of this Order. The reports shall identify:

   a. All significant industrial users (SIUs) which violated any standards or reporting requirements during that quarter;

   b. The violations committed (distinguish between categorical and local limits);

   c. The enforcement actions undertaken; and

   d. The status of active enforcement actions from previous periods, including closeouts (facilities under previous enforcement actions which attained compliance during the quarter).

2. Annually, the Discharger shall submit a report to the Regional Water Board, the State Water Resources Control Board and the EPA Region 9 describing the pretreatment activities within the service area during the previous year. In the event that any control authority within the service area is not in compliance with any conditions or requirements of this Order or their approved pretreatment program (such as due to industrial user discharges, interjurisdictional agency agreement implementation issues, or other causes,) then the Discharger shall also include the reasons for non-compliance and state how and when the Discharger and the control authority shall comply with such conditions and requirements. This annual report shall cover operations from July 1 to June 30 of each fiscal year and is due on September 1 of each year. The report shall contain, but not be limited to, the following information:

   a. A summary of analytical results from representative, flow-proportioned, 24-hour composite sampling of the POTW's influent and effluent wastewaters for those pollutants which are known or suspected to be discharged by industrial users

(IUs) as identified by EPA under Section 307(a) of the CWA. The summary will include the result of annual full priority pollutant scan, with quarterly samples analyzed only for those pollutants[5] detected in the full scan. The Discharger shall also provide any influent or effluent monitoring data for non-priority pollutants which the Discharger believes may be causing or contributing to Interference, Pass Through or adversely impacting sludge quality. Sampling and analysis shall be performed in accordance with the techniques prescribed in 40 CFR 136 and amendments thereto.

b. A discussion of any upset, interference, or pass-through incidents at the treatment plant (if any), which the Discharger knows or suspects were caused by IUs of the POTW system. The discussion shall include the following:

   (1) The reasons why the incidents occurred, the corrective actions taken, and, if known, the name and address of the IU(s) responsible.
   (2) A review of the applicable pollutant limitations to determine whether any additional limitations, or changes to existing requirements, may be necessary to prevent pass through, interference or noncompliance with sludge disposal requirements.

c. A complete and updated list of the Discharger's significant industrial users (SIUs), including names, Standard Industrial Classification (SIC) code(s) and addresses, and a list of any SIU deletions and/or additions. The Discharger shall provide a brief explanation for each deletion. The SIU list shall identify the SIUs subject to Federal Categorical Standards by specifying which set(s) of standards are applicable to each SIU. The list shall also indicate which SIUs are subject to local limitations more stringent than Federal Categorical Standards and those, which are not subject to local limits.

d. A list or table characterizing the industrial compliance status of each SIU, including:

   (1) SIU name;
   (2) Industrial category;
   (3) The type (processes) of wastewater treatment in place;
   (4) Number of samples taken by the POTW during the year;
   (5) Number of samples taken by the SIU during the year;
   (6) Whether all needed certifications (if allowed) were provided by SIUs which have limits for total toxic organics;
   (7) Federal and Regional Standards violated during the year, reported separately;
   (8) Whether the SIU at any time in the year was in Significant Noncompliance (SNC)[6], as defined by 40 CFR 403.12 (f)(2)(vii); and
   (9) A summary of enforcement actions against the SIU taken during the year, including the type of action, final compliance date, and amount of fines assessed/collected (if any). Proposed actions, if known, should be included.

---

5 *The Discharger is not required to analyze for asbestos.*

6 *SNC is determined at the beginning of each quarter based on data of the previous six months.*

(10) Number of inspections conducted at each SIU during the year.

e. A compliance summary table which includes:

(1) SIU's which were in SNC at any time during the year;
(2) The total number of SIUs which are in SNC with pretreatment compliance schedules during the year;
(3) The total number of notices of violation and administrative orders issued against SIUs during the year;
(4) The total number of civil and criminal judicial actions filed against SIUs during the year;
(5) The number of SIUs which were published as being in SNC during the year; and
(6) The number of IUs from which penalties were collected during the year.

f. A short description of any significant changes in operating the pretreatment program which differ from the previous year including, but not limited to changes concerning:

(1) The program's administrative structure;
(2) Local industrial discharge limitations;
(3) Monitoring program or monitoring frequencies;
(4) Legal authority or enforcement policy;
(5) Funding mechanisms; and
(6) Resource requirements and/or staffing levels.

g. A summary of the annual pretreatment budget, including the cost of pretreatment program functions and equipment purchases.

h. A summary of public participation activities to involve and inform the public.

i. A description of any changes in sludge disposal methods and a discussion of any concerns not described elsewhere in the report.

3. The cumulative number of industrial users that the Discharger has notified regarding Baseline Monitoring Reports and the cumulative number of industrial user responses.

4. The Discharger shall submit the quarterly compliance status reports and the annual pretreatment report to EPA Region 9, the State Board and the Regional Water Board.

VIII. REPORTING REQUIREMENTS

A. General Monitoring and Reporting Requirements

1. All analytical data shall be reported with method detection limit[7] (MDLs) and with identification of either reporting level (RL), minimum level (ML), or limits of quantitation (LOQs).

2. Laboratory data for effluent samples must quantify each constituent down to the approved reporting levels (RL) or minimum level (ML) for specific constituents. Any internal quality control data associated with the sample must be reported when requested by the Executive Officer. The Regional Water Board will reject the quantified laboratory data if quality control data is unavailable or unacceptable.

3. Discharge monitoring data shall be submitted in a format acceptable by the Regional Water Board. Specific reporting format may include preprinted forms and/or electronic media. The results of all monitoring required by this Order shall be reported to the Regional Water Board, and shall be submitted in such a format as to allow direct comparison with the limitations and requirements of this order.

4. The Discharger shall tabulate the monitoring data to clearly illustrate compliance and/or noncompliance with the requirements of the Order.

5. For every item of monitoring data where the requirements are not met, the monitoring report shall include a statement discussing the reasons for noncompliance, and of the actions undertaken or proposed which will bring the discharge into full compliance with requirements at the earliest time, and an estimate of the date when the Discharger will be in compliance. The Discharger shall notify the Regional Water Board by letter when compliance with the time schedule has been achieved.

6. The monthly reports for June and December shall include a roster of plant personnel, including job titles, duties, and level of State certification for each individual.

7. The Discharger shall report monitoring results for specific parameters in accordance with the following table:

Table 6. Reporting Requirements

Parameter	Measurement
Flow	Daily total flow
pH	Daily high and daily low
Turbidity	Daily maximum and daily average

[7] *The standardized test procedure to be used to determine the method detection limit (MDL) is given at Appendix B, 'Definition and Procedure for the Determination of the Method Detection Limit' of 40 CFR 136.*

8. The Discharger shall file a written report with the Regional Board within ninety (90) days after the average dry-weather waste flow for any month equals or exceeds 75 percent of the overall design capacity of the City's waste treatment and/or disposal facilities. The Discharger's senior administrative officer shall sign a letter which transmits that report and certifies that the policy making body is adequately informed about it. The report shall include:

   a. Average daily flow for the month, the date on which the instantaneous peak flow occurred, the rate of that peak flow, and the total flow for the day.

   b. The Discharger's best estimate of when the average daily dry-weather flow rate will equal or exceed the design capacity of the treatment facilities.

   c. The Discharger's intended schedule for studies, design, and other steps needed to provide additional capacity for the waste treatment and/or disposal facilities before the waste flow rate equals the capacity of present units.

B. Self Monitoring Reports (SMRs)

1. At any time during the term of this permit, the State or Regional Water Board may notify the Discharger to electronically submit Self-Monitoring Reports (SMRs) using the State Water Board's California Integrated Water Quality System (CIWQS) program web site (http://www.waterboards.ca.gov/ciwqs/index.html). Until such notification is given, the Discharger shall submit hard copy SMRs. The CIWQS web site will provide additional directions for SMR submittal in the event there will be service interruption for electronic submittal.

2. The Discharger shall report in the SMR the results for all monitoring specified in this MRP under Sections III through V. Additionally, the Discharger shall report in the SMR the results of any special studies by Special Provisions – VI.C. of this Order. The Discharger shall submit monthly, quarterly and annual SMRs including the results of all required monitoring using CDPH-ELAP-approved test methods or other test methods specified in this Order. If the Discharger monitors any pollutant more frequently than required by this Order, the results of this monitoring shall be included in the calculations and reporting of the data submitted in the SMR.

3. Monitoring periods and reporting for all required monitoring shall be completed according to the following schedule:

Table 7. Monitoring and Reporting Schedule

Sampling Frequency	Monitoring Period Begins On	Monitoring Period	SMR Due Date
Continuous	May 1, 2011	All	Submit with monthly SMR
Daily	"	(Midnight through 11:59 PM) or any 24-hour period that reasonably represents a calendar day for	Submit with monthly SMR

Table 7. Monitoring and Reporting Schedule

Sampling Frequency	Monitoring Period Begins On	Monitoring Period	SMR Due Date
		purposes of sampling.	
Weekly	May 1, 2011	Sunday through Saturday	Submit with monthly SMR
Monthly	"	1st day of calendar month through last day of calendar month	First day of the second month following the reporting period, submit as monthly SMR
Quarterly	July 1, 2011	January 1 through March 31; April 1 through June 30; July 1 through September 30; October 1 through December 31	First day of the second month following the reporting period, submit with monthly SMR
Semiannually	"	January 1 through June 30 July 1 through December 31	First day of the second month following the reporting period, submit with monthly SMR
Annually	"	See I.A.8.j. above	First day of the second month following the reporting period, submit with monthly SMR

4. Reporting Protocols. The Discharger shall report with each sample result the applicable Reporting Level (RL), or Minimum Level (ML), and the current Method Detection Limit (MDL), as determined by the procedure in 40 CFR Part 136.

   The Discharger shall report the results of analytical determinations for the presence of chemical constituents in a sample using the following reporting protocols:

   a. Sample results greater than or equal to the RL shall be reported as measured by the laboratory (i.e., the measured chemical concentration in the sample).

   b. Sample results less than the RL, but greater than or equal to the laboratory's MDL, shall be reported as "Detected, but Not Quantified," or DNQ. The *estimated chemical concentration of the sample shall also be reported.

      For the purposes of data collection, the laboratory shall write the estimated chemical concentration next to DNQ as well as the words "Estimated Concentration" (may be shortened to "Est. Conc."). The laboratory may, if such information is available, include numerical estimates of the data quality for the reported result. Numerical estimates of data quality may be percent accuracy (± a percentage of the reported value), numerical ranges (low to high), or any other means considered appropriate by the laboratory.

   c. Sample results less than the laboratory's MDL shall be reported as "Not Detected," or ND.

d. Dischargers are to instruct laboratories to establish calibration standards so that the ML value (or its equivalent if there is differential treatment of samples relative to calibration standards) is the lowest calibration standard. At no time is the Discharger to use analytical data derived from *extrapolation* beyond the lowest point of the calibration curve.

5. The Discharger shall submit hard copy SMRs (with an original signature) when required by subsection B.1 above in accordance with the following requirements:

   a. The Discharger shall arrange all reported data in a tabular format. The data shall be summarized to clearly illustrate whether the facility is operating in compliance with interim and/or final effluent limitations.

   b. The Discharger shall attach a cover letter to the SMR. The information contained in the cover letter shall clearly identify violations of the WDRs; discuss corrective actions taken or planned; and the proposed time schedule for corrective actions. Identified violations must include a description of the requirement that was violated and a description of the violation.

   c. SMRs must be submitted to the Regional Water Board, signed and certified as required by the Standard Provisions (Attachment D), to the address listed below:

      California Regional Water Quality Control Board
      Santa Ana Region
      3737 Main Street, Suite 500
      Riverside, CA 92501-3348

6. By April 1 of each year, the Discharger shall submit an annual report to the Regional Water Board. The annual report shall include the following:

   a. Tabular and graphical summaries of the monitoring data obtained during the previous year;

   b. A discussion of the compliance record and the corrective actions taken or planned, which may be needed to bring the discharge into full compliance with the waste discharge requirements;

   c. A summary of the quality assurance (QA) activities for the previous year; and

   d. For pollutant constituents that do not have effluent limitations but are required to be monitored, the Discharger shall evaluate the monitoring data obtained during the previous year and determine whether detected constituents are at levels that would warrant reopening the permit to include effluent limitations for such constituent(s). To conduct this evaluation, the concentration of detected constituents shall be compared to the values specified in Table 1 of Attachment G and determine whether monitoring results for the specific constituent show persistent exceedance above the value specified in Attachment G. This evaluation shall be reported annually together with the required annual report.

The Discharger shall include a discussion of the corrective actions taken or planned to address values above those specified in Attachment G.

C. Other Reports – Not Applicable

Attachment F – FACT SHEET

TABLE OF CONTENTS

List of Tables

ATTACHMENT F – FACT SHEET

As described in Section II of this Order, this Fact Sheet includes the legal requirements and technical rationale that serve as the basis for the requirements of this Order.

This Order has been prepared under a standardized format to accommodate a broad range of discharge requirements for Dischargers in California. Only those sections or subsections of this Order that are specifically identified as "not applicable" have been determined not to apply to this Discharger. Sections or subsections of this Order not specifically identified as "not applicable" are fully applicable to this Discharger.

I. PERMIT INFORMATION

The following table summarizes administrative information related to the Facility.

Table 1. Facility Information

WDID	8 332181001
Discharger/Operator	City of Corona, Department of Water & Power
Name of Facility	Water Reclamation Facility No. 2 (WRF-2)
Facility Address	650 E. Harrison Street, Corona, CA 92879
Facility Contact, Title and Phone	Tom Moody, Operations Manager, (951) 279-3660 Tom.moody@ci.corona.ca.us
Authorized Person to Sign and Submit Reports	Jonathan Daly, General Manager, Frank Garza, Chief Reclamation Operator, (951) 279-3665, Frank.garza@ci.corona.ca.us
Mailing/Billing Address	755 Corporation Yard Way, Corona, CA 92880
Type of Facility	Wastewater Treatment Facility
Threat to Water Quality	2
Complexity	B
Pretreatment Program	Y
Reclamation Requirements	Producer/User
Facility Design Flow	Currently 3 mgd secondary undisinfected treatment; 2 mgd secondary undisinfected treatment and 1 mgd tertiary treatment by mid 2011; 3 mgd tertiary treatment by May 31, 2014
Facility Permitted Flow	3 mgd
Receiving Water	Temescal Groundwater Management Zone Prado Basin Management Zone (potential) Temescal Creek (potential)
Receiving Water Type	Groundwater/Surface Water
Watershed	Middle Santa Ana River Watershed

A. The City of Corona, Department of Water & Power (hereinafter Discharger or City) is the owner and operator of Water Reclamation Facility No. 2 (hereinafter WRF-2 or Facility), a publicly owned wastewater treatment plant, which currently produces undisinfected secondary treated wastewater.

B. Treated wastewater is discharged three evaporation/percolation ponds which overlie the Temescal Groundwater Management Zone. The ponds are also adjacent to Temescal Creek and the Prado Basin Management Zone. The discharge is currently regulated by Order No. 98-03, which was adopted on April 17, 1998. Order No. 98-03 was amended by Order No. R8-2007-0052 on September 7, 2007 to include revised total dissolved solids limits, and to reflect an increase in the discharge to the percolation ponds to up to 3.0 mgd.

On July 20, 2009, the Board adopted Time Schedule Order No. R8-2009-0039 (TSO). This TSO specifies a time schedule to achieve tertiary treatment levels for discharges to the three ponds by May 31, 2014.

C. The Discharger submitted a report of waste discharge for renewal of its Waste Discharge and Producer/User Reclamation Requirements on May 15, 2009 for this facility. Supplemental information was requested in July 2009 and received on September 8, 2009. A site visit was conducted on September 1, 2009, to observe operations and collect additional data to develop permit limitations and conditions. The application was deemed complete on September 8, 2009.

II. FACILITY DESCRIPTION

A. Description of Wastewater and Biosolids Treatment or Controls

1. Facility Background

The City purchased the Sunkist Lemon Products industrial wastewater treatment facility in 1986 and renovated it to an activated sludge plant to treat municipal wastewater. The facility is now referred to as Water Reclamation Facility No. 2 (WRF-2).

The City's Department of Water & Power (hereinafter Corona) operates Water Reclamation Facilities No. 1 (WRF-1) and No. 2 (WRF-2). Both plants, in combination, are permitted to discharge up to 8.5 million gallons per day of secondary-treated, undisinfected effluent to the Lincoln/Cota percolation/evaporation ponds under current permits. Corona's discharge to the ponds is regulated under Order No. R8-2007-0005 for WRF-1 and Order No. 98-03, as amended by Order No. R8-2007-0052, for WRF-2.

The WRF-2 is currently designed to treat up to 3 mgd of undisinfected secondary treated wastewater with the option to bypass flows to WRF No. 1. The secondary treated wastewater is discharged to the ponds.

Flows from WRF-2 can be diverted to WRF-1, if necessary. WRF-2 does not have sludge handling facilities, thus, primary and waste activated sludge are either gravity fed through the sewer lines or pumped via a 6-inch force main directly to WRF-1 for solids processing and disposal. Additionally, the City has a disposal connection to the Western Riverside County Regional Wastewater Treatment Plant that could be utilized if influent flows exceeded WRF-2's reliable treatment capacity.

2. Service Area

WRF-2 currently treats flow from the eastern and northeastern portions of Corona and Riverside County, approximately 8,495-acres. The service area of WRF-2 consists of low to high density residential, commercial, office professional, and general and light industries.

3. Design Characteristics

The treatment processes at WRF No. 2 are tabulated as follows:

Table 2. Plant Design - Corona WRF-2

Preliminary Treatment	Screens, grit removal, influent flow equalization
Primary Treatment	2 Primary Clarifiers
Secondary Treatment	3 mgd activated sludge and secondary clarifiers
Tertiary Treatment	3 mgd coagulation, microfiltration, and chlorine disinfection by May 31, 2014
Solids Handling	Sludge is sent to WRF-1 for handling and processing.

B. Discharge Points and Receiving Waters

The following table shows the discharge points, longitude and latitude, affected receiving waters, and estimated volume of discharge:

Table 3. Discharge Points

Discharge Serials No.	Effluent Description	Location (Latitude & Longitude)	Receiving Water	Flow & Frequency
001- Land Disposal – Lincoln/Cota Ponds	Undisinfected Secondary until May 31, 2014	33°53'30"N 117°34'32"W	Temescal Groundwater Management Zone Potentially – Prado Basin Management Zone and/or Temescal Creek	Up to 3 mgd, continuously
	Disinfected Tertiary after May 31, 2014			
002- Recycled Water	Disinfected Tertiary beginning in mid 2011	33°52'58"N 117°33'24"W	Temescal Groundwater Management Zone	Up to 1 mgd, continuously

1. Discharge Point to Ponds - 001

Treated wastewater is discharged via DP 001 to three evaporation/percolation ponds: the Lincoln Pond and the Cota North and Cota South Ponds. Currently, up to 3 mgd of undisinfected secondary treated wastewater is discharged to these ponds.

The Lincoln/Cota ponds overlie the Temescal Groundwater Management Zone (TGMZ). The ponds are located next to each other, and are adjacent to the Prado Basin Management Zone (PBMZ) and an unlined portion of Temescal Creek. Both the PBMZ and Temescal Creek are designated as REC-1 (body contact recreation) beneficial use water bodies in the Water Quality Control Plan for the Santa Ana River Basin (Basin Plan).

In light of the proximity of the ponds to the PBMZ and Temescal Creek, and the relatively shallow groundwater beneath these ponds, there is a potential for water discharged to the ponds to surface within Temescal Creek and/or the PBMZ. This water may not receive adequate filtering through the soil (i.e. that which would be equivalent to tertiary treatment) to remove pathogens prior to surfacing within Temescal Creek and/or the PBMZ.

Although recent studies indicate that the majority, if not all, of the wastewater discharged to the ponds percolates into the TGMZ, the Regional Water Board found that in order to protect the REC-1 beneficial use, it was necessary to require Corona to improve the quality of its effluent being discharged to the ponds to tertiary treatment standards. On July 20, 2009, the Regional Water Board adopted Time Schedule Order No. R8-2009-0039 (TSO). The TSO sets a schedule for Corona to achieve tertiary treatment levels for discharges from WRF-2 to the ponds by May 31,

2014. This time schedule is being incorporated directly into these revised waste discharge requirements.

2. Discharge Point for Recycling Water Reuse - 002

Corona plans to distribute up to 3 mgd of tertiary treated wastewater via DP 002 to the City's recycled water system by May 31, 2014. The recycled water use area overlies the Temescal Groundwater Basin.

3. Stormwater

Industrial Stormwater Requirements. Pursuant to Section 402(p) of the Clean Water Act and Title 40 of the Code of Federal Regulations (CFR) Part 122, 123, and 124, the State Water Resources Control Board adopted a general NPDES permit to regulate storm water discharges associated with industrial activities (State Board Order No. 97-03-DWQ) on April 17, 1997. Storm water discharges from WRF-2 are regulated under State Board Order No. 97-03-DWQ.

C. Summary of Previous Requirements and Self-Monitoring Report (SMR) Data

1. Effluent limitations/Discharge Specifications contained in the previous Order No. 98-3 for discharges from the WRF-2 at Discharge Point 001 (Monitoring Location No. M-001) and representative monitoring data from the term of the previous Order are as follows:

Table 4. Historic Effluent Limitations and Monitoring Data for WRF-2

Parameter (units)	Effluent Limitation			Monitoring Data From Jan. 2007 to December 2010			
	Average Monthly	12-M Average	Maximum Daily	Highest Average Monthly Discharge	Highest Average Weekly Discharge	Highest Daily Discharge	Highest 12-Month Average
Flow, mgd			3	2.3		2.9	
pH Daily Average (SU)			6-9			6.0-8.3	
BOD_5 (mg/L)	30		45	11.9		75	
Suspended Solids (mg/L)	30		45	13.6		140	
TDS (mg/L)		840 (1998-2007)					771
		770 (after 09/07/2007)					803*
Total Hardness (mg/L)		440					310
TIN (mg/L)		10 (WRF-1 and WRF-2)					10.3*
Chloride (mg/L)		180					165
Sodium (mg/L)		120					160*
Sulfate (mg/L)		160					218*
Antimony (µg/L)		6					0.69
Arsenic (µg/L)				2.1			
Cadmium (µg/L)				0.16			
Chromium, VI (µg/L)		50					0.19
Cobalt (µg/L)		200					0.82
Copper (µg/L)				8.6			
Cyanide (µg/L)							ND
Lead (µg/L)		50					0.66
Selenium (µg/L)				2.1			
Silver (µg/L)				2.1			
Phenol (µg/L)				ND			

* offset by Temescal Desalter.

D. Temescal Desalter – TDS/TIN Offset

As evident in the above table, at times the highest 12-month averages for sodium, sulfate, TIN, and TDS have exceeded effluent limitations. The concentrations of these constituents in the effluent are due to the quality of the water supply sources utilized in Corona's service area. Corona has taken reasonable steps, including the construction and operation of the Temescal Desalter, to ensure that the best quality water supplies are used in Corona's service area. In addition, the removal of salinity from the basin, through the use of the Temescal Desalter, adequately offsets Corona's discharges in excess of the above limits.

E. Compliance Summary

Based on a review of effluent monitoring data submitted by the Discharger for the period from 2007 through 2010, the following table shows the compliance summary for WRF-2:

Table 5. Compliance Status for WRF-2

Month	Type of Incident	Explanation/Reason	Corrective Action
January 2007 –December 2007	Sodium exceeded the 12 month avg. limit of 120 mg/L.	The 12-month average was exceeded due to the quality of water supply sources utilized in Corona's service area.	The Temescal Desalter was approved as an acceptable offset as identified in order No. R8-2007-0005, NPDES CA 8000383.
January 2007 –December 2007	Sulfate exceeded the 12 month avg. limit of 160 mg/L.	The 12-month average was exceeded due to the quality of water supply sources utilized in Corona's service area.	The Temescal Desalter was approved as an acceptable offset as identified in order No. R8-2007-0005, NPDES CA 8000383.
January 2008 –December 2008	Sodium exceeded the 12 month avg. limit of 120 mg/L.	The 12-month average was exceeded due to the quality of water supply sources utilized in Corona's service area.	The Temescal Desalter was approved as an acceptable offset as identified in order No. R8-2007-0005, NPDES CA 8000383.
January 2008– December 2008	Sulfate exceeded the 12 month avg. limit of 160 mg/L.	The 12-month average was exceeded due to the quality of water supply sources utilized in Corona's service area.	The Temescal Desalter was approved as an acceptable offset as identified in order No. R8-2007-0005, NPDES CA 8000383.
January 2008	Monthly sampling not performed	Miscommunication between the lab manager and the lab field sampler.	Monthly compliance was demonstrated using weekly sampling results.
January 2009 –December 2009	Sodium exceeded the 12 month avg. limit of 120 mg/L.	The 12-month average was exceeded due to the quality of water supply sources utilized in Corona's service area.	The Temescal Desalter was approved as an acceptable offset as identified in order No. R8-2007-0005, NPDES CA 8000383.
January 2009– December 2009	Sulfate exceeded the 12 month avg. limit of 160 mg/L.	The 12-month average was exceeded due to the quality of water supply sources utilized in Corona's service area.	The Temescal Desalter was approved as an acceptable offset as identified in order No. R8-2007-0005, NPDES CA 8000383.

Table 5. Compliance Status for WRF-2

Month	Type of Incident	Explanation/Reason	Corrective Action
January 2009	BOD and TSS exceeded 45 mg/l for daily limits.	Automatic control system failed and caused flow automatically pacing returned activated sludge.	A new programmable logic controller was replaced.
January 2010 –December 2010	Sodium exceeded the 12 month avg. limit of 120 mg/L.	The 12-month average was exceeded due to the quality of water supply sources utilized in Corona's service area.	The Temescal Desalter was approved as an acceptable offset as identified in order No. R8-2007-0005, NPDES CA 8000383.
January 2010– December 2010	Sulfate exceeded the 12 month avg. limit of 160 mg/L.	The 12-month average was exceeded due to the quality of water supply sources utilized in Corona's service area.	The Temescal Desalter was approved as an acceptable offset as identified in order No. R8-2007-0005, NPDES CA 8000383.

F. Planned Changes

The City began construction of a tertiary treatment system with 1 mgd capacity in August 2010, with an anticipated commissioning in mid 2011.

On July 20, 2009, the Regional Board adopted Time Schedule Order No. R8-2009-0039 (TSO). This TSO requires that the City of Corona conform with the following time schedule to achieve tertiary treatment levels on all effluent discharges to the ponds from WRF-2:

Table 6. Compliance Time Schedule for WRF-2

Task	Compliance Date	Report of Compliance Due Date
Complete final design for WRF-2 tertiary treatment	August 28, 2012	September 1, 2012
Complete construction bids for WRF-2 tertiary treatment	November 15, 2012	December 1, 2012
Complete construction of WRF-2 tertiary treatment	April 10, 2014	May 1, 2014
Achieve full compliance	May 31, 2014	August 1, 2014

III. APPLICABLE PLANS, POLICIES, AND REGULATIONS

The requirements contained in the proposed Order are based on the requirements and authorities described in this section.

A. Legal Authorities

This Order serves as Waste Discharge Requirements pursuant to article 4, Chapter 4, Division 7 of the Water Code (commencing with Section 13260).

B. California Environmental Quality Act (CEQA)

In compliance with the California Environmental Quality Act (CEQA), the Discharger completed the CEQA study for the construction of the WRF-2 tertiary filtration project with a capacity of 1 mgd. A Mitigated Negative Declaration was certified and a Notice of Determination was filed on April 1, 2009.

C. State Regulations, Policies, and Plans

1. **Water Quality Control Plans.** The Regional Water Board adopted a Water Quality Control Plan for the Santa Ana Basin (hereinafter Basin Plan) that became effective on January 24, 1995. The Basin Plan designates beneficial uses, establishes water quality objectives, and contains implementation programs and policies to achieve those objectives for all waters addressed through the plan.

   On January 22, 2004, the Regional Water Board adopted Resolution No. R8-2004-0001, amending the Basin Plan to incorporate revised boundaries for groundwater subbasins, now termed "management zones", new nitrate-nitrogen and TDS objectives for the new management zones, and new nitrogen and TDS management strategies applicable to both surface and ground waters. The State Water Board and Office of Administrative Law (OAL) approved the N/TDS Amendment on September 30, 2004 and December 23, 2004, respectively. Accordingly, these waste discharge requirements implement relevant, groundwater-related components of the N/TDS Amendment. Specifically, the total dissolved solids (TDS) and total inorganic nitrogen (TIN) limitations established in this Order are based on the amended Basin Plan.

   As previously discussed, the Facility discharges wastewater from discharge points that overlie the Temescal Groundwater Management Zone, and the discharge might also affect Temescal Creek and the Prado Basin Management Zone. The designated beneficial uses of receiving waters affected, or potentially affected, by the discharge from the Facility are as follows:

Table 7. Basin Plan Beneficial Uses

Discharge Point	Receiving Water	Beneficial Uses Present or Potential
001 002	Temescal Groundwater MZ	a. Municipal and domestic supply, b. Agricultural supply, c. Industrial service supply, and d. Industrial process supply
001	Temescal Creek and Prado Basin MZ	a. Water contact recreation, b. Non-contact water recreation, c. Warm freshwater habitat, d. Wildlife habitat, and e. Rare, threatened or endangered species habitat

Requirements of this Order implement the Basin Plan.

2. **Antidegradation Policy.** The State Water Board established California's antidegradation policy in State Water Board Resolution No. 68-16. Resolution No. 68-16 incorporates the federal antidegradation policy where the federal policy applies under federal law. Resolution No. 68-16 requires that existing water quality be maintained unless degradation is justified based on specific findings. The Regional Water Board's Basin Plan implements, and incorporates by reference, the State antidegradation policies. The permitted discharge must be consistent with the antidegradation provisions of State Water Board Resolution No. 68-16.

3. **Monitoring and Reporting Requirements.** Section 13267 of the CWC authorizes the Regional Water Board to require technical and monitoring reports. The Monitoring and the Reporting Program (MRP) establishes monitoring and reporting requirements to implement state requirements. This MRP is provided in Attachment E.

D. Other Plans, Polices and Regulations-Not Applicable

IV. RATIONALE FOR EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS

A. Discharge Prohibitions

The discharge prohibitions are based on the Basin Plan, State Water Resources Control Board's plans and policies, previous Order No. 98-03, its Amendment Order No. R8-2007-0052, and TSO No. R8-2009-0039 for WRF-2. These prohibitions are consistent with the requirements set for other discharges regulated by WDRs adopted by the Regional Water Board.

B. Technology-Based Effluent Limitations

For secondary treated wastewater, the BOD_5 and TSS concentration limits shown in the following table are based on technology-based secondary treatment standards concentration limits for BOD_5 and TSS that are specified in the federal regulations.

Table 8. Effluent BOD_5 and TSS Limits for Secondary Effluent

Constituent	Maximum Daily	Average Monthly
Biochemical Oxygen Demand	45 mg/L	30 mg/L
Suspended Solids	45 mg/L	30 mg/L

C. Water Quality-Based Effluent Limitations (WQBELs) For Land Disposal

1. Applicable Beneficial Uses and Water Quality Criteria for DP 001

The Discharger discharges up to 3.0 mgd of secondary (currently) or tertiary (by May 31, 2014) treated wastewater into three percolation ponds, which overlie the Temescal Groundwater Management Zone (TGMZ).

a. TDS and TIN: The TDS and TIN limitations specified in the Order are based on the water quality objectives specified for the TGMZ in the amended Basin Plan.

Table 9. Water Quality Objectives

Constituent	Objective, mg/L
TDS	770
NO_3-N	10

The Regional Water Board has determined that it is not practicable to express TDS and TIN effluent limitations as average weekly and average monthly effluent limitations because the ~~TDS and TIN~~ objectives in the Basin Plan were established primarily to protect the underlying groundwater. Consequently, a 12-month flow weighted average concentration is more appropriate.

b. Metals Limitations:
Metal constituent limits are based on the California Department of Public Health's (CDPH) Maximum Contaminant Levels (MCLs). Monitoring data show that there is no reasonable potential to threaten to violate MCL criteria. As a result, no metals limits are specified in this Order.

c. Coliform Limitations:
Coliform limitations are specified in the Order for recycled water use, in accordance with Title 22 regulations. Similar limitations will be applicable for discharges to the ponds after May 31, 2014.

D. Best Professional Judgment-Based Effluent Limitations

For tertiary treated wastewater, the BOD_5 and TSS concentration limits shown in the following table are based on Best Professional Judgment. The technology-based secondary treatment standards concentration limits for BOD_5 and TSS that are specified in the federal regulations are less stringent and do not apply. These limitations will apply after May 31, 2014.

Table 10. Effluent BOD_5 and TSS Limits for Tertiary Effluent

Constituent	Average Weekly	Average Monthly
Biochemical Oxygen Demand	30 mg/L	20 mg/L
Suspended Solids	30 mg/L	20 mg/L

E. Summary of Land Disposal Limitations

Table 11. Summary of Effluent Limitations at DP 001 for Land Disposal

Parameter	Units	Effluent Limitations				Basis
		Average Monthly or as noted herein	Ave. Weekly	Max. Daily	Range	
BOD_5 (after May 31, 2014)	mg/L	20	30	--	--	BPJ
Total Suspended Solids (after May 31, 2014)	mg/L	20	30	--	--	BPJ
BOD_5 (until May 30, 2014)	mg/L	30	45	--	--	Tech
Total Suspended Solids (until May 30, 2014)	mg/L	30	45	--	--	Tech
Coliform (after May 31, 2014)	MPN/100mL	--	2.2	--	--	Title 22
TDS	mg/L	770 (12-M avg)	--	--	--	BP
TIN	mg/L	10 (12-M avg)	--	--	--	BP
pH	Std. unit	--	--	--	6-9	BP

Notes: BP= Basin Plan.

F. Reclamation Specifications - DP 002

1. Section 13523 of the California Water Code provides that a Regional Water Board, after consulting with and receiving the recommendations from the CDPH and any party who has requested in writing to be consulted, and after any necessary hearing, shall prescribe water reclamation requirements for water which is used or proposed to be used as recycled water, if, in the judgment of the Board, such requirements are necessary to protect the public health, safety, or welfare. Section 13523 further provides that such requirements shall include, or be in conformance with, the statewide uniform water recycling criteria established by the CDPH pursuant to California Water Code Section 13521.

2. Reclamation specifications in the proposed Order are based upon the recycling criteria contained in Title 22, Division 4, Chapter 3, Sections 60301 through 60355, California Code of Regulations, and California Water Code Section 13521.

3. For recycled water use, this Order (Section IV.C.1.b to c. Reclamation Specifications – Discharge Points 002) specifies TDS limits based on the water quality objective for the Temescal Groundwater Management Zone, which is 770 mg/l.

4. Summary of Recycled Water Limitations:

Table 12. Summary of Recycled Water Limitations at DP 002

Parameter	Units	Effluent Limitations					Basis
		Average Monthly or as noted herein	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum	
BOD_5	mg/L	20	30	--	--	--	BPJ
Total Suspended Solids	mg/L	20	30	--	--	--	BPJ
CT	milligram -minutes per liter	--	--	--	450	--	Title 22
Coliform	MPN/100 mL	--	2.2 and 23 median in 7 days, respectively	--	--	--	Title 22
Turbidity	NTU	--	--	see §60301.320		--	Title 22

5. The Basin Plan water quality objectives for TIN do not apply to recycled water use for agricultural and landscape irrigation because of plant uptake of nitrogen.

V. RATIONALE FOR RECEIVING WATER LIMITATIONS

A. Surface Water – Not Applicable

B. Groundwater

1. The receiving groundwater limitations in the proposed Order are based upon the water quality objectives contained in the amended Basin Plan.

VI. RATIONALE FOR MONITORING AND REPORTING REQUIREMENTS

Sections 13267 of the CWC authorize the Water Boards to require technical and monitoring reports. The MRP, Attachment E of this Order, establishes monitoring and reporting requirements to implement federal and State requirements. The following provides the rationale for monitoring and reporting requirements contained in the MRP for this Facility.

A. Influent Monitoring

This Order carries forward the WRF-2 influent monitoring requirements for all parameters except flow. Flow shall be measured and reported as a sum of the flow meter readings at M-INF 002 and M-INF-003 minus the flow of primary sludge to WRF No. 1. Influent monitoring is required to determine the effectiveness of the pretreatment program and to assess treatment plant performance.

B. Effluent Monitoring

The Discharger is required to conduct monitoring of the permitted discharges in order to evaluate compliance with permit conditions. Monitoring requirements are given in the proposed monitoring and reporting program (Attachment E). Attachment E includes Standard Monitoring Provisions (SMP). The SMP are standard requirements applicable to almost all waste discharge requirements issued by the Regional Water Board. In addition to containing definitions of terms, it specifies general sampling/analytical protocols and the requirements of reporting of spills, violations, and routine monitoring data in accordance with WDR regulations, the California Water Code, and Regional Water Board's policies. The monitoring and reporting program also contains a sampling program specific to the Discharger's wastewater treatment plant. It defines the sampling stations, frequency, pollutants to be monitored, and additional reporting requirements. Pollutants to be monitored include all pollutants for which effluent limitations are specified.

This Order modifies the monitoring requirements specified in previous Orders and adds monitoring requirements. This Order also requires the Discharger to conduct accelerated monitoring for those constituents that are detected in the quarterly and annual pollutant scans.

C. Receiving Water Monitoring

1. Groundwater – Not Applicable

D. Other Monitoring Requirements

1. Water Supply Monitoring

The Discharger is required to collect a sample of each source of water supplied and analyze for total dissolved solids. The result of this monitoring will enable the Discharger to show compliance with TDS limitations in the Order.

2. Biosolids Monitoring – Not Applicable

Biosolids produced in this facility are sent to WRF-1 for disposal and treatment. No monitoring is required in this Order.

3. Pretreatment Monitoring

These monitoring and reporting requirements are established pursuant EPA 40 CFR 403 regulations. An acceptable pretreatment program has been developed by the City and is implemented throughout its service area.

VII. RATIONALE FOR PROVISIONS

A. Provisions

1. Reopener Provisions – Not Applicable

2. Special Studies and Additional Monitoring Requirements

This Order requires the discharger to submit a report that details the manner in which sampling, monitoring and reporting will be performed as required in the Order. This is a standard requirement for all POTW dischargers within the Region.

3. Construction, Operation, and Maintenance Specifications

The requirements are based on requirements that were specified in the prior Order.

4. Special Provisions for Municipal Facility - POTWs Only

The treatment plant capacity is 3 mgd and there are significant industrial users within the service areas. Consequently, this Order contains requirements for the implementation of an effective pretreatment program pursuant to Section 307 of the Federal Clean Water Act; Parts 35 and 403 of Title 40, Code of Federal Regulations (40 CFR 35 and 40 CFR 403); and/or Section 2233, Title 23, California Code of Regulations.

5. Other Special Provisions – Not Applicable

6. Compliance Schedules
See above Section II.F.

VIII. PUBLIC PARTICIPATION

The Regional Water Board will be considering the adoption of waste discharge requirements (WDRs) for the City of Corona's Water Reclamation Facility No. 2. As a step in the WDR adoption process, the Regional Water Board staff has developed tentative WDRs. The Regional Water Board encourages public participation in the WDR adoption process.

A. Notification of Interested Parties

The Regional Water Board staff has notified the Discharger and interested agencies and persons of the Board's intent to prescribe waste discharge requirements for the discharges and has provided them with an opportunity to submit their written comments and recommendations. Notification was provided through mailings and at the Regional Water Board website: http://www.waterboards.ca.gov/santaana.

B. Written Comments

The staff determinations are tentative. Interested persons are invited to submit written comments concerning these tentative WDRs. To be fully responded to by staff and considered by the Regional Water Board, written comments should be received at the Regional Water Board offices by 5:00 p.m. on March 25, 2011. Comments must be submitted either in person or by mail to the staff person listed below:

Jane Qiu
California Regional Water Quality Control Board
Santa Ana Region
3737 Main Street, Suite 500
Riverside, CA 92501-3348

C. Public Hearing

The Regional Water Board will hold a public hearing on the tentative WDRs during its regular Board meeting on the following date and time and at the following location:

Date:	April 22, 2011
Time:	9:00 A.M.
Location:	Orange County Water District 18700 Ward Street Fountain Valley, CA 92708

Interested persons are invited to attend. At the public hearing, the Regional Water Board will hear testimony, if any, pertinent to the discharge, WDRs, and permit. Oral

testimony will be heard; however, for accuracy of the record, important testimony should be in writing.

Please be aware that dates and venues may change. Our web address, where you can access the current agenda for changes in dates and locations is: http://www.waterboards.ca.gov/santaana.

D. Waste Discharge Requirements Petitions

Any aggrieved person may petition the State Water Board to review the decision of the Regional Water Board regarding the final WDRs. The petition must be submitted within 30 days of the Regional Water Board's action to the following address:

State Water Resources Control Board
Office of Chief Counsel
P.O. Box 100, 1001 I Street
Sacramento, CA 95812-0100

E. Information and Copying

The Report of Waste Discharge, related documents, tentative effluent limitations and special provisions, comments received, and other information are on file and may be inspected at the address above at any time between 9:00 a.m. and 3:00 p.m. Monday through Thursday. Copying of documents may be arranged through the Regional Water Board by calling (951) 782-4130.

F. Register of Interested Persons

Any person interested in being placed on the mailing list for information regarding these waste discharge requirements should contact the Regional Water Board, reference this facility, and provide a name, address, and phone number.

G. Additional Information

Requests for additional information or questions regarding this Order should be directed to Jane Qiu at (951) 320-2008 or jqiu@waterboards.ca.gov.

Attachment G – Pollutant Monitoring Trigger List

Table 1

Chemical	*Maximum Contaminant Level*	*Unit*
Inorganic Chemicals		
Aluminum	1	mg/L
Antimony	0.006	mg/L
Arsenic	0.010	mg/L
Asbestos (MFL = million fibers per liter; for fibers >10 microns long)	7 MFL	MFL
Barium	1	mg/L
Beryllium	0.004	mg/L
Cadmium	0.005	mg/L
Chromium, Total	0.05	mg/L
Cyanide	0.15	mg/L
Fluoride	2	mg/L
Mercury (inorganic)	0.002	mg/L
Nickel	0.1	mg/L
Nitrate (as NO3)	45	mg/L
Nitrite (as N)	1 as N	mg/L
Nitrate + Nitrite	10 as N	mg/L
Perchlorate	0.006	mg/L
Selenium	0.05	mg/L
Thallium	0.002	mg/L
Copper	1.3	mg/L
Lead	0.015	mg/L
Organic Chemicals		
(a) Volatile Organic Chemicals (VOCs)		
Benzene	0.001	mg/L
Carbon tetrachloride	0.0005	mg/L
1,2-Dichlorobenzene	0.6	mg/L
1,4-Dichlorobenzene (p-DCB)	0.005	mg/L
1,1-Dichloroethane (1,1-DCA)	0.005	mg/L
1,2-Dichloroethane (1,2-DCA)	0.0005	mg/L
1,1-Dichloroethylene (1,1-DCE)	0.006	mg/L
cis-1,2-Dichloroethylene	0.006	mg/L
trans-1,2-Dichloroethylene	0.01	mg/L

Table 1

Chemical	*Maximum Contaminant Level*	*Unit*
Dichloromethane (Methylene chloride)	0.005	mg/L
1,2-Dichloropropane	0.005	mg/L
1,3-Dichloropropene	0.0005	mg/L
Ethylbenzene	0.3	mg/L
Methyl tertiary butyl ether (MTBE)	0.013	mg/L
Monochlorobenzene	0.07	mg/L
Styrene	0.1	mg/L
1,1,2,2-Tetrachloroethane	0.001	mg/L
Tetrachloroethylene (PCE)	0.005	mg/L
Toluene	0.15	mg/L
1,2,4-Trichlorobenzene	0.005	mg/L
1,1,1-Trichloroethane (1,1,1-TCA)	0.2	mg/L
1,1,2-Trichloroethane (1,1,2-TCA)	0.005	mg/L
Trichloroethylene (TCE)	0.005	mg/L
Trichlorofluoromethane (Freon 11)	0.15	mg/L
1,1,2-Trichloro-1,2,2-Trifluoroethane (Freon 113)	1.2	mg/L
Vinyl chloride	0.0005	mg/L
Xylenes	1.75	mg/L
(b) Non-Volatile Synthetic Chemicals (SOCs)		
Alachlor	0.002	mg/L
Atrazine	0.001	mg/L
Bentazon	0.018	mg/L
Benzo(a)pyrene	0.0002	mg/L
Carbofuran	0.018	mg/L
Chlordane	0.0001	mg/L
2,4-Dichlorophenoxyacetic acid (2,4-D)	0.07	mg/L
Dalapon	0.2	mg/L
1,2-Dibromo-3-chloropropane (DBCP)	0.0002	mg/L
Di(2-ethylhexyl)adipate	0.4	mg/L
Di(2-ethylhexyl)phthalate (DEHP)	0.004	mg/L
Dinoseb	0.007	mg/L
Diquat	0.02	mg/L
Endrin	0.002	mg/L
Endothal	0.1	mg/L
Ethylene dibromide (EDB)	0.00005	mg/L

Table 1

Chemical	*Maximum Contaminant Level*	*Unit*
Glyphosate	0.7	mg/L
Heptachlor	0.00001	mg/L
Heptachlor epoxide	0.00001	mg/L
Hexachlorobenzene	0.001	mg/L
Hexachlorocyclopentadiene	0.05	mg/L
Lindane	0.0002	mg/L
Methoxychlor	0.03	mg/L
Molinate	0.02	mg/L
Oxamyl	0.05	mg/L
Pentachlorophenol	0.001	mg/L
Picloram	0.5	mg/L
Polychlorinated biphenyls (PCBs)	0.0005	mg/L
Simazine	0.004	mg/L
2,4,5-TP (Silvex)	0.05	mg/L
2,3,7,8-TCDD (dioxin)	$3x10^{-8}$	mg/L
Thiobencarb	0.07	mg/L
Toxaphene	0.003	mg/L
Disinfectant Byproducts		
Total trihalomethanes (TTHM)	0.080	mg/L
Bromodichloromethane		mg/L
Bromoform		mg/L
Chloroform		mg/L
Dibromochloromethane		mg/L
Haloacetic acids (five) (HAA5)	0.060	mg/L
Monochloroacetic Acid		mg/L
Dichloroacetic Acid		mg/L
Trichloroacetic Acid		mg/L
Monobromoacetic Acid		mg/L
Dibromoacetic Acid		mg/L
Bromate	0.010	mg/L
Chlorite	1.0	mg/L

Table 2

ITEM	CHEMICAL CONSTITUENT	Concentration (mg/L)
1	Boron	1
2	n-Butylbenzene	0.26
3	sec-Butylbenzene	0.26
4	tert-Butyl benzene	0.26
5	Carbon disulfide	0.16
6	Chlorate	0.8
7	2-Chlorotoluene	0.14
8	4-Chlorotoluene	0.14
9	Dichlorodifluoromethane (Freon 12)	1
10	1,4-Dioxane	0.003
11	Ethylene glycol	14
12	Formaldehyde	0.1
13	HMX	0.35
14	Isopropylbenzene	0.77
15	Manganese	0.5
16	Methyl isobutyl ketone (MIBK)	0.12
17	Naphthalene	0.017
18	N-Nitrosodiethyamine (NDEA)	0.00001
19	N-Nitrosodimethylamine (NDMA)	0.00001
20	N-Nitrosodi-n-propylamine (NDPA)	0.00001
21	Propachlor	0.09
22	n-Propylbenzene	0.26
23	RDX	0.0003
24	Tertiary butyl alcohol (TBA)	0.012
25	1,2,3-Trichloropropane (1,2,3-TCP)	0.000005
26	1,2,4-Trimethylbenzene	0.33
27	1,3,5-Trimethylbenzene	0.33
28	2,4,6-Trinitrotoluene (TNT)	0.001
29	Vanadium	0.05

ATTACHMENT H – MINIMUM LEVELS

MINIMUM LEVELS IN PPB (µg/l)

Table 1- VOLATILE SUBSTANCES[1]	GC	GCMS
Acrolein	2.0	5
Acrylonitrile	2.0	2
Benzene	0.5	2
Bromoform	0.5	2
Carbon Tetrachloride	0.5	2
Chlorobenzene	0.5	2
Chlorodibromomethane	0.5	2
Chloroethane	0.5	2
Chloroform	0.5	2
Dichlorobromomethane	0.5	2
1,1 Dichloroethane	0.5	1
1,2 Dichloroethane	0.5	2
1,1 Dichloroethylene	0.5	2
1,2 Dichloropropane	0.5	1
1,3 Dichloropropylene (volatile)	0.5	2
Ethylbenzene	0.5	2
Methyl Bromide (*Bromomethane*)	1.0	2
Methyl Chloride (*Chloromethane*)	0.5	2
Methylene Chloride (*Dichloromethane*)	0.5	2
1,1,2,2 Tetrachloroethane	0.5	1
Tetrachloroethylene	0.5	2
Toluene	0.5	2
trans-1,2 Dichloroethylene	0.5	1
1,1,1 Trichloroethane	0.5	2
1,1,2 Trichloroethane	0.5	2
Trichloroethylene	0.5	2
Vinyl Chloride	0.5	2
1,2 Dichlorobenzene (volatile)	0.5	2
1,3 Dichlorobenzene (volatile)	0.5	2
1,4 Dichlorobenzene (volatile)	0.5	2

Selection and Use of Appropriate ML Value:

ML Selection: When there is more than one ML value for a given substance, the discharger may select any one of those ML values, and their associated analytical methods, listed in this Attachment that are below the calculated effluent limitation for compliance determination. If no ML value is below the effluent limitation, then the discharger shall select the lowest ML value, and its associated analytical method, listed in the PQL Table.

ML Usage: The ML value in this Attachment represents the lowest quantifiable concentration in a sample based on the proper application of all method-based analytical procedures and the absence of any matrix interferences. Assuming that all method-specific analytical steps are followed, the ML value will also represent, after the appropriate application of method-specific factors, the lowest standard in the calibration curve for that specific analytical technique. Common analytical practices sometimes require different treatment of the sample relative to calibration standards.
Note: chemical names in parenthesis and italicized is another name for the constituent.

---

[1] *The normal method-specific factor for these substances is 1, therefore, the lowest standard concentration in the calibration curve is equal to the above ML value for each substance.*

MINIMUM LEVELS IN PPB (µg/l)

Table 2 – Semi-Volatile Substances[2]	GC	GCMS	LC
2-Chloroethyl vinyl ether	1	1	
2 Chlorophenol	2	5	
2,4 Dichlorophenol	1	5	
2,4 Dimethylphenol	1	2	
4,6 Dinitro-2-methylphenol	10	5	
2,4 Dinitrophenol	5	5	
2- Nitrophenol		10	
4- Nitrophenol	5	10	
4 Chloro-3-methylphenol	5	1	
2,4,6 Trichlorophenol	10	10	
Acenaphthene	1	1	0.5
Acenaphthylene		10	0.2
Anthracene		10	2
Benzidine		5	
Benzo (a) Anthracene (*1,2 Benzanthracene*)	10	5	
Benzo(a) pyrene (*3,4 Benzopyrene*)		10	2
Benzo (b) Flouranthene (*3,4 Benzofluoranthene*)		10	10
Benzo(g,h,i)perylene		5	0.1
Benzo(k)fluoranthene		10	2
bis 2-(1-Chloroethoxyl) methane		5	
bis(2-chloroethyl) ether	10	1	
bis(2-Chloroisopropyl) ether	10	2	
bis(2-Ethylhexyl) phthalate	10	5	
4-Bromophenyl phenyl ether	10	5	
Butyl benzyl phthalate	10	10	
2-Chloronaphthalene		10	
4-Chlorophenyl phenyl ether		5	
Chrysene		10	5
Dibenzo(a,h)-anthracene		10	0.1
1,2 Dichlorobenzene (semivolatile)	2	2	
1,3 Dichlorobenzene (semivolatile)	2	1	
1,4 Dichlorobenzene (semivolatile)	2	1	
3,3' Dichlorobenzidine		5	
Diethyl phthalate	10	2	
Dimethyl phthalate	10	2	
di-n-Butyl phthalate		10	
2,4 Dinitrotoluene	10	5	
2,6 Dinitrotoluene		5	
di-n-Octyl phthalate		10	
1,2 Diphenylhydrazine		1	
Fluoranthene	10	1	0.05
Fluorene		10	0.1
Hexachloro-cyclopentadiene	5	5	
1,2,4 Trichlorobenzene	1	5	

MINIMUM LEVELS IN PPB (µg/l)

Table 2 - SEMI-VOLATILE SUBSTANCES[2]	GC	GCMS	LC	COLOR
Pentachlorophenol	1	5		
Phenol [3]	1	1		50
Hexachlorobenzene	5	1		
Hexachlorobutadiene	5	1		
Hexachloroethane	5	1		
Indeno(1,2,3,cd)-pyrene		10	0.05	
Isophorone	10	1		
Naphthalene	10	1	0.2	
Nitrobenzene	10	1		
N-Nitroso-dimethyl amine	10	5		
N-Nitroso -di n-propyl amine	10	5		
N-Nitroso diphenyl amine	10	1		
Phenanthrene		5	0.05	
Pyrene		10	0.05	

Table 3– INORGANICS[4]	FAA	GFAA	ICP	ICPMS	SPGFAA	HYDRIDE	CVAA	COLOR	DCP
Antimony	10	5	50	0.5	5	0.5			1000
Arsenic		2	10	2	2	1		20	1000
Beryllium	20	0.5	2	0.5	1				1000
Cadmium	10	0.5	10	0.25	0.5				1000
Chromium (total)	50	2	10	0.5	1				1000
Chromium VI	5							10	
Copper	25	5	10	0.5	2				1000
Lead	20	5	5	0.5	2				10000
Mercury				0.5			0.2		
Nickel	50	5	20	1	5				1000
Selenium		5	10	2	5	1			1000
Silver	10	1	10	0.25	2				1000
Thallium	10	2	10	1	5				1000
Zinc	20		20	1	10				1000
Cyanide								5	

2 *With the exception of phenol by colorimetric technique, the normal method-specific factor for these substances is 1000, therefore, the lowest standards concentration in the calibration curve is equal to the above ML value for each substance multiplied by 1000.*

3 *Phenol by colorimetric technique has a factor of 1.*

4 *The normal method-specific factor for these substances is 1, therefore, the lowest standard concentration in the calibration curve is equal to the above ML value for each substance.*

MINIMUM LEVELS IN PPB (µg/l)

Table 4- PESTICIDES – PCBs[5]	GC
Aldrin	0.005
alpha–BHC (*a-Hexachloro-cyclohexane*)	0.01
beta–BHC (*b-Hexachloro-cyclohexane*)	0.005
Gamma–BHC (*Lindane; g-Hexachloro-cyclohexane*)	0.02
Delta-BHC (*d-Hexachloro-cyclohexane*)	0.005
Chlordane	0.1
4,4'-DDT	0.01
4,4'-DDE	0.05
4,4'-DDD	0.05
Dieldrin	0.01
Alpha-Endosulfan	0.02
Beta-Endosulfan	0.01
Endosulfan Sulfate	0.05
Endrin	0.01
Endrin Aldehyde	0.01
Heptachlor	0.01
Heptachlor Epoxide	0.01
PCB 1016	0.5
PCB 1221	0.5
PCB 1232	0.5
PCB 1242	0.5
PCB 1248	0.5
PCB 1254	0.5
PCB 1260	0.5
Toxaphene	0.5

Techniques:
GC - Gas Chromatography
GCMS - Gas Chromatography/Mass Spectrometry
HRGCMS - High Resolution Gas Chromatography/Mass Spectrometry (i.e., EPA 1613, 1624, or 1625)
LC - High Pressure Liquid Chromatography
FAA - Flame Atomic Absorption
GFAA - Graphite Furnace Atomic Absorption
HYDRIDE - Gaseous Hydride Atomic Absorption
CVAA - Cold Vapor Atomic Absorption
ICP - Inductively Coupled Plasma
ICPMS - Inductively Coupled Plasma/Mass Spectrometry
SPGFAA - Stabilized Platform Graphite Furnace Atomic Absorption (i.e., EPA 200.9)
DCP - Direct Current Plasma
COLOR – Colorimetri

5 *The normal method-specific factor for these substances is 100, therefore, the lowest standard concentration in the calibration curve is equal to the above ML value for each substance multiplied by 100.*