Inland Empire Utilities Agency
A MUNICIPAL WATER DISTRICT

Inland Empire Utilities Agency
Regional Plant No. 5
Title 22 Engineering Report

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Section 1
Introduction

The purpose of this engineering report is to evaluate the treatment and reliability features of Regional Plant No. 5 (RP-5), which is owned and operated by Inland Empire Utilities Agency (IEUA). This report demonstrates RP-5's compliance with water recycling criteria and the design and reliability requirements set forth in Title 22 of the California Code of Regulations. This section describes the background of the facility and the objective of this document.

1.1 Background

Sewage from IEUA service area is treated in four regional water reclamation plants: (1) Regional Plant No. 1 (RP-1), (2) Regional Plant No. 4 (RP-4), (3) Carbon Canyon Water Reclamation Facility (CCWRF), and (4) RP-5. Regional Plant No. 2 (RP-2) handles biosolids from CCWRF and RP-5. IEUA owns and operates RP-5, located in San Bernardino County west of Interstate 15 and between State Route 60 and State Route 91. The plant site is located immediately east of IEUA's administrative headquarters on Kimball Avenue in the City of Chino.

RP-5 began operation in March 2004 to replace the liquid treatment process at RP-2. RP-5 treats domestic and commercial/industrial wastewater from the Cities of Chino and Chino Hills and portions of Ontario, Montclair, and Upland. In addition, RP-1 and CCWRF have the capability to divert influent peak flows to RP-5.

RP-5 is designed to treat an annual average flow of 15 million gallons per day (mgd) from RP-5's service area plus 1.3 mgd of liquid return flows from the RP-2 Lift Station.

Tertiary treated effluent from RP-5 is discharged to Chino Creek, which is tributary to Reach 3 of the Santa Ana River. Effluent is also used in IEUA's recycled water distribution system for landscape irrigation and other approved recycled water uses.

1.2 Objective

The objective of this report is to demonstrate RP-5 compliance with California Code of Regulations Title 22, Division 4, Chapter 3, entitled Water Recycling Criteria (California, 2001). Section 60323, Article 7 of these Criteria requires submittal of an engineering report to the Regional Water Quality Control Board (RWQCB) and California Department of Public Health (CDPH).

RP-5 operates under a consolidated permit with three other IEUA plants, including RP-1, RP-4 and CCWRF, issued by the Regional Water Quality Control

Board, Santa Ana Region (RWQCB) as National Pollutant Discharge Elimination System (NPDES) Permit No. CA8000409 and Order No. R8-2009-0021 (RWQCB, 2009). A copy of the permit is included in Appendix A.

Section 2
Regulatory Requirements

Wastewater treatment, disposal, and reuse are regulated by local, State, and Federal requirements primarily to protect public health, safety, and general welfare. In California, water recycling has received support from the U.S. Environmental Protection Agency (EPA), State Water Resources Control Board (SWRCB), and CDPH as a means of effluent reuse and disposal. This section describes the types of reuse and regulatory requirements that pertain to RP-5.

2.1 Types of Reuse

Tertiary treated effluent from RP-5 Discharge Point No. 007 (DP 007) ties into IEUA's recycled water distribution system at the Pine Avenue recycled water line, which is located in Pressure Zone 800 at the south end of IEUA's service area. The IEUA recycled water system supplies water for beneficial uses including landscape irrigation, agricultural irrigation, and industrial use. Effluent from RP-5 is also used for in-plant uses such as spray and washdown, pump seals, and irrigation. IEUA also operates recycled water groundwater recharge facilities; however, only effluent from RP-1 and RP-4 is approved for use as groundwater recharge. Due to the location of RP-5's recycled water effluent connection point, no RP-5 effluent is used for groundwater recharge.

A portion of RP-5's final effluent that is not reused is dechlorinated and discharged to the adjacent Chino Creek, by Discharge Point No. 3 (DP 003), which is tributary to Reach 3 of the Santa Ana River.

Refer to Section 8 for additional information on recycled water users.

2.2 Water Recycling Criteria

Water recycling criteria are specified in the California Code of Regulations, Title 22, Division 4, Chapter 3, Sections 60301 through 60355. Water reclamation requirements and guidelines are established by CDPH. Enforcement of these criteria is the role of the SWRCB and its nine Regional Water Quality Control Boards. RP-5 is under the jurisdiction of Regional Board No. 8, the Santa Ana River Basin RWQCB.

Commonly referred to as Title 22 Criteria, the treatment and effluent quality requirements are dependent upon the proposed type of water reuse. In addition to these requirements, Title 22 specifies reliability criteria to ensure protection of public health.

Effluent from RP-5 must comply with the highest categories of reuse for spray irrigation and non-restricted recreational and landscape impoundments. Under Title 22, wastewater is required to be oxidized, coagulated (as needed for

turbidity reduction – see Section 3), filtered, and disinfected, or treated by a sequence of unit processes assuring an equivalent degree of treatment and reliability. Title 22 specifies that recycled water for the highest level of reuse shall be disinfected tertiary effluent. The NPDES permit requires the flow from RP-5 to meet that requirement, except when the receiving water provides a dilution flow of 20:1 or greater. In that case the effluent can be a disinfected oxidized wastewater with a median number of coliforms not exceeding a most probable number (MPN) of 23 per 100 milliliters (mL). However, since RP-5 recycled water will be pumped directly to users or will be pumped to Chino Creek, RP-5 will have to comply with the requirements for disinfected tertiary effluent at all times, even though some of the water may eventually be discharged to Chino Creek during periods when dilutions of 20:1 are available.

With regard to filtration, the Title 22 Water Recycling Criteria specify a maximum filtration rate and effluent turbidity requirements. For continuous backwashing, upflow tertiary filters like those at RP-5, the maximum filtration rate is limited to 5 gallons per minute per square foot (gpm/sq ft) of surface area. Under Title 22, the turbidity of the filtered wastewater may not exceed any of the following:

(1) An average of 2 Nephelometric Turbidity Units (NTU) within a 24-hour period;

(2) 5 NTU more than 5 percent of the time within a 24-hour period; and

(3) 10 NTU at any time.

RWQCB Order No. R8-2009-0021 (RWQCB, 2009) specifies that RP-5 must meet the turbidity requirements specified in Title 22, as summarized above.

Permissible coliform bacteria levels are used as an indicator of effluent quality. Requirements for water reuse for spray irrigation and non-restricted recreational and landscape impoundments are:

(1) The median number of total coliform bacteria must not exceed 2.2 MPN per 100 mL sample of effluent for the previous 7 days for which bacteriological analyses have been completed;

(2) The median number of total coliform bacteria must not be more than 23 MPN per 100 mL sample of effluent in more than one sample within any 30-day period; and

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

If a chlorination disinfection process is used, such as that being implemented at RP-5, Title 22 specifies that a contact time (CT) value of at least 450 milligram-minutes per liter (mg-min/L) at all times with a modal contact time of at least 90 minutes (based on peak dry weather design flow) be provided.

In addition to treatment and effluent quality, Title 22 sets forth general reliability requirements. The facilities must be designed for flexibility so that a high degree of treatment can be achieved under varying conditions. Components of a flexible design include multiple or standby treatment units or pieces of equipment. In addition, alarms are required to alert plant operators of power supply failure or failure of any treatment plant unit processes. In the event of a power supply failure, Title 22 requires the plant to provide either a standby power source or automatically actuated short-term or long-term storage or disposal provisions.

In order to assure that wastewater reclamation facilities comply with the regulations, Title 22 requires that an engineering report describing the proposed reclamation system and the means for the system complying with listed requirements be prepared and submitted to the RWQCB and CDPH for approval. The engineering report must be amended or resubmitted in the event that there are significant modifications to an existing project.

2.3 Creek Discharge Requirements

Effluent that is not used for irrigation or reuse is discharged to Chino Creek, which is designated as Discharge Point No. 003 (DP 003). The IEUA consolidated NPDES permit (RWQCB, 2009) requires that discharges to the creek be disinfected tertiary effluent suitable for non-restricted recreational impoundments as required under Title 22, except when the creek provides at least a 20:1 dilution ratio.

When at least 20:1 dilution of the wastewater effluent can be provided by the natural flow of the creek at the point of discharge, the discharge may be disinfected secondary effluent. The discharge shall be considered adequately disinfected if the weekly average number of coliform bacteria does not exceed a median of 23 MPN per 100 mL as determined from the daily coliform bacteria values for the last seven days.

2.4 User Rules

The use of recycled water from the regional water distribution system is regulated by IEUA's Ordinance No. 69 (IEUA, 2000). This ordinance requires all users to apply for and receive a Recycled Water User Permit to be eligible to receive recycled water service from IEUA. All users must pay recycled water rates and comply with all appropriate on-site controls. A copy of IEUA Ordinance No. 69 is included in Appendix B.

Other ordinances provide for the regulation and use of recycled water for the cities of Ontario, Chino and Chino Hills. The City of Ontario has Ordinance No. 2689 (Ontario, 1999); the City of Chino has ordinance No. 98-12 (Chino, 1998); and the City of Chino Hills has Ordinance No. 101 (Chino Hills, 1998). Copies of these City ordinances are also included in Appendix B. These ordinances establish the requirements to obtain Recycled Water User Permits and for each

user to submit a report to the City, which must be approved by CDPH and the County Environmental Health Department. The report is required to include 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(s) 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 water 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.

Section 3
Wastewater Flow and Quality

This section describes wastewater flow and quality characteristics, as well as treated effluent quality limitations for RP-5.

3.1 Wastewater Flow Characteristics

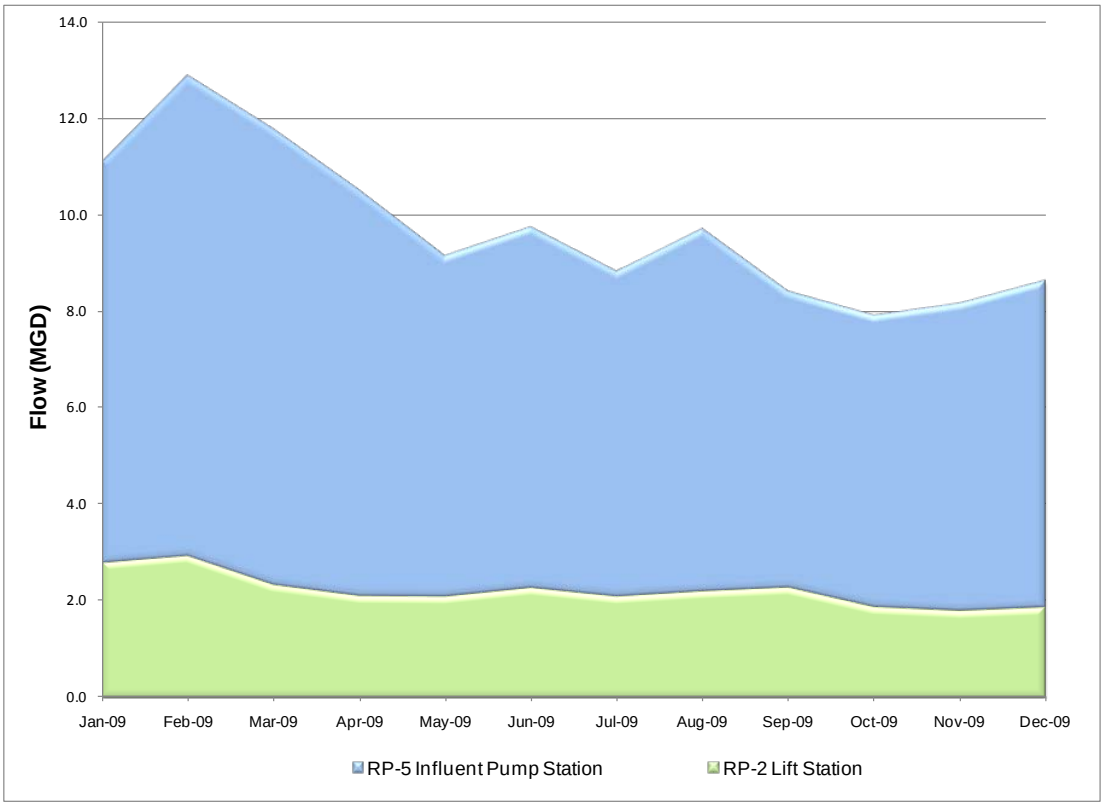
Influent and effluent flows are monitored continuously at RP-5. Table 3-1 summarizes flow data from January 2009 through December 2009. Figure 3-1 illustrates the breakdown of the two influent flow streams at RP-5 during 2009: RP-5 Influent Pump Station and RP-2 Lift Station. The total raw influent flow shown in the table below is the sum of RP-5 influent flow as measured at the RP-5 Influent Pump Station and RP-2 return flow as measured at the RP-2 Lift Station. The RP-2 Lift Station conveys liquid return flow from the RP-2 solids processes to RP-5, discharging downstream of the RP-5 Influent Pump Station. (For more information on locations of these flow streams, please see Section 4.)

Table 3-1
Average Influent and Effluent Flows[1]

Flow Stream	Minimum Monthly (mgd) [3, 4]	Average Month (mgd)	Maximum Month (mgd) [5, 6]
Raw Influent Flow (RP-5 Influent Pump Station only)	6.0	7.5	10.0
Raw Influent Flow (RP-2 Lift Station only)	1.8	2.2	2.9
Total Raw Influent Flow (Total flow to RP-5 Treatment Facility)[2]	7.9	9.7	12.9
Effluent Flow	7.5	9.1	11.4

1. Reference: IEUA, 2010a, monthly average flow data for 2009. Values may not be additive because they occur during different months as listed below.
2. Total Raw Influent Flow to RP-5 includes RP-5 Influent Pump Station Flows and RP-2 Lift Station Flows. (Note that RP-2 Lift Station return flows enter the RP-5 facility downstream of the RP-5 Influent Pump Station.)
3. Minimum monthly average raw influent flows occurred as follows:
   - RP-5 Influent Pump Station only — October 2009
   - RP-2 Lift Station only — November 2009
   - Total (RP-5 Influent Pump Station + RP-2 Lift Station) — October 2009
4. Minimum monthly average effluent flow occurred in September 2009.
5. Maximum monthly average raw influent flows occurred as follows:
   - RP-5 Influent Pump Station only — February 2009
   - RP-2 Lift Station only — February 2009
   - Total (RP-5 Influent Pump Station + RP-2 Lift Station) — February 2009
6. Maximum monthly average effluent flow occurred in February 2009.

Figure 3-1
Average Daily Influent Flow
Regional Plant No. 5



3.2 Influent Quality Characteristics

The chemical composition of raw wastewater influent to RP-5 based on 2009 data is summarized in Table 3-2.

Table 3-2
Typical Influent Wastewater Characteristics[1,2]

Constituent	Units	Minimum	Average	Maximum
Specific Conductance	µmhos/cm	986	1,089	1,271
pH	unit	7.1	7.5	7.7
Total Organic Carbon (TOC)	mg/L	100	117	141
Total Suspended Solids (TSS)	mg/L	124	221	313
Total Dissolved Solids (TDS)	mg/L	485	514	560
Biochemical Oxygen Demand (BOD_5)	mg/L	186	214	253
Ammonia – Nitrogen (NH_3-N)	mg/L	32.6	37.5	42.7
Total Inorganic Nitrogen (TIN)	mg/L	30.6	33.9	40.7
Boron	mg/L	0.2	0.2	0.3

Table 3-2
Typical Influent Wastewater Characteristics[1,2]

Constituent	Units	Minimum	Average	Maximum
Chloride	mg/L	102	121	175
Cyanide	µg/L	<2	<2	<2
Fluoride	mg/L	0.2	0.3	1.7
Sodium	mg/L	79	89	115
Sulfate	mg/L	35	39	46
Total Hardness	mg/L	151	203	244
Arsenic	µg/L	<10	<10	<10
TR Cadmium	µg/L	<10	<10	<10
TR Copper	µg/L	48	59	77
TR Chromium	µg/L	<10	<10	<10
TR Lead	µg/L	<20	<20	<20
TR Mercury	µg/L	<0.5	<1	<1
TR Nickel	µg/L	<10	<10	<10
TR Selenium	µg/L	<20	<21	<28
TR Silver	µg/L	<10	<10	<10
TR Zinc	µg/L	94	122	167

1. Source: IEUA, 2010a. RP-5 influent monitoring data are calculated by flow-weighting data from RP-5 Influent Pump Station and data from RP-2 Lift station.
2. Minimum value for each parameter is the minimum of all monthly averages for 2009. Maximum value for each parameter is the maximum of all monthly averages for 2009. Average value for each parameter is the average of the monthly averages for 2009.

3.3 Source Control

IEUA maintains a comprehensive industrial pretreatment and source control program to control waste discharges from point sources into the wastewater collection system. The focus of this source control program is to prevent adverse effects on the treatment facilities and the environment. IEUA owns and operates a non-reclaimable wastewater (NRW) collection and conveyance system that provides disposal for industrial wastewater and brines. The NRW discharges either into the Orange County Sanitation District's wastewater treatment facilities or to the Sanitation Districts of Los Angeles County wastewater treatment facilities for treatment and disposal. The industrial pretreatment program and the NRW system provide source control and salinity management for the IEUA water recycling facilities.

3.4 Effluent Quality Limits

Effluent discharge limits established for RP-5 in RWQCB Order No. R8-2009-0021, NPDES Permit No. CA8000409 (RWQCB, 2009), became effective on July 20, 2009. The RWQCB issues discharge limits based on the beneficial uses and water quality objectives established in the "Santa Ana River Basin Water Quality Control Plan" (RWQCB, 2008), commonly referred to as the "Basin Plan", which

was updated to include the Basin Plan Amendment (RWQCB, 2004), and recommendations from other regulatory agencies, such as CDPH. RP-5 is a tertiary treatment plant that produces recycled water for reuse in the IEUA service area. RP-5 discharges a portion of its effluent to Chino Creek through Discharge Point No. 003 (DP 003), which discharges to Reach 3 of the Santa Ana River. Solids from RP-5 are conveyed to RP-2 for removal and treatment. Specific effluent quality requirements for RP-5 are discussed below.

3.4.1 Biochemical Oxygen Demand and Suspended Solids Limits

Table 3-3 lists biochemical oxygen demand (BOD) and total suspended solids (TSS) limits from the RP-5 discharge permit. These values are achievable with tertiary treatment and are intended to ensure that only adequately oxidized wastewater is discharged.

Table 3-3
Effluent BOD and TSS Limitations[1]

Constituent	Average Weekly Concentration (mg/L)	Average Monthly Concentration (mg/L)
For Discharges Without 20:1 Dilution:		
BOD	30	20
TSS	30	20
For Discharges With 20:1 Dilution:		
BOD	45	30
TSS	45	30

1. Source: RWQCB, 2009.

3.4.2 Ammonia-Nitrogen and Chlorine Residual Limits

Table 3-4 lists the ammonia-nitrogen and total chlorine residual concentration limits for protection of receiving waters.

Table 3-4
Effluent Ammonia-Nitrogen and Chlorine Residual Limitations[1]

Constituent	Instantaneous Maximum (mg/L)	Average Monthly (mg/L)
Ammonia-Nitrogen	---	4.5
Total Chlorine Residual (For Discharges Without 20:1 Dilution)	0.1 [2]	---

Table 3-4
Effluent Ammonia-Nitrogen and Chlorine Residual Limitations[1]

Constituent	Instantaneous Maximum (mg/L)	Average Monthly (mg/L)
Total Chlorine Residual (For Discharges With 20:1 Dilution)	2.1 [3]	---

1. Source: RWQCB, 2009.
2. Compliance with the total instantaneous chlorine residual limit of 0.1 mg/L is based on 99% compliance as defined by the following conditions:
    a. The total time during which the total chlorine residual values are above 0.1 mg/L shall not exceed 7 hours and 26 minutes in any calendar month.
    b. No individual excursion from the 0.1 mg/L value shall exceed 5 minutes in duration; and
    c. No individual excursion shall exceed 5.0 mg/L.
3. Compliance with the total instantaneous chlorine residual limit of 2.1 mg/L is based on 99% compliance as defined by the following conditions:
    a. The total time during which the total chlorine residual values are above 2.1 mg/L shall not exceed 7 hours and 26 minutes in any calendar month;
    b. No individual excursion from the 2.1 mg/L value shall exceed 5 minutes in duration; and
    c. No individual excursion shall exceed 10.5 mg/L.

3.4.3 Total Dissolved Solids and Total Inorganic Nitrogen Limits

Restrictions are imposed for effluent salinity and Total Inorganic Nitrogen (TIN). Total Dissolved Solids (TDS) and TIN limits are summarized in Table 3-5 on the following page.

Compliance with effluent TDS permit specifications is based on the lower of either of the two following conditions:

(1) The 12-month flow weighted running average TDS concentration shall not exceed 550 mg/L. This limitation may be met on an agency-wide basis using flow weighted averages of the discharges from all IEUA treatment plants; or

(2) The 12-month flow weighted running average TDS concentration shall not exceed the 12-month flow weighted running average TDS concentration in the water supply by more than 250 mg/L.

The first of these conditions reflects the RWQCB's intention to regulate all IEUA wastewater treatment facilities in the Chino North "Maximum Benefit" Groundwater Management Zone as a group. In the second condition, the permit recognizes that effluent TDS is based on the TDS of the water supply sources utilized in the IEUA service area. By doing so, the RWQCB will not initiate enforcement action for TDS limit violations if the violation is due to the TDS of the water supply sources utilized in the IEUA service area and that all reasonable steps have been taken to ensure that the best TDS quality supplies are obtained

and utilized in the service area. Furthermore, the RWQCB will not initiate enforcement action for violations of the TDS limits if the cause is solely due to chemical additions in the treatment processes needed to meet the waste discharge requirements, provided that IEUA has taken steps to optimize chemical additions to minimize TDS increases.

TIN is the sum of nitrate, nitrite, and ammonia, measured as nitrogen. The TIN limits in the RP-5 permit are based on the RWQCB's revised wasteload allocation for TIN in Publicly Owned Treatment Works discharges to the Santa Ana River and its tributaries and to groundwater in the Upper Santa Ana River Basin. The RP-5 permit allows IEUA to offset nitrogen discharges in excess of the TIN limits provided that an equivalent amount of nitrogen is removed at one of IEUA's other wastewater treatment plants. In other words, the permit specifies that if the TIN limit is exceeded at RP-5, compliance shall be achieved by removal of an equivalent amount of TIN under this nitrogen offset program. To comply with this requirement, IEUA needs to remove an equivalent amount of TIN from its other facilities including RP-1, RP-4 and/or CCWRF. The intent of the offset program is that the total TIN in the effluent discharges from RP-1/RP-4, RP-5, and CCWRF not be exceeded in a regional nitrogen management approach.

Table 3-5
Effluent TDS and TIN Limitations[1]

Constituent	12-Month Running Average (mg/L)
TDS	550 [2]
TIN	8 [3]

1. Source: RWQCB, 2009.
2. The 12-month flow weighted running average TDS concentration shall not exceed the 12-month flow weighted running average TDS in the water supply by more than 250 mg/L. Compliance is based on the lower of the two limits, either 550 mg/L or 250 mg/L above the average water supply.
3. The 12-month flow weighted running average TIN concentration may be met on an agency-wide basis using the flow weighted averages of discharges from all IEUA's treatment facilities.

3.4.4 Trace Constituent Effluent Limitations

The RP-5 NPDES permit specifies maximum concentrations for trace constituents in the effluent as summarized in Table 3-6.

Table 3-6
Effluent Trace Constituent Limitations[1]

Constituent	Maximum Daily Concentration (μg/L)	Average Monthly Concentration (μg/L)
Cyanide, Free	7.3	4.6
Bromodichloromethane	92	46

1. Source: RWQCB, 2009.

The permit states that cyanide and bromodichloromethane are the only priority pollutants determined to have reasonable potential to exceed water quality objectives. (Refer to Attachment F of the permit (RWQCB, 2009) for the calculation process for determining the effluent limitations)

3.4.5 Other Effluent Limitations

Treatment requirements specified in the NPDES permit are dependent upon the flow in the receiving waters and the amount of effluent dilution that will be provided. (Monitoring location R-003U, which is located within 100 feet upstream of the discharge point to the creek, DP-003, is used to determine the dilution ratio in Chino Creek.)

3.4.5.1 Discharges Without 20:1 Dilution

If the flow in Chino Creek is less than that required for a 20:1 (ratio of receiving water flow to wastewater flow) dilution at the point of discharge, the discharge must be tertiary effluent that has been adequately oxidized, coagulated, filtered, and disinfected.

The discharge is considered adequately filtered if the turbidity does not exceed:

(1) An average of 2 NTU within a 24-hour period;
(2) 5 NTU more than 5 percent of the time during any 24-hour period; and
(3) 10 NTU at any time.

The discharge is considered adequately disinfected if:

(1) The median number of coliform organisms does not exceed 2.2 MPN per 100 mL over the last seven days;
(2) The number of coliform organisms does not exceed an MPN of 23 per 100 mL in more than one sample within any 30-day period, and
(3) The number of coliform organisms does not exceed an MPN of 240 per 100 mL in any sample.

3.4.5.2 Discharges With 20:1 Dilution

If the flow in Chino Creek is more than that required for a 20:1 dilution at the point of discharge, the discharge must be at least secondary effluent that has

been adequately oxidized and disinfected. The discharge is considered adequately disinfected if the median number of coliform organisms does not exceed 23 MPN per 100 mL as determined from the daily coliform bacteria values for the last seven days.

3.4.5.3 Oil and Grease, pH, and Toxicity Limitations

The NPDES permit includes other general effluent limitations that restrict oil and grease, pH and toxicity for all discharges. Visible oil and grease in the effluent is not permissible, and the effluent pH must be within 6.5 and 8.5 standard units. Compliance determinations for pH require compliance with the following conditions:

(1) The total time during which the pH values are outside the required range of 6.5 to 8.5 units shall not exceed 7 hours and 26 minutes in any calendar month; and
(2) No individual excursion from the range of 6.5 to 8.5 pH units shall exceed 60 minutes.

Effluent toxicity is required to be monitored monthly. Monitoring of toxicity shall be accelerated as specified in the NPDES permit when the result of any single chronic toxicity test of the effluent exceeds 1.0 chronic toxicity units (TUc). An Initial Investigation Toxicity Reduction Evaluation (IITRE) shall be developed and followed when the result of the chronic toxicity tests exceeds a two month median value of 1.0 TUc for survival or reproduction endpoint, or 1.7 TUc for survival endpoint for any single test.

3.4.5.4 Water Reclamation and Reuse Requirements

The use of recycled water for landscape irrigation or other similar uses shall comply with the limitations set forth in the NPDES permit. In order to comply with Title 22 requirements for spray irrigation and non-restricted recreational landscape impoundments, recycled water must be tertiary effluent that has been adequately disinfected, oxidized, coagulated (as needed for turbidity reduction), and filtered. The same BOD, TSS, turbidity and disinfection requirements apply for recycled water production as for surface water discharges with less than 20:1 dilution.

The same TDS limitations also apply for recycled water production as for surface water discharges with less than 20:1 dilution. However, if those “maximum benefit” agency-wide TDS limitations of 550 mg/L, are not met, more restrictive antidegradation limitations are included in the NPDES permit for recycled water overlying the Chino 1 and Chino 2 Groundwater Management Zones. In that case, the antidegradation limits for TDS would be 280 mg/L for the Chino 1 Groundwater Management Zone and 250 mg/L for the Chino 2 Groundwater Management Zone, based on 12-month average concentrations.

3.5 Effluent Quality Characteristics

IEUA submits monitoring reports to the RWQCB in accordance with the NPDES permit. Table 3-7 summarizes recent recycled water quality data for some of the major regulated parameters. Complete monitoring and reporting records are available from IEUA or the RWQCB.

Table 3-7
Typical RP-5 Effluent Quality[1]

Constituent	Units	Minimum	Average	Maximum
BOD_5	mg/L	<2	<2	<2
Specific Conductance	µmhos/cm	848	974	1046
pH	unit	6.9	7.1	7.3
Turbidity	NTU	0.7	0.9	1.4
TOC	mg/L	3.3	3.6	3.9
TSS	mg/L	<1	<1	2
TDS	mg/L	435	500	529
Carbonate Alkalinity	mg/L as $CaCO_3$	0	0	0
Bicarbonate Alkalinity	mg/L as $CaCO_3$	129	150	162
Nitrate as Nitrogen (NO_3-N)	mg/L	4.2	5.6	9.8
Ammonia as Nitrogen (NH_3-N)	mg/L		<0.1	<0.2
TIN	mg/L	4.3	5.6	9.9
Boron	mg/L	0.2	0.3	0.3
Calcium	mg/L	51	54	59
Chloride	mg/L	118	129	150
Magnesium	mg/L	10	11	13
Sodium	mg/L	89	98	109
Free Cyanide	µg/L	<2	<2	<2
Bromodichloromethane	µg/L	14	23	31
Sulfate	mg/L	44	53	60
Total Hardness	mg/L as $CaCO_3$	174	183	201
Iron	µg/L	43	62	103
Manganese	µg/L	10	15	26
Arsenic	µg/L	<2	<2	<2
Barium	µg/L	11	13	17
TR Chromium	µg/L	0.5	1.4	4.3
TR Copper	µg/L	4	6	8
TR Cadmium	µg/L	<0.25	<0.25	<0.25
TR Lead	µg/L	<0.5	<0.5	<0.5
TR Mercury	µg/L	<0.05	<0.05	<0.05
TR Nickel	µg/L	2	3	4
TR Selenium	µg/L	<2	<2	<2
TR Silver	µg/L	<0.25	<0.25	<0.25
TR Zinc	µg/L	24	25	28

1. Reference: IEUA, 2010a. Data and averages from 2009.

Section 4
Plant Facilities

IEUA's RP-5 provides preliminary, primary, secondary, and tertiary treatment of wastewater that conforms to the highest level of California water recycling criteria. This section describes the facilities in detail and presents the basis for compliance with the treatment, recycled water quality, and reliability requirements set forth in Title 22.

4.1 General Description of Facilities

IEUA's RP-5 is a water recycling facility with the ability to treat a total annual average influent flow of 16.3 mgd, which includes approximately 15 mgd from the RP-5 Influent Pump Station plus 1.3 mgd of influent return flows from the RP-2 Lift Station.

The RP-5 facility consists of the following unit processes:

- Influent Pump Station
- Headworks
- Primary Clarifiers
- Aeration Basins
- Secondary Clarifiers
- Tertiary Filters
- Chlorination/Dechlorination
- Emergency Storage Pond
- Emergency Holding Pond
- Appurtenant structures and systems for the unit processes listed above

The RP-5 Influent Pump Station receives raw sewage from the service area as described in Section 1 and raw sewage/primary effluent that has been bypassed from CCWRF and RP-1. The RP-2 Lift Station contributes an additional 1.3 mgd to the RP-5 influent consisting of approximately 0.5 mgd from Butterfield Ranch Community, 0.08 mgd from Prado Park, and 0.72 mgd liquid recycle sidestreams from RP-2's solids processing facilities, (RWQCB, 2009 & IEUA 2008). RP-2 processes solids from both RP-5 and CCWRF. Flows from the RP-2 Lift Station enter RP-5 at the head of the barscreens where it is blended with flow from the RP-5 Influent Pump Station.

Figure 4-1 shows a flow schematic for RP-5, and Figure 4-2 shows a general site plan of the plant.

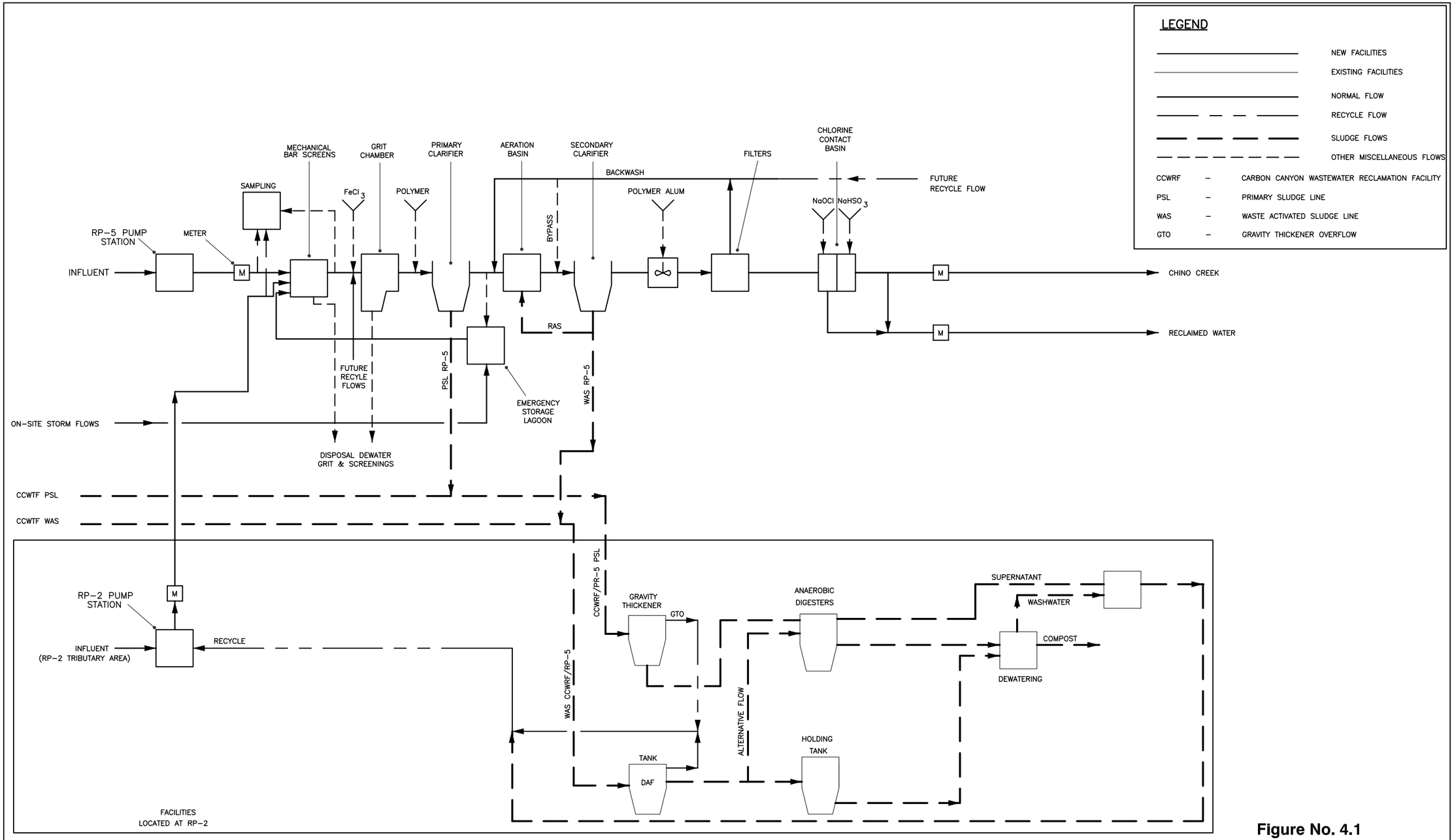


Figure No. 4.1
PLANT FLOW SCHEMATIC
INLAND EMPIRE UTILITIES AGENCY

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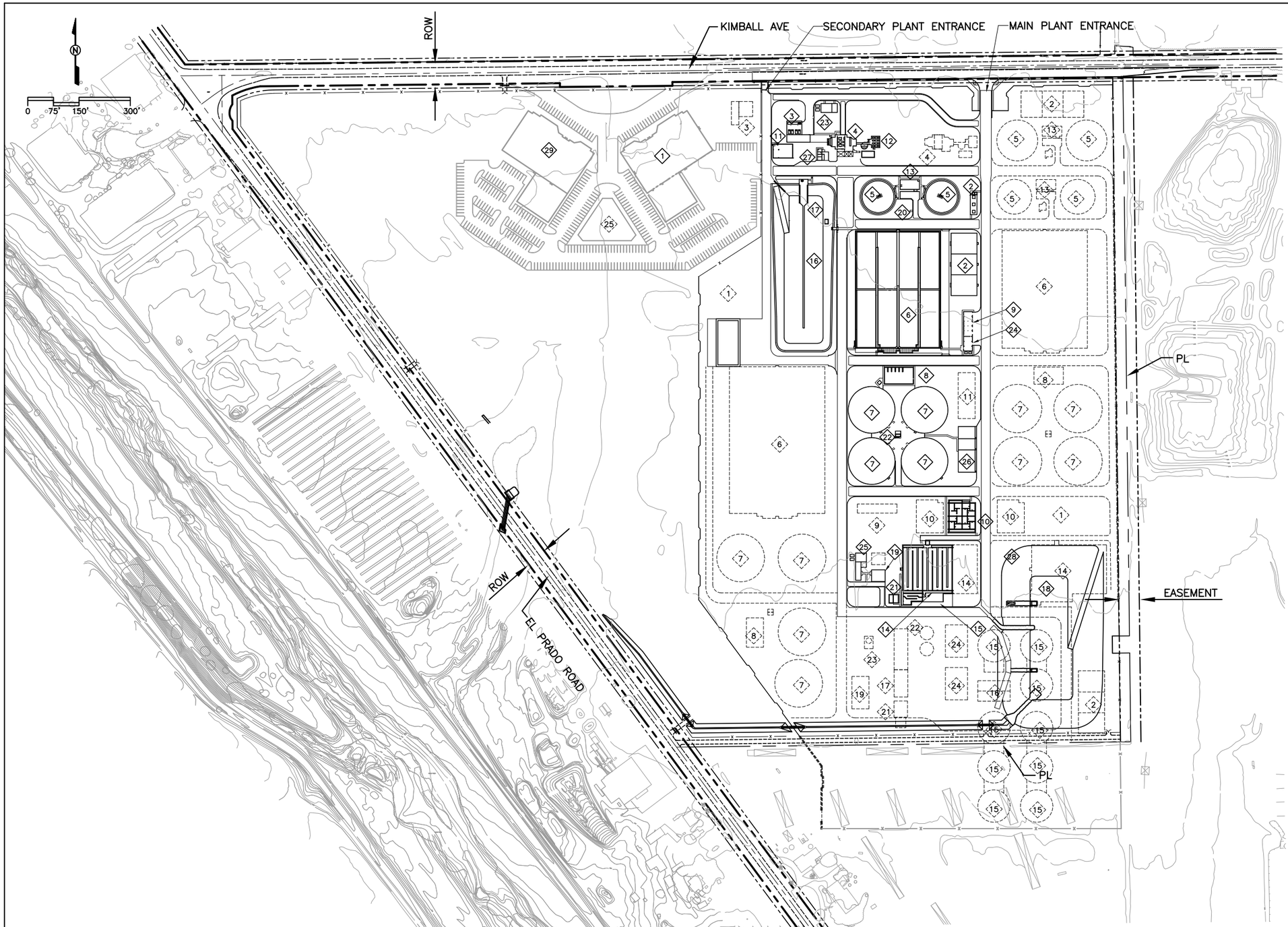

	NEW	AREA
1	OPERATIONS BUILDING	
2	PHASE I SCRUBBER (BIO FILTER)	19
3	INFLUENT PUMP STATION	10
4	HEADWORKS	11
5	PRIMARY CLARIFIER	12
6	AERATION BASIN	20
7	SECONDARY CLARIFIER	22
8	RAS/WAS PUMP STATION	23
9	BLOWER BUILDING	21
10	TERTIARY FILTER WITH FLASH MIXER	30
11	PRIMARY CHEMICAL FACILITY	53
12	PRIMARY CLARIFIER SPLITTER BOX	11
13	PRIMARY CLARIFIER PUMP STATION	13
14	CHLORINE CONTACT BASIN	31
15	W3 PUMP STATION	55
16	EMERGENCY STORAGE LAGOON	01
17	EMERGENCY STORAGE LAGOON PUMP STATION	01
18	EMERGENCY OVERFLOW POND	
19	STANDBY GENERATOR	
20	EMERGENCY STORAGE BASIN SPLITTER BOX	01
21	OUTFALL STRUCTURE	–
22	SECONDARY SCUM PUMP STATION	01
23	POWER CENTER 1	
24	POWER CENTER 2	21
25	POWER CENTER 3	
26	TERTIARY CHEMICAL FACILITY	54
27	SEPTAGE RECEIVING STATION	–
28	STORM WATER PUMP STATION	
29	ADMINISTRATION BUILDING	

FUTURE

1. MAINTENANCE BUILDING
2. SCRUBBER (SOIL FILTER)
3. INFLUENT PUMP STATION
4. HEADWORKS
5. PRIMARY CLARIFIER
6. AERATION BASIN
7. SECONDARY CLARIFIER
8. RAS/WAS PUMP STATION
9. BLOWER BUILDING
10. TERTIARY FILTER
11. TERTIARY CHEMICAL FACILITY
12. PRIMARY CLARIFIER SPLITTER BOX
13. PRIMARY CLARIFIER PUMP STATION
14. CHLORINE CONTACT BASIN
15. DIGESTER
16. DIGESTER CONTROL BUILDING
17. SLUDGE THICKENING/DEWATERING
19. CO–GENERATION BUILDING
21. TRUCK LOADING (RELOCATE IN FUTURE)
22. LOW PRESSURE GAS HOLDER
23. FLARE
24. ACID PHASE DIGESTER
25. CENTRAL LABORATORY

Figure No. 4.2
SITE PLAN
INLAND EMPIRE UTILITIES AGENGY

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The following sections describe the basis of design for each of the treatment processes in detail and demonstrate how Title 22 compliance is achieved for a total annual average flow of 16.3 mgd for each process. Capacities of each unit process are determined for operation as defined under the following conditions:

- Peak Capacity – total peak flow capacity with all units in service.
- Annual Average Capacity Without Redundancy – annual average capacity with all units in service.
- Title 22 Reliable Annual Average Capacity – annual average capacity conforming to the reliability requirements set forth in Title 22. Reliability may be provided by redundant, standby, or alternative equipment or processes. Typically, the Title 22 Reliable Annual Average Capacity for each treatment process is determined with the largest unit out of service. In other cases, alternative means of reliability is provided by storage or another treatment process. The specific means of establishing reliability is described for each treatment process.

4.2 Design Flowrates

The total annual average daily rated capacity of RP-5 is 16.3 mgd, which includes approximately 15 mgd from the RP-5 Influent Pump Station plus 1.3 mgd of influent return flows from the RP-2 Lift Station.

Table 4-1 summarizes the flowrates and peaking factors for RP-5 that are used as the basis of this report.

Table 4-1
Summary of RP-5 Flowrates and Peaking Factors for Title 22 Compliance[1]

Parameter	Flowrate (mgd)[2]	Peaking Factor[3]
Average Annual Day Flow (AADF)	16.3	1.00
Maximum Month Flow (MMF)	18.9	1.16
Peak Dry Weather Flow (PDWF)	28.2	1.73
Peak Wet Weather Flow (PWWF)	32.6	2.00
Typical Effluent Diurnal Flow	22.3 – 26.1	1.37 – 1.6

1. Reference: IEUA, 2008.
2. Refer to Appendix C for calculations.
3. Peaking factor = $\frac{\text{MMF, PDWF, PWWF, or Typical Diurnal Flow (mgd)}}{\text{AADF(mgd)}}$

4.3 Design Wastewater Characteristics

The typical chemical composition of the raw influent wastewater to RP-5 is summarized in Table 4-2. These values are based on 2009 data.

Table 4-2
Design Raw Wastewater Characteristics

Parameter	Units	Value
Annual Average Raw Influent Quality:[1]		
BOD-5 day	mg/L	214
TSS	mg/L	221
NH_3-N	mg/L	37.5
TKN	mg/L	43.3
pH	--	7.5
TDS	mg/L	514
Annual Average Raw Influent Loadings:[2]		
BOD-5 day	lbs/day	29,092
TSS	lbs/day	30,043

1. Reference: IEUA, 2010a.
2. Calculated values. Refer to Appendix C.

More detailed data on the influent wastewater characteristics may be found in Section 3.

4.4 Influent Pumping

The RP-5 Influent Pump Station conveys plant influent flow to the headworks. Once lifted to the headworks, flow proceeds through the entire plant by gravity.

Table 4-3 presents design criteria for the influent pumping.

Table 4-3
Influent Pumping Design Criteria[1]

Parameter	Units	Value
Type	--	Wet-pit submersible, non-clog, centrifugal, VFD controlled
No. of pumps	units	3 (2 duty, 1 standby)
Capacity, each	gpm (mgd) @ ft	8,333 (12.0[2]) @ 48.5

1. Reference: Carollo, 2004, unless otherwise noted.
2. Pump efficiencies have decreased over time from the initial design capacity of 13.58 mgd each to 12 mgd each (IEUA, 2007a).

Table 4-4 presents the capacity of the influent pumping. Note that there are no specific Title 22 requirements for influent pumping redundancy since downstream treatment capacity is not affected by influent pumping capacity. However, there is a manhole in the influent sewer line that overflows to the RP-2 Lift Station. This lift station pumps back to the headworks at RP-5, which prevents the sewer line from becoming surcharged and provides additional pumping capacity.

Table 4-4
Influent Pumping Capacity[1]

Process	Peak Capacity (mgd)	Annual Average Capacity With All Units in Service (mgd)	Title 22 Reliable Annual Average Capacity (mgd)
Influent Pumping	36	18	24[2]

1. Refer to Appendix C for calculations.
2. Based on two pumps in service at 12 mgd each (one pump out of service).

4.5 Preliminary Treatment

The headworks consists of bar screens with screenings washers and compactors and grit basins with grit washers. Two mechanical climber-type bar screens are installed along with a screw conveyor and screenings washer/compactor. One manual bar screen is also installed as a standby unit. One induced vortex grit basin is installed along with two grit slurry pumps and two grit classifiers and washers.

Table 4-5 presents design criteria for the headworks facility.

Table 4-5
Headworks Design Criteria[1]

Parameter	Units	Value
Mechanical Bar Screens:		
Type	--	Climber
Number	units	2
Opening size	inches	½
Peak flow capacity, each	mgd	30
Manual Bar Screens:		
Number	units	1
Opening size	inches	2
Peak flow capacity	mgd	30
Washer/Compactor:		
Number	units	1
Capacity	ft^3/hr	32
Grit Basins:		
Number	units	1
Diameter	ft	18
Side water depth	ft	7
Capacity	mgd	30
Grit Pumps:		
Number	units	2 (1 duty, 1 standby)
Capacity, each	gpm @ ft	250 @ 53
Efficiency, each	%	26

Table 4-5
Headworks Design Criteria[1]

Parameter	Units	Value
Capacity (average/peak)	gpm	250/350
Maximum inlet pressure loss	psi	8
Grit Classifiers:		
Number	units	2 (1 duty, 1 standby)
Maximum flow entering classifier	gpm	16
Capacity	ft^3/hr	13

1. Reference: Carollo, 2004.

Each of the three bar screens (two mechanical and one manual) is capable of handling 30 mgd. With one screen out of service, the remaining two can handle a peak flow of 60 mgd, which is equivalent to an annual average capacity of 30 mgd based on a peaking factor of 2.0 (refer to table 4-1 for a summary of peaking factors).

The grit basin is rated to 30 mgd peak flow. It should be noted that grit removal is not essential to the plant's overall treatment ability. Primary clarification is available as an alternative process to the grit basin; thus grit removal complies with Title 22 criteria because the downstream primary treatment process will provide grit removal when the grit basin is out of service. This reliance on downstream treatment effectively allows the grit removal system to be able to handle the full plant's rated capacity of 16.3 mgd.

The capacity of each preliminary treatment unit process is summarized in Table 4-6.

Table 4-6
Preliminary Treatment Capacity[1]

Process	Peak Capacity (mgd)	Annual Average Capacity With All Units in Service (mgd)	Title 22 Reliable Annual Average Capacity (mgd)
Bar screens	90	45	30
Grit basin	30	16.3	16.3[2]

1. Refer to Appendix C for calculations.
2. Reliability provided by downstream process. See discussion above regarding reliable capacity of the grit removal process.

In summary, the preliminary treatment facilities comply with Title 22 requirements by providing standby units and back-up treatment capacity. The preliminary treatment processes can effectively handle an annual average flow of 16.3 mgd.

4.6 Primary Treatment

Primary treatment facilities at RP-5 consist of two 100-foot diameter, circular, primary clarifiers. The clarifiers are center feed, peripheral drawoff with sludge hoppers and scum removal. The two clarifiers have a common sludge and scum pump station. Sludge and scum is currently pumped to RP-2 for processing. The primary clarifiers are designed to allow advanced primary treatment by adding ferric chloride and polymer upstream and downstream of the grit chambers, respectively. Table 4-7 presents design criteria for the primary clarifiers.

Table 4-7
Primary Treatment Design Criteria

Parameter	Units	Value
Primary Clarifiers*[1]*:		
Number	units	2
Diameter	ft	100
Surface Area, each	sq ft	7,854
Side Water Depth	ft	12
Surface overflow rate at PWWF, all units in service[2]	gpd/sq ft	2,075
Surface overflow rate at PWWF, 1 unit out of service[2]	gpd/sq ft	4,151
Surface overflow rate at AADF, all units in service[2]	gpd/sq ft	1,038
Surface overflow rate at AADF, one unit out of service[2]	gpd/sq ft	2,075
Primary Sludge Pumps[1]		
Number	units	3 (2 duty, 1 standby)
Type	--	Progressive cavity, variable speed
Capacity, each	gpm @ psi	230 @ 62
Primary Scum Pumps[1]		
Number	units	2
Type	--	Progressive cavity
Capacity, each	gpm @ psi	100 @ 62
Ferric Chloride Storage and Feed System		
Number of storage tanks	units	1
Total storage volume	gal	9600
Number of pumps	units	2
Pump type	--	Diaphragm
Pump capacity, each	gph @ psi	53 @ 150
Ferric chloride dosage	mg/L	5 to 8

Table 4-7
Primary Treatment Design Criteria

Parameter	Units	Value
Total ferric chloride use	lbs/day	695
Polymer Storage and Feed System		
Number of storage tanks	units	2 Totes (as needed)
Total storage volume	gal	275 (per tote)
Number of pumps	units	2
Pump type	--	Diaphragm
Pump capacity, each	gph @ psi	4 @ 100
Polymer dosage	mg/L	0.15

1. Reference: Carollo, 2004, unless otherwise noted.
2. Refer to Appendix C for calculated values.

With one unit out of service, the remaining clarifier has to operate at twice its design overflow rate. The system as a whole (including all downstream processes in service) is able to treat the peak wet weather conditions to Title 22 standards with advanced primary treatment. Advanced primary treatment facilities, including ferric chloride and polymer injection, are brought online during peak flow scenarios to increase the removal capacity of the clarifier.

Table 4-8 shows the capacity of the primary clarifiers.

Table 4-8
Primary Treatment Capacity

Process	Peak Capacity (mgd)	Annual Average Capacity With All Units in Service (mgd)	Title 22 Reliable Annual Average Capacity (mgd)
Primary Clarifiers	32.6[1]	16.3	16.3[2]

1. For more information on calculated values, see Appendix C.
2. Refer to the discussion above regarding Title 22 Reliable Annual Average Capacity.

4.7 Emergency and Short-Term Storage

RP-5 has a 6.8 million gallon (MG) emergency storage pond and a 17 MG emergency holding pond.

4.7.1 Emergency Storage Pond

Downstream of the primary clarifiers, there is a primary effluent box with an adjustable weir gate that can be used to divert flow to the 6.8 MG Emergency Storage Pond. The weir gate is manually set such that primary effluent in excess of a selected flowrate goes over the weir gate into the lagoon. The effluent is then pumped back to the headworks when the influent rate is low enough to allow all flow to continue to downstream processes.

The weir gate is normally set at an elevation that allows only a peak flow of 23.4 mgd to pass through to secondary treatment and beyond. The value of 23.4 mgd is based on the capacity of the chlorine contact basin (refer to Section 4.9.2).

In terms of a total annual average flow of 16.3 mgd, this flow represents a peaking factor of approximately 1.34 multiplied by 16.3 mgd, with an allowance of 1.5 mgd for internal backwash and plant water recycled flows (16.3 mgd x 1.34 p.f. + 1.5 mgd = 23.4 mgd). Or in terms of plant rated capacity, an overall peaking factor of 1.44 for flow equalization for the downstream secondary and tertiary treatment processes (23.4 mgd / 16.3 mgd = 1.44 p.f.).

Any combination of influent and recycle flows that exceed 23.4 mgd is considered an emergency situation and will be shaved from what are considered normal flows. However, it should be noted that the wet weather Emergency Storage Pond is only needed during wet weather storm events or on unusually high flow days (e.g. some holidays). This limits the peaking factor for the downstream secondary and tertiary treatment processes.

4.7.2 Emergency Holding Pond

The unlined 17 MG Emergency Holding Pond (located downstream of the dechlorination basin at the end of the plant) can be used to store final plant effluent if it does not meet the permit requirements. The basin does not have a permanent pumping facility, but it has the capability to return flow to the headworks through a 16-inch line with the use of temporary pumps. This same line can be used to divert flow (by gravity) from the influent pump station wetwell to the Emergency Holding Pond in an emergency situation.

4.8 Secondary Treatment

Secondary treatment is provided by an activated sludge biological treatment process. The required level of nitrogen removal (for the agency-wide 8 mg/L TIN limit) is achieved in a two-stage biological nutrient removal (BNR) configuration that combines an anoxic zone with a typical activated sludge process. In the aerobic zone, ammonia (NH_3) is converted to nitrate (NO_3) by nitrifying microorganisms. The anoxic zone is mixed but not aerated. Under non-aerated conditions, microorganisms in the mixed liquor will utilize NO_3 as their oxygen source, thereby destroying NO_3 and releasing nitrogen as nitrogen gas. Table 4-9 presents design criteria for the secondary treatment facilities.

Table 4-9
Secondary Treatment Design Criteria[1]

Parameter	Units	Value
Aeration Basins:		
Number	units	2
Volume, each	MG	5.16

Table 4-9
Secondary Treatment Design Criteria[1]

Parameter	Units	Value
Depth	ft	19
Anoxic volume	%	17 - 58
Solids Retention Time (SRT)		
At Max Month Flow, all units in service	days	29.9
At Max Month Flow, 1 unit out of service	days	25.9
Design MLSS Concentration		
At Max Month Flow, all units in service	mg/L	3,770
At Max Month Flow, 1 unit out of service	mg/L	3,830
Hydraulic Retention Time (HRT)		
At Max Month Flow, all units in service	hrs	13.4
At Max Month Flow, 1 unit out of service	hrs	11.7
Lbs MLSS/mgd		
At Max Month Flow, all units in service	lbs MLSS/mgd	17,511
At Max Month Flow, 1 unit out of service	lbs MLSS/mgd	15,563
Nominal HRT (with 200% MLR)		
At Max Month Flow, all units in service	hrs	2.8
At Max Month Flow, 1 unit out of service	hrs	2.1
Mixed Liquor Return Pumps		
Number	per basin	1
Type	--	Propeller, variable speed
Capacity, each	gpm	6,300
Recirculation ratio	Qr/Qi (avg)	1 - 3
Secondary Clarifiers:		
Number	units	4
Diameter	ft	130
Surface area, each	sq ft	13,273
Side water depth	ft	17
Flow to secondary clarifiers based on maximum month flow conditions[2]	mgd	18.9

Table 4-9
Secondary Treatment Design Criteria[1]

Parameter	Units	Value
Surface Overflow Rate		
At Max Month Flow, all units in service[2]	gpd/sq ft	356
At Max Month Flow, 1 unit out of service[2]	gpd/sq ft	475
At Max Primary Effluent Weir Setting Flow, 23.4 mgd, all units in service[2]	gpd/sq ft	441
At Max Primary Effluent Weir Setting, 23.4 mgd, 1 unit out of service[2]	gpd/sq ft	588
Peak Capacity at Overflow 600 gpd/sq ft, all units in service[2]	mgd	31.9
Peak Capacity at Overflow 600 gpd/sq ft, 1 unit out of service[2]	mgd	23.9
Secondary Treatment Process peaking factor (flow equalized)[2]	--	1.44
Annual Average Capacity at Overflow rate 600 gpd/sq ft, all units in service[2]	mgd	22.2
Annual Average Capacity at Overflow rate 600 gpd/sq ft, 1 unit out of service[2]	mgd	16.6
Design maximum SVI	mL/g	150
Return Activated Sludge Pumps		
Number	units	5
Type	--	Screw Centrifugal, Variable Speed
Capacity, each	gpm	2,500
Return ratio	percent of ADF	70 to 170
Return sludge concentration	mg/L	3,000 – 9,000
Waste Activated Sludge Pumps (WAS)		
Number	units	2
Type	--	Positive Displacement, Variable Speed
Capacity, each	gpm	100
Secondary Scum Pumps		
Number	units	2
Type	--	Submersible
Capacity, each	gpm	600

1. Reference: Carollo, 2004, unless otherwise noted.
2. Refer to Appendix C for calculations.

At the parameters listed above, the aeration basins are capable of treating the maximum month condition of 18.9 mgd with one compartment out of service. The system as a whole can handle the max month condition with one secondary clarifier out of service and all aeration basins in service.

The system can function with either one aeration basin compartment or one secondary clarifier out of service, per Title 22 standards. A blower failure alarm is linked to the supervisory control and data acquisition (SCADA) system to indicate the failure of the biological treatment process.

Table 4-10 summarizes the capacity of the secondary treatment facilities. For secondary treatment aeration system, the flow that is used in determining capacity is the maximum month influent flow as discussed above. Secondary clarifier capacities are based on reasonable overflows.

Table 4-10
Secondary Treatment Capacity[1]

Process	Peak Capacity (mgd)	Annual Average Capacity Using Redundancy (mgd)	Title 22 Reliable Annual Average Capacity (mgd)
Aeration Basins	23.4[2]	17.1[3]	16.3
Secondary Clarifiers	31.9	22.2	16.6

1. Refer to Appendix C for calculations.
2. Peak capacity with all aeration basins in service is based on the primary effluent weir setting.
3. Reference: Carollo, 2004.

4.9 Tertiary Treatment

The Title 22 Water Recycling Criteria (California, 2001) require that "filtered wastewater" be an oxidized wastewater that has passed through a mono, dual or mixed media gravity, upflow or pressure filtration system at a rate that does not exceed 5 gpm/sq ft of surface area. The turbidity of the filtered wastewater must not exceed (a) an average of 2 NTU within a 24-hour period, (b) 5 NTU more than 5 percent of the time within a 24-hour period, and (c) 10 NTU at any time. Under Title 22 requirements, the maximum filtration rate is calculated with the largest filter out of service.

The filtered effluent is disinfected with sodium hypochlorite using chlorine contact tanks to provide the 90-minute modal contact time as required by Title 22 regulations. The Title 22 quality effluent is then available for reuse or is dechlorinated using sodium bisulfite prior to discharge to Chino Creek.

4.9.1 Filtration

The continuous backwash, upflow tertiary filters provide physical treatment to remove suspended solids and reduce the turbidity of the secondary effluent. There are 12 tertiary filters along with a rapid mix basin, four flocculation basins

and a filter recycled pump station at RP-5. The tertiary filters are located south of the secondary clarifiers. The rapid mix and flocculation basin contains one rapid mixer and four flocculators. Each tertiary filter contains six 50-square-foot modules, giving a total of 300 square feet per filter. Flow that enters the tertiary filters comes from the secondary clarifiers. The Filter Recycle Pump Station contains three submersible pumps that pump filter backwash water to the aeration basins. Table 4-11 presents design criteria for the filters.

Table 4-11
Filtration Design Criteria[1]

Parameter	Units	Value
Filters:		
Number of filters	units	12
Surface area per filter	sq ft	300
Design peak surface loading rate	gpm/sq ft	5.0
Length	ft	21 feet 3 inches
Width	ft	14 feet 2 inches
Filter bed depth	ft	40
Backwash flow	%	5
Maximum capacity, all units in service (at 5 gpm/sq ft)[2]	mgd	25.9
Maximum capacity, one unit out of service (at 5 gpm/sq ft)[2]	mgd	23.8
Filtration System peaking factor (flow equalized)[2]	--	1.44
Annual average capacity, all units in service (at 5 gpm/sq ft)[2]	mgd	18.0
Annual average capacity, one unit out of service (at 5 gpm/sq ft)[2]	mgd	16.5
Media		
Type	--	High grade silica sand (minimum 95% silica)
Effective size	mm	0.9
Uniformity coefficient	--	≤1.5
Rapid Mixer		
Horsepower	hp	10
Speed	rpm	100
Velocity gradient, G	1/seconds	300
Flocculators		
Number	units	4
Horsepower, each (listed from upstream to downstream flocculators)	hp	3.0, 2.0, 1.5, 1.0

Table 4-11
Filtration Design Criteria[1]

Parameter	Units	Value
Maximum speed, each (listed from upstream to downstream flocculators)	rpm	45, 37, 30, 25
Minimum speed	rpm	½ of maximum speed
Speed control	--	Variable frequency drive
Velocity gradient (listed from upstream to downstream flocculators)	1/seconds	40-80, 30-60, 22-44, 17-34
Filter Recycle Pumps		
Number	units	3
Capacity, each	gpm @ ft	420 @ 28
Horsepower, each	hp	7.5
Alum System		
Design average flow	mgd	15
Design peak flow	mgd	30
Design average dosage	mg/L	1
Design peak dosage	mg/L	5
Peak alum feed rate required	gph	10
Number of alum pumps	units	2 (1 duty, 1 standby)
Alum pump capacity, each	gph	12
Storage at average flow and dosage	days	14

1. Reference: Carollo, 2004, unless otherwise noted.
2. For more information on calculated values, see Appendix C.

Based on a filter loading rate of 5 gpm/sq ft, the filters have a maximum capacity of 25.9 mgd with all units in service and 23.8 mgd with one unit out of service. As discussed above in section 4.7.1, the secondary and tertiary treatment processes have a peaking factor of 1.44 due to the available short-term storage used for primary effluent flow equalization. Therefore, the annual average capacity of the filters with all units in service is 18.0 mgd (25.9 mgd / 1.44 p.f. = 18.0 mgd) and the annual average capacity with one unit out of service is 16.5 mgd (23.8 mgd / 1.44 p.f. = 16.5 mgd).

The weir gate at the primary effluent equalization basin (Emergency Storage Pond) is normally set at an elevation that allows only a peak flow of 23.4 mgd to pass through to the secondary and tertiary treatment processes. Therefore, the filtration system would never receive more than 23.4 mgd of flow.

Failure of the alum and polymer pumps or the rapid mixer annunciates an alarm in the SCADA system to indicate the failure of the coagulation process. The air compressor that feeds the filter air lift pump also has a failure alarm, and the

effluent turbidity meter annunciates an alarm as well if a high effluent turbidity is detected. These alarms notify the operator of failure in the filtration process.

4.9.2 Chlorination

Disinfection of the effluent is provided by a sodium hypochlorite system and two chlorine contact basins. Table 4-12 presents design criteria for the chlorination facilities.

Table 4-12
Chlorination and Dechlorination Design Criteria[1]

Parameter	Units	Value
Chlorine Contact Basins:		
Number	units	2
Number of channels per basin	--	5
Length	ft	125
Width, per channel	ft	12.5
Side water depth[2]	ft	15.5
Volume per basin[3]	gal	900,000
Total volume[3]	gal	1,800,000
Required modal contact time	min	90
Ratio of modal to theoretical contact time	--	0.815
Peak capacity[3]	mgd	23.5
Annual average capacity[3]	mgd	16.3
Sodium Hypochlorite System		
Design average flow	mgd	15
Design peak flow	mgd	30
Design average dosage	mg/L	15
Design peak dosage	mg/L	20
Peak hypochlorite feed rate required	gph	200
Number of hypochlorite pumps	units	4 (3 duty, 1 standby)
Hypochlorite pump capacity, each	gph	77
Storage at average flow and dosage	days	14
Dechlorination System:		
Average sodium bisulfite dose	mg/L	5.76
Average sodium bisulfite feed rate	lbs/day	476
Average sodium bisulfite use	gpd	282
Maximum sodium bisulfite dose	mg/L	11.5
Maximum sodium bisulfite feed rate	lbs/day	892
Maximum sodium bisulfite use	gpd	536
Sodium Bisulfite Feed Pumps		
Number of tanks	units	2
Volume per tank	gallons	5200

Table 4-12
Chlorination and Dechlorination Design Criteria[1]

Parameter	Units	Value
Total storage	gallons	10400
Sodium Bisulfite Feed Pumps		
Number of pumps	units	4
Capacity per pump	gph	53 gph @ 150psi

1. Reference: Carollo, 2004, unless otherwise noted.
2. Assuming effluent weir elevation of 568.94.
3. For more information on calculated values, see Appendix C.

The maximum flow allowable through the chlorine contact basin system is 23.5 mgd. This flow represents the actual flow capacity of the basin, based on a modal contact time of 90 minutes and the results of the dye test (SFE Global, 2004). Refer to Appendix D for a copy of the CCB Contact Time Testing Final Report prepared by SFE Global NW.

To prevent flow to the chlorine contact basin from exceeding its 23.5 mgd capacity, the weirs of the upstream primary effluent box are set to conservatively allow no more than 23.4 mgd to pass through. Any flows in excess of 23.4 mgd overflow from the primary effluent box to the 6.8 MG Emergency Storage Pond, as described in Subsection 4.7. As discussed above, the overall peaking factor of 1.44 is used for flow equalization for the secondary and tertiary treatment processes (23.4 mgd / 16.3 mgd = 1.44 p.f.). For the chlorination system, the annual average flow capacity is 16.3 mgd (23.4 mgd / 1.44 p.f. = 16.3 mgd).

Because of the availability of the 17 MG Emergency Holding Pond for reliability, coupled with the fact that the chlorine contact basins contain no mechanical equipment, the entire basin is used in determining Title 22 capacity without a redundant unit.

For the sodium hypochlorite chlorination system, the feed pumps are designed to handle a peaking factor of 2.0 at peak dosage with one unit out of service.

The hypochlorite metering pumps and mixer are programmed to annunciate an alarm in the SCADA system if they fail. The chlorine residual analyzer also triggers an alarm if it detects a low chlorine residual. These alarms notify the operator of a failure in the disinfection process.

Table 4-13 summarizes the capacity of the tertiary treatment system.

Table 4-13
Tertiary Treatment Capacity[1]

Process	Peak Capacity (mgd)	Annual Average Capacity Using Redundancy (mgd)	Title 22 Reliable Annual Average Capacity (mgd)
Filters	25.9	18.0	16.5
Chlorine Contact Basins	23.5[2]	16.3	16.3

1. For more information on calculated values, see Appendix C.
2. Refer to the discussion above for more information on the maximum flow allowable through the chlorine contact basins.

4.10 Recycled Water Pump Station

The RP-5 Recycled Water Pump Station is interconnected to the Carbon Canyon Wastewater Reclamation Facility Recycled Water Pump Station and the Regional Plant No.1 Zone 930 Recycled Water Pump Station; any water conveyed by these stations can be discharged to Prado Lake Dechlorination Station. Design criteria for the RP-5 Recycled Water Pump Station are summarized in Table 4-10.

Table 4-14
Recycled Water Pump Station Design Criteria

DESCRIPTIONS	RP-5	
	PUMPS P-1 & P-2	PUMPS P-3, P-4 & P-5
Quantity	2	3
Duty	Continuous	Continuous
Drive	Variable Speed	Constant Speed
Project site elevation, ft., msl	575	575
Minimum available NPSH, ft	15	15
Minimum capacity at design head	1925 gpm	1925 gpm
Design head, TDH	262 feet	262 feet
Max. pump shutoff head*	392 feet	392 feet
Min. pump laboratory efficiency @ design head	82 %	82 %
Maximum outside diameter of bowls	14 inches	14 inches
Number of bowls	4 stages	4 stages
Diameter of discharge	12 inches	12 inches
Discharge flange rating ANSI, psi	150	150
Minimum column shaft diameter, in	Per manufacturer recommendation	Per manufacturer recommendation
Minimum column diameter, in	Per manufacturer recommendation	Per manufacturer recommendation

Table 4-14
Recycled Water Pump Station Design Criteria

DESCRIPTIONS	RP-5	
	PUMPS P-1 & P-2	PUMPS P-3, P-4 & P-5
Max. Dimension from bottom base plate to bottom of pump bowl assembly	237 inches	237 inches
Max. required horse power**	150 HP	150 HP
Max. operating speed	1800 rpm	1800 rpm
Power supply	460V/3Ø /60Hz	460V/3Ø /60Hz

4.11 Solids Handling

Solids removed in the primary and secondary treatment processes at RP-5 are piped to the regional solids handling facility at RP-2 for sludge treatment. The solids treatment system at RP-2 includes the following:

a) Gravity thickeners, dissolved air flotation thickeners, anaerobic digestion, aerobic digestion,
b) Belt press and centrifuge dewatering;
c) Dewatered biosolids are hauled away to approved disposal sites.

The dewatered biosolids are hauled to and composted at the Inland Empire Region Composting Facility (IERCF) located in the City of Rancho Cucamonga. The final product meets Exceptional Quality Class A biosolids requirements which is bagged and sold as soil amendment.

Side flows from RP-2, including belt press filtrate, centrifuge centrate, gravity thickener overflow, dissolved air flotation overflow and drainage flow from biosolids handling, are pumped back up to RP-5 for treatment at an average daily flowrate of up to 1.3 mgd.

The methane gas derived from the RP-2 digesters is used to power engine-generator units that produce the electricity used as the energy source to operate the treatment plant.

4.12 Power Supply

The primary sources of power to RP-5 are the newly constructed solar cells and Southern California Edison. The 12-kV power connection is located at Power Center No. 3 at the southwest corner of the plant. The power is distributed to the rest of the plant through Power Center No. 3, as well as Power Center Nos. 1 and 2, located next to the headworks facility and aeration basins, respectively.

All Title 22 critical processes are provided with an automatically actuated standby power system. Standby power is provide by a diesel engine 2,000 kW generator located next to Power Center No. 3. The standby equipment is provided with alarms and automatic equipment switchover in the case of a power failure, in accordance with the reliability requirements of Title 22.

A new cogeneration facility is also used as an alternate source of power. The facility is an internal combustion engine generator that produces power for RP-5 facilities and the IEUA headquarters' buildings. The cogeneration facility engines run on digester gas as a primary fuel and air-diluted natural gas as a backup fuel. Digester gas is conveyed from RP-2 solids handling.

4.13 Monitoring and Alarms

Title 22 requires that alarm devices be provided for: (1) loss of power from the normal supply, (2) failure of the biological treatment process, (3) failure of the disinfection process, (4) failure of the coagulation process, and (5) failure of the filtration process. Operation of these systems is constantly monitored and alarms are provided. RP-5 has a state-of-the-art SCADA system that monitors all vital functions of the plant and assists operations staff. The control system records data on process operation and for permit compliance and provides information on the status of equipment and plant operation. The RP-5 control system also provides a communication link to other IEUA treatment facilities and to standby operators when the plant is not staffed.

The RP-5 alarm devices monitor the following functions:

- Loss of normal power
- Failure of the influent pump station
- Failure of the biological treatment process
- Failure of the filtration process
- Failure of the disinfection process

Plant alarms are automatically powered by the emergency (standby) generator if the primary power supply is interrupted. RP-5 is manned about 8 hours per day, 7 days per week. During the remaining 16 hours each day when the plant is unmanned, RP-5 operation is monitored remotely via the SCADA system by the assigned standby operator. Alarms that occur during any unmanned periods are annunciated through the SCADA system. A cell phone paging system is used to notify the standby operator of any alarms, if the plant operation is not being actively monitored. Standby operators have laptop computers for remote SCADA system access to enable them to address alarm conditions and remotely monitor and control plant operations. A summary of key alarms is presented in Table 4-15. A detailed list of the RP-5 alarms is included in Appendix E.

Table 4-15
Summary of Principle Alarms

System Component	Parameter/Equipment	Alarm Conditions
Power	Primary electrical service	Failure
	Standby generator	On
Influent Pumping	Pumps	Failure
	Water level	High and low
	Pumps	High flow
Biological	Dissolved oxygen level	Low
	Blowers	On and failure
	Mixers	Failure
Mixed Liquor Return	Pumps	Failure
Filtration	Filter influent turbidity	High - automatically activates alum pump
	Valves	Failure
	Flow	High
	Effluent turbidity	High
Chlorination	Chlorine Residual	Low, High
	CT	Low
Dechlorination	Chemical feed pumps	On, off, and failure
	Chlorine residual	High
Effluent	pH	Low, High

Power supply reliability is discussed in the preceding section. RP-5 has four electrical power sources: (1) Southern California Edison, (2) Solar power, (3) an emergency generator, and (4) a cogeneration facility. The diesel powered emergency generator is activated automatically during a power failure to maintain full plant operation and alarms. The cogeneration facility operates on digester gas as a primary fuel source and air-diluted natural gas as a backup fuel.

Alarms for biological treatment breakdown exist on all electrical/mechanical equipment serving the treatment processes. Alarms signal low oxygen levels in the aeration (oxic) basins, or the failure of any blower. Failure of the RAS pumps or high torque on the clarifier scraper arms are also signaled by alarms. These alarms provide assurance that a biological system failure is not equipment related, and ensure the reliability of the anoxic/oxic treatment process.

As described earlier, flow to the filtration and chlorination processes is restricted by the weir setting and limited to 23.4 mgd. If too high (above a setpoint), the excess primary effluent flow is diverted to the Emergency Storage Pond. This ensures that the secondary treatment process operates well and that the filtration rate and modal contact time requirements are met for production of high quality

recycled water. In addition, if the water level is high in any of the tertiary filters, an alarm is activated to alert the operators.

In general, poor effluent quality can also signal alarms. For example, high effluent turbidity alerts the operators to a problem at the filters. Filter effluent turbidity is monitored, and if it becomes too high, the polymer feed system can be actuated to provide coagulation in compliance with Title 22.

Multiple alarms and backup equipment ensure the reliability and safety of the disinfection system. Multiple bulk storage tanks and metering pumps provide duplicate equipment for the sodium hypochlorite system. The standby metering pump is started automatically if the duty pump fails.

Chlorine residual of the recycled water is closely monitored and can activate an alarm if it is too high or too low. Chlorine residual is also monitored for discharges to Chino Creek. The effluent gate to the creek is automatically closed by the SCADA system and an alarm is actuated if the chlorine residual is too high, indicating a failure of the dechlorination system.

As shown in Table 4-16, RP-5 utilizes on-line instruments to monitor continuous compliance with Title 22 requirements.

Table 4-16 lists instruments used in the operation and control of the filtration and disinfection systems along with the associated alarm conditions and contingency actions.

Table 4-16
Continuous Monitoring for Title 22 Compliance

Description	Measures	Control/Monitoring Action
Secondary Effluent Turbidity	Filter Influent Turbidity	If influent turbidity increases above the setpoint, the alum pump automatically starts.
Filtered Effluent turbidity	Compliance with Title 22 requirements for Turbidity	If effluent turbidity increases above a warning setpoint an alarm is annunciated and operators respond. If effluent turbidity continues to increase the effluent is diverted to the Emergency Holding Pond.
Residual Chlorine analyzers	Compliance with Title 22 requirements for CT. Residual chlorine is used with effluent flow and CT is calculated.	Alarm annunciated if effluent is not in compliance with CT. Effluent is diverted by the operator to the Emergency Holding Pond until chlorine residual re-established.
Chlorinated Effluent Flow meters	Compliance with Title 22 requirements for CT. Residual chlorine is used with effluent flow and CT is calculated.	Alarm annunciated if effluent is not in compliance with CT. Effluent is diverted by the operator to the Emergency Holding Pond until flowmeter is re-established.

Table 4-17
Alarms and Contingency Actions for Filtration and Disinfection Processes

Description	Alarm Condition	Consequence	Contingency Action
Secondary Effluent Turbidity	Turbidity High	Filter influent exceeds 5 NTU design specification.	Alarm annunciated. Alum pump automatically starts.
Alum Metering Pump	Metering Pump Failure	No alum addition, possible increase in effluent soluble phosphorus, and high turbidity.	Alarm annunciated. Operator switches to standby pump.
Alum Metering Pump	Pressure Switch High	Low or No alum addition, possible increase in effluent soluble phosphorus and high turbidity.	Alarm annunciated. Operator switches to standby pump. Blockage removed.
Alum storage tank level	Storage tank level low	Low or No alum addition, possible increase in effluent soluble phosphorus and high turbidity.	Alarm annunciated. Tank refilled. Effluent diverted to Emergency Holding Pond
Coagulant Rapid Mixer Local Control Panel	YA = Mixer Failure	Alum is not well mixed into secondary effluent, therefore higher soluble P and turbidity.	Alarm annunciated. Maintenance called out. Effluent diverted to Emergency Holding Pond
Flocculator	YA = Flocculator Failure	Alum floc is not well formed.	Alarm annunciated. Maintenance called out. If three out of the four flocculators are in operation floc should form. Effluent diverted to Emergency Holding Pond
Filter 1 Level Filter 2 Level Filter 3 Level Filter 4 Level	High Level in Filtration	Overflow of filter or backflow.	Alarm annunciated. Operator performs additional backwash or isolates filter.

Table 4-17
Alarms and Contingency Actions for Filtration and Disinfection Processes

Description	Alarm Condition	Consequence	Contingency Action
Filter backwash tank level	Low level in Backwash tank	Filter backwash will stop for all filters.	Alarm annunciated. Maintenance called out. Will not deteriorate effluent quality unless remaining in fault.
Filtered Effluent turbidity	Turbidity high	Will exceed Title 22 specification for turbidity if continues to increase.	Alarm annunciated. Effluent diverted to Emergency Holding Pond
MX NaOCl (Chlorine) Injection Mixer	YA = Mixer Failure	Chlorine injector mixer failure will reduce efficiency of chlorine contact tank.	Alarm annunciated. Effluent diverted to Emergency Holding Pond
Residual Chlorine analyzers	Residual chlorine low	Effluent fails to meet Title 22 requirements for CT.	Alarm annunciated. Effluent diverted to Emergency Holding Pond until chlorine residual is re-established.
Chlorinated Effluent Flow meters	Flow meter fails	Effluent fails to meet Title 22 requirements for CT when in flow proportional control.	Alarm annunciated. Effluent diverted to Emergency Holding Pond until flowmeter is re-established.
Sodium Hypochlorite dosing pump control	Pump Fails	No NaOCl addition. Fail to meet CT specification.	Alarm annunciated. Operator switches to standby pump.

Table 4-17
Alarms and Contingency Actions for Filtration and Disinfection Processes

Description	Alarm Condition	Consequence	Contingency Action
Sodium Hypochlorite dosing pump control	High discharge pressure	No NaOCl addition. Fail to meet CT specification.	Alarm annunciated. Operator switches to standby pump. Clears blockage in NaOCl system. If blockage in common pipe then effluent diverted to Emergency Holding Pond
Sodium Bisulfite dosing pump control	Pump Fails	No NAHS addition. Fail to dechlorinate effluent	Alarm annunciated. Operator switches to standby pump.
Sodium Bisulfite dosing pump control	High discharge pressure	No NAHS addition. Fail to dechlorinate effluent.	Alarm annunciated. Operator switches to standby pump. Clears blockage in NAHS system. If blockage in common pipe then effluent diverted to Emergency Holding Pond

4.14 Emergency Storage and Effluent Disposal

As discussed in Section 4.7, RP-5 has two emergency storage basins: a 6.8 MG storage pond that can be used to store excess primary effluent, and a 17 MG holding pond that can be used to store either final effluent or raw wastewater during an emergency overflow situation or conditions that would exceed Title 22 filtration and disinfection criteria.

Effluent that is not used in the reclamation system is dechlorinated and discharged to Chino Creek.

4.15 Unit Process Reliability Features

The reliability features of the different unit processes are described in the individual sections of this report. Table 4-18 summarizes these features.

Table 4-18
RP-5 Unit Processes Reliability Features

Unit Process	Reliability Feature
Preliminary Treatment	Standby mechanical bar screen Standby manual bar screen Standby grit pump Standby grit classifier
Primary Treatment	Standby primary clarifier Advanced primary treatment facilities (ferric chloride and polymer)
Emergency and Short Term Storage	6.8 MG Emergency Storage Pond to shave peak flows to secondary and tertiary treatment processes. Primary effluent flows are restricted by a weir. 17 MG Emergency Holding Pond, to store final plant effluent in emergency situations
Secondary Treatment	Standby unit of aeration basin Standby secondary clarifier Standby blower Standby RAS pump Standby WAS pump Standby scum pump
Filtration	Emergency short-term storage Standby air compressor Standby filter backwash pump Standby alum pump and polymer feeder
Chlorination	Standby sodium hypochlorite pump
Power Supply	Automatically actuated standby power for all Title 22 critical processes

Section 5
Monitoring Program

This section demonstrates how the RP-5 monitoring program complies with Title 22 Water Recycling Criteria.

5.1 Sampling and Analysis

Water quality monitoring is required under Title 22 Water Recycling Criteria and IEUA's consolidated NPDES permit, RWQCB Order No. R8-2009-0021. Monitoring locations are specified in the permit, which is included in Appendix A. The reclamation monitoring in the NPDES permit requires that effluent samples be taken at least daily for total suspended solids, biochemical oxygen demand and coliform bacteria. Continuous turbidity and pH monitoring and recording is required.

Specific guidelines and parameters are established in Attachment E "Monitoring and Reporting Program" of Order No. R8-2009-0021 for sampling and analysis of the influent and effluent streams. Depending on the constituent, sampling is required to be a continuous, 24-hour composite, or grab specimen taken on regularly scheduled intervals (daily, weekly, monthly, quarterly, semi-annually or annually).

5.2 Monitoring Program

The performance of each of the treatment processes is closely monitored at RP-5. Influent, effluent and reclamation flows are measured continuously at monitoring locations M-INF 3A, M-INF 3B, M-INF 3C, M-003 and REC-003. RP-5 effluent turbidity, pH and conductivity are monitored continuously at monitoring location M-003 prior to discharge to Chino Creek. Chlorine residual is also continuously monitored at M-003 to be sure that the dechlorination facilities are functioning properly. In addition, the chlorination system CT and modal contact time are continuously calculated and recorded.

Other constituents that are monitored and the frequency of the sampling and analyses are listed in Tables 5-1 through 5-7. In conformance with its permit, IEUA prepares monthly and annual water quality reports summarizing all monitoring data and relating any operational incidents.

Table 5-1
Influent Monitoring Program Summary at M-INF 3B, 3C, 3D[1]

Constituent	Unit	Type of Sample	Minimum Frequency of Sampling & Analysis
Flow	mgd	Recorder/totalizer	Continuous
pH	pH units	Recorder	Continuous
Specific conductance	µmhos/cm	Recorder	Continuous
TOC	mg/L	Composite	Weekly
BOD_5[2]	mg/L	Composite	Weekly
TSS	mg/L	Composite	Weekly
TDS	mg/L	Composite	Weekly
Ammonia-Nitrogen	mg/L	Grab	Weekly
Total Nitrogen	mg/L	Composite	Weekly
TIN	mg/L	Composite	Weekly
Cyanide (Free)[3]	µg/L	Grab	Monthly
Total Hardness	mg/L	Composite	Quarterly
Boron	mg/L	Composite	Quarterly
Chloride	mg/L	Composite	Quarterly
Fluoride	mg/L	Composite	Quarterly
Sodium	mg/L	Composite	Quarterly
Sulfate	mg/L	Composite	Quarterly
Arsenic	µg/L	Composite	Quarterly
Cadmium	µg/L	Composite	Quarterly
Total Chromium or Chromium VI	µg/L	Composite	Quarterly
Total Recoverable Copper	µg/L	Composite	Quarterly
Total Recoverable Lead	µg/L	Composite	Quarterly
Total Recoverable Mercury	µg/L	Composite	Quarterly
Total Recoverable Nickel	µg/L	Composite	Quarterly
Selenium	µg/L	Composite	Quarterly
Total Recoverable Silver	µg/L	Composite	Quarterly
Total Recoverable Zinc	µg/L	Composite	Quarterly
Bis (2-ethylhexyl) phthalate	µg/L	Grab	Quarterly
2,3,7,8 – TCDD (Dioxin)[4]	µg/L	Composite	Semi-annually
Volatile organic portion of EPA Priority Pollutants[5]	µg/L	Grab	Annually
Remaining EPA Priority Pollutants[5]	µg/L	Composite	Annually

1. Source: RWQCB, 2009. Influent compliance is for Monitoring Point M-INF.
2. BOD_5 is calculated based on a BOD_5/TOC correlation approved by the Region Water Board.
3. Free cyanide is measured as aquatic free cyanide (ASTM Method D7237) without sodium hydroxide (NaOH) preservation.
4. Applies at M-INF 3b & 3D only.
5. See waste discharge permit (Order No. R8-2009-0021) (RWQCB, 2009) for complete list or description.

Table 5-2
Tertiary Effluent Monitoring Program Summary at M-003[1]
(Without 20:1 Dilution in the Receiving Water)

Constituent	Unit	Type of Sample	Minimum Frequency of Sampling & Analysis
Flow	mgd	Recorder/totalizer	Continuous
Specific conductance	µmhos/cm	Recorder	Continuous
pH	pH units	Recorder	Continuous
Turbidity[2]	NTU	Recorder	Continuous
Total Chlorine Residual	mg/L	Recorder	Continuous
Coliform Organisms[3]	MPN per 100 ml	Grab	Daily
CT	mg-minutes/L	Recorder	Continuous[4]
TOC	mg/L	Composite	Daily
BOD_5[5]	mg/L	Composite	Daily
TSS	mg/L	Composite	Daily
Ammonia-Nitrogen	mg/L	Grab	Weekly
Temperature	°C	Grab	Weekly
TDS	mg/L	Composite	Monthly
TIN	mg/L	Composite	Monthly
Total Nitrogen	mg/L	Composite	Monthly
Cyanide (Free)[6]	µg/L	Grab	Monthly
Total Recoverable Copper	µg/L	Composite	Monthly
Toxicity[7]	TUc	Composite	Monthly
Total Hardness	mg/L	Composite	Monthly
Bicarbonate	mg/L	Composite	Monthly
Boron	mg/L	Composite	Monthly
Calcium	mg/L	Composite	Monthly
Carbonate	mg/L	Composite	Monthly
Chloride	mg/L	Composite	Monthly
Fluoride	mg/L	Composite	Monthly
Magnesium	mg/L	Composite	Monthly
Sodium	mg/L	Composite	Monthly
Sulfate	mg/L	Composite	Monthly
Total Recoverable Cadmium	µg/L	Composite	Monthly
Chromium (VI) or Total Chromium[8]	µg/L	Composite	Monthly
Total Recoverable Lead	µg/L	Composite	Monthly
Total Recoverable Mercury	µg/L	Composite	Monthly
Total Recoverable Selenium	µg/L	Composite	Monthly
Total Recoverable Silver	µg/L	Composite	Monthly
Total Recoverable Zinc	µg/L	Composite	Monthly
Bis (2-ethylhexyl) phthalate	µg/L	Grab	Monthly

Table 5-2
Tertiary Effluent Monitoring Program Summary at M-003[1]
(Without 20:1 Dilution in the Receiving Water)

Constituent	Unit	Type of Sample	Minimum Frequency of Sampling & Analysis
Bromodichloromethane	µg/L	Grab	Monthly
Aluminum	mg/L	Composite	Quarterly
Antimony	mg/L	Composite	Quarterly
Arsenic	µg/L	Composite	Quarterly[9]
Barium	µg/L	Composite	Quarterly[9]
Cobalt	µg/L	Composite	Quarterly[9]
Total Recoverable Nickel	µg/L	Composite	Quarterly[9]
2,3,7,8 – TCDD (Dioxin)	µg/L	Composite	Quarterly[10]
Volatile organic portion of Remaining EPA Priority Pollutants	µg/L	Grab	Annually[11]
Remaining EPA Priority Pollutants	µg/L	Composite	Annually[11]

1. Source: RWQCB, 2009. Effluent compliance is for tertiary treated effluent at Discharge Point DP 003 and Monitoring Location M-003.
2. Turbidity analysis shall be continuous, performed by a continuous recording turbidimeter. Compliance with the daily average operating filter turbidity shall be determined by averaging results of the daily average turbidity determinations shall be reported monthly. Turbidity measurements shall be taken immediately after filtration.
3. Samples for total coliform bacterial shall be collected daily. Samples shall be taken from the disinfected effluent.
4. The CT and modal contact time shall be continuously calculated and recorded. The minimum daily value shall be reported monthly. Modal contact time and CT shall be calculated based on the minimum one-hour average value in a 24-hr period.
5. BOD_5 is calculated based on a BOD_5/TOC correlation approved by the Region Water Board.
6. Free cyanide is measured as aquatic free cyanide (ASTM Method D7237) without sodium hydroxide (NaOH) preservation.
7. Refer to Order No. R8-2009-0021 for additional information regarding toxicity monitoring requirements.
8. If total Chromium test result is greater than 11 µg/L, the following sample shall be tested for Chromium IV, until directed otherwise.
9. Monitoring frequency for those priority pollutants that are detected during the required quarterly monitoring at a concentration greater than the concentration specified for that pollutant in Attachment I of the Permit shall be accelerated to monthly. To return to the monitoring frequency specified, approval must be requested from the RWQCB's Executive Officer or designee. For those priority pollutants without specified criteria values, accelerated monitoring is not required.
10. The discharger is required to conduct quarterly monitoring for Dioxin for one year. After one year, if quarterly monitoring results show non-detect values at acceptable reporting levels, the Discharger may reduce the frequency of monitoring for Dioxin from quarterly to semi-annual monitoring upon approval by the Regional Water Board Executive Officer or designee.
11. The monitoring frequency for those priority pollutants that are detected during the required semi-annual monitoring at a concentration greater than the concentration specified for that pollutant in Attachment I of the Permit shall be accelerated to quarterly for one year. To return to the monitoring frequency specified, approval must be requested from the RWQCB's Executive Officer or designee.

Table 5-3
Secondary Effluent Monitoring Program Summary at M-003
(With 20:1 Dilution in the Receiving Water)[1]

Constituent	Unit	Type of Sample	Minimum Frequency of Sampling & Analysis
Flow	mgd	Recorder/totalizer	Continuous
pH	pH units	Recorder/totalizer	Continuous
Total Chlorine Residual	mg/L	Recorder	Continuous
BOD_5	mg/L	Grab	Daily (when discharging)
Total Dissolved Solids	mg/L	Grab	When discharging
Coliform Organisms	MPN per 100 ml	Grab	Daily (when discharging)
Suspended Solids	mg/L	Grab	Daily (when discharging)
Total Hardness	mg/L	Grab	When discharging
EPA Priority Pollutants	µg/L	Grab	Annually[2]

1. Source: RWQCB, 2009. Effluent compliance is for secondary treated effluent for DP 003 and Monitoring Location M-003 when the receiving water has a 20:1 dilution.
2. Sample is collected from the first discharge, once a year.

Table 5-4
Reclamation Monitoring Program Summary at REC-003[1]

Constituent	Unit	Type of Sample	Minimum Frequency of Sampling & Analysis
Flow	mgd	Recorder/totalizer	Continuous
pH	pH units	Recorder/totalizer	Continuous
Turbidity[2]	mg/L	Recorder	Continuous
CT	mg-minutes/L	Recorder	Continuous[3]
Coliform Organisms	MPN per 100 ml	Grab	Daily
BOD_5	mg/L	Composite	Daily
TSS	mg/L	Composite	Daily
TDS	mg/L	Composite	Monthly

1. Source: RWQCB, 2009. Effluent compliance is for tertiary treated effluent for DP 007 and Monitoring Location REC-003.
2. Turbidity Samples shall be collected at Monitoring Point M-003.
3. The CT and modal contact time shall be continuously calculated and recorded. The minimum daily values shall be reported monthly.

Table 5-5
Receiving Water Monitoring Program Summary
(At Monitoring Location R-003U)[1]

Constituent	Unit	Type of Sample	Minimum Frequency of Sampling & Analysis
Flow	mgd	Estimate	Weekly
Dissolved Oxygen	mg/L	Grab	Weekly
Temperature	°C	Grab	Weekly
pH	pH unit	Grab	Weekly
Total Dissolved Solids	mg/L	Grab	Monthly
Total Inorganic Nitrogen	mg/L	Grab	Monthly
Total Hardness	mg/L	Grab	Quarterly
TSS	mg/L	Grab	Quarterly
EPA Priority Pollutants[2]	µg/L	Grab	Annually

1. Source: RWQCB, 2009. Monitoring location R-003U is located within 100 feet upstream of discharge point DP 003 in Chino Creek.
2. For the annual monitoring of the heavy metals EPA Priority Pollutants, the total recoverable and total dissolved metal concentrations shall be determined.

Table 5-6
Receiving Water Monitoring Program Summary
(At Monitoring Location R-003D)[1]

Constituent	Unit	Type of Sample	Minimum Frequency of Sampling & Analysis
Dissolved Oxygen	mg/L	Grab	Weekly
Temperature	°C	Grab	Weekly
pH	pH unit	Grab	Weekly
Color change, foam, deposition of material, odor	--	Observe	Weekly
Total Hardness	mg/L	Grab	Quarterly
TSS	mg/L	Grab	Quarterly
EPA Priority Pollutants[2]	µg/L	Grab	Annually

1. Source: RWQCB, 2009. Monitoring location R-003U is located within 500 feet downstream of discharge point DP 003 in Chino Creek.
2. For the annual monitoring of the heavy metals EPA Priority Pollutants, the total recoverable and total dissolved metal concentrations shall be determined.

Table 5-7
Biosolids Monitoring Program Summary[1]

Constituent	Unit	Type of Sample	Minimum Frequency of Sampling & Analysis
Priority Pollutants	mg/kg	Grab	Semi-annually
Moisture Content (% solid)	mg/kg	Grab	Quarterly

1. Source: RWQCB, 2009.

Section 6
Contingency Plan

IEUA's contingency plan to maintain continuous, high-level treatment at RP-5 and prevent discharge of inadequately treated effluent is described in this section.

6.1 Contingency Plan

The basis for the RP-5 contingency plan relies on the use of multiple treatment units and standby equipment and storage. As described for each process in Section 4 of this report, RP-5 has the capacity to treat flows averaging at least 16.3 mgd and peaks of at least 32.6 mgd.

Treatment reliability is provided by one of the following:

- standby treatment units and equipment,
- reliance on downstream processes,
- standby engine generator for emergency power, and
- on-site, short-term emergency storage.

For pumping stations and other similar mechanical facilities, standby units are available in the event that duty units are out of service. For major processes, such as the biological secondary treatment or filtration processes, standby units and conservative design criteria offer reliability, or if these are insufficient, on-site emergency storage can be used

Overall planning to prevent the discharge of inadequately treated effluent in the event of process outages or upsets is an integral part of plant reliability. Whenever a problem or potential problem that would adversely affect effluent quality is noted, some action must be taken to prevent improper discharge.

As discussed in Section 4.12 on Monitoring and Alarms, if any critical unit process fails or approaches the limit of its Title 22 capacity, an alarm is annunciated and the operator takes appropriate action. If the plant is unmanned, the on-call operator can log-on remotely to the SCADA system to review the alarm condition and determine the appropriate course of action.

Once the operations staff has been alerted to a potential problem, the first actions under a contingency plan are to assess the nature of the problem and its potential severity, and to determine if corrections can readily be made. The IEUA Manager of Operations would make the decision of which course of action to take. If it is determined that process adjustments or repairs cannot be made quickly enough, the following general procedures would be followed.

In the unlikely event of a major failure of the preliminary or primary treatment systems, the first alternative would be to divert a portion of the influent wastewater to another of IEUA's upstream treatment facilities. A second alternative would be to increase the removal efficiency of the remaining units in service. This can be accomplished by increasing the dosage of ferric chloride and polymer to the primary clarifiers, or by calling an additional blower into service due to increased air requirements. The plant could operate without significant impacts to the process under average conditions for a short time. It should be noted that the plant can be operated in the short term without the screening and grit removal processes.

For all other major process failures or events that would result in inadequately treated effluent for disposal or reuse, the primary response is to divert flow to on-site storage. Primary effluent would be diverted to the 6.8 million gallon Emergency Storage Pond, and tertiary effluent would be diverted to the 17 million gallon Emergency Holding Pond. Diversion to the Emergency Holding Pond is automatic; the gate to the outfall is automatically closed, and the future recycle pumps will be programmed to turn off. All pumps are programmed to shut down on a high effluent turbidity signal so no inadequately treated wastewater would be delivered to recycled water users.

On-site emergency storage basins have a combined volume of 23.8 million gallons or approximately 35 hours of storage at an average flow of 16.3 mgd. Significantly more storage time would be available if a portion of the influent flow were temporarily treated at one of IEUA's upstream plants.

Any inadequately treated effluent stored on-site would be returned to the influent pump station wetwell after the plant is restored to working capacity and influent flows are sufficiently low. The Emergency Storage Pond has a permanent pumping facility for this purpose, and the Emergency Holding Pond has provisions for portable pumps to return flow to the head of the plant.

In the event of a power failure, the plant is designed to automatically switch over to the standby diesel engine-generator. An alarm will annunciate in the SCADA system to inform operators that power has failed.

All of the major process units have been provided with backup reliability and multiple units in the event that any one unit is out of service. Additionally, IEUA's preventative maintenance program (described in Section 7) helps to ensure that all mechanical equipment is kept in reliable working order.

Section 7
Operation and Maintenance Plan

Operation and maintenance of RP-5 are described in this section. IEUA's plans for staffing the facility and performing preventive maintenance are discussed.

7.1 Staffing

RP-5 is fully staffed with operation and maintenance personnel. Operators are physically working at the plant 8 hours per day and are on-call 24 hours per day, 7 days per week. Key operators are provided with laptops and pagers for alarms and monitoring when the plant is unmanned. Certified operators at the plant are listed in Table 7-1. In addition to these personnel, the plant has a Manager of Operations for RP-5, who is a Grade V wastewater operator. IEUA has an Executive Manager of Operations, who is also a Grade V operator and is in charge of wastewater administration for the entire agency.

Table 7-1
Operations Staff

Operator Grade[1]	Position	Number of Persons[2]
V	Operations Supervisor	1
III	Operations Assistant	1
V	Senior Operator	3
V	Operator	2
IV	Operator	1
III	Operator	3
II	Operator	2
I	Operator	1

1. State Wastewater Certification
2. Source: Carollo, 2004.

Mechanical, electrical, and instrumentation maintenance personnel are also on duty as required. Table 7-2 lists the maintenance staff available to RP-5.

Table 7-2
Plant Maintenance Staff

Certification[1]	Position	Number of Persons[2]
III	Plant Maintenance Superintendent	1
I	Senior Plant Maintenance Technician	1
I	Technician II	4
I	Senior Mechanic	1

Table 7-2
Plant Maintenance Staff

Certification[1]	Position	Number of Persons[2]
	Mechanic II	4
II	Senior Instrumentation Technician	1
II	Instrumentation Technician II	3
I	Senior Electrician	1
I	Electrician II	3

1. California Water Environment Association Certification
2. Source: Carollo, 2004.

7.2 Preventive Maintenance Program

Under IEUA's preventive maintenance program, inspections, lubrications, and operational rotation and repair of all mechanical, electrical, and support equipment are regularly scheduled. In addition to retaining manufacturers' maintenance manuals, files are kept for all major equipment. Routine or regularly scheduled maintenance activities are carried out with the aid of detailed checklists to ensure that important checks and servicing are not overlooked and that complete records are kept for all major equipment components. An organized system, based on work orders with priority determined on a "need" basis, coordinates the operation and maintenance personnel at the plant. The maintenance department normally keeps lists of replacement parts necessary for specific equipment, and in many cases, stocks the replacement parts at the plant site.

7.3 Employee Training Program

The existing IEUA training program will remain in effect at RP-5. This program covers the procedures, rules and regulations that apply when working with recycled water, and basic cross-connection and backflow principles and procedures.

Section 8
Recycled Water Use

This section of the report describes the recycled water users, demands, distribution system, and on-site user facilities.

8.1 Users and Demands

The current IEUA recycled water distribution system is supplied by the following reclamation plants: RP-1, RP-4, RP-5 and CCWRF.

The distribution system supplies recycled water to five agencies: IEUA, San Bernardino County, City of Ontario, City of Chino, and City of Chino Hills. The recycled water is used primarily for landscape irrigation. Other uses include agricultural irrigation, industrial use, and groundwater recharge. Since RP-5 ties into the distribution system well downstream of the groundwater recharge connection, no RP-5 effluent is used directly for groundwater recharge.

The recycled water user rules and regulations are described in IEUA's Ordinance Nos. 69 and 75. Copies of these ordinances can be found in Appendix B.

Current recycled water users and their individual demands, type of use, and distribution system pressure zone (PZ) are listed below in Table 8-1. RP-5 supplies recycled water to the distribution system in the 800 pressure zone.

Table 8-1
Recycled Water Users

Recycled Water User Name	Type of Use	PZ	Total[2]
C W FARMS I	Agricultural Irrigation	800	316.93
C W FARMS II	Agricultural Irrigation	800	45.67
C W FARMS III	Agricultural Irrigation	800	257.76
C W FARMS IV	Agricultural Irrigation	800	691.71
CAL POLY POMONA	Agricultural Irrigation	800	334.01
CHINO DEVELOPMENT CORPORATION	Landscape Irrigation	800	38.16
CHINO HILLS FORD	Landscape Irrigation	800	5.28
CLEVELAND FARM #1	Agricultural Irrigation	800	223.80
Cal Aero Academy (K-8 SCHOOL)	Landscape Irrigation	800	10.74
LA BRUCHERIE FARMS	Agricultural Irrigation	800	133.44
NYENHUIS DAIRY	Agricultural Irrigation	800	431.38
PRESERVE MAINTENANCE CORP	Landscape Irrigation	800	7.04
PRESERVE MAINTENANCE CORP	Landscape Irrigation	800	6.08

Table 8-1
Recycled Water Users

Recycled Water User Name	Type of Use	PZ	Total[2]
PRESERVE MASTER MAINTENANCE	Landscape Irrigation	800	14.20
RICHARDSON, DON	Agricultural Irrigation	800	35.16
SUPERIOR SOD	Landscape Irrigation	800	192.04
SUPERIOR SOD	Landscape Irrigation	800	104.44
THE PRESERVE MASTER COMMUNITY	Landscape Irrigation	800	5.19
VIAVERDE NURSERY	Landscape Irrigation	800	7.24
VIRAMONTES EXPRESS	Landscape Irrigation	800	7.73
WATSON LAND COMPANY	Landscape Irrigation	800	6.39
WATSON LAND COMPANY	Landscape Irrigation	800	5.75
ALL COAST FOREST PRODUCTS	Landscape Irrigation	930	5.10
CAL POLY POMONA	Agricultural Irrigation	930	125.57
CITY OF CHINO	Landscape Irrigation	930	80.93
CITY OF CHINO	Landscape Irrigation	930	10.81
CITY OF CHINO AYALA PARK	Landscape Irrigation	930	26.07
CITY OF CHINO AYALA PARK	Landscape Irrigation	930	26.82
CLEVELAND FARM #2	Agricultural Irrigation	930	81.45
CLEVELAND FARM #2	Agricultural Irrigation	930	843.80
CLEVELAND FARM #2	Agricultural Irrigation	930	120.38
COLLEGE PARK COMMUNITY ASSOC	Landscape Irrigation	930	8.42
MAJESTIC MANAGEMENT	Landscape Irrigation	930	5.17
California Cogeneration	Industrial	930	46.84
SAN BDNO COUNTY FAIRGROUNDS	Landscape Irrigation	930	7.92
SUN CAL INLAND EMPIRE DIV	Landscape Irrigation	930	7.99
Big League Dreams	Landscape Irrigation	930	25.13
BRE Properties	Landscape Irrigation	930	8.16
C.U.S.D.	Landscape Irrigation	930	5.45
Caltrans	Landscape Irrigation	930	7.47
Chino Hills Business Park	Landscape Irrigation	930	6.20
Chino Hills High School	Landscape Irrigation	930	7.81
Chino Hills High School	Landscape Irrigation	930	6.74
Choung, Cu	Landscape Irrigation	930	26.17
Chino Hills City	Landscape Irrigation	930	8.23
Chino Hills City	Landscape Irrigation	930	8.32
Chino Hills City	Landscape Irrigation	930	8.50
Chino Hills City	Landscape Irrigation	930	10.30
Chino Hills City	Landscape Irrigation	930	10.28

Table 8-1
Recycled Water Users

Recycled Water User Name	Type of Use	PZ	Total[2]
Chino Hills City	Landscape Irrigation	930	9.79
Chino Hills City	Landscape Irrigation	930	12.75
Chino Hills City	Landscape Irrigation	930	7.44
Chino Hills City	Landscape Irrigation	930	5.14
Chino Hills City	Landscape Irrigation	930	9.77
Chino Hills City	Landscape Irrigation	930	8.31
Chino Hills City	Landscape Irrigation	930	7.00
Fieldstone Comm	Landscape Irrigation	930	6.66
Los Serranos Golf	Landscape Irrigation	930	97.97
Los Serranos Golf	Landscape Irrigation	930	42.93
Pine Corporate Ctr Assoc	Landscape Irrigation	930	5.86
Pinehurst Hills Comm Assoc	Landscape Irrigation	930	5.01
Ridgegate Neighborhood Assoc	Landscape Irrigation	930	6.80
Ridgegate Neighborhood Assoc	Landscape Irrigation	930	5.19
Ridgegate Neighborhood Assoc	Landscape Irrigation	930	7.13
Sycamore Heights Comm Assoc	Landscape Irrigation	930	5.06
Sycamore Heights Comm Assoc	Landscape Irrigation	930	5.16
Sycamore Heights Comm Assoc	Landscape Irrigation	930	9.21
Chino Creek Park	Landscape Irrigation	800	5.92
Greenlee Nursery	Landscape Irrigation	800	5.19
Chino Creek Park	Evaporation/Percolation	800	67.60
Ely	Recharge Basin	1158	126
RP-3	Recharge Basin	1158	655
Bootsma Farm (ORW-20)	Agricultural Irrigation	930	49.74
Cleveland Farms	Agricultural Irrigation	930	69.94
Cleveland Farms	Agricultural Irrigation	930	465.05
Cleveland Farms	Agricultural Irrigation	930	174.01
Cleveland Farms	Agricultural Irrigation	930	82.58
Cleveland Farms	Agricultural Irrigation	930	8.73
Legend Dairies (Petersma)	Agricultural Irrigation	930	110.29
David Li	Agricultural Irrigation	930	125.63
Murai Farms (Luke Li)	Agricultural Irrigation	930	141.57
Murai Farms (Luke Li)	Agricultural Irrigation	930	150.45
Ron LaBrucherie	Agricultural Irrigation	930	306.99
Sam Lewis Farm	Agricultural Irrigation	930	486.84
Yoog II Farm Inc.	Agricultural Irrigation	930	87.30

Table 8-1
Recycled Water Users

Recycled Water User Name	Type of Use	PZ	Total[2]
CalTrans	Landscape Irrigation	1050	15.48
CalTrans	Landscape Irrigation	1050	40.34
Cleveland Farms	Agricultural Irrigation	1050	193.31
CCC-S	Landscape Irrigation	1158	6.29
Fruit Growers	Industrial	1158	14.59
Kaiser Hospital	Landscape Irrigation	1158	10.51
Toyota	Landscape Irrigation	1158	12.58
Toyota	Landscape Irrigation	1158	13.37
Toyota	Landscape Irrigation	1158	13.96
Toyota	Landscape Irrigation	1158	9.41
Toyota	Landscape Irrigation	1158	8.77
Toyota	Landscape Irrigation	1158	10.18
Toyota	Landscape Irrigation	1158	7.69
Westwind Park	Landscape Irrigation	1158	39.53
Whispering Lakes Golf Course	Landscape Irrigation	1158	364.85
Bellevue Memorial Park	Landscape Irrigation	1158	53.51
City of Ontario (Soccer Complex)	Landscape Irrigation	1158	35.96
El Prado Golf Course	Landscape Irrigation	800	73.68
El Prado Regional Park	Landscape Irrigation	800	478.41
El Prado Golf Course (Meter Read)	Landscape Irrigation	800	54.75
El Prado Regional Park (Meter Read)	Landscape Irrigation	800	271.59

1. IEUA, 2010b. Demands shown are for the month of July 2009 through October 2009.
2. Current recycled water users may have multiple meters per site

8.2 Distribution System

The distribution system consists of the following major pipelines: CCWRF Recycle Water System, RP-4 Outfall, RP-1 Outfall Extension, West Edison, Ramona Feeder, and Solids Process Recycle. These pipelines form part of the Regional Recycled Water Distribution System, which is illustrated in Appendix F.

8.3 Recycled Water User Facilities

IEUA Ordinance No. 69 (IEUA, 2000), adopted by the IEUA Board of Directors in May, 2000, establishes rules, requirements, and responsibilities, under which, recycled water service is provided to customers. IEUA Ordinance No. 75 (IEUA, 2002) specifies requirements and incentives for recycled water use within the service area. Applicants for recycled water service agree to comply with the terms of their Recycled Water Use Permit, as well as applicable Federal, State and Local statutes, to protect public health. The on-site operational controls

must be appropriate for the beneficial use approved in the Recycled Water Use Permit for the safe and reliable delivery of recycled water. Specific identification, signage, and cross-connection prevention requirements include the following measures:

- All recycled water valves, outlets, quick couplers, and sprinkler heads shall be of a type, or secured in a manner that only permits operation by personnel authorized by the customer.
- All recycled water valves and outlets shall be appropriately tagged to warn the public and employees that the water is not intended nor allowed for drinking.
- All piping, valves and outlets shall be color-coded (purple) or otherwise marked to differentiate recycled water from non-recycled water facilities.
- Hose bibs shall not be used in the recycled water system; quick couplers or comparable connection devices shall be used instead.
- Adequate means of notification shall be provided to inform the public, employees and others that recycled water is being used. Such notification shall include the posting of conspicuous recycled water information signage with proper wording in both English and Spanish of sufficient size to be clearly read, which shall be posted at adequate intervals around the use area. Signage shall be in conformance with CDPH Title 22 regulations.
- Cross-connection prevention measures, such as backflow preventers or reduced pressure principle devices, shall be installed and maintained to comply with requirements of CDPH and local potable water purveyors.

The current users are served by the City of Ontario, or in the case of the Reliant Energy Power Station, directly by IEUA. The City of Ontario has a Recycled Water Use Ordinance (City of Ontario, 1999) that requires recycled water users to complete a Title 22 engineering report and obtain a user permit from the City. IEUA has a contract with Reliant Energy that requires them to comply with IEUA's Ordinance No. 69 and have an approved Title 22 engineering report.

IEUA encourages the maximum use of recycled water for beneficial purposes. As part of this effort, IEUA maintains guidance to educate and support local member agencies and recycled water customers in the proper design, installation, operation, and maintenance of their on-site recycled water systems.

IEUA maintains an employee training program that covers procedures used when working with recycled water, rules and regulations associated with recycled water use, hazards of working with recycled water, and basic cross-connection prevention and backflow principles and procedures.

Section 9
Conclusions and Recommendations

This chapter summarizes the findings of the evaluation of RP-5 for compliance with Title 22 Water Recycling Criteria. Conclusions and recommendations are presented.

9.1 Conclusions

This Title 22 Engineering Report demonstrates how IEUA's RP-5 provides reliable treatment capacity in compliance with Title 22 Water Recycling Criteria for an annual average flow of 16.3 mgd, peak dry weather capacity of 28.2 mgd, and peak wet weather capacity of 32.6 mgd for all facilities. Table 9-1 on the following page summarizes the rated capacity of each treatment process. Described in detail in Section 4, capacity is based on the following criteria:

- Design criteria and actual operating parameters;
- Provisions for redundant, standby, or alternative equipment or treatment processes; and
- On-site emergency storage.

Table 9-1
RP-5 Process Capacity Summary

Process	Peak Capacity[1] (mgd)	Annual Average Capacity With All Units in Service (mgd)	Title 22 Reliable Annual Average Capacity[2] (mgd)
Influent Pumping:			
Influent Pumping[3]	36	18	24
Preliminary Treatment:			
Bar screens	90	45	30
Grit basin	30	16.3	16.3
Primary Treatment:			
Primary Clarifiers	32.6	16.3	16.3
Secondary Treatment:			
Aeration Basins	23.4	17.1	16.3
Clarifiers	31.9	22.2	16.6
Tertiary Treatment:			
Filtration[4]	25.9	18.0	16.5
Chlorine Contact Basin[5]	23.5	16.3	16.3

1. Peak Capacity = total peak flow capacity with all units in service.
2. Title 22 Reliable Annual Capacity = annual average flow capacity conforming to the reliability requirements set forth in Title 22. Reliability may be provided by redundant, standby, or alternative equipment or processes. The specific means of establishing reliability is described in Section 4 for each treatment process.
3. The Influent Pump Station receives influent flow from the RP-5 service area. Flows from the RP-2 Lift Station enter RP-5 downstream of the Influent Pump Station.
4. Filtration Title 22 Annual Average Capacity is based on having one filter out of service.
5. Peak capacity is 23.5 mgd to provide the minimum 450 mg-min/L CT and 90 minute modal contact time required by Title 22 for peak dry weather flows based on modal contact time test (SFE Global, 2004).

9.2 Recommendations

RP-5 currently complies with Title 22 Water Recycling Criteria at an annual average capacity of 16.3 mgd. This is consistent with the RP-5 permit, RWQCB Order No. R8-2009-0021.

References

INLAND EMPIRE UTILITIES AGENCY

REGIONAL PLANT NO. 5

References

California, 2001. Code of Regulations, Title 22, Division 4, Chapter 3, Water Recycling Criteria, June 2001.

Carollo Engineers, 2004. "IEUA Regional Plant No. 5 Title 22 Engineering Report", December 2004.

City of Chino, 1998. Chino Municipal Code, Ordinance No. 98-12. Title 13 Water, Sewers and Utilities, Chapter 13.06, "Recycled Water Regulations".

City of Chino Hills, 1998. Chino Hills Municipal Code, Ordinance No. 101. Title 13 Public Services, Chapter 13.32, "Reclaimed Water Regulations".

City of Ontario, 1999. Ontario Municipal Code, Ordinance No. 2689. Title 6 Sanitation and Health, Chapter 8C, "Recycled Water Use".

IEUA, 2000. Ordinance No. 69, "An Ordinance of the Board of Directors of Inland Empire Utilities Agency, A Municipal Water District, Regulating the Availability and Use Recycled Water from the Regional Recycled Water Distribution System", adopted May 18, 2000.

IEUA, 2002. Ordinance No. 75, "An Ordinance of the Board of Directors of Inland Empire Utilities Agency, A Municipal Water District, Establishing Incentives and Encouraging the Use of Recycled Water from the Regional Recycled Water Distribution System", adopted May 15, 2002.

IEUA, 2007a. Operations and Technical Services Department Memorandum, RP-5/CCWRF Flow Projections, April 5, 2007

IEUA, 2007b. Recycled Water Sales Projection (AF) for FY06/07 to FY07/08 by Facility, received from IEUA March 2007.

IEUA, 2008. Draft Technical Memorandum No. 1, RP-5 De-Bottlenecking Core Group, May 29, 2008

IEUA, 20010a. Wastewater flow and quality records for 2009.

IEUA, 20010b. Agency Wide Recycled Water Users FY09/10.

RWQCB, 1995. "Santa Ana River Basin Water Quality Control Plan", 1995.

RWQCB, 2004. Resolution No. R8-2004-0001, "Incorporate an Updated Total Dissolved Solids (TDS) and Nitrogen Management Plan", January 2004.

RWQCB, 2008. Order No. R8-2008-0028, NPDES No. CA8000402, "Waste Discharge and Producer/User Reclamation Requirements for the Inland Empire Utilities Agency Regional Water Recycling Plant No. 5 Discharge to Chino Creek", September 5, 2008.

RWQCB, 2009. Order No. R8-2009-0021, National Pollution Discharge Elimination System (NPDES) Permit No. CA8000409, "Waste Discharge and Producer/user Reclamation Requirements for Inland Empire Utilities Agency Regional Water Recycling Facilities Surface Water Discharges and Recycled Water Use", July 20, 2009.

SFE Global, 2004. "Chlorine Contact Basin Contact Time Testing – Inland RP-5 WWTP, Final Report", Inland Empire Utilities Agency, Chino, California, June 2004.

Appendix A

ORDER NO. R8-2009-0021
NPDES NO. CA8000409

WASTE DISCHARGE AND PRODUCER /USER RECLAMATION REQUIREMENTS
FOR
INLAND EMPIRE UTILITIES AGENCY
REGIONAL WATER RECYCLING FACILITIES
SURFACE WATER DISCHARGES AND RECYCLED WATER USE

California Regional Water Quality Control Board
Santa Ana Region

July 20, 2009

ITEM: ***7**

SUBJECT: Issuance of Waste Discharge and Producer/User Reclamation Requirements for the Inland Empire Utilities Agency's Regional Water Recycling Facilities, Surface Water Discharges and Recycled Water Use, Order No. R8-2009-0021, NPDES No. CA8000409, San Bernardino County

DISCUSSION:

See attached Fact Sheet

RECOMMENDATIONS:

Adopt Order No. R8-2009-0021, NPDES No. CA8000409 as presented.

COMMENT SOLICITATION:

Comments were solicited from the discharger and the following agencies:

U.S. Environmental Protection Agency, Permits Issuance Section (WTR-5) – Doug Eberhardt
U.S. Army District, Los Angeles, Corps of Engineers - Regulatory Branch
U.S. Fish and Wildlife Service, Carlsbad – Christine Medak
State Water Resources Control Board, Office of the Chief Counsel – David Rice
State Department of Fish and Game, Los Alamitos - Ms. Latonio
California Department of Public Health, San Bernardino – Sean McCarthy
California Department of Public Health, Carpenteria - Jeff Stone
State Department of Water Resources, Glendale – Charles Keene
Santa Ana Watershed Project Authority – Celeste Cantu
Santa Ana River Dischargers Association – Ed Filadelfia
Orange County Water District - Nira Yamachika
San Bernardino County Transportation/Flood Control District – Naresh Varma
San Bernardino County Environmental Health Services – Daniel Avera
City of Chino, Public Works Department – Jose Alire
City of Chino Hills - Public Works Department
City of Fontana – Chuck Hays, chays@fontana.org
City of Montclair - Nicole Greene
City of Ontario – Mohamed El-Amamy
City of Upland – Maria Linzay
Cucamonga Valley Water District -
Inland Empire Waterkeeper – Autumn DeWoody
Orange County Coastkeeper - Garry Brown
Lawyers for Clean Water C/c San Francisco Baykeeper
Natural Resources Defense Council – David Beckman
Inland Empire Utilities Agency - Patrick Sheilds

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD

SANTA ANA REGION

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

ORDER NO. R8-2009- 0021
NPDES NO. CA8000409

WASTE DISCHARGE AND PRODUCER/USER RECLAMATION REQUIREMENTS FOR INLAND EMPIRE UTILITIES AGENCY REGIONAL WATER RECYCLING FACILITIES SURFACE WATER DISCHARGES AND RECYCLED WATER USE

The following Discharger is subject to waste discharge requirements as set forth in this Order:

Table 1. Discharger Information

Discharger/ Operator	Inland Empire Utilities Agency			
Name of Facility	Regional Water Recycling Plant No. 1 (RP-1)	Regional Water Recycling Plant No. 4 (RP-4)	Regional Water Recycling Plant No. 5 (RP-5)	Carbon Canyon Water Reclamation Facility (CCWRF)
Facility Address	2450 East Philadelphia Street	12811 Sixth Street	6068 Kimball Ave, Building "C".	14950 Telephone Avenue
	Ontario, CA 91761	Rancho Cucamonga, CA 91729	Chino, CA 91708	Chino, CA 91710
	San Bernardino County			
The U.S. Environmental Protection Agency (USEPA) and the Regional Water Quality Control Board have classified this discharge as a major discharge.				

The discharge by Inland Empire Utilities Agency (IEUA) from the discharge points identified below is subject to waste discharge requirements as set forth in this Order:

Table 2. Discharge Locations

Discharge Point	Effluent Description	Discharge Point Latitude	Discharge Point Longitude	Receiving Water
001	Tertiary treated effluent from RP-1	N33°56'39"	W117°38'34"	Prado Park Lake, overflow from the lake to an unnamed creek, then to Reach 1A of Chino Creek, a tributary to Reach 3 of Santa Ana River in Prado Basin
002	Tertiary treated effluent from RP-1&RP-4	N34°01'31"	W117°33'56"	Reach 1 of Cucamonga Creek, then to Mill Creek, then to Reach 1A of Chino Creek, a tributary to Reach 3 of Santa Ana River in Prado Basin
003	Tertiary treated effluent from RP-5	N33°57'44"	W117°40'41"	Reach 1B of Chino Creek, a tributary to Reach 3 of Santa Ana River
004	Tertiary treated effluent from CCWRF	N33°58'56	W117°41'48"	Reach 2 of Chino Creek, a tributary to Reach 3 of Santa Ana River
005	Recycled water from RP-1	N34°01'29"	W117°35'57"	Use area overlying Chino North "Max Benefit" GMZ (or Chino 1, 2, and 3 "Antidegradation" GMZs – see Fact Sheet)
006	Recycled water from RP-4	N34°04'59"	W117°31'35"	
007	Recycled water from RP-5	N33°57'51"	W117°40'24"	
008	Recycled water from CCWRF	N33°58'47"	W117°41'37"	
S-001	Stormwater from RP-1	N34°01'36"	W117°35'59"	Stormwater runoff to Reach 1 of Cucamonga Creek
S-002	Stormwater from RP-1	N34°01'28"	W117°35'58"	Stormwater runoff to Reach 1 of Cucamonga Creek

Table 3. Administrative Information

This Order was adopted by the Regional Water Quality Control Board on:	July 20, 2009
This Order shall become effective on:	July 20, 2009
This Order shall expire on:	July 1, 2014
The Discharger shall file a Report of Waste Discharge in accordance with title 23, California Code of Regulations, as application for issuance of new waste discharge requirements no later than:	January 2, 2014

I, Gerard J. Thibeault, 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 July 20, 2009.

Gerard J. Thibeault, Executive Officer

Table of Contents

List of Tables

List of Attachments

I. FACILITY INFORMATION

The following Discharger is subject to waste discharge requirements as set forth in this Order:

Table 4. Facility Information

Discharger/Operator	Inland Empire Utilities Agency			
Name of Facility (RWRF)	RP-1	RP-4	RP-5	CCWRF
Address	2450 East Philadelphia Street	12811 Sixth Street	6068 Kimball Avenue Building "C"	14950 Telephone Avenue
	Ontario, CA 91761	Rancho Cucamonga, CA 91729	Chino, CA 91708	Chino, CA 91710
	San Bernardino County			
Facility Contact, Title and Phone	Patrick O. Sheilds, Executive Manager of Operations, (909) 993-1806			
Authorized Person to Sign and Submit Reports	Patrick O. Sheilds, Executive Manager of Operations, (909) 993-1806			
Address	6075 Kimball Avenue, Chino, CA 91708			
Mailing/Billing Address	P.O. Box 9020, Chino Hills, CA 91709			
Type of Facility	POTW			
Facilities Permitted Flow	84.4 million gallons per day (mgd)			
Facility Design Flow	44 mgd	14 mgd	15 mgd (and 1.3 mgd RP-2 sludge treatment system wastewater flows)	11.4 mgd

II. FINDINGS

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

A. Background. The Inland Empire Utilities Agency (hereinafter Discharger, or IEUA) owns and operates a regional wastewater collection system and four regional water recycling facilities (hereinafter, Facilities), including Regional Water Recycling Plants Nos. 1, 4, and 5 and the Carbon Canyon Water Reclamation Facility (CCWRF). The Discharger is currently discharging from these Facilities pursuant to the following waste discharge and producer/user water reclamation requirements:

1. Order No. R8-2006-0010, National Pollutant Discharge Elimination System (NPDES) Permit No. CA0105279, as amended by Orders No. R8-2007-0045 and No. R8-2007-0078, for treated wastewater discharges from Regional Water Recycling Plant No. 1 (RP-1) and Regional Water Recycling Plant No. 4 (RP-4);

2. Order No. R8-2008-0028, NPDES No. CA8000402 for treated wastewater discharges from Regional Water Recycling Plant No. 5 (RP-5); and

3. Order No. R8-2004-0020, NPDES No. CA8000073, as amended by Orders No. R8-2006-0038 and No. R8-2007-0078, for treated wastewater discharges from Carbon Canyon Water Reclamation Facility (CCWRF).

The Discharger submitted a Report of Waste Discharge (ROWD), dated January 27, 2009, and applied for a NPDES permit to consolidate the three waste discharge and producer/user water reclamation requirements identified above into one permit to regulate a total discharge of up to 84.4 million gallons per day (mgd) of tertiary treated wastewater from RP-1, RP-4, RP-5, and CCWRF.

For the purposes of this Order, references to the “discharger” or “permittee” in applicable federal and state laws, regulations, plans, or policy are held to be equivalent to references to the Discharger herein.

B. Facility Description. IEUA owns and operates a regional wastewater collection system and four water recycling plants. Wastewater can be diverted to different plants via available routing options built into the regional system (see Figure 1 of Attachment C for further detail). After treatment, effluent/recycled water can be discharged to nearby outfall(s) or it can be recycled for industrial uses, irrigation and groundwater recharge. The wastewater treatment systems consist of primary, secondary, and tertiary treatment. Treated wastewater is discharged from various discharge points either to Prado Park Lake, Reach 1 of Cucamonga Creek, or Chino Creek. The lake and the creeks are tributaries to Reach 3 of the Santa Ana River within the Prado Basin Management Zone. Recycled water is used in areas overlying the Chino North “Maximum Benefit” Groundwater Management Zone (GMZ) (or Chino 1, 2, and 3 “Antidegradation” GMZs). Groundwater recharge of recycled water is regulated under separate waste discharge requirements. Attachment B provides maps of the area

around these Facilities. Attachment C provides flow schematics at each Facility, the IEUA System-Wide influent flow interrelationship diagram, and a schematic of the IEUA System-Wide Water Recycling Distribution System.

C. Legal Authorities. This Order is issued pursuant to section 402 of the federal Clean Water Act (CWA) and implementing regulations adopted by the U.S. Environmental Protection Agency (USEPA) and chapter 5.5, division 7 of the California Water Code (commencing with section 13370). It shall serve as an NPDES permit for point source discharges from this Facility to surface waters. This Order also serves as Waste Discharge Requirements (WDRs) pursuant to article 4, chapter 4, Division 7 of the Water Code (commencing with section 13260).

D. Background and Rationale for Requirements. The Regional Water Board developed the requirements in this Order based on information submitted as part of the application, through monitoring and reporting programs, and other available information. The Fact Sheet (Attachment F), which contains background information and rationale for Order requirements, is hereby incorporated into this Order and constitutes part of the Findings for this Order. Attachments A through E and G through K are also incorporated into this Order.

E. California Environmental Quality Act (CEQA). Under Water Code section 13389, this action to adopt an NPDES permit is exempt from the provisions of CEQA, Public Resources Code section 21000 et seq. (*County of Los Angeles v. California State Water Resources Control Board* (2006) 143 Cal.App.4th 985, mod. (Nov. 6, 2006, B184034) 50 Cal.Rptr.3d 619, 632-636). This action also involves the re-issuance of waste discharge requirements for an existing facility that discharges treated wastewater to land and as such, is exempt from the provisions of California Environmental Quality Act (commencing with Section 21100) in that the activity is exempt pursuant to Title 14 of the California Code of Regulations Section 15301.

F. Technology-based Effluent Limitations. Section 301(b) of the CWA and implementing USEPA permit regulations at section 122.44, title 40 of the Code of Federal Regulations[1], require that permits include conditions meeting applicable technology-based requirements at a minimum, and any more stringent effluent limitations necessary to meet applicable water quality standards. The discharge authorized by this Order must meet minimum federal technology-based requirements based on Secondary Treatment Standards at Part 133 and/or Best Professional Judgment (BPJ) in accordance with Part 125, section 125.3. A detailed discussion of the technology-based effluent limitations development is included in the Fact Sheet (Attachment F).

[1] *All further statutory references are to title 40 of the Code of Federal Regulations unless otherwise indicated.*

G. Water Quality-Based Effluent Limitations. Section 301(b) of the CWA and section 122.44(d) require that permits include limitations more stringent than applicable federal technology-based requirements where necessary to achieve applicable water quality standards. This Order contains requirements, expressed as a technology equivalence requirement, more stringent than secondary treatment requirements. These requirements are necessary to meet applicable water quality standards.

The rationale for these requirements, which consist of tertiary or equivalent treatment requirements and other provisions, is discussed in the Fact Sheet.

Section 122.44(d)(1)(i) mandates that permits include effluent limitations for all pollutants that are or may be discharged at levels that have the reasonable potential to cause or contribute to an exceedance of a water quality standard, including numeric and narrative objectives within a standard. Where reasonable potential has been established for a pollutant, but there is no numeric criterion or objective for the pollutant, water quality-based effluent limitations (WQBELs) must be established using: (1) USEPA criteria guidance under CWA section 304(a), supplemented where necessary by other relevant information; (2) an indicator parameter for the pollutant of concern; or (3) a calculated numeric water quality criterion, such as a proposed state criterion or policy interpreting the state's narrative criterion, supplemented with other relevant information, as provided in section 122.44(d)(1)(vi).

H. 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 Water 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.

In addition, the Basin Plan implements State Water Resources Control Board (State Water Board) Resolution No. 88-63, which established State policy that all waters, with certain exceptions, should be considered suitable or potentially suitable for municipal or domestic supply. Based on the criteria specified in the State Water Board Resolution, the Basin Plan specifies that Reaches 1A, 1B, and 2 of Chino Creek, Reach 1 of Cucamonga Creek and Reach 5 of the Santa Ana River, beginning at the intersection of Orange Avenue in the City of Redlands, and downstream reaches are excepted from the municipal and domestic supply beneficial use.

As discussed in detail in the Fact Sheet (Attachment F), beneficial uses applicable to the Prado Basin Management Zone, Reach 1 of Cucamonga Creek, Reaches 1A, 1B, and 2 of Chino Creek, and Reach 3 of the Santa Ana River are as follows:

Table 5. Basin Plan Beneficial Uses

Discharge Point	Receiving Water	Beneficial Uses
001	Prado Park Lake overflow from the lake to an unnamed creek, then to Reach 1A of Chino Creek	Present or Potential: Water contact recreation (REC-1), non-contact water recreation (REC-2), warm freshwater habitat, wildlife habitat (WILD), and rare, threatened and endangered species. Recreational use at Prado Park Lake is restricted to fishing and boating. Excepted from Municipal and Domestic Supply.
002	Reach 1 of Cucamonga Creek, then to Mill Creek, thence to Reach 1A of Chino Creek	Present or Potential: Groundwater Recharge, Water contact recreation (REC-1), non-contact water recreation (REC-2), Limited warm freshwater habitat, and wildlife habitat (WILD). Excepted from Municipal and Domestic Supply.
003	Reach 1B of Chino Creek	Present or Potential: Water contact recreation (REC-1), non-contact water recreation (REC-2), warm freshwater habitat, wildlife habitat (WILD), and rare, threatened and endangered species. Excepted from Municipal and Domestic Supply.
004	Reach 2 of Chino Creek	Present or Potential: Groundwater Recharge, Water contact recreation (REC-1), non-contact water recreation (REC-2), Cold freshwater habitat, and wildlife habitat (WILD). Excepted from Municipal and Domestic Supply.
001, 002, 003, 004, S-001, & S-002	Reach 3 of Santa Ana River within Prado Basin Area	Present or Potential: Agricultural supply, groundwater recharge, water contact recreation, non-contact water recreation, warm freshwater habitat, wildlife habitat, and rare, threatened or endangered species. Excepted from Municipal and Domestic Supply.
001, 002, 003, 004, 005, 006, 007, 008, S-001, & S-002	Chino North “Max Benefit” GMZ/Chino 1, 2 and 3 “antidegradation” GMZs	Present or Potential: Municipal and domestic supply, agricultural supply, industrial service supply, and industrial process supply.
	Orange GMZ (affected GMZ downstream of discharge points)	Present or Potential: Municipal and domestic supply, agricultural supply, industrial service supply, and industrial process supply.

Requirements of this Order implement the Basin Plan.

I. National Toxics Rule (NTR) and California Toxics Rule (CTR). USEPA adopted the NTR on December 22, 1992, and later amended it on May 4, 1995 and November 9, 1999. About forty criteria in the NTR applied in California. On May 18, 2000, USEPA adopted the CTR. The CTR promulgated new toxics criteria for California and, in addition, incorporated the previously adopted NTR criteria that were applicable in the state. The CTR was amended on February 13, 2001. These rules contain water quality criteria for priority pollutants.

J. Compliance Schedules and Interim Requirements – Not Applicable

K. State Implementation Policy. On March 2, 2000, the State Water Board adopted the *Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California* (State Implementation Policy or SIP). The SIP became effective on April 28, 2000 with respect to the priority pollutant criteria promulgated for California by the USEPA through the NTR and to the priority pollutant objectives established by the Regional Water Board in the Basin Plan. The SIP became effective on May 18, 2000 with respect to the priority pollutant criteria promulgated by the USEPA through the CTR. The State Water Board adopted amendments to the SIP on February 24, 2005 that became effective on July 13, 2005. The SIP establishes implementation provisions for priority pollutant criteria and objectives and provisions for chronic toxicity control. Requirements of this Order implement the SIP.

L. Alaska Rule. On March 30, 2000, USEPA revised its regulation that specifies when new and revised state and tribal water quality standards (WQS) become effective for CWA purposes. (40 C.F.R. section 131.21; 65 Fed. Reg. 24641 (April 27, 2000).) Under the revised regulation (also known as the Alaska rule), new and revised standards submitted to USEPA after May 30, 2000, must be approved by USEPA before being used for CWA purposes. The final rule also provides that standards already in effect and submitted to USEPA by May 30, 2000 may be used for CWA purposes, whether or not approved by USEPA.

M. Stringency of Requirements for Individual Pollutants. This Order contains both technology-based and water quality based effluent limitations for individual pollutants. The technology-based effluent limitations consist of restrictions on BOD_5 and Suspended Solids. Restrictions on the same pollutants are discussed in Section IV.B.2. of Attachment F. This Order's technology-based pollutant restrictions implement the minimum, applicable federal technology-based requirements. In addition, this Order contains effluent limitations more stringent than the minimum, federal technology-based requirements that are necessary to meet water quality standards. These limitations are not more stringent than required by the CWA.

Water quality-based effluent limitations have been scientifically derived to implement water quality objectives that protect beneficial uses. Both the beneficial uses and the water quality objectives have been approved pursuant to federal law and are the applicable federal water quality standards. To the extent that toxic pollutant water quality-based effluent limitations were derived from the CTR, the CTR is the applicable standard pursuant to section 131.38. The scientific procedures for calculating the individual water quality-based effluent limitations for priority pollutants are based on the CTR-SIP, which was approved by USEPA on May 18, 2000. With the exception of certain surface water standards changes adopted as part of the Nitrogen/TDS Basin Plan Amendment (see Section H, above), all beneficial uses and water quality objectives contained in the Basin Plan were approved under state law and submitted to and approved by USEPA prior to May 30, 2000. Any water quality objectives and beneficial uses submitted to USEPA prior to May 30, 2000, but not approved by USEPA before that date, are nonetheless "applicable water quality standards for purposes of the CWA" pursuant to section 131.21(c)(1). The surface water standards changes adopted as part of the Nitrogen/TDS Basin Plan Amendment were approved by USEPA on June 20, 2007.

N. Antidegradation Policy. Section 131.12 requires that the state water quality standards include an antidegradation policy consistent with the federal 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 quality of waters be maintained unless degradation is justified based on specific findings. The Regional Water Board's Basin Plan implements, and incorporates by reference, both the state and federal antidegradation policies. As discussed in the Fact Sheet, discharges in accordance with the terms and conditions of this Order will not result in a lowering of water quality. Therefore, the permitted discharges are consistent with the antidegradation provisions of section 131.12 and State Water Board Resolution No. 68-16.

O. Anti-Backsliding Requirements. Sections 402(o)(2) and 303(d)(4) of the CWA and federal regulations at title 40, Code of Federal Regulations section 122.44(l) prohibit backsliding in NPDES permits. These anti-backsliding provisions require effluent limitations in a reissued permit to be as stringent as those in the previous permit. With the exception of the average monthly limitation for free cyanide, all effluent limitations in this Order are at least as stringent as the effluent limitations in the previous Orders and are consistent with the anti-backsliding requirements of the CWA and federal regulations.

P. Endangered Species Act. This Order does not authorize any act that results in the taking of a threatened or endangered species or any act that is now prohibited, or becomes prohibited in the future, under either the California Endangered Species Act (Fish and Game Code sections 2050 to 2097) or the Federal Endangered Species Act (16 U.S.C.A. sections 1531 to 1544). This Order requires compliance with effluent limits, receiving water limits, and other requirements to protect the beneficial uses of waters of the state. The Discharger is responsible for meeting all requirements of the applicable Endangered Species Act.

Q. Monitoring and Reporting. Section 122.48 requires that all NPDES permits specify requirements for recording and reporting monitoring results. Water Code sections 13267 and 13383 authorizes the Regional Water 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.

R. Pretreatment: The Discharger has established an approved regional pretreatment program. The approved pretreatment program and its components, such as Ordinance No.97-OR5, local limits (adopted by the Discharger in 2000), and control mechanisms, among others, are hereby made an enforceable condition of this Order.

S. 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. However, this Order includes Regional Water Board biosolids requirements.

T. 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).

This Order requires the Discharger and other governmental agencies[2] to obtain enrollment for regulation under the General Water Quality Order No. 2006-0003. The Discharger has already enrolled.

[2] *Member agencies and sewering agencies discharging wastewater into the Facility.*

U. Standard and Special Provisions. Standard Provisions, which apply to all NPDES permits in accordance with section 122.41, and additional conditions applicable to specified categories of permits in accordance with section 122.42, are provided in Attachment D. The Discharger must comply with all standard provisions and with those additional conditions that are applicable under section 122.42. The Regional Water Board has also included in this Order special provisions applicable to the Discharger. The rationale for the special provisions contained in this Order is provided in the attached Fact Sheet.

V. Provisions and Requirements Implementing State Law. The provisions/requirements in subsections IV.B, IV.C, V.B, and VI.C. of this Order are included to implement state law only. These provisions/requirements are not required or authorized under the federal CWA; consequently, violations of these provisions/requirements are not subject to the enforcement remedies that are available for NPDES violations.

W. 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 notification are provided in the Fact Sheet of this Order.

X. 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 Hearing are provided in the Fact Sheet of this Order.

IT IS HEREBY ORDERED, that this Order supersedes Order No. R8-2006-0010 as amended by Orders No. R8-2007-0045 and No. R8-2007-0078; Order No. R8-2008-0028, and Order No. R8-2004-0020 as amended by Order Nos. R8-2006-0038, and R8-2007-0078, except for enforcement purposes, and, in order to meet the provisions contained in division 7 of the Water Code (commencing with section 13000) and regulations adopted thereunder, and the provisions of the federal Clean Water Act (CWA) and regulations and guidelines adopted thereunder, the Discharger shall comply with the requirements in this Order.

III. DISCHARGE PROHIBITIONS

A. The direct discharge of secondary treated wastewater to Chino Creek and Reach 1 of Cucamonga Creek other than when the flow[3] in the creeks results in a dilution of 20:1 or more at the point of discharge is prohibited.

B. Discharge of wastewater at a location or in a manner different from those described in this Order is prohibited.

C. The bypass or overflow of untreated wastewater or wastes to surface waters or surface water drainage courses is prohibited, except as allowed in Standard Provision I.G. of Attachment D, Federal Standard Provisions.

D. The discharge of any substances in concentrations toxic to animal or plant life is prohibited.

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

IV. EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS

A. Effluent Limitations –Discharge Points (DP) 001, 002, 003, and 004

Unless otherwise specifically specified hereinafter, compliance with the following effluent limitations is measured at monitoring locations M-001, M-002, M-003 and M-004 as described in the attached MRP (Attachment E).

1. Final Effluent Limitations for discharges under conditions <u>without</u> 20:1 dilution in the receiving water – DPs 001, 002, 003 and 004

a. The Discharge shall maintain compliance with the following effluent limitations at:

(1) DPs 001, 002, 003 and 004 with compliance measured at Monitoring Locations M-001A & B, M-002A & B, M-003 and M-004, respectively, as described in the attached MRP:

Table 6. Effluent Limitations at DP 001 through DP 004

Parameter	Units	Effluent Limitations				
		Average Monthly	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
Biochemical Oxygen Demand 5-day @ 20°C	mg/L	20	30	--	--	--
Total Suspended Solids	mg/L	20	30	--	--	--
Ammonia-Nitrogen	mg/L	4.5	--	--	--	--
Total Chlorine Residual[3]	mg/L					0.1

(2) DPs 001 and 002 with compliance measured at Monitoring Locations M-001B and M-002A, respectively, as described in the attached MRP:

[3] *See Section VII.M. – Compliance Determination.*

Table 7. Effluent Limitations Applicable at DP 001 and DP 002 only

Parameter	Units	Effluent Limitations		
		Average Monthly	Average Weekly	Maximum Daily
Free Cyanide	µg/L	4.2	--	8.5
Bis(2-ethylhexyl) Phthalate	µg/L	5.9		11.9
Selenium	µg/L	4.1		8.2

(3) DP 003 with compliance measured at Monitoring Location M-003, as described in the attached MRP:

Table 8. Effluent Limitations Applicable at DP 003 only

Parameter	Units	Effluent Limitations		
		Average Monthly	Average Weekly	Maximum Daily
Free Cyanide	µg/L	4.6	--	7.3
Bromodichloromethane	µg/L	46	--	92

(4) DP 004 with compliance measured at Monitoring Location M-004, as described in the attached MRP:

Table 9. Effluent Limitations Applicable at DP 004 only

Parameter	Units	Effluent Limitations		
		Average Monthly	Average Weekly	Maximum Daily
Free Cyanide	µg/L	4.3	--	8.5
Bis(2-ethylhexyl) Phthalate	µg/L	5.9	--	11.9

b. **Percent Removal:** The average monthly percent removal of BOD 5-day 20°C and total suspended solids shall not be less than 85 percent. (See Compliance Determination Section VII.N.)

c. **TDS Limitations** - The lower of the two total dissolved solids (TDS) limits specified in (1) or (2), below, is the limit.

(1) The 12-month flow weighted running average TDS constituent concentration and mass emission rates shall not exceed 550 mg/L and 366,960 lbs/day[4], respectively. This limitation may be met on an agency-wide basis using flow weighted averages of the discharges from the Discharger's RP-1, RP-4, RP-5 and CCWRF, or

(2) The 12-month flow weighted running average TDS concentration shall not exceed the 12-month flow weighted running average TDS concentration in the water supply by more than 250 mg/L[5]. This limitation may be met on an agency-wide basis using flow weighted averages of the water supplied to the Discharger's RP-1, RP-4, RP-5 and CCWRF service areas.

d. The 12-month flow weighted running average Total Inorganic Nitrogen (TIN) concentration and mass emission rates shall not exceed 8 mg/L and 5,338 lbs/day[6], respectively. This limitation may be met on an agency-wide basis using flow weighted averages of the discharges from the Discharger's RP-1, RP-4, RP-5 and CCWRF.

e. The discharge shall at all times be adequately oxidized, filtered, and disinfected treated wastewater and shall meet the following limitations.

(1) The turbidity of the filtered wastewater shall not exceed any of the following:

(a) Average of 2 Nephelometric Turbidity Unit (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) The disinfected effluent shall meet the following:

(a) When chlorine disinfection process is utilized following filtration, a CT (the product of total chlorine residual and modal contact time 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[7], based on peak dry weather design flow[8;] shall be provided[9].

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4 *Based on wasteload allocation volume of 80 mgd and concentration of 550 mg/L.*

5 *See Section VII.L. - Compliance Determination.*

6 *Based on wasteload allocation volume of 80 mgd and concentration of 8 mg/L.*

7 *The modal contact time requirement is applicable only to the use of recycled water and not to surface water discharges, provided the receiving water provides a 1:1 dilution. The receiving water considered here shall exclude upstream POTW effluent flow.*

8 *"Peak Dry Weather Flow" means the arithmetic mean of the maximum peak flow rates sustained over some period of time (for example three hours) during the maximum 24-hour dry weather period. Dry weather period is defined as period of little or no rainfall.*

(b) When a disinfection process combined with the filtration process is utilized, the combined process shall demonstrate[10] inactivation and/or removal of 99.999 percent of the plaque-forming units of F-specific bacteriophage MS-2[11], 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.

(c) The weekly average concentration of total coliform bacteria shall not exceed a Most Probable Number (MPN) of 2.2 total coliform bacteria per 100 milliliters (ml). (see Compliance Determination VII.J.1., below)

(d) 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 30-day period.

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

f. There shall be no visible oil and grease in the discharge.

g. The pH of the discharge shall be within 6.5 to 8.5 pH[12].

h. Wastewater discharged at DP 001 shall be limited to treated and disinfected effluent that meets the conditions in Section IV.A.1.

i. Wastewater discharged at DP 002 through DP 004 shall be limited to treated and disinfected effluent that meets the conditions in Section IV.A.1., except for discharges of treated wastewater that meets the conditions specified in Section IV.A.4., when the flow[13] in Reaches 1B or 2 of Chino Creek or Reach 1 of Cucamonga Creek results in a dilution of 20:1 or more at the point of discharge.

2. Interim Effluent Limitations – Not Applicable

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9 *Modal contact time and CT shall be calculated based on the minimum one-hour average value in a 24-hr period.*

10 *Meeting the discharge limits in A.1.e.(2).(c),(d), and (e) shall constitute the demonstration required by this sub-paragraph.*

11 *F-Specific bacteriophage MS-2 means a strain of a specific type of virus that infects coliform bacteria that is traceable to the American Type Culture Collection (ATCC) 15597B1) and is grown on lawns of E. coli (ATCC 15597).*

12 *See Section VII.K. Compliance Determination.*

13 *Exclusive of discharges to surface waters from upstream publicly owned treatment works.*

3. Toxicity Requirements/Discharge Specifications

a. There shall be no acute or chronic toxicity in the plant effluent nor shall the plant effluent cause any acute or chronic toxicity in the receiving water. All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in human, plant, animal, or indigenous aquatic life. This Order contains no numeric limitation for toxicity. However, the Discharger shall conduct chronic toxicity monitoring.

b. The Discharger shall implement the accelerated monitoring as specified in Attachment E when the result of any single chronic toxicity test of the effluent exceeds 1.0 TUc.

4. Effluent Limitations at DPs 002, 003, and 004, Under Conditions <u>with</u> 20:1 or More Dilution

The discharge of treated and disinfected effluent when the creek flow[14] at monitoring locations R-002U, R-003U, and/or R-004U results in a dilution of 20:1 (receiving water flow : wastewater flow) or more shall maintain compliance with the following effluent limitations at DPs 002, 003, and/or 004 with compliance measured at Monitoring Locations M002, M003 and M-004, respectively, as described in the attached MRP.

a. Numeric Effluent Limitations

Table 10. Effluent Limitations Under 20:1 Dilution

Parameter	Units	Effluent Limitations			
		Average Monthly	Average Weekly	Instantaneous Minimum	Instantaneous Maximum
Biochemical Oxygen Demand 5-day @ 20°C	mg/L	30	45	- -	- -
Total Suspended Solids	mg/L	30	45	- -	- -
Total Residual Chlorine	mg/L	-	-	-	2.1

b. Treated wastewater shall at all times be adequately oxidized and disinfected wastewater and shall meet the following limitations:

(1) The weekly average number of coliform bacteria does not exceed a median of 23 per 100 milliliters as determined from the daily coliform bacteria values for the last seven (7) days. (see also Compliance Determination VII.J.2., below)

[14] *Exclusive of discharges to surface waters from upstream publicly owned treatment works.*

(2) The discharge shall be considered adequately oxidized if the 5-day @ 20°C Biochemical Oxygen Demand and Total Suspended Solids constituent concentrations of the discharge are less than or equal to the limitations shown in IV.A.4.a., above.

c. The monthly average biochemical oxygen demand and suspended solids concentrations of the discharge shall not be greater than fifteen percent (15%) of the monthly average influent concentration.

d. The pH of the discharge shall be within 6.5 to 8.5 pH[15].

B. Land Discharge Specifications – Not Applicable

C. Reclamation Specifications – DP 005 through DP 008

1. Upon the effective date of this Order, the use of recycled water for parks, landscape irrigation, and/or other similar uses shall maintain compliance with the following effluent limitations at DP 005 through DP 008 with compliance measured at monitoring locations REC-001 through REC-004, respectively, and where representative samples of recycled water can be obtained for laboratory testing and analysis as described in the attached Monitoring and Reporting Program (Attachment E). The Discharger shall submit for approval by the Executive Officer a list of other monitoring location(s) not specified herein where representative samples of recycled water could be obtained for laboratory testing and analysis.

   a. Physical/Biological Limitations:

Table 11. Recycled Water Effluent Limitations

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

   b. TDS Limitations: The following TDS limitations apply to recycled water uses, except groundwater recharge, that would affect underlying local Groundwater Management Zone(s). These limitations may be met on an agency-wide basis using flow-weighted averages of the discharges from the Discharger's RP-1, RP-4, RP-5 and CCWRF.

[15] *See Section VII.K. Compliance Determination*

(1) If maximum benefit is demonstrated (see Provisions VI.C.6.), the 12-month flow weighted running average total dissolved solids concentration shall not exceed 550 mg/L.

(2) If maximum benefit is not demonstrated (see Provisions VI.C.6.), the 12-month flow weighted running average total dissolved solids concentration shall not exceed the following:

Table 12. Recycled Water Effluent TDS Limitations

Groundwater Management Zone	TDS limit, mg/L
Chino 1	280
Chino 2	250
Chino 3	260

c. Recycled water described in Section 60307(a) of Division 4, Chapter 3, Title 22, California Code of Regulations and for irrigation of food crops, parks and playground, school yards, residential landscaping and other irrigation uses not specified in Section 60304(a) of Division 4, Chapter 3, Title 22, California Code of Regulations or not prohibited in other Sections of the California Code of Regulations shall at all times be adequately oxidized, filtered, and disinfected tertiary treated wastewater and shall meet the following limitations:

(1) The turbidity of the filter effluent when filtration is through natural undisturbed soils or a bed of filter media 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) The disinfected effluent shall meet the following:

(a) The weekly average total coliform bacteria[16] shall not exceed a Most Probable Number (MPN) of 2.2 total coliform bacteria per 100 milliliters (ml).
(b) 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 30-day period.
(c) No total coliform sample shall exceed an MPN of 240 total coliform bacteria per 100 ml.

[16] *See Compliance Determination Section VII.J.1.*

(d) A chlorine disinfection process following filtration that provides a CT (the product of total chlorine residual and modal contact time[17] 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.

d. Recycled water used for irrigation of food crops where the edible portion is produced above ground and not contacted by the recycled water shall at all times be adequately oxidized and disinfected so that average weekly total coliform bacteria in the disinfected effluent does not exceed a most probable number (MPN) of 2.2 per 100 milliliters utilizing the bacteriological results of the last seven days for which analyses have been completed, and the number of total coliform bacteria does not exceed an MPN of 23 per 100 milliliters in more than one sample in any 30-day period.

e. Recycled water used for the uses listed below shall be an oxidized and disinfected water so that the average weekly total coliform bacteria[18] in the disinfected effluent does not exceed a most probable number (MPN) of 23 per 100 milliliters utilizing the bacteriological results of the last seven days for which analyses have been completed, and the number of total coliform bacteria does not exceed an MPN of 240 per 100 milliliters in more than one sample in any 30 day period.

(1) Industrial boiler feed, nonstructural fire fighting, backfill consolidation around nonpotable piping, soil compaction, mixing concrete, dust control on roads and streets, cleaning roads, sidewalks and outdoor work areas and industrial process water that will not come into contact with workers.
(2) Irrigation of cemeteries, freeway landscaping, restricted access golf courses, ornamental nursery stock and sod farms where access by the general public is not restricted, pasture for animals producing milk for human consumption, and any nonedible vegetation where access is controlled so that irrigated area cannot be used as if it were part of a park, playground or school yard.

f. For recycled water uses specified in Sections 60304 and 60307 of Title 22 where filtration is provided pursuant Section 60301.320(a) and coagulation is not used as part of the treatment process, the Discharger shall comply with the following:

(1) The turbidity of the influent to the filters is continuously measured and the influent turbidity does not exceed 5 NTU for more than 15 minutes and never exceeds 10 NTU;
(2) The filtered wastewater turbidity shall not exceed 2 NTU within any 24-hour period; and;

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[17] *Modal contact time and CT shall be calculated daily based on the minimum one-hour average value in a 24-hour period.*

[18] *See Compliance Determination Section VII.J.2.*

(3) Should the filter influent turbidity exceed 5 NTU for more than 15 minutes, chemical addition shall be automatically activated if available, if not, the wastewater shall be diverted.

2. For new reuse sites, the use of recycled water shall only commence after the California Department of Public Health (CDPH) grants final approval for such use. The Discharger shall provide the Regional Water Board with a copy of the CDPH approval letter within 30 days of the approval notice.

3. The Discharger shall be responsible for assuring that recycled water is delivered and utilized in conformance with this Order, the recycling criteria contained in Title 22, Division 4, Chapter 3, Sections 60301 through 60355, California Code of Regulations. The Discharger shall conduct periodic inspections of the facilities of the recycled water users to monitor compliance by the users with this Order.

4. 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 the 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.

5. The Discharger shall, within 60 days of the adoption of this Order, review and update as necessary its program to conduct compliance inspections of recycled water reuse sites. Inspections shall determine the status of compliance with the Discharger's Rules and Regulations for Recycled Water Use.

6. 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.

7. Prior to delivering recycled water to any new user, the Discharger shall submit to the California Department of Public Health and the County Environmental Health Department a report containing the following information for review and approval:

   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 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.

8. The Discharger shall require the user(s) 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.

9. Recycled water shall at all times be maintained within the property lines of any user. There shall be no direct or indirect discharge of recycled water into drainage systems that could affect surface water quality standards.

D. Stormwater Discharge Specifications – S-001 and S-002

1. Storm water[19] discharges shall maintain compliance with the following effluent limitations at S-001 and S-002 with compliance measured at monitoring locations STORM-001 and STORM-002 and shall not:

a. Cause or contribute to a violation of any applicable water quality standards contained in the Basin Plan or in the State or Federal regulations.

b. Cause or threaten to cause pollution, contamination, or nuisance.

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19 *Storm water means storm water runoff and surface runoff and drainage.*

c. Contain a hazardous substance equal to or in excess of a reportable quantity listed in 40 CFR Part 117 and/or 40 CFR Part 302.

d. Adversely impact human health or the environment.

e. Result in noncompliance with the lawful requirements of municipalities, counties, drainage districts, and other local agencies on storm water discharges into storm drain systems or other courses under their jurisdiction.

2. Stormwater discharges from this Facility shall comply with the Stormwater Requirements in Attachment J and K.

3. The Discharger must update and implement the Storm Water Pollution Prevention Plan for the Facility in accordance with Attachment J of this Order.

V. RECEIVING WATER LIMITATIONS

A. Surface Water Limitations

1. Receiving water limitations are based upon water quality objectives contained in the Basin Plan. As such, they are a required part of this Order. The discharge shall not cause the following in Prado Park Lake, Reach 1 of Cucamonga Creek, Reaches 1A, 1B and 2 of Chino Creek or Reach 3 of the Santa Ana River and downstream reaches:

   a. Coloration of the receiving waters, which causes a nuisance or adversely affects beneficial uses.

   b. Deposition of oil, grease, wax or other materials in the receiving waters in concentrations which result in a visible film or in coating objects in the water, or which cause a nuisance or affect beneficial uses.

   c. An increase in the amounts of suspended or settleable solids in the receiving waters, which will cause a nuisance or adversely affect beneficial uses as a result of controllable water quality factors.

   d. Taste or odor-producing substances in the receiving waters at concentrations, which cause a nuisance or adversely affect beneficial uses.

   e. The presence of radioactive materials in the receiving waters in concentrations, which are deleterious to human, plant or animal life.

   f. The depletion of the dissolved oxygen concentration below 5.0 mg/L.

   g. The temperature of the receiving waters to be raised above 90°F (32°C) during the period of June through October, or above 78°F (26°C) during the rest of the year.

h. The concentration of pollutants in the water column, sediments, or biota to adversely affect the beneficial uses of the receiving water. The discharge shall not result in the degradation of inland surface water communities and populations, including vertebrate, invertebrate, and plant species.

2. The discharge of wastes shall not cause a violation of any applicable water quality standards for receiving waters adopted by the Regional Water Board or State Water Board, as required by the Clean Water Act and regulations adopted thereunder.

3. Pollutants not specifically mentioned and limited in this Order shall not be discharged at levels that will bioaccumulate in aquatic resources to levels, which are harmful to human health or animal life.

4. The discharge shall not contain constituent concentrations of mercury that will result in the bioaccumulation of methylmercury in fish flesh tissue greater than 0.3 milligram methylmercury/kilogram. (See also Section VI.C.1.e. and VI.C.2.a., below).

B. Groundwater Limitations

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

VI. PROVISIONS

A. Standard Provisions

1. The Discharger shall comply with all Standard Provisions included in Attachment D of this Order.

2. The Discharger shall comply with the following provisions:

   a. 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.

b. In the event the Discharger does not comply or will be unable to comply for any reason, with any prohibition, discharge limitations (e.g., maximum daily effluent limitation), or receiving water limitation of this Order, the Discharger shall notify the Regional Water Board by telephone (951) 782-4130 within 24 hours of having knowledge of such noncompliance, and shall confirm this notification in writing within five days, unless the Regional Water Board waives confirmation. 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.

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

d. 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.

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

(1) Violation of any terms or conditions of this Order;
(2) Obtaining this Order by misrepresentation or failure to disclose fully all relevant facts, or;
(3) In addition to any other grounds specified herein, this Order may be modified or revoked at any time if, on the basis of any data, the Regional Water Board determines that continued discharges may cause unreasonable degradation of the aquatic environment.

f. If an effluent standard or discharge prohibition (including any schedule of compliance specified in such effluent standard or prohibition) is established under Section 307 (a) of the Clean Water Act for a toxic pollutant which is present in the discharge, and such standard or prohibition is more stringent than any limitation for that pollutant in this Order, this Order may be modified or revoked and reissued to conform to the effluent standard or discharge prohibition.

g. The Discharger shall file with the Regional Water Board a Report of Waste Discharge at least 180 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:

(1) Adding a major industrial waste discharge to a discharge of essentially domestic sewage, or adding a new process or product by an industrial facility resulting in a change in the character of the waste.
(2) Significantly changing the disposal method or location, such as changing the disposal to another drainage area or water body.
(3) Significantly changing the method of treatment.
(4) Increasing the treatment plant design capacity beyond that specified in this Order.

h. 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.

i. 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.

j. 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.

k. 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.

l. The Discharger has demonstrated a correlation between the biological oxygen demand (BOD_5) and total organic carbon (TOC) concentrations in the effluent to the satisfaction of the Executive Officer. Therefore, compliance with the BOD_5 limits and monitoring requirements contained in this Order may be determined based on analyses of the TOC of the effluent.

m. 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.

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

B. Monitoring and Reporting Program (MRP) Requirements

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 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

a. This Order will be reopened to address any changes in State or federal plans, policies or regulations that would affect the quality requirements for the discharges.

b. This Order may be reopened to include effluent limitations for pollutants determined to be present in the discharge in concentrations that pose a reasonable potential to cause or contribute to violations of water quality standards.

c. This Order may be reopened and modified in accordance with the requirements set forth at 40 CFR 122 and 124, to include the appropriate conditions or limits to address demonstrated effluent toxicity based on newly available information, or to implement any EPA-approved new State water quality standards applicable to effluent toxicity.

d. This Order may be reopened for modification, or revocation and reissuance, as a result of the detection of a reportable priority pollutant generated by special conditions included in this Order. These special conditions may be, but are not limited to, fish tissue sampling, whole effluent toxicity, monitoring requirements on internal waste stream(s), and monitoring for surrogate parameters. Additional requirements may be included in this Order as a result of the special condition monitoring data.

e. This Order may be reopened to include an appropriate bioaccumulation based effluent limit for mercury if test results (as required in Attachment E of this Order) show that the concentration levels of methylmercury in the fish tissue are at or above 0.3 milligrams per kilogram.

f. This Order may be reopened to incorporate appropriate biosolids requirements if the State Water Resources Control Board and the Regional Water Quality Control Board are given the authority to implement regulations contained in 40 CFR 503.

2. Special Studies, Technical Reports and Additional Monitoring Requirements

a. By September 1, 2009, the Discharger shall notify the Executive Officer of its continuous involvement with the comprehensive mercury investigation program currently being conducted by a group of Santa Ana River system dischargers. If the Discharger discontinues its involvement with this comprehensive program, the Discharger shall, within 60 days of that date, submit for the approval of the Executive Officer its plan for the annual testing of mercury levels in fish flesh samples collected from the Santa Ana River, upstream of, at, and downstream of the point of the discharge point. Upon approval, the Discharger shall implement the plan.

b. Toxicity Reduction Requirements.

(1) The Discharger shall develop an Initial Investigation Toxicity Reduction Evaluation (IITRE) work plan that describes the steps the Discharger intends to follow if required by Toxicity Requirements b.(2), below. The work plan shall include at a minimum:

(a) A description of the investigation and evaluation techniques that will be used to identify potential causes/sources of the exceedance, effluent variability, and/or efficiency of the treatment system in removing toxic substances. This shall include a description of an accelerated chronic toxicity testing program.

(b) A description of the methods to be used for investigating and maximizing in-house treatment efficiency and good housekeeping practices.

(c) A description of the evaluation process to be used to determine if implementation of a more detailed TRE\TIE is necessary.

(2) The Discharger shall implement the IITRE work plan whenever the results of chronic toxicity tests of the effluent exceed:

(a) A two month median value of 1.0 TUc for survival or reproduction endpoint or,
(b) Any single test value of 1.7 TUc for survival endpoint.

(3) The Discharger shall develop a detailed Toxicity Reduction Evaluation and Toxicity Identification Evaluation (TRE/TIE) work plan that shall describe the steps the Discharger intends to follow if the implemented IITRE fails to identify the cause of, or to rectify, the toxicity.

(4) The Discharger shall use as guidance, at a minimum, EPA manuals EPA/600/2-88/070 (industrial), EPA/600/4-89-001A (municipal), EPA/600/6-91/005F (Phase I), EPA/600/R-92/080 (Phase II), and EPA-600/R-92/081 (Phase III) to identify the cause(s) of toxicity. If during the life of this Order the aforementioned EPA manuals are revised or updated, the revised/updated manuals may also be used as guidance. The detailed TRE/TIE work plan shall include:

(a) Further actions to investigate and identify the cause of toxicity;
(b) Actions the Discharger will take to mitigate the impact of the discharge and to prevent the recurrence of toxicity; and
(c) A schedule for these actions.

(5) The Discharger shall implement the TRE/TIE workplan if the IITRE fails to identify the cause of, or rectify, the toxicity, or if in the opinion of the Executive Officer the IITRE does not adequately address an identified toxicity problem.

(6) The Discharger shall assure that adequate resources are available to implement the required TRE/TIE.

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 plants 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(s) (O&M Manual)" which it has developed for the treatment facilities to conform to latest plant changes and requirements. The O&M Manual(s) shall be readily available to operating personnel onsite. The O&M Manual(s) shall include the following:

(1) Description of 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 collection system in violation of this Order (40 C.F.R. § 122.41(d)). See the Order at Standard Provision VI.A.2.b. and Attachment D, subsections I.D, V.E, V.H, and I.C.

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

(1) The Discharger shall update as necessary and implement an acceptable pretreatment program.

(2) The Discharger shall update as necessary the appropriate contractual agreements with all governmental agencies[20]. 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.

[20] *Member agencies and sewering agencies discharging wastewater into the Facility.*

(3) The Discharger shall ensure that the POTW[21] 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 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;

[21] *Publicly owned treatment works.*

(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.

(9) The Discharger shall operate the wastewater collection system under a comprehensive industrial pretreatment and pollutant control program for the control of discharge of toxic wastes from point sources. If the California Department of Health Services identifies any contaminants that may pose a risk of contamination to a drinking water supply, it may designate those contaminants for inclusion in the pretreatment and source control program requirements for IEUA to minimize the possibility that the influent wastewater to RP-1 and RP-4 will be contaminated with such toxic chemicals. The source control program shall include:

(a) An assessment of the fate of the specified contaminant compounds through the wastewater and recycled water treatment systems.

(b) A source investigation and monitoring program focused on the specified contaminants.

(c) An outreach program to industrial, commercial and residential communities within the sewage collection agency's service area to manage and minimize the discharge of compounds of concern at the source.

(d) A proactive program for maintaining an inventory of compounds discharged into the wastewater collection system so that new compounds of concern can be evaluated rapidly.

6. Other Special Provisions

a. As necessary based on the consideration of evidence regarding the implementation of the maximum benefit commitments shown in Attachment L , the Regional Water Board will be asked to make a determination of whether those commitments are being satisfied. If the Regional Water Board finds that the maximum benefit commitments are not being satisfied, then the Discharger shall implement a mitigation program approved by the Regional Water Board for recycled water use in the Chino 1, 2 or 3 Groundwater Management Zones using recycled water in excess of the limitations applicable to the Groundwater Management Zones (Sections IV.A.1.c. and IV.A.1.d., and Sections IV.C.1.b.). A proposed mitigation plan and schedule shall be submitted within 60-days of notification by the Regional Water Board Executive Officer of the need to do so. The Discharger shall implement the plan and schedule upon approval by the Regional Water Board.

7. Compliance Schedules – Not Applicable

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 priority 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 priority pollutant in the monitoring sample is greater than the effluent limitation and greater than or equal to the reporting level (RL).

B. Multiple Sample Data.

When determining compliance with an AMEL or MDEL for priority pollutants and more than one sample result is available, 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.

C. Average Monthly Effluent Limitation (AMEL).

If the average (or when applicable, the median determined by subsection B above 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.

D. Average Weekly Effluent Limitation (AWEL).

If the average or when applicable, the median determined by subsection B above for multiple sample data of daily discharges over a calendar week exceeds the AWEL for a given parameter, this will represent a single violation, though the Discharger will 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 will 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.

E. 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.

F. Instantaneous Minimum Effluent Limitation.

If the analytical result of a single grab sample is lower than the instantaneous minimum effluent limitation for a parameter, the Discharger will be considered out of compliance for that parameter for that single sample. Non-compliance for each sample will be considered separately (e.g., the results of two grab samples taken within a calendar day that both are lower than the instantaneous minimum effluent limitation would result in two instances of non-compliance with the instantaneous minimum effluent limitation).

G. Instantaneous Maximum Effluent Limitation.

If the analytical result of a single grab sample is higher than the instantaneous maximum effluent limitation for a parameter, the Discharger will be considered out of compliance for that parameter for that single sample. Non-compliance for each sample will be considered separately (e.g., the results of two grab samples taken within a calendar day that both exceed the instantaneous maximum effluent limitation would result in two instances of non-compliance with the instantaneous maximum effluent limitation).

H. 12-Month Running Average Effluent Limitation (12-MRAEL).

Compliance with the 12-month flow weighted running average limits under Discharge Specification IV.A.1.c., IV.A.1.d., and IV.C.1.b. shall be determined by the arithmetic mean of the last twelve monthly averages.

I. Turbidity Limitations.

The Discharger shall be considered in compliance with Discharge Specifications IV.A.1.e.(1) and IV.C.1.c.(1), if the following conditions are met. If the Discharger is using a properly operating backup turbidimeter, the reading of the backup turbidimeter shall be considered in determining whether there has been an actual noncompliance:

1. There are no excursions above the limits specified in Discharge Specifications IV.A.1.e.(1)(a) and (b) and IV.C.1.c.(1)(a) and (b);
2. Exceedances of the “10 NTU at any time” turbidity requirement do not exceed a duration of one minute.
3. The apparent exceedance was caused by interference with, or malfunction of, the monitoring instrument.

J. Coliform Organism Effluent Limitations.

1. Compliance with the average weekly total coliform limit expressed in Discharge Specification IV.A.1.e.(2)(b), IV.C.1.c.(2)(a), and IV.C.1.d. shall be based on a median of test results from the previous 7 days. To comply with the limit, the 7-day median MPN must not exceed 2.2 per 100 milliliters on any day during the week. However, only one violation is recorded for each calendar week, even if the 7-day median MPN value is greater than 2.2 for more than one day in the week.

2. Compliance with the average weekly total coliform limit expressed in Discharge Specification IV.C.1.e. shall be based on a median of test results from the previous 7 days. To comply with the limit, the 7-day median MPN must not exceed 23 per 100 milliliters on any day during the week. However, only one violation is recorded for each calendar week, even if the 7-day median MPN value is greater than 23 for more than one day in the week.

K. pH Effluent Limitations.

Pursuant to 40 CFR 401.17, the Discharger shall be in compliance with the pH limitations specified in the Discharge Specification IV.A.1.g., IV.A.4.d., above, provided that both of the following conditions are satisfied:

1. The total time during which the pH values are outside the required range of 6.5-8.5 pH values shall not exceed 7 hours and 26 minutes in any calendar month; and
2. No individual excursion from the range of pH values shall exceed 60 minutes.

L. TDS Increment Limit.

Compliance with Discharge Specifications IV.A.1.c.(2) shall be based on IEUA's (RP-1, RP- 4, RP-5, and CCWRF) agency-wide flow weighted TDS water supply quality and shall be determined from TDS analysis of secondary treated wastewater. The Discharger shall provide the necessary calculations showing the overall TDS water supply quality.

M. Total Chlorine Residual Limitation (TCR)

Compliance determinations for total chlorine residual shall be based on 99% compliance. To determine 99% compliance with the effluent limitation for total chlorine residual, the following conditions shall be satisfied:

1. For TCR Limit specified in Section IV.A.1. :
   a The total time during which the total chlorine residual values are above 0.1 mg/L (instantaneous maximum value) shall not exceed 7 hours and 26 minutes in any calendar month;
   b No individual excursion from 0.1 mg/L value shall exceed 5 minutes; and
   c No individual excursion shall exceed 5.0 mg/L.

2. For TCR Limit specified in Section IV.A.4.:
   a The total time during which the total chlorine residual values are above 2.1 mg/L (instantaneous maximum value) shall not exceed 7 hours and 26 minutes in any calendar month;
   b No individual excursion from 2.1 mg/L value shall exceed 5 minutes; and
   c No individual excursion shall exceed 10.5 mg/L.

N. Percent Removal

Compliance with the 85 percent average monthly removal requirement (See Effluent Limitations and Discharge Specifications Section IV.A.1.b.)shall be determined for each individual facility (RP-1, RP-4, RP- 5, and CCWRF).

O. Priority Pollutants.

The Discharger shall be deemed out of compliance with an effluent limitation if the concentration of the priority pollutant in the monitoring sample is greater than the effluent limitation.

1. Compliance determination shall be based on the reporting level selected from minimum level (ML)[22] specified in Attachment H of this Order, unless an alternative reporting level is approved by the Regional Water Board's Executive Officer. When there is more than one ML value for a given substance, the Discharger shall select the ML value that is below the calculated effluent limitation, and use its associated analytical method, listed in Attachment H of this Order. If no ML value is below the effluent limitation, then the Regional Water Board will select as the reporting level the lowest ML value and its associated analytical method.

2. When determining compliance with an average monthly limit 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:

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

   b. 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. If a sample result, or the arithmetic mean or median of multiple sample results, is below the reporting level, and there is evidence that the priority pollutant is present in the effluent above an effluent limitation and the Discharger conducts a pollutant minimization program (PMP)[23] the Discharger shall not be deemed out of compliance.

P. Non-Priority Pollutants.

The discharge shall be considered to be in compliance with an effluent limitation that is less than or equal to the method detection limit (MDL) specified in 40 CFR 136 if the arithmetic mean of all test results for the monitoring period is less than the constituent effluent limitation. Analytical results that are less than the specified MDL shall be assigned a value of zero.

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[22] *Minimum level is the concentration at which the entire analytical system must give a recognizable signal and acceptable 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.*

[23] *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.*

Q. 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.

Compliance with a single effluent limitation which applies to a group of chemicals (e.g., PCBs), based on a single sample shall be determined by considering the concentrations of individual members of the group to be zero if the analytical response for the individual chemical falls below the method detection limit (MDL) for that chemical.

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.

Coefficient of Variation (CV) is a measure of the data variability and is calculated as the estimated standard deviation divided by the arithmetic mean of the observed values.

Criteria Continuous Concentration (CCC) equals the highest concentration of a pollutant to which aquatic life can be exposed for an extended period of time (4 days) without deleterious effects.

Criteria Maximum Concentration (CMC) equals the highest concentration of a pollutant to which aquatic life can be exposed for a short period of time without deleterious effects.

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.

For composite sampling, if 1 day is defined as a 24-hour period other than a calendar day, the analytical result for the 24-hour period will be considered as the result for the calendar day in which the 24-hour period ends.

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

Effluent Concentration Allowance (ECA) is a value derived from the water quality criterion/objective, dilution credit, and ambient background concentration that is used, in conjunction with the coefficient of variation for the effluent monitoring data, to calculate a long-term average (LTA) discharge concentration. The ECA has the same meaning as waste load allocation (WLA) as used in USEPA guidance (Technical Support Document For Water Quality-based Toxics Control, March 1991, second printing, EPA/505/2-90-001).

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 the State Implementation 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).

Load Allocation (LA) is the portion of receiving water's total maximum daily load that is allocated to one of its non-point sources of pollution or to natural background sources.

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.

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

MEC: Maximum Effluent Concentration is the observed maximum pollutant concentration for the effluent.

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 title 40 of the Code of Federal Regulations, Part 136, Attachment B, revised as of July 3, 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.

Mixing Zone is a limited volume of receiving water that is allocated for mixing with a wastewater discharge where water quality criteria can be exceeded without causing adverse effects to the overall water body.

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

Objectionable Bottom Deposits are an accumulation of materials or substances on or near the bottom of a water body, which creates conditions that adversely impact aquatic life, human health, beneficial uses, or aesthetics. These conditions include, but are not limited to, the accumulation of pollutants in the sediments and other conditions that result in harm to benthic organisms, production of food chain organisms, or fish egg development. The presence of such deposits shall be determined by RWQCB(s) on a case-by-case basis.

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 Water Code section 13263.3(d), shall be considered to fulfill the PMP requirements.

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 State or Regional Water Board.

Reporting Level (RL) is the ML (and its associated analytical method) chosen by the Discharger for reporting and compliance determination from the MLs included in this Order. The MLs included in this Order correspond to approved analytical methods for reporting a sample result that are selected by the Regional Water Board either from Appendix 4 of the SIP[1] 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.

Satellite Collection System is the portion, if any, of a sanitary sewer system owned or operated by a different public agency than the agency that owns and operates the wastewater treatment facility that a sanitary sewer system is tributary to.

Source of Drinking Water is any water designated as municipal or domestic supply (MUN) in a Regional Water Board Basin Plan.

[1] *SIP refers to the Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California.*

Standard Deviation (σ) is a measure of variability that is calculated as follows:

$$\sigma = (\sum[(x - \mu)^2]/(n - 1))^{0.5}$$

where:

x is the observed value;

μ is the arithmetic mean of the observed values; and

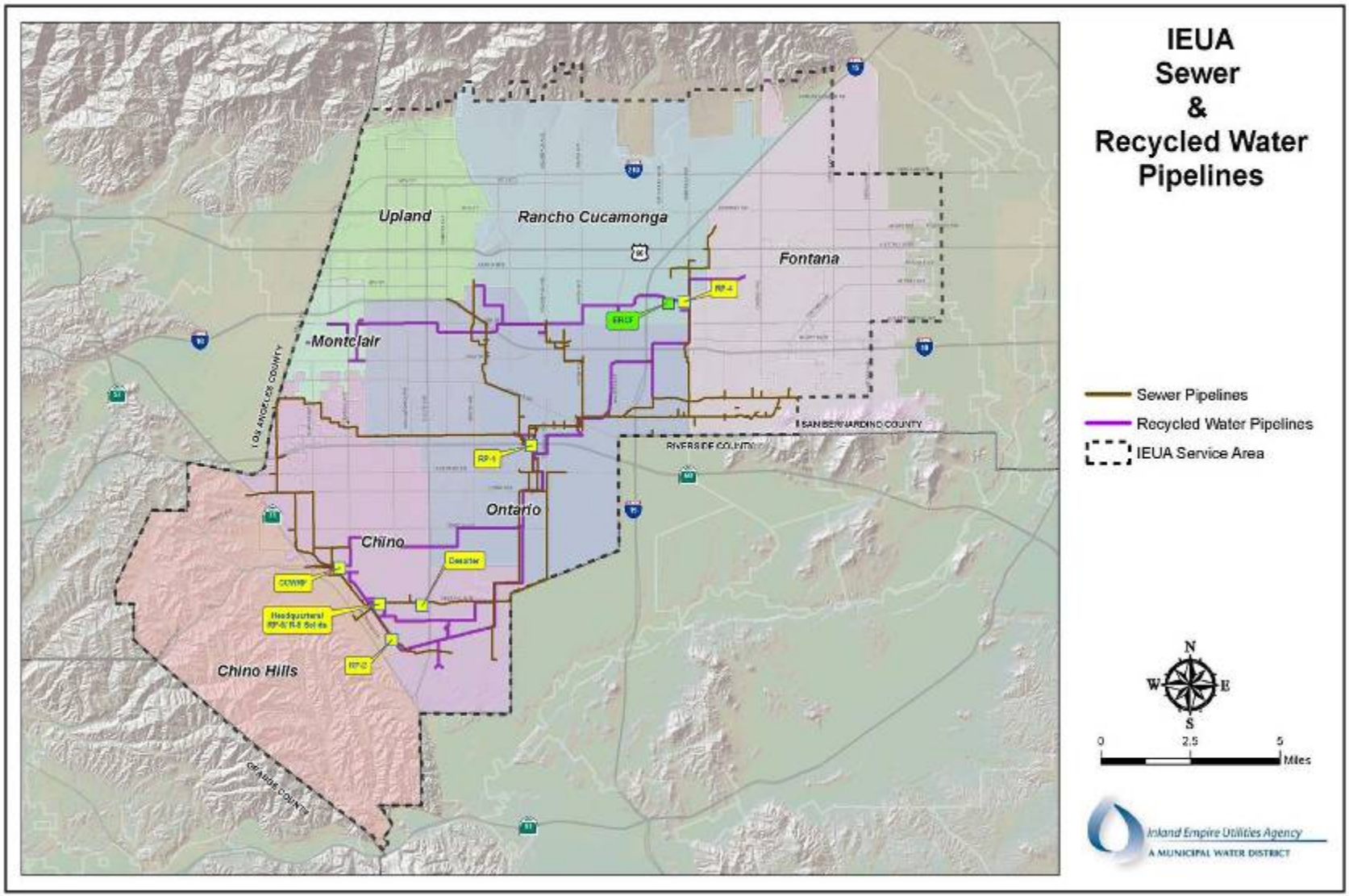
n is the number of samples.

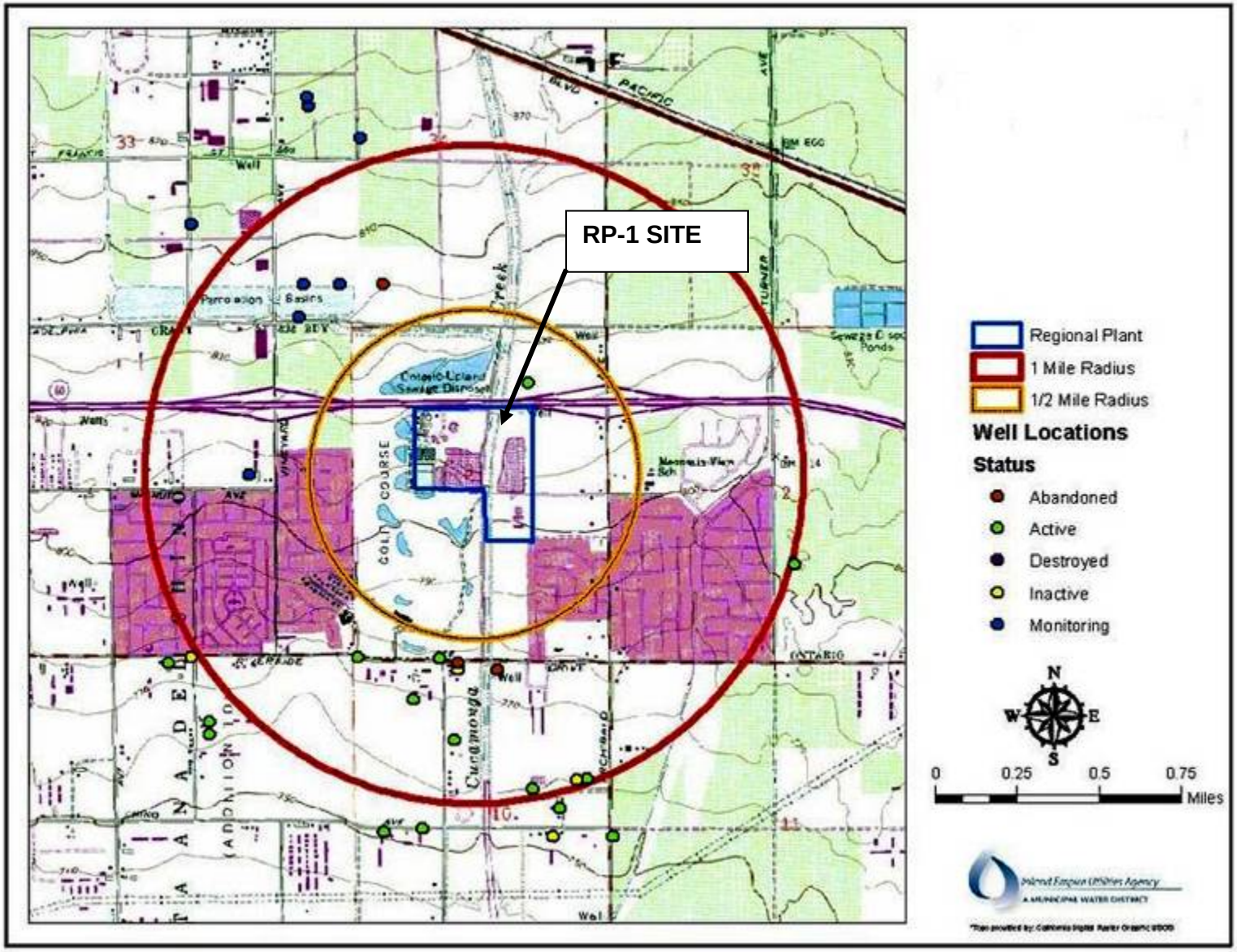
Toxicity Reduction Evaluation (TRE) is a study conducted in a step-wise process designed to identify the causative agents of effluent or ambient toxicity, isolate the sources of toxicity, evaluate the effectiveness of toxicity control options, and then confirm the reduction in toxicity. The first steps of the TRE consist of the collection of data relevant to the toxicity, including additional toxicity testing, and an evaluation of facility operations and maintenance practices, and best management practices. A Toxicity Identification Evaluation (TIE) may be required as part of the TRE, if appropriate. (A TIE is a set of procedures to identify the specific chemical(s) responsible for toxicity. These procedures are performed in three phases (characterization, identification, and confirmation) using aquatic organism toxicity tests.)

Water Effect Ratio (WER) is an appropriate measure of the toxicity of a material obtained in a site water divided by the same measure of the toxicity of the same material obtained simultaneously in a laboratory dilution water.

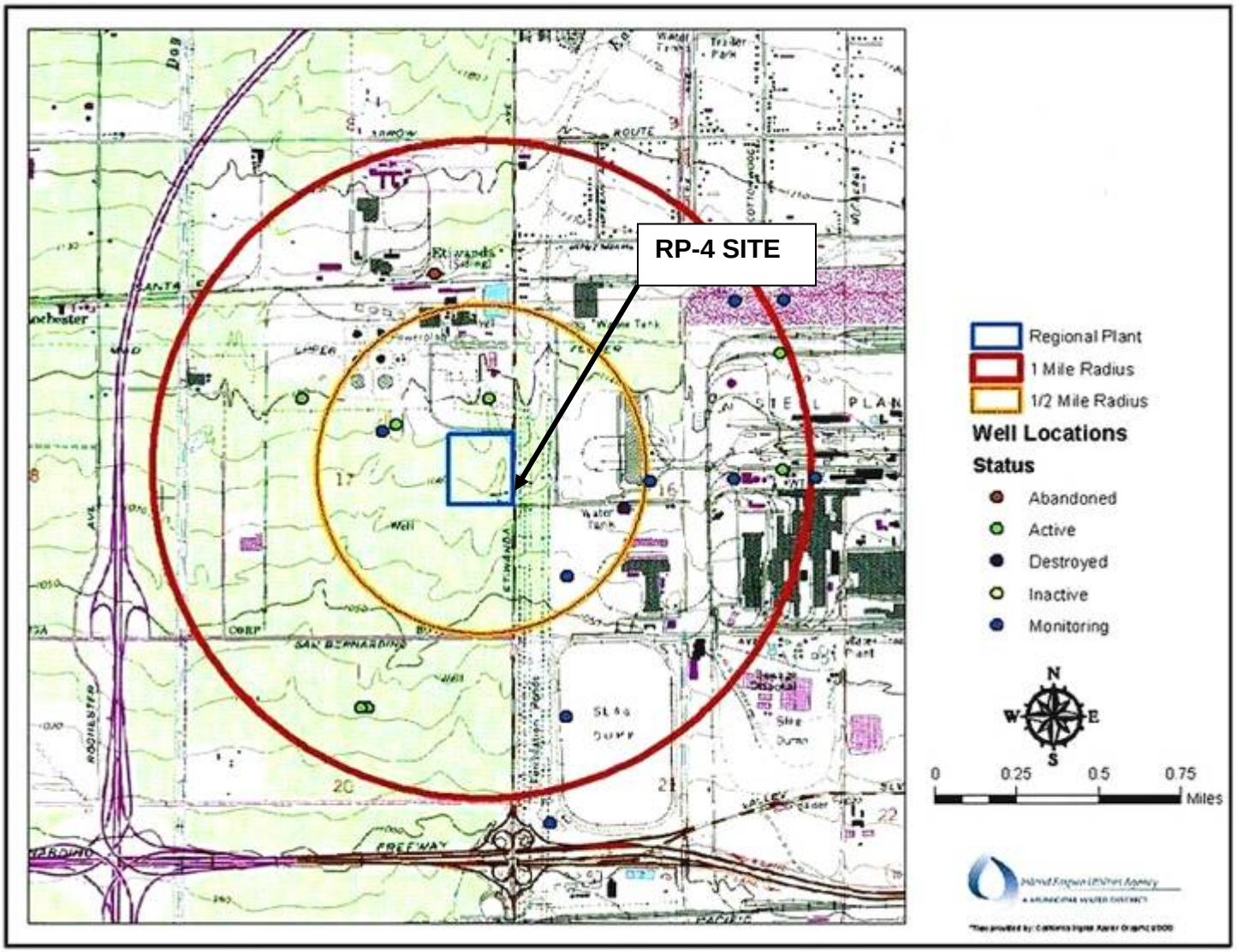
12-Month Running Average Effluent Limitation (12-MRAEL): the highest allowable average of monthly discharges over last twelve months, calculated as the sum of all monthly discharges measured during last twelve months divided by the number of monthly discharges measured during that time period.

ATTACHMENT B – LOCATION

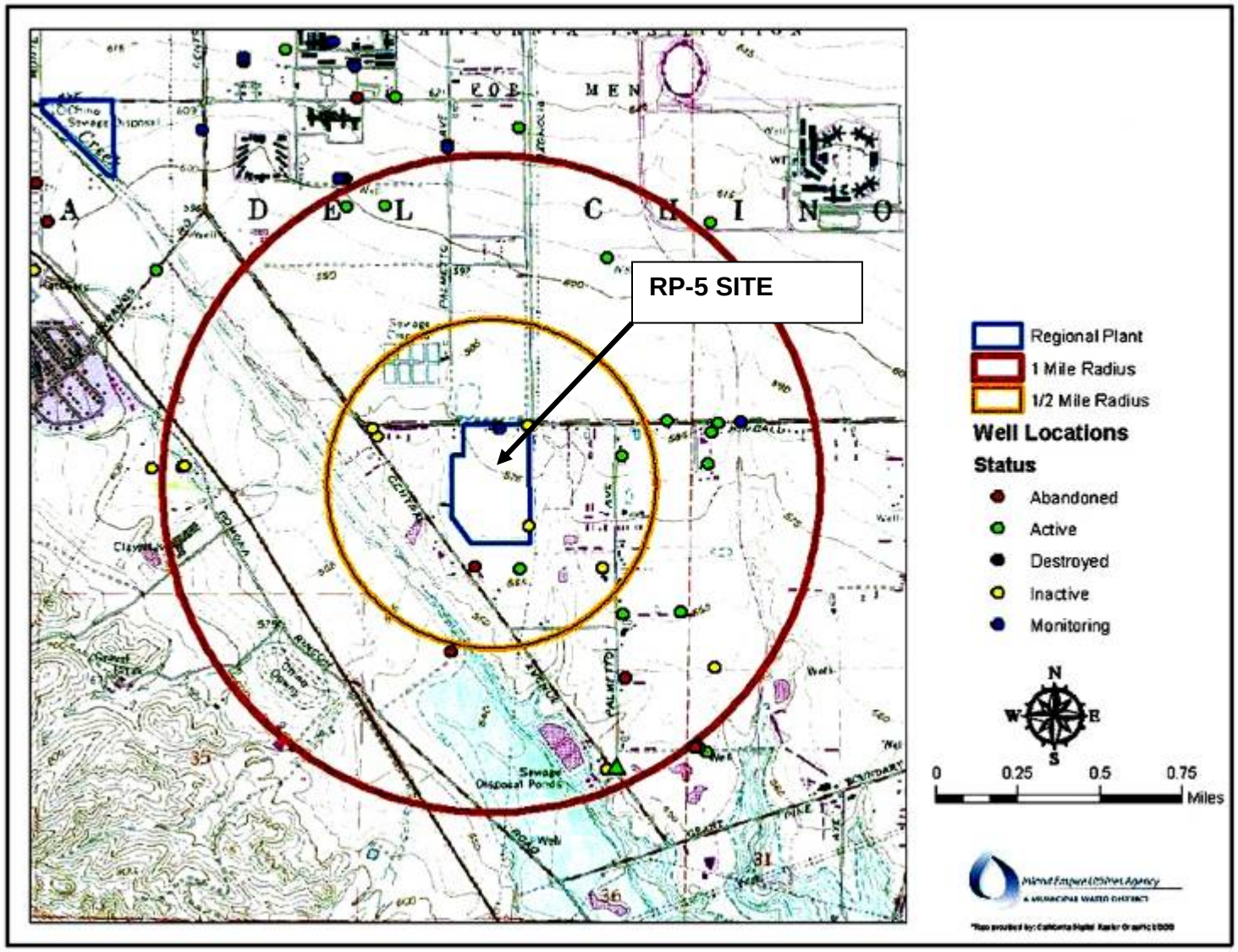




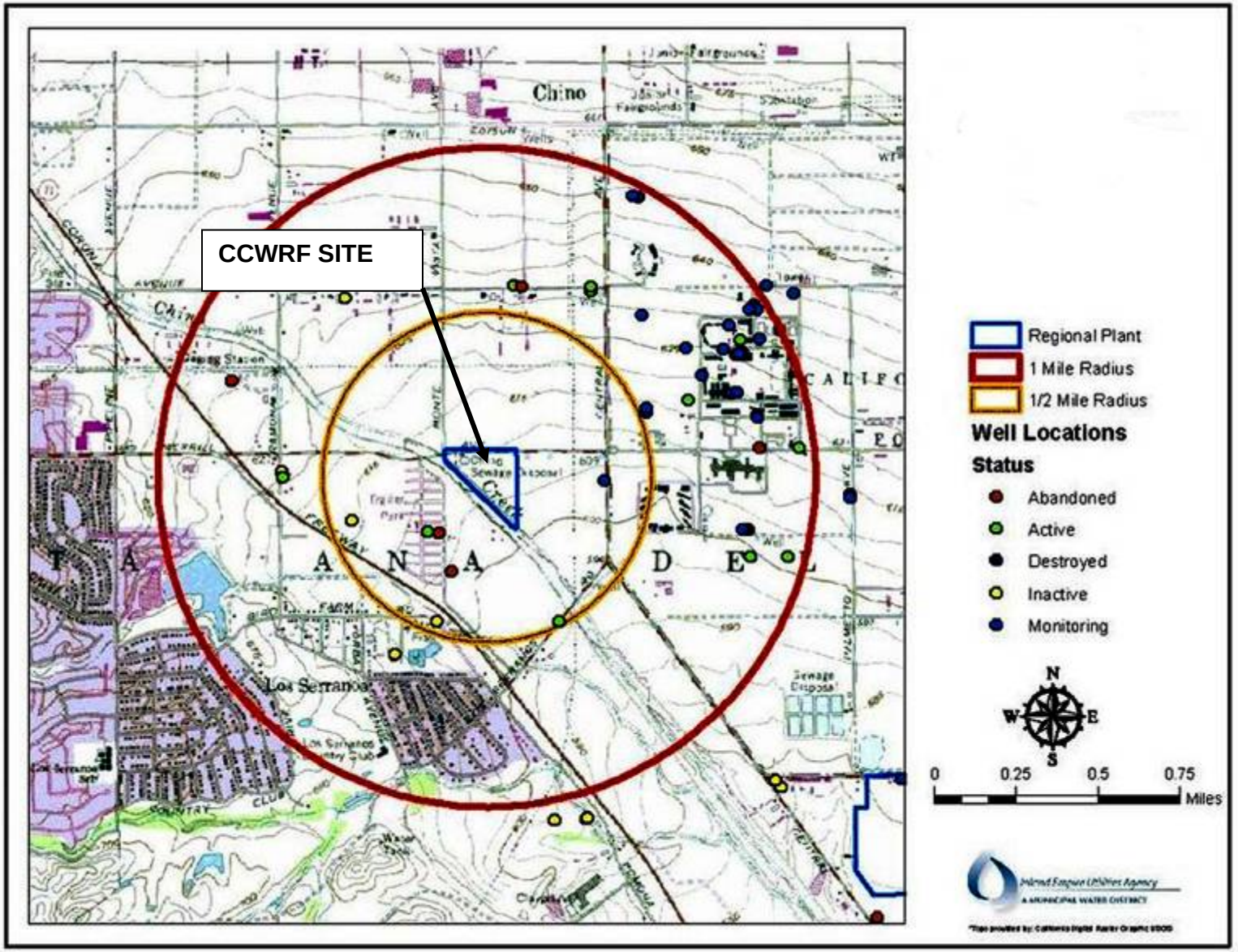
RP-1 LOCATION MAP



RP-4 LOCATION MAP

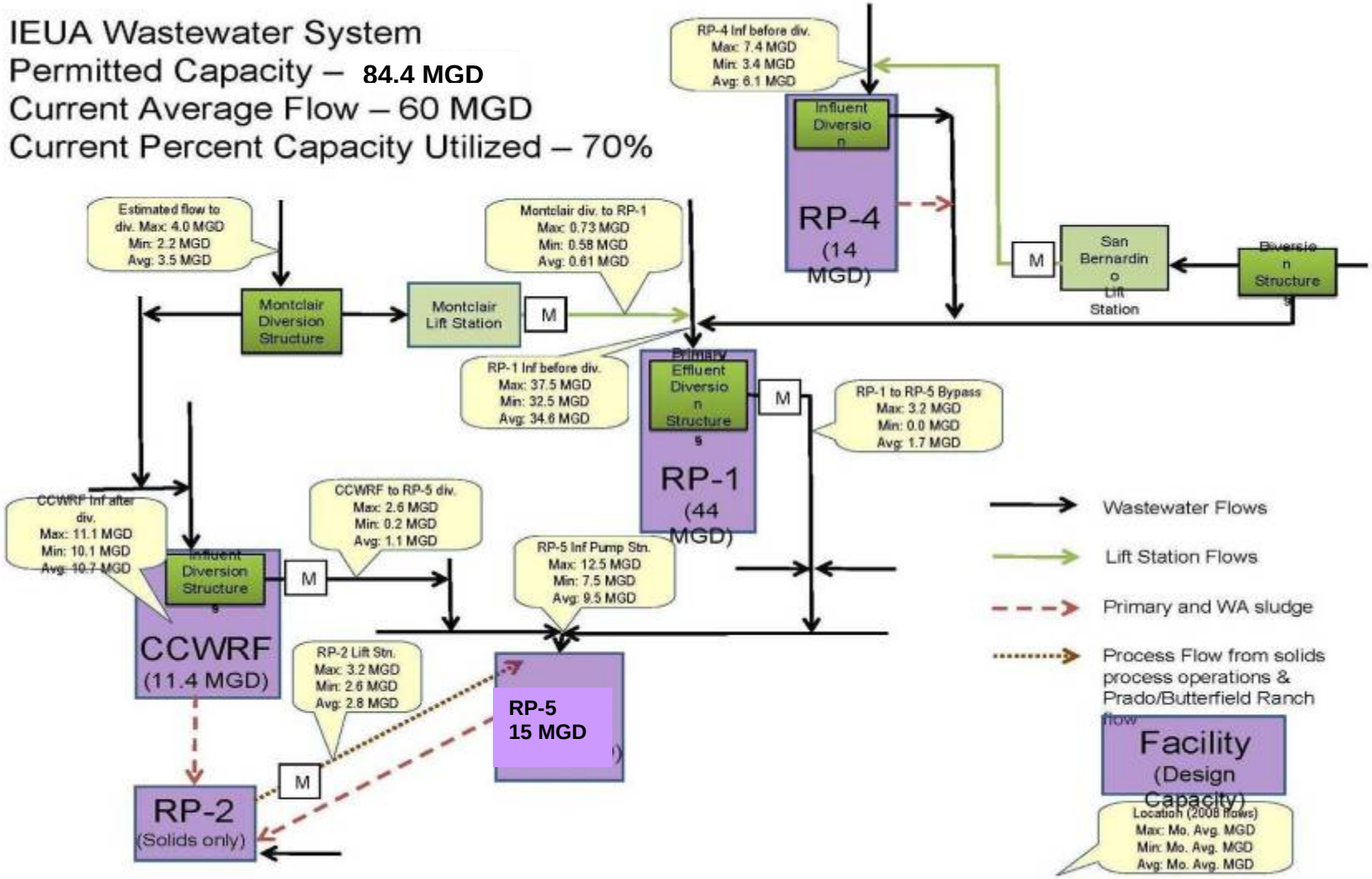


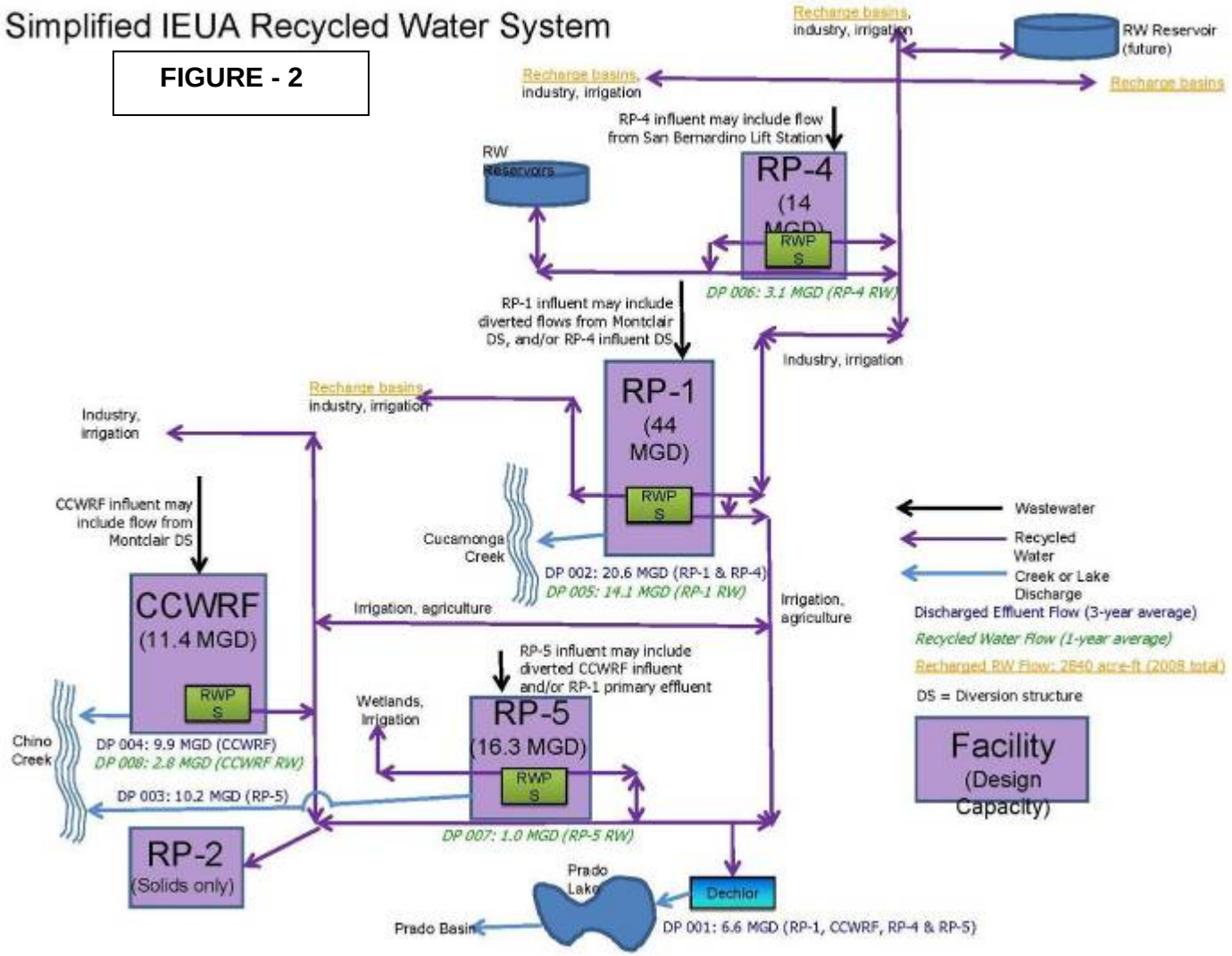
RP-5 LOCATION MAP

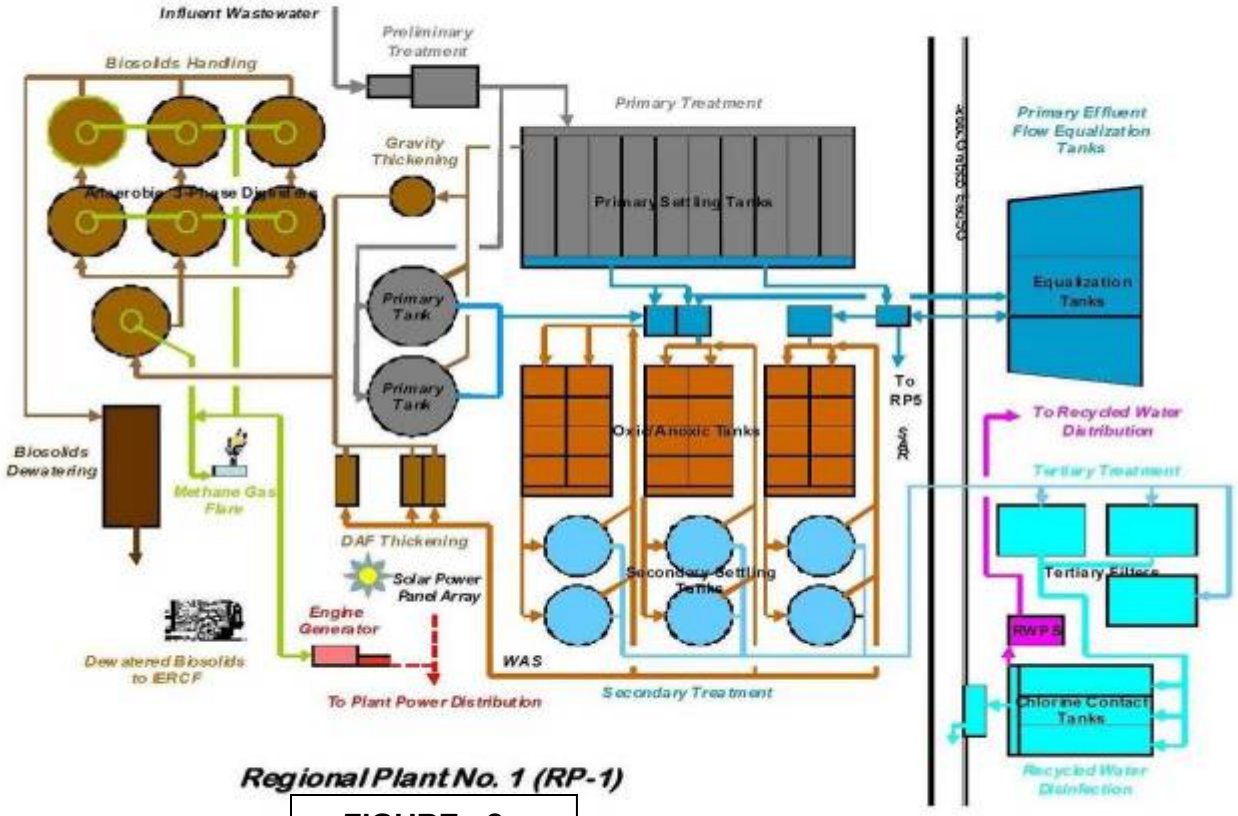


CCWRF LOCATION MAP

ATTACHMENT C – FIGURE 1




Simplified IEUA Recycled Water System
FIGURE - 2
Recharge basins, industry, irrigation
RW Reservoir (future)
Recharge basins
Recharge basins, industry, irrigation
RP-4 influent may include flow from San Bernardino Lift Station
RW Reservoirs
RP-4
(14 MGD)
RWPS
DP 006: 3.1 MGD (RP-4 RW)
RP-1 influent may include diverted flows from Montclair DS, and/or RP-4 influent DS
Industry, irrigation
Recharge basins, industry, irrigation
RP-1
(44 MGD)
RWPS
Industry, irrigation
CCWRF influent may include flow from Montclair DS
Cucamonga Creek
DP 002: 20.6 MGD (RP-1 & RP-4)
DP 005: 14.1 MGD (RP-1 RW)
Irrigation, agriculture
Irrigation, agriculture
CCWRF
(11.4 MGD)
RWPS
RP-5 influent may include diverted CCWRF influent and/or RP-1 primary effluent
Wetlands, Irrigation
RP-5
(16.3 MGD)
RWPS
Chino Creek
DP 004: 9.9 MGD (CCWRF)
DP 008: 2.8 MGD (CCWRF RW)
DP 003: 10.2 MGD (RP-5)
DP 007: 1.0 MGD (RP-5 RW)
RP-2
(Solids only)
Prado Lake
Dechlor
Prado Basin
DP 001: 6.6 MGD (RP-1, CCWRF, RP-4 & RP-5)
Wastewater
Recycled Water
Creek or Lake Discharge
Discharged Effluent Flow (3-year average)
Recycled Water Flow (1-year average)
Recharged RW Flow: 2640 acre-ft (2008 total)
DS = Diversion structure
Facility
(Design Capacity)



Regional Plant No. 1 (RP-1)

FIGURE - 3

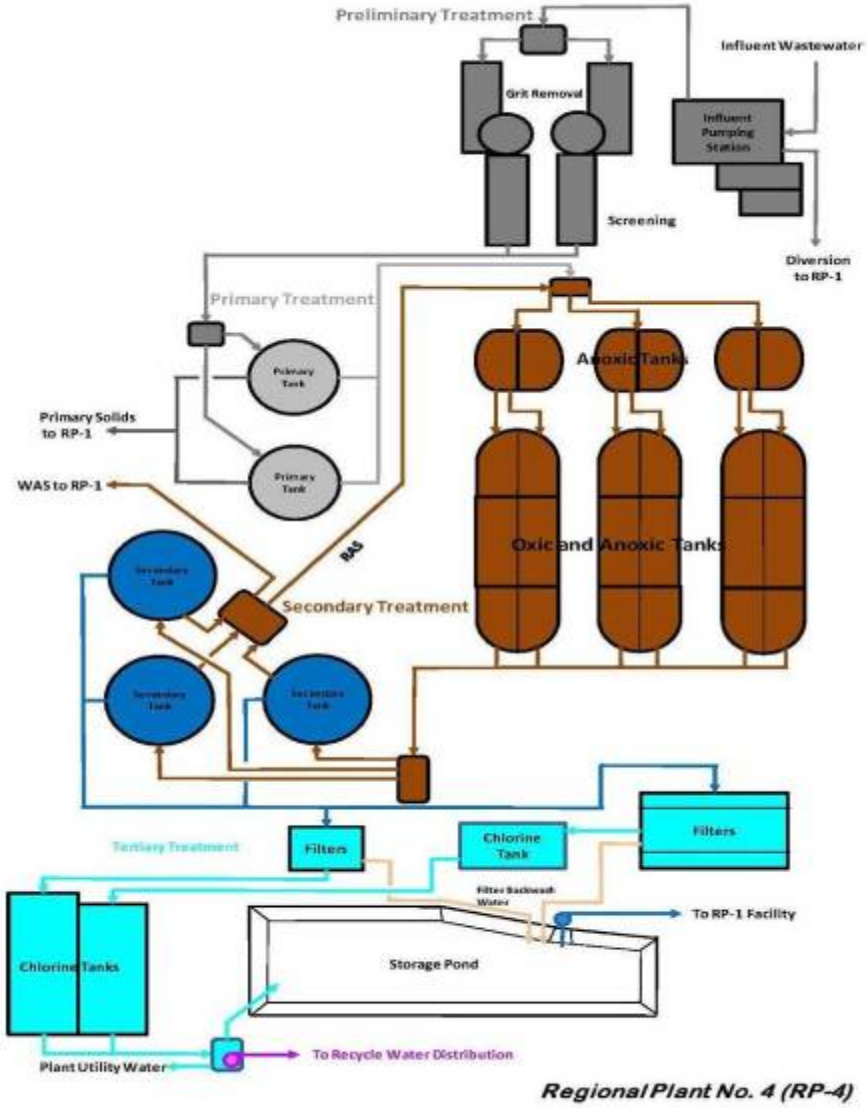
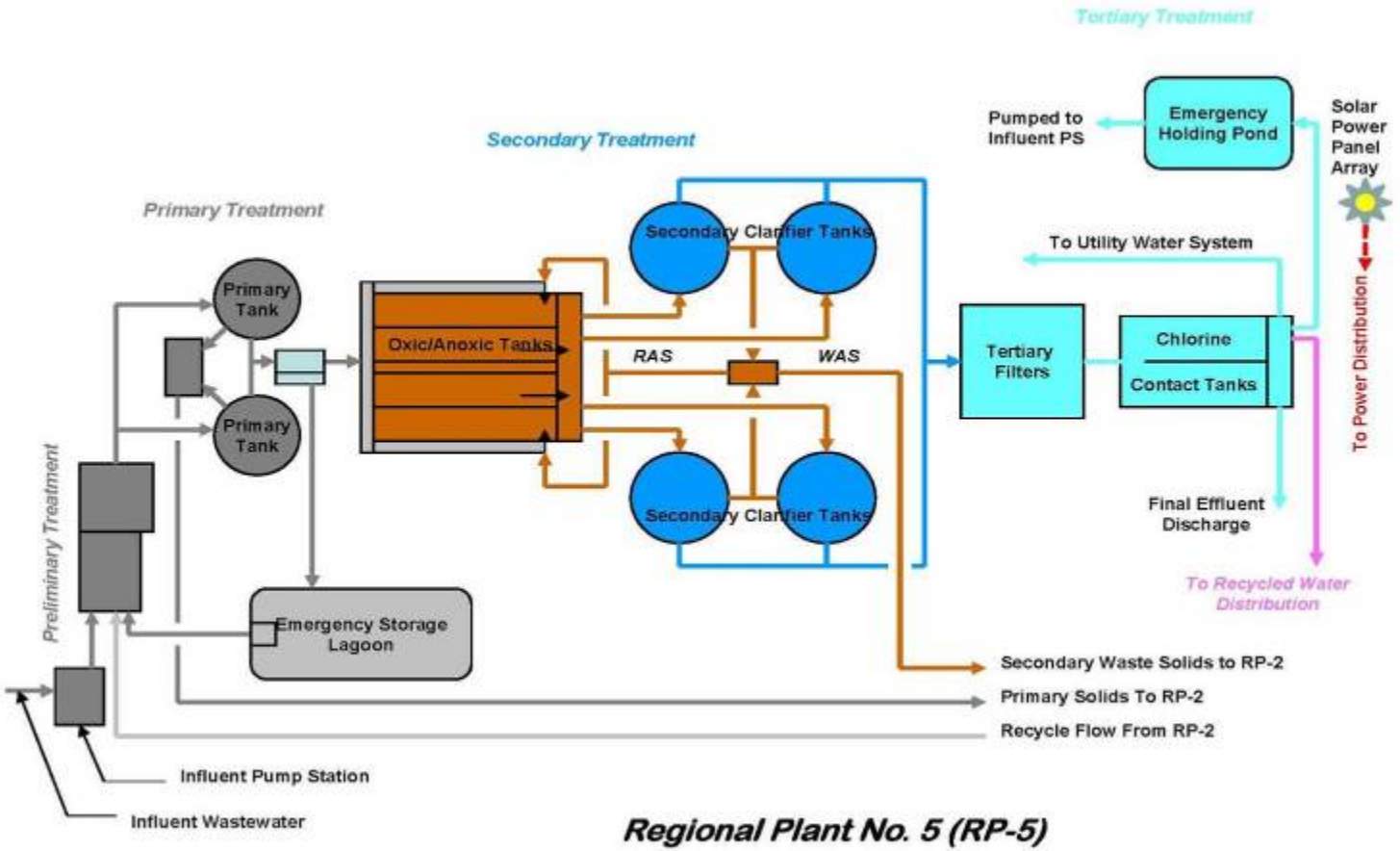
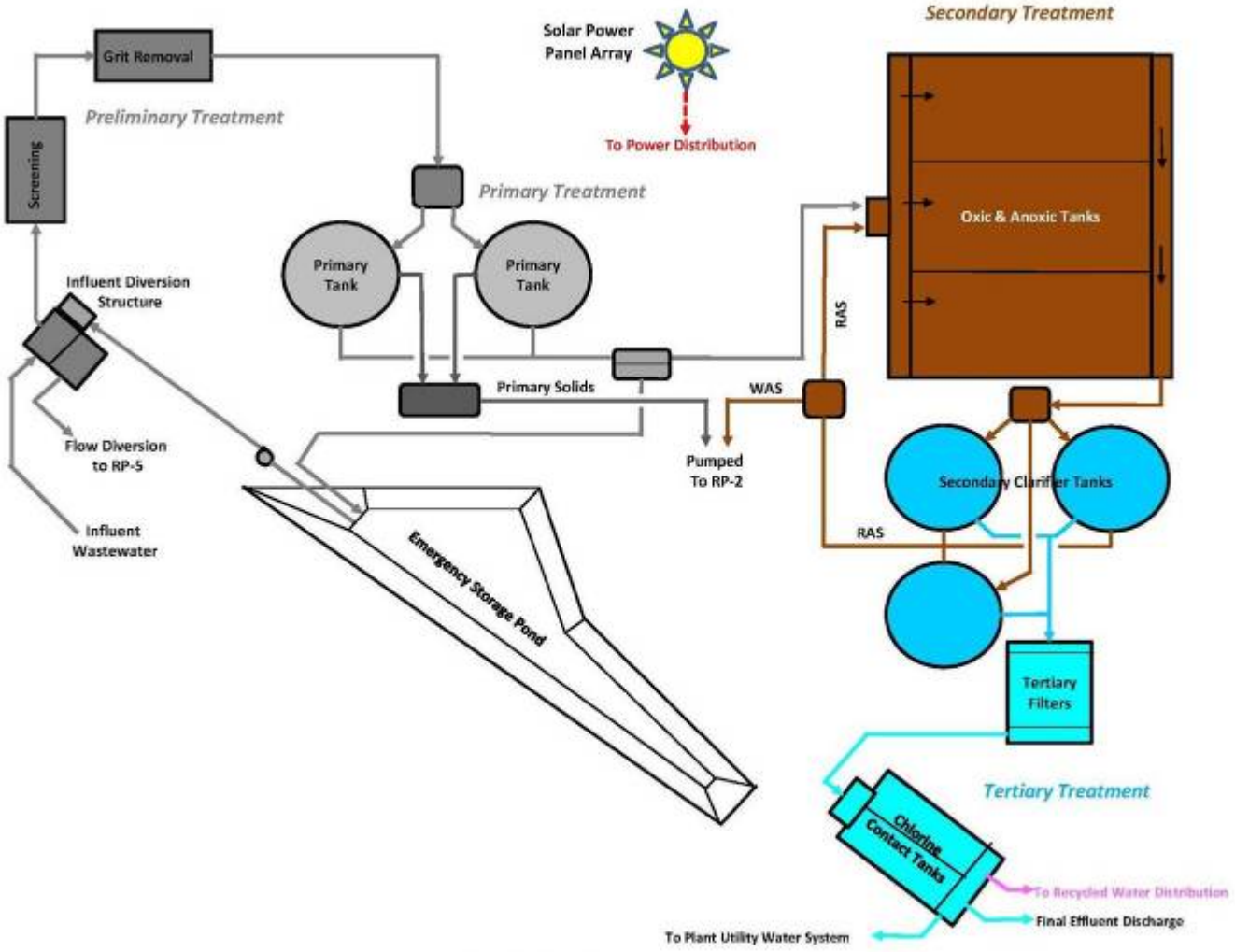

Preliminary Treatment
Influent Wastewater
Grit Removal
Influent Pumping Station
Screening
Diversion to RP-1
Primary Treatment
Primary Tank
Primary Tank
Primary Solids to RP-1
WAS to RP-1
Anoxic Tanks
Oxic and Anoxic Tanks
RAS
Secondary Treatment
Secondary Tank
Secondary Tank
Secondary Tank
Tertiary Treatment
Filters
Chlorine Tank
Filters
Filter Backwash Water
To RP-1 Facility
Storage Pond
Chlorine Tanks
Plant Utility Water
To Recycle Water Distribution
Regional Plant No. 4 (RP-4)

FIGURE - 4



Regional Plant No. 5 (RP-5)

FIGURE - 5



Carbon Canyon Water Recycle Facility (CCWRF)

FIGURE - 6

ATTACHMENT D –STANDARD PROVISIONS

I. STANDARD PROVISIONS – PERMIT COMPLIANCE

A. Duty to Comply

1. The Discharger must comply with all of the conditions of this Order. Any noncompliance constitutes a violation of the Clean Water Act (CWA) and the California Water Code and is grounds for enforcement action, for permit termination, revocation and reissuance, or modification; or denial of a permit renewal application. (40 C.F.R. § 122.41(a).)

2. The Discharger shall comply with effluent standards or prohibitions established under Section 307(a) of the CWA for toxic pollutants and with standards for sewage sludge use or disposal established under Section 405(d) of the CWA 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. (40 C.F.R. § 122.41(a)(1).)

B. Need to Halt or Reduce Activity Not a Defense

It shall not be a defense for a Discharger in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this Order. (40 C.F.R. § 122.41(c).)

C. Duty to Mitigate

The Discharger shall take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of this Order that has a reasonable likelihood of adversely affecting human health or the environment. (40 C.F.R. § 122.41(d).)

D. Proper Operation and Maintenance

The Discharger shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the Discharger to achieve compliance with the conditions of this Order. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of backup or auxiliary facilities or similar systems that are installed by a Discharger only when necessary to achieve compliance with the conditions of this Order. (40 C.F.R. § 122.41(e).)

E. Property Rights

1. This Order does not convey any property rights of any sort or any exclusive privileges. (40 C.F.R. § 122.41(g).)

2. The issuance of this Order does not authorize any injury to persons or property or invasion of other private rights, or any infringement of state or local law or regulations. (40 C.F.R. § 122.5(c).)

F. Inspection and Entry

The Discharger shall allow the Regional Water Board, State Water Board, United States Environmental Protection Agency (USEPA), and/or their authorized representatives (including an authorized contractor acting as their representative), upon the presentation of credentials and other documents, as may be required by law, to (40 C.F.R. § 122.41(i); Wat. Code, § 13383):

1. Enter upon the Discharger's premises where a regulated facility or activity is located or conducted, or where records are kept under the conditions of this Order (40 C.F.R. § 122.41(i)(1));

2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this Order (40 C.F.R. § 122.41(i)(2));

3. Inspect and photograph, at reasonable times, any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Order (40 C.F.R. § 122.41(i)(3)); and

4. Sample or monitor, at reasonable times, for the purposes of assuring Order compliance or as otherwise authorized by the CWA or the Water Code, any substances or parameters at any location. (40 C.F.R. § 122.41(i)(4).)

G. Bypass

1. Definitions

   a. “Bypass” means the intentional diversion of waste streams from any portion of a treatment facility. (40 C.F.R. § 122.41(m)(1)(i).)

   b. “Severe property damage” means substantial physical damage to property, damage to the treatment facilities, which causes them to become inoperable, or substantial and permanent loss of natural resources that can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production. (40 C.F.R. § 122.41(m)(1)(ii).)

2. Bypass not exceeding limitations. The Discharger may allow any bypass to occur which does not cause exceedances of effluent limitations, but only if it is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions listed in Standard Provisions – Permit Compliance I.G.3, I.G.4, and I.G.5 below. (40 C.F.R. § 122.41(m)(2).)

3. Prohibition of bypass. Bypass is prohibited, and the Regional Water Board may take enforcement action against a Discharger for bypass, unless (40 C.F.R. § 122.41(m)(4)(i)):

   a. Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage (40 C.F.R. § 122.41(m)(4)(i)(A));

   b. There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass that occurred during normal periods of equipment downtime or preventive maintenance (40 C.F.R. § 122.41(m)(4)(i)(B)); and

   c. The Discharger submitted notice to the Regional Water Board as required under Standard Provisions – Permit Compliance I.G.5 below. (40 C.F.R. § 122.41(m)(4)(i)(C).)

4. The Regional Water Board may approve an anticipated bypass, after considering its adverse effects, if the Regional Water Board determines that it will meet the three conditions listed in Standard Provisions – Permit Compliance I.G.3 above. (40 C.F.R. § 122.41(m)(4)(ii).)

5. Notice

   a. Anticipated bypass. If the Discharger knows in advance of the need for a bypass, it shall submit a notice, if possible at least 10 days before the date of the bypass. (40 C.F.R. § 122.41(m)(3)(i).)

   b. Unanticipated bypass. The Discharger shall submit notice of an unanticipated bypass as required in Standard Provisions - Reporting V.E below (24-hour notice). (40 C.F.R. § 122.41(m)(3)(ii).)

H. Upset

Upset means an exceptional incident in which there is unintentional and temporary noncompliance with technology based permit effluent limitations because of factors beyond the reasonable control of the Discharger. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation. (40 C.F.R. § 122.41(n)(1).)

1. Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with such technology based permit effluent limitations if the requirements of Standard Provisions – Permit Compliance I.H.2 below are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review. (40 C.F.R. § 122.41(n)(2).).

2. Conditions necessary for a demonstration of upset. A Discharger who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs or other relevant evidence that (40 C.F.R. § 122.41(n)(3)):

   a. An upset occurred and that the Discharger can identify the cause(s) of the upset (40 C.F.R. § 122.41(n)(3)(i));

   b. The permitted facility was, at the time, being properly operated (40 C.F.R. § 122.41(n)(3)(ii));

   c. The Discharger submitted notice of the upset as required in Standard Provisions – Reporting V.E.2.b below (24-hour notice) (40 C.F.R. § 122.41(n)(3)(iii)); and

   d. The Discharger complied with any remedial measures required under Standard Provisions – Permit Compliance I.C above. (40 C.F.R. § 122.41(n)(3)(iv).)

3. Burden of proof. In any enforcement proceeding, the Discharger seeking to establish the occurrence of an upset has the burden of proof. (40 C.F.R. § 122.41(n)(4).)

II. STANDARD PROVISIONS – PERMIT ACTION

A. General

This Order may be modified, revoked and reissued, or terminated for cause. The filing of a request by the Discharger for modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any Order condition. (40 C.F.R. § 122.41(f).)

B. Duty to Reapply

If the Discharger wishes to continue an activity regulated by this Order after the expiration date of this Order, the Discharger must apply for and obtain a new permit. (40 C.F.R. § 122.41(b).)

C. Transfers

This Order is not transferable to any person except after notice to the Regional Water Board. The Regional Water Board may require modification or revocation and reissuance of the Order to change the name of the Discharger and incorporate such other requirements as may be necessary under the CWA and the Water Code. (40 C.F.R. § 122.41(l)(3); § 122.61.)

III. STANDARD PROVISIONS – MONITORING

A. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity. (40 C.F.R. § 122.41(j)(1).)

B. Monitoring results must be conducted according to test procedures under Part 136 or, in the case of sludge use or disposal, approved under Part 136 unless otherwise specified in Part 503 unless other test procedures have been specified in this Order. (40 C.F.R. § 122.41(j)(4); § 122.44(i)(1)(iv).)

IV. STANDARD PROVISIONS – RECORDS

A. Except for records of monitoring information required by this Order related to the Discharger's sewage sludge use and disposal activities, which shall be retained for a period of at least five years (or longer as required by Part 503), the Discharger shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this Order, and records of all data used to complete the application for this Order, for a period of at least three (3) years from the date of the sample, measurement, report or application. This period may be extended by request of the Regional Water Board Executive Officer at any time. (40 C.F.R. § 122.41(j)(2).)

B. Records of monitoring information shall include:

1. The date, exact place, and time of sampling or measurements (40 C.F.R. § 122.41(j)(3)(i));

2. The individual(s) who performed the sampling or measurements (40 C.F.R. § 122.41(j)(3)(ii));

3. The date(s) analyses were performed (40 C.F.R. § 122.41(j)(3)(iii));

4. The individual(s) who performed the analyses (40 C.F.R. § 122.41(j)(3)(iv));

5. The analytical techniques or methods used (40 C.F.R. § 122.41(j)(3)(v)); and

6. The results of such analyses. (40 C.F.R. § 122.41(j)(3)(vi).)

C. Claims of confidentiality for the following information will be denied (40 C.F.R. § 122.7(b)):

1. The name and address of any permit applicant or Discharger (40 C.F.R. § 122.7(b)(1)); and

2. Permit applications and attachments, permits and effluent data. (40 C.F.R. § 122.7(b)(2).)

V. STANDARD PROVISIONS – REPORTING

A. Duty to Provide Information

The Discharger shall furnish to the Regional Water Board, State Water Board, or USEPA within a reasonable time, any information which the Regional Water Board, State Water Board, or USEPA may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this Order or to determine compliance with this Order. Upon request, the Discharger shall also furnish to the Regional Water Board, State Water Board, or USEPA copies of records required to be kept by this Order. (40 C.F.R. § 122.41(h); Wat. Code, § 13267.)

B. Signatory and Certification Requirements

1. All applications, reports, or information submitted to the Regional Water Board, State Water Board, and/or USEPA shall be signed and certified in accordance with Standard Provisions – Reporting V.B.2, V.B.3, V.B.4, and V.B.5 below. (40 C.F.R. § 122.41(k).)

2. All permit applications shall be signed by either a principal executive officer or ranking elected official. For purposes of this provision, a principal executive officer of a federal agency includes: (i) the chief executive officer of the agency, or (ii) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., Regional Administrators of USEPA). (40 C.F.R. § 122.22(a)(3).).

3. All reports required by this Order and other information requested by the Regional Water Board, State Water Board, or USEPA shall be signed by a person described in Standard Provisions – Reporting V.B.2 above, or by a duly authorized representative of that person. A person is a duly authorized representative only if:

   a. The authorization is made in writing by a person described in Standard Provisions – Reporting V.B.2 above (40 C.F.R. § 122.22(b)(1));

b. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company. (A duly authorized representative may thus be either a named individual or any individual occupying a named position.) (40 C.F.R. § 122.22(b)(2)); and

c. The written authorization is submitted to the Regional Water Board and State Water Board. (40 C.F.R. § 122.22(b)(3).)

4. If an authorization under Standard Provisions – Reporting V.B.3 above is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of Standard Provisions – Reporting V.B.3 above must be submitted to the Regional Water Board and State Water Board prior to or together with any reports, information, or applications, to be signed by an authorized representative. (40 C.F.R. § 122.22(c).)

5. Any person signing a document under Standard Provisions – Reporting V.B.2 or V.B.3 above shall make the following certification:

   "I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations." (40 C.F.R. § 122.22(d).)

C. Monitoring Reports

1. Monitoring results shall be reported at the intervals specified in the Monitoring and Reporting Program (Attachment E) in this Order. (40 C.F.R. § 122.22(l)(4).)

2. Monitoring results must be reported on a Discharge Monitoring Report (DMR) form or forms provided or specified by the Regional Water Board or State Water Board for reporting results of monitoring of sludge use or disposal practices. (40 C.F.R. § 122.41(l)(4)(i).)

3. If the Discharger monitors any pollutant more frequently than required by this Order using test procedures approved under Part 136 or, in the case of sludge use or disposal, approved under Part 136 unless otherwise specified in Part 503, or as specified in this Order, the results of this monitoring shall be included in the

calculation and reporting of the data submitted in the DMR or sludge reporting form specified by the Regional Water Board. (40 C.F.R. § 122.41(l)(4)(ii).)

4. Calculations for all limitations, which require averaging of measurements, shall utilize an arithmetic mean unless otherwise specified in this Order. (40 C.F.R. § 122.41(l)(4)(iii).)

D. Compliance Schedules

Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this Order, shall be submitted no later than 14 days following each schedule date. (40 C.F.R. § 122.41(l)(5).)

E. Twenty-Four Hour Reporting

1. The Discharger shall report any noncompliance that may endanger health or the environment. Any information shall be provided orally within 24 hours from the time the Discharger becomes aware of the circumstances. A written submission shall also be provided within five (5) days of the time the Discharger becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance. (40 C.F.R. § 122.41(l)(6)(i).)

2. The following shall be included as information that must be reported within 24 hours under this paragraph (40 C.F.R. § 122.41(l)(6)(ii)):

    a. Any unanticipated bypass that exceeds any effluent limitation in this Order. (40 C.F.R. § 122.41(l)(6)(ii)(A).)

    b. Any upset that exceeds any effluent limitation in this Order. (40 C.F.R. § 122.41(l)(6)(ii)(B).)

3. The Regional Water Board may waive the above-required written report under this provision on a case-by-case basis if an oral report has been received within 24 hours. (40 C.F.R. § 122.41(l)(6)(iii).)

F. Planned Changes

The Discharger shall give notice to the Regional Water Board as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required under this provision only when (40 C.F.R. § 122.41(l)(1)):

1. The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in section 122.29(b) (40 C.F.R. § 122.41(l)(1)(i)); or

2. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants that are not subject to effluent limitations in this Order. (40 C.F.R. § 122.41(l)(1)(ii).)

3. The alteration or addition results in a significant change in the Discharger's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan. (40 C.F.R.§ 122.41(l)(1)(iii).)

G. Anticipated Noncompliance

The Discharger shall give advance notice to the Regional Water Board or State Water Board of any planned changes in the permitted facility or activity that may result in noncompliance with General Order requirements. (40 C.F.R. § 122.41(l)(2).)

H. Other Noncompliance

The Discharger shall report all instances of noncompliance not reported under Standard Provisions – Reporting V.C, V.D, and V.E above at the time monitoring reports are submitted. The reports shall contain the information listed in Standard Provision – Reporting V.E above. (40 C.F.R. § 122.41(l)(7).)

I. Other Information

When the Discharger becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the Regional Water Board, State Water Board, or USEPA, the Discharger shall promptly submit such facts or information. (40 C.F.R. § 122.41(l)(8).)

VI. STANDARD PROVISIONS – ENFORCEMENT

A. The Regional Water Board is authorized to enforce the terms of this permit under several provisions of the Water Code, including, but not limited to, sections 13385, 13386, and 13387.

VII. ADDITIONAL PROVISIONS – NOTIFICATION LEVELS

A. Publicly-Owned Treatment Works (POTWs)

All POTWs shall provide adequate notice to the Regional Water Board of the following (40 C.F.R. § 122.42(b)):

1. Any new introduction of pollutants into the POTW from an indirect discharger that would be subject to sections 301 or 306 of the CWA if it were directly discharging those pollutants (40 C.F.R. § 122.42(b)(1)); and

2. Any substantial change in the volume or character of pollutants being introduced into that POTW by a source introducing pollutants into the POTW at the time of adoption of the Order. (40 C.F.R. § 122.42(b)(2).)

3. Adequate notice shall include information on the quality and quantity of effluent introduced into the POTW as well as any anticipated impact of the change on the quantity or quality of effluent to be discharged from the POTW. (40 C.F.R. § 122.42(b)(3).)

ATTACHMENT E – MONITORING AND REPORTING PROGRAM

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ATTACHMENT E – MONITORING AND REPORTING PROGRAM (MRP)

The Code of Federal Regulations section 122.48 requires that all NPDES permits specify monitoring and reporting requirements. Water Code Sections 13267 and 13383 also authorize the Regional Water Quality Control Board (Regional Water Board) to require technical and monitoring reports. This MRP establishes monitoring and reporting requirements, which implement the federal and California regulations.

I. GENERAL MONITORING PROVISIONS

A. General Monitoring Provision

1. All sampling and sample preservation shall be in accordance with the current edition of “Standard Methods for the Examination of Water and Wastewater” (American Public Health Association) or 40CFR136. (revised as of April 11, 2007) "Guidelines Establishing Test Procedures for the Analysis of Pollutants," promulgated by the United States Environmental Protection Agency (EPA).

2. All laboratory analyses shall be performed in accordance with test procedures under 40 CFR 136 (revised as of April 11, 2007) "Guidelines Establishing Test Procedures for the Analysis of Pollutants," promulgated by the United States Environmental Protection Agency (EPA), unless otherwise specified in this MRP. In addition, the Regional Water Board and/or EPA, at their discretion, may specify test methods that are more sensitive than those specified in 40 CFR 136.

3. 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, or conducted at a laboratory certified for such analyses by the EPA or at laboratories approved by the Regional Water Board's Executive Officer.

4. In conformance with federal regulations 40 CFR 122.45(c), analyses to determine compliance with the effluent limitations for metals shall be conducted using the total recoverable method. For Chromium (VI), the dissolved method in conformance with 40 CFR 136 may be used to measure compliance with the Chromium (VI) limitation.

5. The Discharger shall have, and implement an acceptable written quality assurance (QA) plan for laboratory analyses. Duplicate chemical analyses must be conducted on a minimum of ten percent (10%) of the samples, or at least one sample per month, whichever is greater. A similar frequency shall be maintained for analyzing spiked samples. When requested by the Regional Water Board or EPA, the Discharger will participate in the NPDES discharge monitoring report QA performance study.

6. 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.

7. The Discharger shall assure that records of all monitoring information are maintained and accessible for a period of at least five years (this retention period supersedes the retention period specified in Section IV.A. of Attachment D) 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 information listed in Attachment D- IV Standard Provisions – Records, subparagraph B. of this Order;
   b. The laboratory which performed the analyses;
   c. The date(s) analyses were performed;
   d. The individual(s) who performed the analyses;
   e. The modification(s) to analytical techniques or methods used;
   f. All sampling and analytical results, including
      (1) Units of measurement used;
      (2) Minimum reporting level for the analysis (minimum level);
      (3) Results less than the reporting level 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.
   g. All monitoring equipment calibration and maintenance records;
   h. All original strip charts from continuous monitoring devices;
   i. All data used to complete the application for this Order; and,
   j. Copies of all reports required by this Order.
   k. Electronic data and information generated by the Supervisory Control And Data Acquisition (SCADA) System.

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

9. 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. Whenever the Discharger monitors any pollutant 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 the Executive Officer.

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

   e. 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.

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

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

   h. Quarterly samples shall be taken on any representative day of January, April, July, and October.

   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
2010	July
2011	October
2012	January
2013	April
2014	July
2015	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 and Longitude
001/002	M-INF 1A	RP-1 influent line, before Headworks	34°01'48"N, 117°36'07"W
001/002	M-INF 1B	RP-4 influent line, before Headworks	34°05'09"N, 117°31'28"W
001	M-001A	RP-1 effluent Outfall to Prado Park Lake	33°56'39"N, 117°38'34"W
001	M-001B	At the RP-1splitter box	34°01'29"N, 117°35'57"W
002	M-002A	RP-1 and RP-4 Effluent outfall to Reach 1 of Cucamonga Creek	34°01'31"N, 117°35'56"W
002	M-002B	RP-1 at the end of CCB 3 (Chlorine Contact Basin) before outfall discharge to Reach 1 of Cucamonga Creek	34°01'28"N, 117°35'57"W
003	M-INF 3A	RP-5 influent upstream of any in-plant return flows (theoretical point of combined M-INFB & M-INFD flows)	33°58'04"N, 117°40'28"W
003	M-INF 3B	RP-5 Influent Pump Station	33°57'38"N, 117°40'16"W
003	M-INF 3C	RP-2 Recycle Flow	33°57'29"N, 117°40'23"W
003	M-INF 3D	RP-2 Lift Station	33°57.08"N, 117°40'00"W
003	M-003	RP-5 Effluent to Reach 2 of Chino Creek	33°57'44"N, 117°40'41"W
004	M-INF 4	Influent sampling at CCWRF	33°58'56"N, 117°41'48"W
004	M-004	CCWRF Effluent to Reach 2 of Chino Creek	33°58'47"N, 117°41'39"W
005	REC-001	RP-1 Effluent to recycled water use area, same as M-001B	34°01'29"N, 117°35'57"W
006	REC-002	RP-4 Effluent to recycled water use area	34°04'59"N, 117°31'35"W
007	REC-003	RP-5 Effluent to recycled water use area - Same as M-003	33°57'44"N, 117°40'41"W
008	REC-004	CCWRF Effluent to recycled water use area – Same as M-004	33°58'47"N, 117°41'39"W
002	R-002U	Cucamonga Creek within 100 feet upstream of the DP 002	34°01'29"N, 117°35'58"W
002	R-002D	Cucamonga Creek within 500 feet downstream of DP 002 after blending	34°00'43"N, 117°35'59"W
003	R-003U	Chino Creek within 100 feet upstream of DP 003	33º57'45"N, 117º40'41"W
003	R-003D	Chino Creek within 500 feet downstream of DP 003 in	33º57'45"N, 117º40'41"W
004	R-004U	Chino Creek within 100 feet upstream of DP 004	33º58'47"N, 117º40'41"W
004	R-004D	Chino Creek within 500 feet downstream of DP 004 in	33º58'46"N, 117º40'38"W
S-001	STORM-001	Storm water runoff from RP-1, west	34°01'36"N, 117°35'59"W

Table 2 Monitoring Station Locations

Discharge Point Name	Monitoring Location Name	Monitoring Location Description	Latitude and Longitude
S-002	STORM-002	Storm water runoff from RP-1, east	34°01'28"N, 117°35'58"W

Note: RP-5 influent consists of RP-5 Influent Pump Station flows and RP-2 Lift Station flows, which include RP-2 Recycle Flow and Prado/Butterfield Ranch flows. Therefore, values reported for M-INF3A are flow-weighted values based on flows from RP-5 Pump Station and RP-2 Lift Station.

III. INFLUENT MONITORING REQUIREMENTS

A. Monitoring Locations M-INFs 1A, 1B, 3A, 3B, 3C, 3D, and M-INF 4

1. Sampling stations shall be established for the points of inflow to each treatment plant. The sampling stations shall be located upstream of any in-plant return flows and where representative samples of the influent of the treatment plant can be obtained.

2. The Discharger shall monitor the influent to the Facility at Monitoring Locations M-INFs 1A, 1B, 3A, 3B, 3C, 3D, and M-INF 4 as follows. If more than one analytical test method is listed for a given parameter, the Discharger must select from the listed methods and corresponding Minimum Level:

Table 3 Influent Monitoring M-INFs 1A, 1B, 3A, 3B, 3C, 3D, and M-INF 4

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Flow	mgd	Recorder/Totalizer	Continuous	--
pH	pH Units	Recorder	Continuous	--
Specific Conductance	µmhos/cm	Recorder	Continuous	--
TOC	mg/L	Composite	Weekly	See Section I.A.2 & 3, above, of this MRP
BOD_5 [1]	mg/L	Composite	Weekly	"
Total Suspended Solids	mg/L	Composite	Weekly	"
Total Dissolved Solids	mg/L	Composite	Weekly	"
Ammonia-Nitrogen	mg/L	Grab	Weekly	"
Total Nitrogen	mg/L	Composite	Weekly	"
Total Inorganic Nitrogen	mg/L	Composite	Weekly	"
Cyanide (Free)[2]	µg/l	Grab	Monthly	"

1 *BOD_5 is calculated based on a BOD_5/TOC correlation approved by the Regional Water Board.*

2 *Free cyanide is measured as aquatic free cyanide (ASTM Method D7237) without sodium hydroxide (NaOH) preservation.*

Table 3 Influent Monitoring M-INFs 1A, 1B, 3A, 3B, 3C, 3D, and M-INF 4

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Total Hardness	mg/L	Composite	Quarterly	"
Boron	mg/L	Composite	Quarterly	"
Chloride	mg/L	Composite	Quarterly	"
Fluoride	mg/L	Composite	Quarterly	"
Sodium	mg/L	Composite	Quarterly	"
Sulfate	mg/L	Composite	Quarterly	See Section I.A.3. above, of this MRP
Arsenic	µg/L	Composite	Quarterly	See Section I.A.2. above, of this MRP
Cadmium	µg/L	Composite	Quarterly	"
Total Chromium or Chromium VI	µg/L	Composite	Quarterly	See Section I.A.2. above, of this MRP
Total Recoverable Copper	µg/L	Composite	Quarterly	"
Total Recoverable Lead	µg/L	Composite	Quarterly	"
Total Recoverable Mercury	µg/L	Composite	Quarterly	"
Total Recoverable Nickel	µg/L	Composite	Quarterly	"
Selenium	µg/L	Composite	Quarterly	"
Total Recoverable Silver	µg/L	Composite	Quarterly	"
Total Recoverable Zinc	µg/L	Composite	Quarterly	"
Bis (2-ethylhexyl) phthalate	µg/L	Grab	Quarterly	See Sections I.A.2., I.A.3., above of this MRP
2,3,7,8-TCDD (Dioxin)[3]	µg/L	Composite	Semi-Annually	See Section I.A.3. above, RL 1 pg/L
Volatile organic portion of EPA Priority Pollutants[4] (See Attachment G)	µg/L	Grab	Annually	See Section I.A.2. above, of this MRP
Remaining EPA Priority Pollutants[5] (See Attachment G)	µg/L	Composite	Annually	"

[3] *Applies at M-INF 3B & 3D and M-INF 4 only.*

[4] *EPA priority pollutants are those remaining volatile organic pollutants listed in Attachment "G" which are not specifically listed in this monitoring program table.*

[5] *Remaining EPA priority pollutants are those pollutants listed in Attachment "G" which are not volatile organics and pollutants not specifically listed in this monitoring program table.*

IV. EFFLUENT MONITORING REQUIREMENTS TO SURFACE WATER

The Discharger shall monitor tertiary effluent at monitoring locations M-001, M-002, M-003, and M-004 as follows. If more than one analytical test method is listed for a given parameter, the Discharger must select from the listed methods and corresponding Minimum Level.

A. Effluent Monitoring Locations M-001 to M-004

1. The Discharger shall monitor tertiary treated effluent for DP 001, DP 002, DP 003, and DP 004 at Monitoring Locations M-001B, M-002A, M-003, and M-004 as follows.

Table 4 Tertiary Effluent Monitoring at M-001B, M-002A, M-003, and M-004

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method and Minimum Level, units, respectively
Flow	mgd	Recorder/ Totalizer	Continuous	--
Specific Conductance[6]	µmhos/cm	Recorder	Continuous	--
pH	pH units	Recorder	Continuous	--
Turbidity[7]	NTU	Recorder	Continuous	--
Total Chlorine Residual[8]	mg/L	Recorder	Continuous	--
Coliform Organisms[9], [10]	MPN per 100 ml[11]	Grab	Daily	See Section I.A.3., above of this MRP
CT	mg-minutes/L	Recorder	Continuous[12]	--
Total Organic Carbon (TOC)	mg/L	Composite	Daily	See Section I.A.3. above, of this MRP
BOD_5[13]	mg/L	Composite	Daily	See Section I.A.3. above, of

6 *Except M-001B.*

7 *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.*

8 *Except M-001B.*

9 *Samples for total coliform bacteria shall be collected daily. Samples shall be taken from the disinfected effluent.*

10 *M-001B is the coliform monitoring location for DP 001 & DP 002. Alternative monitoring at M-002B is available if gate is closed between Chlorine Contact Basin 2 and 3.*

11 *MPN/100mL = Most Probable Number per 100 milliliters.*

12 *The CT and modal contact time shall be continuously calculated and recorded. The minimum daily value shall be reported monthly. Modal contact time and CT shall be calculated based on the minimum one-hour average value in a 24-hr period.*

Table 4 Tertiary Effluent Monitoring at M-001B, M-002A, M-003, and M-004

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method and Minimum Level, units, respectively
				this MRP
Total Suspended Solids	mg/L	Composite	Daily	See Section I.A.3. above
Ammonia-Nitrogen	mg/L	Grab	Weekly	See Section I.A.3. above, of this MRP
Temperature	°C	Grab	Weekly	--
Total Dissolved Solids[14]	mg/L	Composite	Monthly	See Section I.A.3. above
Total Inorganic Nitrogen	mg/L	Composite	Monthly	See Section I.A.3. above
Total Nitrogen	mg/L	Composite	Monthly	See Section I.A.3. above
Cyanide, free[15]	µg/L	Grab	Monthly	See Sections I.A.2., I.A.3., above of this MRP and RL 5 µg/L
Total Recoverable Copper	µg/L	Composite	Monthly	See Sections I.A.2., I.A.3. above of this MRP and RL 0.5 µg/L
Toxicity[16]	TUc	See Section V.A, Below	Monthly	See Section V, Below
Total Hardness	mg/L	Composite	Monthly	See Section I.A.3. above
Bicarbonate	mg/L	Composite	Monthly	See Section I.A.3. above, of this MRP
Boron	mg/L	Composite	Monthly	See Section I.A.3. above
Calcium	mg/L	Composite	Monthly	See Section I.A.3. above
Carbonate	mg/L	Composite	Monthly	See Section I.A.3. above
Chloride	mg/L	Composite	Monthly	See Section I.A.3. above
Fluoride	mg/L	Composite	Monthly	See Section I.A.3. above, of this MRP
Magnesium	mg/L	Composite	Monthly	See Section I.A.3. above
Sodium	mg/L	Composite	Monthly	See Section I.A.3. above
Sulfate	mg/L	Composite	Monthly	See Section I.A.3. above
Total Recoverable Cadmium	µg/L	Composite	Monthly	See Sections I.A.2., I.A.3., above of this MRP and RL 0.5 µg/L

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13 *BOD_5 is calculated daily based on a BOD_5/TOC correlation approved by the Regional Water Board.*

14 *Except M-001B.*

15 *Free cyanide is measured as aquatic free cyanide (ASTM Method D7237) without NaOH preservation.*

16 *Except M-001B.*

Table 4 Tertiary Effluent Monitoring at M-001B, M-002A, M-003, and M-004

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method and Minimum Level, units, respectively
Chromium (VI) or Total Chromium[17]	µg/L	Composite	Monthly	See Sections I.A.2., I.A.3. above of this MRP and RL 5 µg/L, Total Cr, RL 2 µg/L
Total Recoverable Lead	µg/L	Composite	Monthly	See Sections I.A.2., I.A.3. above of this MRP and RL 2 µg/L
Total Recoverable Mercury	µg/L	Composite	Monthly	See Sections I.A.2., I.A.3. above of this MRP and RL 0.05 µg/L
Total Recoverable Selenium	µg/L	Composite	Monthly	See Sections I.A.2., I.A.3. above of this MRP and RL 2 µg/L
Total Recoverable Silver	µg/L	Composite	Monthly	See Sections I.A.2., I.A.3., above of this MRP and RL 1 µg/L
Total Recoverable Zinc	µg/L	Composite	Monthly	See Sections I.A.2., I.A.3., above of this MRP
Bis (2-ethylhexyl) phthalate	µg/L	Grab	Monthly	See Sections I.A.2., I.A.3., above of this MRP
Bromodichloromethane[18]	µg/L	Grab	Monthly	See Sections I.A.2., I.A.3., above of this MRP, ML 5 µg/L
Aluminum	mg/L	Composite	Quarterly	See Section I.A.3. above
Antimony	mg/L	Composite	Quarterly	See Sections I.A.2., I.A.3., above of this MRP
Arsenic	µg/L	Composite	Quarterly, (See IV.A.3., below)	See Section I.A.3. above
Barium	µg/L	Composite	Quarterly, (See IV. A.3., below)	See Section I.A.3. above
Cobalt	µg/L	Composite	Quarterly (See IV.A.3., below)	See Section I.A.3. above,
Total Recoverable Nickel	µg/L	Composite	Quarterly (See IV.A.3., below)	See Section I.A.3. above,
2,3,7,8-TCDD (Dioxin)[19]	µg/L	Composite	Quarterly (See IV.A.5., below)	See Section I.A.3. above, RL 1 pg/L
Volatile organic portion of remaining EPA Priority Pollutants (See Attachment G)	µg/L	Grab	Annually (See IV.A.4., below)	See Sections I.A.2., I.A.3., above of this MRP
Remaining EPA Priority Pollutants (See Attachment G)	µg/L	Composite	Annually (See IV.A.4., below)	See Sections I.A.2., I.A.3., above of this MRP

[17] *If Total Chromium test result is greater than 11 µg/L, the following sample shall be tested for Chromium VI, until directed otherwise.*

[18] *Applies at M-003 only.*

[19] *Applies at M-003 and M-004 only.*

2. The Discharger shall monitor tertiary treated effluent for DPs 001 and 002 at M-001A as follows:

Table 5 Effluent Monitoring Requirements at M-001A

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Test Method
Turbidity	NTU	Recorder	Continuous	--
Total Chlorine Residual	mg/l	Recorder	Continuous	--
Specific Conductance	µmhos/cm	Recorder	Continuous	--
Total Dissolved Solids	mg/l	Composite	Monthly	See Sections I.A.2., I.A.3., above of this MRP
Toxicity	TUc	See Section V.A, Below	Monthly	See Section V, Below

3. The monitoring frequency for those priority pollutants that are detected during the required quarterly monitoring at a concentration greater than the concentration specified for that pollutant[20] in Attachment I - Triggers for Monitoring Priority Pollutants shall be accelerated to monthly. To return to the monitoring frequency specified, the Discharger shall request and receive approval from the Regional Water Board's Executive Officer or designee.

4. The monitoring frequency for those priority pollutants that are detected during the required semi-annual or annual monitoring at a concentration greater than the concentration specified for that pollutant in Attachment I shall be accelerated to quarterly for one year. To return to the specified monitoring frequency, the Discharger shall request and receive approval from the Regional Water Board's Executive Officer or designee.

5. The Discharger is required to conduct quarterly monitoring for Dioxin for one year. After one year, if quarterly monitoring result show non-detect values at acceptable reporting levels, the Discharger may reduce the frequency of monitoring for Dioxin from quarterly to semi-annual monitoring upon approval by the Regional Water Board Executive Officer or designee.

B. Secondary Effluent Monitoring at M-002, M-003 and M-004 with 20:1 Dilution

1. The Discharger shall monitor secondary treated effluent at M-002B, M-003 and M-004 when 20:1 dilution is provided by the receiving surface water at the time of the discharge, as follows:

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[20] *For those priority pollutants without specified criteria values, accelerated monitoring is not required.*

Table 6 Secondary Effluent Monitoring at M-002B to M-004 w/ 20:1 Dilution

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Test Method
Flow	mgd	Grab	Daily (when discharging)	--
pH	pH units	Recorder/Totalizer	Continuous	--
Total Chlorine Residual	mg/L	Recorder	Continuous	--
BOD_5	mg/L	Grab	Daily (when discharging)	See Section I.A.3., above, of this MRP
Total Dissolved Solids	mg/L	Grab	when discharging	"
Coliform Organisms	MPN per 100 ml[21]	Grab	Daily (when discharging)	See Sections I.A.2., I.A.3., above of this MRP
Suspended Solids	mg/L	Grab	Daily (when discharging)	See Sections I.A.2., I.A.3., above of this MRP
Total Hardness	mg/L	Grab	When discharge	See Section I.A.3., above, of this MRP
EPA Priority Pollutants	µg/L	Grab	Annually[22] (See IV.A.3., above)	See Sections I.A.2., I.A.3., above of this MRP

V. WHOLE EFFLUENT TOXICITY TESTING REQUIREMENTS

A. Toxicity Monitoring Requirements at M-001A, M-002A, M-003, and M-004

1. The Discharger shall conduct critical life stage chronic toxicity testing in accordance with Method 1002.0 - Survival and Reproduction test for water flea, *Ceriodaphnia dubia* as specified in "Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms", Fourth Edition, Environmental Monitoring Systems Laboratory, U.S. Environmental Protection Agency 2002, Cincinnati, Ohio (October 2002, EPA-821-R-02-013).

2. The Discharger shall establish procedures to ensure that the toxicity testing laboratory notifies the Discharger of the results of toxicity testing by the end of the next business day following the completion of such tests.

3. A minimum of one monthly chronic toxicity test shall be conducted on representative composite samples.

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[21] *MPN/100mL = Most Probable Number per 100 milliliters*

[22] *Sample is collected from the first discharge, once a year.*

4. The Discharger shall increase the frequency of chronic toxicity testing to every two weeks whenever any test result exceeds 1.0 TUc. The first test under the accelerated schedule shall be conducted within two weeks of receiving notice of the test that exceeds 1.0 TUc, and every two weeks thereafter. The Discharger may resume the regular test schedule when two consecutive chronic toxicity tests result in 1.0 TUc, or when the results of the Initial Investigation Reduction Evaluation conducted by the Discharger have adequately addressed the identified toxicity problem.

5. The presence of chronic toxicity shall be estimated as specified in Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms. Fourth Edition. EPA-821-R-02-013.

6. Results for both survival and reproduction endpoints shall be reported in TUc, where TUc = 100/NOEC or 100/ICp or ECp (p is the percent effluent). The no observed effect concentration (NOEC) is the highest concentration of toxicant to which organisms are exposed in a chronic test, that causes no observable adverse effect on the tests organisms (e.g., the highest concentration of toxicant to which the values for the observed responses are not statistically significant different from the controls). The inhibition concentration (IC) is a point estimate of the toxicant concentration that causes a given percent reduction in a non-quantal biological measurement (e.g., reproduction or growth) calculated from a continuous model (the EPA Interpolation Method). The effective concentration (EC) is a point estimate of the toxicant concentration that would cause a given percent reduction in quantal biological measurement (e.g., larval development, survival) calculated from a continuous model (e.g., probit).

7. Additional Testing Requirements

    a. A series of at least five dilutions and a control will be tested. Five dilutions of the series shall be within 60% to 100% effluent concentration.
    b. If organisms are not cultured in-house, concurrent testing with reference toxicants shall be conducted. Where organisms are cultured in-house, monthly reference toxicant testing is sufficient. Reference toxicants shall also be conducted using the same test conditions as the effluent toxicity test (e.g., same test duration, etc).
    c. If either of the reference toxicant test or the effluent tests do not meet all test acceptability criteria as specified in the manual[23], then the Discharger must re-sample and re-test within 14 days or as soon as the Discharger receives notification of failed tests.
    d. Control and dilution water should be receiving water or lab water, as appropriate, as described in the manual. If the dilution water used is different from the culture water, a second control, using culture water shall also be used.

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[23] *Refers to USEPA Manual "Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms. - 4th Ed., October 2002, EPA-821-R-02-013.*

8. Quality Assurance/Control:

   a. A quality assurance/quality control (QA/QC) program shall be instituted to verify the results of the effluent toxicity monitoring program. The QA/QC program shall include but shall not be limited to the following: (1) Selection of an independent testing laboratory; (2) Approval by the Regional Water Board's Executive Officer or Executive Officer's designee of the independent testing laboratory; (3) Once during the year, the Discharger shall split samples with the independent laboratory for conducting chronic toxicity testing; (4) Results from the independent laboratory shall be submitted to the Regional Water Board and the Discharger for evaluation; (5) The Discharger shall review the test acceptability criteria in accordance with the EPA test protocols, Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms. Fourth Edition. EPA-821-R-02-013.

   b. Results from the independent laboratory of the annual QA/QC split samples are to be used for Quality Assurance/Quality Control (QA/QC) purposes only and not for purposes of determining compliance with other requirements of this Order.

9. The use of alternative methods for measuring chronic toxicity may be considered by the Executive Officer on a case–by-case basis. The use of a different test species, in lieu of conducting the required test species may be considered and approved by the Executive Officer on a case-by case basis upon submittal of the documentation supporting Discharger’s determination that a different species is more sensitive and appropriate.

10. Reporting: Results of all toxicity testing conducted within the month following the reporting period shall be submitted monthly in accordance with "Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms. Fourth Edition. EPA-821-R-02-013.” The report shall include a determination of the median value of all chronic toxicity testing results conducted during the two previous months.

11. Whenever an Initial Investigation Reduction Evaluation is conducted, the results of the evaluation shall be submitted upon completion. In addition, monthly status reports shall be submitted as part of the Discharger’s monitoring report for the previous month.

VI. LAND DISCHARGE MONITORING REQUIREMENTS – NOT APPLICABLE

VII. RECLAMATION MONITORING REQUIREMENTS

A. Monitoring Locations REC-001 to REC-004

1. The Discharger shall monitor recycled water at REC-001, REC-002, REC-003 and REC-004 as follows:

Table 7 Reclamation Monitoring at REC-001 to REC-004

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Flow	mgd	Recorder/Totalizer	Continuous	--
pH	Standard units	Recorder/Totalizer	Continuous	--
Turbidity[24]	NTU	Recorder	Continuous	--
CT	mg-minutes/L	Recorder	Continuous[25]	--
Coliform Organisms	MPN per 100 mL	Grab	Daily	See Section I.A.3., above, of this MRP
BOD_5	mg/L	Composite	Daily	See Section I.A.3., above, of this MRP
Total Suspended Solids	mg/L	Composite	Daily	See Section I.A.3., above, of this MRP
TDS	mg/L	Composite	Monthly	See Section I.A.3., above, of this MRP

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 including the names of the groundwater management zones underlying the recycled water use sites; type of use (e.g. irrigation, industrial, etc); and the dates at which water is supplied. The Discharger shall submit annually a summary report of the recorded information by groundwater management zone to the Regional Water Board.

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[24] *Turbidity samples shall be collected at M-001A, M-002A, M-003, and M-004, respectively.*

[25] *The CT and modal contact time shall be continuously calculated and recorded. Modal contact time and CT shall be calculated based on the minimum one-hour average value in a 24-hr period.*

VIII. RECEIVING WATER MONITORING REQUIREMENTS – SURFACE WATER AND GROUNDWATER

A. Flow Measurements at Monitoring Locations R-002U, R-003U, and R-004U During 20:1 Dilution.

The Discharger shall make provisions for the measurement of the receiving water flow at a suitable location in the creek and determine whether a 20:1 dilution exists at DP 002, DP 003, or DP 004, before discharging secondary treated effluent. A dilution of 20:1 or more exclusive of discharges to surface waters from upstream publicly owned treatment works is required at the point of discharge for the discharge of secondary effluent. Flow measurements shall be made prior to any direct discharge to the creeks and shall continue on a daily basis until the discharge is terminated.

B. Monitoring Locations R-002U, R-003U, and R-004U

1. The Discharger shall monitor the receiving water at R-002U, R-003U, and R-004U for the following parameters/constituents when there is flowing water:

Table 8 Receiving Water Monitoring at R-002U, R-003U, and R-004U

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Flow	mgd	estimate	Weekly	--
Dissolved Oxygen	mg/L	Grab	Weekly	--
Temperature	^{0}C	"	Weekly	--
pH	pH unit	Grab	Weekly	--
Total Dissolved Solids	mg/L	Grab	Monthly	See Sections I.A.3. above of this MRP
Total Inorganic Nitrogen	mg/L	Grab	Monthly	See Sections I.A.3. above of this MRP
Total Hardness	mg/L	Grab	Quarterly	See Sections I.A.3. above of this MRP
Total Suspended Solids	mg/L	Grab	Quarterly	See Sections I.A.3. above of this MRP
EPA Priority Pollutants (see VIII.C.2., below)	µg/L	Grab	Annually	See Sections I.A.2., 3. above of this MRP

C. Monitoring Locations R-002D & R-003D

1. The Discharger shall monitor the receiving water at R-002D, R-003D, when there is flowing water upstream of the discharge point for the following constituents:

Table 9 Receiving Water Monitoring at R-002D & R-003D

Parameter	Units	Sample Type	Minimum Sampling & Testing Frequency	Required Analytical Test Method
Dissolved Oxygen	mg/L	Grab	Weekly	--
Temperature	^{0}C	Grab	Weekly	--
pH	pH unit	Grab	Weekly	--
Color change, foam, deposition of material, odor	--	Observe	Weekly	See Section I.A.3., above, of this MRP
Total Hardness	mg/L	Grab	Quarterly	See Sections I.A.3. above of this MRP
Total Suspended Solids	mg/L	Grab	Quarterly	"
EPA Priority Pollutants (see VIII.C.2., below)	µg/L	Grab	Annually	See Sections I.A.2., 3. above of this MRP

2. For the annual monitoring of the heavy metals EPA Priority Pollutants, the total recoverable and total dissolved metal concentrations shall be determined.

D. Regional Monitoring for Fish Flesh Testing:

Unless otherwise directed by the Regional Water Board Executive Officer, the Discharger shall implement the approved plan for the annual sampling and testing of mercury levels in fish flesh samples collected from the Santa Ana River. The frequency of monitoring and submission of reports shall be as stipulated in the approved plan.

E. Monitoring Requirements for Groundwater – Not Applicable

Monitoring of groundwater by the Discharger is addressed in Order No.R8-2007-0039.

IX. OTHER MONITORING REQUIREMENTS

A. Biosolids Monitoring

1. Biosolids monitoring shall be conducted as follows:

Table 10 Biosolids Monitoring Requirements

Biosolids Monitoring	Units	Type of Sample	Minimum Frequency of Sampling & Testing
Priority Pollutants	mg/kg	Grab	Semi-annually
Moisture Content (% solid)	mg/kg	Grab	Quarterly

2. 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. This information shall be reported quarterly.

B. Stormwater Monitoring

The Discharger shall monitor discharges at Discharge Points S-001 to S-002 (as specified in Table 2 of this MRP) and submit monitoring reports in accordance with Attachments J and K - Stormwater Monitoring and Reporting Requirements.

C. 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) supplied to the sewered area from each source of water and the resulting flow-weighted water supply quality for total dissolved solids.

D. 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 April 1 - June 30 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 through June 30 of each fiscal year and is due on September 30 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 POTWs' 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[26] 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 plants (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.

[26] *The Discharger is not required to analyze for asbestos.*

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)[27], 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.
(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.

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

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.

X. REPORTING REQUIREMENTS

A. General Monitoring and Reporting Requirements

1. The Discharger shall comply with all Standard Provisions (Attachment D) related to monitoring, reporting, and recordkeeping.
2. All analytical data shall be reported with method detection limit[28] (MDLs) and with identification of either reporting level or limits of quantitation (LOQs). Quality assurance/quality control data shall be submitted upon request. Test results shall be reported in either milligrams/liter (mg/L) or micrograms/liter (µg/L), or picograms/L (pg/L), as appropriate.
3. For effluent wastewater monitoring:

[28] *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.*

a. The Discharger shall require its testing laboratory to calibrate the analytical system down to the minimum level (ML)[29] specified in Attachment H for priority pollutants with effluent limitations in this Order, unless an alternative minimum level is approved by the Regional Water Board's Executive Officer. When there is more than one ML value for a given substance, the Discharger shall use the ML values, and their associated analytical methods, listed in Attachment H that are below the calculated effluent limitation. The Discharger may select any one of those cited analytical methods for compliance determination. If no ML value is below the effluent limitation, then the lowest ML value and its associated analytical method, listed in Attachment H shall be used. 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.

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

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

(2) Sample results less than the reported ML, but greater than or equal to the laboratory's current Method Detection Limit (MDL)[30], shall be reported as "Detected, but Not Quantified," or "DNQ." The estimated chemical concentration of the sample shall also be reported.

(3) Sample results not detected above the laboratory's MDL shall be reported as "not detected" or "ND."

4. For receiving water monitoring and for those priority pollutants without effluent limitations, the Discharger shall require its testing laboratory to quantify constituent concentrations to the lowest achievable MDL as determined by the procedure found in 40 CFR 136 (revised as of April 11, 2007). In situations where the most stringent applicable receiving water objective (freshwater or human health (consumption of organisms only), as specified for that pollutant in 40 CFR 131.38[31] is below the minimum level value specified in Attachment H and the Discharger cannot achieve an MDL value for that pollutant below the ML value, the Discharger shall submit justification why a lower MDL value cannot be achieved. Justification shall be submitted together with monthly monitoring reports.

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29 *Minimum level is the concentration at which the entire analytical system must give a recognizable signal and acceptable 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.*

30 *MDL is the minimum concentration of a substance that can be measured and reported with 99 percent confidence that the analytical concentration is greater than zero, as defined in 40 CFR 136, Appendix B, revised as of April 11, 2007.*

31 *See Federal Register/ Vol. 65, No. 97 / Thursday, May 18, 2000 / Rules and Regulations.*

5. For non-priority pollutants monitoring, all analytical data shall be reported with method detection limits, as determined by the procedure found in 40 CFR 136 (revised as of April 11, 2007).
6. 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.
7. 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.
8. The Discharger shall tabulate the monitoring data to clearly illustrate compliance and/or noncompliance with the requirements of the Order.
9. The Discharger shall submit to the Regional Water Board reports necessary to determine compliance with effluent limitations in this Order and shall follow the chemical nomenclature and sequential order of priority pollutant constituents shown in Attachment G – Priority Pollutant Lists for reporting the required annual priority pollutant monitoring.
10. The reports for June and December shall include a roster of plant personnel, including job titles, duties, and level of State certification for each individual.
11. The Discharger shall report monitoring results for specific parameters in accordance with the following table:

Table 11 Reporting Requirements

Parameter	Measurement
Flow	Daily total flow
pH	Daily High and daily low
Total Residual Chlorine	Daily Maximum
Electrical Conductivity	Daily High
Turbidity	Daily maximum

12. The Discharger shall file a written report with the Regional Water Board within ninety (90) days after the average dry-weather waste flow for any month equals or exceeds 75 percent of the design capacity of the 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 IX. Additionally, the Discharger shall report in the SMR the results of any special studies, acute and chronic toxicity testing, TRE/TIE, PMP, and Pollution Prevention Plan required 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 USEPA-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 12 Monitoring Periods and Reporting Schedule

Sampling Frequency	Monitoring Period Begins On	Monitoring Period	SMR Due Date
Continuous	The effective day of this Order	All	Submit with monthly SMR
Daily	The effective day of this Order	(Midnight through 11:59 PM) or any 24-hour period that reasonably represents a calendar day for purposes of sampling.	Submit with monthly SMR
Weekly	The effective day of this Order	Sunday through Saturday	Submit with monthly SMR
Monthly	First day of calendar month following permit effective date or on permit date if that date is first day of the month	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

Table 12 Monitoring Periods and Reporting Schedule

Sampling Frequency	Monitoring Period Begins On	Monitoring Period	SMR Due Date
Quarterly[32]	Closest of January 1, April 1, July 1, or October 1 following permit effective date	January 1 through March 31, samples are collected in January; April 1 through June 30; samples are collected in April; July 1 through September 30; samples are collected in July; October 1 through December 31; samples are collected in October	First day of the second month following the reporting period, submit with monthly SMR
Semi-annually	Closest of January 1 or July 1 following permit effective date	January 1 through June 30, samples are collected in January. July 1 through December 31, samples are collected in July.	first day of the second month following the reporting period, submit with monthly SMR
Annually	The effective day of this Order	January 1 through December 31, see Table 1.	April 1 each year including report requirements in Attachments Pretreatment report due to September, 1

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

   c. 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.

[32] *Quarterly monitoring result for certain constituents may be used to satisfy the annual monitoring for the same constituents.*

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

e. 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. 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.

7. 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 priority 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 most stringent applicable receiving water objectives (freshwater or human health (consumption of organisms only) as specified for that pollutant in 40 CFR 131.3833). The Discharger shall include a discussion of the corrective actions taken or planned to address values above receiving water objectives.

C. Discharge Monitoring Reports (DMRs)

1. As described in Section X.B.1 above, at any time during the term of this permit, the State or Regional Water Board may notify the Discharger to electronically submit SMRs that will satisfy federal requirements for submittal of Discharge Monitoring Reports (DMRs). Until such notification is given, the Discharger shall submit DMRs in accordance with the requirements described below.

2. DMRs must be signed and certified as required by the standard provisions (Attachment D). The Discharger shall submit the original DMR and one copy of the DMR to the address listed below:

Table 13 Monitoring Reporting Submittal

Standard Mail	FedEx/UPS/ Other Private Carriers
State Water Resources Control Board Division of Water Quality c/o DMR Processing Center PO Box 100 Sacramento, CA 95812-1000	State Water Resources Control Board Division of Water Quality c/o DMR Processing Center 1001 I Street, 15th Floor Sacramento, CA 95814

3. All discharge monitoring results must be reported on the official USEPA pre-printed DMR forms (EPA Form 3320-1). Forms that are self-generated will not be accepted unless they follow the exact same format of EPA Form 3320-1.

   Regional Administrator
   U. S. Environmental Protection Agency
   Region 9 – Attention WTR – 7
   75 Hawthorne Street
   San Francisco, CA 94105

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[33] *See Federal Register/ Vol. 65, No. 97 / Thursday, May 18, 2000 / Rules and Regulations.*

D. Other Reports

1. The Discharger shall report the results of any special studies, acute and chronic toxicity testing, TRE/TIE, PMP, and Pollution Prevention Plan required by Special Provisions – VI.C. of this Order. The Discharger shall submit reports with the first monthly SMR scheduled to be submitted on or immediately following the report due date in compliance with SMR reporting requirements described in subsection X.B.5 above.

2. Site Spills

a. In accordance with the requirements of Health and Safety Code section 5411.5, the Discharger shall provide notification to the local health officer or the director of environmental health with jurisdiction over the affected water body of any unauthorized release of sewage or other waste that causes, or probably will cause, a discharge to any waters of the state.

b. In accordance with the requirements of Water Code section 13271, the Discharger shall provide notification to the Office of Emergency Services of the release of reportable amounts of hazardous substances or sewage that causes, or probably will cause, a discharge to any waters of the state. The California Code of Regulations, Title 23, section 2250, defines a reportable amount of sewage as being 1,000 gallons. The phone number for reporting these releases to the Office of Emergency Services is (800) 852-7550.

c. The Discharger shall notify the Regional Water Board of any unauthorized release of sewage from its wastewater treatment plant that causes, or probably will cause, a discharge to a water of the state as soon as possible, but not later than two (2) hours after becoming aware of the release. This notification does not need to be made if the Discharger has notified the Office of Emergency Services. The phone number for reporting these releases of sewage to the Regional Water Board is (951) 782-4130. At a minimum, the following information shall be provided:

(1) The location, date, and time of the release.

(2) The water body that received or will receive the discharge.

(3) An estimate of the amount of sewage or other waste released and the amount that reached a surface water at the time of notification.

(4) If ongoing, the estimated flow rate of the release at the time of the notification.

(5) The name, organization, phone number and email address of the reporting representative.

d. As soon as possible, but not later than twenty four (24) hours after becoming aware of an unauthorized discharge of sewage or other waste from its wastewater treatment plant to a water of the state, the Discharger shall submit a statement to the Regional Water Board by email at spillreportR8@waterboards.ca.gov. If the discharge is 1,000 gallons or more, this statement shall certify that the State Office of Emergency Services has been notified of the discharge in accordance with Water Code section 13271. The statement shall also certify that the local health officer or director of environmental health with jurisdiction over the affected water bodies has been notified of the discharge in accordance with Health and Safety Code section 5411.5. The statement shall also include at a minimum the following information:

(1) Agency and Order No.

(2) The location, date, and time of the discharge.

(3) The water body that received the discharge.

(4) A description of the level of treatment of the sewage or other waste discharged.

(5) An initial estimate of the amount of sewage or other waste released and the amount that reached a surface water.

(6) The Office of Emergency Services control number and the date and time that notification of the incident was provided to the Office of Emergency Services.

(7) The name of the local health officer or director of environmental health representative notified (if contacted directly); the date and time of notification; and the method of notification (e.g., phone, fax, email).

Attachment F – Fact Sheet

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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 332818001**			
Discharger/Operator		Inland Empire Utilities Agency			
Name of Facility		Regional Water Recycling Plant No. 1 (RP-1)	Regional Water Recycling Plant No. 4 (RP-4)	Regional Water Recycling Plant No. 5 (RP-5)	Carbon Canyon Water Reclamation Facility (CCWRF)
Address		2450 East Philadelphia Street.	12811 Sixth Street	6068 Kimball Avenue, Building "C"	14950 Telephone Avenue
		Ontario, CA 91761	Rancho Cucamonga, CA 91729	Chino, CA 91708	Chino, CA 91710
		San Bernardino County			
Facility Contact, Title and Phone		Patrick O. Sheilds, Executive Manager of Operations, (909) 993-1806			
Authorized Person to Sign and Submit Reports		Patrick O. Sheilds, Executive Manager of Operations, (909) 993-1806			
Address		6075 Kimball Avenue, Chino, CA 91708			
Mailing/Billing Address		P.O. Box 9020, Chino Hills, CA 91709			
Major or Minor Facility		Major			
Type of Facility		POTW			
Threat to Water Quality		1			
Complexity		A			
Pretreatment Program		Y			
Reclamation Requirements		Y			
Facilities Permitted Flow		84.4 million gallons per day (mgd)			
Facility Design Flow		44 mgd	14 mgd	15 mgd (and 1.3 mgd flow from sludge treatment system at Regional Water Recycling Plant No.2 (RP-2))	11.4 mgd
Watershed		Santa Ana River watershed			
Receiving Water	**Surface Waters**	Prado Park Lake, Reach 1A of Chino Creek, Reach 1 of Cucamonga Creek, Mill Creek, and Reach 3 of Santa Ana River		Reach 1B of Chino Creek and Reach 3 of Santa Ana River	Reach 2 of Chino Creek and Reach 3 of Santa Ana River
	Groundwater	Chino North "Maximum Benefit" Groundwater Management Zone/Chino 1, 2, and 3 "Antidegradation" Groundwater Management Zones			
Receiving Water Type		Inland surface water and groundwater			

A. Inland Empire Utilities Agency (hereinafter Discharger, or IEUA) is the owner and operator of four regional water recycling facilities, appurtenant structures[1], sewer pipeline system, and recycled water distribution system (hereinafter Facilities). The four Facilities are linked as shown in Figures 1 and 2 of Attachment C.

For the purposes of this Order, references to the "discharger" or "permittee" in applicable federal and State laws, regulations, plans, or policy are held to be equivalent to references to the Discharger herein.

B. The Discharger produces tertiary treated wastewater and discharges to surface waters at different locations, including discharges into Reaches IA, IB and 2 of Chino Creek, Reach 1 of Cucamonga Creek, Prado Park Lake, and Reach 3 of the Santa Ana River. Chino Creek, Reach 1 of Cucamonga Creek, Prado Park Lake, and the Santa Ana River are waters of the United States. Discharges from the Facilities are regulated pursuant to the following Orders tabulated below for each facility:

Table 2. List of Orders adopted for each Facility

Facility	Order No.	Order Adoption Date	Expiration Date	WDR Regulatory Scope
RP-1 & RP-4	R8-2006-0010, amended by R8-2007-0045 and R8-2007-0078	May 19, 2006	May 1, 2011	Regulates discharges to Prado Park Lake and Reach 1 of Cucamonga Creek, tributaries to Reach 3 of Santa Ana River and recycled water use.
RP-5	R8-2008-0028	Sept. 5, 2008	Sept. 1, 2013	Regulates discharges to Reach 1B of Chino Creek, a tributary to Reach 3 of Santa Ana River and recycled water use.
CCWRF	R8-2004-0020, amended by R8-2006-0038 and R8-2007-0078	August 13, 2004	August 1, 2009	Regulates discharges to Reach 2 of Chino Creek, a tributary to Reach 3 of Santa Ana River and recycled water use.

The terms and conditions of the current Orders remain in effect until new Waste Discharge Requirements and NPDES permit are adopted pursuant to this Order.

[1] *Appurtenant structures among other things include the Regional Water Recycling Plant No.2 (RP-2) facility. RP-2 is an existing tertiary wastewater treatment plant owned by the Discharger. Cease and Desist Order No. 94-74 required the Discharger to relocate the liquid treatment facilities at RP-2 to a site not subject to flooding. Consequently, RP-5 replaced RP-2. Only the sludge treatment systems at RP-2 are operational and there are no longer surface water discharges from RP-2. Primary and waste activated sludge from RP-5 and CCWRF are piped to the regional solids handling facility at RP-2 for sludge treatment. Dewatered wastewater from RP-2 is pumped back to the headworks of RP-5.*

C. The Discharger filed a report of waste discharge and submitted an application for a new Waste Discharge Requirements (WDRs) and National Pollutant Discharge Elimination System (NPDES) permit on January 27, 2009. The Discharger requests consolidation of all three permits into one permit for the Discharger's Facilities. This request is consistent with the interconnected nature of the facilities and the approach specified in the individual Orders to regulate certain constituents (TDS and TIN) on an agency-wide, flow-weighted average basis. This new permit will regulate the discharges from the Facilities to surface waters and will also regulate recycled water use. Supplemental information was requested starting February 13, 2009. The latest supplemental information was received on May 21, 2009. A site visit was conducted on May 19, 2009, to observe operations and collect additional data to develop permit limitations and conditions. The application was deemed complete on May 21, 2009.

II. FACILITY DESCRIPTION

A. Description of Wastewater and Biosolids Treatment or Controls

1. Discharger and Service Area

Inland Empire Utilities Agency (IEUA) is a municipal water supply and wastewater treatment agency. IEUA owns and operates a regional wastewater collection system and water recycling plants, including RP-1, RP-4, RP-5, and CCWRF. The treatment Facilities receive domestic, commercial, and industrial waste waters generated within the IEUA service areas. Wastewater can be diverted to different plants via available routing options built into the regional system (see Figure 1 of Attachment C for further detail). After treatment, recycled water can be discharged to nearby outfall(s) or recycled for industrial uses, irrigation and groundwater recharge. The following table summarizes the service areas and the population served by each Facility.

Table 3. Summary of Service Areas & Population Served

Facility	Population Served	Cities/Agency Served
RP-1 & RP-4	602,000	Chino, Fontana, Montclair, Upland, Ontario, and Cucamonga Valley Water District
RP-5	104,000	Chino, Chino Hills, and Ontario; Montclair and Upland via CCWRF
CCWRF	126,400	Chino, Chino Hills, Montclair, and Upland

Attachment B provides a map of the area at each water recycling Facility.

Attachment C provides the IEUA System-Wide influent flow interrelationship diagram, IEUA System-Wide Water Recycling Distribution System and treatment flow schematic for each Facility.

2. Design Characteristics and Biosolids Treatment

The treatment processes at each Facility are tabulated as follows:

Table 4. Plant Treatment Processes

Facility	RP-1	RP-4	RP-5	CCWRF
Preliminary & Primary Treatment	Mechanical bar screens, grit chambers, chemical addition, primary clarifiers, flow equalization /emergency storage basins	Mechanical bar screens, grit chambers, chemical addition, primary clarifiers	Mechanical bar screen, grit chambers, one storage basin (, primary clarifiers	Mechanical bar screen, grit removal, chemical addition, primary clarifiers, emergency storage basin
Secondary Treatment	Aeration trains with oxic/anoxic zones, secondary clarifiers	Aeration basins with oxic /anoxic zones, secondary clarifiers	Aeration basins with anoxic/oxic zones, secondary clarifiers	Aeration basins with anoxic/oxic zones, secondary clarifiers
Tertiary Treatment	Coagulation/Flocculation, sedimentation, filtration, chlorination, dechlorination	Coagulation/Flocculation, filtration, chlorination, de-chlorination (not used), emergency diversion pond	Coagulation/Flocculation, filtration, chlorination, de-chlorination, emergency overflow pond	Coagulation/flocculation, filtration, chlorination, dechlorination
Design Capacity, mgd	44	14	15 (and 1.3 mgd RP-2 sludge treatment system wastewater flows)	11.4
Solids Handling	The solids handling for these facilities takes place at RP-1. RP-4 primary sludge and waste activated sludge are conveyed through the sewer system and enter RP-1 as influent. Solids treatment includes gravity thickener and dissolved air flotation thickeners, anaerobic digestion, digester gas utilization, and belt press dewatering. Belt press wash water is pumped to the DAFT units where the solids can be recovered and the remaining liquid is returned to the activated sludge process.[2] Belt press filtrate is pumped to the Non-Reclaimable Waste System (NRWS) line and is ultimately treated by the County Sanitation Districts of Los Angeles County.		Primary and waste activated sludge wastes from RP-5 and CCWRF are piped to the regional solids handling facility at RP-2 for sludge treatment. The solids treatment system at RP-2 includes gravity thickeners; dissolved air flotation thickeners; anaerobic digestion; aerobic digestion; belt press, and centrifuge dewatering. Dewatered biosolids are hauled away to approved disposal sites Sludge treatment system wastewater from RP-2 is pumped back to headworks of RP-5.	

[2] *IEUA plans to construct a building to house four new centrifuges for dewatering digested sludge. This will replace the belt press dewatering. The tentative project completion and start-up date is 2012.*

3. Recycled Water Uses

The Discharger delivers tertiary treated wastewater through the regional recycled water system at various locations for recycling use. The recycled water is used for landscape irrigation by public and private users, for agricultural irrigation by farmers, for dust control at construction sites and for industrial purposes, including equipment/machinery cooling. Total average flow for recycled water use has increased significantly in recent years, with a peak annual average usage of approximately 20 mgd in 2008. This Order also regulates the recycled water use within the Discharger's service area.

Recycled water from RP-1 and RP- 4 is also used for groundwater recharge in areas overlying the Chino North Groundwater Management Zone. This groundwater recharge is regulated under a separate Order (Order No. R8-2007-0039). Order No. R8-2007-0039 was issued to the Discharger and the Chino Basin Watermaster to regulate the use of recycled water for the Chino Basin Recycled Water Groundwater Recharge Project, Phase I and Phase II. Order No. R8-2009-0021 does not regulate the use of recycled water for groundwater recharge.

B. Discharge Points and Receiving Waters

1. Discharge Points to Surface Water

Tertiary treated wastewater from each of the four Facilities is discharged at different Discharge Points (DPs 001, 002, 003, & 004) to surface waters that include Reaches 1A, 1B and 2 of Chino Creek, Reach 1 of Cucamonga Creek, and Prado Park Lake. These waterbodies are tributary to Reach 3 of the Santa Ana River within the Prado Basin Management Zone.

2. Stormwater Discharge points

Stormwater flows generated on site at RP-1 are collected and pumped to a liquid process stream for treatment. In the event that stormwater flows exceed the capacity to store and/or pump to a liquid process stream, stormwater may enter Reach 1 of Cucamonga Creek via S-001 or S-002.

Stormwater flows generated on site at RP- 4 are fully contained in an onsite, 4 million gallon capacity storage basin. All water captured in this basin is then pumped to a liquid process stream for treatment.

Stormwater flows generated on site at RP-5 and CCWRF plant are collected and pumped to the liquid process stream for treatment.

3. Recycled Water Use Area

Recycled water for irrigation is delivered to IEUA's service area through Discharge Points (DP) 005 through DP 008.

4. Receiving Water

Surface water. Tertiary treated wastewater discharges from the Facilities are either into Reaches 1A, 1B and 2 of Chino Creek, Reach 1 of Cucamonga Creek, and Prado Park Lake, tributaries of Reach 3 of the Santa Ana River within the Prado Basin Management Zone (PBMZ).

Groundwater. The Discharger distributes recycled water throughout its service area. The current recycled water use area overlies the Chino North "Maximum Benefit" Groundwater Management Zone (or Chino 1, 2, and 3 "Antidegradation" groundwater management zones).

There is little or no groundwater storage within the PBMZ.

Table 5 shows a summary of the discharge points, discharge coordinates (longitude and latitude), affected receiving waters, and estimated volume of discharge:

Table 5. Summary of Discharge Points and Receiving Waters

Discharge Point	Latitude	Longitude	Discharging Facility	Effluent Description and Receiving Water	Flow (MGD) & Frequency
001	N33°56'39"	W117°38'34"	RP-1	Tertiary treated effluent into Prado Park Lake. Overflow from the lake to an unnamed creek, then to Reach 1A of Chino Creek, a tributary to Reach 3 of Santa Ana River in Prado Basin	6.6 mgd 3-year average Continuous discharge
002	N34°1'31"	W117°33'56"	RP-1 & RP-4	Reach 1 of Cucamonga Creek, then to Mill Creek, then Reach 1A of Chino Creek, a tributary to Reach 3 of Santa Ana River in Prado Basin	20.6 mgd 3-year average Continuous discharge
003	N33°57'44"	W117°40'41"	RP-5	Reach 1B of Chino Creek, a tributary to Reach 3 of Santa Ana River	10.2 mgd 3-year average Continuous discharge
004	N33°58'56	W117°41'48"	CCWRF	Reach 2 of Chino Creek, a tributary to Reach 3 of Santa Ana River	9.9 mgd 3-year average Continuous discharge

Table 5. Summary of Discharge Points and Receiving Waters					
Discharge Point	Latitude	Longitude	Discharging Facility	Effluent Description and Receiving Water	Flow (MGD) & Frequency
005	N34°01'29"	W117°35'57"	RP-1	Recycled water use in areas overlying Chino North "Max Benefit" GMZ	14.1 mgd 1-year average - intermittent
006	N34°04'59"	W117°31'35"	RP-4	Recycled water use in areas overlying Chino North "Max Benefit" GMZ	3.1 mgd 1-year average (2007) - intermittent
007	N33°57'51"	W117°40'24"	RP-5	Recycled water use in areas overlying Chino North "Max Benefit" GMZ	1.0 MGD 1-year average - intermittent
008	N33°58'47"	W117°41'37"	CCWRF	Recycled water use in areas overlying Chino North "Max Benefit" GMZ	2.8 mgd 1-year average - intermittent
S-001	N34°01'36"	W117°35'59"	RP-1	Stormwater runoff to Reach 1 of Cucamonga Creek	Varies during storm event
S-002	N34°01'28"	W117°35'58"	RP-1	Stormwater runoff to Reach 1 of Cucamonga Creek	Varies during storm event

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

1. Effluent Limitations/Discharge Specifications contained in the previous Order No. R8-2006-0010 for discharges from RP-1 & RP-4 at Discharge Point 001 and DP002 and representative monitoring data from the term of the previous Order are as follows:

Table 6. RP-1 Historic Effluent Limitations and Monitoring Data at M-001A and M-001B

Parameter (units)	Effluent Limitation			Monitoring Data (From Aug. 2004 to December 2008)			
	Average Monthly	Average Weekly	Maximum Daily	Highest Average Monthly Discharge	Highest Average Weekly Discharge	Highest Daily Discharge	Highest 12-Month Average
Flow (mgd) (Jan 06 to Dec 08)				11.1		11.7	Avg: 6.5
pH Daily Average (SU)			Range 6.5-8.5			Range 6.7-8.4	
BOD5 (mg/L)	20	30		2	3		
Suspended Solids (mg/L)	20	30		2	3		
Coliform Organisms (MPN/100 mL)	23 (1/mo.)	2.2			2		
Ammonia-Nitrogen (mg/L)	4.5			2.9			

Table 6. RP-1 Historic Effluent Limitations and Monitoring Data at M-001A and M-001B

Parameter (units)	Effluent Limitation			Monitoring Data (From Aug. 2004 to December 2008)			
	Average Monthly	Average Weekly	Maximum Daily	Highest Average Monthly Discharge	Highest Average Weekly Discharge	Highest Daily Discharge	Highest 12-Month Average
Total Residual Chlorine (mg/L)			0.1 Instant. Max			0.0	
TDS (mg/L)	12-M, 550 agency-wide[3]			543			505 combined M-001 and M-002
Total Hardness (mg/L)					5th percentile 123	159	
Toxicity, TUc				1.7 Reproductio n			
TIN[4] (mg/L)	12-M, 8 agency-wide						9.8 Note: combined RP-1 and RP-4
Arsenic(µg/L)				6		6	
Cadmium(µg/L)				<0.25		<0.25	
Total recoverable Chromium (VI) (µg/L)				4.6		4.6	
Copper (µg/L)				7		7	
Free Cyanide (µg/L)[5]	4.2		8.5	24		24	
Lead (µg/L)				<0.5		<0.5	
Mercury (µg/L)				<0.05		<0.05	
Nickel (µg/L)				16		16	
Total recoverable Selenium (µg/L)	4.1		8.2	7		7	
Silver (µg/L)				0.7		0.7	
Zinc (µg/L)				122		122	
Bis(2-Ethylhexyl) Phthalate (µg/L)	5.9		11.8	9		9	
Bromodichloro Methane (µg/L)				34		34	
Chlorodibromo Methane (µg/L)				13		13	

[3] *This limitation may be met on an agency-wide basis using flow weighted averages of the discharges from all treatment plants operated by the Discharger*

[4] *Agency wide, the Discharger currently complies with the total inorganic nitrogen limitations in the Orders for RP-1, RP-4, RP-5 and CCWRF.*

[5] *Prior to January 2008, "Available cyanide" was measured rather than just "Free Cyanide". Available cyanide encompasses weak-acid dissociable cyanide compounds (that can release free cyanide) and free cyanide.*

Table 6. RP-1 Historic Effluent Limitations and Monitoring Data at M-001A and M-001B

Parameter (units)	Effluent Limitation			Monitoring Data (From Aug. 2004 to December 2008)			
	Average Monthly	Average Weekly	Maximum Daily	Highest Average Monthly Discharge	Highest Average Weekly Discharge	Highest Daily Discharge	Highest 12-Month Average
Turbidity, NTU			2			>2	

Table 7. RP-1 & RP-4 Historic Effluent Limitations and Monitoring Data at M-002A and M-002B

Parameter (units)	Effluent Limitation			Monitoring Data (From Aug 2004 to December 2008)			
	Average Monthly	Average Weekly	Maximum Daily	Highest Average Monthly Discharge	Highest Average Weekly Discharge	Highest Daily Discharge	Highest 12-Month Average
Flow (mgd) (Jan 06 to Dec 08)				28.5		40.9	Avg: 20.4
pH Daily Average (SU)			Range 6.5-8.5			Range 6.5-8.0	
BOD5 (mg/L)	20	30		2	3		
Suspended Solids (mg/L)	20	30		5	12		
Coliform Organisms (MPN/100 mL)	23 (1/mo.)	2.2	240		2		
Ammonia-Nitrogen (mg/L)	4.5			3.0			
Total Residual Chlorine (mg/L)			0.1 instant. Max			4.8	
TDS (mg/L)	12-M, 550 agency-wide			534			505 Note: combined RP-1 and RP-4
Total Hardness (mg/L)					5^{th} percentile 120	162	
Toxicity, TUc				1.3 Reproduction			
TIN (mg/L)	12-M, 8 agency-wide						9.8 combined M-001 and M-002 only
Arsenic(µg/L)				6		6	
Cadmium(µg/L)				<0.25		<0.25	
Total recoverable Chromium (VI) (µg/L)				4.3		4.3	
Copper (µg/L)				8		8	
Free Cyanide (µg/L)[6]	4.2		8.5	15		15	
Lead (µg/L)				5		5	
Mercury (µg/L)				<0.05		<0.05	
Nickel (µg/L)				4		4	

[6] *Prior to January 2008, "Available" cyanide was measured rather than "Free Cyanide".*

Table 7. RP-1 & RP-4 Historic Effluent Limitations and Monitoring Data at M-002A and M-002B

Parameter (units)	Effluent Limitation			Monitoring Data (From Aug 2004 to December 2008)			
	Average Monthly	Average Weekly	Maximum Daily	Highest Average Monthly Discharge	Highest Average Weekly Discharge	Highest Daily Discharge	Highest 12-Month Average
Total recoverable Selenium (µg/L)	4.1		8.2	8		8	
Silver (µg/L)				0.37		0.37	
Zinc (µg/L)				59		59	
Bis(2-Ethylhexyl) Phthalate (µg/L)	5.9		11.8	7		7	
Bromodichloro Methane (µg/L)				31		31	
Chlorodibromo Methane (µg/L)				13		13	

2. Effluent limitations/Discharge Specifications contained in the previous Order No. R8-2008-0028 for discharges from RP-5 at discharge Point 003 and representative monitoring data from the term of the previous Order are as follows:

Table 8. RP-5 Historic Effluent Limitations and Monitoring Data at M-003

Parameter (units)	Effluent Limitation			Monitoring Data (From Aug 2004 to December 2008)			
	Average Monthly	Average Weekly	Maximum Daily	Highest Average Monthly Discharge	Highest Average Weekly Discharge	Highest Daily Discharge	Highest 12-Month Average
Flow (mgd) (Jan 06 to Dec 08)				13.0		15.4	Avg: 10.3
pH Daily Average (SU)			Range 6.5-8.5			Range 6.5-8.1	
BOD5 (mg/L)	20	30		<2	<3		
Suspended Solids (mg/L)	20	30		4	7		
Coliform Organisms (MPN/100 mL)	23 (1/mo.)	2.2	240		2		
Ammonia-Nitrogen (mg/L)	4.5			0.4			
Total Residual Chlorine (mg/L)			0.1 Instant. Max.			0.0	
TDS (mg/L)	12-M, 550 agency-wide			557			533
Total Hardness (mg/L)					5^{th} percentile 148	215	
Toxicity, TUc				>1.7 Reproduction			
TIN (mg/L)	12-M, 8 agency-wide						6.5
Arsenic (µg/L)				7		7	
Cadmium (µg/L)				1.7		1.7	

Table 8. RP-5 Historic Effluent Limitations and Monitoring Data at M-003

Parameter (units)	Effluent Limitation			Monitoring Data (From Aug 2004 to December 2008)			
	Average Monthly	Average Weekly	Maximum Daily	Highest Average Monthly Discharge	Highest Average Weekly Discharge	Highest Daily Discharge	Highest 12-Month Average
Total recoverable Chromium (VI) (µg/L)				9		9	
Copper (µg/L)				13		13	
Free Cyanide (µg/L) [7]	4.6		7.3	8		8	
Lead (µg/L)				3		3	
Mercury (µg/L)				<0.05		<0.05	
Nickel (µg/L)				7		7	
Total recoverable Selenium (µg/L)				3		3	
Silver (µg/L)				0.5		0.5	
Zinc (µg/L)				69		69	
Bis(2-Ethylhexyl) Phthalate (µg/L)				3		3	
Bromodichloro Methane (µg/L)				48		48	
Chlorodibromo Methane (µg/L)				21		21	
2,3,7,8-TCDD (Dioxin), (µg/L)						0.0000035	

3. Effluent limitations/Discharge Specifications contained in the previous Order No. R8-2004-0020 for discharges from CCWRF at Discharge Point 004 and representative monitoring data from the term of the previous Order are as follows:

Table 9. CCWRF Historic Effluent Limitations and Monitoring Data at M-004

Parameter (units)	Effluent Limitation			Monitoring Data (From Aug 2004 to December 2008)			
	Average Monthly	Average Weekly	Maximum Daily	Highest Average Monthly Discharge	Highest Average Weekly Discharge	Highest Daily Discharge	Highest 12-Month Average
Flow (mgd) (Jan 06 to Dec 08)	11.4			10.0		13.2	Avg: 6.9
pH Daily Average (SU)			Range 6.5-8.5			Range 6.6-7.7	
BOD5 (mg/L)	20	30		2	3		
Suspended Solids (mg/L)	20	30		2	8		
Coliform Organisms (MPN/100 mL)	23 (1/mo.)	2.2	240		2		
Ammonia-Nitrogen (mg/L)	4.5			0.2			

[7] *Prior to January 2008, "Available cyanide" was measured rather than "Free Cyanide".*

Table 9. CCWRF Historic Effluent Limitations and Monitoring Data at M-004

Parameter (units)	Effluent Limitation			Monitoring Data (From Aug 2004 to December 2008)			
	Average Monthly	Average Weekly	Maximum Daily	Highest Average Monthly Discharge	Highest Average Weekly Discharge	Highest Daily Discharge	Highest 12-Month Average
Total Residual Chlorine (mg/L)			0.1 instant. Max			0.0	
TDS (mg/L)	12M, 550 agency-wide			554			537
Total Hardness (mg/L)					5th percentile 130		
Toxicity, TUc				1.7 Reproduction			
TIN (mg/L)	12M, 8						7.5
Arsenic(µg/L)				7		7	
Cadmium(µg/L)				<0.25		<0.25	
Total recoverable Chromium (VI) (µg/L)	8.2		16.3	4.1		4.1	
Copper (µg/L)				12		12	
Free Cyanide (µg/L)[8]	4.1		8.2	8		8	
Lead (µg/L)				0.5		0.5	
Mercury (µg/L)				<0.05		<0.05	
Nickel (µg/L)				20		20	
Total recoverable Selenium (µg/L)	4.1		8.2	<2		<2	
Silver (µg/L)				0.9		0.9	
Zinc (µg/L)				57		57	
Bis(2-Ethylhexyl) Phthalate(µg/L)	5.9		11.8	25		25	
Bromodichloro Methane (µg/L)				33		33	
Chlorodibromo Methane (µg/L)				10		10	
2,3,7,8-TCDD (Dioxin) (µg/L)						0.00000026	

D. Compliance Summary

Based on a review of effluent monitoring data submitted by the Discharger for the period from 2004 through 2008, the following Table shows the compliance summary for each Facility:

[8] *Prior to January 2008, "Available cyanide" was measured rather than Free Cyanide.*

Table 10. Compliance Status RP-1, RP-5 and CCWRF

Date	Plant	Parameter	Value	Permit Limit	Reason for Violation	Corrective Measures
01/02/04	RP-1 (001)	Chlorine Residual	4.6 mg/L	0.1mg/L	Sodium Bisulfite (SBS) crystallized due to low temps	Heat tape installed to the SBS piping distribution system to prevent crystallization of SBS in the line
10/17/04	RP-1 (001)	Chlorine Residual	6.5 mg/L	0.1mg/L or not exceed 5 mg/L	Dechlor Station power failure	Monthly standby generator testing and automated V-1 valve closure
03/14/05	RP-1 (001)	Turbidity	>2 NTU	2 NTU	Plant upset, unstable activated sludge system , and one activated sludge train was in repair	Placed train back into service, reseeded one activated sludge system, polymer addition, chlorinated RAS.
03/14/05 - 03/16/05	RP-1 (002)	Turbidity	>2 NTU	2 NTU, 5 NTU 5%		
07/24/06	RP-1 (002)	Chlorine Residual	4.8 mg/L	0.1mg/L	Stage 2 Power Alert. Standby generator at pump stations and Dechlor stn power failure	Preventative maintenance procedures reviewed, revised, and implemented.
10/01/06	RP-1 (002)	Coliform	900 MPN/100 mL	240 MPN/ 100mL	Sample contamination	Staff retrained in sample collection and handling techniques
09/05/07	RP-1 (001)	Coliform	500 MPN/100 mL	240 MPN/ 100mL	Sample contamination	Staff retrained in sample collection and handling techniques
11/22/07	RP-1 (002)	Coliform	>1600 MPN/100 mL	240 MPN/ 100mL	Metal tip at sampling point contaminated sample	Discontinued use of metal tip at sampling point
03/06/07	CCWRF	Bis(2-ethylhexyl phthalate	25 µg/L	5.9 µg/L avg; 11.8 µg/L max	Sample contamination	Compound commonly used in the manufacturing of plastics. Influent concentration was “non-detect”
01/04/05	RP-5	Chlorine Residual	5.29 mg/L	0.1mg/L or not exceed 5 mg/L	Sodium Bisulfite (SBS) crystallized due to low temps	Heat tape installed to the SBS piping distribution system to prevent crystallization of SBS in the line.
01/09/05	RP-5	Chlorine Residual	>5.0 mg/L	0.1mg/L or not exceed 5 mg/L	Control analyzer failure	Allow effluent gate to close automatically as designed.

E. Planned Changes – Not Applicable

III. APPLICABLE PLANS, POLICIES, AND REGULATIONS

A. Legal Authorities

This Order is issued pursuant to section 402 of the federal Clean Water Act (CWA) and implementing regulations adopted by the U.S. Environmental Protection Agency (USEPA) and Chapter 5.5, Division 7 of the California Water Code (commencing with Section 13370). It shall serve as a NPDES permit for point source discharges from the Regional Water Recycling Facilities to surface waters. This Order also serves as Waste Discharge Requirements (WDRs) pursuant to article 4, Chapter 4, Division 7 of the Water Code (commencing with Section 13260). This Order also includes Producer/User Recycling Requirements to regulate recycled water use for irrigation and other industrial uses.

B. California Environmental Quality Act (CEQA)

Under Water Code section 13389, this action to adopt an NPDES permit is exempt from the provisions of CEQA, Public Resources Code section 21000 et seq. (*County of Los Angeles v. California State Water Resources Control Board* (2006) 143 Cal.App.4th 985, mod. (Nov. 6, 2006, B184034) 50 Cal.Rptr.3d 619, 632-636.)

This action also involves the re-issuance of waste discharge requirements for an existing Facility that discharges treated wastewater to land and as such, is exempt from the provisions of California Environmental Quality Act (commencing with Section 21100) in that the activity is exempt pursuant to Title 14 of the California Code of Regulations Section 15301.

C. State and Federal Regulations, Policies, and Plans

1. **Water Quality Control Plans.** The Regional Water Board adopted an updated 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. In addition, State Water Resources Control Board (State Water Board) Resolution No. 88-63 (Sources of Drinking Water Policy) requires that, with certain exceptions, the Regional Water Board assign the municipal and domestic water supply use to water bodies. Based on the exception criteria specified in Resolution No. 88-63, the Regional Water Board excepted certain waters from the municipal and domestic supply beneficial use.

   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. EPA approved the surface water standards components of the N/TDS Amendment on June 20, 2007. Effluent limitations in this Order for TDS and TIN discharges to Chino Creek, Reach 1 of Cucamonga Creek, Prado Park Lake, and Reach 3 of the Santa Ana River are based on applicable wasteload allocations specified in the Basin Plan as amended.

The designated beneficial uses of receiving waters affected by the discharge from the Facility are as follows:

Table 11. Basin Plan Beneficial Uses

Discharge Point	Receiving Water	Beneficial Uses
001	Prado Park Lake, overflow from the lake to an unnamed creek, then to Reach 1A of Chino Creek	Present or Potential: Water contact recreation (REC-1), non-contact water recreation (REC-2), warm freshwater habitat, wildlife habitat (WILD), and rare, threatened and endangered species. Recreational use at Prado Park Lake is restricted to fishing and boating. Excepted from Municipal and Domestic Supply.
002	Reach 1 of Cucamonga Creek, to Mill Creek, then Reach 1A of Chino Creek	Present or Potential: Groundwater Recharge, Water contact recreation (REC-1), non-contact water recreation (REC-2), Limited warm freshwater habitat, and wildlife habitat (WILD). Excepted from Municipal and Domestic Supply.
003	Reach 1B of Chino Creek	Present or Potential: Water contact recreation (REC-1), non-contact water recreation (REC-2), warm freshwater habitat, wildlife habitat (WILD), and rare, threatened and endangered species. Excepted from Municipal and Domestic Supply.
004	Reach 2 of Chino Creek	Present or Potential: Groundwater Recharge, Water contact recreation (REC-1), non-contact water recreation (REC-2), Cold freshwater habitat, and wildlife habitat (WILD). Excepted from Municipal and Domestic Supply.
001, 002, 003, 004, S-001, & S-002	Reach 3 of Santa Ana River within Prado Basin Management Zone	Present or Potential: Agricultural supply, groundwater recharge, water contact recreation, non-contact water recreation, warm freshwater habitat, wildlife habitat, rare, threatened or endangered species, and spawning, reproduction, and development waters supporting high quality aquatic habitats. Excepted from Municipal and Domestic Supply.

Table 11. Basin Plan Beneficial Uses

Discharge Point	Receiving Water	Beneficial Uses
001, 002, 003, 004, 005, 006, 007, 008, S-001, & S-002	Chino North "Max Benefit" GMZ / Chino 1, 2 and 3 "antidegradation" GMZs	Present or Potential: Municipal and domestic supply, agricultural supply, industrial service supply, and industrial process supply.
	Orange GMZ (affected GMZ downstream of discharge points)	Present or Potential: Municipal and domestic supply, agricultural supply, industrial service supply, and industrial process supply.

Requirements of this Order implement the Basin Plan.

2. **National Toxics Rule (NTR) and California Toxics Rule (CTR).** USEPA adopted the NTR on December 22, 1992, and later amended it on May 4, 1995 and November 9, 1999. About forty criteria in the NTR applied in California. On May 18, 2000, USEPA adopted the CTR. The CTR promulgated new toxics criteria for California and, in addition, incorporated the previously adopted NTR criteria that were applicable in the state. The CTR was amended on February 13, 2001. These rules contain water quality criteria for priority pollutants.

3. **State Implementation Policy.** On March 2, 2000, the State Water Board adopted the *Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California* (State Implementation Policy or SIP). The SIP became effective on April 28, 2000 with respect to the priority pollutant criteria promulgated for California by the USEPA through the NTR and to the priority pollutant objectives established by the Regional Water Board in the Basin Plan. The SIP became effective on May 18, 2000 with respect to the priority pollutant criteria promulgated by the USEPA through the CTR. The State Water Board adopted amendments to the SIP on February 24, 2005 that became effective on July 13, 2005. The SIP establishes implementation provisions for priority pollutant criteria and objectives and provisions for chronic toxicity control. Requirements of this Order implement the SIP.

4. **Alaska Rule.** On March 30, 2000, USEPA revised its regulation that specifies when new and revised state and tribal water quality standards (WQS) become effective for CWA purposes (40 C.F.R. § 131.21, 65 Fed. Reg. 24641 (April 27, 2000)). Under the revised regulation (also known as the Alaska rule), new and revised standards submitted to USEPA after May 30, 2000, must be approved by USEPA before being used for CWA purposes. The final rule also provides that standards already in effect and submitted to USEPA by May 30, 2000, may be used for CWA purposes, whether or not approved by USEPA.

5. **Antidegradation Policy.** 40 CFR § 131.12 requires that the state water quality standards include an antidegradation policy consistent with the federal 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, both the State and federal antidegradation policies. As discussed in Section IV. E. 2 of this Fact Sheet, the permitted discharges are consistent with the antidegradation provisions of § 131.12 and State Water Board Resolution No. 68-16.

6. **Anti-Backsliding Requirements.** Sections 402(o)(2) and 303(d)(4) of the CWA and federal regulations at title 40, Code of Federal Regulations[9] section 122.44(l) prohibit backsliding in NPDES permits. These anti-backsliding provisions require that effluent limitations in a reissued permit must be as stringent as those in the previous permit, with some exceptions in which limitations may be relaxed. All effluent limitations in the Order are at least as stringent as the effluent limitations in the previous Orders for each Facility.

7. **Monitoring and Reporting Requirements.** Section 122.48 of 40 CFR requires that all NPDES permits specify requirements for recording and reporting monitoring results. Sections 13267 and 13383 of the CWC authorize the Regional Water Board to require technical and monitoring reports. The Monitoring and Reporting Program (MRP) establishes monitoring and reporting requirements to implement federal and State requirements. This MRP is provided in Attachment E.

D. Impaired Water Bodies on CWA 303(d) List

Reach 1 of Chino Creek, Mill Creek (Prado Area) and Prado Park Lake are included in the USEPA approved 2006 CWA 303(d) list due to nutrients resulting principally from agricultural and dairy operations inputs during storm events. Reaches 1 & 2 of Mill Creek are also listed due to pathogen indicators, also resulting principally from dairy operations inputs during storm events. This Order requires that the wastewater discharged from the Facilities be essentially free of pathogens/pathogen indicators and that the wastewaters comply with the applicable Basin Plan wasteload allocation for total inorganic nitrogen (8 mg/L) for surface water discharges.

E. Other Plans, Polices and Regulations-Not Applicable

[9] *All further statutory references are to title 40 of the Code of Federal Regulations unless otherwise indicated.*

IV. RATIONALE FOR EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS

The CWA requires point source Dischargers to control the amount of conventional, non-conventional, and toxic pollutants that are discharged into the waters of the United States. The control of pollutants discharged is established through effluent limitations and other requirements in NPDES permits. There are two principal bases for effluent limitations in the Code of Federal Regulations: section 122.44(a) requires that permits include applicable technology-based limitations and standards; and section 122.44(d) requires that permits include water quality-based effluent limitations to attain and maintain applicable numeric and narrative water quality criteria to protect the beneficial uses of the receiving water

A. Discharge Prohibitions

The discharge prohibitions are based on the Federal Clean Water Act, Basin Plan, State Water Board's plans and policies, U.S. Environmental Protection Agency guidance and regulations, and previous permit provisions in Orders No. R8-2006-0010, R8-2008-0028, and R8-2004-0020 and are consistent with the requirements set for other discharges regulated by NPDES permits adopted by the Regional Water Board.

B. Technology-Based Effluent Limitations

1. Scope and Authority

Section 301(b) of the CWA and implementing USEPA permit regulations at section 122.44, title 40 of the Code of Federal Regulations, require that permits include conditions meeting applicable technology-based requirements at a minimum, and any more stringent effluent limitations necessary to meet applicable water quality standards. The discharge authorized by this Order must meet minimum federal technology-based requirements based on Secondary Treatment Standards at Part 133 and/or Best Professional Judgment (BPJ) in accordance with Part 125, section 125.3.

Regulations promulgated in 40 CFR §125.3(a)(1) require technology-based effluent limitations for municipal dischargers to be placed in waste discharge requirements based on Secondary Treatment Standards or Equivalent to Secondary Treatment Standards.

The Federal Water Pollution Control Act Amendments of 1972 (PL 92-500) established the minimum performance requirements for POTWs [defined in Section 304(d)(1)]. Section 301(b)(1)(B) of that Act requires that such treatment works must, as a minimum, meet effluent limitations based on secondary treatment as defined by the USEPA Administrator.

Based on this statutory requirement, USEPA developed secondary treatment regulations, which are specified in 40 CFR Part 133. These technology-based regulations apply to all municipal wastewater treatment plants and identify the minimum level of effluent quality attainable by secondary treatment in terms of biochemical oxygen demand (BOD_5), total suspended solids (TSS), and pH.

2. Applicable Technology-Based Effluent Limitations for 20:1 dilution

This Facility meets the technology-based regulations for the minimum level of effluent quality attainable by secondary treatment in terms of BOD_5, total suspended solids and removal rate as summarized in the Table below. These effluent limitations have been set for secondary treated wastewater discharges at Discharge Points (DPs) 002, 003, and 004 under 20:1 dilution conditions.

Table 12. Summary of Technology-Based Effluent Limits for Secondary Treatment

Constituent	Average Weekly (mg/L)	Average Monthly (mg/L)	Average Monthly Removal Rate %
Biochemical Oxygen Demand, 5-day 20^0C	45	30	85
Total Suspended Solids	45	30	85

DP 001 discharges to Prado Park Lake. This lake is a property of the County of San Bernardino. The County and the Discharger agreed that the Discharger will provide up to 6.6 mgd of tertiary treated recycled water to the lake for recreation and fishing. There are no other discharges into the lake except stormwater from the tributary drainage area. Overflow from this lake discharges continuously to an unnamed creek, then to Reach 1A of Chino Creek. Consequently, discharges of secondary treated wastewater under 20:1 dilution condition into the lake is not allowed.

C. WQBEL-Based Effluent Limitations for DP 001 through DP 004

1. Scope and Authority

Section 301(b) of the CWA and section 122.44(d) require that permits include limitations more stringent than applicable federal technology-based requirements where necessary to achieve applicable water quality standards.

Section 122.44(d)(1)(i) mandates that permits include effluent limitations for all pollutants that are or may be discharged at levels that have the reasonable potential to cause or contribute to an exceedance of a water quality standard, including numeric and narrative objectives within a standard. Where reasonable potential has been established for a pollutant, but there is no numeric criterion or objective for the

pollutant, water quality-based effluent limitations (WQBELs) must be established using: (1) USEPA criteria guidance under CWA section 304(a), supplemented where necessary by other relevant information; (2) an indicator parameter for the pollutant of concern; or (3) a calculated numeric water quality criterion, such as a proposed state criterion or policy interpreting the state's narrative criterion, supplemented with other relevant information, as provided in section 122.44(d)(1)(vi).

The process for determining reasonable potential and calculating WQBELs when necessary is intended to protect the designated uses of the receiving water as specified in the Basin Plan, and achieve applicable water quality objectives and criteria that are contained in other state plans and policies, or any applicable water quality criteria contained in the CTR and NTR.

2. Applicable Beneficial Uses and Water Quality Criteria and Objectives

a. The Basin Plan specifies narrative and numeric water quality objectives applicable to surface water as follows.

Table 13. Applicable Basin Plan Surface Water Quality Objectives

Constituents	Basis for Limitations
Ammonia Nitrogen	Dissociates under certain conditions to the toxic un-ionized form. Thus, nitrogen discharges to surface water pose a threat to aquatic life and instream beneficial uses, as well as to the beneficial uses of affected groundwater. The Basin Plan specifies total ammonia and un-ionized ammonia objectives and an effluent limit of 4.5 mg/L for discharges to surface waters--Chino Creek and Mill Creek.
Hydrogen Ion (pH)	Hydrogen Ion (pH) is a measure of Hydrogen Ion concentration in the water. A pH range of 6.5 to 8.5 for surface water discharges is specified.
Oil & Grease	Oil and related materials have a high surface tension and are not soluble in water, resulting in odors and visual impacts.
Total Dissolved Solids	High levels of TDS can adversely impact groundwater affected by recharge of the affected receiving waters, as well as the use of that groundwater for supply purposes. The TDS limit for surface water discharges is based on the amended Basin Plan wasteload allocation for the discharger of 550 mg/L[10] and 80 mgd flow.
Total Inorganic Nitrogen	Nitrogen discharges to the Santa Ana River pose a threat to aquatic life and instream beneficial uses, as well as to the beneficial uses of affected groundwater. The TIN limit for surface water discharges is based on the amended Basin Plan wasteload allocation of 8.0 mg/L and 80 mgd flow .
Total Chlorine Residual	Wastewater disinfection with chlorine usually produces chlorine residual. Chlorine and its reaction products are toxic to aquatic life. To protect aquatic life, the chlorine residual in wastewater discharged to inland surface waters shall not exceed 0.1 mg/L.

10 *The Basin Plan specifies in Table 5-5 that TDS and TIN discharges to surface waters from the Discharger's wastewater treatment facilities are to be regulated pursuant to a single wasteload allocation, applied as a flow-weighted average of the discharges from the facilities. The TDS and TIN wasteload allocations are not contingent on "maximum benefit" objectives or implementation.*

(1) TDS and TIN: TDS and TIN limitations are specified in the Order for discharges of tertiary treated effluent at DPs 001, 002, 003, and 004. These TDS/TIN limits are based on the waste load allocation specified in Table 5-5 of the amended Basin Plan.

(2) TDS: This Order also includes a TDS limit based on the flow weighted running average quality of the water supplied to the service area plus a reasonable use increment of 250 mg/L. This reasonable use increment addition is discussed and authorized in the Basin Plan.

(3) For surface water discharges, the more restrictive of the TDS limit based on the wasteload allocation or the TDS limit based on water supply quality plus the reasonable use increment applies to discharges from the Facilities.

(4) In accordance with 40 CFR Section 122.45(d), there may be instances in which the basis for a limit for a particular continuous discharge may be impracticable to be stated as a maximum daily, average weekly, or average monthly effluent limitation. 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 average period is more appropriate.

b. NTR, CTR and SIP. The National Toxics Rule, California Toxics Rule (CTR) and State Implementation Policy specify numeric objectives for toxic substances and the procedures whereby these objectives are to be implemented. The procedures include those used to conduct reasonable potential analysis to determine the need for effluent limitations for priority and non-priority pollutants.

c. Requirement to meet 2.2 total coliform bacteria limit in the effluent. Article 3, Section 60305 of Title 22, Chapter 3, "Use of Recycled water for impoundments" of the California Code of Regulations specifies that recycled water used as a source of supply in a nonrestricted recreational impoundment shall be at all times an adequately disinfected, oxidized, coagulated, clarified, filtered wastewater (tertiary treated). The degree of treatment specified represents an approximately 5-log reduction in the virus content of the water. The California State Department of Public Health (CDPH) has determined that this degree of virus removal is necessary to protect the health of people using these impoundments for water contact recreation. The CDPH has developed wastewater disinfection guidelines ("Wastewater Disinfection for Health Protection", Department of Health Services, Sanitary Engineering Branch, February 1987) for discharges of wastewater to surface waters where water contact recreation (REC-1) is a beneficial use. The disinfection guidelines recommend the same treatment requirements for wastewater discharges to REC-1 waters as those stipulated in Title 22 for supply of recycled water to nonrestricted recreational impoundments, since the public health risks under both

scenarios are analogous. The disinfection guidelines are based on sound science and are widely used as guidance to assure public health and beneficial use protection.

None of the surface waters to which the discharges regulated under this Order occur are considered to be "nonrestricted recreational impoundments", nor is "recycled water[11]" being used as a supply source pursuant to the definitions in Title 22. However, to protect the water contact recreation beneficial use and to prevent nuisance and health risk, it is necessary and appropriate to require the same degree of treatment for wastewater discharges to the affected waterbodies as would be required for the use of recycled water in a nonrestricted recreational impoundment. Thus, this Order specifies requirements based on tertiary or equivalent treatment.

d. Requirement to meet disinfection CT limit in the effluent. The Board has consulted with the CDPH regarding the applicability of the process design standards (specifically filter rates, CT, and modal contact) for discharges of waste to flowing streams. CDPH has determined that although compliance with these standards is necessary to protect public health when recycled water is used, compliance with these standards is not necessary to protect public health for discharges into waterbodies that provide dilution of the wastewater, provided the performance standards are consistently met. During periods when the receiving water can provide a 1:1 dilution of the wastewater discharge, the Order provides that the specified filter rates, CT, and modal contact time do not apply to wastewater discharges to surface water. The specified filter rates, CT, and modal contact time applies to recycled water use.

3. Determining the Need for WQBELs

In accordance with Section 1.3 of the SIP, the Regional Water Board conducted a reasonable potential analysis (RPA) for each priority pollutant with an applicable criterion or objective to determine if a WQBEL is required in the Order. The Regional Water Board analyzed effluent data to determine if a pollutant in a discharge has the reasonable potential to cause or contribute to an excursion above a state water quality standard. For all parameters that have the reasonable potential to cause or contribute to an excursion above a water quality standard, numeric WQBELs are required. The RPA considers criteria from the CTR, and when applicable, water quality objectives specified in the Basin Plan. For hardness dependent metals, a fixed hardness value for each outfall, based on the lowest 5th percentile of effluent hardness measurements from each plant, is used to facilitate the determination of compliance. The decision to use the 5th percentile of effluent hardness measurements is based on previous practice resulting from the Santa Ana River Use Attainability Analysis conducted in 1994 and a 2008 special study conducted by the State Water Board staff.

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11 *As defined in the Reclamation Criteria, recycled water means water which, as a result of treatment of domestic wastewater, is suitable for a direct beneficial use or a controlled use that would not otherwise occur.*

Sufficient data are needed to conduct a complete RPA. If data are not sufficient, the Discharger will be required to gather the appropriate data for the Regional Water Board to conduct the RPA. Upon review of the data, and if the Regional Water Board determines that WQBELs are needed to protect the beneficial uses, the permit will be reopened for appropriate modification.

The RPA was performed by reviewing the data provided by the Discharger in accordance with the SIP. Total recoverable selenium, and bis(2-ethylhexyl) phthalate were determined to have reasonable potential to cause an excursion above applicable pollutant criteria or objectives for discharges at DP 001 and DP 002. For discharges at DP 003, cyanide, selenium, bis(2-ethylhexyl) phthalate, and Bromodichloromethane were determined to have reasonable potential to cause an excursion above applicable pollutant criteria or objectives. For discharges at DP 004, bis(2-ethylhexyl) phthalate was determined to have reasonable potential to cause an excursion above applicable pollutant criteria or objectives. For CCWRF, the RPA also determined that total recoverable chromium (VI) does not have the reasonable potential to cause an excursion above applicable pollutant criteria or objectives. Consequently, effluent limitations for this constituent are not included in this Order.

The December 2007 monitoring data for 2,3,7,8-TCDD (Dioxin) at DP 003 and DP 004 showed one detected value each at 0.0000035 µg/L and 0.00000026 µg/L, respectively. These values are above the water quality criteria for Dioxin. However, the prior monitoring results before detection showed non-detect values and subsequent to detection, three monitoring data for each outfall also showed non-detect values. Considering the previous and subsequent monitoring results, it is determined that there is no reasonable potential for Dioxin to exceed applicable pollutant criteria. Consequently, no effluent limitation for Dioxin is included in the Order. However, the Order requires the Discharger to conduct quarterly monitoring for Dioxin for one year. The monitoring frequency is reduced to semi-annual if quarterly monitoring results show non-detect values at acceptable reporting levels.

For free cyanide, the RPA was based on the previous RPA that was done for each facility because the EPA approved test method for free cyanide is in question and the Discharger is using a test method that is currently being verified for accuracy and repeatability. This test method will be submitted to EPA for approval. Meanwhile, this Order retains the current effluent limits for free cyanide for RP-1, RP-4, RP-5 and CCWRF.

The following tables show the RPA study results for each Facility. Effluent limitations are established in this Order for those parameters with “yes” in the RPA column of the tables.

Table 14. RP-1 - Comparing DP 001 Effluent Data with WQOs

Parameter	unit	Effluent MEC[12]	CTR-Fresh water			Basin Plan	RPA
		Fresh water	CMC/CCC	WQO	Human Health Organisms Only	WQO	
Cyanide, Free	µg/L	24	22/5.2				yes
Bis(2-ethylhexyl) Phthalate	µg/L	9			5.9		yes
Total recoverable selenium	µg/L	7.0	0/5.0				yes

*: 5th percentile of effluent hardness of 124 mg/l is used to calculate metals criteria with hardness related.

Table 15. RP-1 & RP-4 - Comparing DP 001 & DP 002 Effluent Data with WQOs

Parameter	unit	Effluent MEC	CTR-Fresh water			Basin Plan	RPA
		Fresh water	CMC/CCC	WQO	Human Health	WQO	
Cyanide, Free	µg/L	15	22/5.2				yes
Bis(2-ethylhexyl) Phthalate	µg/L	7			5.9		yes
Total recoverable selenium	µg/L	8.0	0/5.0				yes

*: 5th percentile of effluent hardness of 122 mg/l is used to calculate metals criteria with hardness related.

Table 16. RP-5 - Comparing DP 003 Effluent Data with WQOs

Parameter	unit	Effluent MEC	CTR-Fresh water			Basin Plan	RPA
		Fresh water	CMC/CCC	WQO	Human Health	WQO	
Cyanide, Free	µg/L	8	22/5.2				yes
Bis(2-ethylhexyl) Phthalate	µg/L	4			5.9		no
Total recoverable Selenium	µg/L	3	0/5.0				No
2,3,7,8-TCDD (Dioxin)	µg/L	0.0000035			0.000000014		No, see Section IV.C.3., above
Bromodichloromethane	µg/L	48			46		yes

*: 5th percentile of effluent hardness of 148 mg/l is used to calculate metals criteria with hardness related.

[12] *MEC, CMC, CCC are defined in Attachment A.*

Table 17. CCWRF - Comparing DP 004 Effluent Data with WQOs

Parameter	unit	Effluent MEC	CTR-Fresh water			Basin Plan	RPA
		Fresh water	CMC/CCC	WQO	Human Health	WQO	
Cyanide, Free	µg/L	8	22/5.2				yes
Bis(2-ethylhexyl) Phthalate	µg/L	25			5.9		yes
Total recoverable chromium (VI)	µg/L	4.1	16/11				No
Total recoverable Selenium	µg/L	<2	0/5.0				No
2,3,7,8-TCDD (Dioxin)	µg/L	0.00000026			0.000000014		No, see Section IV.C.3., above

*: 5th percentile of effluent hardness of 130 mg/l is used to calculate metals criteria with hardness related.

4. WQBEL Calculations

No mixing zone allowance is included in the calculation of effluent limits in this Order. Consequently, compliance with the effluent limits is required to be determined at the end of the discharge pipe for freshwater discharge.

a. For priority pollutants, water quality based effluent limits based on monitoring results and the calculation process outlined in Section 1.4 of the California Toxic Rule and the Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays and Estuaries of California are summarized in the following Tables 19, 20 and 21. The criteria calculation is based on CTR criteria for freshwater.

The calculated coefficients of variation (CVs) for data sets of total recoverable selenium and cyanide are based on standard deviation, number of samples and mean of the data set.

This Order retains the free cyanide limits in the prior permits. The following table shows the free cyanide limits.

Table 18. Cyanide Limits in prior Orders

Discharge Point	Order	Facility	Effluent Limitations, µg/L	
			Average Monthly	Maximum Daily
DP 001&DP 002	R8-2006-0010	RP-1/RP-4	4.2	8.5
DP 003	R8-2008-0028	RP-5	4.6	7.3
DP 004	R8-2004-0020	CCWRF	4.3	8.5

Table 19. Calculation of Effluent Limits at DP 001 and DP002

				CV = 0.6, long-term average			Aquatic Life		Human		Permit Limit	
	CTR Criteria			Acute M	Chronic M	LTA	Objective/limits		Health Limits		Concentration Limit	
	Fresh water		Human Health	0.321	0.527		**3.11**	**1.55**	**2.01**			
Constituent	CMC	CCC		Acute LTA	Chronic LTA		MDEL	AMEL	MDEL	AMEL	MDEL	AMEL
Bis(2-ethylhexyl) Phthalate			5.9						11.9	5.9	**11.9**	**5.9**
Total recoverable selenium		5.0			2.6	***2.6***	8.2	4.1			**8.2**	**4.1**

Table 20. Calculation of Effluent Limits at DP 003

Bromodichloromethane			46						92.5	46.0	**92**	**46**

Table 21. Calculation of Effluent Limits at DP 004

Constituent	CMC	CCC		Acute LTA	Chronic LTA		MDEL	AMEL	MDEL	AMEL	MDEL	AMEL
Bis(2-ethylhexyl) Phthalate			5.9						11.9	5.9	**11.9**	**5.9**

5. Whole Effluent Toxicity (WET)

This Order does not specify WET limits but requires chronic toxicity monitoring. This Order, as in the previous Orders, also requires the Discharger to conduct the accelerated monitoring as specified in Attachment E when the result of any single chronic toxicity test of the effluent exceeds 1.0 TUc. The monitoring data for all the Facilities during the past three years (2005-2008) indicated that the monthly trigger of 1 TUc has not been exceeded.

D. BPJ - Based Effluent Specifications for DP 001 through DP 004

For tertiary treated wastewater, the BOD_5 and TSS concentration limits are based on Best Professional Judgment. The technology-based secondary treatment standards specify BOD_5 and TSS concentration limits that are less stringent.

Table 22. Tertiary Effluent BOD_5 and TSS Limits

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 Final Effluent Limitations

1. Satisfaction of Anti-Backsliding Requirements

All effluent limitations in this Order are at least as stringent as the effluent limitations in previous Orders.

2. Satisfaction of Antidegradation Policy

The discharges addressed in this Order are existing discharges regulated under waste discharge requirements issued for each of the Facilities. This Order consolidates those requirements. The effluent limitations in this Order are at least as stringent as those specified in the prior individual waste discharge requirements. No increases in the regulated discharge flows are proposed. Therefore, discharges conducted in conformance with the requirements of this Order will not result in a lowering of water quality. The discharges therefore conform to antidegradation requirements specified in Resolution No. 68-16, which incorporates the federal antidegradation policy at 40 CFR 131.12 where, as here, is it applicable.

3. Stringency of Requirements for Individual Pollutants

Water quality-based effluent limitations have been scientifically derived to implement water quality objectives that protect beneficial uses. Both the beneficial uses and the water quality objectives have been approved pursuant to federal law and are the applicable federal water quality standards. To the extent that toxic pollutant water quality-based effluent limitations were derived from the CTR, the CTR is the applicable standard pursuant to section 131.38. The scientific procedures for calculating the individual water quality-based effluent limitations for priority pollutants are based on the CTR-SIP, which was approved by USEPA on May 18, 2000. Apart from certain surface water standards changes resulting from the N/TDS Basin Plan amendment that do not materially affect the quality requirements for the discharges regulated by this Order, all beneficial uses and water quality objectives contained in the Basin Plan were approved under state law and submitted to and approved by USEPA prior to May 30, 2000. Any water quality objectives and beneficial uses submitted to USEPA prior to May 30, 2000, but not approved by USEPA before that date, are nonetheless "applicable water quality standards for purposes of the CWA" pursuant to section 131.21(c)(1). Collectively, this Order's restrictions on individual pollutants are no more stringent than required to implement the requirements of the CWA.

4. Summary of Final Effluent Limitations

Table 23. Summary of Water Quality-Based Effluent Limits at all DPs

Parameter	Units	Effluent Limitations					Basis
		Average Monthly	Average Weekly	Max Daily	Instant. Max.	Range	
BOD_5	mg/L	20	30	--	--	--	Basin Plan
Total Suspended Solids	mg/L	20	30	--	--	--	BP
pH	Std. unit	--	--	--		6.5-8.5	BP
Total Residual Chlorine	mg/L				0.1		BP
Coliform	MPN	--		2.2 MPN	--	--	Title 22
Ammonia Nitrogen	mg/L	4.5					BP
Free Cyanide	µg/L	4.0		9.2			CTR
Bis (2-Ethylhexyl) Phthalate at DPs 001, 002, & 004	µg/L	5.9		12			CTR
Total recoverable selenium at DPs 001 & 002	µg/L						CTR
Bromodichloromethane At DP 003	µg/L	46		92	µg/L		CTR

F. Interim Effluent Limitations - Not Applicable

G. Land Discharge Specifications – Not Applicable

H. Reclamation Specifications

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 the California Water Code Section 13521.

3. As shown in Chapter 4 of the Basin Plan as amended by the N/TDS Amendment, Resolution No. R8-2004-0001, two sets of groundwater management zones (GMZs) and respective TDS objectives have been adopted for a portion of the Chino Basin. "Maximum benefit" objectives are established for the Chino North GMZ, while "antidegradation" objectives are set for the Chino 1, 2 and 3 GMZs. Order Nos. R8-2004-0020, R8-2006-0010, and R8-2008-0028 include TDS limits for recycled water use that implement the Chino North and Chino 1, 2, and 3 TDS objectives. Provided that applicable maximum benefit commitments specified in Chapter 5 of the amended Basin Plan (and shown in Attachment J of this Order) are satisfied by the Discharger and the Chino Basin Watermaster, the TDS discharges from the combined effluent quality from the Discharger's treatment plants will be limited to 550 mg/L. Note that the "maximum benefit" objective for the Chino North GMZ is 420 mg/L. The basis for the TDS limit of 550 mg/L is as follows. The TDS value of 550 mg/L for recycled water use was assumed as part of the development of the maximum benefit objective for the Chino North GMZ and the maximum benefit program. Implementation of that program, which entails blending of recycled water with other sources of supply (stormwater, imported State Project Water) will assure that the TDS objective of the Chino North GMZ is achieved and maintained. If the Regional Board finds that thee maximum benefit commitments are not satisfied, then the Chino 1, 2 and 3 "antidegradation" management zones and their respective TDS objectives apply. Since the Chino 1, 2 and 3 GMZs lack assimilative capacity for TDS, the TDS limits are the same as the management zone objectives.

Table 24. TDS Limitations

Receiving Groundwater Management Zone	12-Mo Average TDS Concentration, mg/L
Chino 1	280
Chino 2	250
Chino 3	260
Chino – North "maximum benefit"	550

4. TIN limits: When recycled water is reused for irrigation, no nitrogen limit is established for the effluent, since nitrogen is anticipated to be used by plants and will not affect water quality.

I. Stormwater Discharge Requirements

On April 17, 1997, the State Board adopted the General Industrial Storm Water Permit, Order No. 97-03-DWQ, NPDES No. CAS000001. This General Permit implements the Final Regulations (40 CFR 122, 123, and 124) for stormwater runoff published on November 16, 1990 by EPA in compliance with Section 402(p) of the Clean Water Act (CWA). Industrial facilities, including POTW sites, are required to obtain NPDES Permits for stormwater discharges. Accordingly, this Order incorporates requirements for the discharge of stormwater from RP-1[13].

J. Groundwater Recharge Requirements – Not Applicable

Order No. R8-2007-0039 regulates the use of recycled water from RP-1 and RP-4 for groundwater recharge.

V. RATIONALE FOR RECEIVING WATER LIMITATIONS

A. Surface Water

The surface water receiving water limitations in this Order are based upon the water quality objectives contained in the Basin Plan. As such, they are required part of the proposed Order.

B. Groundwater – Not Applicable

[13] *Stormwater discharges from the Discharger's other Facilities are treated onsite (see II. B. 2, above).*

VI. RATIONALE FOR MONITORING AND REPORTING REQUIREMENTS

Section 122.48 of 40 CFR requires all NPDES permits to specify recording and reporting of monitoring results. Sections 13267 and 13383 of the CWC authorize the Regional 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 the monitoring and reporting requirements contained in the MRP for these Facilities.

A. Influent Monitoring

This Order carries forward the treatment plant influent monitoring requirements specified in Orders No. R8-2004-0020, R8-2006-0010, and R8-2008-0028 with modifications. Influent monitoring is required to determine the effectiveness of the treatment program and assess treatment plant performance, and to implement EPA source control/pretreatment program.

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). This provision requires compliance with the monitoring and reporting program, and is based on 40 CFR 122.44(i), 122.62, 122.63 and 124.5. The SMP is a standard requirement in almost all NPDES permits (including the proposed Order) 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 NPDES regulations, the California Water Code, and Regional Water Board's policies. The monitoring and reporting program also contains sampling program specific for the Discharger's wastewater treatment plant. It defines the sampling stations and frequency, pollutants to be monitored, and additional reporting requirements. Pollutants to be monitored include all pollutants for which effluent limitations are specified. Further, in accordance with Section 1.3 of the SIP, periodic monitoring is required for all priority pollutants defined by the CTR, for which criteria apply and for which no effluent limitations have been established, to evaluate reasonable potential to cause or contribute to an excursion above a water quality standard.

This Order continues the monitoring requirements specified in the Order No. R8-2004-0020, No. R8-2006-0010, and No. R8-2008-0028, with modifications. This Order also requires the Discharger to conduct accelerated monitoring for those constituents that are detected in the annual priority pollutant scan.

C. Whole Effluent Toxicity Testing Requirements

Whole effluent toxicity (WET) protects the receiving water quality from the aggregate toxic effect of a mixture of pollutants in the effluent. WET tests measure the degree of response of exposed aquatic test organisms to an effluent. The WET approach implements the narrative "no toxics in toxic amounts" criterion. There are two types of WET tests: acute and chronic. An acute toxicity test is conducted over a shorter time period and measures mortality. A chronic toxicity test is conducted over a longer period of time and may measure mortality, reproduction, and growth.

The Basin Plan specifies a narrative objective for toxicity, requiring that all waters be maintained free of toxic substances in concentrations that are lethal to or produce other detrimental response on aquatic organisms. Detrimental response includes but is not limited to decreased growth rate, decreased reproductive success of resident or indicator species, and/or significant alterations in population, community ecology, or receiving water biota.

In addition to the Basin Plan requirements, Section 4 of the SIP states that a chronic toxicity effluent limitation is required in permits for all discharges that will cause, have the reasonable potential to cause, or contribute to chronic toxicity in receiving waters. Therefore, in accordance with the SIP, this Order requires the Discharger to conduct chronic toxicity testing. In addition, the Order establishes thresholds that when exceeded require the Discharger to conduct accelerated toxicity testing and/or to conduct toxicity identification evaluation (TIE) studies.

This Order requires the Discharger to conduct chronic toxicity testing of the effluent from each of the Facilities on a monthly basis. The Order also requires the Discharger to conduct an Initial Investigation Toxicity Reduction Evaluation (IITRE) program when either the two-month median of toxicity test results exceeds 1 TUc or any single test exceeds 1.7 TUc for survival endpoint. Based on the results of this investigation program and at the discretion of the Executive Officer, a more rigorous Toxicity Reduction Evaluation/Toxicity Identification Evaluation (TRE/TIE) may be required. A re-opener provision is included in the Order to incorporate a chronic toxicity effluent limitation if warranted by the toxicity test results.

D. Receiving Water Monitoring

1. Surface Water

Receiving water monitoring is required to determine compliance with receiving water limitations and to characterize the water quality of the receiving water. Requirements are based on the Basin Plan.

2. Groundwater – Not Applicable

E. 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** - This Order continues the monitoring requirements specified in Order No. R8-2004-0020, No. R8-2006-0010, and No. R8-2008-0028, with modifications.

3. **Pretreatment Monitoring** - These monitoring and reporting requirements are established pursuant EPA 40 CFR 403 regulations.

VII. RATIONALE FOR PROVISIONS

A. Standard Provisions

Standard Provisions, which apply to all NPDES permits in accordance with section 122.41, and additional conditions applicable to specified categories of permits in accordance with section 122.42, are provided in Attachment D. The Discharger must comply with all standard provisions and with those additional conditions that are applicable under section 122.42.

Section 122.41(a)(1) and (b) through (n) establish conditions that apply to all State-issued NPDES permits. These conditions must be incorporated into the permits either expressly or by reference. If incorporated by reference, a specific citation to the regulations must be included in the Order. Section 123.25(a)(12) allows the state to omit or modify conditions to impose more stringent requirements. In accordance with section 123.25, this Order omits federal conditions that address enforcement authority specified in section0s 122.41(j)(5) and (k)(2) because the enforcement authority under the Water Code is more stringent. In lieu of these conditions, this Order incorporates by reference Water Code section 13387(e).

B. Special Provisions

1. Reopener Provisions

The provisions are based on 40 CFR Parts 122.44(c) and 123. The Regional Water Board may reopen the permit to modify permit conditions and requirements. Causes for modifications include the promulgation of new regulations, modification in sludge use or disposal practices, or adoption of new regulations by the State Water Board or Regional Water Board, including revisions to the Basin Plan.

2. Special Studies and Additional Monitoring Requirements

Toxicity Identification Evaluations or Toxicity Reduction Evaluations. This provision is based on the SIP, Section 4, Toxicity Control Provisions.

3. Best Management Practices and Pollution Prevention

Best Management Practices and Pollution Prevention - The requirements are based on the SIP Section 2.4.5.1

4. Construction, Operation, and Maintenance Specifications

Construction, Operation, and Maintenance Specifications - The requirements are based on requirements that were specified in prior Orders issued to the Discharger.

5. Special Provisions for Municipal Facilities - POTWs Only

a. Oxidized, filtered, and disinfected by UV or chlorine Wastewater Requirements: These requirements are based on Title 22 requirements for the use of recycled water.

b. Pretreatment: The system treatment plants capacity is 84.4 mgd. 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.

c. The State Water Board issued General Waste Discharge Requirements for Sanitary Sewer Systems, Water Quality Order No. 2006-0003-DWQ (General Order) on May 2, 2006. The General Order requires public agencies that own or operate sanitary sewer systems with greater 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), among other requirements and prohibitions. The Discharger has enrolled and implemented these requirements.

Furthermore, the General Order contains requirements for operation and maintenance of collection systems and for reporting and mitigating sanitary sewer overflows. Inasmuch as the Discharger's collection system is part of the system that is subject to this Order, Provisions section VI.C.5.a. of this Order applies. For instance, the 24-hour reporting requirements in this Order (Provisions section VI.A.2.b.) are not included in the General Order. The Discharger must comply with both the General Order and this Order. The Discharger and public agencies that are discharging wastewater into one or more of the individual facilities were required to obtain enrollment for regulation under the General Order. The Discharger and public agencies that are discharging wastewater into one or more of the individual facilities have enrolled and implemented these requirements.

d. Biosolids: 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.

6. Other Special Provisions – Not Applicable

7. Compliance Schedules – Not Applicable

VIII. PUBLIC PARTICIPATION

The California Regional Water Quality Control Board, Santa Ana Region (Regional Water Board) is considering the issuance of waste discharge requirements (WDRs) that will serve as a National Pollutant Discharge Elimination System (NPDES) permit for Inland Empire Utilities Agency's Regional Water Recycling Facilities. 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 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. Notification was provided through the posting of a Notice of Public Hearing at the Inland Empire Utilities Agency's RP-1, RP-4, RP-5, CCWRF Facilities and office, and at the Regional Water Board website http://www.waterboards.ca.gov/santaana/board_decisions/tentative_orders/index.shtml and publication in the local newspaper on June 10, 2009.

B. Written Comments

The staff determinations are tentative. Interested persons are invited to submit written comments concerning these tentative WDRs. Comments must be submitted either in person or by mail to the Executive Officer at the Regional Water Board at the address shown below.

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 June 19, 2009.

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: July 20, 2009
Time: 10:00 A.M.
Location: California Regional Water Quality Control Board
Santa Ana Region
3737 Main Street, Suite 500
Riverside, CA 92501-3348

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 is http://www.waterboards.ca.gov/santaana. You can access the current agenda for changes in dates and locations.

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 (RWD), 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 Friday. Copying of documents may be arranged through the Regional Water Board by calling Jane Qiu (951) 320-2008.

F. Register of Interested Persons

Any person interested in being placed on the mailing list for information regarding the WDRs and NPDES permit 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.

ATTACHMENT G - EPA PRIORITY POLLUTANT LIST

EPA PRIORITY POLLUTANT LIST					
Metals		**Acid Extractibles**		**Base/Neutral Extractibles (continuation)**	
1.	Antimony	45.	2-Chlorophenol	91.	Hexachloroethane
2.	Arsenic	46.	2,4-Dichlorophenol	92.	Indeno (1,2,3-cd) Pyrene
3.	Beryllium	47.	2,4-Dimethylphenol	93.	Isophorone
4.	Cadmium	48.	2-Methyl-4,6-Dinitrophenol	94.	Naphthalene
5a.	Chromium (III)	49.	2,4-Dinitrophenol	95.	Nitrobenzene
5b.	Chromium (VI)	50.	2-Nitrophenol	96.	N-Nitrosodimethylamine
6.	Copper	51.	4-Nitrophenol	97.	N-Nitrosodi-N-Propylamine
7.	Lead	52.	3-Methyl-4-Chlorophenol	98.	N-Nitrosodiphenylamine
8.	Mercury	53.	Pentachlorophenol	99.	Phenanthrene
9.	Nickel	54.	Phenol	100.	Pyrene
10.	Selenium	55.	2, 4, 6 – Trichlorophenol	101.	1,2,4-Trichlorobenzene
11.	Silver	**Base/Neutral Extractibles**		**Pesticides**	
12.	Thallium	56.	Acenaphthene	102.	Aldrin
13.	Zinc	57.	Acenaphthylene	103.	Alpha BHC
Miscellaneous		58.	Anthracene	104.	Beta BHC
14.	Cyanide, Free	59.	Benzidine	105.	Delta BHC
15.	Asbestos (not required unless requested)	60.	Benzo (a) Anthracene	106.	Gamma BHC
16.	2,3,7,8-Tetrachlorodibenzo-P-Dioxin (TCDD)	61.	Benzo (a) Pyrene	107.	Chlordane
Volatile Organics		62.	Benzo (b) Fluoranthene	108.	4, 4' - DDT
17.	Acrolein	63.	Benzo (g,h,i) Perylene	109.	4, 4' - DDE
18.	Acrylonitrile	64.	Benzo (k) Fluoranthene	110.	4, 4' - DDD
19.	Benzene	65.	Bis (2-Chloroethoxy) Methane	111.	Dieldrin
20.	Bromoform	66.	Bis (2-Chloroethyl) Ether	112.	Alpha Endosulfan
21.	Carbon Tetrachloride	67.	Bis (2-Chloroisopropyl) Ether	113.	Beta Endosulfan
22.	Chlorobenzene	68.	Bis (2-Ethylhexyl) Phthalate	114.	Endosulfan Sulfate
23.	Chlorodibromomethane	69.	4-Bromophenyl Phenyl Ether	115.	Endrin
24.	Chloroethane	70.	Butylbenzyl Phthalate	116.	Endrin Aldehyde
25.	2-Chloroethyl Vinyl Ether	71.	2-Chloronaphthalene	117.	Heptachlor
26.	Chloroform	72.	4-Chlorophenyl Phenyl Ether	118.	Heptachlor Epoxide
27.	Dichlorobromomethane	73.	Chrysene	119.	PCB 1016
28.	1,1-Dichloroethane	74.	Dibenzo (a,h) Anthracene	120.	PCB 1221
29.	1,2-Dichloroethane	75.	1,2-Dichlorobenzene	121.	PCB 1232
30.	1,1-Dichloroethylene	76.	1,3-Dichlorobenzene	122.	PCB 1242
31.	1,2-Dichloropropane	77.	1,4-Dichlorobenzene	123.	PCB 1248
32.	1,3-Dichloropropylene	78.	3,3'-Dichlorobenzidine	124.	PCB 1254
33.	Ethylbenzene	79.	Diethyl Phthalate	125.	PCB 1260
34.	Methyl Bromide	80.	Dimethyl Phthalate	126.	Toxaphene
35.	Methyl Chloride	81.	Di-n-Butyl Phthalate		
36.	Methylene Chloride	82.	2,4-Dinitrotoluene		
37.	1,1,2,2-Tetrachloroethane	83.	2-6-Dinitrotoluene		
38.	Tetrachloroethylene	84.	Di-n-Octyl Phthalate		
39.	Toluene	85.	1,2-Dipenylhydrazine		
40.	1,2-Trans-Dichloroethylene	86.	Fluoranthene		
41.	1,1,1-Trichloroethane	87.	Fluorene		
42.	1,1,2-Trichloroethane	88.	Hexachlorobenzene		
43.	Trichloroethylene	89.	Hexachlorobutadiene		
44.	Vinyl Chloride	90.	Hexachlorocyclopentadiene		

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 - Colorimetric

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.*

ATTACHMENT I – TRIGGERS FOR MONITORING PRIORITY POLLUTANTS

Table I-1. For DP001 and DP002

	CONSTITUENT	µg/L		CONSTITUENT	µg/L
1	Antimony	2150	38	Tetratchloroethylene	4.43
2	Arsenic	75	*39*	***Toluene***	***150***
3	Beryllium	--	*40*	***1,2,-Trans-dichloroethylene***	***10***
4	Cadmium	3.7	*41*	***1,1,1-Trichloroethane***	***200***
5a	Chromium III	122	42	***1,1,2-Trichloroethane***	***5***
5b	Chromium VI	5.5	*43*	***Trichloroethylene***	***5***
6	Copper	14	*44*	***Vinyl Chloride***	***0.5***
7	Lead	12	45	2-Chlorophenol	200
8	Mercury	0.026	46	2,4-Dichlorophenol	395
9	Nickel	31	47	2,4-Dimethylphenol	1150
10	Selenium	2.5	48	2-Methy-4,6-Dinitrophenol	383
11	Silver	2.9	49	2,4-Dinitrophenol	7000
12	Thallium	3.2	50	2-Nitrophenol	--
13	Zinc	71	51	4-Nitrophenol	--
14	Cyanide	2.6	52	3-Methyl-4-Chlorophenol	--
15	Asbestos	--	53	***Pentachlorophenol***	***1***
16	2,3,7,8-TCDD (Dioxin)	0.000000007	54	Phenol	2,300,000
17	Acrolein	390	55	2,4,6-Trichlorophenol	3.3
18	Acrylonitrile	0.33	56	Acenapthene	1,350
19	***Benzene***	***1***	57	Acenapthylene	--
20	Bromoform	180	58	Anthracene	55,000
21	***Carbon Tetrachloride***	***0.5***	59	Benzidine	0.00027
22	Chlorobenzene	10500	60	Benzo (a) anthracene	0.025
23	Chlorodibromomethane	17	61	Benzo (a) pyrene	0.025
24	Chloroethane	--	62	Benzo (b) fluoranthene	0.025
25	2-Chloroethyl vinyl ether	--	63	Benzo (g,h,i) pyrylene	--
26	Chloroform	--	64	Benzo (k) fluorantene	0.025
27	Dichlorobromomethane	23	65	Bis (2-Chloroethoxy) methane	--
28	***1,1-Dichloroethane***	***5***	66	Bis (2-Chloroethyl) ether	0.7
29	***1,2-Dichloroethane***	***0.5***	67	Bis (2-Chloroisopropyl) ether	85,000
30	1,1-Dichloroethylene	1.6	68	Bis (2-ethyhexyl) phthalate	3.0
31	***1,2-Dichloropropane***	***5***	69	4-Bromophenyl phenyl ether	--
32	***1,3-Dichloropropylene***	***0.5***	70	Butyl benzyl phthalate	2600
33	***Ethylbenzene***	***300***	71	2- Chloronapthalene	2150
34	Methyl Bromide	2000	72	4-Chlrorphenyl phenyl ether	--
35	Methyl Chloride	--	73	Chrysene	0.025
36	Methylene Chloride	800	74	Dibenzo (a,h) anthracene	0.025
37	***1,1,2,2-Tetratchloroethane***	***1***	***75***	***1,2-Dichlorobenzene***	***600***

Table I-1. For DP001 and DP002--Continued

	CONSTITUENT	µg/L
76	1,3-Dichlorobenzene	1,300
77	***1,4-Dichlorobenzene***	***5***
78	3,3-Dichlorobenzidine	0.039
79	Diethyl phthalate	60,000
80	Dimethyl phthalate	1,450,000
81	Di-N-butyl phthalate	6,000
82	2,4-Dinitrotoluene	4.6
83	2,6-Dinitrotoluene	--
84	Di-N-octyl phthalate	--
85	1,2-Diphenylhydrazine	0.27
86	Fluoranthene	185
87	Fluorene	7,000
88	Hexachlorobenzene	0.00039
89	Hexachlorobutadiene	25
90	***Hexachlorocyclopentadiene***	***50***
91	Hexachloroethane	4.5
92	Indeno (1,2,3-cd) pyrene	0.025
93	Isophorone	300
94	***Naphthalene***	***17***
95	Nitrobenzene	950
96	***N-Nitrosodimethylamine***	***0.01***
97	***N-Nitrosodi-N-propylamine***	***0.01***
98	N-Nitrosodiphenylamine	8
99	Phenantrene	--

	CONSTITUENT	µg/L
100	Pyrene	5,500
101	***1,2,4 -Trichlorobenzene***	***5***
102	Aldrin	0.00007
103	BHC Alpha	0.0065
104	BHC Beta	0.023
105	BHC Gamma	0.032
106	BHC Delta	--
107	Chlordane	0.0003
108	4,4-DDT	0.0003
109	4,4-DDE	0.0003
110	4,4-DDD	0.00042
111	Dieldrin	0.00007
112	Endosulfan Alpha	0.028
113	Endosulfan Beta	0.028
114	Endosulfan Sulfate	120
115	Endrin	0.018
116	Endrin Aldehyde	0.42
117	Heptachlor	0.00011
118	Heptachlor Epoxide	0.000055
119	PCB 1016	0.000085
120	PCB 1221	0.000085
125	PCB 1260	0.000085
126	Toxaphene	0.0001

Notes:

1. For constituents not shown italicized, the values shown in the Table are fifty percent of the most stringent applicable receiving water objectives (freshwater or human health (consumption of water and organisms) as specified for that pollutant in 40 CFR 131.38[1]).
2. For constituents shown bold and italicized, the values shown in the Table are based on the California Department of Public Health maximum contaminant levels (MCLs) or Notification Level. Notification Level based trigger is underlined.
3. For hardness dependent metals, the hardness value used is 122 mg/L as 5th percentile of effluent flows and for pentachlorophenol, the pH value used is 7.5 standard units.

[1] *See Federal Register/ Vol. 65, No. 97 / Thursday, May 18, 2000 / Rules and Regulations.*

Table I-1. For DP003

	CONSTITUENT	µg/L
1	Antimony	2150
2	Arsenic	75
3	Beryllium	--
4	Cadmium	4.4
5a	Chromium III	143
5b	Chromium VI	5.5
6	Copper	17
7	Lead	16
8	Mercury	0.026
9	Nickel	36
10	Selenium	2.5
11	Silver	4.0
12	Thallium	3.2
13	Zinc	84
14	Cyanide	2.6
15	Asbestos	--
16	2,3,7,8-TCDD (Dioxin)	0.000000007
17	Acrolein	390
18	Acrylonitrile	0.33
19	***Benzene***	***1***
20	Bromoform	180
21	***Carbon Tetrachloride***	***0.5***
22	Chlorobenzene	10500
23	Chlorodibromomethane	17
24	Chloroethane	--
25	2-Chloroethyl vinyl ether	--
26	Chloroform	--
27	Dichlorobromomethane	23
28	***1,1-Dichloroethane***	***5***
29	***1,2-Dichloroethane***	***0.5***
30	1,1-Dichloroethylene	1.6
31	***1,2-Dichloropropane***	***5***
32	***1,3-Dichloropropylene***	***0.5***
33	***Ethylbenzene***	***300***
34	Methyl Bromide	2000
35	Methyl Chloride	--
36	Methylene Chloride	800
37	***1,1,2,2-Tetratchloroethane***	***1***
38	Tetratchloroethylene	4.43
39	***Toluene***	***150***
40	***1,2,-Trans-dichloroethylene***	***10***
41	***1,1,1-Trichloroethane***	***200***
42	***1,1,2-Trichloroethane***	***5***
43	***Trichloroethylene***	***5***
44	***Vinyl Chloride***	***0.5***
45	2-Chlorophenol	200
46	2,4-Dichlorophenol	395
47	2,4-Dimethylphenol	1150
48	2-Methy-4,6-Dinitrophenol	383
49	2,4-Dinitrophenol	7000
50	2-Nitrophenol	--
51	4-Nitrophenol	--
52	3-Methyl-4-Chlorophenol	--
53	***Pentachlorophenol***	***1***
54	Phenol	2,300,000
55	2,4,6-Trichlorophenol	3.3
56	Acenapthene	1,350
57	Acenapthylene	--
58	Anthracene	55,000
59	Benzidine	0.00027
60	Benzo (a) anthracene	0.025
61	Benzo (a) pyrene	0.025
62	Benzo (b) fluoranthene	0.025
63	Benzo (g,h,i) pyrylene	--
64	Benzo (k) fluorantene	0.025
65	Bis (2-Chloroethoxy) methane	--
66	Bis (2-Chloroethyl) ether	0.7
67	Bis (2-Chloroisopropyl) ether	85,000
68	Bis (2-ethyhexyl) phthalate	3.0
69	4-Bromophenyl phenyl ether	--
70	Butyl benzyl phthalate	2600
71	2- Chloronapthalene	2150
72	4-Chlrorphenyl phenyl ether	--
73	Chrysene	0.025
74	Dibenzo (a,h) anthracene	0.025
75	***1,2-Dichlorobenzene***	***600***

Table I-1. For DP003--Continued

	CONSTITUENT	µg/L
76	1,3-Dichlorobenzene	1,300
77	***1,4-Dichlorobenzene***	***5***
78	3,3-Dichlorobenzidine	0.039
79	Diethyl phthalate	60,000
80	Dimethyl phthalate	1,450,000
81	Di-N-butyl phthalate	6,000
82	2,4-Dinitrotoluene	4.6
83	2,6-Dinitrotoluene	--
84	Di-N-octyl phthalate	--
85	1,2-Diphenylhydrazine	0.27
86	Fluoranthene	185
87	Fluorene	7,000
88	Hexachlorobenzene	0.00039
89	Hexachlorobutadiene	25
90	***Hexachlorocyclopentadiene***	***50***
91	Hexachloroethane	4.5
92	Indeno (1,2,3-cd) pyrene	0.025
93	Isophorone	300
94	***Naphthalene***	***17***
95	Nitrobenzene	950
96	***N-Nitrosodimethylamine***	***0.01***
97	***N-Nitrosodi-N-propylamine***	***0.01***
98	N-Nitrosodiphenylamine	8
99	Phenantrene	--

	CONSTITUENT	µg/L
100	Pyrene	5,500
101	***1,2,4 -Trichlorobenzene***	***5***
102	Aldrin	0.00007
103	BHC Alpha	0.0065
104	BHC Beta	0.023
105	BHC Gamma	0.032
106	BHC Delta	--
107	Chlordane	0.0003
108	4,4-DDT	0.0003
109	4,4-DDE	0.0003
110	4,4-DDD	0.00042
111	Dieldrin	0.00007
112	Endosulfan Alpha	0.028
113	Endosulfan Beta	0.028
114	Endosulfan Sulfate	120
115	Endrin	0.018
116	Endrin Aldehyde	0.42
117	Heptachlor	0.00011
118	Heptachlor Epoxide	0.000055
119	PCB 1016	0.000085
120	PCB 1221	0.000085
125	PCB 1260	0.000085
126	Toxaphene	0.0001

Notes:

4. For constituents not shown italicized, the values shown in the Table are fifty percent of the most stringent applicable receiving water objectives (freshwater or human health (consumption of water and organisms) as specified for that pollutant in 40 CFR 131.38[2]).
5. For constituents shown bold and italicized, the values shown in the Table are based on the California Department of Public Health maximum contaminant levels (MCLs) or Notification Level. Notification Level based trigger is underlined.
6. For hardness dependent metals, the hardness value used is 148 mg/L as 5th percentile of effluent flows and for pentachlorophenol, the pH value used is 7.5 standard units.

[2] *See Federal Register/ Vol. 65, No. 97 / Thursday, May 18, 2000 / Rules and Regulations.*

Table I-2. For DP004

	CONSTITUENT	µg/L
1	Antimony	2150
2	Arsenic	75
3	Beryllium	--
4	Cadmium	3.9
5a	Chromium III	128
5b	Chromium VI	5.5
6	Copper	15
7	Lead	14
8	Mercury	0.026
9	Nickel	33
10	Selenium	2.5
11	Silver	3.2
12	Thallium	3.2
13	Zinc	75
14	Cyanide	2.6
15	Asbestos	--
16	2,3,7,8-TCDD (Dioxin)	0.000000007
17	Acrolein	390
18	Acrylonitrile	0.33
19	***Benzene***	***1***
20	Bromoform	180
21	***Carbon Tetrachloride***	***0.5***
22	Chlorobenzene	10500
23	Chlorodibromomethane	17
24	Chloroethane	--
25	2-Chloroethyl vinyl ether	--
26	Chloroform	--
27	Dichlorobromomethane	23
28	***1,1-Dichloroethane***	***5***
29	***1,2-Dichloroethane***	***0.5***
30	1,1-Dichloroethylene	1.6
31	***1,2-Dichloropropane***	***5***
32	***1,3-Dichloropropylene***	***0.5***
33	***Ethylbenzene***	***300***
34	Methyl Bromide	2000
35	Methyl Chloride	--
36	Methylene Chloride	800
37	***1,1,2,2-Tetratchloroethane***	***1***
38	Tetratchloroethylene	4.43
39	***Toluene***	***150***
40	***1,2,-Trans-dichloroethylene***	***10***
41	***1,1,1-Trichloroethane***	***200***
42	***1,1,2-Trichloroethane***	***5***
43	***Trichloroethylene***	***5***
44	***Vinyl Chloride***	***0.5***
45	2-Chlorophenol	200
46	2,4-Dichlorophenol	395
47	2,4-Dimethylphenol	1150
48	2-Methy-4,6-Dinitrophenol	383
49	2,4-Dinitrophenol	7000
50	2-Nitrophenol	--
51	4-Nitrophenol	--
52	3-Methyl-4-Chlorophenol	--
53	***Pentachlorophenol***	***1***
54	Phenol	2,300,000
55	2,4,6-Trichlorophenol	3.3
56	Acenapthene	1,350
57	Acenapthylene	--
58	Anthracene	55,000
59	Benzidine	0.00027
60	Benzo (a) anthracene	0.025
61	Benzo (a) pyrene	0.025
62	Benzo (b) fluoranthene	0.025
63	Benzo (g,h,i) pyrylene	--
64	Benzo (k) fluorantene	0.025
65	Bis (2-Chloroethoxy) methane	--
66	Bis (2-Chloroethyl) ether	0.7
67	Bis (2-Chloroisopropyl) ether	85,000
68	Bis (2-ethyhexyl) phthalate	3.0
69	4-Bromophenyl phenyl ether	--
70	Butyl benzyl phthalate	2600
71	2- Chloronapthalene	2150
72	4-Chlrorphenyl phenyl ether	--
73	Chrysene	0.025
74	Dibenzo (a,h) anthracene	0.025
75	***1,2-Dichlorobenzene***	***600***

Table I-1. For DP004--Continued

	CONSTITUENT	µg/L
76	1,3-Dichlorobenzene	1,300
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81	Di-N-butyl phthalate	6,000
82	2,4-Dinitrotoluene	4.6
83	2,6-Dinitrotoluene	--
84	Di-N-octyl phthalate	--
85	1,2-Diphenylhydrazine	0.27
86	Fluoranthene	185
87	Fluorene	7,000
88	Hexachlorobenzene	0.00039
89	Hexachlorobutadiene	25
90	***Hexachlorocyclopentadiene***	***50***
91	Hexachloroethane	4.5
92	Indeno (1,2,3-cd) pyrene	0.025
93	Isophorone	300
94	***Naphthalene***	***17***
95	Nitrobenzene	950
96	***N-Nitrosodimethylamine***	***0.01***
97	***N-Nitrosodi-N-propylamine***	***0.01***
98	N-Nitrosodiphenylamine	8
99	Phenantrene	--

	CONSTITUENT	µg/L
100	Pyrene	5,500
101	***1,2,4 -Trichlorobenzene***	***5***
102	Aldrin	0.00007
103	BHC Alpha	0.0065
104	BHC Beta	0.023
105	BHC Gamma	0.032
106	BHC Delta	--
107	Chlordane	0.0003
108	4,4-DDT	0.0003
109	4,4-DDE	0.0003
110	4,4-DDD	0.00042
111	Dieldrin	0.00007
112	Endosulfan Alpha	0.028
113	Endosulfan Beta	0.028
114	Endosulfan Sulfate	120
115	Endrin	0.018
116	Endrin Aldehyde	0.42
117	Heptachlor	0.00011
118	Heptachlor Epoxide	0.000055
119	PCB 1016	0.000085
120	PCB 1221	0.000085
125	PCB 1260	0.000085
126	Toxaphene	0.0001

Notes:

7. For constituents not shown italicized, the values shown in the Table are fifty percent of the most stringent applicable receiving water objectives (freshwater or human health (consumption of water and organisms) as specified for that pollutant in 40 CFR 131.38[3]).
8. For constituents shown bold and italicized, the values shown in the Table are based on the California Department of Public Health maximum contaminant levels (MCLs) or Notification Level. Notification Level based trigger is underlined.
9. For hardness dependent metals, the hardness value used is 130 mg/L as 5th percentile of effluent flows and for pentachlorophenol, the pH value used is 7.5 standard units.

[3] *See Federal Register/ Vol. 65, No. 97 / Thursday, May 18, 2000 / Rules and Regulations.*

ATTACHMENT J – STORMWATER POLLUTION PREVENTION PLAN REQUIREMENTS

1. *Implementation Schedule*

The storm water pollution prevention plan (SWPPP) shall be updated and implemented in a timely manner, but in no case later than October 30, 2009.

2. *Objectives*

The SWPPP has two major objectives: (a) to identify and evaluate sources of pollutants associated with industrial activities that may affect the quality of storm water discharges and authorized non-storm water discharges from the facility; and (b) to identify and implement site-specific best management practices (BMPs) to reduce or prevent pollutants associated with industrial activities in storm water discharges and authorized non-storm water discharges. BMPs may include a variety of pollution prevention measures or other low-cost pollution control measures. They are generally categorized as non-structural BMPs (activity schedules, prohibitions of practices, maintenance procedures, and other low-cost measures) and as structural BMPs (treatment measures, run-off controls, over-head coverage). To achieve these objectives, dischargers should consider the five phase process for SWPPP development and implementation as shown in Table A, below.

The SWPPP requirements are designed to be sufficiently flexible to meet the various needs of the facility. SWPPP requirements that are not applicable to the facility should not be included in the SWPPP.

A facility's SWPPP is a written document that shall contain a compliance activity schedule, a description of industrial activities and pollutant sources, descriptions of BMPs, drawings, maps, and relevant copies or references of parts of other plans. The SWPPP shall be revised whenever appropriate and shall be readily available for review by facility employees or Regional Water Board inspectors.

3. *Planning and Organization*

a. Pollution Prevention Team

The SWPPP shall identify a specific individual or individuals and their positions within the facility organization as members of a storm water pollution prevention team responsible for developing the SWPPP, assisting the facility manager in SWPPP implementation and revision, and conducting all monitoring program activities required in the Stormwater monitoring program of Order No. R8-2009-0021. The SWPPP shall clearly identify the storm water pollution prevention related responsibilities, duties, and activities of each team member.

b. Review Other Requirements and Existing Facility Plans

The SWPPP may incorporate or reference the appropriate elements of other regulatory requirements. The discharger shall review all local, state, and federal requirements that impact, complement, or are consistent with the requirements of Order No. R8-2009-0021. The discharger shall identify any existing facility plans that contain storm water pollutant control measures or relate to the requirements of Order No. R8-2009-0021. As examples, dischargers whose facilities are subject to Federal Spill Prevention Control and Countermeasures' requirements should already have instituted a plan to control spills of certain hazardous materials. Similarly, the discharger whose facilities are subject to air quality related permits and regulations may already have evaluated industrial activities that generate dust or particulates.

4. *Site Map*

The SWPPP shall include a site map. The site map shall be provided on an 8-1/2 x 11 inch or larger sheet and include notes, legends, and other data as appropriate to ensure that the site map is clear and understandable. If necessary, the discharger may provide the required information on multiple site maps. The following information shall be included on the site map:

a. The facility boundaries; the outline of all storm water drainage areas within the facility boundaries; portions of the drainage area impacted by run-on from surrounding areas; and direction of flow of each drainage area, on-site surface water bodies, and areas of soil erosion. The map shall also identify nearby water bodies (such as rivers, lakes, ponds) and municipal storm drain inlets where the facility's storm water discharges and authorized non-storm water discharges may be received.

b. The location of the storm water collection and conveyance system, associated points of discharge, and direction of flow. Include any structural control measures that affect storm water discharges, authorized non-storm water discharges, and run-on. Examples of structural control measures are catch basins, berms, detention ponds, secondary containment, oil/water separators, diversion barriers, etc.

c. An outline of all impervious areas of the facility, including paved areas, buildings, covered storage areas, or other roofed structures.

d. Locations where materials are directly exposed to precipitation and the locations where significant spills or leaks identified in Section 6.a.(4)., below, have occurred.

e. Areas of industrial activity. This shall include the locations of all storage areas and storage tanks, shipping and receiving areas, fueling areas, vehicle and equipment storage/maintenance areas, material handling and processing areas, waste treatment and disposal areas, dust or particulate generating areas,

cleaning and rinsing areas, and other areas of industrial activity which are potential pollutant sources.

5. *List of Significant Materials*

The SWPPP shall include a list of significant materials handled and stored at the site. For each material on the list, describe the locations where the material is being stored, received, shipped, and handled, as well as the typical quantities and frequency. Materials shall include raw materials, intermediate products, final or finished products, recycled materials, and waste or disposed materials.

6. *Description of Potential Pollutant Sources*

a. The SWPPP shall include a narrative description of the facility's industrial activities, as identified in Section 4.e., above, associated potential pollutant sources, and potential pollutants that could be discharged in storm water discharges or authorized non-storm water discharges. At a minimum, the following items related to a facility's industrial activities shall be considered:

1) Industrial Processes

Describe each industrial process, the type, characteristics, and quantity of significant materials used in or resulting from the process, and a description of the processes (manufacturing or treatment), cleaning, rinsing, recycling, disposal, or other activities related to the process. Where applicable, areas protected by containment structures and the corresponding containment capacity shall be described.

2) Material Handling and Storage Areas

Describe each handling and storage area, type, characteristics, and quantity of significant materials handled or stored, description of the shipping, receiving, and loading procedures, and the spill or leak prevention and response procedures. Where applicable, areas protected by containment structures and the corresponding containment capacity shall be described.

3) Dust and Particulate Generating Activities

Describe all industrial activities that generate dust or particulates that may be deposited within the facility's boundaries and identify their discharge locations; the characteristics of dust and particulate pollutants; the approximate quantity of dust and particulate pollutants that may be deposited within the facility boundaries; and a description of the primary areas of the facility where dust and particulate pollutants would settle.

4) Significant Spills and Leaks

Describe materials that have spilled or leaked in significant quantities in storm water discharges or non-storm water discharges. Include toxic chemicals (listed in 40 Code of Federal Regulations [CFR] Part 302) that have been discharged to storm water as reported on U.S. Environmental Protection Agency (U.S. EPA) Form R, and oil and hazardous substances in excess of reportable quantities (see 40 CFR, Parts 110, 117, and 302).

The description shall include the type, characteristics, and approximate quantity of the material spilled or leaked, the cleanup or remedial actions that have occurred or are planned, the approximate remaining quantity of materials that may be exposed to storm water or non-storm water discharges, and the preventative measures taken to ensure spills or leaks do not reoccur. Such list shall be updated as appropriate during the term of Order No. R8-2009-0021.

5) Non-Storm Water Discharges

The discharger shall investigate the facility to identify all non-storm water discharges and their sources. As part of this investigation, all drains (inlets and outlets) shall be evaluated to identify whether they connect to the storm drain system.

All non-storm water discharges shall be described. This shall include the source, quantity, frequency, and characteristics of the non-storm water discharges and associated drainage area.

Non-storm water discharges that contain significant quantities of pollutants or that do not meet the conditions of Order No. R8-2009-0021 are prohibited. (Examples of prohibited non-storm water discharges are contact and non-contact cooling water, boiler blowdown, rinse water, wash water, etc.). The SWPPP must include BMPs to prevent or reduce contact of non-storm water discharges with significant materials or equipment.

6) Soil Erosion

Describe the facility locations where soil erosion may occur as a result of industrial activity, storm water discharges associated with industrial activity, or authorized non-storm water discharges.

b. The SWPPP shall include a summary of all areas of industrial activities, potential pollutant sources, and potential pollutants. This information should be summarized similar to Table B below. The last column of Table B, "Control Practices", should be completed in accordance with Section 8., below.

7. *Assessment of Potential Pollutant Sources*

a. The SWPPP shall include a narrative assessment of all industrial activities and potential pollutant sources as described in Section 6., above, to determine:

1) Which areas of the facility are likely sources of pollutants in storm water discharges and authorized non-storm water discharges, and

2) Which pollutants are likely to be present in storm water discharges and authorized non-storm water discharges. The discharger shall consider and evaluate various factors when performing this assessment such as current storm water BMPs; quantities of significant materials handled, produced, stored, or disposed of; likelihood of exposure to storm water or authorized non-storm water discharges; history of spill or leaks; and run-on from outside sources.

b. The discharger shall summarize the areas of the facility that are likely sources of pollutants and the corresponding pollutants that are likely to be present in storm water discharges and authorized non-storm water discharges.

The discharger is required to develop and implement additional BMPs as appropriate and necessary to prevent or reduce pollutants associated with each pollutant source. The BMPs will be narratively described in Section 8., below.

8. *Storm Water Best Management Practices*

The SWPPP shall include a narrative description of the storm water BMPs to be implemented at the facility for each potential pollutant and its source identified in the site assessment phase (Sections 6. and 7., above). The BMPs shall be developed and implemented to reduce or prevent pollutants in storm water discharges and authorized non-storm water discharges. Each pollutant and its source may require one or more BMPs. Some BMPs may be implemented for multiple pollutants and their sources, while other BMPs will be implemented for a very specific pollutant and its source.

The description of the BMPs shall identify the BMPs as (1) existing BMPs, (2) existing BMPs to be revised and implemented, or (3) new BMPs to be implemented. The description shall also include a discussion on the effectiveness of each BMP to reduce or prevent pollutants in storm water discharges and authorized non-storm water discharges. The SWPPP shall provide a summary of all BMPs implemented for each pollutant source. This information should be summarized similar to Table B.

The discharger shall consider the following BMPs for implementation at the facility:

a. Non-Structural BMPs: Non-structural BMPs generally consist of processes, prohibitions, procedures, schedule of activities, etc., that prevent pollutants associated with industrial activity from contacting with storm water discharges and authorized non-storm water discharges. They are considered low technology, cost-effective measures. The discharger should consider all possible non-structural BMPs options before considering additional structural BMPs (see Section 8.b., below). Below is a list of non-structural BMPs that should be considered:

1) Good Housekeeping: Good housekeeping generally consist of practical procedures to maintain a clean and orderly facility.

2) Preventive Maintenance: Preventive maintenance includes the regular inspection and maintenance of structural storm water controls (catch basins, oil/water separators, etc.) as well as other facility equipment and systems.

3) Spill Response: This includes spill clean-up procedures and necessary clean-up equipment based upon the quantities and locations of significant materials that may spill or leak.

4) Material Handling and Storage: This includes all procedures to minimize the potential for spills and leaks and to minimize exposure of significant materials to storm water and authorized non-storm water discharges.

5) Employee Training: This includes training of personnel who are responsible for (a) implementing activities identified in the SWPPP, (b) conducting inspections, sampling, and visual observations, and (c) managing storm water. Training should address topics such as spill response, good housekeeping, and material handling procedures, and actions necessary to implement all BMPs identified in the SWPPP. The SWPPP shall identify periodic dates for such training. Records shall be maintained of all training sessions held.

6) Waste Handling/Recycling: This includes the procedures or processes to handle, store, or dispose of waste materials or recyclable materials.

7) Record Keeping and Internal Reporting: This includes the procedures to ensure that all records of inspections, spills, maintenance activities, corrective actions, visual observations, etc., are developed, retained, and provided, as necessary, to the appropriate facility personnel.

8) Erosion Control and Site Stabilization: This includes a description of all sediment and erosion control activities. This may include the planting and maintenance of vegetation, diversion of run-on and runoff, placement of sandbags, silt screens, or other sediment control devices, etc.

9) Inspections: This includes, in addition to the preventative maintenance inspections identified above, an inspection schedule of all potential pollutant sources. Tracking and follow-up procedures shall be described to ensure adequate corrective actions are taken and SWPPPs are made.

10) Quality Assurance: This includes the procedures to ensure that all elements of the SWPPP and Monitoring Program are adequately conducted.

b. Structural BMPs: Where non-structural BMPs as identified in Section 8.a., above, are not effective, structural BMPs shall be considered. Structural BMPs generally consist of structural devices that reduce or prevent pollutants in storm water discharges and authorized non-storm water discharges. Below is a list of structural BMPs that should be considered:

1) Overhead Coverage: This includes structures that provide horizontal coverage of materials, chemicals, and pollutant sources from contact with storm water and authorized non-storm water discharges.

2) Retention Ponds: This includes basins, ponds, surface impoundments, bermed areas, etc., that do not allow storm water to discharge from the facility.

3) Control Devices: This includes berms or other devices that channel or route run-on and runoff away from pollutant sources.

4) Secondary Containment Structures: This generally includes containment structures around storage tanks and other areas for the purpose of collecting any leaks or spills.

5) Treatment: This includes inlet controls, infiltration devices, oil/water separators, detention ponds, vegetative swales, etc., that reduce the pollutants in storm water discharges and authorized non-storm water discharges.

9. *Annual Comprehensive Site Compliance Evaluation*

The discharger shall conduct one comprehensive site compliance evaluation in each reporting period (July 1-June 30). Evaluations shall be conducted within 8-16 months of each other. The SWPPP shall be revised, as appropriate, and the revisions implemented within 90 days of the evaluation. Evaluations shall include the following:

a. A review of all visual observation records, inspection records, and sampling and analysis results.

b. A visual inspection of all potential pollutant sources for evidence of, or the potential for, pollutants entering the drainage system.

c. A review and evaluation of all BMPs (both structural and non-structural) to determine whether the BMPs are adequate, properly implemented and maintained, or whether additional BMPs are needed. A visual inspection of equipment needed to implement the SWPPP, such as spill response equipment, shall be included.

d. An evaluation report that includes, (1) identification of personnel performing the evaluation, (2) the date(s) of the evaluation, (3) necessary SWPPP revisions, (4) schedule, as required in Section 10.e, below, for implementing SWPPP revisions, (5) any incidents of non-compliance and the corrective actions taken, and (6) a certification that the discharger is in compliance with Order No. R8-2009-0021. If the above certification cannot be provided, explain in the evaluation report why the discharger is not in compliance with this order. The evaluation report shall be submitted as part of the annual report, retained for at least five years, and signed and certified in accordance with Attachment D, Standard Provision, Section V Reporting, Subsection B. Signatory and Certification Requirements of Order No. R8-2009-0021.

10. *SWPPP General Requirements*

a. The SWPPP shall be retained on site and made available upon request by a representative of the Regional Water Board and/or local storm water management agency (local agency) which receives the storm water discharges.

b. The Regional Water Board and/or local agency may notify the discharger when the SWPPP does not meet one or more of the minimum requirements of this section. As requested by the Regional Water Board and/or local agency, the discharger shall submit a SWPPP revision and implementation schedule that meets the minimum requirements of this section to the Regional Water Board and/or local agency that requested the SWPPP revisions. Within 14 days after implementing the required SWPPP revisions, the discharger shall provide written certification to the Regional Water Board and/or local agency that the revisions have been implemented.

c. The SWPPP shall be revised, as appropriate, and implemented prior to changes in industrial activities which (1) may significantly increase the quantities of pollutants in storm water discharge, (2) cause a new area of industrial activity at the facility to be exposed to storm water, or (3) begin an industrial activity which would introduce a new pollutant source at the facility.

d. The SWPPP shall be revised and implemented in a timely manner, but in no case more than 90 days after a discharger determines that the SWPPP is in violation of any requirement(s) of Order No. R8-2009-0021.

e. When any part of the SWPPP is infeasible to implement by the deadlines specified in Order No. R8-2009-0021, due to proposed significant structural changes, the discharger shall submit a report to the Regional Water Board prior to the applicable deadline that (1) describes the portion of the SWPPP that is infeasible to implement by the deadline, (2) provides justification for a time extension, (3) provides a schedule for completing and implementing that portion of the SWPPP, and (4) describes the BMPs that will be implemented in the interim period to reduce or prevent pollutants in storm water discharges and authorized non-storm water discharges. Such reports are subject to Regional Water Board approval and/or modifications. The discharger shall provide written notification to the Regional Water Board within 14 days after the SWPPP revisions are implemented.

f. The SWPPP shall be provided, upon request, to the Regional Water Board. The SWPPP is considered a report that shall be available to the public by the Regional Water Board under Section 308(b) of the Clean Water Act.

TABLE A

FIVE PHASES FOR DEVELOPING AND IMPLEMENTING INDUSTRIAL STORM WATER POLLUTION PREVENTION PLANS

PLANNING AND ORGANIZATION

*Form pollution prevention team
*Review other plans

ASSESSMENT PHASE

*Develop a site map
*Identify potential pollutant sources
*Inventory of materials and chemicals
*List significant spills and leaks
*Identify non-storm water discharges
*Assess pollutant risks

BEST MANAGEMENT PRACTICES IDENTIFICATION PHASE

*Non-structural BMPs
*Structural BMPs
*Select activity and site-specific BMPs

IMPLEMENTATION PHASE

*Train employees
*Implement BMPs
*Conduct record keeping and reporting

EVALUATION / MONITORING

*Conduct annual site evaluation
*Review monitoring information
*Evaluate BMPs
*Review and revise SWPPP

TABLE B

EXAMPLE

ASSESSMENT OF POTENTIAL POLLUTION SOURCES AND CORRESPONDING BEST MANAGEMENT PRACTICES SUMMARY

AREA	ACTIVITY	POLLUTANT SOURCE	POLLUTANT	BEST MANAGEMENT PRACTICES
Vehicle & equipment fueling	Fueling	Spills and leaks during delivery	Fuel oil	- Use spill and overflow protection - Minimize run-on of storm water into the fueling area - Cover fueling area - Use dry cleanup methods rather than hosing down area - Implement proper spill prevention control program - Implement adequate preventative maintenance program to prevent tank and line leaks - Inspect fueling areas regularly to detect problems before they occur - Train employees on proper fueling, cleanup, and spill response techniques.
		Spills caused by topping off fuel oil	Fuel oil	
		Hosing or washing down fuel area	Fuel oil	
		Leaking storage tanks	Fuel oil	
		Rainfall running off fueling areas, and rainfall running onto and off fueling area	Fuel oil	

ATTACHMENT K – STORMWATER MONITORING AND REPORTING REQUIREMENTS

1. *Implementation Schedule*

The discharger shall continue to implement their existing Stormwater monitoring program and implement any necessary revisions to their Stormwater monitoring program in a timely manner, but in no case later than December 30, 2009. The discharger may use the monitoring results conducted in accordance with their existing Stormwater monitoring program to satisfy the pollutant/parameter reduction requirements in Section 5.c., below, and Sampling and Analysis Exemptions and Reduction Certifications in Section 10, below.

2. Objectives

The objectives of the monitoring program are to:

a. Ensure that storm water discharges are in compliance with waste discharge requirements specified in Order No. R8-2009-0021.

b. Ensure practices at the facility to reduce or prevent pollutants in storm water discharges and authorized non-storm water discharges are evaluated and revised to meet changing conditions.

c. Aid in the implementation and revision of the SWPPP required by Attachment "J" Stormwater Pollution Prevention Plan of Order No. R8-2009-0021.

d. Measure the effectiveness of best management practices (BMPs) to prevent or reduce pollutants in storm water discharges and authorized non-storm water discharges. Much of the information necessary to develop the monitoring program, such as discharge locations, drainage areas, pollutant sources, etc., should be found in the Storm Water Pollution Prevention Plan (SWPPP). The facility's monitoring program shall be a written, site-specific document that shall be revised whenever appropriate and be readily available for review by employees or Regional Water Board inspectors.

3. *Non-Storm Water Discharge Visual Observations*

a. The discharger shall visually observe all drainage areas within their facility for the presence of unauthorized non-storm water discharges;

b. The discharger shall visually observe the facility's authorized non-storm water discharges and their sources;

c. The visual observations required above shall occur quarterly, during daylight hours, on days with no storm water discharges, and during scheduled facility operating hours[1]. Quarterly visual observations shall be conducted in each of the following periods: January-March, April-June, July-September, and October-December. The discharger shall conduct quarterly visual observations within 6-18 weeks of each other.

d. Visual observations shall document the presence of any discolorations, stains, odors, floating materials, etc., as well as the source of any discharge. Records shall be maintained of the visual observation dates, locations observed, observations, and response taken to eliminate unauthorized non-storm water discharges and to reduce or prevent pollutants from contacting non-storm water discharges. The SWPPP shall be revised, as necessary, and implemented in accordance with Attachment "J" Stormwater Pollution Prevention Plan Requirements of Order No. R8-2009-0021.

4. *Storm Water Discharge Visual Observations*

a. With the exception of those facilities described in Section 4.d., below, the discharger shall visually observe storm water discharges from one storm event per month during the wet season (October 1-May 30). These visual observations shall occur during the first hour of discharge and at all discharge locations. Visual observations of stored or contained storm water shall occur at the time of release.

b. Visual observations are only required of storm water discharges that occur during daylight hours that are preceded by at least three (3) working days[2] without storm water discharges and that occur during scheduled facility operating hours.

c. Visual observations shall document the presence of any floating and suspended material, oil and grease, discolorations, turbidity, odor, and source of any pollutants. Records shall be maintained of observation dates, locations observed, observations, and response taken to reduce or prevent pollutants in storm water discharges. The SWPPP shall be revised, as necessary, and implemented in accordance with Attachment "J" Stormwater Pollution Prevention Plan Requirements of Order No. R8-2009-0021.

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1 *"Scheduled facility operating hours" are the time periods when the facility is staffed to conduct any function related to industrial activity, but excluding time periods where only routine maintenance, emergency response, security, and/or janitorial services are performed.*

2 *Three (3) working days may be separated by non-working days such as weekends and holidays provided that no storm water discharges occur during the three (3) working days and the non-working days.*

d. The discharger with storm water containment facilities shall conduct monthly inspections of their containment areas to detect leaks and ensure maintenance of adequate freeboard. Records shall be maintained of the inspection dates, observations, and any response taken to eliminate leaks and to maintain adequate freeboard.

5. *Sampling and Analysis*

a. The discharger shall collect storm water samples during the first hour of discharge from (1) the first storm event of the wet season, and (2) at least one other storm event in the wet season. All storm water discharge locations shall be sampled. Sampling of stored or contained storm water shall occur at the time the stored or contained storm water is released. The discharger that does not collect samples from the first storm event of the wet season are still required to collect samples from two other storm events of the wet season and shall explain in the "Annual Stormwater Report" (see Section 12, below) why the first storm event was not sampled.

b. Sample collection is only required of storm water discharges that occur during scheduled facility operating hours and that are preceded by at least (3) three working days without storm water discharge.

c. The samples shall be analyzed for:

1) Total suspended solids (TSS) pH, specific conductance, and total organic carbon (TOC). Oil and grease (O&G) may be substituted for TOC;

2) Toxic chemicals and other pollutants that are likely to be present in storm water discharges in significant quantities. If these pollutants are not detected in significant quantities after two consecutive sampling events, the discharger may eliminate the pollutant from future sample analysis until the pollutant is likely to be present again;

3) The discharger is not required to analyze a parameter when either of the two following conditions are met: (a) the parameter has not been detected in significant quantities from the last two consecutive sampling events, or (b) the parameter is not likely to be present in storm water discharges and authorized non-storm water discharges in significant quantities based upon the discharger's evaluation of the facilities industrial activities, potential pollutant sources, and SWPPP; and

4) Other parameters as required by the Regional Water Board.

6. *Sample Storm Water Discharge Locations*

a. The discharger shall visually observe and collect samples of storm water discharges from all drainage areas that represent the quality and quantity of the facility's storm water discharges from the storm event.

b. If the facility's storm water discharges are commingled with run-on from surrounding areas, the discharger should identify other visual observation and sample collection locations that have not been commingled by run-on and that represent the quality and quantity of the facility's storm water discharges from the storm event.

c. If visual observation and sample collection locations are difficult to observe or sample (e.g., sheet flow, submerged outfalls), the discharger shall identify and collect samples from other locations that represent the quality and quantity of the facility's storm water discharges from the storm event.

d. The discharger that determines that the industrial activities and BMPs within two or more drainage areas are substantially identical may either (1) collect samples from a reduced number of substantially identical drainage areas, or (2) collect samples from each substantially identical drainage area and analyze a combined sample from each substantially identical drainage area. The discharger must document such a determination in the annual Stormwater report.

7. Visual Observation and Sample Collection Exceptions

The discharger is required to be prepared to collect samples and conduct visual observations at the beginning of the wet season (October 1) and throughout the wet season until the minimum requirements of Sections 4. and 5., above, are completed with the following exceptions:

a. The discharger is not required to collect a sample and conduct visual observations in accordance with Section 4 and Section 5, above, due to dangerous weather conditions, such as flooding, electrical storm, etc., when storm water discharges begin after scheduled facility operating hours or when storm water discharges are not preceded by three working days without discharge. Visual observations are only required during daylight hours. The discharger that does not collect the required samples or visual observations during a wet season due to these exceptions shall include an explanation in the "Annual Stormwater Report" why the sampling or visual observations could not be conducted.

b. The discharger may conduct visual observations and sample collection more than one hour after discharge begins if the discharger determines that the objectives of this section will be better satisfied. The discharger shall include an explanation in the "Annual Stormwater Report" why the visual observations and sample collection should be conducted after the first hour of discharge.

8. *Alternative Monitoring Procedures*

The discharger may propose an alternative monitoring program that meets Section 2, above, monitoring program objectives for approval by the Regional Water Board's Executive Officer. The discharger shall continue to comply with the monitoring requirements of this section and may not implement an alternative monitoring plan until the alternative monitoring plan is approved by the Regional Water Board's Executive Officer. Alternative monitoring plans are subject to modification by the Regional Water Board's Executive Officer.

9. Monitoring Methods

a. The discharger shall explain how the facility's monitoring program will satisfy the monitoring program objectives of Section 2., above. This shall include:

1) Rationale and description of the visual observation methods, location, and frequency;

2) Rationale and description of the sampling methods, location, and frequency; and

3) Identification of the analytical methods and corresponding method detection limits used to detect pollutants in storm water discharges. This shall include justification that the method detection limits are adequate to satisfy the objectives of the monitoring program.

b. All sampling and sample preservation shall be in accordance with the current edition of "Standard Methods for the Examination of Water and Wastewater" (American Public Health Association). All monitoring instruments and equipment (including the discharger's own field instruments for measuring pH and Electro-conductivity) shall be calibrated and maintained in accordance with manufacturers' specifications to ensure accurate measurements. All laboratory analyses must be conducted according to test procedures under 40 CFR Part 136, unless other test procedures have been specified in Order No. R8-2009-0021 or by the Regional Water Board's Executive Officer. All metals shall be reported as total recoverable metals or unless otherwise specified in Order No. R8-2009-0021. With the exception of analysis conducted by the discharger, all laboratory analyses shall be conducted at a laboratory certified for such analyses by the State Department of Health Services. The discharger may conduct their own sample analyses if the discharger has sufficient capability (qualified employees, laboratory equipment, etc.) to adequately perform the test procedures.

10. *Sampling and Analysis Exemptions and Reductions*

A discharger who qualifies for sampling and analysis exemptions, as described below in Section 10.a.(1) or who qualifies for reduced sampling and analysis, as described below in Section 10.b., must submit the appropriate certifications and required documentation to the Regional Water Board prior to the wet season (October 1) and certify as part of the annual Stormwater report submittal. A discharger that qualifies for either the Regional Water Board or local agency certification programs, as described below in Section 10.a.(2) and (3), shall submit certification and documentation in accordance with the requirements of those programs. The discharger who provides certification(s) in accordance with this section are still required to comply with all other monitoring program and reporting requirements. The discharger shall prepare and submit their certification(s) using forms and instructions provided by the State Water Board, Regional Water Board, or local agency or shall submit their information on a form that contains equivalent information. The discharger whose facility no longer meets the certification conditions must notify the Regional Water Board's Executive Officer (and local agency) within 30 days and immediately comply with Section 5., Sampling and Analysis requirements. Should a Regional Water Board (or local agency) determine that a certification does not meet the conditions set forth below, the discharger must immediately comply with the Section 5., Sampling and Analysis requirements.

a. Sampling and Analysis Exemptions

A discharger is not required to collect and analyze samples in accordance with Section 5., above, if the discharger meets all of the conditions of one of the following certification programs:

1) No Exposure Certification (NEC)

This exemption is designed primarily for those facilities where all industrial activities are conducted inside buildings and where all materials stored and handled are not exposed to storm water. To qualify for this exemption, the discharger must certify that their facilities meet all of the following conditions:

a) All prohibited non-storm water discharges have been eliminated or otherwise permitted.

b) All authorized non-storm water discharges have been identified and addressed in the SWPPP.

c) All areas of past exposure have been inspected and cleaned, as appropriate.

d) All significant materials related to industrial activity (including waste materials) are not exposed to storm water or authorized non-storm water discharges.

e) All industrial activities and industrial equipment are not exposed to storm water or authorized non-storm water discharges.

f) There is no exposure of storm water to significant materials associated with industrial activity through other direct or indirect pathways such as from industrial activities that generate dust and particulates.

g) There is periodic re-evaluation of the facility to ensure conditions (a), (b), (d), (e), and (f) above are continuously met. At a minimum, re-evaluation shall be conducted once a year.

2) Regional Water Board Certification Programs

The Regional Water Board may grant an exemption to the Section 5. Sampling and Analysis requirements if it determines a discharger has met the conditions set forth in a Regional Water Board certification program. Regional Water Board certification programs may include conditions to (a) exempt the discharger whose facilities infrequently discharge storm water to waters of the United States, and (b) exempt the discharger that demonstrate compliance with the terms and conditions of Order No. R8-2009-0021.

3) Local Agency Certifications

A local agency may develop a local agency certification program. Such programs must be approved by the Regional Water Board. An approved local agency program may either grant an exemption from Section 5. Sampling and Analysis requirements or reduce the frequency of sampling if it determines that a discharger has demonstrated compliance with the terms and conditions of the Industrial Activities Storm Water General Permit Order No. 97-03-DWQ which was adopted by the State Water Resources Control Board on April 17, 1997.

b. Sampling and Analysis Reduction

1) A discharger may reduce the number of sampling events required to be sampled for the remaining term of Order No. R8-2009-0021 if the discharger provides certification that the following conditions have been met:

a) The discharger has collected and analyzed samples from a minimum of six storm events from all required drainage areas;

b) All prohibited non-storm water discharges have been eliminated or otherwise permitted;

c) The discharger demonstrates compliance with the terms and conditions of the Order No. R8-2009-0021 for the previous two years (i.e., completed Annual Stormwater Reports, performed visual observations, implemented appropriate BMPs, etc.);

d) The discharger demonstrates that the facility's storm water discharges and authorized non-storm water discharges do not contain significant quantities of pollutants; and

e) Conditions (b), (c), and (d) above are expected to remain in effect for a minimum of one year after filing the certification.

2) Unless otherwise instructed by the Regional Water Board, the discharger shall collect and analyze samples from two additional storm events during the remaining term of Order No. R8-2009-0021 in accordance with Table A, below. The discharger shall collect samples of the first storm event of the wet season. The discharger that does not collect samples from the first storm event of the wet season shall collect samples from another storm event during the same wet season. The discharger that does not collect a sample in a required wet season shall collect the sample from another storm event in the next wet season. The discharger shall explain in the "Annual Stormwater Report" why the first storm event of a wet season was not sampled or a sample was not taken from any storm event in accordance with the Table A schedule, below.

Table A. REDUCED MONITORING SAMPLING SCHEDULE

Discharger Filing Sampling Reduction Certification By	Samples Shall be Collected and Analyzed in these wet seasons	
	Sample 1	Sample 2
Sept. 1, 2008	Oct. 1, 2008-May 31, 2009	Oct. 1, 2008-May 31, 2009
Sept. 1, 2009	Oct. 1, 2009-May 31, 2010	Oct. 1, 2009-May 31, 2010
Sept. 1, 2010	Oct. 1, 2010-May 31, 2011	Oct. 1, 2010-May 31, 2011
Sept. 1, 2011	Oct. 1, 2011-May 31, 2012	Oct. 1, 2011-May 31, 2012
Sept. 1, 2012	Oct. 1, 2012-May 31, 2013	Oct. 1, 2012-May 31, 2013
Sept. 1, 2013	Oct. 1, 2013-May 31, 2014	Oct. 1, 2013-May 31, 2014

11. Records

Records of all storm water monitoring information and copies of all reports (including the Annual Stormwater Reports) required by Order No. R8-2009-0021 shall be retained for a period of at least five years. These records shall include:

a. The date, place, and time of site inspections, sampling, visual observations, and/or measurements;

b. The individual(s) who performed the site inspections, sampling, visual observations, and or measurements;

c. Flow measurements or estimates;

d. The date and approximate time of analyses;

e. The individual(s) who performed the analyses;

f. Analytical results, method detection limits, and the analytical techniques or methods used;

g. Quality assurance/quality control records and results;

h. Non-storm water discharge inspections and visual observations and storm water discharge visual observation records (see Sections 3. and 4., above);

i. Visual observation and sample collection exception records (see Section 5.a, 6.d, 7, and 10.b.(2), above;

j. All calibration and maintenance records of on-site instruments used;

k. All Sampling and Analysis Exemption and Reduction certifications and supporting documentation (see Section 10);

l. The records of any corrective actions and follow-up activities that resulted from the visual observations.

12. Annual Report

The discharger shall submit an Annual Stormwater Report by July 1 of each year to the Executive Officer of the Regional Water Board and to the local agency (if requested). The report shall include a summary of visual observations and sampling results, an evaluation of the visual observation and sampling and analysis results, laboratory reports, the Annual Comprehensive Site Compliance Evaluation Report required in Section 9. of Attachment "J" of Order No. R8-2009-0021, an explanation of why a facility did not implement any activities required by Order No. R8-2009-0021 (if not already included in the Evaluation Report), and records specified in Section 11., above. The method detection limit of each analytical parameter shall be included. Analytical results that are less than the method detection limit shall be reported as "less than the method detection limit". The Annual Stormwater Report shall be signed and certified in accordance with Attachment D. Federal Standard Provisions, Section V-Reporting, Subsection B. Signatory and Certification requirements of Order No. R8-2009-0021. The discharger shall prepare and submit their Annual Stormwater Reports using the annual report forms provided by the State Water Board or Regional Water Board or shall submit their information on a form that contains equivalent information.

13. Watershed Monitoring Option

Regional Water Boards may approve proposals to substitute watershed monitoring for some or all of the requirements of this section if the Regional Water Board finds that the watershed monitoring will provide substantially similar monitoring information in evaluating discharger compliance with the requirements of Order No. R8-2009-0021.

ATTACHMENT L – CHINO BASIN MAXIMUM BENEFIT COMMITMENTS

Table 5-8a of Resolution No. R8-2004-0001

Chino Basin Maximum Benefit Commitments

Description of Commitment	Compliance Date – as soon as possible, but no later than
1. Surface Water Monitoring Program	
a. Submit Draft Monitoring Program to Regional Board	a. January 23, 2005 (complied)
b. Implement Monitoring Program	b. Within 30 days from date of Regional Board approval of monitoring plan
c. Quarterly data report submittal	c. April 15, July 15, October 15, January 15
d. Annual data report submittal	d. February 15th
2. Groundwater Monitoring Program	
a. Submit Draft Monitoring Program to Regional Board	a. January 23, 2005(complied)
b. Implement Monitoring Program	b. Within 30 days from date of Regional Board approval of monitoring plan
c. Annual data report submittal	c. February 15th
3. Chino Desalters	
a. Chino 1 desalter expansion to 10 MGD	a. Prior to recharge of recycled water
b. Chino 2 desalter at 10 MGD design	b. Recharge of recycled water allowed once award of contract and notice to proceed issued for construction of desalter treatment plant
4. Future desalters plan and schedule submittal	October 1, 2005 Implement plan and schedule upon Regional Board approval
5. Recharge facilities (17) built and in operation	June 30, 2005 (Partially complied)
6. IEUA wastewater quality improvement plan and schedule submittal	60 days after agency-wide 12 month running average effluent TDS quality equals or exceeds 545 mg/L for 3 consecutive months or agency-wide 12 month running average TIN equals or exceeds 8 mg/L in any month. Implement plan and schedule upon approval by Regional Board

Table 5-8a of Resolution No. R8-2004-0001

Chino Basin Maximum Benefit Commitments (cont.)

Description of Commitment	Compliance Date – as soon as possible, but no later than
7. Recycled water will be blended with other recharge sources so that the 5-year running average TDS and nitrate-nitrogen concentrations of water recharged are equal to or less than the "maximum benefit" water quality objectives for the affected Management Zone (Chino North or Cucamonga).	Compliance must be achieved by end of 5th year after initiation of recycled water recharge operations.
a. Submit a report that documents the location, amount of recharge, and TDS and nitrogen quality of stormwater recharge before the OBMP recharge improvements were constructed and what is projected to occur after the recharge improvements are completed	a. Prior to initiation of recycled water recharge
b. Submit documentation of amount, TDS and nitrogen quality of all sources of recharge and recharge locations. For stormwater recharge used for blending, submit documentation that the recharge is the result of CBW/IEUA enhanced recharge facilities.	b. Annually, by February 15th, after initiation of construction of basins/other facilities to support enhanced stormwater recharge.
8. Hydraulic Control Failure	
a. Plan and schedule to correct loss of hydraulic control	a. 60 days from Regional Board finding that hydraulic control is not being maintained
b. Achievement and maintenance of hydraulic control	b. In accordance with plan and schedule approved by Regional Board. The schedule shall assure that hydraulic control is achieved as soon as possible but no later than 180 days after loss of hydraulic control is identified.
c. Mitigation plan for temporary failure to achieve/maintain hydraulic control	c. By January 23, 2005(complied). Implement plan upon Regional Board determination that hydraulic control is not being maintained.
9. Ambient groundwater quality determination	July 1, 2005 and every 3 years thereafter

Appendix B

INLAND EMPIRE UTILITIES AGENCY

RECYCLED WATER AND REUSE ORDINANCES

ORDINANCE No. 69

AN ORDINANCE OF THE BOARD OF DIRECTORS OF INLAND EMPIRE UTILITIES AGENCY*, A MUNICIPAL WATER DISTRICT, REGULATING THE AVAILABILITY AND USE OF RECYCLED WATER FROM THE REGIONAL RECYCLED WATER DISTRIBUTION SYSTEM

WHEREAS, The California State Legislature adopted the Recycled Water Act of 1991 with the intent of promoting the implementation of recycled water projects throughout the State of California;

WHEREAS, The Recycled Water Act of 1991 has been amended from time to time to strengthen the level of cooperation and coordination among and between the recycled water producers, the recycled water retailers, and the recycled water customers within the State of California;

WHEREAS, The Regional Sewage Service Contract, (Section 15, paragraph B) provides each Contracting Agency with the right of first purchase, for that volume of recycled water, up to the quantity of its base entitlement, that is tributary to the Regional Wastewater Treatment System from its service area;

WHEREAS, Inland Empire Utilities Agency* (IEUA*) has maintained its National Pollution Discharge Elimination Permit (a Master Recycling Permit, pursuant to Water Code Section 13523.1) and continues to own and operate the Regional Wastewater Treatment System which produces high-quality recycled water for distribution to its Contracting Agencies and certain retail customers;

WHEREAS, IEUA* has developed a Regional Recycled Water Distribution System for the delivery of recycled water to its Contracting Agencies and other customers within the IEUA* service area;

WHEREAS, The Regional Sewage Service Contract defines and declares that a wastewater collection sewer serving two or more Contracting Agencies is a regional asset, so too shall recycled water distribution pipelines serving two or more Contracting Agencies be defined as regional assets controlled and operated by IEUA*;

WHEREAS, The Regional Sewage Service Contract has made provisions for the annual review and establishment of the Regional Wholesale Recycled Water Rate associated with the ongoing operation and maintenance of both the Regional Wastewater Treatment System and the Regional Recycled Water Distribution System;

WHEREAS, The staff of IEUA*, together with the review of the Regional Advisory Committees, have committed to performing the necessary annual calculations for the preparation of such rates and adopt them as a routine task of annual budget preparation; and

WHEREAS, The Wholesale Recycled Water Rate determined annually shall be a wholesale rate. The actual retail recycled water rates are adopted by the local agency based on the cost of service.

BE IT ORDAINED by the Board of Directors of the Inland Empire Utilities Agency* as follows:

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PART I - INTRODUCTION

SECTION 101 - AUTHORIZATION

This Ordinance is enacted pursuant to the authority contained in the Municipal Water District Law of 1911; California Water Code, Section 71000 et. seq., as amended; and pursuant to the Recycled Water Act of 1991, California Water Code, commencing with Section 13575; as these documents now exist and as they may be amended from time to time.

SECTION 102 - PURPOSE

The purpose of this Ordinance is to promote the conservation of all water resources and to provide for the maximum public benefit from the use of recycled water supplies made available from the wastewater treatment facilities owned and operated by IEUA*. The use of recycled water will be encouraged and provided for uses including, but not limited to: landscape irrigation, commercial and/or industrial process, construction, groundwater recharge, wildlife habitat, recreational impoundment, agriculture, and any additional uses permitted under Title 22, Division 4, Chapter 3, Water Recycling Criteria, Section 60301 et. seq., of the California Code of Regulations.

SECTION 103 - INTENT

The Ordinance is intended to incorporate retail utility specific requirements as approved and adopted by the Contracting Agencies, water districts, and other local agencies.

This Ordinance shall also provide for the establishment of certain rules, requirements, and responsibilities, under which, recycled water service is provided and shall supplement local municipal requirements and standards.

SECTION 104 - EXTENSION OF MASTER RECLAMATION PERMIT AUTHORITY

Section 13523.1 of the California Water Code states that a recycled water supplier or distributor may be issued either waste discharge requirements or a master reclamation permit. IEUA* is a supplier of recycled water as a result of the operation of the wastewater treatment plant owned and operated under the terms of the Regional Sewage Service Contract. The IEUA* National Pollution Discharge Elimination System Permit also serves as a master reclamation permit. The Contracting Agencies, as signatories to the Regional Sewage Service Contract, shall enjoy all of the privileges and responsibilities of the master reclamation permittee. Accordingly, permittee shall be responsible for compliance with the terms and condition of the IEUA National Pollution Discharge Elimination System permit and shall indemnify and hold IEUA harmless for any fines, penalties and/or assessments arising from a violation of said permit by permittee.

SECTION 105 - DEFINITION OF TERMS

(A) APPLICANT: any person, firm, corporation, association, or agency that applies for recycled water service as provided in accordance with this Ordinance.

(B) AUTHORIZED REPRESENTATIVE: A person, group, firm, partnership, corporation, association, or agency that, pursuant to written permission, from the owner of a property, has the responsibility for establishing recycled water service for a given property.

(C) BOARD OF DIRECTORS: the Board of Directors of Inland Empire Utilities Agency* (IEUA*).

(D) CHIEF EXECUTIVE OFFICER/GENERAL MANAGER: shall mean the Chief Executive Officer/General Manager, or a duly Authorized Representative, of IEUA*.

(E) CONTRACTING AGENCY: a Public Agency that has, by due process, become a signatory to the IEUA* Regional Sewage Service Contract.

(F) DIRECT RECYCLED WATER USER: any person, group, firm, partnership, corporation, association, or agency that, pursuant to an approved Recycled Water Use Permit, directly purchases recycled water from the IEUA* Regional Recycled Water Distribution System.

(G) DOHS: State of California Department of Health Services.

(H) INDIRECT RECYCLED WATER USER: any person, group, firm, partnership, corporation, association, or agency that, pursuant to an approved Recycled Water Use Permit, purchases recycled water from the IEUA* Regional Recycled Water Distribution System by contract with a Retail Water Agency.

(I) LOCAL RECYCLED WATER DISTRIBUTION SYSTEM: a recycled water distribution system which is owned and/or operated by a Retail Water Agency; the local recycled water distribution system is generally an approved extension of the Regional Recycled Water Distribution System.

(J) NPDES PERMIT: National Pollutant Discharge Elimination System Permit issued to regulate the operation of a wastewater treatment plant, the quality of recycled water produced, and to provide a master recycling permit.

(K) OWNER: the owner of a property that is anticipated to receive or is currently receiving recycled water service.

(L) PERSON: shall mean any individual or entity including but not limited to any person, firm, company, or corporation, partnership, association, any public corporation, political subdivision, city, county, district, the State of California, the United States of America or any department or agency thereof. The singular in each case shall include the plural.

(M) RECYCLED WATER: as defined in Title 22, Division 4, Chapter 3, Water Recycling Criteria, Section 60301 et. seq., of the California Code of Regulations; water which is available as a result of the treatment of wastewater. Also as described in subdivision (n) of Section 13050 of the Water Code of the State of California, treated wastewater that is suitable for direct beneficial use or a controlled use that otherwise would not occur.

(N) RECYCLED WATER PRODUCER: any local entity that produces recycled water.

(O) RECYCLED WATER USE PERMIT: a document evidencing that an application for connection to the Regional Recycled Water Distribution System has been prepared by a Retailer and examined by IEUA* staff.

(P) RECYCLED WATER WHOLESALER: any local entity that distributes recycled water to a Retailer and which has constructed, or is constructing, a wholesale recycled water distribution system.

(Q) REGIONAL RECYCLED WATER DISTRIBUTION SYSTEM: the equipment, structures, controls, etc., used in the preparation, pumping, transmission, storage, and distribution of recycled water; owned and operated by IEUA*.

(R) RETAIL WATER AGENCY: any local entity, a public agency, or a private water company in whose service area is located the property to which a customer requests the delivery of recycled water.

(S) SERVICE: the delivery of recycled water.

(T) SERVICE CONNECTION: the IEUA* facilities or the Retailer's facilities, including but not limited to, a service valve, a meter box, a meter, and piping; between the Regional Recycled Water Distribution System and the Customer's on-site facilities, or between the Retail Water Agency's facilities and the Customers on-site facilities.

(U) WHOLESALE OF RECYCLED WATER: the transfer/sale of recycled water, from IEUA* to a Retail Water Agency.

(V) WHOLESALE RECYCLED WATER RATE: the rate for a unit of recycled water that will be set annually, by resolution of the IEUA* Board of Directors.

SECTION 106 - SEVERABILITY

If any section, subsection, sentence, clause or phrase of these rules, regulations, or requirements is for any reason found to be invalid or unconstitutional, such decision shall not affect the remaining portions of this Ordinance. The Board of Directors of IEUA* declares that it would have approved these rules, regulations, and requirements individually by section, subsection, sentence, clause, or phrase irrespective of the fact that any one or more of the sections, subsections, sentences, clauses or phrases may be declared invalid or unconstitutional.

SECTION 107 - RECYCLED WATER SERVICE AREA

This Ordinance shall pertain to the implementation and the on-going operation of the Regional Recycled Water Distribution System within the legal boundaries of IEUA's* service area, unless otherwise stated. With the expressed approval of the Board of Directors, recycled water service shall also be extended to lands, uses, and/or improvements lying outside the legal boundaries of IEUA's* service area.

PART II - RECYCLED WATER SERVICE

Part II establishes the process for the application for recycled water service. An applicant, at IEUA's discretion, may be connected directly to the Regional Recycled Water Distribution System, or may be connected indirectly to the Regional Recycled Water Distribution System via laterals that may be owned and operated by Contracting Agencies, or other Retail Water Agencies within the IEUA* service area. Records for each connection, direct or indirect, shall be consistent for all applicants.*

SECTION 201 - GENERAL

IEUA* may provide Recycled Water Service for applicants whose property falls outside of a Retail Water Agency's service area. If the applicant's property falls within a Retail Water Agency's service area the applicant shall be prepared to enter into a contact with the Retail Water Agency to apply for Recycled Water Service. Depending on the location of a given property, the lowest cost Recycled Water Service could be provided through a direct connection to the Regional Recycled Water System within the Retail Water Agency's service area or through a connection to the Retail Water Agency's local distribution system. To execute such a connection the Applicant and the Retail Water Agency shall enter a Recycled Water Service Agreement with IEUA* for Recycled Water Service on a case-by-case basis.

Whether IEUA* provides the direct delivery of Recycled Water or delivery through a local Retail Water Agency, IEUA* assumes the primary responsibility to assure that recycled water quality distributed to and utilized, in accordance with the provisions of this Ordinance, and in compliance with applicable Federal, State, and Local statutes. The Retail Water Agency shall, from the point of connection to the Regional Recycled Water Distribution System, be responsible for the recycled water quality distributed to and utilized by all subsequent connections, in accordance with the provisions of this Ordinance, and in compliance with applicable Federal, State, and Local statutes.

SECTION 202 - RECYCLED WATER USE PERMIT

To receive Recycled Water Service, a property owner or an authorized representative, of the property, that is intended to be served with recycled water, must submit a completed application for Recycled Water Service. A Recycled Water Use Permit shall be required and on file at the Retail Water Agency.

The service-area wide design criteria, for the on-going development and implementation of the recycled water systems, will be regularly scheduled for discussion at the Regional Technical Committee meetings. The design criteria will be incorporated into the Regional Recycled Water Distribution System Connection Permit.

SECTION 203 - APPLICANT'S RESPONSIBILITY

A Recycled Water Service Application must be made in writing, signed by the Applicant. In the event that the Applicant and the property owner are not one and the same, the Applicant shall have the written authorization of the property owner. By signing the Application, the

owner/applicant shall agree to comply with the requirements of any and all applicable Federal, State, and Local statutes, ordinances, regulations, and all other requirements including this Ordinance. The applicant shall, as evidenced by their signature on the application form, agree to comply with this Ordinance and any and all other applicable governing documents.

SECTION 204 - PROTECTION FROM DAMAGE

No Person shall maliciously, willfully, or negligently break, damage, destroy, impair the usefulness, uncover, deface, or tamper with any structure, appurtenance, or equipment which is a part of the Regional Recycled Water Distribution System. Similarly, no Person shall maliciously, willfully, or negligently break, damage, destroy, impair the usefulness, uncover, deface, or tamper with any structure, appurtenance, or equipment which is a part of either On-site Facilities or Off-site Facilities that could prevent the full function of the Regional Recycled Water Distribution System.

PART III - RATES

SECTION 301 - RECYCLED WATER USE CHARGE

The rate for a unit of recycled water will be set, annually, by resolution of the IEUA* Board of Directors. Said recycled water rate shall be based on the actual costs of operation of the Regional Wastewater Treatment System, the actual costs of operation of the Regional Recycled Water Distribution System, any associated administrative expenses, and anticipated costs for the next fiscal year.

SECTION 302 - BILLING AND PAYMENT

(A) IEUA* shall invoice Retail Water Agencies for actual monthly volumetric usage. Retail Water Agencies shall pay to IEUA*, within thirty (30) calendar days of the date of the postmark on the envelope within which the invoice was delivered, an amount determined by multiplying the actual quantity of recycled water delivered, by the applicable Wholesale Recycled Water Rate, as calculated on the invoice.

(B) IEUA* shall invoice a Customer, which is directly connected to the Regional Recycled Water Distribution System, for actual monthly volumetric usage. The Customer shall pay to IEUA*, within thirty (30) calendar days of the date of the postmark on the envelope within which the invoice was delivered, an amount determined by multiplying the actual quantity of recycled water delivered, by the applicable Recycled Water Rate, as calculated on the invoice.

(C) In the event the payment of an invoice for Recycled Water deliveries remains unpaid, for any reason, more than thirty (30) calendar days, it will become delinquent and a penalty of two percent (2%) of the original unpaid invoice amount shall be added to original invoice amount. The 30-day interval will be determined by either the postmark on the payment envelope or, in the case of a hand delivered payment, the date the payment is received and date stamped by the IEUA* main office receptionist (see Appendix D for

directions to the IEUA* main office). After a second 30-day period, a second penalty will be accessed, etc.

(D) Additionally, interest, at the maximum rate provided by California Government Code Section 54348 as may be amended from time to time, shall accrue commencing at the end of the 30th day after the postmark of the invoice. Interest shall accrue on the total outstanding balance: the original invoice amount plus applicable penalties.

SECTION 303 - APPEAL OF PENALTY AND/OR INTEREST CHARGES

(A) The penalty amount(s) and the interest amount(s) provided in Section 302 may be waived by the Board of Directors. To obtain such a wavier, a Customer will provide a written request for a wavier to the Board of Directors. In the written request, the Customer shall document the reasons for the delinquency of a specific invoice. After the Board of Directors makes a finding that the delinquency was caused by excusable neglect or circumstances beyond the control of the Customer, the penalty amount(s) and/or the interest amount(s) may be reduced or waived. Such a waiver will be contingent upon the reimbursement of IEUA* for any and all actual costs that may have been incurred as a result of the delinquent payment, as determined by the Board of Directors.

SECTION 304 - ERRORS

In the event an error is discovered in any Recycled Water Sales record or invoice, the Chief Executive Officer/General Manager shall initiate appropriate corrective action. If a record from a Customer is submitted, or an invoice is issued based on such a record, contains an error; then the Chief Executive Officer/General Manager shall notify the affected Customer of any adjustment and the manner of making any required credit or additional charge. Neither of which shall be subject to an interest calculation. Errors made or recorded more than three (3) years prior to discovery shall not be corrected with adjustments to amounts owed or paid; Customer files shall be updated to reflect the correction.

PART IV - ON-SITE CONTROLS

SECTION 401 - IMPLEMENTATION

To protect the health of the public and any (potential) employees of the Customer, the DOHS has promulgated guidelines and regulations. The minimum necessary on-site controls are contained in Title 22, Division 4, Chapter 3, Water Recycling Criteria, Sections 60301 et. seq., and Title 17; both of the California Code of Regulations, and in the County Public Health Code.

SECTION 402 - STATE /LOCAL REGULATIONS

Recycled water system on-site controls shall meet all of the requirements established by IEUA* and the applicable State and local regulatory agencies to protect the public health.

Plans and specifications for all proposed recycled water operations, distribution, and on-site systems shall be submitted to the applicable State and local health agencies for review and approvals before the systems are constructed.

SECTION 403 - OPERATIONAL CONTROLS

The operational controls for the use of recycled water shall be appropriate for the beneficial use as approved in the Recycled Water Use Permit. Appendix D shall be maintained with the recommended equipment and procedures to achieve the control objectives necessary for the safe and reliable delivery of recycled water.

SECTION 404 - IDENTIFICATION

(A) All recycled water valves, outlets, quick couplers, and sprinkler heads should be of a type, or secured in a manner that only permits operation by personnel authorized by the Customer.

(B) All recycled water valves and outlets should be appropriately tagged to warn the public and employees that the water is not intended nor allowed for drinking.

(C) All piping, valves and outlets should be color-coded or otherwise marked to differentiate recycled water from non-recycled water facilities.

(D) Hose bibs shall not be used in the recycled water system; quick couplers or comparable connection devices shall be used instead.

SECTION 405 - POSTING OF ON-SITE NOTIFICATIONS

Adequate means of notification shall be provided to inform the public, employees and others that recycled water is being used. Such notification shall include the posting of conspicuous Recycled Water information signage with proper wording of sufficient size to be clearly read, which shall be posted at adequate intervals around the use area. In some locations, especially at crop irrigation use areas, the Recycled Water information signs shall be in the primary language of the workers (i.e., Spanish), as well as English. Signs and means of notification shall be in compliance with DOHS regulations.

Signs shall be placed around the perimeter of the site and at such other locations on-site as deemed appropriate by the Retailer during the Recycled Water Use Permit application review.

SECTION 406 - CROSS CONNECTION PREVENTION

The Customer is responsible for following their Potable Water Purveyor's rules, regulations and/or Ordinance regarding cross connection prevention.

PART V - EFFECTIVE DATE

Upon adoption, the effective date of all provisions of this Ordinance No. 69, shall be May 18, 2000.

ADOPTED this 18th day of May, 2000.

John L. Anderson
President of the Inland Empire Utilities Agency* and of the Board of Directors thereof

ATTEST:

Anne Dunihue
Secretary of the Inland Empire Utilities Agency* and of the Board of Directors thereof

* A Municipal Water District

STATE OF CALIFORNIA)
)SS
COUNTY OF)
SAN BERNARDINO)

I, Anne Dunihue, Secretary of the Inland Empire Utilities Agency* DO HEREBY CERTIFY that the foregoing Ordinance being No. 69, was adopted at an adjourned regular Board Meeting on May 18, 2000, of said Agency by the following vote:

AYES: Dunihue, Troxel, Koopman, Anderson

NOES: None

ABSTAIN: None

ABSENT: Catlin

Anne Dunihue
Secretary

*A Municipal Water District

ORDINANCE NO. 75

AN ORDINANCE OF THE BOARD OF DIRECTORS OF INLAND EMPIRE UTILITIES AGENCY*, A MUNICIPAL WATER DISTRICT, ESTABLISHING INCENTIVES AND ENCOURAGING THE USE OF RECYCLED WATER FROM THE REGIONAL RECYCLED WATER DISTRIBUTION SYSTEM

WHEREAS, The California State Legislature adopted the Recycled Water Act of 1991, and on January 10, 2000, the Legislature established in the State Water Code Section 13500, known as and may be sited as the Water Recycling Law; Section 13550. (a), declared that the use of potable domestic water for nonpotable uses is a waste or an unreasonable use of potable water within the meaning of Section 2 of Article X of the California Constitution if recycled water is available and meets all conditions of a potential user, as determined by the State Board, pursuant to Article 2 (commencing with Section 648) of Chapter 1.5 of Division 3 of Title 23 of the California Code of regulations."

WHEREAS, Inland Empire Utilities Agency* (IEUA*) has established and operates the IEUA* Regional Water Recycling Plant treatment systems and has maintained its National Pollution Discharge Elimination Permit (a Master Recycling Permit, pursuant to Water Code Section 13523.1) and produces high-quality recycled water, having unrestricted use except for direct potable uses, for distribution to its Contracting Agencies and certain other municipal and private water retail companies;

WHEREAS, IEUA* has developed and continues expand its Regional Recycled Water Distribution System for the delivery of recycled water to its Contracting Agencies and other municipal and private water retail companies within and outside the IEUA* service area as described in the Recycled Water Feasibility Study consistent with the adopted Urban Water Management Plan and the Optimum Basin Management Program;

WHEREAS, IEUA* and it's Contracting Agencies are desirous to comply with conservation of all available water resources, therefore, IEUA and it's Contracting Agencies require the maximum reuse of recycled water for beneficial uses, and thus, agree that continued use of potable water for industrial uses and irrigation of greenbelt areas, including golf courses, parks, and highway landscaped areas, and certain other non-domestic water uses may be an unreasonable use of such water where recycled water is available;

BE IT ORDAINED by the Board of Directors of the Inland Empire Utilities Agency* as follows:

INDEX

PART I - INTRODUCTION

SECTION 101 - AUTHORIZATION

This Ordinance is enacted pursuant to the authority contained in the Municipal Water District Law of 1911; California Water Code, Section 71000 et. seq., as amended; and pursuant to the Recycled Water Act of 1991, California Water Code, commencing with Section 13575; and Section 13500, known as and may be sited as the Water Recycling Law, including Section 13550.

SECTION 102 - PURPOSE

The purpose of this Ordinance is to promote the conservation of all water resources and to provide for the maximum public benefit from the reuse of recycled water supplies made available from the Regional Water Recycling Plants (RWRPs) owned and operated by IEUA*. The use of recycled water will be encouraged and provided for uses including, but not limited to: landscape irrigation, commercial and/or industrial process, construction, groundwater recharge, wildlife habitat, recreational impoundment, agriculture, and any additional uses permitted under Title 22, Division 4, Chapter 3, Water Recycling Criteria, Section 60301 et. seq., of the California Code of Regulations.

SECTION 103 - DEFINITION OF TERMS

The following terms are defined for the purposes of this Ordinance:

(A) ADEQUATE QUALITY: Means the quality which satisfies the requirements of regulatory agencies for a particular use.

(B) AGRICULTURAL PURPOSES: Agricultural purposes include the growing of field and nursery crops, row crops, trees, and vines and the feeding of fowl and livestock.

(C) ARTIFICIAL LAKE: A human-made lake, pond, lagoon, or other body of water that is used wholly or partly for landscape, scenic or direct contact recreational purposes.

(D) COST: Means the amount paid by the customer for recycled water service.

(E) BOARD OF DIRECTORS: The Board of Directors of Inland Empire Utilities Agency* (IEUA*).

(F) CHIEF EXECUTIVE OFFICER/GENERAL MANAGER: Shall mean the Chief Executive Officer/General Manager, or a duly Authorized Representative, of IEUA*.

(G) COMMERCIAL BUILDING: Any building for office or commercial uses with water requirements which include, but are not limited to, landscape irrigation, toilets, urinals and decorative fountains.

(H). CONTRACTING AGENCY: A Public Agency that has, by due process, become a signatory to the IEUA* Regional Sewage Service Contract.

(I) DOHS: State of California Department of Health Services.

(J) FEASIBLE: Means capable of completion within a reasonable period of time for a reasonable price.

(K) GREENBELT AREAS: A greenbelt area includes, but is not limited to, golf courses, cemeteries, parks and landscaping.

(L) INDUSTRIAL PROCESS WATER: water used by any industrial facility with process water requirements which include, but are not limited to, rinsing, washing, cooling and circulation, or construction, including any facility regulated by the industrial waste discharge ordinance of the Agency.

(M) LOCAL RECYCLED WATER DISTRIBUTION SYSTEM: A recycled water distribution system which is owned and/or operated by a Retail Water Agency; the local recycled water distribution system is generally an approved extension of the Regional Recycled Water Distribution System.

(N) NPDES PERMIT: National Pollutant Discharge Elimination System Permit issued to regulate the operation of a recycled water treatment plant, the quality of recycled water produced, and to provide a Master Recycling Permit.

(O) OFF-SITE FACILITIES: Water facilities from the source of supply to the point of connection with the on-site facilities. Including the water meter.

(P) ON-SITE FACILITIES: Water facilities under the control of the owner, downstream from the water meter.

(Q) OWNER: The owner of a property that is anticipated to receive or is currently receiving recycled water service.

(R) PERSON: Shall mean any individual or entity including but not limited to any person, firm, company, or corporation, partnership, association, any public corporation, political subdivision, city, county, district, the State of California, the United States of America or any department or agency thereof. The singular in each case shall include the plural.

(S) POTABLE WATER: Water which conforms to the federal, state and local standards for human consumption.

(T) RECYCLED WATER: As defined in Title 22, Division 4, Chapter 3, Water Recycling Criteria, Section 60301 et. seq., of the California Code of Regulations; water which is available as a result of the treatment of wastewater. Also as described in subdivision (n) of Section 13050 of the Water Code of the State of California, treated wastewater that is suitable for direct beneficial use or a controlled use that otherwise would not occur.

* A Municipal Water District

(U) RECYCLED WATER CUSTOMER: Existing or future properties requiring water supply which is identified as recycled water customer per Section 204-A.

(V) RECYCLED WATER PRODUCER: Any local entity that produces recycled water.

(W) RECYCLED WATER USE PERMIT: A document evidencing that an application for connection to the Regional Recycled Water Distribution System has been prepared by a Retailer, and examined and approved by IEUA* staff.

(X) RECYCLED WATER WHOLESALER: Any local entity that distributes recycled water to a Retailer and which has constructed, or is constructing, a wholesale recycled water distribution system.

(Y) REGIONAL RECYCLED WATER DISTRIBUTION SYSTEM: The pipelines, equipment, structures, controls, etc., used in the preparation, pumping, transmission, storage, and distribution of recycled water; owned and operated by IEUA*.

(Z) RETAIL WATER AGENCY (Retailer): Any local entity, a public agency, or a private water company in whose service area is located the property to which a customer requests the delivery of recycled water.

(AA) SERVICE CONNECTION: The IEUA* facilities or the Retail Water Agency's facilities, including but not limited to, a service valve, a meter box, a meter, and piping; between the Regional Recycled Water Distribution System and the Customer's on-site facilities, or between the Retail Water Agency's facilities and the Customers on-site facilities.

(BB) SUFFICIENT QUANTITY: Means an amount of water needed to satisfy requirements without interruption.

(CC) WHOLESALE OF RECYCLED WATER: The transfer/sale of recycled water, from IEUA* to a Retail Water Agency.

(DD) WHOLESALE RECYCLED WATER RATE: The rate for a unit of recycled water that will be set annually, by resolution of the IEUA* Board of Directors.

SECTION 104 - WATER RECYCLING MASTER PLAN

(A) GENERAL: The IEUA has prepared and adopted the IEUA Recycled Water System Feasibility Study (Study), January 2002, to define, encourage and develop the use of recycled water within its service area. The Study shall be updated not less often than every five years.

(B) CONTENTS OF THE WATER RECYCLING MASTER PLAN: The Study includes, but is not limited to:

a. PLANTS AND FACILITIES: Evaluation of the location and size of present and future recycling facilities, distribution pipelines, pump stations, reservoirs, and other related facilities, including cost estimates and potential financing methods.

b. RECYCLED WATER SERVICE AREAS: A designation, based on the criteria set forth in SECTION 103, and the information derived from SECTION 105, (A) and (B) a and b, of the areas within the boundaries of IEUA that can or may in the future use recycled water in lieu of potable water. Recycled water uses may include, but not be limited to the irrigation of greenbelt and agricultural areas, filling of artificial lakes, and appropriate industrial and commercial uses.

SECTION 105 - SEVERABILITY

If any section, subsection, sentence, clause or phrase of these rules, regulations, or requirements is for any reason found to be invalid or unconstitutional, such decision shall not affect the remaining portions of this Ordinance. The Board of Directors of IEUA* declares that it would have approved these rules, regulations, and requirements individually by section, subsection, sentence, clause, or phrase irrespective of the fact that any one or more of the sections, subsections, sentences, clauses or phrases may be declared invalid or unconstitutional.

SECTION 106 - RECYCLED WATER SERVICE AREA

This Ordinance shall pertain to the on-going operation, expansion and implementation of the Regional Recycled Water Distribution System within the legal boundaries of IEUA's* service area, unless otherwise stated. With the expressed approval of the IEUA* Board of Directors, recycled water service shall also be extended to lands, uses, and/or improvements lying outside the legal boundaries of IEUA's* service area.

PART II - VOLUNTARY RECYCLED WATER USE

SECTION 201 - RECYCLED WATER SERVICE FOR CUSTOMERS

IEUA* may provide recycled water service for certain other municipal agencies or private water retail companies whose service area/property falls outside of a IEUA service area. If a customer's (recycled water user) property falls within a Retail Water Agency's service area the customer shall be prepared to accept recycled water service from the Retail Water Agency. Depending on the location of a given property, IEUA and the Retail Water Agency shall determine the method for delivery of recycled water; it may be provided through a direct connection to the IEUA Regional Recycled Water System within the Retail Water Agency's service area, or through a connection to the Retail Water Agency's local distribution system.

PART III – MANDATORY RESCYCLED WATER USE

SECTION 301 – FUTURE CUSTOMERS

In the event a development application is reviewed and found to be a suitable application for use of recycled water, but recycled water is not yet available to the property, such development permit

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shall be conditioned to require an appropriate recycled water distribution system within the project to accommodate recycled water at such time as recycled water becomes available to the site.

SECTION 302– EXISTING CUSTOMERS

(A) The Retail Water Agency's engineer and the IEUA's* engineer, in consultation with the prospective recycled water customer(s), shall implement a program of review of each parcel of property within the Retail Water Agency's service area to determine which parcels would be appropriate for using recycled water for industrial processing, landscape irrigation, or other appropriate uses by the then existing customer(s).

(B) Based on the Study, addressing the designation of each recycled water service area or the commencement of the design of new recycled water facilities, IEUA and the Retail Water Agency shall make preliminary determinations as to which existing potable water customers shall be converted to the use of recycled water. Each water customer shall be notified of the basis for determining that conversion to recycled water service will be required, as well as, the proposed conditions and schedule for conversion.

(C) In making such determination, the Retail Water Agency's engineer and the IEUA's* engineer, in consultations with the prospective recycled water customer(s), shall consider, but not be limited to, the following factors:

1. Whether recycled water is or will be available to the site.
2. Whether the uses, processes or equipment used on the site can safely and effectively be operated with recycled water.
3. Whether it is feasible to modify on-site facilities to utilize recycled water.
4. Whether the use of recycled water would be cost-effective, technically feasible and cost-competitive for prospective recycled water customers.

(D) If a property is identified as being suitable for use of recycled water and recycled water is or will be available to the site, the potential customer (property owner) shall be notified. The notice provided to a potential recycled water customer of the preliminary determination, including the proposed conditions and time scheduled for compliance shall be delivered or mailed to the potential recycled water customer.

(E) Within thirty (30) days of such notification, the potential customer (property owner or the occupant) of the property must either:

1. apply for the use of recycled water and commence the necessary work to convert to recycled water, or
2. provide satisfactory evidence to the Retail Water Agency's engineer and the IEUA's* engineer, that conversion of the site to use recycled water is not technically or economically feasible, or
3. would result in the loss of diminution of an existing water right, or
4. would be harmful to the public health, safety, welfare, or to the environment.

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(F) At the time of commencing the work, the property owner shall furnish the Retail Water Agency's engineer and the IEUA's* engineer, a schedule showing the time frame of when the conversion work will be completed. The Retail Water Agency's engineer and the IEUA's* engineer may grant an extension of time for the preparation of studies, environmental review or other good reason.

(G) OBJECTIONS / APPEALS:

1. The water customer may file a notice of objection within thirty (30) days after any notice of determination to comply is delivered or mailed to the customer, and may request reconsideration of the determination or modification of the proposed conditions or schedule for conversion.
2. The objection must be in writing and specify the reasons for the objection.
3. The preliminary determination shall be final if the customer does not file a timely objection.
4. The Retail Water Agency and the IEUA staff shall review the objection and shall confirm, modify or abandon the preliminary determination.
5. Upon issuance of a final determination by staff, customer may appeal the determination as follows:
    a. The customer may appeal to the Retail Water Agency Manager; and if not satisfied,
    b. the customer may then appeal to IEUA General Manager; the IEUA General Manager's decision shall be final.

SECTION 303 – FAILURE TO COMMENCE USE OF RECYCLED WATER

The General Manager shall identify and give notice to all persons, firms, and corporations which have failed to commence the use of recycled water obligated under the general rule, and determine the reasons for said persons, firms, or corporations for failing to take recycled water, after being offered the opportunity.

SECTION 304 – PROCEDURES FOR INSTITUTING MANDATORY SERVICE

The IEUA* Board of Directors may initiate proceedings to institute mandatory service to a person, firm or corporation as follows:

(A) The potential recycled water customer shall be notified in writing why the General Manager has determined it is feasible to convert to recycled water service; initiating a 30-day period for filing protests or requesting a waiver.

(B) After the 30-day protests and waivers period has expired, findings shall be made, and the General Manager shall request of the Agency's Board to conduct a hearing to find the conditions for mandatory use exist.

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SECTION 305 – SURCHARGE FOR FAILURE TO USE RECYCLED WATER

In the event the potential recycled water customer (property owner or the occupant) fails, neglects, or refuses to convert to the use of recycled water, such potential customer shall pay to the IEUA* a surcharge on the amount of potable water used on the site in an amount of fifty percent (50%) of IEUA's highest wholesale rate for imported water.

PART IV - FUNDING AND TECHNICAL ASSISTANCE

(A) IEUA will assist recycled water customers with the preparation of the customers Preliminary Engineering Report and permits for use of recycled water.
(B) IEUA will offer to finance a loan to the recycled water customer(s) for retrofitting the recycled water facilities at the customer's site at the interest rate available to IEUA.
(C) Loans will be made for 10 years maximum.

PART V – EFFECTIVE DATE

Upon adoption, the effective date of all provisions of this Ordinance No. 75, shall be May 15, 2002.

ADOPTED this 15th day of May , 2002.

John L. Anderson

President of the Inland Empire Utilities Agency* and of the Board of Directors thereof

ATTEST:

Anne Dunihue

Secretary of the Inland Empire Utilities Agency* and of the Board of Directors thereof

* A Municipal Water District

STATE OF CALIFORNIA)
)SS
COUNTY OF)
SAN BERNARDINO)

I, Anne Dunihue, Secretary of the Inland Empire Utilities Agency* DO HEREBY CERTIFY that the foregoing Ordinance being No. 75, was adopted at an adjourned regular Board Meeting on May 15, 2002, of said Agency by the following vote:

AYES: Anderson, Catlin, Koopman

NOES: 0

ABSTAIN: 0

ABSENT: Dunihue, Tropel

Anne Dunihue
Secretary

*A Municipal Water District

NOTICE OF PUBLIC HEARING AND INTENT TO ADOPT ORDINANCE NO. 75, ESTABLISHING INCENTIVES AND ENCOURAGING THE USE OF RECYCLED WATER FROM THE REGIONAL RECYCLED WATER DISTRIBUTION SYSTEM

NOTICE IS HEREBY GIVEN THAT the Board of Directors of Inland Empire Utilities Agency, a Municipal Water District, has indicated its intent to adopt Ordinance No. 75, establishing incentives and encouraging the use of recycled water from the regional recycled water distribution system.

The Board will consider the adoption of this ordinance at its Board Meeting on Wednesday, May 15, 2002, at 9:00 a.m., at the Office of the Agency, 9400 Cherry Avenue, Building A, Fontana, CA 92335.

NOTICE IS FURTHER GIVEN that said public hearing will be for the purpose of hearing any and all public testimony on the above-stated issue. All interested persons are invited to attend the public hearing and provide comments regarding the proposed ordinance. Oral statements will be heard but, for the accuracy of the record, all important testimony should be submitted in writing.

NOTICE IS FURTHER GIVEN that the proposed ordinance is available for public review in the Office of the Secretary of the Agency. For additional information, please contact the Agency's Executive Manager of Engineering and Planning, Tom Love at (909) 357-0241, Extension 410.

Publish: **March 29, April 30 and May 8, 2002.**

INLAND EMPIRE UTILITIES AGENCY
A MUNICIPAL WATER DISTRICT
ORDINANCE NO. 75

An ordinance of the Board of Directors of Inland Empire Utilities Agency, a Municipal Water District, establishing incentives and encouraging the use of recycled water from the Regional Recycled Water Distribution System was approved at the May 15, 2002 Board of Directors Meeting. For additional information, please contact Patti Dickenson at (909) 357-0241, Ext. 211.

Published: MAY 22, 2002

Chino Hills, CA Municipal Code

Files listed below require Adobe Acrobat Reader 4.0.

Title 13 PUBLIC SERVICES

Chapter 13.32 RECLAIMED WATER REGULATIONS

13.32.010 Definitions.

In addition to the definitions set forth in Title 22, Division 4, Chapter 3, Regulations of the California Administrative Code, the following definitions shall be applicable for this chapter.

“AFY” means acre-feet per year.

“Agricultural use” means water used for the production of crops and/or livestock and the preparation of these products for market.

“Air-gap separation” means a physical break between a supply pipe and a receiving vessel. The air gap shall be at least double the diameter of the supply pipe, measured vertically above the top rim of the vessel, and in no case less than one inch.

“Applicant” means any person, firm, corporation, association, or agency who applies for reclaimed water service.

“Application rate” means the rate at which irrigation water is applied to a design or use area, expressed in inches per hour.

“Approved check valve” means a check valve that seats readily and completely. It must be carefully machined to have free moving parts and assure water tightness. The face of the closure element and valve seat must be bronze or other noncorrodible material that will seat tightly under all prevailing conditions of field use. Pins and bushings shall be of bronze or other non-corrodible, nonsticking material. The closure element (e.g., clapper) shall be internally weighted or otherwise internally equipped to promote rapid and positive closure in all sizes where this feature is obtainable. All devices shall comply with the USC Foundation of Cross-Connection Control.

“Approved double check valve assembly” is an assembly of at least two independently acting approved check valves including tightly closing shut-off valves on each side of the check valve assembly and suitable leak-detector drains plus connections available for testing the water tightness of each check valve. All devices shall comply with the USC Foundation of Cross-Connection Control.

“Approved reduced pressure principle backflow prevention device” is a device incorporating two or more check valves and an automatically operating differential relief valve located between the two checks, two shut off valves, and equipped with necessary appurtenances for testing. The device shall operate to maintain the pressure in the zone between two check valves less than the pressure on the city water supply side of the device. At cessation of normal flow, the pressure between the check valves shall be less than the supply pressure. In case of leakage of either check valve, the differential relief valve shall operate to maintain this reduced pressure by discharging to the atmosphere. When the inlet pressure is two psi or less, the relief valve shall be open to the atmosphere, thereby providing an air gap in the device. To be approved, these devices must be readily accessible for maintenance and testing, and installed in a location where no pan of the valve will be submerged. All devices shall comply with the USC Foundation of Cross-Connection Control.

“Approved use” means an application of reclaimed water in a manner, and for a purpose, designated in a user permit issued by the city and in compliance with all applicable regulatory agency requirements.

“Approved use area” means a site, with well-defined boundaries, designated in a permit for reclaimed water service issued by the city to receive reclaimed water for an approved use and acknowledged by all applicable regulatory agencies.

“As-built drawings” means record drawings that show the completed facilities as constructed or modified.

“Automatic system” means controllers, valves, and associated equipment used to program and operate irrigation systems for the efficient application of reclaimed water.

“Auxiliary water supply” means any water supply on or available to the premises other than the approved potable water or reclaimed water supplies.

“AWWA” means American Water Works Association.

“Board” means Board of Directors of the Chino Basin Municipal Water District.

“City” means city of Chino Hills.

“City Council” means City Council of the city of Chino Hills.

“Commercial/industrial use” means water used for toilets, urinals, decorative fountains; industrial processes such as rinsing, washing, cooling, flushing, circulation, or construction; and other related uses.

“Commodity charge” means a charge imposed by the city for all reclaimed water used, whether such water use is estimated or actually metered.

“Connection fee” means a fee imposed by the city for obtaining reclaimed water service from the city reclaimed water facilities.

“Cross-connection” means any unapproved and/or unprotected connection between any part of a potable water system and any source or system containing water or other substances not approved as safe and potable for human consumption.

“Customer” means any person, group, firm, partnership, corporation, association, user, or agency who legally receives reclaimed water service from the city.

“Design area” means a site, with well-defined boundaries, proposed to receive reclaimed water for an approved use, as delineated in the application for reclaimed water service.

“Direct beneficial use” means the use of reclaimed water which has been transported from the point of production to the point of use without an intervening discharge to waters of the state.

“Discharge” means any release or distribution of reclaimed water to a use area or disposal site/mechanism (e.g., outfall, live stream discharge, municipal sewage system). All discharges of reclaimed water must be approved by the regulatory agencies.

“District” means Chino Basin Municipal Water District.

“DOHS” means San Bernardino County Department of Health Services.

“Greenbelt areas” means area including, but not limited to, parkways, parks, right-of-ways, and landscaping within and/or surrounding a community.

“HCF” means hundred cubic feet, a common unit of water volume measurement.

“Industrial process water” means water used in industrial facilities for rinsing, washing, cooling, circulation, or construction.

“Infiltration rate” means rate at which water penetrates the soil surface and enters the soil profile.

“Landscape impoundment” means a body of water containing reclaimed water which is used for aesthetic or irrigation purposes and which is not intended for public contact or ingestion.

“Landscape irrigation/use” means reclaimed water used for the propagation and maintenance of trees, shrubs, ground cover and turf. This plant material is intended for erosion control and

aesthetic value, not for resale/profit purposes.

“Nonpotable water” means water that has not been treated for, or is not acceptable for, human consumption in conformance with federal, state and local water standards. Nonpotable water includes reclaimed water.

“Off-site facilities” means existing or proposed facilities under the control of the purveyor, from the source of supply to the point of connection with the customer’s on-site facilities, normally up to and including the agency’s meter and meter box.

“On-site facilities” means existing or proposed facilities within property under the control of the customer, normally downstream of the city’s meter.

“On-site reclaimed water supervisor” means a qualified person designated by a reclaimed water user and approved by the city to be responsible for the safe and efficient operation of the user’s reclaimed water system. This person shall be knowledgeable in the construction and operation of reclaimed water and irrigation systems and in the application of federal, state and local guidelines, criteria, standards and rules and regulations governing the use of reclaimed water.

“Open space” means land that has been designated to remain undeveloped. These areas may receive reclaimed water service for landscape irrigation.

“Permit” means a processed and approved application package to, and agreement with, the reclaimed water purveyor for reclaimed water service.

“POC” means point of connection.

“Ponding” means retention of piped water on the ground surface or manmade surface for a period of time following the cessation of an approved reclaimed water use activity such that potential hazard to the public health may result.

“Potable water” means water which conforms to the latest federal, state and local drinking water standards.

“PSI” means pounds per square inch. The most common unit of pressure measurement.

“Reclaimed water” as defined in Title 22, Division 4, of the California Administrative Code, means water which as a result of treatment of wastewater, is suitable for direct beneficial use or a controlled use that otherwise would not occur. The treatment of wastewater is accomplished in accordance with the criteria set forth in that code.

“Reclaimed water facilities” means systems, structures, etc., used in the treatment, storage, pumping, transmission and distribution of reclaimed water.

“Recreational impoundment” means a body of reclaimed water used for recreational activities including, but not limited to, fishing, boating, and/or swimming. Allowable uses will depend on treatment level of the reclaimed water.

“Regulatory agency” means those public entities legally constituted by federal, state and local statutes to protect health and water quality.

“Runoff” means flow of water along the either natural or manmade surfaces of the ground off of the designated use area.

“RWQCB” means Santa Ana Regional Water Quality Control Board.

“Secondary effluent” means wastewater which has been treated by gravity sedimentation to remove settleable solids remaining after the primary biological treatment process.

“Service” means the delivery of reclaimed water to a user.

“Service connection” means city of Chino Hills facilities between the city reclaimed water distribution system and the customer’s reclaimed water service valve, including, but not limited to, the meter, meter box, valves, and piping equipment.

“Standard specifications” means specifications adopted by the city for construction of water facilities.

“Tertiary effluent” means secondary effluent which has been disinfected and filtered. Allowable uses include body contact and irrigation of human food crops.

“Unauthorized discharge” means any release of reclaimed water that violates these rules and regulations or any applicable federal, state, or local statutes, regulations, ordinances, contracts or other requirements.

“Use area” means the specific area designated to be served with reclaimed water through on-site reclaimed water facilities.

“User” means any person, group, firm, partnership, corporation, association or agency accepting reclaimed water from the city of Chino Hills reclaimed water facilities for use in accordance with this chapter.

“Windblown spray” means dispersed, airborne particles of water capable of being transmitted through the air to a location other than that for which the direct application of reclaimed water is approved. (Ord. 101 § 1 (part), 1998)

13.32.020 Introduction.

A. The city is partially dependent on imported water for domestic, agricultural, irrigation, commercial and industrial uses. This imposed supply is considered limited and its future is reliability uncertain. It is in the best interests of the city to promote and implement innovative water management strategies to conserve water resources while still satisfying water needs of the city’s customers. The city operates and maintains portions of a region-wide reclaimed water distribution network within the city’s potable water service area enabling it to provide tertiary treated reclaimed water from the district for a variety of beneficial uses. This alternate supply allows large quantities of higher quality potable water to be made available for domestic use.

B. The use of reclaimed water from domestic sewage is regulated by the California Regional Water Quality Control Board Santa Ana Region (RWQCB). California Water Code Section 13551 establishes a state policy to encourage the use of reclaimed water. Permission to use reclaimed water is based on the district’s ability to adequately treat domestic wastewater to the point that the reclaimed water (effluent) meets the requirements of existing Title 22, Division 4, Chapter 3 Regulations of the California Administrative Code. Title 22, Division 4 was promulgated by the State Department of Health Services to ensure proper health protection and specify the treatment degree to match the intended applications.

C. In accordance with waste discharge requirements for water reclamation projects, the RWQCB requires regulation measures for facilities distributing reclaimed water.

1. Purpose. The purpose of this chapter is to establish rules and regulations including procedures, specifications, and limitations for the safe and orderly development and operation of reclaimed water facilities and systems within the city’s service area.

2. Goals.

a. Achieve conservation of potable water supplies by using reclaimed water for current and future demands. Reclaimed water uses shall be for the maximum public benefit and may include, upon City Council approval and compliance with all applicable regulations:

i. Agricultural irrigation;

ii. Commercial uses;

iii. Construction use;

iv. Groundwater recharge;

v. Industrial processes;

vi. Landscape irrigation;

vii. Landscape and/or recreational impoundment;

viii. Wildlife habitat.

b. Maintain reclaimed water quality through a stringent pretreatment program for commercial and industrial wastes and by restricting brine discharges from water softeners, evaporative coolers, and other sources.

c. Prevent direct human consumption of reclaimed water through:

i. Adherence to all applicable rules and regulations;

ii. Posting of warning signs by the user;

iii. Cross-connection/backflow prevention pro-gram.

d. Control runoff of reclaimed water through monitoring of the installation and operation of all reclaimed water facilities and use areas.

e. Monitor reclaimed water quality.

3. Policy. It is the policy of the city that reclaimed water be used for any purpose approved for reclaimed water use, when it is economically, financially, technically, and institutionally feasible. Use of potable water for nondomestic uses shall be contrary to the city policy and shall not be considered the most beneficial use of a natural resource and shall be avoided to the maximum extent possible.

4. Priority. Reclaimed water shall be provided on a first-come, first-served basis, as long as reclaimed water is available. (Ord. 101 § 1 (part), 1998)

13.32.030 Right of revision.

The city reserves the right to amend this chapter as it deems appropriate. (Ord. 101 § 1 (part), 1998)

13.32.040 Administrator.

Except as otherwise provided in this chapter, the City Manager shall administer, implement, and enforce the provisions of this chapter. The City Manager may at his or her discretion, delegate any or all of these powers and duties. (Ord. 101 § 1 (part), 1998)

13.32.050 Service area.

This chapter pertains to reclaimed water service to lands and/or improvements lying within the legal boundaries of the city unless otherwise stated. The city shall provide reclaimed water service in accordance with this chapter to all areas identified in the city's Water Reclamation Master Plan including all subsequent revisions for the use of reclaimed water. Reclaimed water service shall be provided to the service area when related distribution facilities are completed and

service becomes available. (Ord. 101 § 1 (part), 1998)

13.32.060 Determination of reclaimed water use area.

A. General.

1. The city may adopt a water reclamation master plan (“Master Plan”) designated current and potential areas for reclaimed water use. The Master Plan shall be in accordance with all regulatory agency’s requirements and shall encourage reclaimed water use. The Master Plan may be reviewed and updated as needed.

2. The city may review its Master Plan and determine where water service shall be made with reclaimed water in place of potable water. Where it is determined reclaimed water is, or will be available, the city may require modifications to existing on-site water facilities and require construction of reclaimed water systems in all new developments.

3. The city may enter into agreements with surrounding cities and/or other water agencies to determine reclaimed water use areas within the service area/jurisdiction of those entities.

B. Existing Potable Water Service.

1. Upon adoption of this chapter, and each update of the city’s Master Plan, the city may make determinations of areas where existing potable water use shall be made with reclaimed water.

2. A notice of the determination to use reclaimed water shall be sent to the current owner explaining the city’s reasons for use and resultant procedures needed to facilitate reclaimed water use. The owner shall have one hundred eighty (180) days to comply with the city’s determination. The city may allow for an extension if warranted.

C. New Reclaimed Water Service. Upon submittal by applicant of a tentative map, land use permit, or request for reclaimed water service, the city shall review the Master Plan and make preliminary determinations if reclaimed water service should be provided to the area in question. (Ord. 101 § 1 (part), 1998)

13.32.070 Authorized uses.

In accordance with the goals of the city, as stated in this chapter, the uses of reclaimed water shall include only uses approved by the California State Department of Health Services (DOHS) and for which Title 22, Division 4, Chapter 3, “Wastewater Reclamation Criteria” of the California Code of Regulations provides treatment requirements. Each such use will be considered for approval on a case-by-case basis. Prior to approval and at its discretion, the city may set forth specific requirements as conditions to providing service, which may require specific prior approval from the CBMWD and/or other appropriate regulatory agencies. (Ord. 101 § 1 (part), 1998)

13.32.080 Conditions of service.

Reclaimed water service shall be provided by the city only if a permit for such service is obtained in the manner provided in this chapter. Reclaimed water service shall be available, provided, and used in accordance with other applicable codes, rules, and regulations. If any of the following conditions of service are not satisfied at all times, the permit for reclaimed water service may be revoked by the city after which all reclaimed water service shall cease in the manner described in this section. Connection to a potable water system will not be allowed.

A. Financial. Conditions relating to service fees and billing shall be the same as established for the potable water system. Rates for reclaimed water service shall be established by resolution of the City Council of the city.

B. Operational.

1. Liability. The city shall not be liable for any damage by reclaimed water use or resulting from:

a. Defective plumbing;

b. On-site facilities failures;

c. High or low pressure conditions;

d. Interruptions of service.

2. Service Basis. All reclaimed water will be provided to the user in the conditions and quantity specified in the permit for reclaimed water service. Reclaimed water use will not be subject to the same restrictions as potable water during drought conditions.

C. Regulatory. Reclaimed water service may be terminated whenever the quality of the reclaimed water does not comply with the requirements of the regulatory agencies, this chapter or other applicable codes. (Ord. 101 § 1 (part), 1998)

13.32.090 Other applicable codes and conditions.

A. For regulations that are the same between potable and reclaimed water, use applicable federal, state, and local regulations or sections of such regulations, already adopted for potable water systems by the city.

B. Other applicable guidelines, rules and regulations, ordinances, specifications that govern the use of reclaimed water:

Agency/ Organization	Document Number	Document Title
Chino Basin MWD	Ordinance No. XX	Regional Reclamation Ordinance For Reclaimed Water Service
Calif. DOHS	Title 22 Div. 4	Water Reclamation Criteria
Calif. DOHS	Title 17	Regulations Relating to Cross-Connections
California-Nevada Section, AWWA	--	Guidelines For Distribution Of Non-potable Water
Foundation For Cross-Connection Control	--	Manual Of Cross-Connection and Hydraulic Research, University of Southern California, School of Engineering

(Ord. 101 § 1 (part), 1998)

13.32.100 Permit application process.

A. A completed application for reclaimed water service must be submitted to the city by the owner, or authorized representative of the property which is intended to be served with reclaimed water. Approval for service shall be indicated by the city issuing a permit for reclaimed water service. This permit shall be in addition to permits and conditions required by the city and all other regulatory agencies.

B. The city shall furnish the application form upon request by prospective users. The application shall supply information concerning:

1. Applicant's relationship to the subject property as legal owner, tenant, or lessee;

2. Description of reclaimed water use on the property;

3. Legal description of property;

4. Technical information (listed on the application form);

5. Total irrigated acres;

6. Special conditions (items that could be of concern when using reclaimed water);

7. A drawing of the property on one eight and one-half inches by eleven (11) inches paper sheet. Include/show:

a. Location of service connection, reclaimed and potable water main line,

b. Size of service connection,

c. Use area location,

d. Areas served with reclaimed water and areas excluded from reclaimed water service,

e. A brief description of all special construction requirements.

C. The applicant shall state by signature on the application form that he or she agrees to comply with this chapter and any and all other applicable governing documents.

D. The following items are to be included in an application package:

1. Completed application form;

2. Required drawing(s);

3. Required fees and deposits;

4. Special conditions.

E. Upon receipt of a completed application package, the city shall review the material, respond, and forward the application to the CBMWD's General Manager or designated representative within forty-five (45) calendar days of receipt of the application package. The city may research any additional information it deems necessary. The city shall determine if the property to be served is in a suitable area for reclaimed water use and if the necessary quantity and quality of reclaimed water can be made available to the applicant. The city may prescribe specific requirements of the applicant for service which may concern:

1. Additional facilities to be constructed;

2. Manner of construction;

3. Financial responsibility;

4. Use of reclaimed water.

F. Upon successful completion of its review, the District shall submit the application package to the Santa Ana Regional Water Quality Control Board (RWQCB) and the San Bernardino County DOHS for their approval. Upon approval of the application package by the RWQCB and the San Bernardino County DOHS, the applicant will be requested to submit detailed construction plans

(blueprints), construction schedule, and pay required fees to the city.

G. The city will issue a permit for reclaimed water service. The permit shall be a binding agreement between the city and the user. A new application must be submitted to reinstate a permit that has been canceled. (Ord. 101 § 1 (part), 1998)

13.32.110 Permits.

A city permit for reclaimed water service must be obtained by the user to receive reclaimed water on any property. Permits to receive reclaimed water service or any connection for service issued under this chapter pursuant to receipt of an application for such service shall be subject to the following conditions:

A. The applicant shall adhere to requirements prescribed by this chapter and to all additional requirements prescribed by all governing agencies pertaining to reclaimed water service.

B. The applicant shall pay specified connection fees, service line charges, and other charges prior to issuance of the permit.

C. The city may schedule reclaimed water use. Such scheduling may involve programming deliveries to different users and/or to various portions of a single user on-site system. Any scheduling shall consider applicable constraints of all involved regulatory agencies, this chapter, and the operating constraints of the affected users.

D. The city may temporarily terminate reclaimed water service at any time water at the terminal point of the District's reclamation plant does not meet the requirements of the regulatory agencies. Reclaimed water service would, in such case, be restored when the reclaimed water meets the governing requirements at the terminal point of the treatment plant. The city and the District may provide reclaimed water service from other approved sources. In addition, approved air gap separations may be used to provide potable water to the reclaimed water system to ensure water service.

E. The city may apply for and process all applicable regulatory agency permits. The cost and preparation of any study or report necessary to comply with California Environmental Quality Act (CEQA) or other regulatory requirements shall be the responsibility of the applicant.

F. The use permit shall become valid only after the project has been completely constructed, tested, and approved by the involved agencies.

G. A copy of the current permit must be available for review at all times, clearly visible at the site and on file at the user's office.

H. The use permit shall include the following:

1. Name and address of owner and user;

2. A statement that no changes in the proposed system will be undertaken without application and issuance of an amended city permit;

3. A statement that the applicant recognizes potential penalties for violation of this chapter and/or regulations of any regulatory agencies;

4. Specific quantity of reclaimed water to be used. Identify the following:

a. Average annual hundred cubic feet (HCF) used,

b. Maximum gallons per minute (GPM) needed at the point of connection (POC) as shown on the plans;

5. Permitted/approved uses;

6. Property location and estimated irrigated acres.

I. The use permit shall stay in effect indefinitely, but shall be canceled if:

1. A change of ownership occurs;

2. A change of user occurs;

3. A change of reclaimed water use occurs;

4. A violation of this chapter and/or other regulatory agencies occurs, which results in a system turn-off. (Ord. 101 § 1 (part), 1998)

13.32.120 Rates, fees, charges, and deposits.

A. General. All rates and charges relating to reclaimed water service shall be established by resolution of the City Council. Applicants for reclaimed water service shall pay their fair share for the construction of facilities needed to deliver reclaimed water to the applicant's property. All fees and estimated construction costs shall be paid prior to construction; however, the city may reimburse the applicant for a portion of the cost of such facilities as set in subsection D of this section.

B. Change of Rates or Charges. The city reserves the right to change the schedule of reclaimed water rates, service charges, and any other charges, deposits, or fees at any time. These charges are subject to the terms of any existing reclaimed water service permits (and/or agreements) and will be made by appropriate action of the city.

C. Temporary Service. The reclaimed water rate for all water sold through temporary meters shall be established by resolution of the City Council.

D. Financial Participation By City. Under certain circumstances, the city may contribute to the cost of constructing the facilities needed to deliver reclaimed water to an applicant's property. Subject to the availability of funds, the city may:

1. Reimburse an applicant for costs incurred to install oversized facilities;

2. Elect to participate in or construct supply lines, main lines, reservoirs, pumping stations or other facilities, as it determines necessary, and/or as funds are available. (Ord. 101 § 1 (part), 1998)

13.32.130 Size, location and installation of service line.

A. The city reserves the right to determine the size and location and/or type of:

1. Reclaimed water service lines;

2. Service connections;

3. Meters;

4. Backflow protection devices and other appurtenances in the service area.

B. The reclaimed water service lines shall be extended to an area abutting upon a public street, highway, road or city easement in which reclaimed water mains are installed. (Ord. 101 § 1 (part), 1998)

13.32.140 Service connection limitations.

Permits for reclaimed water service shall be issued under the following conditions:

A. The city reserves the right to limit the area of land under one ownership or homeowner's association to be supplied by one reclaimed water service connection and one reclaimed water meter.

B. A reclaimed water service connection and its corresponding meter shall not be used to supply adjoining property of a different owner.

C. A service connection shall not be used to supply adjoining property of a different owner or to supply property of the same owner across a road, street or other public right-of-way. When a property which is provided with a reclaimed water connection and corresponding meter is subdivided, such connection and meter shall be considered as serving the lot or parcel of land on which the meter is located. Additional reclaimed water mains and/or reclaimed water service lines will be required for all subdivided areas in accordance with this chapter.

D. Irrigation systems in homeowner's asso-ciations and other developments where landscaping around homes and in common areas are served with one meter shall be allowed to cross under roads, streets, or other right-of-ways within the association's or developer's property.

E. All reclaimed water used on any property where a meter is installed must pass through the meter. Customers shall be held responsible and charged for all reclaimed water passing through their meters.

F. Every reclaimed water service line installed shall be equipped with a curb stop or wheel valve on the inlet side of the meter. The valve or curb stop is to be used only by city personnel to control the reclaimed water supply through the water service line. If the wheel valve or curb stop is damaged by the customer, then the customer shall bear full financial responsibility for replacement.

G. When a reasonable service pressure would not be available to on-site facilities not previously served from the potable water system, the user shall be responsible for correcting this situation upon conversion to the reclaimed water system. If available service pressure is too high, the user shall utilize pressure regulator(s) downstream of the meter to obtain the correct pressure. If available pressure is too low, the user shall provide booster pumping to increase the pressure. When a reasonable service pressure would not be available to on-site facilities previously served from the potable water system, correcting this situation upon conversion to the reclaimed system shall be handled as follows:

1. If user-provided booster pumping or pressure regulation was required for on-site facilities when service was provided from the potable system then any booster pumping or pressure regulation required for reclaimed water service shall be provided by the user.

2. If reasonable service pressure was available for the on-site facilities when service was provided from the potable system, then any action needed to provide reclaimed water service shall be considered on a case-by-case basis in conjunction with the city.

H. Service is commenced after issuance of a permit for reclaimed water service by the city. (Ord. 101 § 1 (part), 1998)

13.32.150 Relocation of reclaimed water service lines.

Should a reclaimed water service line installed according to the directions of the applicant, owner, or customer (user) be of the wrong size or installed at a wrong location or depth, the cost of relocation or removal shall be paid for by the user where the error was that of the user or the user's representative. All services provided prior to final street improvements shall be considered temporary and the costs for any repairs or changes to on-site facilities required to be performed by the city shall be paid by the user. (Ord. 101 § 1 (part), 1998)

13.32.160 Protective measures.

A. The following provisions are to protect the city's potable and reclaimed water supplies against actual, undiscovered, unauthorized, or potential cross-connections to the user's reclaimed water system. These provisions are in addition to, not in lieu of, the controls and requirements of other regulatory agencies. These provisions are in accordance with Title 17 (Public Health) of the California Administrative Code. These regulations are intended to protect the city water supplies and are not intended to provide regulatory measures for protection of users from the hazards of cross-connections within their own property.

B. Approved backflow prevention devices on the city's potable and reclaimed water services to the property, as required in these provisions, shall be provided, installed, tested, and maintained at user expense. These devices shall be located on the property served immediately downstream of the meter and shall not be on the city's facilities. All devices shall be readily accessible for testing and maintenance.

C. When reclaimed water service is initiated, the applicant must provide sufficient information, including plumbing and building plans, to enable the city and other regulatory agencies to determine the level of backflow protection required. The proper backflow protection as determined by the city and other regulatory agencies shall then be installed and inspected before reclaimed water service is provided. Each time there is a change of customer (either owner or tenant) on any commercial or industrial premise, the user shall notify the city immediately. The city will then reassess the level of protection required. Also, any alterations to existing on-site facilities that may affect required protection level must be reported immediately to the city.

D. At their discretion, representatives of any health agency having jurisdiction, the city, and CBMWD may conduct surveys of any property where water service is provided by the city. These surveys are to determine if any actual or potential cross-connections exist. The applicant, owner, or user shall provide full cooperation in facilitating these surveys.

1. Where Protection is Required. Approved backflow protection for potable water supplies shall be provided as follows:

a. Each city water service connection that supplies potable water to a premises having an auxiliary water supply that is not accepted as a potable source by the city and is approved for such use by the San Bernardino County DOHS shall be protected against backflow from the premises into the city water systems.

b. Each city water service connection for supplying potable water to a premises on which any substance is handled in a fashion as to permit entry into the city water system from the premises shall be protected against backflow from the premises into the city water system. This shall include, but not be limited to, the handling of process waters, waters originating from any of the city water systems that have been subject to deterioration in quality, and agricultural use.

c. Backflow devices shall be installed where premises have intricate plumbing and piping arrangements or where not all portions of the premises are readily accessible for inspection.

d. Backflow protection may be required at premises where there has been a history of cross-connections being reestablished.

2. Other Measures.

a. Whenever possible the city will operate the reclaimed water system at a lower pressure than potable water systems. This will cause potable water to flow to the reclaimed water system in the event of a cross-connection.

b. Water meters and backflow devices used for reclaimed water service shall be tagged or color-coded purple, color pantone 512 or 522, or otherwise distinguished as such. These meters shall not be interchanged or used for potable water service after repairs and/or meter testing have been performed.

c. Periodic inspection of the reclaimed water facilities will determine if all identifying items are still clearly discernible. If not, they will be replaced, repaired or refurbished as needed. These items include:

i. Warning tags;

ii. Painted surfaces;

iii. Warning tape;

iv. Identification tape;

v. Covers, caps, signs;

vi. Other items that indicate reclaimed water is being used.

d. Acceptable tracer dyes may periodically be introduced into the reclaimed water system by the city, CBMWD or local health agency, to determine the existence of any cross-connections or backflow conditions into the potable water system.

e. In the event of contamination or pollution of a city potable water system due to a cross-connection or other failure, the San Bernardino County DOHS and the city shall be promptly notified so that appropriate measures will be taken to correct the problem.

f. The state and county health departments and the city shall be kept informed by written document of the identity of the person responsible for the user's reclaimed water system on all premises concerned with these rules and regulations. At each authorized use area, an on-site Reclaimed Water Supervisors shall be designated and responsible for including, but not limited to, the following:

i. The installation and use of all components of the on-site reclaimed water system(s);

ii. Prevention of cross-connections;

iii. Change in use of reclaimed water.

3. Water Service Termination. When the city determines that reclaimed water uses or conditions encountered by the city represent a clear and immediate hazard to the city's potable and/or reclaimed water supply that cannot be immediately removed or corrected, the city shall reserve the right to terminate reclaimed water use. Conditions or uses that create a basis for termination include, but are not limited to:

a. Refusal to install a required backflow prevention device;

b. Refusal to test a backflow prevention device;

c. Refusal to repair or replace a faulty backflow prevention device;

d. Direct or indirect connection between the potable and reclaimed water systems;

e. Direct or indirect connection between the reclaimed water system and a system or equipment containing contaminants;

f. A situation which presents an immediate health hazard to the city potable and/or reclaimed water system, as determined by the city, CBMWD, or other regulatory agency. (Ord. 101 § 1 (part), 1998)

13.32.170 Type of protection.

The level of protection required is related to the degree of hazard that exists on the premises served. Listed in increasing levels of protection, the following protective backflow devices may be required: double check valve (DC), reduced pressure principle device (RPPD), and an air gap separation (AG). The user may choose a higher level of protection than required by the city or other regulatory agencies. Minimum types required, relative to various situations, are listed below. Situations not listed will be evaluated on a case-by-case basis and the appropriate level of protection required shall be determined by the city or the San Bernardino County Department of Health Service. These shall include situations where on-site conditions could impact the reclaimed water quality.

Degree of Hazard	Required Minimum Backflow Prevention
A. Sewage and Hazardous Substances	
Premises where the on-site potable water supply system is used to supplement reclaimed water supply.	AG
Premises where there are wastewater pumping and/or treatment plants and there is no interconnection with the potable water system. This does not include a single-family residence that has a sewage lift pump. An RPPD may be provided in lieu of an AG if approved by the health agency, and city.	AG
Premises where hazardous substances are handled in any manner in which the substance may enter the potable water system. This does not include a single-family residence that has a sewage lift pump. An RPPD may be provided in lieu of an AG if approved by the health agency, and city premises where there are irrigation systems into which fertilizers, herbicides, or pesticides are, or can be, injected.	
B. Premises where entry is restricted so that cross-connection inspections cannot be made with sufficient frequency or at sufficiently short notice to assure that cross-connections do not exist.	RPPD
C. Premises where there is a repeated history of cross-connections being established or reestablished.	RPPD
D. Premises where the fire system is supplied from the city water system and there is an unapproved auxiliary water supply on or to the premises.	DC
E. Premises where the fire system is supplied from the city water system and interconnected with an unapproved auxiliary water supply. An RPPD may be substituted for an AG if approved by the San Bernardino County DOHS.	AG
F. Premises where the fire system is supplied from the city water system and where either elevated storage tanks or fire pumps which take suction from private reservoirs or tanks are used.	DC

(Ord. 101 § 1 (part), 1998)

13.32.180 Inspection and maintenance of protective devices.

The user is responsible for inspection and testing of all backflow prevention devices at least once a year, or more often in those instances where successive inspections indicate repeated failure.

All inspections shall be performed at the user's expense by a tester certified by the County Health Department. These devices shall be repaired, overhauled, and/or replaced at the expense of the user whenever they are found to be defective. These devices shall also be tested immediately after they are installed, relocated, or repaired. The user shall maintain records of all such tests, repairs, and overhauls. These records shall be made available to the Department of Health Services upon request and sent to the city annually. (Ord. 101 § 1 (part), 1998)

13.32.190 Facilities design.

A. The design of off-site facilities including the preparation of plans and construction specifications shall be the responsibility of a civil engineer registered in the state of California. The design of customer (on-site) facilities that will use reclaimed water, and preparations of plans and construction specifications, shall be the responsibility of a landscape architect or civil engineer registered in the state of California.

B. Before the city grants final acceptance of any system using reclaimed water, as-built drawings shall be provided. The installed system shall be tested in accordance with the city standard specifications to ensure that the system is in full compliance with these rules and regulations.

1. General.

a. All off-site and on-site reclaimed water facilities shall be designed and constructed according to the requirements, conditions, and standards as adopted in the city standard specifications to ensure that the system is in full compliance with this chapter. Reclaimed water systems, both on-site and off-site, shall be separate and independent of any potable water systems.

b. Where the premises contain dual or multiple water systems, the exposed portions of pipelines shall be identified at sufficient intervals to distinguish clearly which water is safe for drinking purposes and which is not safe.

c. Areas irrigated with reclaimed water must be completely separate from domestic water wells and reservoirs. Reclaimed water shall not be allowed to migrate to within fifty (50) feet and no impoundment of reclaimed water within one hundred (100) feet of any domestic water supply well.

d. Adequate means of notification should be provided to inform the public, employees, and others that reclaimed water is being used. Conspicuous signs with appropriate wording that can be clearly read should be placed at adequate intervals around the authorized use area.

i. Golf courses should print messages on score cards in a different color indicating reclaimed water is being used. Water hazards containing reclaimed water should be posted with appropriate signs.

ii. Languages, other than English, should be used on signs when appropriate.

2. Off-Site Facilities.

a. Any off-site reclaimed water distribution facilities required to serve development, shall be provided by the applicant, owner, or user at their expense, unless the city determines it is a city benefit to construct these capital facilities.

b. Plans and specifications for all reclaimed water distribution facilities shall be submitted to and approved by the city, and other regulatory agencies in advance of construction. The city will assume responsibility for providing reclaimed water service to the point of connection of such development upon transfer to the city of title to all off-site reclaimed water systems and any necessary easements. All easements shall be in a form acceptable to the city, not subject to outstanding obligations to relocate such facilities or any deeds of trust, except in instances where such is determined by the city to be in the best interest of the city.

c. The property owner, proponent, or developer may request that the city enter into a

reimbursement agreement for the portions of a system which are required to be oversized with capacity to supply more reclaimed water than the property owner, proponent or developer requires. The decision to enter into a reimbursement agreement shall be made by the city.

3. On-Site Facilities. Any on-site reclaimed water facility shall be provided by the applicant, owner, or user at his or her expense. Applicant, owner or user shall retain title to all on-site facilities. When the city standard specifications require a higher quality of material, equipment, design or construction method than that required by other governing codes, rules and regulations, the city standard specifications shall take precedence. On-site reclaimed water facilities shall conform to local governing codes, rules and regulations.

4. Interim Service. In areas where reclaimed water is not immediately available, when the use area is ready for construction and if the city has determined that reclaimed water will be supplied in the future, on-site facilities shall be designed to use reclaimed water. Provisions shall be made and this chapter followed to allow for connection to the city off-site reclaimed water facilities. In the interim, potable or other suitable water may be supplied to the on-site facilities through an interim service connection.

a. Conditions of interim service are:

i. The city anticipates reclaimed water will be available to the site in which interim service is initiated.

ii. The applicant must obtain a city permit for reclaimed water service.

iii. The applicant must agree to perform all work necessary to make connections to the permanent reclaimed water system(s) once it is installed.

b. An approved backflow prevention device is required on the interim service. The backflow preventer shall be at the POC with the interim supply system. The city will remove the interim connection at the user's expense and will make the connection to the on-site facilities when reclaimed water becomes available.

c. Future reclaimed water customers will pay for the following:

i. Cost of constructing and abandoning the interim service;

ii. Applicable reclaimed water fees at the time service becomes available;

iii. Applicable interim water rates for the type of water delivered through the interim service.

d. When reclaimed water is available to the site, an inspection of the on-site facilities will be conducted by the city to verify that the facilities have been adequately maintained and are in compliance with the reclaimed water use permit. Reclaimed water service shall be provided upon verification of compliance. If the facilities are not in compliance, the city shall notify the user to correct the situation. (Ord. 101 § 1 (part), 1998)

13.32.200 Construction.

A. New. Construction of all new reclaimed water systems, both on-site and off-site, shall follow the city standard specifications.

B. Conversion to Reclaimed Water Use. Where it is planned that an existing nonreclaimed water system be converted to a reclaimed water facility, the facilities to be converted to reclaimed water shall be investigated in detail at the user's expense. On a case-by-case basis, the city shall review the as-built drawings, prepare required reports for the user, and determine the measures necessary to bring the system into full compliance with this chapter. The San Bernardino County DOHS shall also review and approve all conversions. No existing potable water facilities shall be connected to or incorporated into the reclaimed water system without city and other regulatory agency testing and approval.

C. Conversion From Reclaimed Water Use. If the city determines it necessary to convert on-site facilities from a reclaimed water supply to a potable or other water supply, due to on-site failure of the reclaimed water system or use violations, it shall be the responsibility of the user to pay all costs for such conversion, unless determined otherwise by the city. Conversion costs shall include, but not be limited to the following:

1. Isolation of the Reclaimed Water Supply. Service shall be removed and plugged by the city, at the city main, or abandoned in a manner approved by the city;

2. Installation of Approved Backflow Prevention Devices. The user shall install approved backflow devices on all potable or other water meter connections;

3. Removal of Any/All Special Reclaimed Water Quick Couplers. The user shall be responsible for replacement with quick couplers approved for potable water systems;

4. Notification to all on-site personnel involved;

5. Removal of all warning labels/signs;

6. Distribution system flushing with approved water quality analysis as required by the San Bernardino County DOHS;

7. Installation of all potable water lines and facilities and payment of any fees. (Ord. 101 § 1 (part), 1998)

13.32.210 Emergency connection to reclaimed water system.

A. If the city determines an emergency exists where all or parts of the reclaimed water system are unable to provide reclaimed water, the city may approve a temporary connection to the potable water system. Before such temporary connection is made, the portion without reclaimed water shall be isolated by an air gap separation from the remainder of the reclaimed water system. This isolation shall occur at either individual services or on the off-site system, as determined by the city. An approved backflow prevention device or other devices as directed shall be installed on the potable water lines in accordance with this chapter and all other applicable regulations of the governing agencies. The emergency connection shall be removed before connection is reestablished to the reminder of the reclaimed water system.

B. Reestablishment of reclaimed water service must be inspected and approved by the city prior to resuming delivery of reclaimed water.

C. Supplemental emergency supplies will be delivered at the rate then in effect for the type of alternate water used. (Ord. 101 § 1 (part), 1998)

13.32.220 Off-site facilities.

Operation, maintenance and surveillance of all city off-site reclaimed water systems including but not limited to, reclaimed water pipelines, valves, connections, storage facilities, and other related equipment and property up to and including the meter, shall be under the management and control of the city. No other persons except authorized representatives of the city or CBMWD shall have the right to enter upon any of the city or CBMWD off-site facilities. Only city personnel and their representatives shall operate, adjust, change, alter, move or relocate any portion of the off-site reclaimed water systems. (Ord. 101 § 1 (part), 1998)

13.32.230 On-site facilities.

A. General. The operation, surveillance, repair, and maintenance of all customer reclaimed water facilities are the responsibility of the user. The user’s designated on-site Reclaimed Water

Supervisor shall bear this responsibility. The city and/or regulatory agencies shall monitor in inspect all on-site reclaimed water facilities, and for these purposes shall have the right to enter upon the user's premises. When necessary, keys and/or lock combinations shall be issued to the city to provide such access upon a request during normal business hours of operation.

B. The user shall have the following responsibilities pertaining to operation of on-site facilities:

1. To ensure that all operations personnel are trained and knowledgeable regarding the use of reclaimed water;

2. To furnish all operations personnel with maintenance instructions, irrigation schedules, controller charts, and as-built drawings to ensure proper operation in accordance with the on-site facilities design and the rules and regulations of all regulatory agencies;

3. To prepare and submit to the city one reproducible set of as-built drawings;

4. To notify the city of all updates or proposed changes, modifications, or additions to the on-site facilities. All updates and proposed changes shall be approved by the city prior to construction in accordance with city procedures. All updates and proposed changes shall comply with this chapter and governing documents of all other regulatory agencies;

5. To ensure that the operation and maintenance of all reclaimed water facilities remain in accordance with this chapter and other documents governing reclaimed water systems within the city;

6. To operate and control the system in order to prevent direct human consumption of reclaimed water and to control and limit runoff. The applicant, owner, or user shall be responsible for any and all subsequent uses of the reclaimed water. Operation and control measures to be utilized in this regard shall include, but not be limited to:

a. On-site reclaimed water facilities shall be operated to prevent or minimize discharge onto areas not under control of the user so as to minimize public contact. Full circle sprinklers shall not be used adjacent to sidewalks, roadways, and property lines in order to confine the discharge to the use area,

b. The operation of the on-site reclaimed water facilities shall be during periods of minimal human use of the service area. Consideration shall be given to allow a maximum dry-out time before the irrigated area will be used by the public. For agricultural operations, the soil moisture reservoir shall be depleted (dried) by at least thirty (30) percent before harvest,

c. Adequate first aid kits shall be available on the premises. All cuts and abrasions shall be promptly treated to prevent infection,

d. Reclaimed water shall be applied at a rate that does not exceed the infiltration rate of the soil. Where varying soil types are present, the design and operation of the reclaimed water facilities shall be compatible with the lowest infiltration rate of the soils present,

e. When the application rate exceeds the soil infiltration rate, automatic controller systems shall be utilized to minimize ponding and runoff of reclaimed water. Total sprinkler run times shall not be greater than the time needed to supply the landscape's water requirements. If runoff occurs before the landscape's water requirements are met, the automatic controllers shall be reprogrammed with additional watering cycles of shorter duration to meet the requirements. This method of operation is intended to control and limit runoff,

f. The user shall report to the city any and all failures in the reclaimed water system(s) that cause an unauthorized discharge of reclaimed water,

g. All drinking fountains located within the approved use area, designated by the user permit, shall be protected from contact with reclaimed water to the maximum extent possible. Windblown spray, direct application through irrigation, or other approved uses are considered sources of reclaimed water. Protection shall be by design, construction practice, or system operation,

h. Facilities that may be used by the public, including but not limited to, eating surfaces, playground equipment, and located within the approved use areas designated by the use permit, shall be protected from contact with reclaimed water to the maximum extent possible. Windblown spray, direct contact by irrigation application, or other approved use are considered sources of reclaimed water. Protection shall be by design, construction practice, or system operation.

C. The user shall enforce the following prohibitions:

1. Cross-Connections. Cross-connections, as defined by the California Administrative Code, Title 17, resulting from the use of reclaimed water or from the physical presence of a reclaimed water service, whether by design, construction practice, or system operation, are prohibited.

2. Disposal in Unapproved Areas. Disposal of reclaimed water for any purposes, including approved uses, in areas other than those specifically approved in the currently effective user permit issued by the city, and without the prior knowledge and approval of the governing regulatory agencies is prohibited.

3. Fire Hydrants. Use or installation of fire hydrants on any user water system that presently operates or is designed to operate with reclaimed water, regardless of the fire hydrant construction or identification, is prohibited.

4. Hose Bibs. Use or installation of permanent hose bibs on any user water system that presently operates or is designed to operate with reclaimed water, regardless of the hose bib construction or identification is prohibited. Hose bibs may be used only on quick couplers.

5. Ponding. Conditions that directly or indirectly cause reclaimed water to pond either within or outside of the approved use area, whether by design, construction practice, or system operation are prohibited.

6. Runoff. Conditions that directly or indirectly cause runoff of reclaimed water onto areas outside of approved use areas, whether by design, construction practice, or system operation are prohibited.

7. Unapproved Uses. Uses of reclaimed water for any purposes other than those specifically approved, in the currently effective user permit issued by the city, and without the prior knowledge and approval of the governing regulatory agencies is prohibited.

8. Windblown Spray. Conditions that directly or indirectly permit windblown spray to pass outside of the approved use area, whether by design, construction practice, or system operation are prohibited. (Ord. 101 § 1 (part), 1998)

13.32.240 Monitoring and inspection.

The manager or authorized representatives of the city shall monitor and inspect the entire reclaimed distribution facility, including both off-site and on-site facilities. The city shall conduct monitoring programs, maintain records as deemed necessary, inspect on-site facilities for compliance with these rules and regulations, and provide reports as requested by the regulating agencies. For these purposes, the manager or authorized representatives of the city shall have the right to enter upon the user's premises during reasonable hours to inspect on-site reclaimed water facilities and approved use areas. Reasonable hours shall include hours when irrigation is occurring. The city, CBMWD, RWQCB, and San Bernardino County DOHS shall have the right to enter upon the user's premises during reasonable hours, from time to time, to verify that the user's irrigation practices conform with this chapter and its rules and regulations. (Ord. 101 § 1 (part). 1998)

13.32.250 Maintenance responsibility.

A. Reclaimed Water System. The applicant, owner, or user is responsible for maintaining all on-

site facilities that are under the ownership of parties other than the city.

B. Obstruction in Meter Boxes. No person shall place, dispose, deposit or permit the placement, disposal, deposit of oil, toxic, hazardous or contaminated liquid or waste, trash, soil, building materials or other substances, objects, or obstructions in, on, or around meter boxes or other city facilities. No person shall allow or permit meter boxes or other city facilities from becoming obstructed or obscured by trees, shrubs, plants or in any other manner so as to impede their use or access to them or make their location difficult to determine. If such substances, objects, or obstructions are not cleaned and removed or are permitted to obscure or impede use or access to such facilities, the city may accomplish the cleaning and removal at the user's expense. The city must provide reasonable notice to the user before assessing the charge. (Ord. 101 § 1 (part), 1998)

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CHAPTER 8C: RECYCLED WATER USE

Sec. 6-8.700. Authority.

Recycled water use is regulated by the California Regional Water Quality Control Board, Santa Ana Region (RWQCB). In accordance with waste discharge requirements for water reclamation projects, the RWQCB requires control mechanisms to regulate facilities distributing recycled water. Article 2 of Chapter 7 of Division 7 of the Cal. Water Code establishes a State policy to encourage the use of recycled water. Permission to use recycled water is based on Inland Empire Utilities Agency's ability to adequately treat domestic wastewater to the point that the recycled water (effluent) meets the requirements of existing Title 22, Chapter 3 regulations of the California Code of Regulations. These regulations were adopted to ensure proper health protection and specify the treatment degree to meet the needs of the intended applications.

(§ 1, Ord. 2689, eff. June 17, 1999)

Sec. 6-8.701. Purpose.

The purpose of this chapter is to establish procedures, specifications, and limitations for the safe and orderly development and operation of recycled water facilities and systems within the City's service area, and adopt rules and regulations controlling such use.

(§ 1, Ord. 2689, eff. June 17, 1999)

Sec. 6-8.702. Goals.

The goals of this chapter are as follows:

(a) Achieve conservation of potable water supplies by using recycled water for current and future demands. Recycled water uses may include:

(1) Agricultural irrigation.

(2) Commercial uses (including flushing toilets and urinals).

(3) Construction use.

(4) Industrial processes.

(5) Landscape irrigation.

(6) Landscape and/or recreational impound- ments.

(7) Wildlife habitat.

(b) Maintain recycled water quality through a stringent pretreatment program for industrial wastewater.

(c) Prevent direct human consumption of recycled water through:

(1) Adherence to all applicable rules and regulations.

(2) Posting of warning signs by the user.

(3) Cross-connection/backflow prevention program.

(d) Control runoff of recycled water through monitoring of the installation and operation of all recycled water facilities and use areas.

(e) Monitor recycled water quality.

(§ 1, Ord. 2689, eff. June 17, 1999)

Sec. 6-8.703. Policy.

It is the policy of the City that recycled water be used for any purposes approved for recycled water use, when it is economically, technically, and institutionally feasible. Recycled water shall be the primary source of supply for commercial and industrial uses, whenever available and/or feasible. Use of potable water for commercial and industrial uses shall be contrary to City policy; shall not be considered the most beneficial use of a natural resource; and shall be avoided to the maximum extent feasible.

(§ 1, Ord. 2689, eff. June 17, 1999)

Sec. 6-8.704. Priority.

Connection to the Recycled Water System shall be provided on a first-come, first-served basis, as long as infrastructure and recycled water supplies are available.

(§ 1, Ord. 2689, eff. June 17, 1999)

Sec. 6-8.705. Definitions.

Unless the context specifically indicates otherwise, the following terms and phrases, as used in this Chapter, in addition to the definitions set forth in Title 22, Division 4, Chapter 3, Regulations of the California Code of Regulations, shall have the meanings hereinafter designated.

(a) "Agency" shall mean the Inland Empire Utilities Agency (IEUA).

(b) "Agricultural Use" shall mean water used for the production of crops and/or livestock.

(c) "Air-Gap Separation" shall mean a physical break between a supply pipe and a receiving vessel. The air gap shall be at least double the diameter of the supply pipe, measured vertically from the flood rim of the receiving vessel to the supply pipe; however, in no case shall this separation be less than one (1) inch.

(d) "Applicant" shall mean any person, group, firm, partnership, corporation, association, or agency that applies for recycled water service.

(e) "Application Rate" shall mean the rate at which irrigation water is applied to a design or use area, expressed in gallons per minute.

(f) "Approved Use" shall mean an application of recycled water in a manner, and for a purpose, designated in a Recycled Water Use Agreement in compliance with applicable State and local rules and regulations.

(g) "Approved Use Area" shall mean a site with well-defined boundaries designated in a Recycled Water Use Agreement in compliance with applicable rules and regulations.

(h) "As-built Drawings" shall mean the record drawings that show the completed facilities as constructed or modified.

(i) "Automatic System" shall mean the electronically actuated controllers, valves, and associated equipment used to program and operate irrigation systems for the efficient application of recycled water.

(j) "Auxiliary Water Supply" shall mean any water supply on or available to the premises other than the City's potable water.

(k) "AWWA" shall mean the American Water Works Association.

(l) "City Council" shall mean the City Council of the City of Ontario.

(m) "Commercial/Industrial Use" shall mean the water used for toilets, urinals, decorative fountains, decorative indoor and outdoor landscape, industrial process such as rinsing, washing, cooling, flushing, circulation, or construction; and other uses approved by the City.

(n) "Commodity Charge" shall mean a charge imposed by the City for all metered, recycled water used.

(o) "Cross-Connection" shall mean any unapproved and/or unprotected, actual or potential, connection between any part of a potable water system and any equipment, source, or system containing water or other substances not approved as safe and potable for human consumption.

(p) “Direct Beneficial Use” shall mean the use of recycled water 'which has been transported from the point of production to the point of use, without an intervening discharge to waters of the State.

(q) “Administrator” shall mean the City Manager of the City of Ontario or his or her authorized representative.

(r) “Discharge” shall mean any release or distribution of recycled water to a use area or disposal site/mechanism. Such discharges are subject to approval by the City.

(s) “DHS” shall mean the California Department of Health Services.

(t) “Double Check Valve Assembly” shall mean a double check valve (DC) that as a minimum, conform to the AWWA Standard C506-78 (R83) adopted on January 28, 1978 for Double Check Valve Type Backflow Prevention Devices which is herein incorporated by reference.

(u) “Greenbelt Areas” shall mean those areas including, but not limited to, parkways, parks, right-of-ways, and landscaping within and/or surrounding a community.

(v) “HCF” shall mean a unit of measure equaling one hundred (100) cubic feet or 748 gallons.

(w) “Industrial Process Water” shall mean the water used in industrial facilities for blending, rinsing, washing, or cooling.

(x) “Infiltration Rate” shall mean the rate at which water penetrates the soil surface and enters the soil profile.

(y) “Landscape Impoundment” shall mean a body of water containing recycled water, which is used for aesthetic or irrigation purposes and which is not intended for public contact or ingestion.

(z) “Landscape Irrigation/Use” shall mean recycled water used for the propagation and maintenance of trees, shrubs, ground cover and turf used for erosion control and aesthetic value, not for resale/profit purposes.

(aa) “Non-potable Water” shall mean water that has not been treated for, or is not acceptable for human consumption, in conformance with Federal, State and local water standards. Non-potable water includes recycled water.

(ab) “Off-site Facilities” shall mean all existing or proposed facilities under the control of the IEUA or the City, from the source of supply to the point of connection with the customer's on-site facilities, up to and including the City's recycled water meter and meter box.

(ac) “On-site Facilities” shall mean all existing or proposed facilities within property under the control of the customer, normally downstream of the City's recycled water meter and meter box.

(ad) “On-site Recycled Water Supervisor” shall mean a qualified person designated by a recycled water user and approved by the City to be responsible for the safe and efficient operation of the user's recycled water system. This person shall be knowledgeable in the operation of the recycled water system and in the application of Federal, State and local guidelines, criteria, standards, and rules and regulations governing the use of recycled water.

(ae) “Open Space” shall mean land that has been designated to remain undeveloped. These areas may receive recycled water service for agricultural or landscape irrigation, or other approved uses.

(af) “POC” shall mean the point of connection at the recycled water service meter.

(ag) “Ponding” shall mean the retention of recycled water on the ground surface or human- made surface for a period of time following the cessation of an approved recycled water use activity, such that potential hazard to the public health may result, as determined by regulatory agencies.

(ah) “Potable Water” shall mean water which conforms to the latest Federal, State and local drinking water standards.

(ai) “PSI” shall mean pounds per square inch. This is a common unit expression of pressure measurement.

(aj) “Recycled Water” shall mean water, which as a result of treatment of wastewater, is suitable for direct beneficial use or a controlled use that otherwise would not occur. The treatment of wastewater is accomplished in accordance with the criteria set forth in Title 22, Division 4 of the California Code of Regulations.

(ak) “Recycled Water Facilities” shall mean the systems; structures, and the like, used in the treatment, storage, pumping, transmission and distribution of recycled water.

(al) “Recycled Water Use Agreement” shall mean an agreement between the user and the City to use recycled water in compliance with all applicable rules and regulations.

(am) “Recreational Impoundment” shall mean a body of recycled water used for recreational activities including, but not limited to, fishing, boating, and/or swimming. Allowable uses will depend on treatment level of the recycled water.

(an) “Reduced Pressure Principle Backflow Prevention Device” shall mean a reduced pressure principle backflow prevention device (RP) that as a minimum, conform to the AWWA Standard C506-78 (R83) adopted on January 28, 1978 for Reduced Pressure Principle Type Backflow Prevention Devices which is herein incorporated by reference.

(ao) “Regulatory Agency” shall mean any public entity legally constituted by Federal, State and local statutes to protect health and water quality.

(ap) “Runoff' shall mean the flow of water along natural or manmade surfaces away from the designated use area.

(aq) “RWQCB” shall mean the California Regional Water Quality Control Board, Santa Ana Region.

(ar) “Secondary Effluent” shall mean any oxidized wastewater that has been treated by gravity sedimentation to remove settled solids remaining after the primary biological treatment process.

(as) “Service” shall mean the delivery of recycled water to a user.

(at) “Service Connection” shall mean City facilities between the City recycled water distribution

system and the customer's meter, including, but not limited to, the meter, meter box, valves, and piping equipment.

(au) "Standard Specifications" shall mean the specifications approved by the City for construction of recycled water facilities.

(av) "Tertiary Effluent" shall mean any secondary effluent which has been filtered and disinfected, and meets all applicable requirements under Title 22. Allowable uses for tertiary effluent shall include body contact and irrigation of human food crops.

(aw) "Unauthorized Discharge" shall mean any release of recycled water that violates any applicable Federal, State, or local statutes, regulations, chapters, contracts or other requirements.

(ax) "Use Area" shall mean the specific area designated to be served with recycled water through on-site recycled water facilities.

(ay) "User" shall mean any person, group, firm, partnership, corporation, association or agency accepting recycled water from the City's recycled water facilities for use in accordance with this chapter. "Applicant," "Owner," or "Customer" are terms that are to be considered as users.

(az) "Windblown Spray" shall mean any dispersed, airborne particles of recycled water capable of being transmitted through the air to a location other than that for which the direct application of recycled water is approved.

(§ 1, Ord. 2689, eff. June 17, 1999)

Sec. 6-8.706. Administrator.

Except as otherwise provided herein, the City Manager shall administer, implement, and enforce the provisions of this Chapter. The City Manager may, at his or her discretion, delegate any or all of these powers and duties.

(§ 1, Ord. 2689, eff. June 17, 1999)

Sec. 6-8.707. Validity.

If any section, subsection, sentence, clause or phrase of this chapter establishing rules and regulations for the use of recycled water is for any reason found to be invalid or unconstitutional, such decision shall not affect the remaining portions of this chapter. The City Council declares that it would have approved this chapter by section, subsection, sentence, clause, or phrase irrespective of the fact that any one or more of the sections, subsections, sentences, clauses or phrases be declared invalid or unconstitutional.

(§ 1, Ord. 2689, eff. June 17, 1999)

Sec. 6-8.708. Service area.

The rules and regulations contained in this chapter apply to recycled water service to lands and/or improvements lying within the legal boundaries of the City, to properties contiguous to the City under the same ownership as abutting lands within the City or its designated service boundary. Recycled water service shall be provided to a specific service area when related distribution facilities are completed and

service becomes available.

(§ 1, Ord. 2689, eff. June 17, 1999)

Sec. 6-8.709. Determination of recycled use area.

(a) General

(1) The City Council may adopt a Recycled Water Master Plan or utilize the Inland Empire Utilities Agency Recycled Water Master Plan designating current and potential areas for recycled water use. The Master Plan shall be in accordance with all of the requirements of DHS and RWQCB, and shall encourage recycled water use. The Master Plan shall be reviewed and updated as needed.

(2) The City Council may review the Recycled Water Master Plan and recommend where water service should be made with recycled water in place of potable water. Where it is determined recycled water is, or will be available within five (5) years, the City may request modifications to existing on-site water facilities and require construction of recycled water systems in new developments.

(3) The City Council may enter into agreements with surrounding cities and/or other agencies to determine recycled water use service areas within the City and jurisdiction of those entities.

(b) Existing potable water service.

(1) The City Council may make determinations of areas where existing potable water use should be replaced with recycled water use.

(2) A notice of the determination to use recycled water shall be mailed to the current owner, explaining the reasons for use and resultant procedures needed to facilitate recycled water use.

(c) New recycled water service.

(1) On submittal by applicant of a tentative map, land use permit, other proposed land development/land use, or request for recycled water service, the Administrator shall make preliminary determinations if recycled water service can be provided to the area in question.

(2) The Administrator may require the use of recycled water for approved uses, and refuse or otherwise restrict potable water service when recycled water is available and approved for use.

(§ 1, Ord. 2689, eff. June 17, 1999, as amended by § 28, Ord. 2816, eff. December 1, 2005)

Sec. 6-8.710. Authorized uses.

Uses of recycled water include only those uses approved by the California State Department of Health Services (DHS) and for which Title 22 of the California Code of Regulations provides treatment requirements. Each such use will be considered for approval on case-by-case basis. Prior to approval, the user must comply with the requirements established by this chapter and any other requirements imposed by the Inland Empire Utilities Agency, DHS, or any other regulatory agencies that have jurisdiction over such use.

(§ 1, Ord. 2689, eff. June 17, 1999)

Sec. 6-8.711. Conditions of service.

(a) Prior to obtaining recycled water service, the user must enter into a Recycled Water Use Agreement with the City. Recycled water use shall be subject to terms and conditions established in the agreement, and in accordance with this chapter, and other applicable codes, rules, and regulations. If any of the conditions of service are not satisfied at all times, the Recycled Water Use Agreement may be revoked by the Administrator after which all recycled water service shall cease:

(b) The City shall not be liable for any damage by recycled water or resulting from:

(1) Defective plumbing.

(2) Broken or faulty services or recycled water mains.

(3) On-site facilities failures.

(4) High or low pressure conditions.

(5) Interruptions of service.

(6) Any inappropriate or illegal use or management practices.

(c) All recycled water will be provided to the user in the conditions and quantity specified in the Recycled Water Use Agreement.

(d) Recycled water use will not be subject to the same restrictions as potable water during drought conditions and will be supplied as available.

(e) Recycled water service may be terminated whenever the quality of the recycled water does not comply with the requirements of the regulatory agencies, or at any time the provisions of this Chapter, or the conditions specified in the Recycled Water Use Agreement are violated.

(§ 1, Ord. 2689, eff. June 17, 1999)

Sec. 6-8.712. Other applicable rules and codes.

Other guidelines, rules and regulations, ordinances, specifications that may be applied by the City Manager to govern the use of recycled water within the City include:

(a) Regulations that deal with backflow prevention, billing, deposits, penalties, delinquencies, and metering for potable water as established in §§ 6-8.50 to 6-8.64 of the Municipal Code.

(b) Regional Recycled Water Distribution System Ordinance (Ordinance No. 63, Inland Empire Utilities Agency.)

(c) Water Reclamation (Title 22, Division 4 of the California Code of Regulations.)

(d) Regulations Relating to Cross-Connections (Title 17 of the California Code of Regulations.)

(e) Guidelines for Distribution of Non-potable Water (California-Nevada Section AWWA.)

(§ 1, Ord. 2689, eff. June 17, 1999)

Sec. 6-8.713. Recycled water service application.

The steps for obtaining recycled water service are as follows:

(a) The user completes and submits a recycled water service application, including existing facility "as-built" drawings or proposed facility plans as appropriate, description of where and how recycled water use is proposed, and any other information pertinent to the use of recycled water as requested by the Administrator.

(b) The user prepares an Engineering Report describing proposed/requested recycled water use(s). The City may prepare the report on behalf of the user, provided that the user pays all costs associated with the preparation of the report. The Engineering Report shall be consistent with DHS guidelines.

(c) The completed Engineering Report will be forwarded to the State Department of Health Services (DHS) for review and approval.

(d) The user and the City will address any concerns that the DHS may have regarding the Engineering Report and revise the report accordingly.

(e) Once the DHS approves the Engineering Report, the applicant will enter into a Recycled Water Use Agreement with the City, and pay any applicable fees.

(f) The Administrator will schedule a start-up test of on-site recycled water system to ensure that cross-connections do not exist.

(g) Upon the successful completion of the test, the Administrator may authorize recycled water service to begin.

(§ 1, Ord. 2689, eff. June 17, 1999)

Sec. 6-8.714. Recycled Water Use Agreement.

Recycled Water Use Agreement shall be subject to the following conditions:

(a) The applicant shall pay any specified connection fees, service line charges and other charges, and adhere to the requirements prescribed by this chapter and to any additional requirements required by other agencies governing recycled water use.

(b) In order to maintain acceptable operating conditions throughout the recycled water system, the Administrator may schedule recycled water use for specific applications. Such scheduling may involve programming deliveries to different users and/or to various portions of a single users on-site system. Any scheduling shall consider the operating constraints of the affected users.

(c) The Administrator may temporarily terminate recycled water service at any time recycled water produced by the Inland Empire Utilities Agency reclamation plant does not meet the requirements of the regulatory agencies. Recycled water service would, in such case, be restored when the recycled water meets the governing requirements.

(d) At a minimum, the Recycled Water Use Agreement shall include the following:

(1) Names and addresses of owner the property and user of the recycled water.

(2) A statement that no changes in the proposed system will be undertaken without amending the Agreement.

(3) A statement that the applicant recognizes potential penalties for violation of this Chapter and any regulatory agencies.

(4) A copy of the DHS approved Engineering Report.

(5) Specific quantity of recycled water to be used, including estimated average annual use in acre-feet, and the maximum gallons per minutes (GPM) needed at the point of connection (POC) as shown on the plans.

(6) Approved uses.

(7) A statement that the Agreement shall be canceled or amended if:

(i) A change of recycled water use occurs.

(ii) A change in the piping system has been implemented without prior approval.

(iii) A violation of these rules and regulations occurs and results in a system turn-off.

(§ 1, Ord. 2689, eff. June 17, 1999)

Sec. 6-8.715. Rates, fees, charges and deposits.

(a) All rates and fees regarding recycled water service and their administrative costs shall be established by the City Council and incorporated into OMC Title 6, Chapter 8B. Any changes in fee and rate schedules shall be automatically adopted into this chapter.

(b) Applicants for recycled water service shall pay their fair share for the construction of facilities needed to deliver recycled water to the applicant's properly. All fees and estimated construction costs shall be paid prior to construction; however, the City may reimburse the applicant for a portion of the cost of such facilities as described in subsection (c) of this section.

(c) Under certain circumstances, the City may contribute to the cost of designing and/or constructing the facilities needed to deliver recycled water to an applicant's property. Subject to the availability of funds, the City may:

(1) Reimburse an applicant for costs incurred to install oversized facilities in the public right-of-way.

(2) Elect to participate in or construct pipelines, reservoirs, pumping stations or other facilities, as it determines necessary, and/or as funds are available.

(3) Elect to fund or construct recycled water facilities, necessary for converting existing

customers from potable to recycled water, with customer reimbursement to the City in the form of an increased recycled water rate, not to exceed the potable rate, until such time as reimbursement is complete under the terms of the Recycled Water Use Agreement.

(§ 1, Ord. 2689, eff. June 17, 1999, as amended by § 29, Ord. 2816, eff. December 1, 2005)

Sec. 6-8.716. Size, location, and installation of service line.

Recycled water service lines shall be extended by the property owner/developer to a curb line or property line of the customer's property, abutting on a public street, highway, road or City easement in which recycled water mains are installed. The size and location and/or type of recycled water service lines, service connections, meters, backflow protection devices, and any/all other appurtenances are subject to review and approval by the City.

(§ 1, Ord. 2689, eff. June 17, 1999)

Sec. 6-8.717. Service connection limitations.

Recycled water service shall be subject to the following conditions:

(a) A recycled water service connection and its corresponding meter shall not be used to supply adjoining property of a different owner, or to supply property of the same owner across a road, street or other public right-of-way. When a property provided with a recycled water connection and corresponding meter is subdivided, such connection and meter shall be considered as serving the lot or parcel of land on which the meter is located. Additional recycled water mains and/or recycled water service lines will be required for all subdivided areas in accordance with this chapter.

(b) Private irrigation systems for homeowner's associations and other developments where landscaping around homes and in common areas are served with one meter, shall not be allowed to cross public roads, easements, or other public rights-of-way without City approval.

(c) All recycled water used on any property where a meter is installed must pass through the meter. Customers shall be held responsible and charged for all recycled water passing through their meters.

(§ 1, Ord. 2689, eff. June 17, 1999)

Sec. 6-8.718. Service pressure.

Whenever possible, the recycled water system will operate at a slightly lower pressure than the potable water system. This will cause potable water to flow in the recycled water system in the event of a cross-connection.

(§ 1, Ord. 2689, eff. June 17, 1999, as amended by § 30, Ord. 2816, eff. December 1, 2005)

Sec. 6-8.719. Relocation of recycled water service lines.

Should a recycled water service line installed according to the directions of the owner or user be of the wrong size, or installed at a wrong location or depth, the cost of relocation or removal shall be paid for by the user.

(§ 1, Ord. 2689, eff. June 17, 1999)

Sec. 6-8.720. Protective measures.

The following provisions are intended to protect the City's potable water supplies against actual, undiscovered, unauthorized, or potential cross- connections to the user's recycled water system. These provisions are in addition to, not in lieu of, the controls and requirements of other regulatory agencies. These provisions are in accordance with Title 17 (Public Health) of the California Code of Regulations.

(a) Approved backflow prevention devices on the City's potable water services to the property as required in these provisions, shall be provided, installed, tested, and maintained according to § 6-8.722. These devices shall be located on the property served immediately downstream of the potable water meter. All devices shall be readily accessible for testing and maintenance and no device shall be submerged at any time.

(b) When a request for recycled water service is initiated, the applicant must provide sufficient information, including plumbing and building plans, to enable the Administrator and other regulatory agencies to determine the level of backflow protection required. The proper backflow protection, as determined by the Administrator and other regulatory agencies, shall then be installed and tested according to § 6-8.722 before recycled water service is provided.

(c) Each time there is a change of tenant on any commercial or industrial premise, the owner or user shall notify the Administrator immediately. The Administrator will then reassess the level of protection required. In addition, any alterations to existing on-site facilities that may affect required protection level must be reported immediately to the Administrator.

(d) At their discretion, representatives of any health agency having jurisdiction, and the Administrator, may inspect any property provided recycled water service by the City. The inspection shall serve to determine if any actual or potential cross-connections exist. The owner or user shall provide full cooperation in facilitating the inspection.

(e) Where protection is required, an approved backflow protection device for potable water supplies shall be provided as follows:

(1) Each City water service connection that supplies potable water to a premises having an auxiliary water supply (including recycled water) that is not accepted as a potable source by the Administrator, and/or is not approved for potable use by the DHS, shall be protected against backflow from the premises into the City potable water system.

(2) Each City water service connection supplying potable or recycled water to a premises on which any substance is handled in such a fashion as to permit entry into the City water systems (potable or recycled) from the premises shall be protected against backflow. This shall include, but not limited to, the handling of fertilizers, process waters, waters originating from any of the City water systems that have been subject to deterioration in quality, and agricultural use.

(3) Approved backflow devices shall be installed where premises have intricate plumbing and piping arrangements or where not all portions of the premises are readily accessible for inspection.

(4) Appropriate backflow protection may be required at premises where there has been a history of cross-connections being re-established.

(f) Other measures.

(1) Water meters used for recycled water service shall be tagged or color-coded purple, color pantone 512 or 522, or otherwise distinguished as such per AWWA standards. These meters shall not be interchanged or used for potable water service after repairs and/or meter testing have been performed.

(2) Periodic inspection by the City of the recycled water facilities will determine if all identifying items are still clearly discernable. If not, they shall be immediately replaced, repaired or refurbished as needed, by the user. These items include:

(i) Warning tags.

(ii) Painted surfaces.

(iii) Warning tape.

(iv) Identification tape.

(v) Covers, caps, signs.

(vi) Other items that indicate recycled water is being used.

(3) To determine the existence of any cross-connections or backflow conditions into the potable water system, periodic testing by DHS approved methods will be performed by the Administrator and/or other regulatory agencies.

(4) In the event of contamination or pollution of a City potable water system due to a cross-connection or other failure, the DHS, the Administrator, and the IEUA shall be promptly notified by telephone so that appropriate and immediate measures may be taken to correct the problem.

(5) The state and county health departments, the Administrator, and the IEUA shall be kept informed by written document of the identity of the person responsible for the user's recycled water system on all premises concerned with these rules and regulations. At each authorized use area, an 'On-site' Recycled Water Supervisor shall be designated. This supervisor shall be responsible for:

(i) The installation and use of all components of the on-site recycled water system(s).

(ii) Prevention of cross-connections.

(iii) Change in use of recycled water.

(g) When the recycled water uses or conditions, as determined by the Administrator or other regulatory agency, represent a clear and immediate hazard to the City potable and/or recycled water supply that cannot be immediately removed or corrected, the Administrator shall terminate recycled water use. Conditions or uses that create a basis for termination include, but are not limited to, refusal to install, test or repair a required backflow prevention device.

(§ 1, Ord. 2689, eff. June 17, 1999, as amended by § 31, Ord. 2816, eff. December 1, 2005)

Sec. 6-8.721. Types of protection.

The level of protection required shall be related to the degree of potential hazard that exists on the premises served, and will be determined by the Administrator.

(§ 1, Ord. 2689, eff. June 17, 1999)

Sec. 6-8.722. Testing and maintenance of backflow prevention devices.

The user is responsible for testing all backflow prevention devices and maintaining these devices in a satisfactory operating condition. Testing shall be done at least once a year by a San Bernardino County certified backflow prevention tester. More frequent testing may be required if successive inspections indicate repeated failures. The backflow prevention devices shall be repaired, overhauled and/or replaced whenever they are found to be defective. These devices shall also be tested immediately after they are installed, relocated or repaired. All inspections, tests and repairs shall be performed at the user's expense. The user shall maintain records of all such tests, repairs and overhauls. These records shall be submitted to the Administrator, annually, and made available to the DHS, on request.

(§ 1, Ord. 2689, eff. June 17, 1999)

Sec. 6-8.723. Facilities design.

(a) The design of off-site facilities, including the preparation of plans and construction specifications shall be under the responsibility of an engineer registered in the State of California. The design of customer (on-site) facilities that will use recycled water, and preparations of plans and construction specifications, shall be stamped and signed by a State of California Registered Landscape Architect or Civil Engineer, unless otherwise approved by the Administrator.

(b) Before the Administrator grants final acceptance of any system using recycled water, as- built drawings of the system shall be provided. The installed system shall be tested in accordance with the City Standard Specifications to ensure that the system is in full compliance with these rules and regulations.

(c) All off-site and on-site recycled water facilities shall be designed and constructed according to the requirements, conditions, and standards as adopted in the City Standard Specifications to ensure that this system is in full compliance with this chapter. Recycled water systems, both on-site and off-site, shall be separate and independent of any potable water systems.

(d) Where the premises contain dual or multiple water systems, the exposed portions of pipelines shall be identified at sufficient intervals.

(e) Areas irrigated with recycled water must be kept completely separated from domestic water wells and reservoirs. Recycled water shall not be applied or allowed to migrate to within fifty (50) feet of any well used for domestic supply. No impoundment of recycled water shall be located within hundred (100) feet of any domestic water well, unless it can be demonstrated that special circumstances justify lesser distances to be acceptable.

(f) Adequate means of notification should be provided to inform the public, employees and others that recycled water is being used. Conspicuous signs with appropriate wording that can be clearly read should be placed at adequate intervals around the authorized use area.

(1) Golf courses should print messages on score cards in a different color indicating recycled

water is being used. Water hazards containing recycled water should be posted with appropriate signs.

(2) Languages in addition to English should be used on signs where appropriate.

(g) Off-site Facilities.

(1) Any off-site recycled water distribution facilities required to serve existing or new developments of the property within the City, as determined by the Administrator, shall be provided by the applicant, owner, or customer at their expense, unless the Administrator determines it is a City benefit to construct these capital facilities.

(2) Plans and specifications for all recycled water distribution facilities shall be submitted to and approved by the Administrator, and other regulatory agencies, in advance of construction.

(3) The City will assume responsibility for providing recycled water service to the point of connection of such development on transfer, to the City, title to all off-site recycled water systems and any necessary easements. All easements shall be in a form acceptable to the Administrator, and not subject to outstanding obligations to relocate such facilities or any deeds of trust, except in instances where such is determined by the Administrator to be in the best interest of the City.

(4) The City and the property owner or developer may enter into a reimbursement agreement for the portions of a recycled water system that are required to be oversized with capacity to supply more recycled water than the property owner or developer requires. The determination to enter into a reimbursement agreement, and the specific items that are the subject of reimbursement, will be made by the City.

(h) On-site facilities

(1) The user or the owner of the property shall be responsible for all costs associated with on-site recycled water facilities.

(2) When City Standards and Specifications require a higher quality material, equipment, design or construction method than that required by other governing codes, rules and regulations, the City Standards and Specifications shall take precedence.

(i) In areas where recycled water is not immediately available when the use area is ready for construction, and if the City has determined that recycled water will be supplied in the future, on-site facilities shall be designed to use recycled water. Provisions shall be made to allow for connection to the City off-site recycled water facilities, when available. In the interim, potable or other suitable water may be supplied to the on-site facilities through an “interim service connection.”

(j) Conditions of interim service are:

(1) The City anticipates recycled water will be available to the site within five (5) years of the time interim service is initiated.

(2) The user or the owner of the property must sign a Recycled Water Use Agreement.

(3) The user or the owner of the property must agree to perform or pay for all work necessary to remove the interim connection and make connections to the permanent recycled water system at the time

the recycled water system is installed.

(4) An approved backflow prevention device is required on the interim service. The backflow prevention device shall be at the point of connection with the interim supply system and a part of the on-site recycled water facilities.

(5) Future recycled water users will pay for the following:

(i) Cost of constructing and abandoning the interim service and cost of constructing the recycled water service.

(ii) Applicable recycled water fees at the time service becomes available.

(iii) Applicable interim water rates for the type of water delivered through the interim service.

(6) When recycled water is available to the site, an inspection of the on-site facilities will be conducted by the Administrator to verify that the facilities are still in compliance with the Recycled Water Use Agreement. Recycled water service shall be provided on verification of compliance. If the facilities are not in compliance, the Administrator shall notify the user to make any necessary corrections.

(§ 1, Ord. 2689, eff. June 17, 1999, as amended by § 32, Ord. 2816, eff. December 1, 2005)

Sec. 6-8.724. Construction.

(a) Construction of all new recycled water facilities will follow City Standards and Specifications and the American Water Works Association Construction Guidelines for Recycled Water Facilities.

(b) Where it is planned that an existing non- recycled water system shall be converted to a recycled water facility, the facilities to be converted to recycled water shall be investigated in detail at the user's expense, to determine the measures required to bring the system into full compliance with this Chapter. No existing potable water facilities shall be connected to or incorporated into the recycled water system without City and DHS approvals.

(c) If, due to on-site failure of the recycled water system, the Administrator determines that it is necessary to convert on-site facilities from a recycled water supply to a potable water supply, it shall be the responsibility of the user to pay all costs for such conversion. Conversion costs may include, but not be limited to, the following:

(1) Isolation of the recycled water supply. Service shall be removed and plugged at the City main or abandoned in a manner approved by the Administrator.

(2) Installation of approved backflow prevention devices, as determined by the Administrator, on all potable, and/or other water meter connections.

(3) Removal of any/all special recycled water quick couplers. The user shall be responsible for replacement with quick couplers approved for potable water systems.

(4) Notification to all on-site personnel involved.

(5) Removal of all warning labels/signs.

(6) Installation of any/all potable water facilities and payment of any associated capacity fees, as established in Title 6, Chapter 8B, of the Municipal Code.

(7) System flushing, disinfecting, decontamination, and water quality analyses, as required by the City and/or other regulatory agencies.

(§ 1, Ord. 2689, eff. June 17, 1999)

Sec. 6-8.725. Emergency connection of the recycled water system to the potable water system.

If the Administrator determines an emergency exists where all or parts of the recycled water system are unable to provide recycled water, the Administrator may approve an emergency temporary connection to the potable water system. Before such emergency temporary connection is made, the portion without recycled water shall be isolated by an air gap separation from the remainder of the recycled water system. This isolation shall occur at either individual services or on the off-site system, as determined by the Administrator. An approved backflow prevention device shall be installed on the potable water lines in accordance with this chapter. The emergency temporary connection shall be removed before connection to the recycled water system is re-established. Re-establishment of recycled water service must be inspected and approved by the Administrator prior to resuming delivery of recycled water.

(§ 1, Ord. 2689, eff. June 17, 1999)

Sec. 6-8.726. Off-site facilities.

The City and/or the Inland Empire Utilities Agency shall be responsible for the operation, maintenance and surveillance of all off-site recycled water systems. This includes but is not limited to recycled water pipelines, valves, connections, storage facilities, and other related equipment and property up to and including the meter. Only City and/or the Inland Empire Utilities Agency personnel and their representatives shall operate, adjust, change, alter, move or relocate any portion of their respective off-site recycled water facilities.

(§ 1, Ord. 2689, eff. June 17, 1999)

Sec. 6-8.727. On-site facilities.

(a) General.

(1) The operation, surveillance, repair, and maintenance of all customer recycled water facilities are the responsibility of the user and his designated “On-site” Recycled Water Supervisor.

(2) The Administrator shall have the right to enter the user's premises to monitor and inspect all on-site recycled water facilities. Where necessary, keys and/or lock combinations shall be issued to the Administrator to provide such access during hours of recycled water system operation.

(b) The user shall have the following responsibilities pertaining to operation of on-site facilities:

(1) Ensure that all operations personnel are trained and familiarized with the use of recycled

water.

(2) Furnish their operations personnel with maintenance instructions, irrigation schedules, controller charts, and as-built drawings to ensure proper operation in accordance with the on-site facilities design and these rules and regulations.

(3) Prepare and submit to the Administrator one reproducible set of as-built drawings.

(4) Notify the Administrator of all updates or proposed changes, modifications, or additions to the on-site facilities and operations for review and approval prior to construction or implementation. All updates and proposed changes shall comply with this chapter, the Recycled Water Use Agreement and any other applicable rules and regulations.

(5) Ensure that the operation and maintenance of all recycled water facilities remain in accordance with this chapter, the Recycled Water Use Agreement and any other applicable rules and regulations.

(6) Operate and control the system in order to prevent direct human consumption of recycled water and to control and limit runoff. The user or the owner of the property shall be responsible for any and all subsequent uses of the recycled water. Operation and control measures to be utilized in this regard shall include where appropriate, but not limited to:

(i) Minimizing discharge onto areas not under control of the user so as to minimize public contact. Full circle sprinklers shall not be used adjacent to sidewalks, roadways, and property lines in order to confine the discharge to the use area.

(ii) Operating the on-site recycled water facilities during periods of minimal human use of the service area, and allowing a maximum dry-out time before the irrigated area will be used by the public.

(iii) Providing adequate first aid kits on the premises, and promptly treating all cuts and abrasions to prevent infection. If infection is likely, a physician should be consulted.

(iv) Taking any other precautionary measures to minimize direct contact with recycled water. User's employees, residents, and the public should not be subjected to recycled water sprays.

(v) Applying recycled water at a rate that does not exceed the infiltration rate of the soil. Where varying soil types are present, the design and operation of the recycled water facilities shall be compatible with the lowest infiltration rate of the soils present.

(vi) Reporting to the Administrator any/all failures in the recycled water system that cause an unauthorized discharge of recycled water.

(vii) Protecting all drinking fountains located within the approved use area, by location and/or a structure from contact with recycled water to the maximum extent possible. Windblown spray, direct application through irrigation or other approved uses are considered sources of recycled water. Protection shall be by design, construction practice, or system operation.

(viii) Protecting facilities that may be used by the public, including but not limited to, eating surfaces and playground equipment located within the approved use areas, by seating and/or structure

from contact with recycled water to the maximum extent possible. Windblown spray, direct contact by irrigation application, or other approved uses are considered sources of recycled water. Protection shall be by design, construction practice, or system operation.

(c) The user shall enforce the following prohibitions:

(1) Cross-connections, as defined by the California Code of Regulations, Title 17, resulting from the use of recycled water or from the physical presence of a recycled water service, whether by design, construction practice, or system operation, are prohibited.

(2) Discharge of recycled water for any purposes, in areas other than those specifically approved in the Recycled Water Use Agreement, and without the prior approval of the Administrator, is prohibited.

(3) Use or installation of permanent hose bibs on any customer water system that presently operates or is designed to operate with recycled water is prohibited.

(4) Conditions that directly or indirectly cause recycled water to pond either within or outside of the approved use area, whether by design, construction practice, or system operation are prohibited, unless designed specifically for ponding and approved by Administrator.

(5) Conditions that directly or indirectly cause runoff of recycled water onto areas outside of approved use areas, whether by design, construction practice, or system operation, are prohibited.

(6) Use of recycled water for any purposes other than those specifically approved in the Recycled Water Use Agreement, and without the prior approval of the Administrator, is prohibited.

(7) Conditions that directly or indirectly permit windblown spray to pass outside of the approved use area, whether by design, construction practice, or system operation, are prohibited.

(§ 1, Ord. 2689, eff. June 17, 1999)

Sec. 6-8.728. Monitoring and inspection.

The Administrator will monitor and inspect the entire recycled distribution facility, including both off-site and on-site facilities. The Administrator will conduct monitoring programs, maintain records as deemed necessary, inspect on-site facilities for compliance with these rules and regulations, and provide reports as requested by DHS. For these purposes, the Administrator will have the right to enter the user's premises during hours of recycled water system operation to inspect on-site recycled water facilities and approved use areas, to verify that the user's irrigation practices conform with this Chapter and the Recycled Water Use Agreement.

(§ 1, Ord. 2689, eff. June 17, 1999)

Sec. 6-8.729. Maintenance responsibility.

(a) The user or owner is responsible for maintaining all on-site facilities that are under the ownership of parties other than the City.

(b) No person shall place, dispose, deposit or permit the placement, disposal, deposit of oil, toxic,

hazardous or contaminated liquid or waste, trash, soil, building materials or any other substances, objects, or obstructions in, on, or around meter boxes or other City facilities. No person shall allow or permit meter boxes or other City facilities from becoming obstructed or obscured by trees, shrubs, plants or in any other manner so as to impede their use or access or make their location difficult to determine. If such substances, objects, or obstructions are not cleaned and removed or are permitted to obscure or impede use or access to such facilities, the City may accomplish the cleaning and removal at the user's expense. The Administrator will provide reasonable notice to the user before assessing the charge.

(§ 1, Ord. 2689, eff. June 17, 1999)

Chino Municipal Code

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Title 13 WATER, SEWERS AND UTILITIES

Chapter 13.06 RECYCLED WATER REGULATIONS

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Title 13 WATER, SEWERS AND UTILITIES

Chapter 13.06 RECYCLED WATER REGULATIONS

13.06.010 Authority.

A. The use of water recycled from domestic sewage is regulated by the California Regional Water Quality Control Board Santa Ana Region (RWQCB). Article 2 of Chapter 7 of Division 7 of the California Water Code establishes a state policy to encourage the use of recycled water. Permission to use recycled water is based on Inland Empire Utilities Agency's ability to adequately treat domestic wastewater to the point that the recycled water (effluent) meets the requirements of existing Title 22, Chapter 3 regulations of the California Administrative Code. Title 22 was promulgated by the State Department of Health Service to ensure proper health protection and specify the treatment degree to match the intended applications.

B. In accordance with waste discharge requirements for water reclamation projects, the RWQCB requires regulation measures for facilities distributing recycled water. (Ord. 98-12 § 1 (part), 1998.)

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Title 13 WATER, SEWERS AND UTILITIES

Chapter 13.06 RECYCLED WATER REGULATIONS

13.06.020 Purpose.

The purpose of this chapter is to establish rules and regulations including procedures, specifications and limitations for the safe and orderly development and operation of recycled water facilities and systems within the city's service area. (Ord. 98-12 § 1 (part), 1998.)

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Title 13 WATER, SEWERS AND UTILITIES

Chapter 13.06 RECYCLED WATER REGULATIONS

13.06.030 Goals.

The goals of this chapter are as follows:

A. Achieve conservation of potable water supplies by using recycled water for current and future demands. Recycled water uses shall be for the maximum public benefit and may include:

Agricultural irrigation,

Commercial uses (including flushing toilets and urinals),

Construction use,

Groundwater recharge,

Industrial processes,

Landscape irrigation,

Landscape and/or recreational impoundments,

Wildlife habitat;

B. Maintain recycled water quality through a stringent pretreatment program for commercial and industrial wastes and by restricting brine discharges from water softeners, evaporative coolers and other sources;

C. Prevent direct human consumption of recycled water through:

1. Adherence to all applicable rules and regulations,

2. Posting of warning signs by the user,

3. Cross-connection/backflow prevention program;

D. Control runoff of recycled water through monitoring of the installation and operation of all recycled water facilities and use areas;

E. Monitor recycled water quality. (Ord. 98-12 § 1 (part), 1998.)

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Title 13 WATER, SEWERS AND UTILITIES

Chapter 13.06 RECYCLED WATER REGULATIONS

13.06.040 Policy.

It is the policy of the city that recycled water be used for any purposes approved for recycled water use, when it is economically, technically and institutionally feasible. Recycled water shall be the primary source of supply for commercial and industrial uses, whenever available and/or feasible. Use of potable water for commercial and industrial uses shall be contrary to city policy; shall not be considered the most beneficial use of a natural resource; and shall be avoided to the maximum extent possible. (Ord. 98-12 § 1 (part), 1998.)

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Title 13 WATER, SEWERS AND UTILITIES

Chapter 13.06 RECYCLED WATER REGULATIONS

13.06.050 Priority.

Recycled water shall be provided on a first-come, first-served basis, as long as recycled water is available. (Ord. 98-12 § 1 (part), 1998.)

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Title 13 WATER, SEWERS AND UTILITIES

Chapter 13.06 RECYCLED WATER REGULATIONS

13.06.060 Definitions.*

Unless the context specifically indicates otherwise, the following terms and phrases, as used in this chapter, in addition to the definitions set forth in Title 22, Division 4, Chapter 3, Regulations, of the California Administrative Code, shall have the meanings hereinafter designated.

"AFY" means acre-feet per year.

"Agency" means the Inland Empire Utilities Agency (IEUA).

"Agricultural use" means water used for the production of crops and/or livestock.

"Air-gap separation" means a physical break between a supply pipe and a receiving vessel. The air gap shall be at least double the diameter of the supply pipe, measured vertically above the top rim of the vessel, and in no case less than one inch.

"Applicant" means any person, group, firm, partnership, corporation, association or agency that applies for recycled water service.

"Application rate" means the rate at which irrigation water is applied to a design or use area, expressed in gallons per minute.

"Approved double check valve assembly" means an assembly of at least two independently acting check valves including tightly closing resilient seated (typ.) shut-off valves on each side of the check valve assembly and suitable leak-detector drains plus connections available for testing the water tightness of each check valve. This assembly shall only be used to protect a non-health hazard.

"Approved reduced pressure principle backflow prevention device" means a device incorporating two check valves and an automatically operating differential relief valve located between the two checks, two (typ.) shut-off valves, and equipped with necessary appurtenances for testing. The device shall operate to maintain the pressure in the zone between two check valves two psi less than the pressure on the city and/or Inland Empire Utilities Agency water supply side of the device. At cessation of normal flow, the pressure between the check valves shall be less than the supply pressure. In case of leakage of either check valve, the differential relief valve shall operate to maintain this reduced pressure by discharging to the atmosphere. To be approved, these devices must be readily accessible for maintenance and testing, and installed in a location where no part of the valve will be submerged.

"Approved use" means an application of recycled water in a manner, and for a purpose, designated in a user permit issued by the city and in compliance with all applicable regulatory agency requirements.

"Approved use area" means a site, with well-defined boundaries, designated in a permit for recycled water service issued by the city to receive recycled water for an approved use as acknowledged by all applicable regulatory agencies.

"As-built drawings" means the record drawings that show the completed facilities as constructed or modified.

"Automatic system" means the electrically actuated controllers, valves and associated equipment used to program and operate irrigation systems for the efficient application of recycled water.

"Auxiliary water supply" means any water supply on or available to the premises other than the city's potable water.

"AWWA" means the American Water Works Association.

"Check valve" means a check valve that seats readily and completely. It must be carefully machined to have free moving parts and assure water tightness. The face of the closure element and valve seat must be bronze or other noncorrodible material that will seat tightly under all prevailing conditions of field use. Pins and bushings shall be of bronze or other noncorrodible, nonsticking material. The closure element (e.g., clapper) shall be internally weighted or otherwise internally equipped to promote rapid and positive closure in all sizes where this feature is obtainable.

"City council" means the city council of the city of Chino.

"Commercial/industrial use" means the water used for toilets, urinals, decorative fountains, decorative indoor and outdoor landscape, industrial process such as rinsing, washing, cooling, flushing, circulation or construction; and other uses approved by the city.

"Commodity charge" means a charge imposed by the city for all metered, recycled water used.

"Connection fee" means a fee imposed by the city for obtaining recycled water service from the city by means of its recycled water facilities, including, but not necessarily limited to, a service activation fee.

"Cross-connection" means any unapproved and/or unprotected, actual or potential, connection between any part of a potable water system and any equipment, source or system containing water or other substances not approved as safe and potable for human consumption.

"Customer" means any person, group, firm, partnership, corporation, association or agency that legally receives recycled water service from the city.

"Design area" means a site, with well-defined boundaries, proposed to receive recycled water for an approved use, as delineated in the application for recycled water service.

"Direct beneficial use" means the use of recycled water, which has been transported from the point of production to the point of use, without an intervening discharge to waters of the state.

"Discharge" means any release or distribution of recycled water to a use area or disposal site/mechanism (outfall, live stream discharge, municipal sewage system). All discharges of recycled water must be approved by the city and/or the Inland Empire Utilities Agency.

"DOHS" means the Department of Health Services (state and/or county).

"Greenbelt areas" means those areas including, but not limited to, parkways, parks, rights-of-way and landscaping within and/or surrounding a community.

"HCF" means hundred cubic feet. This is a common unit of water volume measurement used for billing purposes.

"Industrial process water" means the water used in industrial facilities for blending, rinsing, washing or cooling.

"Infiltration rate" means the rate at which water penetrates the soil surface and enters the soil profile.

"Landscape impoundment" means a body of water containing recycled water, which is used for aesthetic or irrigation purposes and which is not intended for public contact or ingestion.

"Landscape irrigation/use" means recycled water used for the propagation and maintenance of trees, shrubs, ground cover and turf used for erosion control and aesthetic value, not for

resale/profit purposes.

"Nonpotable water" means water that has not been treated for, or is not acceptable for, human consumption, in conformance with federal, state and local water standards. Nonpotable water includes recycled water.

"Off-site facilities" means all existing or proposed facilities under the control of the purveyor, from the source of supply to the point of connection with the customer's on-site facilities, normally up to and including the agency's meter and meter box.

"On-site facilities" means all existing or proposed facilities within property under the control of the customer, normally downstream of the agency's meter.

"On-site recycled water supervisor" means a qualified person designated by a recycled water user and approved by the city to be responsible for the safe and efficient operation of the user's recycled water system. This person shall be knowledgeable in the operation of the recycled water system, and in the application of federal, state and local guidelines, criteria, standards and rules and regulations governing the use of recycled water.

"Open space" means land that has been designated to remain undeveloped. These areas may receive recycled water service for agricultural or landscape irrigation, or other approved uses.

"Permit" means a processed and approved application package to, and agreement with, the city for recycled water service.

"POC" means the point of connection at the recycled water service meter.

"Ponding" means the retention of recycled water on the ground surface or manmade surface for a period of time following the cessation of an approved recycled water use activity, such that potential hazard to the public health may result, as determined by regulatory agencies.

"Potable water" means water which conforms to the latest federal, state and local drinking water standards.

"PSI" means pounds per square inch. This is a common unit expression of pressure measurement.

"Recreational impoundment" means a body of recycled water used for recreational activities including, but not limited to, fishing, boating and/or swimming. Allowable uses will depend on treatment level of the recycled water.

"Recycled water" means as defined in Title 22, Division 4, of the California Administrative Code, water, which as a result of treatment of wastewater, is suitable for direct beneficial use or a controlled use that otherwise would not occur. The treatment of wastewater is accomplished in accordance with the criteria set forth in the code.

"Recycled water facilities" means the systems, structures, etc., used in the treatment, storage, pumping, transmission and distribution of recycled water.

"Regulatory agency" means those public entities legally constituted by federal, state and local statutes to protect health and water quality.

"Runoff" means the flow of water along natural or manmade surfaces away from the designated use area.

"RWQCB" means the Regional Water Quality Control Board, Santa Ana Region.

"Secondary effluent" means any wastewater that has been treated by gravity sedimentation to remove settled solids remaining after the primary biological treatment process.

"Service" means the delivery of recycled water to a user.

"Service connection" means city facilities between the city recycled water distribution system and the customer's meter, including, but not limited to, the meter, meter box, valves and piping equipment.

"Standard specifications" means the specifications approved by the city for construction of recycled water facilities.

"Tertiary effluent" means any secondary effluent which has been disinfected and filtered. Allowable uses for tertiary effluent shall include body contact and irrigation of human food crops.

"Unauthorized discharge" means any release of recycled water that violates these rules and regulations or any applicable federal, state or local statutes, regulations, ordinances, contracts or other requirements.

"Use area" means the specific area designated to be served with recycled water through on-site recycled water facilities.

"User" means any person, group, firm, partnership, corporation, association or agency accepting recycled water from the city's recycled water facilities for use in accordance with this chapter. "Applicant," "owner" or "customer" are terms that are to be considered as users.

"Windblown spray" means any dispersed, airborne particles of recycled water capable of being transmitted through the air to a location other than that for which the direct application of recycled water is approved. (Ord. 98-12 § 1 (part), 1998.)

* NOTE: Devices used shall be included on the list of devices approved by the Foundation for Cross-Connection Control and Hydraulic Research, School of Engineering, University of Southern California.

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Chapter 13.06 RECYCLED WATER REGULATIONS

13.06.070 Administrator.

Except as otherwise provided in this chapter, the director of public works shall administer, implement and enforce the provisions of this chapter. The director of public works may, at his discretion, delegate any or all of these powers and duties. (Ord. 98-12 § 1 (part), 1998.)

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13.06.080 Validity.

If any section, subsection, sentence, clause or phrase of this chapter establishing rules and regulations for the use of recycled water is for any reason found to be invalid or unconstitutional, such decision shall not affect the remaining portions of this chapter. The city council declares that it would have approved this chapter by section, subsection, sentence, clause or phrase irrespective of the fact that any one or more of the sections, subsections, sentences, clauses or phrases be declared invalid or unconstitutional. (Ord. 98-12 § 1 (part), 1998.)

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13.06.090 Right of revision.

The city council reserves the right to amend this chapter, as it deems appropriate. (Ord. 98-12 § 1 (part), 1998.)

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13.06.100 Service area.

The rules and regulations contained in this chapter apply to recycled water service to lands and/or improvements lying within the legal boundaries of the city, to properties contiguous to the city under the same ownership as abutting lands within the city or its designated service boundary. Recycled water service shall be provided to a specific service area when related distribution facilities are completed and service becomes available. (Ord. 98-12 § 1 (part), 1998.)

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Chapter 13.06 RECYCLED WATER REGULATIONS

13.06.110 Determination of recycled use area.

A. General.

1. The city council may adopt a water reclamation master plan or utilize the Inland Empire Utilities Agency Recycled Water Master Plan designating current and potential areas for recycled water use. The master plan shall be in accordance with the requirements of all regulatory agencies and encourage recycled water use. The master plan may be reviewed and updated as needed.

2. The city council may review its master plan and recommend where water service should be made with recycled water in place of potable water. Where it is determined recycled water is, or will be available within five years, the city may request modifications to existing on-site water facilities and require construction of recycled water systems in new developments.

3. The city council may enter into agreements with surrounding cities and/or other agencies to determine recycled water use areas within the service area/jurisdiction of those entities.

B. Existing Potable Water Service.

1. On adoption of this chapter, and each update of the city master plan, the city council may make determinations of areas where existing potable water use should be with recycled water.

2. A notice of the determination to use recycled water shall be sent to the current owner, explaining the reasons for use and resultant procedures needed to facilitate recycled water use.

C. New Recycled Water Service. On submittal by applicant of a tentative map, land use permit, other proposed land development/land use, or request for recycled water service, the city engineer shall make preliminary determinations if recycled water service should be provided to the area in question. The city engineer may require the use of recycled water for approved uses, and refuse or otherwise restrict potable water service when recycled water is available and approved for use. (Ord. 98-12 § 1 (part), 1998.)

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13.06.120 Authorized uses.

In accordance with the goals as stated in this chapter, the uses of recycled water include only those uses approved by the California State Department of Health Services (DOHS) and for which Title 22 of the California Administrative Code provides treatment requirements. Each such use will be considered for approval on case-by-case basis. Prior to approval, the city engineer may set forth specific requirements as conditions to providing service, and/or require specific prior approval from the Inland Empire Utilities Agency and/or other appropriate regulatory agencies. (Ord. 98-12 § 1 (part), 1998.)

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Chapter 13.06 RECYCLED WATER REGULATIONS

13.06.130 Conditions of service.

A. Recycled water service shall be provided by the city engineer only if a permit for such service is obtained in the manner provided in this chapter. Recycled water service shall be available, provided, and used in accordance with other codes, rules and regulations as listed in Section 13.06.140.

B. If any of the following conditions of service are not satisfied at all times, the permit for recycled water service may be revoked by the city engineer after which all recycled water service shall cease in the manner described herein.

1. Financial. Conditions relating to service fees and billing shall be similar, but not the same, as established for the potable water system. Rates for recycled water service shall be adopted by the city council as listed in Resolution No. 98-18 (Appendix I).

2. Operational.

a. Liability. The city shall not be liable for any damage by recycled water or resulting from:

i. Defective plumbing;

ii. Broken or faulty services or recycled water mains;

iii. On-site facilities failures;

iv. High- or low-pressure conditions;

v. Interruptions of service.

b. Service Basis. All recycled water will be provided to the user in the conditions and quantity specified in the permit for recycled water service. Recycled water use will not be subject to the same restrictions as potable water during drought conditions and will be supplied as available.

3. Regulatory. Recycled water service may be terminated whenever the quality of the recycled water does not comply with the requirements of the regulatory agencies, or at any time the provisions of the chapter regarding the use of recycled water are violated, or at any time that the permit conditions, whether contained in an agreement, are violated. (Ord. 98-12 § 1 (part), 1998.)

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13.06.140 Other applicable rules and codes.

For regulations that are the same for potable and recycled water, use applicable regulations, or sections of already adopted potable water system regulations:

Item	Current Regulation
Backflow prevention	CMC 13.04.075
Billing	CMC 13.04.100
Deposits	CMC 13.04.030
Penalties	CMC 13.04.100; 13.04.120
Delinquencies	CMC 13.04.120
Metering	CMC 13.04.020; 13.04.040

Other guidelines, rules and regulations, ordinances and specifications that may be applied by the city engineer to govern the use of recycled water within the city include:

Agency/Organization	Document Number	Document Title
Inland Empire Utilities Agency	Ordinance No. 63	Regional Recycled Water Distribution System Ordinance
California DOHS	Title 22, Division 4	Water Reclamation
California DOHS	Title 17	Regulations Relating to Cross-Connections
California-Nevada Section AWWA		Guidelines for Distribution of Non-Potable Water
Foundation for Cross-Connection	Most Current Edition	Manual of Cross-Connection Control and Hydraulic Research, School of Engineering, University of Southern California

(Ord. 98-12 § 1 (part), 1998.)

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Chapter 13.06 RECYCLED WATER REGULATIONS

13.06.150 Permit application process.

The steps for obtaining recycled water permits are as follows:

A. Obtain application form for recycled water service from utility billing. By signature on the application form, the applicant states that he/she agrees to comply with this chapter and any and all applicable governing documents.

B. Complete application package and submit to public works. The application package shall consist of:

1. Completed recycled water service application form;

2. Existing facility "as-built" drawings or proposed facility plans as appropriate;

3. Description of where and how recycled water use is proposed;

4. Any other information pertinent to the use of recycled water as requested by the city engineer.

C. Schedule appointment with the city engineer to review application packet. Subsequent to meeting, submit any additional information required.

D. Prepare engineering report describing proposed/requested recycled water use(s). Submit engineering report to the city engineer. As a minimum, the engineering report shall consist of the following information:

1. Applicant’s relationship to the subject property as legal owner, tenant or lessee;

2. Description of recycled water use on the property;

3. Legal description of property;

4. Technical information requested on recycled water service application form;

5. Total irrigated acres (if applicable);

6. Special conditions (other items that could be of concern when using recycled water);

7. A sketch of the property, including:

a. Locations of all service connections and waterlines (recycled, potable, any other auxiliary source),

b. Proposed size of recycled water service connection,

c. Areas to be served with recycled water and areas excluded from recycled water service;

8. A brief description of any/all special construction requirements.

E. The city engineer will review the engineering report. The city engineer will inform applicant of any needed revisions.

F. The engineering report approved by the city engineer will be forwarded to the State

Department of Health Services (DOHS) for review and approval.

G. The city engineer and applicant will address any concerns that the DOHS has regarding the engineering report and revise the report accordingly.

H. Once the DOHS has approved the engineering report, the city engineer will prepare a permit for recycled water service (see Section 13.06.160). Any auxiliary agreement between the city and the applicant, related to the permit for recycled water service, will be with the approval of the city attorney.

I. Applicant will pay any applicable fees.

J. The city engineer will schedule a start-up test of on-site recycled water system to ensure that cross-connections do not exist.

K. The city engineer will direct recycled water service valves to be turned on and service will begin. (Ord. 98-12 § 1 (part), 1998.)

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Chapter 13.06 RECYCLED WATER REGULATIONS

13.06.160 Permits.

A city permit for recycled water service must be obtained by the user to receive recycled water on any property. Permits to receive recycled water service, or any connection for service made as provided in the permit issued under this chapter pursuant to receipt of an application for such service, shall be subject to the following conditions:

A. The applicant shall adhere to requirements prescribed by this chapter and to all additional requirements required by all governing agencies governing recycled water use.

B. The applicant shall pay any specified connection fees, service line charges and other charges prior to issuance of the permit.

C. In order to maintain acceptable operating conditions throughout the recycled water system, the city engineer may schedule recycled water use for specific applications. Such scheduling may involve programming deliveries to different users and/or to various portions of a single user's on-site system. Any scheduling shall consider the operating constraints of the affected users.

D. The city engineer may temporarily terminate recycled water service at any time recycled water produced by the Inland Empire Utilities Agency reclamation plant does not meet the requirements of the regulatory agencies. Recycled water service would, in such case, be restored when the recycled water meets the governing requirements. The city may provide water service from other approved sources. In addition, approved air gap separations may be modified (as approved) to provide potable water to the recycled water system to ensure water service.

E. The city will apply for and process all applicable regulatory agency permits. The cost and preparation of any study or report necessary to comply with the California Environmental Quality Act (CEQA) or other regulatory requirements shall be the responsibility of the applicant, unless otherwise determined by the city council.

F. The use permit shall come into force after the project has been completely constructed, tested and been approved by the involved agencies.

G. A copy of the current permit must be available for review at all times, and on file at the user's office.

H. As a minimum, the use permit shall include the following:

1. Name and address of owner and user;

2. A statement that no changes in the proposed system will be undertaken without application for and issuance of an amended permit;

3. A statement that the applicant recognizes potential penalties for violation of this chapter and any regulatory agencies;

4. A copy of the DOHS-approved engineering report;

5. Specific quantity of recycled water to be used. The following must be identified:

a. Estimated average annual AFY used,

b. Maximum GPM needed at the POC as shown on the plans;

6. Permitted/approved uses.

I. The use permit shall stay in effect as provided in the permit or related agreement, but shall be cancelled or amended if:

1. A change of ownership occurs;

2. A change of recycled water use occurs;

3. A change in the piping system has been implemented without prior approval;

4. A violation of these rules and regulations occurs and results in a system turn-off. (Ord. 98-12 § 1 (part), 1998.)

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Chapter 13.06 RECYCLED WATER REGULATIONS

13.06.170 Rates, fees, charges and deposits.

A. General.

1. All rates and fees regarding recycled water service and their administrative costs shall be fixed and established by the city council. The most current fee and rate schedules shall be established by resolution of the city council and incorporated into this chapter. Any changes in fee and rate schedules shall be automatically adopted into this chapter.

2. Applicants for recycled water service shall pay their fair share for the construction of facilities needed to deliver recycled water to the applicant's property. All fees and estimated construction costs shall be paid prior to construction; however, the city may reimburse the applicant for a portion of the cost of such facilities as described in subsection D, Financial Participation by City.

B. Change of Rates or Charges. The city reserves the right to change the schedule of recycled water rates, service charges and any other charges, deposits or fees at any time. These changes are subject to the terms of any existing recycled water service permits (and/or agreements) and will be made by appropriate action of the city council.

C. Temporary Service. The recycled water rate for all water sold through temporary meters shall be established by action of the city council. The charges for recycled water sold through temporary meters shall be billed and paid on a monthly basis.

D. Financial Participation by City. Under certain circumstances, the city may contribute to the cost of designing and/or constructing the facilities needed to deliver recycled water to an applicant's property. Subject to the availability of funds, the city may:

1. Reimburse an applicant for costs incurred to install oversized facilities in the public right-of-way;

2. Elect to participate in or construct pipelines, reservoirs, pumping stations or other facilities, as it determines necessary, and/or as funds are available. (Ord. 98-12 § 1 (part), 1998.)

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13.06.180 Size, location and installation of service line.

The city reserves the right to determine the size and location and/or type of:

A. Recycled water service lines;

B. Service connections;

C. Meters;

D. Backflow protection devices and any/all other appurtenances included to the service area.

Recycled water service lines shall be extended by the property owner/developer to a curb line or property line of the customer's property, abutting on a public street, highway, road or city easement in which recycled water mains are installed. (Ord. 98-12 § 1 (part), 1998.)

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13.06.190 Service connection limitations.

Permits for recycled water service shall be subject to the following conditions:

A. A recycled water service connection and its corresponding meter shall not be used to supply adjoining property of a different owner.

B. A service connection shall not be used to supply adjoining property of a different owner, or to supply property of the same owner across a road, street or other public right-of-way. When a property provided with a recycled water connection and corresponding meter is subdivided, such connection and meter shall be considered as serving the lot or parcel of land on which the meter is located. Additional recycled water mains and/or recycled water service lines will be required for all subdivided areas in accordance with this chapter.

C. Private irrigation systems for homeowner's associations and other developments where landscaping around homes and in common areas are served with one meter, shall not be allowed to cross public roads, easements, or other public rights-of-way.

D. All recycled water used on any property where a meter is installed must pass through the meter. Customers shall be held responsible and charged for all recycled water passing through their meters.

E. Every recycled water service line installed by the city (or its agent) shall be equipped with a right angle valve (per city standard) on the inlet side of the meter. The right angle valve is to be used only by city personnel to control the recycled water supply through the water service line. If the right angle valve is damaged by the customer to an extent requiring replacement, then the customer shall bear full financial responsibility.

F. Service is commenced after issuance of a permit for recycled water service by the city. (Ord. 98-12 § 1 (part), 1998.)

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13.06.200 Service pressure.

The city will make every reasonable effort to supply recycled water at a service pressure that is nearly equal to the potable water system pressure at the location of interest. If recycled water service pressure does not meet the needs of the user, then it shall be the user's responsibility to increase or decrease the recycled water pressure on the user's side of the recycled water meter. (Ord. 98-12 § 1 (part), 1998.)

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13.06.210 Relocation of recycled water service lines.

Should a recycled water service line installed according to the directions of the applicant, owner, or customer (user) be of the wrong size, or installed at a wrong location or depth, the cost of relocation or removal shall be paid for by the user where the error was that of the user or the user's representative. (Ord. 98-12 § 1 (part), 1998.)

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Chapter 13.06 RECYCLED WATER REGULATIONS

13.06.220 Protective measures.

The following provisions are intended to protect the city's potable water supplies against actual, undiscovered, unauthorized or potential cross-connections to the user's recycled water system. These provisions are in addition to, not in lieu of, the controls and requirements of other regulatory agencies. These provisions are in accordance with Title 17 (Public Health) of the California Administrative Code.

A. Approved backflow prevention devices, on the city's potable water services to the property, as required in these provisions, shall be provided, installed, tested and maintained by the user at user expense, unless otherwise determined by the city engineer. These devices shall be located on the property served immediately downstream of the meter. All devices shall be readily accessible for testing and maintenance and no device shall be submerged at any time.

B. When a request for recycled water service is initiated, the applicant must provide sufficient information, including plumbing and building plans, to enable the city engineer and other regulatory agencies to determine the level of backflow protection required. The proper backflow protection, as determined by the city engineer and other regulatory agencies, shall then be installed, inspected and tested before recycled water service is provided.

C. Each time there is a change of customer (either owner or tenant) on any commercial or industrial premise, the owner or customer shall notify the city engineer immediately. The city engineer will then reassess the level of protection required. In addition, any alterations to existing on-site facilities that may affect required protection level must be reported immediately to the city engineer.

D. At their discretion, representatives of any health agency having jurisdiction, and the city engineer, may conduct surveys of any property where recycled water service is provided by the city. These surveys shall serve to determine if any actual or potential cross-connections exist. The applicant, owner, or customer shall provide full cooperation in facilitating these surveys.

E. Where Protection is Required. Approved backflow protection for potable water supplies shall be provided as follows:

1. Each city water service connection that supplies potable water to a premises having an auxiliary water supply (including recycled water) that is not accepted as a potable source by the city engineer, and/or is not approved for potable use by the DOHS, shall be protected against backflow from the premises into the city potable water system.

2. Each city water service connection supplying potable or recycled water to a premises on which any substance is handled in such a fashion as to permit entry into the city water systems (potable or recycled) from the premises shall be protected against backflow. This shall include, but not be limited to, the handling of fertilizers, process waters, waters originating from any of the city water systems that have been subject to deterioration in quality, and agricultural use.

3. Approved backflow devices shall be installed where premises have intricate plumbing and piping arrangements or where not all portions of the premises are readily accessible for inspection.

4. Appropriate backflow protection may be required at premises where there has been a history of cross-connections being re-established.

F. Other Measures.

1. Whenever possible, the city will operate the recycled water system at a slightly lower pressure than the potable water system. This will cause potable water to flow in the recycled water system in the event of a cross-connection.

2. Water meters used for recycled water service shall be tagged or color-coded purple, color pantone 512 or 522, or otherwise distinguished as such per AWWA standards. These meters shall not be interchanged or used for potable water service after repairs and/or meter testing have been performed.

3. Periodic inspection, by the city, of the recycled water facilities will determine if all identifying items are still clearly discernable. If not, they shall be replaced, repaired or refurbished as needed, by the user. These items include:

a. Warning tags;

b. Painted surfaces;

c. Warning tape;

d. Identification tape;

e. Covers, caps, signs;

f. Other items that indicate recycled water is being used.

4. To determine the existence of any cross-connections or backflow conditions into the potable water system, periodic testing by DOHS approved methods will be performed by the city engineer and/or other regulatory agencies.

5. In the event of contamination or pollution of a city potable water system due to a cross-connection or other failure, the DOHS, the city engineer and the IEUA shall be promptly notified, so that appropriate and immediate measures may be taken to correct the problem.

6. The state and county health departments, the city engineer and the IEUA shall be kept informed by written document of the identity of the person responsible for the user's recycled water system on all premises concerned with these rules and regulations. At each authorized use area, an on-site recycled water supervisor shall be designated. This supervisor shall be responsible for:

a. The installation and use of all components of the on-site recycled water system(s);

b. Prevention of cross-connections;

c. Change in use of recycled water.

G. Recycled Water Service Termination Due to Health and Safety Concerns. When the city engineer determines that recycled water uses or conditions encountered by the city engineer represent a clear and immediate hazard to the city potable and/or recycled water supply that cannot be immediately removed or corrected, the city engineer shall begin the procedure for terminating recycled water use. Conditions or uses that create a basis for termination include, but are not limited to:

1. Refusal to install a required backflow prevention device;

2. Refusal to test a backflow prevention device;

3. Refusal to repair or replace a faulty backflow prevention device;

4. Direct or indirect connection between the potable and recycled water systems;

5. Direct or indirect connection between the recycled water system and a system or equipment containing contaminants;

6. A situation which presents an immediate health hazard to the city potable and/or recycled water system, as determined by the city engineer, Inland Empire Utilities Agency or other regulatory agency. (Ord. 98-12 § 1 (part), 1998.)

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13.06.230 Type of protection.

The level of protection required shall be related to the degree of potential hazard that exists on the premises served, and will be determined by the city engineer. (Ord. 98-12 § 1 (part), 1998.)

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13.06.240 Inspection and maintenance of protective devices.

The user is responsible for inspection and testing of all backflow prevention devices at least once a year, or more often in those instances where successive inspections indicate repeated failure. All inspections and tests shall be performed at the user's expense by a city-approved testing firm. These devices shall be repaired, overhauled and/or replaced at the expense of the user whenever they are found to be defective. These devices shall also be tested immediately after they are installed, relocated or repaired. The user shall maintain records of all such tests, repairs and overhauls. These records shall be made available to the DOHS, on request, and submitted to the city engineer, annually. (Ord. 98-12 § 1 (part), 1998.)

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Chapter 13.06 RECYCLED WATER REGULATIONS

13.06.250 Facilities design.

The design of off-site facilities, including the preparation of plans and construction specifications shall be under the responsibility of an engineer registered in the state of California. The design of customer (on-site) facilities that will use recycled water, and preparations of plans and construction specifications, shall be stamped and signed by a state of California Registered Landscape Architect or Civil Engineer, unless otherwise approved by the city engineer. Before the city engineer grants final acceptance of any system using recycled water, as-built drawings of the system shall be provided. The installed system shall be tested in accordance with the city standard specifications to ensure that the system is in full compliance with these rules and regulations.

A. General.

1. All off-site and on-site recycled water facilities shall be designed and constructed according to the requirements, conditions and standards as adopted in the city standard specifications to ensure that this system is in full compliance with this chapter. Recycled water systems, both on-site and off-site, shall be separate and independent of any potable water systems.

2. Where the premises contain dual or multiple water systems, the exposed portions of pipelines shall be identified at sufficient intervals to distinguish clearly which water is not safe for drinking purposes.

3. Areas irrigated with recycled water must be kept completely separated from domestic water wells and reservoirs. Recycled water shall not be applied or allowed to migrate to within fifty feet of any well used for domestic supply, and no impoundment of recycled water shall be located within one hundred feet of any domestic water well, unless it can be demonstrated that special circumstances justify lesser distances to be acceptable.

4. Adequate means of notification should be provided to inform the public, employees and others that recycled water is being used. Conspicuous signs with appropriate wording that can be clearly read, should be placed at adequate intervals around the authorized use area.

a. Golf courses should print messages on score cards in a different color indicating recycled water is being used. Water hazards containing recycled water should be posted with appropriate signs.

b. Languages in addition to English should be used on signs where appropriate.

B. Off-site Facilities.

1. Any off-site recycled water distribution facilities required to serve existing or new developments of the property within the city, as determined by the city engineer, shall be provided by the applicant, owner or customer at their expense, unless the city engineer determines it is a city benefit to construct these capital facilities.

2. Plans and specifications for all recycled water distribution facilities shall be submitted to and approved by the city engineer, and other regulatory agencies, in advance of construction.

3. The city will assume responsibility for providing recycled water service to the point of connection of such development on transfer, to the city, title to all off-site recycled water systems and any necessary easements. All easements shall be in a form acceptable to the city engineer, and not subject to outstanding obligations to relocate such facilities or any deeds of trust, except

in instances where such is determined by the city engineer to be in the best interest of the city.

4. The property owner, proponent or developer may request that the city enter into a reimbursement agreement for the portions of a recycled water system that are required to be oversized (considering standard sizes of materials and city standards) with capacity to supply more recycled water than the property owner, proponent or developer requires. Or for certain items that would not be required if potable water were to be used in place of recycled water. The determination to enter into a reimbursement agreement, and the specific items that are the subject of reimbursement, will be made by the city.

C. On-site Facilities.

1. Any on-site recycled water facility shall be provided by the applicant, owner or customer at his expense. The applicant, owner or customer shall retain title to all on-site facilities.

2. When this chapter and/or standard specifications require a higher quality material, equipment, design or construction method than that required by other governing codes, rules and regulations, the city specifications shall take precedence.

D. Interim Service. In areas where recycled water is not immediately available when the use area is ready for construction, and if the city has determined that recycled water will be supplied in the future, on-site facilities shall be designed to use recycled water. Provisions shall be made, and this chapter followed, to allow for connection to the city off-site recycled water facilities, when available. In the interim, potable or other suitable water may be supplied to the on-site facilities through an "interim service connection."

1. Conditions of interim service are:

a. The city anticipates recycled water will be available to the site within five years of the time interim service is initiated;

b. The applicant must obtain a permit for recycled water service;

c. The applicant must agree to perform or pay for all work necessary to remove the interim connection and make connections to the permanent recycled water system at the time the recycled water system is installed.

2. An approved backflow prevention device is required on the interim service. The backflow prevention device shall be at the point of connection with the interim supply system and a part of the on-site recycled water facilities.

3. Future recycled water customers will pay for the following:

a. Cost of constructing and abandoning the interim service, and cost of constructing the recycled water service;

b. Applicable recycled water fees at the time service becomes available;

c. Applicable interim water rates for the type of water delivered through the interim service.

4. When recycled water is available to the site, an inspection of the on-site facilities will be conducted by the city engineer to verify that the facilities have been adequately maintained and are still in compliance with the recycled water use permit. Recycled water service shall be provided on verification of compliance. If the facilities are not in compliance, the city engineer shall notify the user to correct the situation. (Ord. 98-12 § 1 (part), 1998.)

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Chapter 13.06 RECYCLED WATER REGULATIONS

13.06.260 Construction.

A. New. Construction of all recycled water facilities will follow the city standard specifications (i.e., American Water Works Association Construction Guidelines for Recycled Water Facilities), unless otherwise specified by the city engineer.

B. Conversion to Recycled Water Use. Where it is planned that an existing nonrecycled water system be converted to a recycled water facility, the facilities to be converted to recycled water shall be investigated in detail at the user's expense, unless otherwise determined by the city engineer. On a case-by-case basis, the city engineer and other regulatory agencies will review the materials, specified in Section 13.06.150, deemed necessary to determine the measures required to bring the system into full compliance with this chapter. No existing potable water facilities shall be connected to or incorporated into the recycled water system without city and other regulatory agency approvals.

C. Conversion from Recycled Water Use. If, due to on-site failure of the recycled water system or use violations, the city and/or other regulatory agencies determine it possible and necessary to convert on-site facilities from a recycled water supply to a potable, or other, water supply, it shall be the responsibility of the user to pay all costs for such conversion, unless determined otherwise by the city engineer. Conversion costs may include, but not be limited to, the following:

1. Isolation of the recycled water supply. Service shall be removed and plugged at the city main or abandoned in a manner approved by the city engineer;

2. Installation of approved backflow prevention devices, as determined by the city engineer and other regulatory agencies. The user shall install approved backflow devices on all potable, and/or other water meter connections;

3. Removal of any/all special recycled water quick couplers. The user shall be responsible for replacement with quick couplers approved for potable water systems;

4. Notification to all on-site personnel involved;

5. Removal of all warning labels/signs;

6. Installation of any/all potable water facilities and payment of any associated capacity fees, as provided for in the city water service code;

7. System flushing, disinfecting, decontamination and water quality analyses, as required by the city and/or other regulatory agencies. (Ord. 98-12 § 1 (part), 1998.)

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Chapter 13.06 RECYCLED WATER REGULATIONS

13.06.270 Emergency connection of the recycled water system to the potable water system.

If the city engineer determines an emergency exists where all or parts of the recycled water system are unable to provide recycled water, the city engineer may approve an emergency temporary connection to the potable water system. Before such emergency temporary connection is made, the portion without recycled water shall be isolated by an air gap separation from the remainder of the recycled water system. This isolation shall occur at either individual services or on the off-site system, as determined by the city engineer or other regulatory agencies. An approved backflow prevention device shall be installed on the potable water lines in accordance with this chapter and all other applicable regulations of the governing agencies. The emergency temporary connection shall be removed before connection to the recycled water system is re-established. Re-establishment of recycled water service must be inspected and approved by the city engineer prior to resuming delivery of recycled water. (Ord. 98-12 § 1 (part), 1998.)

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Chapter 13.06 RECYCLED WATER REGULATIONS

13.06.280 Off-site facilities.

Operation, maintenance and surveillance of all city and/or the Inland Empire Utilities Agency off-site recycled water systems including but not limited to, recycled water pipelines, valves, connections, storage facilities, and other related equipment and property up to and including the meter, shall be under the management and control of the city and/or the Inland Empire Utilities Agency. No other persons except authorized representatives of the city and/or the Inland Empire Utilities Agency shall have the right to enter any of the city and/or the Inland Empire Utilities Agency off-site facilities. Only city and/or the Inland Empire Utilities Agency personnel and their representatives shall operate, adjust, change, alter, move or relocate any portion of the off-site recycled water system. (Ord. 98-12 § 1 (part), 1998.)

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Title 13 WATER, SEWERS AND UTILITIES

Chapter 13.06 RECYCLED WATER REGULATIONS

13.06.290 On-site facilities.

A. General.

1. The operation, surveillance, repair and maintenance of all customer recycled water facilities are the responsibility of the user. The user's designated on-site recycled water supervisor shall bear this responsibility.

2. The city engineer will monitor and inspect all on-site recycled water facilities and associated records, and for these purposes will have the right to enter the user's premises. Where necessary, keys and/or lock combinations shall be issued to the city engineer to provide such access during hours of recycled water system operation. Monitor and inspection includes documenting inspection observations by photograph and copying of records.

B. The user shall have the following responsibilities pertaining to operation of on-site facilities:

1. To ensure that all operations personnel are trained and familiarized with the use of recycled water;

2. To furnish their operations personnel with maintenance instructions, irrigation schedules, controller charts, and as-built drawings to ensure proper operation in accordance with the on-site facilities design and these rules and regulations;

3. To prepare and submit to the city engineer one reproducible set of as-built drawings;

4. To notify the city engineer of all updates or proposed changes, modifications or additions to the on-site facilities and operations. All updates and proposed changes must be approved by the city engineer prior to construction or implementation. All updates and proposed changes shall comply with this chapter and governing documents of all other regulatory agencies;

5. To ensure that the operation and maintenance of all recycled water facilities remain in accordance with this chapter and other documents governing recycled water systems within the city;

6. To operate and control the system in order to prevent direct human consumption of recycled water and to control and limit runoff. The applicant, owner or customer shall be responsible for any and all subsequent uses of the recycled water. Operation and control measures to be utilized in this regard shall include where appropriate, but not limited to:

a. On-site recycled water facilities shall be operated to prevent or minimize discharge onto areas not under control of the customer so as to minimize public contact. Full-circle sprinklers shall not be used adjacent to sidewalks, roadways and property lines in order to confine the discharge to the use area,

b. The operation of the on-site recycled water facilities shall be during periods of minimal human use of the service area. Consideration shall be given to allow a maximum dry-out time before the irrigated area will be used by the public. For agricultural operations, the soil moisture reservoir shall be depleted (dried) by at least thirty percent before harvest,

c. Adequate first aid kits should be available on the premises. All cuts and abrasions should be promptly treated to prevent infection. If infection is likely, a physician should be consulted,

d. Other precautionary measures should be taken to minimize direct contact with recycled water.

User's employees, residents and the public should not be subjected to recycled water sprays,

e. Recycled water shall be applied at a rate that does not exceed the infiltration rate of the soil. Where varying soil types are present, the design and operation of the recycled water facilities shall be compatible with the lowest infiltration rate of the soils present,

f. When the application rate exceeds the soil infiltration rate, automatic controller systems shall be utilized to minimize ponding and runoff of recycled water. Total sprinkler run times shall not be greater than the time needed to supply the landscape's water requirement. If runoff occurs before the landscape's water requirements are met, the automatic controllers shall be reprogrammed with additional watering cycles of shorter duration to meet the requirements. This method of operation is intended to control and limit runoff,

g. The user shall report to the city engineer any/all failures in the recycled water system that cause an unauthorized discharge of recycled water,

h. All drinking fountains located within the approved use area, designated by the user permit, shall be protected by location and/or a structure from contact with recycled water to the maximum extent possible. Windblown spray, direct application through irrigation or other approved uses are considered sources of recycled water. Protection shall be by design, construction practice, or system operation,

i. Facilities that may be used by the public, including but not limited to eating surfaces and playground equipment and located within the approved use areas designated by the user permit, shall be protected by seating and/or structure from contact with recycled water to the maximum extent possible. Windblown spray, direct contact by irrigation application, or other approved uses are considered sources of recycled water. Protection shall be by design, construction practice or system operation.

C. The user shall enforce the following prohibitions:

1. Cross-connections. Cross-connections, as defined by the California Administrative Code, Title 17, resulting from the use of recycled water or from the physical presence of a recycled water service, whether by design, construction practice or system operation, are prohibited.

2. Discharge in Unapproved Areas. Discharge of recycled water for any purposes, in areas other than those specifically approved in the currently effective user permit issued by the city engineer, and without the prior knowledge and approval of the governing regulatory agencies, is prohibited.

3. Hose Bibs. Use or installation of permanent hose bibs on any customer water system that presently operates or is designed to operate with recycled water, regardless of the hose bib construction or identification is prohibited.

4. Ponding. Conditions that directly or indirectly cause recycled water to pond either within or outside of the approved use area, whether by design, construction practice or system operation are prohibited, unless designed specifically for ponding and approved by regulatory agencies.

5. Runoff. Conditions that directly or indirectly cause runoff of recycled water onto areas outside of approved use areas, whether by design, construction practice or system operation, are prohibited.

6. Unapproved Uses. Use of recycled water for any purposes other than those specifically approved, in the currently effective user permit issued by the city engineer, and without the prior knowledge and approval of the governing regulatory agencies, is prohibited.

7. Windblown Spray. Conditions that directly or indirectly permit windblown spray to pass outside of the approved use area, whether by design, construction practice or system operation, are prohibited. (Ord. 98-12 § 1 (part), 1998.)

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Title 13 WATER, SEWERS AND UTILITIES

Chapter 13.06 RECYCLED WATER REGULATIONS

13.06.300 Monitoring and inspection.

The city engineer will monitor and inspect the entire recycled distribution facility, including both off-site and on-site facilities. The city engineer will conduct monitoring programs, maintain records as deemed necessary, inspect on-site facilities for compliance with these rules and regulations, and provide reports as requested by the regulating agencies. For these purposes, the city engineer will have the right to enter the customer's premises during hours of recycled water system operation to inspect on-site recycled water facilities and approved use areas, to verify that the customer's irrigation practices conform with this chapter. (Ord. 98-12 § 1 (part), 1998.)

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Title 13 WATER, SEWERS AND UTILITIES

Chapter 13.06 RECYCLED WATER REGULATIONS

13.06.310 Maintenance responsibility.

A. Recycled Water System. The applicant, owner or customer is responsible for maintaining all on-site facilities that are under the ownership of parties other than the city.

B. Obstruction in Meter Boxes. No person shall place, dispose, deposit or permit the placement, disposal, deposit of oil, toxic, hazardous or contaminated liquid or waste, trash, soil, building materials or other substances, objects or obstructions in, on or around meter boxes or other city facilities. No person shall allow or permit meter boxes or other city facilities from becoming obstructed or obscured by trees, shrubs, plants or in any other manner so as to impede their use or access to them to make their use or access to them or make their location difficult to determine. If such substances, objects or obstructions are not cleaned and removed or are permitted to obscure or impede use or access to such facilities, the city may accomplish the cleaning and removal at the user's expense. The city engineer will provide reasonable notice to the user before assessing the charge. (Ord. 98-12 § 1 (part), 1998.)

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Appendix C

INLAND EMPIRE UTILITIES AGENCY
REGIONAL PLANT NO. 5

PLANT FACILITIES CALCULATIONS

Appendix C
Plant Facilities Calculations

C.1 Calculations follow for Tables in Section 4:

(Only those tables in Section 4 that have calculated or estimated values are shown herein. See Section 4 for other tables, references, and explanations.)

Table 4-1
Summary of RP-5 Flowrates and Peaking Factors for Title 22 Compliance[1]

Parameter	Flowrate (mgd)[2]	Peaking Factor[3]
Average Annual Day Flow (AADF)	16.3	1.00
Maximum Month Flow (MMF)	18.9	1.16
Peak Dry Weather Flow (PDWF)	28.2	1.73
Peak Wet Weather Flow (PWWF)	32.6	2.00
Typical Effluent Diurnal Flow	22.3 – 26.1	1.37 – 1.6

1. Reference: IEUA, 2008.
2. Refer to right margin for calculations.
3. Peaking factor = MMF, PDWF, PWWF, or Typical Diurnal Flow (mgd) / AADF(mgd)

Comment [BGS1]: 16.3 mgd x 1.16 peaking factor = 18.9 mgd

Comment [BGS2]: 16.3 mgd x 1.73 peaking factor = 28.2 mgd

Comment [BGS3]: 16.3 mgd x 2.0 peaking factor = 32.6 mgd

Comment [BGS4]: 16.3 mgd x 1.37 peaking factor = 22.3 mgd

16.3 mgd x 1.6 p.f. = 26.1 mgd

Table 4-2
Design Raw Wastewater Characteristics

Parameter	Units	Value
Annual Average Raw Influent Quality:[1]		
BOD-5 day	mg/L	214
TSS	mg/L	221
NH_3-N	mg/L	37.5
TKN	mg/L	43.3
pH	--	7.5
TDS	mg/L	514
Annual Average Raw Influent Loadings:[2]		
BOD-5 day	lbs/day	29,092
TSS	lbs/day	30,043

1. Reference: IEUA, 2010a.
2. Calculated values. See right margin.

Comment [BGS5]: 214 mg/L x 16.3 mgd (AADF) x 8.34 lb/mil gal/mg/L= 29,092 lbs/day

Comment [BGS6]: 221 mg/L x 16.3 mgd (AADF) x 8.34 lb/mil gal/mg/L= 30,043 lbs/day

Table 4-4
Influent Pumping Capacity[1]

Process	Peak Capacity (mgd)	Annual Average Capacity With All Units in Service (mgd)	Title 22 Reliable Annual Average Capacity (mgd)
Influent Pumping	36	18	24

1. Refer to right margin for calculations.
2. Based on two pumps in service at 12 mgd each (one pump out of service).

Comment [BGS7]: Three pumps (including standby pump) at 12.0 mgd each = 36 mgd

Comment [BGS8]: 36.0 mgd / 2.0 p.f. = 18.0 mgd

Comment [BGS9]: Two duty pumps at 12.0 mgd each = 24 mgd

Table 4-6
Preliminary Treatment Capacity[1]

Process	Peak Capacity (mgd)	Annual Average Capacity With All Units in Service (mgd)	Title 22 Reliable Annual Average Capacity (mgd)
Bar screens	90	45	30
Grit basin	30	16.3	16.3[2]

1. Refer to right margin for calculations.
2. See discussion in Section 4 regarding reliable capacity of the grit removal process.

Comment [BGS10]: Three bar screens at 30 mgd each = 90 mgd

Comment [BGS11]: 90 mgd / 2.0 peaking factor = 45 mgd

Comment [BGS12]: Two bar screens at 30 mgd = 60 mgd / 2.0 peaking factor = 30 mgd

Table 4-7
Primary Treatment Design Criteria

Parameter	Units	Value
Primary Clarifiers[1]***:***		
Number	units	2
Diameter	ft	100
Surface Area, each	sq ft	7,854
Side Water Depth	ft	12
Surface overflow rate at PWWF, all units in service[2]	gpd/sq ft	2,075
Surface overflow rate at PWWF, one unit out of service[2]	gpd/sq ft	4,151
Surface overflow rate at AADF, all units in service[2]	gpd/sq ft	1,038
Surface overflow rate at AADF, one unit out of service[2]	gpd/sq ft	2,075
Primary Sludge Pumps[1]		
Number	units	3 (2 duty, 1 standby)
Type	--	Progressive cavity, variable speed

Comment [BGS13]: 32.6 mgd * 1,000,000 gal/MG / 7,854 ft^2 * 2 units = 2,075 gpd/sq ft

Comment [BGS14]: 32.6 mgd * 1,000,000 gal/MG / 7,854 ft^2 * 1 units = 4,151 gpd/sq ft

Comment [BGS15]: 16.3 mgd * 1,000,000 gal/MG / 7,854 ft^2 * 2 units = 1,038 gpd/sq ft

Comment [BGS16]: 16.3 mgd * 1,000,000 gal/MG / 7,854 ft^2 * 1 units = 2,075 gpd/sq ft

Table 4-7
Primary Treatment Design Criteria

Parameter	Units	Value
Capacity, each	gpm @ psi	230 @ 62
Primary Scum Pumps[1]		
Number	units	2
Type	--	Progressive cavity
Capacity, each	gpm @ psi	100 @ 62
Ferric Chloride Storage and Feed System		
Number of storage tanks	units	1
Total storage volume	gal	9600
Number of pumps	units	2
Pump type	--	Diaphragm
Pump capacity, each	gph @ psi	53 @ 150
Ferric chloride dosage	mg/L	5 to 8
Total ferric chloride use	lbs/day	695
Polymer Storage and Feed System		
Number of storage tanks	units	2 Totes (as needed)
Total storage volume	gal	275 (per tote)
Number of pumps	units	2
Pump type	--	Diaphragm
Pump capacity, each	gph @ psi	4 @ 100
Polymer dosage	mg/L	0.15

1. Reference: Carollo, 2004, unless otherwise noted.
2. Refer to right margin for calculated values.

Table 4-8
Primary Treatment Capacity

Process	Peak Capacity (mgd)	Annual Average Capacity With All Units in Service (mgd)	Title 22 Reliable Annual Average Capacity (mgd)
Primary Clarifiers	32.6[1]	16.3	16.3[2]

1. For more information on calculated values, see right margin.
2. Refer to the discussion in Section 4 regarding Title 22 Reliable Annual Average Capacity.

Comment [BGS17]: 16.3 mgd * 2 units = 32.6 mgd

Table 4-9
Secondary Treatment Design Criteria[1]

Parameter	Units	Value
Aeration Basins:		
Number	units	2
Volume, each	MG	5.16
Depth	ft	19
Anoxic volume	%	17 - 58
Solids Retention Time (SRT)		
At Max Month Flow, all units in service	days	29.9
At Max Month Flow, 1 unit out of service	days	25.9
Design MLSS Concentration		
At Max Month Flow, all units in service	mg/L	3,770
At Max Month Flow, 1 unit out of service	mg/L	3,830
Hydraulic Retention Time (HRT)		
At Max Month Flow, all units in service	hrs	13.4
At Max Month Flow, 1 unit out of service	hrs	11.7
Lbs MLSS/mgd		
At Max Month Flow, all units in service	lbs MLSS/mgd	17,511
At Max Month Flow, 1 unit out of service	lbs MLSS/mgd	15,563
Nominal HRT (with 200% MLR)		
At Max Month Flow, all units in service	hrs	2.8
At Max Month Flow, 1 unit out of service	hrs	2.1
Mixed Liquor Return Pumps		
Number	per basin	1
Type	--	Propeller, variable speed
Capacity, each	gpm	6,300
Recirculation ratio	Qr/Qi (avg)	1 - 3
Secondary Clarifiers:		
Number	units	4
Diameter	ft	130
Surface area, each	sq ft	13,273
Side water depth	ft	17

Table 4-9
Secondary Treatment Design Criteria[1]

Parameter	Units	Value
Flow to secondary clarifiers based on maximum month flow conditions[2]	mgd	18.9
Surface Overflow Rate		
At Max Month Flow, all units in service[2]	gpd/sq ft	356
At Max Month Flow, 1 unit out of service[2]	gpd/sq ft	475
At Max Primary Effluent Weir Setting Flow, 23.4 mgd, all units in service[2]	gpd/sq ft	441
At Max Primary Effluent Weir Setting, 23.4 mgd, 1 unit out of service[2]	gpd/sq ft	588
Peak Capacity at Overflow 600 gpd/sq ft, all units in service[2]	mgd	31.9
Peak Capacity at Overflow 600 gpd/sq ft, 1 unit out of service[2]	mgd	23.9
Annual Average Capacity at Overflow rate 600 gpd/sq ft, all units in service[2]	mgd	22.2
Annual Average Capacity at Overflow rate 600 gpd/sq ft, 1 unit out of service[2]	mgd	16.6
Secondary Treatment Process peaking factor (flow equalized)[2]	--	1.44
Design maximum SVI	ml/g	150
Return Activated Sludge Pumps		
Number	units	5
Type	--	Screw Centrifugal, Variable Speed
Capacity, each	gpm	2,500
Return ratio	percent of ADF	70 to 170
Return sludge concentration	mg/L	3,000 – 9,000
Waste Activated Sludge Pumps (WAS)		
Number	units	2
Type	--	Positive Displacement, Variable Speed
Capacity, each	gpm	100

Comment [BGS18]: (18.9 mgd x 1,000,000) / (13,273 ft2 x 4 units) = 356 gpd/sq ft

Comment [BGS19]: 18.9 mgd x 1,000,000) / (13,273 ft2 x 3 units) = 475 gpd/sq ft

Comment [BGS20]: 23.4 mgd x 1,000,000) / (13,273 sq ft x 4 units) = 441 gpd/sq ft

Comment [BGS21]: 23.4 mgd x 1,000,000) / (13,273 sq ft x 3 units) = 588 gpd/sq ft

Comment [BGS22]: (13,273 sq ft x 4 units x 600 gpd/sq ft) / 1000000 = 31.9 mgd

Comment [BGS23]: (13,273 sq ft x 3 units x 600 gpd/sq ft) / 1000000 = 23.9 mgd

Comment [BGS24]: (13,273 sq ft x 4 units x 600 gpd/sq ft) / 1000000 = 31.9 mgd / 1.44 p.f. = 22.2 mgd

Comment [BGS25]: (13,273 sq ft x 3 units x 600 gpd/sq ft) / 1000000 = 23.9 mgd / 1.44 p.f. = 16.6 mgd

Comment [BGS26]: 23.4 mgd / 16.3 mgd = 1.44 p.f.

Table 4-9
Secondary Treatment Design Criteria[1]

Parameter	Units	Value
Secondary Scum Pumps		
Number	units	2
Type	--	Submersible
Capacity, each	gpm	600

1. Reference: Carollo, 2004, unless otherwise noted.
2. Refer to right margin for calculations.

Table 4-10
Secondary Treatment Capacity[1]

Process	Peak Capacity (mgd)	Annual Average Capacity Using Redundancy (mgd)	Title 22 Reliable Annual Average Capacity (mgd)
Aeration Basins	23.4[2]	17.1[3]	16.3
Secondary Clarifiers	31.9	22.2	16.6

1. Refer to Table 4-9 above for calculations.
2. Peak capacity with all aeration basins in service is based on the primary effluent weir setting.
3. Reference: Carollo, 2004.

Table 4-11
Filtration Design Criteria[1]

Parameter	Units	Value
Filters:		
Number of filters	units	12
Surface area per filter	sq ft	300
Design peak surface loading rate	gpm/sq ft	5.0
Length	ft	21 feet 3 inches
Width	ft	14 feet 2 inches
Filter bed depth	ft	40
Backwash flow	%	5
Maximum capacity, all units in service (at 5 gpm/sq ft)[2]	mgd	25.9
Maximum capacity, one unit out of service (at 5 gpm/sq ft)[2]	mgd	23.8
Filtration System peaking factor (flow equalized)[2]	--	1.44
Annual average capacity, all units in	mgd	18.0

Comment [BGS27]: 5 gpm/sq ft x 300 sq ft x 12 units = 18,000 gpm = 25.9 mgd

Comment [BGS28]: 5 gpm/sq ft x 300 sq ft x 11 units = 16,500 gpm = 23.8 mgd

Comment [BGS29]: 23.4 mgd / 16.3 mgd = 1.44 p.f.

Comment [BGS30]: 5 gpm/sq ft x 300 sq ft x 12 units = 18,000 gpm = 25.9 mgd / 1.44 p.f. = 18.0 mgd

Table 4-11
Filtration Design Criteria[1]

Parameter	Units	Value
service (at 5 gpm/sq ft)[2]		
Annual average capacity, one unit out of service (at 5 gpm/sq ft)[2]	mgd	16.5
Media		
Type	--	High grade silica sand (minimum 95% silica)
Effective size	mm	0.9
Uniformity coefficient	--	≤1.5
Rapid Mixer		
Horsepower	hp	10
Speed	rpm	100
Velocity gradient, G	1/seconds	300
Flocculators		
Number	units	4
Horsepower, each (listed from upstream to downstream flocculators)	hp	3.0, 2.0, 1.5, 1.0
Maximum speed, each (listed from upstream to downstream flocculators)	rpm	45, 37, 30, 25
Minimum speed	rpm	½ of maximum speed
Speed control	--	Variable frequency drive
Velocity gradient (listed from upstream to downstream flocculators)	1/seconds	40-80, 30-60, 22-44, 17-34
Filter Recycle Pumps		
Number	units	3
Capacity, each	gpm @ ft	420 @ 28
Horsepower, each	hp	7.5
Alum System		
Design average flow	mgd	15
Design peak flow	mgd	30
Design average dosage	mg/L	1
Design peak dosage	mg/L	5
Peak alum feed rate required	gph	10
Number of alum pumps	units	2 (1 duty, 1 standby)
Alum pump capacity, each	gph	12
Storage at average flow and dosage	days	14

1. Reference: Carollo, 2004, unless otherwise noted.
2. For more information on calculated values, see right margin.

Comment [BGS31]: 5 gpm/sq ft x 300 sq ft x 11 units = 16,500 gpm = 23.8 mgd / 1.44 p.f. = 16.5 mgd

Table 4-12
Chlorination and Dechlorination Design Criteria[1]

Parameter	Units	Value
Chlorine Contact Basins:		
Number	units	2
Number of channels per basin	--	5
Length	ft	125
Width, per channel	ft	12.5
Side water depth[2]	ft	15.5
Volume, per basin[3]	gal	900,000
Total volume[3]	gal	1,800,000
Required modal contact time	min	90
Ratio of modal to theoretical contact time	--	0.815
Peak capacity	mgd	23.5
Annual average capacity[3]	mgd	16.3
Sodium Hypochlorite System		
Design average flow	mgd	15
Design peak flow	mgd	30
Design average dosage	mg/L	15
Design peak dosage	mg/L	20
Peak hypochlorite feed rate required	gph	200
Number of hypochlorite pumps	units	4 (3 duty, 1 standby)
Hypochlorite pump capacity, each	gph	77
Storage at average flow and dosage	days	14
Dechlorination System:		
Average sodium bisulfite dose	mg/L	5.76
Average sodium bisulfite feed rate	lbs/day	476
Average sodium bisulfite use	gpd	282
Maximum sodium bisulfite dose	mg/L	11.5
Maximum sodium bisulfite feed rate	lbs/day	892
Maximum sodium bisulfite use	gpd	536
Sodium Bisulfite Feed Pumps		
Number of tanks	units	2
Volume per tank	gallons	5200
Total storage	gallons	10400
Sodium Bisulfite Feed Pumps		
Number of pumps	units	4
Capacity per pump	gph	53 gph @ 150psi

1. Reference: Carollo, 2004, unless otherwise noted.
2. Assuming effluent weir elevation of 568.94.
3. For more information on calculated values, see right margin.

Comment [BGS32]: 125 ft x (12.5 ft x 5 channels) x 15.5 ft = 121,094 cu ft = 900,000 gal (approximate)

Comment [BGS33]: (125 ft x (12.5 ft x 5 channels) x 15.5 ft) x 2 basins = 242,188 cu ft = 1,800,000 gal (approximate)

Comment [BGS34]: 23.5 mgd / 1.44 p.f. = 16.3 mgd

Table 4-13
Tertiary Treatment Capacity[1]

Process	Peak Capacity (mgd)	Annual Average Capacity Using Redundancy (mgd)	Title 22 Reliable Annual Average Capacity (mgd)
Filters	25.9	18.0	16.5
Chlorine Contact Basins	23.5[2]	16.3	16.3

1. For more information on calculated values, see right margin.
2. Refer to Section 4 for more information on the maximum flow allowable through the chlorine contact basins.

Comment [BGS35]: 5 gpm/sq ft x 300 sq ft x 12 units = 18,000 gpm = 25.9 mgd

Comment [BGS36]: 5 gpm/sq ft x 300 sq ft x 12 units = 18,000 gpm = 25.9 mgd / 1.44 p.f. = 18.0 mgd

Comment [BGS37]: 25.9 mgd / 12 units. = 2.16 mgd per unit x 11 units = 23.7 mgd / 1.44 p.f. = 16.5 mgd

Comment [BGS38]: 23.5 mgd / 1.44 p.f. = 16.3 mgd

Appendix D

INLAND EMPIRE UTILITIES AGENCY

REGIONAL PLANT NO. 5

CHLORINE CONTACT BASIN CONTACT TIME TESTING

City of Chino, California
CCB Contact Time Testing - Inland RP5
June 2004
SFE File #C43-03

Final Report

Submitted To:

Carollo Engineers
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92708
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95834
(916) 925-2511

1.0 INTRODUCTION

This report provides details of the Chlorine Contact Basin (CCB) testing conducted by SFE Global at the RP5 WWTP in the City of Chino, California. The project included the injection of concentrated salt solution into the CCB and the measurement of conductivity at the outlet of the CCB for Title 22 conformance. Testing was performed on May 15th, 2004.

Mr. Rob Larson, as Project Manager and Mr. Michael Cottle as Field Service Technician represented SFE during this project.

2.0 TESTING PROGRAM

Testing was performed according to methodology developed by Turner Designs, the manufacturer of fluorometry equipment utilized by SFE Global. Due to high chlorine residual concentration an alternative method of testing was performed with a slug injection of supersaturated salt solution. Conductivity measurements were performed at the CCB outlet with a Foxborough Digital Conductivity Meter and data logger. Logged data and manual readings were used to determine Modal contact time of the Chlorine Contact Basin, relative to the time of slug-injection at the inlet.

The methodology used for this application was as follows:

- Install conductivity meter at the outlet, approximately two feet below water surface.
- Dose granular salt into water and mix until dissolved.
- Slug inject salt solution near the CCB chlorine injection diffuser.
- Read conductivity data at outlet and record values for calculation of Modal contact time.

Conditions were excellent for this testing. Flow rate from the plant flow meter was obtained and recorded during the test. The average flow rate over the testing period is indicated on the following table of contact times. Data obtained indicated a well-defined peak conductivity.

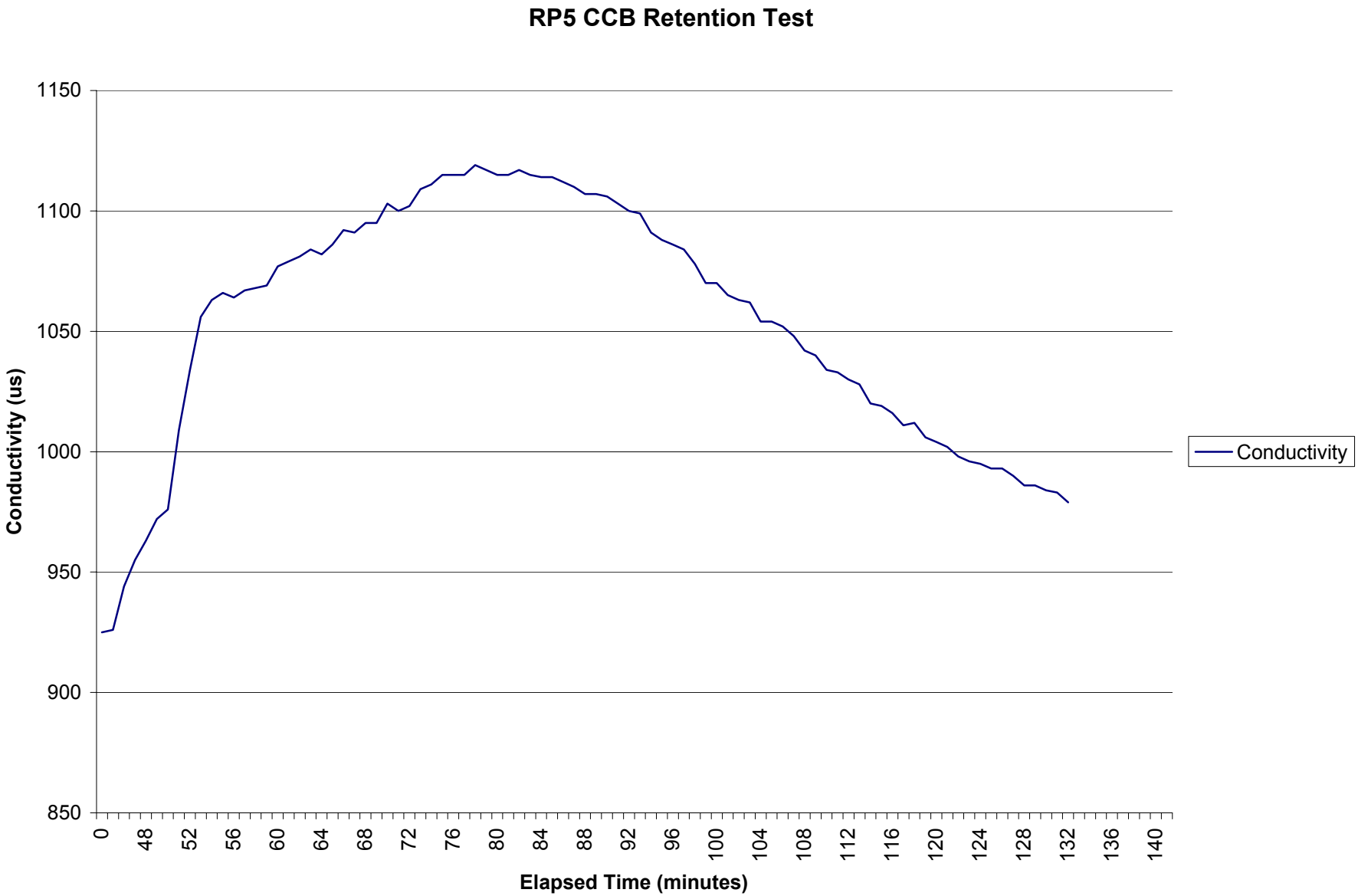
3.0 TEST RESULTS

RP5 Chlorine Contact Basin		
Parameter	**Elapsed Time (Minutes)**	**Flow Rate (Average)**
Minimum	45	13.53
Maximum	141	13.53
Modal	78	13.53

4.0 CONCLUSION

The testing performed on the Inland RP5 CCB was considered successful and a well-defined conductivity peak was observed. Plant flow rate was observed and recorded on the data spreadsheet attached.

Report End
June 2004


RP5 CCB Retention Test
Conductivity (us)
1150
1100
1050
1000
950
900
850
0
48
52
56
60
64
68
72
76
80
84
88
92
96
100
104
108
112
116
120
124
128
132
136
140
Elapsed Time (minutes)
Conductivity

Appendix E

INLAND EMPIRE UTILITIES AGENCY

REGIONAL PLANT NO. 5

ALARMS

CP	COMPOUND	DESCRIPTION	TYPE	ALARM TYPE	PRIORITY
CP6053	NPDES	CL2 HIGH INDIVIDUAL EXCURSION	ACCUM	HMA	5
CP6053	NPDES	MONTHLY CL2 TOTAL TIME	ACCUM	HMA	5
CP6053	NPDES	PH HI/LO INDIVIDUAL EXCURSION	ACCUM	HMA	5
CP6053	NPDES	MONTHLY PH TOTAL TIME	ACCUM	HMA	5
CP6053	NPDES	TURB MINUTES ABOVE 5 NTU	ACCUM	HMA	5
ABST51	AB_SCRN_COMP	SCOMP NO. 1 LEVEL INDICAT	AIN	BAD	2
ABST51	AB_SCRN_COMP		AIN	OOR	2
ABST51	BLOWER1	BLWR 1A INLET VANEPOSITION	AIN	BAD	2
ABST51	BLOWER1	BLWR 1A INLET VANEPOSITION	AIN	OOR	2
ABST51	BLOWER1	BLWR 1A DIFFUSER POSITION	AIN	BAD	5
ABST51	BLOWER1	BLWR 1A DIFFUSER POSITION	AIN	OOR	5
ABST51	BLOWER1	BLWR 1A MOTOR CURRENT	AIN	HMA	2
ABST51	BLOWER1	BLWR 1A MOTOR CURRENT	AIN	OOR	2
ABST51	BLOWER1	BLWR 1A MOTOR CURRENT	AIN	BAD	2
ABST51	BLOWER1	BLWR 1A MOTOR CURRENT	AIN	HHA	2
ABST51	BLOWER1	BLOWER 1A DIFF PRESS	AIN	HHA	5
ABST51	BLOWER1	BLOWER 1A DIFF PRESS	AIN	HMA	5
ABST51	BLOWER1	BLOWER 1A DIFF PRESS	AIN	OOR	0
ABST51	BLOWER1	BLOWER 1A DIFF PRESS	AIN	BAD	0
ABST51	BLOWER1	AERATION SYSTEM HEADER PRESS	AIN	OOR	0
ABST51	BLOWER1	AERATION SYSTEM HEADER PRESS	AIN	HHA	5
ABST51	BLOWER1	AERATION SYSTEM HEADER PRESS	AIN	HMA	2
ABST51	BLOWER1	AERATION SYSTEM HEADER PRESS	AIN	BAD	0
ABST51	BLOWER1	BLOWER 1A SUC AIR TEMP	AIN	HHA	2
ABST51	BLOWER1	BLOWER 1A SUC AIR TEMP	AIN	HMA	2
ABST51	BLOWER1	BLOWER 1A SUC AIR TEMP	AIN	OOR	2
ABST51	BLOWER1	BLOWER 1A SUC AIR TEMP	AIN	BAD	2
ABST51	BLOWER1	B1A BEARING TMP LO SPD INNER	AIN	LLA	2
ABST51	BLOWER1	B1A BEARING TMP LO SPD INNER	AIN	HHA	2
ABST51	BLOWER1	B1A BEARING TMP LO SPD INNER	AIN	LMA	2
ABST51	BLOWER1	B1A BEARING TMP LO SPD INNER	AIN	HMA	2
ABST51	BLOWER1	B1A BEARING TMP LO SPD INNER	AIN	OOR	2
ABST51	BLOWER1	B1A BEARING TMP LO SPD INNER	AIN	BAD	2
ABST51	BLOWER1	B1A BEARING TMP LO SPD OUTER	AIN	LLA	2
ABST51	BLOWER1	B1A BEARING TMP LO SPD OUTER	AIN	HHA	2
ABST51	BLOWER1	B1A BEARING TMP LO SPD OUTER	AIN	LMA	2
ABST51	BLOWER1	B1A BEARING TMP LO SPD OUTER	AIN	OOR	2
ABST51	BLOWER1	B1A BEARING TMP LO SPD OUTER	AIN	BAD	2
ABST51	BLOWER1	B1A BEARING TMP LO SPD OUTER	AIN	HMA	2
ABST51	BLOWER1	B1A BEARING TMP HI SPD INNER	AIN	LMA	2
ABST51	BLOWER1	B1A BEARING TMP HI SPD INNER	AIN	HHA	2
ABST51	BLOWER1	B1A BEARING TMP HI SPD INNER	AIN	LLA	2
ABST51	BLOWER1	B1A BEARING TMP HI SPD INNER	AIN	HMA	2
ABST51	BLOWER1	B1A BEARING TMP HI SPD INNER	AIN	OOR	2
ABST51	BLOWER1	B1A BEARING TMP HI SPD INNER	AIN	BAD	2
ABST51	BLOWER1	B1A BEARING TMP HI SPD OUTER	AIN	OOR	2
ABST51	BLOWER1	B1A BEARING TMP HI SPD OUTER	AIN	LLA	2
ABST51	BLOWER1	B1A BEARING TMP HI SPD OUTER	AIN	HHA	2
ABST51	BLOWER1	B1A BEARING TMP HI SPD OUTER	AIN	LMA	2
ABST51	BLOWER1	B1A BEARING TMP HI SPD OUTER	AIN	BAD	2
ABST51	BLOWER1	B1A BEARING TMP HI SPD OUTER	AIN	HMA	2
ABST51	BLOWER1	B1A BEARING TMP HI SPD THRUST	AIN	BAD	2
ABST51	BLOWER1	B1A BEARING TMP HI SPD THRUST	AIN	OOR	2

CP	COMPOUND	DESCRIPTION	TYPE	ALARM TYPE	PRIORITY
ABST51	BLOWER1	B1A BEARING TMP HI SPD THRUST	AIN	HMA	2
ABST51	BLOWER1	B1A BEARING TMP HI SPD THRUST	AIN	LMA	2
ABST51	BLOWER1	B1A BEARING TMP HI SPD THRUST	AIN	HHA	2
ABST51	BLOWER1	B1A BEARING TMP HI SPD THRUST	AIN	LLA	2
ABST51	BLOWER1	B1A MOTOR TEMP WIND A	AIN	BAD	2
ABST51	BLOWER1	B1A MOTOR TEMP WIND A	AIN	LLA	2
ABST51	BLOWER1	B1A MOTOR TEMP WIND A	AIN	HHA	2
ABST51	BLOWER1	B1A MOTOR TEMP WIND A	AIN	LMA	2
ABST51	BLOWER1	B1A MOTOR TEMP WIND A	AIN	HMA	2
ABST51	BLOWER1	B1A MOTOR TEMP WIND A	AIN	OOR	2
ABST51	BLOWER1	B1A MOTOR TEMP WIND B	AIN	LLA	2
ABST51	BLOWER1	B1A MOTOR TEMP WIND B	AIN	HHA	2
ABST51	BLOWER1	B1A MOTOR TEMP WIND B	AIN	OOR	2
ABST51	BLOWER1	B1A MOTOR TEMP WIND B	AIN	BAD	2
ABST51	BLOWER1	B1A MOTOR TEMP WIND B	AIN	LMA	2
ABST51	BLOWER1	B1A MOTOR TEMP WIND B	AIN	HMA	2
ABST51	BLOWER1	B1A MOTOR TEMP WIND C	AIN	HMA	2
ABST51	BLOWER1	B1A MOTOR TEMP WIND C	AIN	LLA	2
ABST51	BLOWER1	B1A MOTOR TEMP WIND C	AIN	HHA	2
ABST51	BLOWER1	B1A MOTOR TEMP WIND C	AIN	LMA	2
ABST51	BLOWER1	B1A MOTOR TEMP WIND C	AIN	OOR	2
ABST51	BLOWER1	B1A MOTOR TEMP WIND C	AIN	BAD	2
ABST51	BLOWER1	BLWR 1A BEARING VIBRATION X	AIN	BAD	2
ABST51	BLOWER1	BLWR 1A BEARING VIBRATION X	AIN	HMA	2
ABST51	BLOWER1	BLWR 1A BEARING VIBRATION X	AIN	HHA	2
ABST51	BLOWER1	BLWR 1A BEARING VIBRATION X	AIN	OOR	2
ABST51	BLOWER1	BLWR 1A BEARING VIBRATION Y	AIN	HMA	2
ABST51	BLOWER1	BLWR 1A BEARING VIBRATION Y	AIN	BAD	2
ABST51	BLOWER1	BLWR 1A BEARING VIBRATION Y	AIN	HHA	2
ABST51	BLOWER1	BLWR 1A BEARING VIBRATION Y	AIN	OOR	2
ABST51	BLOWER1	BLWR 1A BEARING VIBRATION Z	AIN	LMA	2
ABST51	BLOWER1	BLWR 1A BEARING VIBRATION Z	AIN	HMA	2
ABST51	BLOWER1	BLWR 1A BEARING VIBRATION Z	AIN	HHA	2
ABST51	BLOWER1	BLWR 1A BEARING VIBRATION Z	AIN	OOR	5
ABST51	BLOWER1	BLWR 1A MOTOR VIBRATION INNR	AIN	HHA	2
ABST51	BLOWER1	BLWR 1A MOTOR VIBRATION INNR	AIN	BAD	2
ABST51	BLOWER1	BLWR 1A MOTOR VIBRATION INNR	AIN	OOR	2
ABST51	BLOWER1	BLWR 1A MOTOR VIBRATION INNR	AIN	HMA	2
ABST51	BLOWER1	BLWR 1A MOTOR VIBRATION OUTR	AIN	BAD	2
ABST51	BLOWER1	BLWR 1A MOTOR VIBRATION OUTR	AIN	HHA	2
ABST51	BLOWER1	BLWR 1A MOTOR VIBRATION OUTR	AIN	HMA	2
ABST51	BLOWER1	BLWR 1A MOTOR VIBRATION OUTR	AIN	OOR	2
ABST51	BLOWER1	BLOWER 1A OIL RESERVE TP	AIN	HHA	5
ABST51	BLOWER1	BLOWER 1A OIL RESERVE TP	AIN	LMA	5
ABST51	BLOWER1	BLOWER 1A OIL RESERVE TP	AIN	HMA	5
ABST51	BLOWER1	BLOWER 1A OIL RESERVE TP	AIN	OOR	0
ABST51	BLOWER1	BLOWER 1A OIL RESERVE TP	AIN	BAD	0
ABST51	BLOWER1	BLOWER 1A OIL RESERVE TP	AIN	LLA	5
ABST51	BLOWER2	BLWR 1B INLET VANEPOSITION	AIN	OOR	5
ABST51	BLOWER2	BLWR 1B INLET VANEPOSITION	AIN	BAD	5
ABST51	BLOWER2	BLWR 1B DIFFUSER POSITION	AIN	BAD	2
ABST51	BLOWER2	BLWR 1B DIFFUSER POSITION	AIN	OOR	2
ABST51	BLOWER2	BLWR 1B MOTOR CURRENT	AIN	BAD	2

CP	COMPOUND	DESCRIPTION	TYPE	ALARM TYPE	PRIORITY
ABST51	BLOWER2	BLWR 1B MOTOR CURRENT	AIN	HMA	2
ABST51	BLOWER2	BLWR 1B MOTOR CURRENT	AIN	HHA	2
ABST51	BLOWER2	BLWR 1B MOTOR CURRENT	AIN	OOR	2
ABST51	BLOWER2	BLOWER 1B DIFF PRESS	AIN	HMA	2
ABST51	BLOWER2	BLOWER 1B DIFF PRESS	AIN	OOR	2
ABST51	BLOWER2	BLOWER 1B DIFF PRESS	AIN	BAD	2
ABST51	BLOWER2	BLOWER 1B DIFF PRESS	AIN	HHA	2
ABST51	BLOWER2	BLOWER 1B SUC AIR TEMP	AIN	BAD	2
ABST51	BLOWER2	BLOWER 1B SUC AIR TEMP	AIN	OOR	2
ABST51	BLOWER2	BLOWER 1B SUC AIR TEMP	AIN	HMA	2
ABST51	BLOWER2	BLOWER 1B SUC AIR TEMP	AIN	HHA	2
ABST51	BLOWER2	B1B BEARING TMP LO SPD INNER	AIN	HHA	2
ABST51	BLOWER2	B1B BEARING TMP LO SPD INNER	AIN	BAD	2
ABST51	BLOWER2	B1B BEARING TMP LO SPD INNER	AIN	OOR	2
ABST51	BLOWER2	B1B BEARING TMP LO SPD INNER	AIN	HMA	2
ABST51	BLOWER2	B1B BEARING TMP LO SPD INNER	AIN	LMA	2
ABST51	BLOWER2	B1B BEARING TMP LO SPD INNER	AIN	LLA	2
ABST51	BLOWER2	B1B BEARING TMP LO SPD OUTER	AIN	LLA	2
ABST51	BLOWER2	B1B BEARING TMP LO SPD OUTER	AIN	LMA	2
ABST51	BLOWER2	B1B BEARING TMP LO SPD OUTER	AIN	OOR	2
ABST51	BLOWER2	B1B BEARING TMP LO SPD OUTER	AIN	HMA	2
ABST51	BLOWER2	B1B BEARING TMP LO SPD OUTER	AIN	HHA	2
ABST51	BLOWER2	B1B BEARING TMP LO SPD OUTER	AIN	BAD	2
ABST51	BLOWER2	B1B BEARING TMP HI SPD INNER	AIN	BAD	2
ABST51	BLOWER2	B1B BEARING TMP HI SPD INNER	AIN	HMA	2
ABST51	BLOWER2	B1B BEARING TMP HI SPD INNER	AIN	LMA	2
ABST51	BLOWER2	B1B BEARING TMP HI SPD INNER	AIN	HHA	2
ABST51	BLOWER2	B1B BEARING TMP HI SPD INNER	AIN	LLA	2
ABST51	BLOWER2	B1B BEARING TMP HI SPD INNER	AIN	OOR	2
ABST51	BLOWER2	B1B BEARING TMP HI SPD OUTER	AIN	HHA	2
ABST51	BLOWER2	B1B BEARING TMP HI SPD OUTER	AIN	LLA	2
ABST51	BLOWER2	B1B BEARING TMP HI SPD OUTER	AIN	LMA	2
ABST51	BLOWER2	B1B BEARING TMP HI SPD OUTER	AIN	HMA	2
ABST51	BLOWER2	B1B BEARING TMP HI SPD OUTER	AIN	OOR	2
ABST51	BLOWER2	B1B BEARING TMP HI SPD OUTER	AIN	BAD	2
ABST51	BLOWER2	B1B BEARING TMP HI SPD THRUST	AIN	LLA	2
ABST51	BLOWER2	B1B BEARING TMP HI SPD THRUST	AIN	HHA	2
ABST51	BLOWER2	B1B BEARING TMP HI SPD THRUST	AIN	HMA	2
ABST51	BLOWER2	B1B BEARING TMP HI SPD THRUST	AIN	OOR	2
ABST51	BLOWER2	B1B BEARING TMP HI SPD THRUST	AIN	BAD	2
ABST51	BLOWER2	B1B BEARING TMP HI SPD THRUST	AIN	LMA	2
ABST51	BLOWER2	B1B MOTOR TEMP WIND A	AIN	LLA	2
ABST51	BLOWER2	B1B MOTOR TEMP WIND A	AIN	HHA	2
ABST51	BLOWER2	B1B MOTOR TEMP WIND A	AIN	LMA	2
ABST51	BLOWER2	B1B MOTOR TEMP WIND A	AIN	HMA	2
ABST51	BLOWER2	B1B MOTOR TEMP WIND A	AIN	OOR	2
ABST51	BLOWER2	B1B MOTOR TEMP WIND A	AIN	BAD	2
ABST51	BLOWER2	B1B MOTOR TEMP WIND B	AIN	LLA	2
ABST51	BLOWER2	B1B MOTOR TEMP WIND B	AIN	HHA	2
ABST51	BLOWER2	B1B MOTOR TEMP WIND B	AIN	LMA	2
ABST51	BLOWER2	B1B MOTOR TEMP WIND B	AIN	HMA	2
ABST51	BLOWER2	B1B MOTOR TEMP WIND B	AIN	OOR	2
ABST51	BLOWER2	B1B MOTOR TEMP WIND B	AIN	BAD	2

CP	COMPOUND	DESCRIPTION	TYPE	ALARM TYPE	PRIORITY
ABST51	BLOWER2	B1B MOTOR TEMP WIND C	AIN	LMA	2
ABST51	BLOWER2	B1B MOTOR TEMP WIND C	AIN	LLA	2
ABST51	BLOWER2	B1B MOTOR TEMP WIND C	AIN	BAD	2
ABST51	BLOWER2	B1B MOTOR TEMP WIND C	AIN	OOR	2
ABST51	BLOWER2	B1B MOTOR TEMP WIND C	AIN	HMA	2
ABST51	BLOWER2	B1B MOTOR TEMP WIND C	AIN	HHA	2
ABST51	BLOWER2	BLWR 1B BEARING VIBRATION X	AIN	HMA	2
ABST51	BLOWER2	BLWR 1B BEARING VIBRATION X	AIN	OOR	2
ABST51	BLOWER2	BLWR 1B BEARING VIBRATION X	AIN	BAD	2
ABST51	BLOWER2	BLWR 1B BEARING VIBRATION X	AIN	HHA	2
ABST51	BLOWER2	BLWR 1B BEARING VIBRATION Y	AIN	HHA	2
ABST51	BLOWER2	BLWR 1B BEARING VIBRATION Y	AIN	HMA	2
ABST51	BLOWER2	BLWR 1B BEARING VIBRATION Y	AIN	OOR	2
ABST51	BLOWER2	BLWR 1B BEARING VIBRATION Y	AIN	BAD	2
ABST51	BLOWER2	BLWR 1B BEARING VIBRATION Z	AIN	HMA	2
ABST51	BLOWER2	BLWR 1B BEARING VIBRATION Z	AIN	LMA	2
ABST51	BLOWER2	BLWR 1B BEARING VIBRATION Z	AIN	HHA	2
ABST51	BLOWER2	BLWR 1B MOTOR VIBRATION INNR	AIN	HMA	2
ABST51	BLOWER2	BLWR 1B MOTOR VIBRATION INNR	AIN	OOR	2
ABST51	BLOWER2	BLWR 1B MOTOR VIBRATION INNR	AIN	BAD	2
ABST51	BLOWER2	BLWR 1B MOTOR VIBRATION INNR	AIN	HHA	2
ABST51	BLOWER2	BLWR 1B MOTOR VIBRATION OUTR	AIN	HHA	2
ABST51	BLOWER2	BLWR 1B MOTOR VIBRATION OUTR	AIN	HMA	2
ABST51	BLOWER2	BLWR 1B MOTOR VIBRATION OUTR	AIN	OOR	2
ABST51	BLOWER2	BLWR 1B MOTOR VIBRATION OUTR	AIN	BAD	2
ABST51	BLOWER2	BLOWER 1B OIL RESERVE TP	AIN	LLA	2
ABST51	BLOWER2	BLOWER 1B OIL RESERVE TP	AIN	HHA	2
ABST51	BLOWER2	BLOWER 1B OIL RESERVE TP	AIN	LMA	2
ABST51	BLOWER2	BLOWER 1B OIL RESERVE TP	AIN	HMA	2
ABST51	BLOWER2	BLOWER 1B OIL RESERVE TP	AIN	OOR	2
ABST51	BLOWER2	BLOWER 1B OIL RESERVE TP	AIN	BAD	2
ABST51	HQ	FOXBORO ROOM TEMPERATURE	AIN	HMA	1
ABST51	HQ	HQA AND HQB KWH	AIN	LMA	5
ABST52	CCWRF	CCWRF BYPASS FLOW	AIN	LMA	5
ABST52	CCWRF	CCWRF BYPASS FLOW	AIN	HMA	5
ABST52	CIW_DATA	CIW LEVEL	AIN	HMA	1
ABST52	CIW_DATA	CIW LEVEL	AIN	LMA	1
ABST52	RP1_BYPASS	RP1 BYPASS FLOW METER 3	AIN	HMA	2
ABST52	RP1_BYPASS	RP1 BYPASS FLOW METER 3	AIN	LMA	2
CP6051	ALARM_PAGERS	RP5 PRI 1 ALARM ENABLE/DISABLE	AIN	LMA	5
CP6051	ALARM_PAGERS	RP5 PRI 1 ALARM ENABLE/DISABLE	AIN	HMA	5
CP6051	ALARM_PAGERS	RP5 PRI 1 ALARM ENABLE/DISABLE	AIN	HHA	5
CP6051	ES_PUMPS	EMERGENCY STORAG BASIN TO HDWR	AIN	HMA	2
CP6051	ES_PUMPS	EMERGENCY STORAG BASIN TO HDWR	AIN	OOR	2
CP6051	ES_PUMPS	EMERGENCY STORAG BASIN TO HDWR	AIN	BAD	2
CP6051	ES_PUMPS	EMERGENCY STORAG BASIN TO HDWR	AIN	LMA	2
CP6051	ES_PUMPS	EMERGENCY STORAG BASIN TO HDWR	AIN	LLA	2
CP6051	ES_PUMPS	EMERGENCY STORAG BASIN TO HDWR	AIN	HHA	2
CP6051	ES_PUMPS	EMERGENCY STORAGE BASIN LEVEL	AIN	LLA	2
CP6051	ES_PUMPS	EMERGENCY STORAGE BASIN LEVEL	AIN	HHA	2
CP6051	ES_PUMPS	EMERGENCY STORAGE BASIN LEVEL	AIN	LMA	2
CP6051	ES_PUMPS	EMERGENCY STORAGE BASIN LEVEL	AIN	HMA	2
CP6051	ES_PUMPS	EMERGENCY STORAGE BASIN LEVEL	AIN	OOR	2

CP	COMPOUND	DESCRIPTION	TYPE	ALARM TYPE	PRIORITY
CP6051	ES_PUMPS	EMERGENCY STORAGE BASIN LEVEL	AIN	BAD	2
CP6051	ES_PUMPS	PES-6021 PMP 1 SPEED	AIN	LMA	2
CP6051	ES_PUMPS	PES-6021 PMP 1 SPEED	AIN	OOR	1
CP6051	ES_PUMPS	PES-6021 PMP 1 SPEED	AIN	BAD	1
CP6051	ES_PUMPS	PES-6021 PMP 1 SPEED	AIN	HHA	2
CP6051	ES_PUMPS	PES-6021 PMP 1 SPEED	AIN	LLA	2
CP6051	ES_PUMPS	PES-6021 PMP 1 SPEED	AIN	HMA	2
CP6051	ES_PUMPS	PES-6022 PMP 2 SPEED	AIN	HHA	2
CP6051	ES_PUMPS	PES-6022 PMP 2 SPEED	AIN	LMA	2
CP6051	ES_PUMPS	PES-6022 PMP 2 SPEED	AIN	LLA	2
CP6051	ES_PUMPS	PES-6022 PMP 2 SPEED	AIN	HMA	2
CP6051	ES_PUMPS	PES-6022 PMP 2 SPEED	AIN	OOR	1
CP6051	ES_PUMPS	PES-6022 PMP 2 SPEED	AIN	BAD	1
CP6051	ES_PUMPS	PES-6023 PMP 3 SPEED	AIN	BAD	1
CP6051	ES_PUMPS	PES-6023 PMP 3 SPEED	AIN	OOR	1
CP6051	ES_PUMPS	PES-6023 PMP 3 SPEED	AIN	HMA	2
CP6051	ES_PUMPS	PES-6023 PMP 3 SPEED	AIN	LMA	2
CP6051	ES_PUMPS	PES-6023 PMP 3 SPEED	AIN	HHA	2
CP6051	ES_PUMPS	PES-6023 PMP 3 SPEED	AIN	LLA	2
CP6051	FE_CHLORIDE	TNK-6004 NO. 2A LEVEL	AIN	OOR	2
CP6051	FE_CHLORIDE	TNK-6004 NO. 2A LEVEL	AIN	LLA	2
CP6051	FE_CHLORIDE	TNK-6004 NO. 2A LEVEL	AIN	HHA	2
CP6051	FE_CHLORIDE	TNK-6004 NO. 2A LEVEL	AIN	LMA	2
CP6051	FE_CHLORIDE	TNK-6004 NO. 2A LEVEL	AIN	HMA	2
CP6051	FE_CHLORIDE	TNK-6004 NO. 2A LEVEL	AIN	BAD	2
CP6051	HEADWORKS	BARSCREEN COMBUST GAS	AIN	BAD	1
CP6051	HEADWORKS	BARSCREEN COMBUST GAS	AIN	HMA	2
CP6051	HEADWORKS	BARSCREEN COMBUST GAS	AIN	LMA	2
CP6051	HEADWORKS	BARSCREEN COMBUST GAS	AIN	HHA	1
CP6051	HEADWORKS	BARSCREEN COMBUST GAS	AIN	LLA	1
CP6051	HEADWORKS	BARSCREEN COMBUST GAS	AIN	OOR	1
CP6051	HEADWORKS	BARSCREEN COMBUST GAS	AIN	LMA	2
CP6051	HEADWORKS	BARSCREEN COMBUST GAS	AIN	LLA	1
CP6051	HEADWORKS	BARSCREEN COMBUST GAS	AIN	HHA	1
CP6051	HEADWORKS	BARSCREEN COMBUST GAS	AIN	HMA	2
CP6051	HEADWORKS	BARSCREEN COMBUST GAS	AIN	BAD	1
CP6051	HEADWORKS	BARSCREEN COMBUST GAS	AIN	OOR	1
CP6051	HEADWORKS	BARSCREEN COMBUST GAS	AIN	LLA	1
CP6051	HEADWORKS	BARSCREEN COMBUST GAS	AIN	BAD	1
CP6051	HEADWORKS	BARSCREEN COMBUST GAS	AIN	HHA	1
CP6051	HEADWORKS	BARSCREEN COMBUST GAS	AIN	LMA	2
CP6051	HEADWORKS	BARSCREEN COMBUST GAS	AIN	HMA	2
CP6051	HEADWORKS	BARSCREEN COMBUST GAS	AIN	OOR	1
CP6051	HEADWORKS	BARSCREEN COMBUST GAS	AIN	LLA	2
CP6051	HEADWORKS	BARSCREEN COMBUST GAS	AIN	OOR	1
CP6051	HEADWORKS	BARSCREEN COMBUST GAS	AIN	HMA	2
CP6051	HEADWORKS	BARSCREEN COMBUST GAS	AIN	LMA	2
CP6051	HEADWORKS	BARSCREEN COMBUST GAS	AIN	HHA	2
CP6051	HEADWORKS	BARSCREEN COMBUST GAS	AIN	BAD	1
CP6051	HEADWORKS	BARSCREEN INLET LEVEL	AIN	BAD	2
CP6051	HEADWORKS	BARSCREEN INLET LEVEL	AIN	HMA	2
CP6051	HEADWORKS	BARSCREEN INLET LEVEL	AIN	LLA	5
CP6051	HEADWORKS	BARSCREEN INLET LEVEL	AIN	HHA	5

CP	COMPOUND	DESCRIPTION	TYPE	ALARM TYPE	PRIORITY
CP6051	HEADWORKS	BARSCREEN INLET LEVEL	AIN	LMA	2
CP6051	HEADWORKS	BARSCREEN INLET LEVEL	AIN	OOR	2
CP6051	HEADWORKS	BARSCREEN OUTLET LEVEL	AIN	LLA	2
CP6051	HEADWORKS	BARSCREEN OUTLET LEVEL	AIN	HHA	2
CP6051	HEADWORKS	BARSCREEN OUTLET LEVEL	AIN	LMA	2
CP6051	HEADWORKS	BARSCREEN OUTLET LEVEL	AIN	HMA	2
CP6051	HEADWORKS	BARSCREEN OUTLET LEVEL	AIN	OOR	2
CP6051	HEADWORKS	BARSCREEN OUTLET LEVEL	AIN	BAD	2
CP6051	HEADWORKS	BS CHANNEL LEVEL DIFF	AIN	HMA	2
CP6051	HEADWORKS	BS CHANNEL LEVEL DIFF	AIN	BAD	2
CP6051	HEADWORKS	BS CHANNEL LEVEL DIFF	AIN	OOR	2
CP6051	INFLUENT	IPS DSCHRG HEADR PH	AIN	HHA	2
CP6051	INFLUENT	IPS DSCHRG HEADR PH	AIN	LLA	2
CP6051	INFLUENT	IPS DSCHRG HEADR PH	AIN	LMA	2
CP6051	INFLUENT	IPS DSCHRG HEADR PH	AIN	HMA	2
CP6051	INFLUENT	IPS DSCHRG HEADR PH	AIN	BAD	2
CP6051	INFLUENT	IPS DSCHRG HEADR PH	AIN	OOR	2
CP6051	INFLUENT	IPS DSCHRG HEADR CONDUCTIVITY	AIN	BAD	2
CP6051	INFLUENT	LAG/SBY PUMP HI/LO PERMISSIVE	AIN	LMA	5
CP6051	INFLUENT	LAG/SBY PUMP HI/LO PERMISSIVE	AIN	HMA	5
CP6051	INFLUENT	IPS DSCHRG HEADR FLOW	AIN	LMA	1
CP6051	INFLUENT	IPS DSCHRG HEADR FLOW	AIN	HHA	1
CP6051	INFLUENT	IPS DSCHRG HEADR FLOW	AIN	LLA	1
CP6051	INFLUENT	IPS DSCHRG HEADR FLOW	AIN	BAD	1
CP6051	INFLUENT	IPS DSCHRG HEADR FLOW	AIN	OOR	1
CP6051	INFLUENT	IPS DSCHRG HEADR FLOW	AIN	HMA	1
CP6051	INFLUENT	IPS WETWELL 1 COMBUST GAS	AIN	BAD	1
CP6051	INFLUENT	IPS WETWELL 1 COMBUST GAS	AIN	OOR	1
CP6051	INFLUENT	IPS WETWELL 1 COMBUST GAS	AIN	HMA	2
CP6051	INFLUENT	IPS WETWELL 1 COMBUST GAS	AIN	LMA	2
CP6051	INFLUENT	IPS WETWELL 1 COMBUST GAS	AIN	HHA	2
CP6051	INFLUENT	IPS WETWELL 1 COMBUST GAS	AIN	LLA	2
CP6051	INFLUENT	IPS WETWELL 2 COMBUST GAS	AIN	OOR	1
CP6051	INFLUENT	IPS WETWELL 2 COMBUST GAS	AIN	BAD	1
CP6051	INFLUENT	IPS WETWELL 2 COMBUST GAS	AIN	LMA	2
CP6051	INFLUENT	IPS WETWELL 2 COMBUST GAS	AIN	HHA	2
CP6051	INFLUENT	IPS WETWELL 2 COMBUST GAS	AIN	LLA	2
CP6051	INFLUENT	IPS WETWELL 2 COMBUST GAS	AIN	HMA	2
CP6051	INFLUENT	IPS JUNCT BOX COMBUST GAS	AIN	LMA	2
CP6051	INFLUENT	IPS JUNCT BOX COMBUST GAS	AIN	HMA	2
CP6051	INFLUENT	IPS JUNCT BOX COMBUST GAS	AIN	BAD	2
CP6051	INFLUENT	IPS JUNCT BOX COMBUST GAS	AIN	OOR	1
CP6051	INFLUENT	IPS JUNCT BOX COMBUST GAS	AIN	HHA	2
CP6051	INFLUENT	IPS JUNCT BOX COMBUST GAS	AIN	LLA	2
CP6051	INFLUENT	IPS WETWELL 1 LEVEL	AIN	BAD	1
CP6051	INFLUENT	IPS WETWELL 1 LEVEL	AIN	OOR	1
CP6051	INFLUENT	IPS WETWELL 1 LEVEL	AIN	HHA	1
CP6051	INFLUENT	IPS WETWELL 1 LEVEL	AIN	LLA	1
CP6051	INFLUENT	IPS WETWELL 1 LEVEL	AIN	LMA	1
CP6051	INFLUENT	IPS WETWELL 1 LEVEL	AIN	HMA	1
CP6051	INFLUENT	IPS WETWELL 2 LEVEL	AIN	HMA	1
CP6051	INFLUENT	IPS WETWELL 2 LEVEL	AIN	LLA	1
CP6051	INFLUENT	IPS WETWELL 2 LEVEL	AIN	BAD	1

CP	COMPOUND	DESCRIPTION	TYPE	ALARM TYPE	PRIORITY
CP6051	INFLUENT	IPS WETWELL 2 LEVEL	AIN	OOR	1
CP6051	INFLUENT	IPS WETWELL 2 LEVEL	AIN	HHA	1
CP6051	INFLUENT	IPS WETWELL 2 LEVEL	AIN	LMA	1
CP6051	INFLUENT	IPS PMP 2 SPEED INDICATE	AIN	OOR	1
CP6051	INFLUENT	IPS PMP 2 SPEED INDICATE	AIN	BAD	1
CP6051	INFLUENT	IPS PMP 3 SPEED INDICATE	AIN	BAD	1
CP6051	INFLUENT	IPS PMP 3 SPEED INDICATE	AIN	OOR	1
CP6051	INFLUENT	IPS PMP 4 SPEED INDICATE	AIN	BAD	1
CP6051	INFLUENT	IPS PMP 4 SPEED INDICATE	AIN	OOR	1
CP6051	NO_ALARM1	FLOW RATE BELOW THRESHOLD	AIN	BAD	5
CP6051	NO_ALARM1	FLOW RATE BELOW THRESHOLD	AIN	LMA	5
CP6051	NO_ALARM1	FLOW RATE BELOW THRESHOLD	AIN	OOR	1
CP6051	NO_ALARM1	ESB LEVEL	AIN	HHA	2
CP6051	NO_ALARM1	ESB LEVEL	AIN	LMA	2
CP6051	NO_ALARM1	ESB LEVEL	AIN	BAD	5
CP6051	NO_ALARM1	ESB LEVEL	AIN	LLA	2
CP6051	NO_ALARM1	ESB LEVEL	AIN	HMA	2
CP6051	NO_ALARM1	ESB LEVEL	AIN	OOR	1
CP6051	NO_ALARM1		AIN	HMA	2
CP6051	NO_ALARM1		AIN	BAD	5
CP6051	NO_ALARM1		AIN	OOR	1
CP6051	NO_ALARM1		AIN	LMA	2
CP6051	NO_ALARM1		AIN	HHA	2
CP6051	NO_ALARM1		AIN	LLA	2
CP6051	NO_ALARM1	INFLUENT PUMP STATION	AIN	BAD	5
CP6051	NO_ALARM1	INFLUENT PUMP STATION	AIN	OOR	1
CP6051	NO_ALARM1	INFLUENT PUMP STATION	AIN	HMA	5
CP6051	NO_ALARM1	INFLUENT PUMP STATION	AIN	LMA	5
CP6051	NO_ALARM1	INFLUENT PUMP STATION	AIN	LLA	5
CP6051	NO_ALARM1	INFLUENT PUMP STATION	AIN	HHA	5
CP6051	NO_ALARM1	INFLUENT PUMP STATION	AIN	OOR	1
CP6051	NO_ALARM1	INFLUENT PUMP STATION	AIN	LMA	5
CP6051	NO_ALARM1	INFLUENT PUMP STATION	AIN	BAD	5
CP6051	NO_ALARM1	INFLUENT PUMP STATION	AIN	HMA	5
CP6051	POLYMER	PRIMARY POLYMER TOTE 1A LEVEL	AIN	BAD	1
CP6051	POLYMER	PRIMARY POLYMER TOTE 1A LEVEL	AIN	OOR	1
CP6051	POLYMER	PRIMARY POLYMER TOTE 1A LEVEL	AIN	HMA	2
CP6051	POLYMER	PRIMARY POLYMER TOTE 1A LEVEL	AIN	HHA	2
CP6051	POLYMER	PRIMARY POLYMER TOTE 1A LEVEL	AIN	LLA	2
CP6051	POLYMER	PRIMARY POLYMER TOTE 1A LEVEL	AIN	LMA	2
CP6051	POLYMER	PRIMARY POLYMER TOTE 2A LEVEL	AIN	LLA	2
CP6051	POLYMER	PRIMARY POLYMER TOTE 2A LEVEL	AIN	HHA	2
CP6051	POLYMER	PRIMARY POLYMER TOTE 2A LEVEL	AIN	LMA	2
CP6051	POLYMER	PRIMARY POLYMER TOTE 2A LEVEL	AIN	HMA	2
CP6051	POLYMER	PRIMARY POLYMER TOTE 2A LEVEL	AIN	OOR	1
CP6051	POLYMER	PRIMARY POLYMER TOTE 2A LEVEL	AIN	BAD	1
CP6051	POLYMER	BP-6021 NO. 1A SPEED	AIN	BAD	1
CP6051	POLYMER	BP-6021 NO. 1A SPEED	AIN	OOR	1
CP6051	POLYMER	BP-6021 NO. 1A SPEED	AIN	LLA	2
CP6051	POLYMER	BP-6021 NO. 1A SPEED	AIN	HHA	2
CP6051	POLYMER	BP-6021 NO. 1A SPEED	AIN	LMA	2
CP6051	POLYMER	BP-6021 NO. 1A SPEED	AIN	HMA	2
CP6051	POLYMER	BP-6022 NO. 1B SPEED	AIN	LLA	2

CP	COMPOUND	DESCRIPTION	TYPE	ALARM TYPE	PRIORITY
CP6051	POLYMER	BP-6022 NO. 1B SPEED	AIN	HHA	2
CP6051	POLYMER	BP-6022 NO. 1B SPEED	AIN	LMA	2
CP6051	POLYMER	BP-6022 NO. 1B SPEED	AIN	OOR	1
CP6051	POLYMER	BP-6022 NO. 1B SPEED	AIN	HMA	2
CP6051	POLYMER	BP-6022 NO. 1B SPEED	AIN	BAD	1
CP6051	RP2_FLOW	RP2 FLOW	AIN	OOR	1
CP6051	RP2_FLOW	RP2 FLOW	AIN	BAD	5
CP6051	SLUDGE_PUMPS	TO RP-2 SOLID FACILITY	AIN	BAD	5
CP6051	SLUDGE_PUMPS	TO RP-2 SOLID FACILITY	AIN	OOR	5
CP6051	SLUDGE_PUMPS	TO RP-2 SOLID FACILITY	AIN	LLA	5
CP6051	SLUDGE_PUMPS	PRIMARY SCUM WETWELL	AIN	LMA	1
CP6051	SLUDGE_PUMPS	PRIMARY SCUM WETWELL	AIN	HMA	1
CP6051	SLUDGE_PUMPS	PRIMARY SCUM WETWELL	AIN	OOR	2
CP6051	SLUDGE_PUMPS	PRIMARY SCUM WETWELL	AIN	HHA	1
CP6051	SLUDGE_PUMPS	PRIMARY SCUM WETWELL	AIN	BAD	1
CP6051	SLUDGE_PUMPS	PRIMARY SCUM WETWELL	AIN	LLA	1
CP6052	AERATION_AIR	VAA-6052 ZONE 3A DISSOLVE O2	AIN	LLA	2
CP6052	AERATION_AIR	VAA-6052 ZONE 3A DISSOLVE O2	AIN	LMA	2
CP6052	AERATION_AIR	VAA-6052 ZONE 3A DISSOLVE O2	AIN	HMA	2
CP6052	AERATION_AIR	VAA-6052 ZONE 3A DISSOLVE O2	AIN	OOR	2
CP6052	AERATION_AIR	VAA-6052 ZONE 3A DISSOLVE O2	AIN	BAD	2
CP6052	AERATION_AIR	VAA-6053 ZONE 3B DISSOLVE O2	AIN	LMA	2
CP6052	AERATION_AIR	VAA-6053 ZONE 3B DISSOLVE O2	AIN	HMA	2
CP6052	AERATION_AIR	VAA-6053 ZONE 3B DISSOLVE O2	AIN	BAD	2
CP6052	AERATION_AIR	VAA-6053 ZONE 3B DISSOLVE O2	AIN	OOR	2
CP6052	AERATION_AIR	VAA-6054 ZONE 3C DISSOLVE O2	AIN	OOR	2
CP6052	AERATION_AIR	VAA-6054 ZONE 3C DISSOLVE O2	AIN	BAD	2
CP6052	AERATION_AIR	VAA-6054 ZONE 3C DISSOLVE O2	AIN	HMA	2
CP6052	AERATION_AIR	VAA-6054 ZONE 3C DISSOLVE O2	AIN	LLA	2
CP6052	AERATION_AIR	VAA-6054 ZONE 3C DISSOLVE O2	AIN	LMA	2
CP6052	AERATION_AIR	VAA-6055 ZONE 3D DISSOLVE O2	AIN	BAD	2
CP6052	AERATION_AIR	VAA-6055 ZONE 3D DISSOLVE O2	AIN	OOR	2
CP6052	AERATION_AIR	VAA-6055 ZONE 3D DISSOLVE O2	AIN	HMA	2
CP6052	AERATION_AIR	VAA-6055 ZONE 3D DISSOLVE O2	AIN	LMA	2
CP6052	AERATION_AIR	VAA6060 ZONE 4A DISSOLVE O2	AIN	HMA	2
CP6052	AERATION_AIR	VAA6060 ZONE 4A DISSOLVE O2	AIN	LLA	2
CP6052	AERATION_AIR	VAA6060 ZONE 4A DISSOLVE O2	AIN	LMA	2
CP6052	AERATION_AIR	VAA6060 ZONE 4A DISSOLVE O2	AIN	OOR	2
CP6052	AERATION_AIR	VAA6060 ZONE 4A DISSOLVE O2	AIN	BAD	2
CP6052	AERATION_AIR	VAA6061 ZONE 4B DISSOLVE O2	AIN	BAD	2
CP6052	AERATION_AIR	VAA6061 ZONE 4B DISSOLVE O2	AIN	OOR	2
CP6052	AERATION_AIR	VAA6061 ZONE 4B DISSOLVE O2	AIN	HMA	2
CP6052	AERATION_AIR	VAA6061 ZONE 4B DISSOLVE O2	AIN	LMA	2
CP6052	AERATION_AIR	VAA6062 ZONE 4C DISSOLVE O2	AIN	LLA	2
CP6052	AERATION_AIR	VAA6062 ZONE 4C DISSOLVE O2	AIN	HMA	2
CP6052	AERATION_AIR	VAA6062 ZONE 4C DISSOLVE O2	AIN	LMA	2
CP6052	AERATION_AIR	VAA6062 ZONE 4C DISSOLVE O2	AIN	BAD	2
CP6052	AERATION_AIR	VAA6062 ZONE 4C DISSOLVE O2	AIN	OOR	2
CP6052	AERATION_AIR	VAA6063 ZONE 4D DISSOLVE O2	AIN	LMA	2
CP6052	AERATION_AIR	VAA6063 ZONE 4D DISSOLVE O2	AIN	HMA	2
CP6052	AERATION_AIR	VAA6063 ZONE 4D DISSOLVE O2	AIN	OOR	2
CP6052	AERATION_AIR	VAA6063 ZONE 4D DISSOLVE O2	AIN	BAD	2
CP6052	AERATION_AIR	VAA-6052 ZONE 3A LOW FLOW	AIN	BAD	1

CP	COMPOUND	DESCRIPTION	TYPE	ALARM TYPE	PRIORITY
CP6052	AERATION_AIR	VAA-6052 ZONE 3A LOW FLOW	AIN	OOR	1
CP6052	AERATION_AIR	VAA-6053 ZONE 3B LOW FLOW	AIN	BAD	1
CP6052	AERATION_AIR	VAA-6053 ZONE 3B LOW FLOW	AIN	OOR	1
CP6052	AERATION_AIR	VAA-6054 ZONE 3C LOW FLOW	AIN	BAD	1
CP6052	AERATION_AIR	VAA-6054 ZONE 3C LOW FLOW	AIN	OOR	1
CP6052	AERATION_AIR	VAA-6055 ZONE 3D LOW FLOW	AIN	OOR	1
CP6052	AERATION_AIR	VAA-6055 ZONE 3D LOW FLOW	AIN	BAD	1
CP6052	AERATION_AIR	VAA6060 ZONE 4A LOW FLOW	AIN	BAD	1
CP6052	AERATION_AIR	VAA6060 ZONE 4A LOW FLOW	AIN	OOR	1
CP6052	AERATION_AIR	VAA6061 ZONE 4B LOW FLOW	AIN	BAD	1
CP6052	AERATION_AIR	VAA6061 ZONE 4B LOW FLOW	AIN	OOR	1
CP6052	AERATION_AIR	VAA6062 ZONE 4C LOW FLOW	AIN	BAD	1
CP6052	AERATION_AIR	VAA6062 ZONE 4C LOW FLOW	AIN	OOR	1
CP6052	AERATION_AIR	VAA6063 ZONE 4D LOW FLOW	AIN	BAD	1
CP6052	AERATION_AIR	VAA6063 ZONE 4D LOW FLOW	AIN	OOR	1
CP6052	AERATION_AIR	AERATION TOTAL AIR FLOW	AIN	LMA	1
CP6052	AERATION_AIR	AERATION BASIN HEADER PRESS	AIN	OOR	1
CP6052	AERATION_AIR	AERATION BASIN HEADER PRESS	AIN	LMA	2
CP6052	AERATION_AIR	AERATION BASIN HEADER PRESS	AIN	HHA	2
CP6052	AERATION_AIR	AERATION BASIN HEADER PRESS	AIN	LLA	2
CP6052	AERATION_AIR	AERATION BASIN HEADER PRESS	AIN	BAD	1
CP6052	AERATION_AIR	AERATION BASIN HEADER PRESS	AIN	HMA	2
CP6052	AERATION_AIR	VAA-6052 ZONE 3A VALVE POS	AIN	BAD	1
CP6052	AERATION_AIR	VAA-6052 ZONE 3A VALVE POS	AIN	LLA	2
CP6052	AERATION_AIR	VAA-6052 ZONE 3A VALVE POS	AIN	HHA	2
CP6052	AERATION_AIR	VAA-6052 ZONE 3A VALVE POS	AIN	LMA	2
CP6052	AERATION_AIR	VAA-6052 ZONE 3A VALVE POS	AIN	OOR	1
CP6052	AERATION_AIR	VAA-6052 ZONE 3A VALVE POS	AIN	HMA	2
CP6052	AERATION_AIR	VAA-6053 ZONE 3B VALVE POS	AIN	BAD	1
CP6052	AERATION_AIR	VAA-6053 ZONE 3B VALVE POS	AIN	HMA	2
CP6052	AERATION_AIR	VAA-6053 ZONE 3B VALVE POS	AIN	LMA	2
CP6052	AERATION_AIR	VAA-6053 ZONE 3B VALVE POS	AIN	HHA	2
CP6052	AERATION_AIR	VAA-6053 ZONE 3B VALVE POS	AIN	LLA	2
CP6052	AERATION_AIR	VAA-6053 ZONE 3B VALVE POS	AIN	OOR	1
CP6052	AERATION_AIR	VAA-6054 ZONE 3C VALVE POS	AIN	HMA	2
CP6052	AERATION_AIR	VAA-6054 ZONE 3C VALVE POS	AIN	LMA	2
CP6052	AERATION_AIR	VAA-6054 ZONE 3C VALVE POS	AIN	LLA	2
CP6052	AERATION_AIR	VAA-6054 ZONE 3C VALVE POS	AIN	HHA	2
CP6052	AERATION_AIR	VAA-6054 ZONE 3C VALVE POS	AIN	OOR	1
CP6052	AERATION_AIR	VAA-6054 ZONE 3C VALVE POS	AIN	BAD	1
CP6052	AERATION_AIR	VAA-6055 ZONE 3D VALVE POS	AIN	HHA	2
CP6052	AERATION_AIR	VAA-6055 ZONE 3D VALVE POS	AIN	LMA	2
CP6052	AERATION_AIR	VAA-6055 ZONE 3D VALVE POS	AIN	HMA	2
CP6052	AERATION_AIR	VAA-6055 ZONE 3D VALVE POS	AIN	OOR	1
CP6052	AERATION_AIR	VAA-6055 ZONE 3D VALVE POS	AIN	BAD	1
CP6052	AERATION_AIR	VAA-6055 ZONE 3D VALVE POS	AIN	LLA	2
CP6052	AERATION_AIR	VAA-6060 ZONE 4A VALVE POS	AIN	BAD	1
CP6052	AERATION_AIR	VAA-6060 ZONE 4A VALVE POS	AIN	OOR	1
CP6052	AERATION_AIR	VAA-6060 ZONE 4A VALVE POS	AIN	HMA	2
CP6052	AERATION_AIR	VAA-6060 ZONE 4A VALVE POS	AIN	LMA	2
CP6052	AERATION_AIR	VAA-6060 ZONE 4A VALVE POS	AIN	HHA	2
CP6052	AERATION_AIR	VAA-6060 ZONE 4A VALVE POS	AIN	LLA	2
CP6052	AERATION_AIR	VAA-6061 ZONE 4B VALVE POS	AIN	BAD	1

CP	COMPOUND	DESCRIPTION	TYPE	ALARM TYPE	PRIORITY
CP6052	AERATION_AIR	VAA-6061 ZONE 4B VALVE POS	AIN	LLA	2
CP6052	AERATION_AIR	VAA-6061 ZONE 4B VALVE POS	AIN	HHA	2
CP6052	AERATION_AIR	VAA-6061 ZONE 4B VALVE POS	AIN	LMA	2
CP6052	AERATION_AIR	VAA-6061 ZONE 4B VALVE POS	AIN	HMA	2
CP6052	AERATION_AIR	VAA-6061 ZONE 4B VALVE POS	AIN	OOR	1
CP6052	AERATION_AIR	VAA-6062 ZONE 4C VALVE POS	AIN	OOR	1
CP6052	AERATION_AIR	VAA-6062 ZONE 4C VALVE POS	AIN	LLA	2
CP6052	AERATION_AIR	VAA-6062 ZONE 4C VALVE POS	AIN	HMA	2
CP6052	AERATION_AIR	VAA-6062 ZONE 4C VALVE POS	AIN	HHA	2
CP6052	AERATION_AIR	VAA-6062 ZONE 4C VALVE POS	AIN	LMA	2
CP6052	AERATION_AIR	VAA-6062 ZONE 4C VALVE POS	AIN	BAD	1
CP6052	AERATION_AIR	VAA-6063 ZONE 4D VALVE POS	AIN	LLA	2
CP6052	AERATION_AIR	VAA-6063 ZONE 4D VALVE POS	AIN	HHA	2
CP6052	AERATION_AIR	VAA-6063 ZONE 4D VALVE POS	AIN	LMA	2
CP6052	AERATION_AIR	VAA-6063 ZONE 4D VALVE POS	AIN	HMA	2
CP6052	AERATION_AIR	VAA-6063 ZONE 4D VALVE POS	AIN	OOR	1
CP6052	AERATION_AIR	VAA-6063 ZONE 4D VALVE POS	AIN	BAD	1
CP6052	COMPRESSOR	AIR RECEIVER PLANT AIR PRES	AIN	LMA	1
CP6052	COMPRESSOR	AIR RECEIVER PLANT AIR PRES	AIN	HHA	1
CP6052	COMPRESSOR	AIR RECEIVER PLANT AIR PRES	AIN	LLA	1
CP6052	COMPRESSOR	AIR RECEIVER PLANT AIR PRES	AIN	BAD	1
CP6052	COMPRESSOR	AIR RECEIVER PLANT AIR PRES	AIN	HMA	1
CP6052	COMPRESSOR	AIR RECEIVER PLANT AIR PRES	AIN	OOR	1
CP6052	COMPRESSOR	AIR RECEIVER PLANT AIR PRES	AIN	LLA	2
CP6052	COMPRESSOR	AIR RECEIVER PLANT AIR PRES	AIN	LMA	1
CP6052	COMPRESSOR	AIR RECEIVER PLANT AIR PRES	AIN	HHA	2
CP6052	COMPRESSOR	AIR RECEIVER PLANT AIR PRES	AIN	BAD	1
CP6052	COMPRESSOR	AIR RECEIVER PLANT AIR PRES	AIN	OOR	1
CP6052	COMPRESSOR	AIR RECEIVER PLANT AIR PRES	AIN	HMA	1
CP6052	RAS_PUMPS	PRS-6056 PMP 6 SUCTION FLOW	AIN	HMA	2
CP6052	RAS_PUMPS	PRS-6056 PMP 6 SUCTION FLOW	AIN	LLA	2
CP6052	RAS_PUMPS	PRS-6056 PMP 6 SUCTION FLOW	AIN	HHA	2
CP6052	RAS_PUMPS	PRS-6056 PMP 6 SUCTION FLOW	AIN	LMA	2
CP6052	RAS_PUMPS	PRS-6056 PMP 6 SUCTION FLOW	AIN	OOR	2
CP6052	RAS_PUMPS	PRS-6056 PMP 6 SUCTION FLOW	AIN	BAD	2
CP6052	RAS_PUMPS	PRS-6057 PMP 7 SUCTION FLOW	AIN	HHA	2
CP6052	RAS_PUMPS	PRS-6057 PMP 7 SUCTION FLOW	AIN	LMA	2
CP6052	RAS_PUMPS	PRS-6057 PMP 7 SUCTION FLOW	AIN	OOR	1
CP6052	RAS_PUMPS	PRS-6057 PMP 7 SUCTION FLOW	AIN	BAD	1
CP6052	RAS_PUMPS	PRS-6057 PMP 7 SUCTION FLOW	AIN	LLA	2
CP6052	RAS_PUMPS	PRS-6057 PMP 7 SUCTION FLOW	AIN	HMA	2
CP6052	RAS_PUMPS	PRS-6058 PMP 8 SUCTION FLOW	AIN	HHA	2
CP6052	RAS_PUMPS	PRS-6058 PMP 8 SUCTION FLOW	AIN	BAD	1
CP6052	RAS_PUMPS	PRS-6058 PMP 8 SUCTION FLOW	AIN	OOR	1
CP6052	RAS_PUMPS	PRS-6058 PMP 8 SUCTION FLOW	AIN	HMA	2
CP6052	RAS_PUMPS	PRS-6058 PMP 8 SUCTION FLOW	AIN	LMA	2
CP6052	RAS_PUMPS	PRS-6058 PMP 8 SUCTION FLOW	AIN	LLA	2
CP6052	RAS_PUMPS	RAS TO AB NO. 3 SUCTION FLOW	AIN	HHA	2
CP6052	RAS_PUMPS	RAS TO AB NO. 3 SUCTION FLOW	AIN	LLA	2
CP6052	RAS_PUMPS	RAS TO AB NO. 3 SUCTION FLOW	AIN	LMA	2
CP6052	RAS_PUMPS	RAS TO AB NO. 3 SUCTION FLOW	AIN	BAD	2
CP6052	RAS_PUMPS	RAS TO AB NO. 3 SUCTION FLOW	AIN	OOR	2
CP6052	RAS_PUMPS	RAS TO AB NO. 4 SUCTION FLOW	AIN	LLA	5

CP	COMPOUND	DESCRIPTION	TYPE	ALARM TYPE	PRIORITY
CP6052	RAS_PUMPS	RAS TO AB NO. 4 SUCTION FLOW	AIN	HHA	5
CP6052	RAS_PUMPS	RAS TO AB NO. 4 SUCTION FLOW	AIN	LMA	5
CP6052	RAS_PUMPS	RAS TO AB NO. 4 SUCTION FLOW	AIN	OOR	5
CP6052	RAS_PUMPS	RAS TO AB NO. 4 SUCTION FLOW	AIN	BAD	5
CP6052	RAS_PUMPS	PRS-6069 PMP 9 SUCTION FLOW	AIN	BAD	1
CP6052	RAS_PUMPS	PRS-6069 PMP 9 SUCTION FLOW	AIN	LLA	2
CP6052	RAS_PUMPS	PRS-6069 PMP 9 SUCTION FLOW	AIN	LMA	2
CP6052	RAS_PUMPS	PRS-6069 PMP 9 SUCTION FLOW	AIN	HMA	2
CP6052	RAS_PUMPS	PRS-6069 PMP 9 SUCTION FLOW	AIN	OOR	1
CP6052	RAS_PUMPS	PRS-6069 PMP 9 SUCTION FLOW	AIN	HHA	2
CP6052	RAS_PUMPS	PRS-6060 PMP 10 SUCTION FLOW	AIN	OOR	1
CP6052	RAS_PUMPS	PRS-6060 PMP 10 SUCTION FLOW	AIN	HMA	2
CP6052	RAS_PUMPS	PRS-6060 PMP 10 SUCTION FLOW	AIN	LMA	2
CP6052	RAS_PUMPS	PRS-6060 PMP 10 SUCTION FLOW	AIN	LLA	1
CP6052	RAS_PUMPS	PRS-6060 PMP 10 SUCTION FLOW	AIN	HHA	1
CP6052	RAS_PUMPS	PRS-6060 PMP 10 SUCTION FLOW	AIN	BAD	1
CP6052	RAS_PUMPS	TOTAL INFLUENT	AIN	BAD	5
CP6052	RAS_PUMPS	TOTAL INFLUENT	AIN	HHA	2
CP6052	RAS_PUMPS	TOTAL INFLUENT	AIN	LLA	2
CP6052	RAS_PUMPS	TOTAL INFLUENT	AIN	HMA	2
CP6052	RAS_PUMPS	TOTAL INFLUENT	AIN	OOR	1
CP6052	RAS_PUMPS	TOTAL INFLUENT	AIN	LMA	2
CP6052	RAS_PUMPS	PRS-6056 PMP 6 SPEED	AIN	BAD	1
CP6052	RAS_PUMPS	PRS-6056 PMP 6 SPEED	AIN	LLA	2
CP6052	RAS_PUMPS	PRS-6056 PMP 6 SPEED	AIN	OOR	1
CP6052	RAS_PUMPS	PRS-6056 PMP 6 SPEED	AIN	HHA	2
CP6052	RAS_PUMPS	PRS-6056 PMP 6 SPEED	AIN	HMA	2
CP6052	RAS_PUMPS	PRS-6056 PMP 6 SPEED	AIN	LMA	2
CP6052	RAS_PUMPS	PRS-6057 PMP 7 SPEED	AIN	LLA	2
CP6052	RAS_PUMPS	PRS-6057 PMP 7 SPEED	AIN	HHA	2
CP6052	RAS_PUMPS	PRS-6057 PMP 7 SPEED	AIN	LMA	2
CP6052	RAS_PUMPS	PRS-6057 PMP 7 SPEED	AIN	HMA	2
CP6052	RAS_PUMPS	PRS-6057 PMP 7 SPEED	AIN	BAD	1
CP6052	RAS_PUMPS	PRS-6057 PMP 7 SPEED	AIN	OOR	1
CP6052	RAS_PUMPS	PRS-6058 PMP 8 SPEED	AIN	BAD	1
CP6052	RAS_PUMPS	PRS-6058 PMP 8 SPEED	AIN	OOR	1
CP6052	RAS_PUMPS	PRS-6058 PMP 8 SPEED	AIN	HMA	2
CP6052	RAS_PUMPS	PRS-6058 PMP 8 SPEED	AIN	LMA	2
CP6052	RAS_PUMPS	PRS-6058 PMP 8 SPEED	AIN	HHA	2
CP6052	RAS_PUMPS	PRS-6058 PMP 8 SPEED	AIN	LLA	2
CP6052	RAS_PUMPS	PRS-6069 PMP 9 SPEED	AIN	OOR	1
CP6052	RAS_PUMPS	PRS-6069 PMP 9 SPEED	AIN	HMA	2
CP6052	RAS_PUMPS	PRS-6069 PMP 9 SPEED	AIN	LMA	2
CP6052	RAS_PUMPS	PRS-6069 PMP 9 SPEED	AIN	HHA	2
CP6052	RAS_PUMPS	PRS-6069 PMP 9 SPEED	AIN	LLA	2
CP6052	RAS_PUMPS	PRS-6069 PMP 9 SPEED	AIN	BAD	1
CP6052	RAS_PUMPS	PRS-6060 PMP 10 SPEED	AIN	LLA	2
CP6052	RAS_PUMPS	PRS-6060 PMP 10 SPEED	AIN	HHA	2
CP6052	RAS_PUMPS	PRS-6060 PMP 10 SPEED	AIN	LMA	2
CP6052	RAS_PUMPS	PRS-6060 PMP 10 SPEED	AIN	HMA	2
CP6052	RAS_PUMPS	PRS-6060 PMP 10 SPEED	AIN	OOR	1
CP6052	RAS_PUMPS	PRS-6060 PMP 10 SPEED	AIN	BAD	1
CP6052	RAS_PUMPS	RAS TO AB NO. 3 VALVE POS	AIN	HHA	2

CP	COMPOUND	DESCRIPTION	TYPE	ALARM TYPE	PRIORITY
CP6052	RAS_PUMPS	RAS TO AB NO. 3 VALVE POS	AIN	LLA	2
CP6052	RAS_PUMPS	RAS TO AB NO. 3 VALVE POS	AIN	LMA	2
CP6052	RAS_PUMPS	RAS TO AB NO. 3 VALVE POS	AIN	HMA	2
CP6052	RAS_PUMPS	RAS TO AB NO. 3 VALVE POS	AIN	OOR	2
CP6052	RAS_PUMPS	RAS TO AB NO. 3 VALVE POS	AIN	BAD	2
CP6052	RAS_PUMPS	RAS TO AB NO. 4 VALVE POS	AIN	HHA	2
CP6052	RAS_PUMPS	RAS TO AB NO. 4 VALVE POS	AIN	BAD	1
CP6052	RAS_PUMPS	RAS TO AB NO. 4 VALVE POS	AIN	OOR	1
CP6052	RAS_PUMPS	RAS TO AB NO. 4 VALVE POS	AIN	LLA	2
CP6052	RAS_PUMPS	RAS TO AB NO. 4 VALVE POS	AIN	HMA	2
CP6052	RAS_PUMPS	RAS TO AB NO. 4 VALVE POS	AIN	LMA	2
CP6052	WAS_PUMPS	WAS FEED RATE	AIN	LMA	2
CP6052	WAS_PUMPS	WAS FEED RATE	AIN	OOR	1
CP6052	WAS_PUMPS	WAS FEED RATE	AIN	BAD	1
CP6052	WAS_PUMPS	WAS FEED RATE	AIN	HHA	2
CP6052	WAS_PUMPS	WAS FEED RATE	AIN	LLA	2
CP6052	WAS_PUMPS	WAS FEED RATE	AIN	HMA	2
CP6052	WAS_PUMPS	PWS-6053 PMP 3 SPEED	AIN	BAD	1
CP6052	WAS_PUMPS	PWS-6053 PMP 3 SPEED	AIN	OOR	1
CP6052	WAS_PUMPS	PWS-6053 PMP 3 SPEED	AIN	LMA	2
CP6052	WAS_PUMPS	PWS-6053 PMP 3 SPEED	AIN	HMA	2
CP6052	WAS_PUMPS	PWS-6053 PMP 3 SPEED	AIN	HHA	2
CP6052	WAS_PUMPS	PWS-6053 PMP 3 SPEED	AIN	LLA	2
CP6052	WAS_PUMPS	PWS-6054 PMP 4 SPEED	AIN	LLA	2
CP6052	WAS_PUMPS	PWS-6054 PMP 4 SPEED	AIN	LMA	2
CP6052	WAS_PUMPS	PWS-6054 PMP 4 SPEED	AIN	HMA	2
CP6052	WAS_PUMPS	PWS-6054 PMP 4 SPEED	AIN	HHA	2
CP6052	WAS_PUMPS	PWS-6054 PMP 4 SPEED	AIN	OOR	1
CP6052	WAS_PUMPS	PWS-6054 PMP 4 SPEED	AIN	BAD	1
CP6053	ALUM	PA-6401 PMP 1A SPEED	AIN	OOR	1
CP6053	ALUM	PA-6401 PMP 1A SPEED	AIN	LMA	2
CP6053	ALUM	PA-6401 PMP 1A SPEED	AIN	HHA	2
CP6053	ALUM	PA-6401 PMP 1A SPEED	AIN	LLA	2
CP6053	ALUM	PA-6401 PMP 1A SPEED	AIN	HMA	2
CP6053	ALUM	PA-6401 PMP 1A SPEED	AIN	BAD	1
CP6053	ALUM	PA-6402 PMP 2A SPEED	AIN	HHA	2
CP6053	ALUM	PA-6402 PMP 2A SPEED	AIN	BAD	1
CP6053	ALUM	PA-6402 PMP 2A SPEED	AIN	HMA	2
CP6053	ALUM	PA-6402 PMP 2A SPEED	AIN	LMA	2
CP6053	ALUM	PA-6402 PMP 2A SPEED	AIN	OOR	1
CP6053	ALUM	PA-6402 PMP 2A SPEED	AIN	LLA	2
CP6053	CATI_POLYMER	TERTIARY CHEMICAL POLYMER SYSTEM	AIN	BAD	5
CP6053	CATI_POLYMER	TERTIARY CHEMICAL POLYMER SYSTEM	AIN	OOR	1
CP6053	CATI_POLYMER	TERTIARY CHEMICAL POLYMER SYSTEM	AIN	HMA	2
CP6053	CATI_POLYMER	TERTIARY CHEMICAL POLYMER SYSTEM	AIN	LMA	2
CP6053	CATI_POLYMER	TERTIARY CHEMICAL POLYMER SYSTEM	AIN	HHA	2
CP6053	CATI_POLYMER	TERTIARY CHEMICAL POLYMER SYSTEM	AIN	LLA	2
CP6053	CATI_POLYMER	BP-6401 NO. 1A INJECTION RATE	AIN	HHA	2
CP6053	CATI_POLYMER	BP-6401 NO. 1A INJECTION RATE	AIN	LLA	2
CP6053	CATI_POLYMER	BP-6401 NO. 1A INJECTION RATE	AIN	OOR	1
CP6053	CATI_POLYMER	BP-6401 NO. 1A INJECTION RATE	AIN	LMA	2
CP6053	CATI_POLYMER	BP-6401 NO. 1A INJECTION RATE	AIN	BAD	1
CP6053	CATI_POLYMER	BP-6401 NO. 1A INJECTION RATE	AIN	HMA	2

CP	COMPOUND	DESCRIPTION	TYPE	ALARM TYPE	PRIORITY
CP6053	CATI_POLYMER	BP-6402 NO. 1B INJECTION RATE	AIN	LLA	2
CP6053	CATI_POLYMER	BP-6402 NO. 1B INJECTION RATE	AIN	LMA	2
CP6053	CATI_POLYMER	BP-6402 NO. 1B INJECTION RATE	AIN	HMA	2
CP6053	CATI_POLYMER	BP-6402 NO. 1B INJECTION RATE	AIN	OOR	1
CP6053	CATI_POLYMER	BP-6402 NO. 1B INJECTION RATE	AIN	BAD	1
CP6053	CATI_POLYMER	BP-6402 NO. 1B INJECTION RATE	AIN	HHA	2
CP6053	CATI_POLYMER	TERTIARY POLY TOTE 1A LEVEL	AIN	HMA	2
CP6053	CATI_POLYMER	TERTIARY POLY TOTE 1A LEVEL	AIN	BAD	1
CP6053	CATI_POLYMER	TERTIARY POLY TOTE 1A LEVEL	AIN	OOR	1
CP6053	CATI_POLYMER	TERTIARY POLY TOTE 1A LEVEL	AIN	LLA	2
CP6053	CATI_POLYMER	TERTIARY POLY TOTE 1A LEVEL	AIN	HHA	2
CP6053	CATI_POLYMER	TERTIARY POLY TOTE 1A LEVEL	AIN	LMA	2
CP6053	CL2_CONTACT	CT ONE HOUR AVERAGE	AIN	LMA	1
CP6053	CL2_CONTACT	CT ONE HOUR AVERAGE	AIN	LLA	5
CP6053	CL2_CONTACT	DT ONE HOUR AVERAGE	AIN	LMA	5
CP6053	CL2_CONTACT	DT ONE HOUR AVERAGE	AIN	LLA	5
CP6053	CL2_CONTACT	CL BASIN NO. 2 CL RESIDUAL 1A	AIN	OOR	2
CP6053	CL2_CONTACT	CL BASIN NO. 2 CL RESIDUAL 1A	AIN	LLA	1
CP6053	CL2_CONTACT	CL BASIN NO. 2 CL RESIDUAL 1A	AIN	HHA	1
CP6053	CL2_CONTACT	CL BASIN NO. 2 CL RESIDUAL 1A	AIN	HMA	1
CP6053	CL2_CONTACT	CL BASIN NO. 2 CL RESIDUAL 1A	AIN	LMA	1
CP6053	CL2_CONTACT	CL BASIN NO. 2 CL RESIDUAL 1A	AIN	BAD	1
CP6053	CL2_CONTACT	CL BASIN NO. 3 CL RESIDUAL 1B	AIN	OOR	2
CP6053	CL2_CONTACT	CL BASIN NO. 3 CL RESIDUAL 1B	AIN	LLA	1
CP6053	CL2_CONTACT	CL BASIN NO. 3 CL RESIDUAL 1B	AIN	HHA	1
CP6053	CL2_CONTACT	CL BASIN NO. 3 CL RESIDUAL 1B	AIN	HMA	1
CP6053	CL2_CONTACT	CL BASIN NO. 3 CL RESIDUAL 1B	AIN	LMA	1
CP6053	CL2_CONTACT	CL BASIN NO. 3 CL RESIDUAL 1B	AIN	BAD	1
CP6053	CL2_CONTACT	CL BASIN NO. 2 CL RESIDUAL 2	AIN	LMA	1
CP6053	CL2_CONTACT	CL BASIN NO. 2 CL RESIDUAL 2	AIN	BAD	2
CP6053	CL2_CONTACT	CL BASIN NO. 2 CL RESIDUAL 2	AIN	OOR	2
CP6053	CL2_CONTACT	CL BASIN NO. 2 CL RESIDUAL 2	AIN	HMA	1
CP6053	CL2_CONTACT	CL BASIN NO. 2 CL RESIDUAL 2	AIN	LLA	1
CP6053	CL2_CONTACT	CL BASIN NO. 2 CL RESIDUAL 2	AIN	HHA	1
CP6053	CL2_CONTACT	CL BASIN NO. 3 CL RESIDUAL 3	AIN	OOR	1
CP6053	CL2_CONTACT	CL BASIN NO. 3 CL RESIDUAL 3	AIN	LMA	1
CP6053	CL2_CONTACT	CL BASIN NO. 3 CL RESIDUAL 3	AIN	BAD	1
CP6053	CL2_CONTACT	CL BASIN NO. 3 CL RESIDUAL 3	AIN	LLA	1
CP6053	CL2_CONTACT	CL BASIN NO. 3 CL RESIDUAL 3	AIN	HMA	1
CP6053	CL2_CONTACT	CL BASIN NO. 3 CL RESIDUAL 3	AIN	HHA	1
CP6053	CL2_CONTACT	CONTROL ZCHLOR CL RESIDUAL 4A	AIN	LLA	2
CP6053	CL2_CONTACT	CONTROL ZCHLOR CL RESIDUAL 4A	AIN	HMA	1
CP6053	CL2_CONTACT	CONTROL ZCHLOR CL RESIDUAL 4A	AIN	HHA	2
CP6053	CL2_CONTACT	CONTROL ZCHLOR CL RESIDUAL 4A	AIN	BAD	1
CP6053	CL2_CONTACT	CONTROL ZCHLOR CL RESIDUAL 4A	AIN	OOR	1
CP6053	CL2_CONTACT	OUTFALL ZCHLOR CL RESIDUAL 4B	AIN	BAD	1
CP6053	CL2_CONTACT	OUTFALL ZCHLOR CL RESIDUAL 4B	AIN	OOR	1
CP6053	CL2_CONTACT	OUTFALL ZCHLOR CL RESIDUAL 4B	AIN	HMA	1
CP6053	CL2_CONTACT	OUTFALL ZCHLOR CL RESIDUAL 4B	AIN	HHA	2
CP6053	CL2_CONTACT	OUTFALL ZCHLOR CL RESIDUAL 4B	AIN	LLA	2
CP6053	CL2_CONTACT	OUTFALL TURBIDITY METER	AIN	HMA	1
CP6053	CL2_CONTACT	OUTFALL TURBIDITY METER	AIN	OOR	1
CP6053	CL2_CONTACT	OUTFALL TURBIDITY METER	AIN	BAD	1

CP	COMPOUND	DESCRIPTION	TYPE	ALARM TYPE	PRIORITY
CP6053	CL2_CONTACT	OUTFALL TURBIDITY METER	AIN	LMA	1
CP6053	CL2_CONTACT	OUTFALL PH	AIN	OOR	1
CP6053	CL2_CONTACT	OUTFALL PH	AIN	BAD	1
CP6053	CL2_CONTACT	OUTFALL PH	AIN	HMA	1
CP6053	CL2_CONTACT	OUTFALL PH	AIN	LMA	1
CP6053	CL2_CONTACT	OUTFALL CONDUCTIVITY	AIN	LMA	2
CP6053	CL2_CONTACT	OUTFALL CONDUCTIVITY	AIN	BAD	1
CP6053	CL2_CONTACT	OUTFALL CONDUCTIVITY	AIN	HMA	2
CP6053	CL2_CONTACT	OUTFALL CONDUCTIVITY	AIN	OOR	1
CP6053	CL2_CONTACT	CONTACT TIME ALARM	AIN	LMA	1
CP6053	CL2_CONTACT	CONTACT TIME ALARM	AIN	LLA	1
CP6053	CL2_CONTACT	DETENTION TIME	AIN	LMA	1
CP6053	CL2_CONTACT	FINAL EFFLUENT TO OUTFALL	AIN	HHA	1
CP6053	CL2_CONTACT	FINAL EFFLUENT TO OUTFALL	AIN	OOR	1
CP6053	CL2_CONTACT	FINAL EFFLUENT TO OUTFALL	AIN	LLA	1
CP6053	CL2_CONTACT	FINAL EFFLUENT TO OUTFALL	AIN	LMA	1
CP6053	CL2_CONTACT	FINAL EFFLUENT TO OUTFALL	AIN	HMA	1
CP6053	CL2_CONTACT	FINAL EFFLUENT TO OUTFALL	AIN	BAD	1
CP6053	NA_BISULFITE	SBS PUMP #2 CONTROL	AIN	HMA	5
CP6053	NA_BISULFITE	SBS PUMP #2 CONTROL	AIN	LMA	5
CP6053	NA_BISULFITE	TNK-6408 NO. 1A BISULFITE	AIN	LLA	2
CP6053	NA_BISULFITE	TNK-6408 NO. 1A BISULFITE	AIN	LMA	2
CP6053	NA_BISULFITE	TNK-6408 NO. 1A BISULFITE	AIN	BAD	2
CP6053	NA_BISULFITE	TNK-6408 NO. 1A BISULFITE	AIN	HHA	2
CP6053	NA_BISULFITE	TNK-6408 NO. 1A BISULFITE	AIN	OOR	2
CP6053	NA_BISULFITE	TNK-6408 NO. 1A BISULFITE	AIN	HMA	2
CP6053	NA_BISULFITE	TNK-6409 NO. 2A BISULFITE	AIN	BAD	2
CP6053	NA_BISULFITE	TNK-6409 NO. 2A BISULFITE	AIN	LLA	2
CP6053	NA_BISULFITE	TNK-6409 NO. 2A BISULFITE	AIN	OOR	2
CP6053	NA_BISULFITE	TNK-6409 NO. 2A BISULFITE	AIN	LMA	2
CP6053	NA_BISULFITE	TNK-6409 NO. 2A BISULFITE	AIN	HMA	2
CP6053	NA_BISULFITE	TNK-6409 NO. 2A BISULFITE	AIN	HHA	2
CP6053	NA_BISULFITE	PSB-6401 PMP 1A SPEED	AIN	BAD	2
CP6053	NA_BISULFITE	PSB-6401 PMP 1A SPEED	AIN	OOR	2
CP6053	NA_BISULFITE	PSB-6401 PMP 1A SPEED	AIN	HMA	2
CP6053	NA_BISULFITE	PSB-6401 PMP 1A SPEED	AIN	LMA	2
CP6053	NA_BISULFITE	PSB-6401 PMP 1A SPEED	AIN	HHA	2
CP6053	NA_BISULFITE	PSB-6401 PMP 1A SPEED	AIN	LLA	2
CP6053	NA_BISULFITE	PSB-6402 PMP 2A SPEED	AIN	HHA	2
CP6053	NA_BISULFITE	PSB-6402 PMP 2A SPEED	AIN	BAD	2
CP6053	NA_BISULFITE	PSB-6402 PMP 2A SPEED	AIN	OOR	2
CP6053	NA_BISULFITE	PSB-6402 PMP 2A SPEED	AIN	HMA	2
CP6053	NA_BISULFITE	PSB-6402 PMP 2A SPEED	AIN	LLA	2
CP6053	NA_BISULFITE	PSB-6402 PMP 2A SPEED	AIN	LMA	2
CP6053	NA_BISULFITE	PSB-6403 PMP 3A SPEED	AIN	LLA	2
CP6053	NA_BISULFITE	PSB-6403 PMP 3A SPEED	AIN	BAD	2
CP6053	NA_BISULFITE	PSB-6403 PMP 3A SPEED	AIN	OOR	2
CP6053	NA_BISULFITE	PSB-6403 PMP 3A SPEED	AIN	HMA	2
CP6053	NA_BISULFITE	PSB-6403 PMP 3A SPEED	AIN	LMA	2
CP6053	NA_BISULFITE	PSB-6403 PMP 3A SPEED	AIN	HHA	2
CP6053	NA_BISULFITE	PSB-6404 PMP 4A SPEED	AIN	BAD	2
CP6053	NA_BISULFITE	PSB-6404 PMP 4A SPEED	AIN	OOR	2
CP6053	NA_BISULFITE	PSB-6404 PMP 4A SPEED	AIN	HMA	2

CP	COMPOUND	DESCRIPTION	TYPE	ALARM TYPE	PRIORITY
CP6053	NA_BISULFITE	PSB-6404 PMP 4A SPEED	AIN	LMA	2
CP6053	NA_BISULFITE	PSB-6404 PMP 4A SPEED	AIN	HHA	2
CP6053	NA_BISULFITE	PSB-6404 PMP 4A SPEED	AIN	LLA	2
CP6053	NAOCL		AIN	BAD	5
CP6053	NAOCL		AIN	LLA	2
CP6053	NAOCL		AIN	HHA	2
CP6053	NAOCL		AIN	LMA	2
CP6053	NAOCL		AIN	HMA	2
CP6053	NAOCL		AIN	OOR	1
CP6053	NAOCL	SODIUM HYPO DISINFECT SYS	AIN	BAD	5
CP6053	NAOCL	SODIUM HYPO DISINFECT SYS	AIN	OOR	1
CP6053	NAOCL	SODIUM HYPO DISINFECT SYS	AIN	OOR	1
CP6053	NAOCL	SODIUM HYPO DISINFECT SYS	AIN	BAD	5
CP6053	NAOCL	SODIUM HYPO DISINFECT SYS	AIN	BAD	5
CP6053	NAOCL	SODIUM HYPO DISINFECT SYS	AIN	OOR	1
CP6053	NAOCL	SODIUM HYPO DISINFECT SYS	AIN	LMA	2
CP6053	NAOCL	SODIUM HYPO DISINFECT SYS	AIN	HMA	2
CP6053	NAOCL	SODIUM HYPO DISINFECT SYS	AIN	HHA	2
CP6053	NAOCL	SODIUM HYPO DISINFECT SYS	AIN	LLA	2
CP6053	NAOCL	NAOCL DOSAGE	AIN	LMA	2
CP6053	NAOCL	NAOCL DOSAGE	AIN	HMA	2
CP6053	NAOCL	TOTAL RAS FLOW	AIN	LLA	2
CP6053	NAOCL	TOTAL RAS FLOW	AIN	HHA	2
CP6053	NAOCL	TOTAL RAS FLOW	AIN	LMA	2
CP6053	NAOCL	TOTAL RAS FLOW	AIN	HMA	2
CP6053	NAOCL	TOTAL RAS FLOW	AIN	OOR	1
CP6053	NAOCL	TOTAL RAS FLOW	AIN	BAD	5
CP6053	NAOCL	TNK-6404 NO. 1A NAOCL LEVEL	AIN	HHA	2
CP6053	NAOCL	TNK-6404 NO. 1A NAOCL LEVEL	AIN	HMA	2
CP6053	NAOCL	TNK-6404 NO. 1A NAOCL LEVEL	AIN	BAD	2
CP6053	NAOCL	TNK-6404 NO. 1A NAOCL LEVEL	AIN	OOR	2
CP6053	NAOCL	TNK-6404 NO. 1A NAOCL LEVEL	AIN	LLA	2
CP6053	NAOCL	TNK-6404 NO. 1A NAOCL LEVEL	AIN	LMA	2
CP6053	NAOCL	TNK-6403 NO. 2A NAOCL LEVEL	AIN	LLA	2
CP6053	NAOCL	TNK-6403 NO. 2A NAOCL LEVEL	AIN	BAD	2
CP6053	NAOCL	TNK-6403 NO. 2A NAOCL LEVEL	AIN	OOR	2
CP6053	NAOCL	TNK-6403 NO. 2A NAOCL LEVEL	AIN	HMA	2
CP6053	NAOCL	TNK-6403 NO. 2A NAOCL LEVEL	AIN	LMA	2
CP6053	NAOCL	TNK-6403 NO. 2A NAOCL LEVEL	AIN	HHA	2
CP6053	NAOCL	TNK-6406 NO. 1B NAOCL LEVEL	AIN	LLA	2
CP6053	NAOCL	TNK-6406 NO. 1B NAOCL LEVEL	AIN	HHA	2
CP6053	NAOCL	TNK-6406 NO. 1B NAOCL LEVEL	AIN	HMA	2
CP6053	NAOCL	TNK-6406 NO. 1B NAOCL LEVEL	AIN	OOR	2
CP6053	NAOCL	TNK-6406 NO. 1B NAOCL LEVEL	AIN	BAD	2
CP6053	NAOCL	TNK-6406 NO. 1B NAOCL LEVEL	AIN	LMA	2
CP6053	NAOCL	TNK-6407 NO. 2B NAOCL LEVEL	AIN	LLA	2
CP6053	NAOCL	TNK-6407 NO. 2B NAOCL LEVEL	AIN	LMA	2
CP6053	NAOCL	TNK-6407 NO. 2B NAOCL LEVEL	AIN	HMA	2
CP6053	NAOCL	TNK-6407 NO. 2B NAOCL LEVEL	AIN	OOR	2
CP6053	NAOCL	TNK-6407 NO. 2B NAOCL LEVEL	AIN	BAD	2
CP6053	NAOCL	TNK-6407 NO. 2B NAOCL LEVEL	AIN	HHA	2
CP6053	NAOCL	PSH-6401 PMP 1A SPEED	AIN	BAD	1
CP6053	NAOCL	PSH-6401 PMP 1A SPEED	AIN	OOR	1

CP	COMPOUND	DESCRIPTION	TYPE	ALARM TYPE	PRIORITY
CP6053	NAOCL	PSH-6401 PMP 1A SPEED	AIN	HHA	2
CP6053	NAOCL	PSH-6401 PMP 1A SPEED	AIN	LLA	2
CP6053	NAOCL	PSH-6401 PMP 1A SPEED	AIN	HMA	2
CP6053	NAOCL	PSH-6401 PMP 1A SPEED	AIN	LMA	2
CP6053	NAOCL	PSH-6402 PMP 2A SPEED	AIN	LMA	2
CP6053	NAOCL	PSH-6402 PMP 2A SPEED	AIN	BAD	1
CP6053	NAOCL	PSH-6402 PMP 2A SPEED	AIN	OOR	1
CP6053	NAOCL	PSH-6402 PMP 2A SPEED	AIN	HMA	2
CP6053	NAOCL	PSH-6402 PMP 2A SPEED	AIN	HHA	2
CP6053	NAOCL	PSH-6402 PMP 2A SPEED	AIN	LLA	2
CP6053	NAOCL	PSH-6405 PMP 1B SPEED	AIN	HHA	2
CP6053	NAOCL	PSH-6405 PMP 1B SPEED	AIN	HMA	2
CP6053	NAOCL	PSH-6405 PMP 1B SPEED	AIN	LLA	2
CP6053	NAOCL	PSH-6405 PMP 1B SPEED	AIN	OOR	2
CP6053	NAOCL	PSH-6405 PMP 1B SPEED	AIN	BAD	2
CP6053	NAOCL	PSH-6405 PMP 1B SPEED	AIN	LMA	2
CP6053	NAOCL	PSH-6406 PMP 2B SPEED	AIN	LLA	2
CP6053	NAOCL	PSH-6406 PMP 2B SPEED	AIN	BAD	2
CP6053	NAOCL	PSH-6406 PMP 2B SPEED	AIN	HHA	2
CP6053	NAOCL	PSH-6406 PMP 2B SPEED	AIN	LMA	2
CP6053	NAOCL	PSH-6406 PMP 2B SPEED	AIN	HMA	2
CP6053	NAOCL	PSH-6406 PMP 2B SPEED	AIN	OOR	2
CP6053	NAOCL	PSH-6407 PMP 3B SPEED	AIN	OOR	2
CP6053	NAOCL	PSH-6407 PMP 3B SPEED	AIN	HMA	2
CP6053	NAOCL	PSH-6407 PMP 3B SPEED	AIN	LLA	2
CP6053	NAOCL	PSH-6407 PMP 3B SPEED	AIN	HHA	2
CP6053	NAOCL	PSH-6407 PMP 3B SPEED	AIN	LMA	2
CP6053	NAOCL	PSH-6407 PMP 3B SPEED	AIN	BAD	2
CP6053	NAOCL	PSH-6408 PMP 4B SPEED	AIN	LLA	2
CP6053	NAOCL	PSH-6408 PMP 4B SPEED	AIN	LMA	2
CP6053	NAOCL	PSH-6408 PMP 4B SPEED	AIN	HMA	2
CP6053	NAOCL	PSH-6408 PMP 4B SPEED	AIN	OOR	2
CP6053	NAOCL	PSH-6408 PMP 4B SPEED	AIN	BAD	2
CP6053	NAOCL	PSH-6408 PMP 4B SPEED	AIN	HHA	2
CP6053	NAOCL	PSH-6409 PMP 5B SPEED	AIN	HHA	2
CP6053	NAOCL	PSH-6409 PMP 5B SPEED	AIN	LMA	2
CP6053	NAOCL	PSH-6409 PMP 5B SPEED	AIN	LLA	2
CP6053	NAOCL	PSH-6409 PMP 5B SPEED	AIN	HMA	2
CP6053	NAOCL	PSH-6409 PMP 5B SPEED	AIN	OOR	2
CP6053	NAOCL	PSH-6409 PMP 5B SPEED	AIN	BAD	2
CP6053	NAOCL	PSH-6412 PMP 3C SPEED	AIN	OOR	2
CP6053	NAOCL	PSH-6412 PMP 3C SPEED	AIN	LMA	2
CP6053	NAOCL	PSH-6412 PMP 3C SPEED	AIN	LLA	2
CP6053	NAOCL	PSH-6412 PMP 3C SPEED	AIN	HHA	2
CP6053	NAOCL	PSH-6412 PMP 3C SPEED	AIN	HMA	2
CP6053	NAOCL	PSH-6412 PMP 3C SPEED	AIN	BAD	2
CP6053	NAOCL	PSH-6413 PMP 4C SPEED	AIN	HHA	2
CP6053	NAOCL	PSH-6413 PMP 4C SPEED	AIN	LMA	2
CP6053	NAOCL	PSH-6413 PMP 4C SPEED	AIN	OOR	1
CP6053	NAOCL	PSH-6413 PMP 4C SPEED	AIN	BAD	1
CP6053	NAOCL	PSH-6413 PMP 4C SPEED	AIN	LLA	2
CP6053	NAOCL	PSH-6413 PMP 4C SPEED	AIN	HMA	2
CP6053	NO_ALARM3	SODIUM HYPO DISINFECT SYS	AIN	LLA	5

CP	COMPOUND	DESCRIPTION	TYPE	ALARM TYPE	PRIORITY
CP6053	NO_ALARM3	SODIUM HYPO DISINFECT SYS	AIN	BAD	5
CP6053	NO_ALARM3	SODIUM HYPO DISINFECT SYS	AIN	OOR	1
CP6053	NO_ALARM3	SODIUM HYPO DISINFECT SYS	AIN	LMA	5
CP6053	NO_ALARM3	SODIUM HYPO DISINFECT SYS	AIN	HHA	5
CP6053	NO_ALARM3	SODIUM HYPO DISINFECT SYS	AIN	HMA	5
CP6053	NO_ALARM3	SODIUM HYPO DISINFECT SYS	AIN	HMA	5
CP6053	NO_ALARM3	SODIUM HYPO DISINFECT SYS	AIN	LMA	5
CP6053	NO_ALARM3	SODIUM HYPO DISINFECT SYS	AIN	BAD	5
CP6053	NO_ALARM3	SODIUM HYPO DISINFECT SYS	AIN	HHA	5
CP6053	NO_ALARM3	SODIUM HYPO DISINFECT SYS	AIN	OOR	1
CP6053	NO_ALARM3	SODIUM HYPO DISINFECT SYS	AIN	LLA	5
CP6053	NO_ALARM3	SODIUM HYPO DISINFECT SYS	AIN	LLA	5
CP6053	NO_ALARM3	SODIUM HYPO DISINFECT SYS	AIN	HHA	5
CP6053	NO_ALARM3	SODIUM HYPO DISINFECT SYS	AIN	HMA	5
CP6053	NO_ALARM3	SODIUM HYPO DISINFECT SYS	AIN	BAD	5
CP6053	NO_ALARM3	SODIUM HYPO DISINFECT SYS	AIN	OOR	1
CP6053	NO_ALARM3	SODIUM HYPO DISINFECT SYS	AIN	LMA	5
CP6053	NO_ALARM3	TERTIARY CHEMICAL POLYMER SYSTEM	AIN	HMA	2
CP6053	NO_ALARM3	TERTIARY CHEMICAL POLYMER SYSTEM	AIN	LLA	2
CP6053	NO_ALARM3	TERTIARY CHEMICAL POLYMER SYSTEM	AIN	HHA	2
CP6053	NO_ALARM3	TERTIARY CHEMICAL POLYMER SYSTEM	AIN	LMA	2
CP6053	NO_ALARM3	TERTIARY CHEMICAL POLYMER SYSTEM	AIN	BAD	5
CP6053	NO_ALARM3	TERTIARY CHEMICAL POLYMER SYSTEM	AIN	OOR	1
CP6053	NO_ALARM3	TERTIARY CHEMICAL ALUM	AIN	LLA	2
CP6053	NO_ALARM3	TERTIARY CHEMICAL ALUM	AIN	HHA	2
CP6053	NO_ALARM3	TERTIARY CHEMICAL ALUM	AIN	LMA	2
CP6053	NO_ALARM3	TERTIARY CHEMICAL ALUM	AIN	HMA	2
CP6053	NO_ALARM3	TERTIARY CHEMICAL ALUM	AIN	BAD	5
CP6053	NO_ALARM3	TERTIARY CHEMICAL ALUM	AIN	OOR	1
CP6053	NO_ALARM3	TERTIARY CHEMICAL POLYMER SYSTEM	AIN	HHA	2
CP6053	NO_ALARM3	TERTIARY CHEMICAL POLYMER SYSTEM	AIN	LLA	2
CP6053	NO_ALARM3	TERTIARY CHEMICAL POLYMER SYSTEM	AIN	HMA	2
CP6053	NO_ALARM3	TERTIARY CHEMICAL POLYMER SYSTEM	AIN	LMA	2
CP6053	NO_ALARM3	TERTIARY CHEMICAL POLYMER SYSTEM	AIN	BAD	5
CP6053	NO_ALARM3	TERTIARY CHEMICAL POLYMER SYSTEM	AIN	OOR	1
CP6053	NO_ALARM3	TERTIARY CHEMICAL ALUM	AIN	BAD	5
CP6053	NO_ALARM3	TERTIARY CHEMICAL ALUM	AIN	OOR	1
CP6053	NO_ALARM3	TERTIARY CHEMICAL ALUM	AIN	HMA	2
CP6053	NO_ALARM3	TERTIARY CHEMICAL ALUM	AIN	LMA	2
CP6053	NO_ALARM3	TERTIARY CHEMICAL ALUM	AIN	HHA	2
CP6053	NO_ALARM3	TERTIARY CHEMICAL ALUM	AIN	LLA	2
CP6053	NO_ALARM3	SODIUM HYPO DISINFECT SYS	AIN	OOR	1
CP6053	NO_ALARM3	SODIUM HYPO DISINFECT SYS	AIN	BAD	5
CP6053	NO_ALARM3	FILTER RECYCLE PUMPS	AIN	LLA	2
CP6053	NO_ALARM3	FILTER RECYCLE PUMPS	AIN	HMA	2
CP6053	NO_ALARM3	FILTER RECYCLE PUMPS	AIN	BAD	5
CP6053	NO_ALARM3	FILTER RECYCLE PUMPS	AIN	OOR	1
CP6053	NO_ALARM3	FILTER RECYCLE PUMPS	AIN	LMA	2
CP6053	NO_ALARM3	FILTER RECYCLE PUMPS	AIN	HHA	2
CP6053	NO_ALARM3	FILTER RECYCLE PUMPS	AIN	BAD	5
CP6053	NO_ALARM3	FILTER RECYCLE PUMPS	AIN	OOR	1
CP6053	NO_ALARM3	FILTER RECYCLE PUMPS	AIN	LMA	2
CP6053	NO_ALARM3	FILTER RECYCLE PUMPS	AIN	HHA	2

CP	COMPOUND	DESCRIPTION	TYPE	ALARM TYPE	PRIORITY
CP6053	NO_ALARM3	FILTER RECYCLE PUMPS	AIN	LLA	2
CP6053	NO_ALARM3	FILTER RECYCLE PUMPS	AIN	HMA	2
CP6053	NO_ALARM3	FILTER RECYCLE PUMPS	AIN	HMA	2
CP6053	NO_ALARM3	FILTER RECYCLE PUMPS	AIN	BAD	5
CP6053	NO_ALARM3	FILTER RECYCLE PUMPS	AIN	LLA	2
CP6053	NO_ALARM3	FILTER RECYCLE PUMPS	AIN	OOR	1
CP6053	NO_ALARM3	FILTER RECYCLE PUMPS	AIN	LMA	2
CP6053	NO_ALARM3	FILTER RECYCLE PUMPS	AIN	HHA	2
CP6053	NPDES	OUTFALL CL2 RESIDUAL	AIN	HMA	5
CP6053	NPDES	OUTFALL CL2 RESIDUAL	AIN	HHA	5
CP6053	NPDES	OUTFALL FLOW	AIN	LMA	5
CP6053	NPDES	EFFLUENT PH	AIN	LMA	5
CP6053	NPDES	EFFLUENT PH	AIN	HMA	5
CP6053	NPDES	EFFLUENT TURBIDITY	AIN	HMA	5
CP6053	NPDES	EFFLUENT TURBIDITY	AIN	HHA	5
CP6053	NPDES	OUTFALL TURBIDITY DAILY AVERAGE	AIN	HMA	1
CP6053	TER_FILTERS	FILTER INFLUENT TURBIDITY	AIN	HMA	2
CP6053	TER_FILTERS	FILTER INFLUENT TURBIDITY	AIN	HHA	2
CP6053	TER_FILTERS	FILTER INFLUENT TURBIDITY	AIN	BAD	2
CP6053	TER_FILTERS	FILTER INFLUENT TURBIDITY	AIN	OOR	2
CP6053	TER_FILTERS	FILTER EFFLUENT TURBIDITY	AIN	BAD	2
CP6053	TER_FILTERS	FILTER EFFLUENT TURBIDITY	AIN	OOR	2
CP6053	TER_FILTERS	FILTER EFFLUENT TURBIDITY	AIN	HMA	2
CP6053	TER_FILTERS	FILTER EFFLUENT TURBIDITY	AIN	LMA	2
CP6053	TER_FILTERS	FILTER EFFLUENT TURBIDITY	AIN	HHA	2
CP6053	TER_FILTERS	FILTER EFFLUENT TURBIDITY	AIN	LLA	2
CP6053	TER_FILTERS	FILTER LOADING	AIN	HMA	2
CP6053	TER_FILTERS	FILTER LOADING	AIN	HHA	2
CP6053	TER_FILTERS	FILTER RECYCLE DSCHRG FLOW	AIN	BAD	2
CP6053	TER_FILTERS	FILTER RECYCLE DSCHRG FLOW	AIN	OOR	2
CP6053	TER_FILTERS	FILTER RECYCLE DSCHRG FLOW	AIN	HMA	2
CP6053	TER_FILTERS	FILTER RECYCLE DSCHRG FLOW	AIN	HHA	2
CP6053	TER_FILTERS	FILTER RECYCLE WETWELL	AIN	BAD	2
CP6053	TER_FILTERS	FILTER RECYCLE WETWELL	AIN	OOR	2
CP6053	TER_FILTERS	FILTER RECYCLE WETWELL	AIN	LMA	2
CP6053	TER_FILTERS	FILTER RECYCLE WETWELL	AIN	HHA	2
CP6053	TER_FILTERS	FILTER RECYCLE WETWELL	AIN	LLA	2
CP6053	TER_FILTERS	FILTER RECYCLE WETWELL	AIN	HMA	2
CP6053	TER_FILTERS	FLO-6405 NO. 2A SPEED	AIN	LLA	2
CP6053	TER_FILTERS	FLO-6405 NO. 2A SPEED	AIN	HHA	2
CP6053	TER_FILTERS	FLO-6405 NO. 2A SPEED	AIN	LMA	2
CP6053	TER_FILTERS	FLO-6405 NO. 2A SPEED	AIN	HMA	2
CP6053	TER_FILTERS	FLO-6405 NO. 2A SPEED	AIN	OOR	1
CP6053	TER_FILTERS	FLO-6405 NO. 2A SPEED	AIN	BAD	1
CP6053	TER_FILTERS	FLO-6406 NO. 2B SPEED	AIN	BAD	1
CP6053	TER_FILTERS	FLO-6406 NO. 2B SPEED	AIN	OOR	1
CP6053	TER_FILTERS	FLO-6406 NO. 2B SPEED	AIN	HMA	2
CP6053	TER_FILTERS	FLO-6406 NO. 2B SPEED	AIN	HHA	2
CP6053	TER_FILTERS	FLO-6406 NO. 2B SPEED	AIN	LLA	2
CP6053	TER_FILTERS	FLO-6406 NO. 2B SPEED	AIN	LMA	2
CP6053	TER_FILTERS	FLO-6407 NO. 2C SPEED	AIN	HMA	2
CP6053	TER_FILTERS	FLO-6407 NO. 2C SPEED	AIN	LMA	2
CP6053	TER_FILTERS	FLO-6407 NO. 2C SPEED	AIN	BAD	1

CP	COMPOUND	DESCRIPTION	TYPE	ALARM TYPE	PRIORITY
CP6053	TER_FILTERS	FLO-6407 NO. 2C SPEED	AIN	OOR	1
CP6053	TER_FILTERS	FLO-6407 NO. 2C SPEED	AIN	HHA	2
CP6053	TER_FILTERS	FLO-6407 NO. 2C SPEED	AIN	LLA	2
CP6053	TER_FILTERS	FLO-6408 NO. 2D SPEED	AIN	OOR	1
CP6053	TER_FILTERS	FLO-6408 NO. 2D SPEED	AIN	BAD	1
CP6053	TER_FILTERS	FLO-6408 NO. 2D SPEED	AIN	LLA	2
CP6053	TER_FILTERS	FLO-6408 NO. 2D SPEED	AIN	HHA	2
CP6053	TER_FILTERS	FLO-6408 NO. 2D SPEED	AIN	LMA	2
CP6053	TER_FILTERS	FLO-6408 NO. 2D SPEED	AIN	HMA	2
CP6053	WATER_PUMPS	PUMP SERVICE WTR TOTAL FLOW	AIN	LLA	2
CP6053	WATER_PUMPS	PUMP SERVICE WTR TOTAL FLOW	AIN	HMA	2
CP6053	WATER_PUMPS	PUMP SERVICE WTR TOTAL FLOW	AIN	LMA	2
CP6053	WATER_PUMPS	PUMP SERVICE WTR TOTAL FLOW	AIN	HHA	2
CP6053	WATER_PUMPS	PUMP SERVICE WTR OVERFLOW	AIN	BAD	2
CP6053	WATER_PUMPS	PUMP SERVICE WTR OVERFLOW	AIN	HHA	2
CP6053	WATER_PUMPS	PUMP SERVICE WTR OVERFLOW	AIN	LLA	2
CP6053	WATER_PUMPS	PUMP SERVICE WTR OVERFLOW	AIN	OOR	2
CP6053	WATER_PUMPS	PUMP SERVICE WTR OVERFLOW	AIN	LMA	2
CP6053	WATER_PUMPS	PUMP SERVICE WTR OVERFLOW	AIN	HMA	2
CP6053	WATER_PUMPS	JKQTOTAL TRANSFER TO AIN	AIN	OOR	2
CP6053	WATER_PUMPS	JKQTOTAL TRANSFER TO AIN	AIN	BAD	2
CP6053	WATER_PUMPS	JKWTOTAL TRANSFER TO AIN	AIN	BAD	2
CP6053	WATER_PUMPS	JKWTOTAL TRANSFER TO AIN	AIN	OOR	2
CP6053	WATER_PUMPS	PUMP SERVICE WTR SYSTEM PRESS	AIN	HMA	2
CP6053	WATER_PUMPS	PUMP SERVICE WTR SYSTEM PRESS	AIN	OOR	2
CP6053	WATER_PUMPS	PUMP SERVICE WTR SYSTEM PRESS	AIN	LMA	2
CP6053	WATER_PUMPS	PUMP SERVICE WTR SYSTEM PRESS	AIN	BAD	2
CP6053	WATER_PUMPS	PUMP SERVICE WTR SYSTEM PRESS	AIN	HHA	2
CP6053	WATER_PUMPS	PUMP SERVICE WTR SYSTEM PRESS	AIN	LLA	2
CP6053	WATER_PUMPS	PSW-6402 PMP 2 SPEED	AIN	BAD	1
CP6053	WATER_PUMPS	PSW-6402 PMP 2 SPEED	AIN	OOR	1
CP6053	WATER_PUMPS	PSW-6404 PMP 4 SPEED	AIN	BAD	1
CP6053	WATER_PUMPS	PSW-6404 PMP 4 SPEED	AIN	OOR	1
CP6053	WATER_PUMPS	PSW-6405 PMP 5 SPEED	AIN	BAD	1
CP6053	WATER_PUMPS	PSW-6405 PMP 5 SPEED	AIN	OOR	1
CP6051	ES_PUMPS	PES-6021 PMP 1 SPEED CONTROL	AOUT	BAD	1
CP6051	ES_PUMPS	PES-6022 PMP 2 SPEED CONTROL	AOUT	BAD	1
CP6051	ES_PUMPS	PES-6023 PMP 3 SPEED CONTROL	AOUT	BAD	1
CP6051	FE_CHLORIDE	PF-6024 PMP 4 SPEED CONTROL	AOUT	BAD	1
CP6051	FE_CHLORIDE	PF-6025 PMP 5 SPEED CONTROL	AOUT	BAD	1
CP6051	INFLUENT	INFLUENT SAMPLER PACING	AOUT	BAD	5
CP6051	INFLUENT	IPS PMP 2 SPEED CONTROL	AOUT	BAD	1
CP6051	INFLUENT	IPS PMP 3 SPEED CONTROL	AOUT	BAD	1
CP6051	INFLUENT	IPS PMP 4 SPEED CONTROL	AOUT	BAD	1
CP6051	POLYMER	BP-6021 NO. 1A CONTROLLER	AOUT	BAD	1
CP6051	POLYMER	BP-6022 NO. 1B CONTROLLER	AOUT	BAD	1
CP6052	AERATION_AIR	VAA-6052 ZONE 3A VALVE CONTROL	AOUT	BAD	1
CP6052	AERATION_AIR	VAA-6053 ZONE 3B VALVE CONTROL	AOUT	BAD	1
CP6052	AERATION_AIR	VAA-6054 ZONE 3C VALVE CONTROL	AOUT	BAD	1
CP6052	AERATION_AIR	VAA-6055 ZONE 3D VALVE CONTROL	AOUT	BAD	1
CP6052	AERATION_AIR	VAA-6060 ZONE 4A VALVE CONTROL	AOUT	BAD	1
CP6052	AERATION_AIR	VAA-6061 ZONE 4B VALVE CONTROL	AOUT	BAD	1
CP6052	AERATION_AIR	VAA-6062 ZONE 4C VALVE CONTROL	AOUT	BAD	1

CP	COMPOUND	DESCRIPTION	TYPE	ALARM TYPE	PRIORITY
CP6052	AERATION_AIR	VAA-6063 ZONE 4D VALVE CONTROL	AOUT	BAD	1
CP6052	RAS_PUMPS	PRS-6056 PMP 6 SPEED CONTROL	AOUT	BAD	1
CP6052	RAS_PUMPS	PRS-6057 PMP 7 SPEED CONTROL	AOUT	BAD	1
CP6052	RAS_PUMPS	PRS-6058 PMP 8 SPEED CONTROL	AOUT	BAD	1
CP6052	RAS_PUMPS	PRS-6069 PMP 9 SPEED CONTROL	AOUT	BAD	1
CP6052	RAS_PUMPS	PRS-6060 PMP 10 SPEED CONTROL	AOUT	BAD	1
CP6052	RAS_PUMPS	RAS TO AB NO. 3 VALVE CONTROL	AOUT	BAD	1
CP6052	RAS_PUMPS	RAS TO AB NO. 4 VALVE CONTROL	AOUT	BAD	1
CP6052	WAS_PUMPS	PWS-6053 PMP 3 SPEED CONTROL	AOUT	BAD	1
CP6052	WAS_PUMPS	PWS-6054 PMP 4 SPEED CONTROL	AOUT	BAD	1
CP6053	ALUM	PA-6401 PMP 1A SPEED CONTROL	AOUT	BAD	1
CP6053	ALUM	PA-6402 PMP 2A SPEED CONTROL	AOUT	BAD	1
CP6053	CATI_POLYMER	BP-6401 NO. 1A RATE CONTROL	AOUT	BAD	1
CP6053	CATI_POLYMER	BP-6402 NO. 1B RATE CONTROL	AOUT	BAD	1
CP6053	CL2_CONTACT	OUTFALL SAMPLER PACING	AOUT	BAD	1
CP6053	NA_BISULFITE	PSB-6401 PMP 1A SPEED CONTROL	AOUT	BAD	1
CP6053	NA_BISULFITE	PSB-6402 PMP 2A SPEED CONTROL	AOUT	BAD	1
CP6053	NA_BISULFITE	PSB-6403 PMP 3A SPEED CONTROL	AOUT	BAD	1
CP6053	NA_BISULFITE	PSB-6404 PMP 4A SPEED CONTROL	AOUT	BAD	1
CP6053	NAOCL	PSH-6401 PMP 1A SPEED CONTROL	AOUT	BAD	1
CP6053	NAOCL	PSH-6402 PMP 2A SPEED CONTROL	AOUT	BAD	1
CP6053	NAOCL	PSH-6405 PMP 1B SPEED CONTROL	AOUT	BAD	1
CP6053	NAOCL	PSH-6406 PMP 2B SPEED CONTROL	AOUT	BAD	1
CP6053	NAOCL	PSH-6407 PMP 3B SPEED CONTROL	AOUT	BAD	1
CP6053	NAOCL	PSH-6408 PMP 4B SPEED CONTROL	AOUT	BAD	1
CP6053	NAOCL	PSH-6409 PMP 5B SPEED CONTROL	AOUT	BAD	1
CP6053	NAOCL	PSH-6412 PMP 3C SPEED CONTROL	AOUT	BAD	1
CP6053	NAOCL	PSH-6413 PMP 4C SPEED CONTROL	AOUT	BAD	1
CP6053	TER_FILTERS	FLO-6405 NO. 2A SPEED CONTROL	AOUT	BAD	1
CP6053	TER_FILTERS	FLO-6406 NO. 2B SPEED CONTROL	AOUT	BAD	1
CP6053	TER_FILTERS	FLO-6407 NO. 2C SPEED CONTROL	AOUT	BAD	1
CP6053	TER_FILTERS	FLO-6408 NO. 2D SPEED CONTROL	AOUT	BAD	1
CP6053	WATER_PUMPS	PSW-6402 PMP 2 SPEED CONTROL	AOUT	BAD	1
CP6053	WATER_PUMPS	PSW-6404 PMP 4 SPEED CONTROL	AOUT	BAD	1
CP6053	WATER_PUMPS	PSW-6405 PMP 5 SPEED CONTROL	AOUT	BAD	1
ABST51	REG_STATUS	CARBON CANYON ALARMS	BLNALM	STA	2
ABST51	REG_STATUS	CARBON CANYON ALARMS	BLNALM	STA	2
ABST51	REG_STATUS	CARBON CANYON ALARMS	BLNALM	STA	2
ABST51	REG_STATUS	CARBON CANYON ALARMS	BLNALM	STA	2
ABST51	REG_STATUS	CARBON CANYON ALARMS	BLNALM	STA	2
ABST51	REG_STATUS	CARBON CANYON ALARMS	BLNALM	STA	5
ABST51	REG_STATUS		BLNALM	STA	1
ABST51	REG_STATUS	RED ALARMS	BLNALM	STA	1
ABST51	REG_STATUS	RP1 ALARMS	BLNALM	STA	2
ABST51	REG_STATUS	RP1 ALARMS	BLNALM	STA	2
ABST51	REG_STATUS	RP1 ALARMS	BLNALM	STA	2
ABST51	REG_STATUS	RP1 ALARMS	BLNALM	STA	2
ABST51	REG_STATUS	RP1 ALARMS	BLNALM	STA	2
ABST51	REG_STATUS	RP1 ALARMS	BLNALM	STA	5
ABST51	REG_STATUS	RP4 ALARMS	BLNALM	STA	2
ABST51	REG_STATUS	RP4 ALARMS	BLNALM	STA	2
ABST51	REG_STATUS	RP4 ALARMS	BLNALM	STA	2
ABST51	REG_STATUS	RP4 ALARMS	BLNALM	STA	2

CP	COMPOUND	DESCRIPTION	TYPE	ALARM TYPE	PRIORITY
ABST51	REG_STATUS	RP4 ALARMS	BLNALM	STA	2
ABST51	RP2		BLNALM	STA	5
ABST51	RP2		BLNALM	STA	5
ABST51	RP2		BLNALM	STA	5
ABST51	RP2		BLNALM	STA	5
ABST51	RP2		BLNALM	STA	5
ABST51	RP2		BLNALM	STA	5
ABST51	RP2		BLNALM	STA	5
ABST51	RP2		BLNALM	STA	5
ABST51	RP2		BLNALM	STA	5
ABST51	RP2		BLNALM	STA	5
ABST51	RP2		BLNALM	STA	5
ABST51	RP2		BLNALM	STA	5
ABST51	RP2		BLNALM	STA	5
ABST51	RP2		BLNALM	STA	5
ABST51	RP2		BLNALM	STA	5
ABST51	RP2		BLNALM	STA	5
ABST51	RP2		BLNALM	STA	5
CP6051	INFLUENT	INFLUENT ALARM	BLNALM	STA	1
CP6051	INFLUENT	INFLUENT ALARM	BLNALM	STA	1
CP6051	INFLUENT	INFLUENT ALARM	BLNALM	STA	1
CP6051	INFLUENT	INFLUENT ALARM	BLNALM	STA	1
CP6051	SLUDGE_PUMPS		BLNALM	STA	1
CP6053	CL2_CONTACT	CONTACT BASIN ALARMS	BLNALM	STA	1
CP6053	CL2_CONTACT	CONTACT BASIN ALARMS	BLNALM	STA	1
CP6053	CL2_CONTACT	CONTACT BASIN ALARMS	BLNALM	STA	1
CP6053	CL2_CONTACT	CONTACT BASIN ALARMS	BLNALM	STA	1
CP6053	CL2_CONTACT	CONTACT BASIN ALARMS	BLNALM	STA	1
CP6053	CL2_CONTACT	CONTACT BASIN ALARMS	BLNALM	STA	1
CP6053	CL2_CONTACT	CONTACT BASIN ALARMS	BLNALM	STA	1
CP6053	CL2_CONTACT	CONTACT BASIN ALARMS	BLNALM	STA	1
CP6053	NPDES	NPDES ALARMS	BLNALM	STA	2
CP6053	NPDES	NPDES ALARMS	BLNALM	STA	2
CP6053	NPDES	NPDES ALARMS	BLNALM	STA	2
CP6053	NPDES	NPDES ALARMS	BLNALM	STA	2
CP6053	NPDES	NPDES ALARMS	BLNALM	STA	2
CP6053	NPDES	NPDES ALARMS	BLNALM	STA	2
CP6053	NPDES	NPDES ALARMS	BLNALM	STA	2
CP6053	NPDES	NPDES ALARMS	BLNALM	STA	2
CP6053	NPDES	NPDES ALARMS	BLNALM	STA	2
CP6053	NPDES	NPDES ALARMS	BLNALM	STA	2
CP6053	NPDES	NPDES ALARMS	BLNALM	STA	2
CP6053	TER_FILTERS	TERT. FILTERS	BLNALM	STA	1
CP6053	TER_FILTERS	TERT. FILTERS	BLNALM	STA	1
ABST51	AB_BAR_SCRN1	BAR SCREEN 1B RUNNING	CIN	BAD	1
ABST51	AB_BAR_SCRN1	BAR SCREEN 1B HIGH TORQUE	CIN	STA	1
ABST51	AB_BAR_SCRN1	BAR SCREEN 1B HIGH TORQUE	CIN	BAD	1
ABST51	AB_BAR_SCRN1	BAR SCREEN 1B IN REMOTE	CIN	BAD	1
ABST51	AB_BAR_SCRN2	BAR SCREEN 1C RUNNING	CIN	BAD	1
ABST51	AB_BAR_SCRN2	BAR SCREEN 1C HIGH TORQUE	CIN	STA	1
ABST51	AB_BAR_SCRN2	BAR SCREEN 1C HIGH TORQUE	CIN	BAD	1
ABST51	AB_BAR_SCRN2	BAR SCREEN 1C IN REMOTE	CIN	BAD	1
ABST51	AB_SCRN_COMP	SCOMP NO. 1 AGIT OVERLOAD	CIN	STA	1

CP	COMPOUND	DESCRIPTION	TYPE	ALARM TYPE	PRIORITY
ABST51	AB_SCRN_COMP	SCOMP NO. 1 AGIT OVERLOAD	CIN	BAD	1
ABST51	AB_SCRN_COMP	SCOMP NO. 1 AGIT HIGH TORQUE	CIN	BAD	1
ABST51	AB_SCRN_COMP	SCOMP NO. 1 AGIT HIGH TORQUE	CIN	STA	1
ABST51	AB_SCRN_COMP	SCOMP NO. 1 LEVEL SENSOR F	CIN	STA	2
ABST51	AB_SCRN_COMP	SCOMP NO. 1 LEVEL SENSOR F	CIN	BAD	1
ABST51	AB_SCRN_COMP	SCOMP NO. 1 MTR OVERLOAD	CIN	STA	1
ABST51	AB_SCRN_COMP	SCOMP NO. 1 MTR OVERLOAD	CIN	BAD	1
ABST51	AB_SCRN_COMP	SCOMP NO. 1 MTR HIGH TORQUE	CIN	BAD	1
ABST51	AB_SCRN_COMP	SCOMP NO. 1 MTR HIGH TORQUE	CIN	STA	1
ABST51	AB_SCRN_COMP	SCOMP NO. 1 HI LEVEL	CIN	STA	2
ABST51	AB_SCRN_COMP	SCOMP NO. 1 HI LEVEL	CIN	BAD	2
ABST51	AB_SCRN_COMP	SCOMP NO. 1 MTR RUNNING	CIN	BAD	1
ABST51	AB_SCRN_COMP	SCOMP NO. 1 SPRAY WASH ON	CIN	BAD	1
ABST51	AB_SCRN_COMP	SCOMP NO. 1 AGIT RUNNING	CIN	BAD	1
ABST51	AB_SCRN_COMP	SCOMP NO. 1 IN HAND	CIN	BAD	1
ABST51	AB_SCRN_COMP	SCOMP NO. 1 IN AUTO	CIN	BAD	1
ABST51	BLOWER1	BLWR 1A INLET VANEMOTOR FAILED	CIN	BAD	1
ABST51	BLOWER1	BLWR 1A INLET VANEMOTOR FAILED	CIN	STA	1
ABST51	BLOWER1	BLWR 1A MOTOR FAILED	CIN	STA	1
ABST51	BLOWER1	BLWR 1A MOTOR FAILED	CIN	BAD	1
ABST51	BLOWER1	BLWR 1A DIFFUSER MOTOR FAILED	CIN	BAD	1
ABST51	BLOWER1	BLWR 1A DIFFUSER MOTOR FAILED	CIN	STA	1
ABST51	BLOWER1	BLWR 1A MOTOR START/STOP	CIN	BAD	1
ABST51	BLOWER1	BLOWER 1A FAULT ACK	CIN	STA	1
ABST51	BLOWER1	BLOWER 1A FAULT ACK	CIN	BAD	1
ABST51	BLOWER1	BLOWER 1A FAULT RESET	CIN	STA	1
ABST51	BLOWER1	BLOWER 1A FAULT RESET	CIN	BAD	1
ABST51	BLOWER1	BLWR 1A INLET VANECONTROL	CIN	STA	1
ABST51	BLOWER1	BLWR 1A INLET VANECONTROL	CIN	BAD	1
ABST51	BLOWER1	BLWR 1A DISCH VLV OPEN	CIN	BAD	1
ABST51	BLOWER1	BLWR 1A DIFFUSER CONTROL	CIN	STA	1
ABST51	BLOWER1	BLWR 1A DIFFUSER CONTROL	CIN	BAD	1
ABST51	BLOWER1	BLOWER 1A SUC SURGE PRE	CIN	STA	1
ABST51	BLOWER1	BLOWER 1A SUC SURGE PRE	CIN	BAD	1
ABST51	BLOWER1	BLOWER 1A SURGE SWITCH	CIN	BAD	1
ABST51	BLOWER1	BLOWER 1A SURGE SWITCH	CIN	STA	1
ABST51	BLOWER1	BLWR 1A DISCH VLV CLOSE	CIN	BAD	1
ABST51	BLOWER1	BLWR 1A MOTOR RUNNING	CIN	BAD	1
ABST51	BLOWER1	BLWR 1A INLET VANEIN REMOTE	CIN	BAD	1
ABST51	BLOWER1	BLWR 1A DISCH VLV IN REMOTE	CIN	BAD	1
ABST51	BLOWER1	BLWR 1A DIFFUSER IN REMOTE	CIN	BAD	1
ABST51	BLOWER1	BLOWER 1A ZERO MOTION SW	CIN	BAD	5
ABST51	BLOWER1	BLOWER 1A ZERO MOTION SW	CIN	STA	5
ABST51	BLOWER1	BLWR 1A INLET VANEOPEN	CIN	BAD	1
ABST51	BLOWER1	BLWR 1A DISCH VLV FULLY OPEN	CIN	BAD	1
ABST51	BLOWER1	BLWR 1A DIFFUSER OPEN	CIN	BAD	1
ABST51	BLOWER1	BLWR 1A INLET VANEFULLY CLOSED	CIN	BAD	1
ABST51	BLOWER1	BLWR 1A DISCH VLV FULLY CLOSED	CIN	BAD	1
ABST51	BLOWER1	BLWR 1A DIFFUSER FULLY CLOSED	CIN	BAD	1
ABST51	BLOWER1	EMERG STOP STATUS	CIN	BAD	1
ABST51	BLOWER1	BLWR 1A BLOW OFF VSTATUS	CIN	BAD	1
ABST51	BLOWER1	BLWR 1A BLOW OFF VSTATUS	CIN	BAD	1
ABST51	BLOWER1	BLOWER 1A TRIP LOW OIL PRESS	CIN	STA	1

CP	COMPOUND	DESCRIPTION	TYPE	ALARM TYPE	PRIORITY
ABST51	BLOWER1	BLOWER 1A TRIP LOW OIL PRESS	CIN	BAD	1
ABST51	BLOWER1	BLOWER 1A MTR START DELA	CIN	BAD	1
ABST51	BLOWER1	BLOWER 1A MTR START DELA	CIN	STA	1
ABST51	BLOWER1	BLOWER 1A NO FBACK	CIN	BAD	1
ABST51	BLOWER1	BLOWER 1A NO FBACK	CIN	STA	1
ABST51	BLOWER1	BLOWER 1A LOSS OF FBACK	CIN	STA	1
ABST51	BLOWER1	BLOWER 1A LOSS OF FBACK	CIN	BAD	1
ABST51	BLOWER1	BLOWER 1A MTR STOP DELAY	CIN	BAD	1
ABST51	BLOWER1	BLOWER 1A MTR STOP DELAY	CIN	STA	1
ABST51	BLOWER1	BLOWER 1A RESTART BLOCKI	CIN	BAD	1
ABST51	BLOWER1	BLOWER 1A RESTART BLOCKI	CIN	STA	1
ABST51	BLOWER1	BLOWER 1A TRIP LOW LOW OIL PR	CIN	BAD	1
ABST51	BLOWER1	BLOWER 1A TRIP LOW LOW OIL PR	CIN	STA	1
ABST51	BLOWER1	BLOWER 1A ALARM HI AIR TEMP	CIN	STA	1
ABST51	BLOWER1	BLOWER 1A ALARM HI AIR TEMP	CIN	BAD	1
ABST51	BLOWER1	BLOWER 1A TRIP HI AIR TEMP	CIN	STA	1
ABST51	BLOWER1	BLOWER 1A TRIP HI AIR TEMP	CIN	BAD	1
ABST51	BLOWER1	BLOWER 1A TRIP LO LO OIL TEMP	CIN	BAD	1
ABST51	BLOWER1	BLOWER 1A TRIP LO LO OIL TEMP	CIN	STA	1
ABST51	BLOWER1	BLOWER 1A ALARM LOW OIL TEMP	CIN	BAD	1
ABST51	BLOWER1	BLOWER 1A ALARM LOW OIL TEMP	CIN	STA	1
ABST51	BLOWER1	BLOWER 1A ALARM HI OIL TEMP	CIN	STA	1
ABST51	BLOWER1	BLOWER 1A ALARM HI OIL TEMP	CIN	BAD	1
ABST51	BLOWER1	BLOWER 1A TRIP HI OIL TEMP	CIN	STA	1
ABST51	BLOWER1	BLOWER 1A TRIP HI OIL TEMP	CIN	BAD	1
ABST51	BLOWER1	BLOWER 1A ALARM REV ROTATION	CIN	BAD	1
ABST51	BLOWER1	BLOWER 1A ALARM REV ROTATION	CIN	STA	1
ABST51	BLOWER1	B1A SLW SPD BEARING INNER TEMP	CIN	BAD	1
ABST51	BLOWER1	B1A SLW SPD BEARING INNER TEMP	CIN	STA	1
ABST51	BLOWER1	B1A SLW SPD BEARING INNER TEMP	CIN	STA	1
ABST51	BLOWER1	B1A SLW SPD BEARING INNER TEMP	CIN	BAD	1
ABST51	BLOWER1	B1A LO SPD BEARING OUTER TEMP	CIN	BAD	1
ABST51	BLOWER1	B1A LO SPD BEARING OUTER TEMP	CIN	STA	1
ABST51	BLOWER1	B1A LO SPD BEARING OUTER TEMP	CIN	STA	1
ABST51	BLOWER1	B1A LO SPD BEARING OUTER TEMP	CIN	BAD	1
ABST51	BLOWER1	B1A HI SPD BEARINGINNER ALM TEMP	CIN	BAD	1
ABST51	BLOWER1	B1A HI SPD BEARINGINNER ALM TEMP	CIN	STA	1
ABST51	BLOWER1	B1A HI SPD BEARINGINNER TRIP TEM	CIN	BAD	1
ABST51	BLOWER1	B1A HI SPD BEARINGINNER TRIP TEM	CIN	STA	1
ABST51	BLOWER1	B1A HI SPD BEARINGOUTER ALM TEMP	CIN	STA	1
ABST51	BLOWER1	B1A HI SPD BEARINGOUTER ALM TEMP	CIN	BAD	1
ABST51	BLOWER1	B1A HI SPD BEARINGOUTER TRIP TEM	CIN	BAD	1
ABST51	BLOWER1	B1A HI SPD BEARINGOUTER TRIP TEM	CIN	STA	1
ABST51	BLOWER1	B1A HI SPD BEARINGTHRUST ALM TEM	CIN	STA	1
ABST51	BLOWER1	B1A HI SPD BEARINGTHRUST ALM TEM	CIN	BAD	1
ABST51	BLOWER1	B1A HI SPD BEARINGTHRUST TRIP TE	CIN	STA	1
ABST51	BLOWER1	B1A HI SPD BEARINGTHRUST TRIP TE	CIN	BAD	1
ABST51	BLOWER1	B1A MTR A WINDING HI ALM TEMP	CIN	BAD	1
ABST51	BLOWER1	B1A MTR A WINDING HI ALM TEMP	CIN	STA	1
ABST51	BLOWER1	B1A MTR A WINDING HI TRIP TEMP	CIN	BAD	1
ABST51	BLOWER1	B1A MTR A WINDING HI TRIP TEMP	CIN	STA	1
ABST51	BLOWER1	B1A MTR OUTOARD BEARING TEMP	CIN	STA	1
ABST51	BLOWER1	B1A MTR OUTOARD BEARING TEMP	CIN	BAD	1

CP	COMPOUND	DESCRIPTION	TYPE	ALARM TYPE	PRIORITY
ABST51	BLOWER1	B1A MTR OUTBOARD BEARING TEMP	CIN	STA	1
ABST51	BLOWER1	B1A MTR OUTBOARD BEARING TEMP	CIN	BAD	1
ABST51	BLOWER1	B1A MTR OUTBOARD VELOMITER TRIP	CIN	STA	2
ABST51	BLOWER1	B1A MTR OUTBOARD VELOMITER TRIP	CIN	BAD	2
ABST51	BLOWER1	B1A MTR A WINDING HI ALM TEMP	CIN	BAD	1
ABST51	BLOWER1	B1A MTR A WINDING HI ALM TEMP	CIN	STA	1
ABST51	BLOWER1	B1A MTR A WINDING HI TRIP TEMP	CIN	STA	1
ABST51	BLOWER1	B1A MTR A WINDING HI TRIP TEMP	CIN	BAD	1
ABST51	BLOWER1	B1A MTR B WINDING HI ALM TEMP	CIN	BAD	1
ABST51	BLOWER1	B1A MTR B WINDING HI ALM TEMP	CIN	STA	1
ABST51	BLOWER1	B1A MTR B WINDING HI TRIP TEMP	CIN	STA	1
ABST51	BLOWER1	B1A MTR B WINDING HI TRIP TEMP	CIN	BAD	1
ABST51	BLOWER1	BLOWER 1A LO LO OIL SW	CIN	STA	1
ABST51	BLOWER1	BLOWER 1A LO LO OIL SW	CIN	BAD	1
ABST51	BLOWER1	BLOWER 1A LOW OIL SW	CIN	STA	2
ABST51	BLOWER1	BLOWER 1A LOW OIL SW	CIN	BAD	2
ABST51	BLOWER1	B1A MTR C WINDING TEMP	CIN	STA	1
ABST51	BLOWER1	B1A MTR C WINDING TEMP	CIN	BAD	1
ABST51	BLOWER1	B1A MTR C WINDING TEMP	CIN	BAD	1
ABST51	BLOWER1	B1A MTR C WINDING TEMP	CIN	STA	1
ABST51	BLOWER1	B1A MTR INBOARD BEARING TEMP	CIN	BAD	1
ABST51	BLOWER1	B1A MTR INBOARD BEARING TEMP	CIN	STA	1
ABST51	BLOWER1	B1A MTR INBOARD BEARING TEMP	CIN	BAD	1
ABST51	BLOWER1	B1A MTR INBOARD BEARING TEMP	CIN	STA	1
ABST51	BLOWER1	B1A HI SPD SHAFT X POSITION ALM	CIN	STA	1
ABST51	BLOWER1	B1A HI SPD SHAFT X POSITION ALM	CIN	BAD	1
ABST51	BLOWER1	B1A HI SPD SHAFT X POSITION TRI	CIN	STA	1
ABST51	BLOWER1	B1A HI SPD SHAFT X POSITION TRI	CIN	BAD	1
ABST51	BLOWER1	B1A HI SPD SHAFT Y POSITION ALM	CIN	STA	1
ABST51	BLOWER1	B1A HI SPD SHAFT Y POSITION ALM	CIN	BAD	1
ABST51	BLOWER1	B1A HI SPD SHAFT Y POSITION TRI	CIN	BAD	1
ABST51	BLOWER1	B1A HI SPD SHAFT Y POSITION TRI	CIN	STA	1
ABST51	BLOWER1	B1A HI SPD THRUST MIN POS ALM	CIN	STA	1
ABST51	BLOWER1	B1A HI SPD THRUST MIN POS ALM	CIN	BAD	1
ABST51	BLOWER1	B1A HI SPD THRUST MIN POS TRIP	CIN	STA	1
ABST51	BLOWER1	B1A HI SPD THRUST MIN POS TRIP	CIN	BAD	1
ABST51	BLOWER1	B1A HI SPD THRUST MAX POS ALARM	CIN	STA	1
ABST51	BLOWER1	B1A HI SPD THRUST MAX POS ALARM	CIN	BAD	1
ABST51	BLOWER1	B1A HI SPD THRUST MAX POS TRIP	CIN	BAD	1
ABST51	BLOWER1	B1A HI SPD THRUST MAX POS TRIP	CIN	STA	1
ABST51	BLOWER1	BLOWER 1A PRESS DIFF	CIN	BAD	2
ABST51	BLOWER1	BLOWER 1A PRESS DIFF	CIN	STA	2
ABST51	BLOWER2	BLWR 1B INLET VANEMOTOR FAILED	CIN	STA	1
ABST51	BLOWER2	BLWR 1B INLET VANEMOTOR FAILED	CIN	BAD	1
ABST51	BLOWER2	BLWR 1B MOTOR FAILED	CIN	STA	1
ABST51	BLOWER2	BLWR 1B MOTOR FAILED	CIN	BAD	1
ABST51	BLOWER2	BLWR 1B DIFFUSER MOTOR FAILED	CIN	STA	1
ABST51	BLOWER2	BLWR 1B DIFFUSER MOTOR FAILED	CIN	BAD	1
ABST51	BLOWER2	BLWR 1B MOTOR START/STOP	CIN	BAD	1
ABST51	BLOWER2	BLOWER 1B FAULT ACK	CIN	STA	1
ABST51	BLOWER2	BLOWER 1B FAULT ACK	CIN	BAD	1
ABST51	BLOWER2	BLOWER 1B FAULT RESET	CIN	STA	1
ABST51	BLOWER2	BLOWER 1B FAULT RESET	CIN	BAD	1

CP	COMPOUND	DESCRIPTION	TYPE	ALARM TYPE	PRIORITY
ABST51	BLOWER2	BLWR 1B DISCH VLV OPEN	CIN	BAD	1
ABST51	BLOWER2	BLWR 1B INLET VANECONTROL	CIN	BAD	1
ABST51	BLOWER2	BLWR 1B INLET VANECONTROL	CIN	STA	1
ABST51	BLOWER2	BLWR 1B DIFFUSER CONTROL	CIN	STA	1
ABST51	BLOWER2	BLWR 1B DIFFUSER CONTROL	CIN	BAD	1
ABST51	BLOWER2	BLOWER 1B SUC SURGE PRES	CIN	BAD	1
ABST51	BLOWER2	BLOWER 1B SUC SURGE PRES	CIN	STA	1
ABST51	BLOWER2	BLOWER 1B SURGE SWITCH	CIN	BAD	1
ABST51	BLOWER2	BLOWER 1B SURGE SWITCH	CIN	STA	1
ABST51	BLOWER2	BLWR 1B DISCH VLV CLOSE	CIN	BAD	1
ABST51	BLOWER2	BLWR 1B MOTOR RUNNING	CIN	BAD	1
ABST51	BLOWER2	BLWR 1B INLET VANEIN REMOTE	CIN	BAD	1
ABST51	BLOWER2	BLWR 1B DISCH VLV IN REMOTE	CIN	BAD	1
ABST51	BLOWER2	BLWR 1B DIFFUSER IN REMOTE	CIN	BAD	1
ABST51	BLOWER2	BLOWER 1B ZERO MOTION SW	CIN	STA	2
ABST51	BLOWER2	BLOWER 1B ZERO MOTION SW	CIN	BAD	2
ABST51	BLOWER2	BLWR 1B INLET VANEOPEN	CIN	BAD	1
ABST51	BLOWER2	BLWR 1B DISCH VLV FULLY OPEN	CIN	BAD	1
ABST51	BLOWER2	BLWR 1B DIFFUSER OPEN	CIN	BAD	1
ABST51	BLOWER2	BLWR 1B INLET VANEFULLY CLOSED	CIN	BAD	1
ABST51	BLOWER2	BLWR 1B DISCH VLV FULLY CLOSED	CIN	BAD	1
ABST51	BLOWER2	BLWR 1B DIFFUSER FULLY CLOSED	CIN	BAD	1
ABST51	BLOWER2	EMERG STOP STATUS	CIN	BAD	1
ABST51	BLOWER2	BLWR 1B BLOW OFF VSTATUS	CIN	BAD	1
ABST51	BLOWER2	BLWR 1B BLOW OFF VSTATUS	CIN	BAD	1
ABST51	BLOWER2	BLOWER 1B TRIP LOW OIL PRESS	CIN	STA	1
ABST51	BLOWER2	BLOWER 1B TRIP LOW OIL PRESS	CIN	BAD	1
ABST51	BLOWER2	BLOWER 1B MTR START DELA	CIN	BAD	1
ABST51	BLOWER2	BLOWER 1B MTR START DELA	CIN	STA	1
ABST51	BLOWER2	BLOWER 1B NO FBACK	CIN	STA	1
ABST51	BLOWER2	BLOWER 1B NO FBACK	CIN	BAD	1
ABST51	BLOWER2	BLOWER 1B LOSS OF FBACK	CIN	STA	1
ABST51	BLOWER2	BLOWER 1B LOSS OF FBACK	CIN	BAD	1
ABST51	BLOWER2	BLOWER 1B MTR STOP DELAY	CIN	STA	1
ABST51	BLOWER2	BLOWER 1B MTR STOP DELAY	CIN	BAD	1
ABST51	BLOWER2	BLOWER 1B RESTART BLOCKI	CIN	STA	1
ABST51	BLOWER2	BLOWER 1B RESTART BLOCKI	CIN	BAD	1
ABST51	BLOWER2	BLOWER 1B TRIP LOW LOW OIL PR	CIN	BAD	1
ABST51	BLOWER2	BLOWER 1B TRIP LOW LOW OIL PR	CIN	STA	1
ABST51	BLOWER2	BLOWER 1B ALARM HI AIR TEMP	CIN	STA	1
ABST51	BLOWER2	BLOWER 1B ALARM HI AIR TEMP	CIN	BAD	1
ABST51	BLOWER2	BLOWER 1B TRIP HI AIR TEMP	CIN	STA	1
ABST51	BLOWER2	BLOWER 1B TRIP HI AIR TEMP	CIN	BAD	1
ABST51	BLOWER2	BLOWER 1B TRIP LO LO OIL TEMP	CIN	STA	1
ABST51	BLOWER2	BLOWER 1B TRIP LO LO OIL TEMP	CIN	BAD	1
ABST51	BLOWER2	BLOWER 1B ALARM LOW OIL TEMP	CIN	BAD	2
ABST51	BLOWER2	BLOWER 1B ALARM LOW OIL TEMP	CIN	STA	2
ABST51	BLOWER2	BLOWER 1B ALARM HI OIL TEMP	CIN	BAD	1
ABST51	BLOWER2	BLOWER 1B ALARM HI OIL TEMP	CIN	STA	1
ABST51	BLOWER2	BLOWER 1B TRIP HI OIL TEMP	CIN	BAD	1
ABST51	BLOWER2	BLOWER 1B TRIP HI OIL TEMP	CIN	STA	1
ABST51	BLOWER2	BLOWER 1B ALARM REV ROTATION	CIN	STA	1
ABST51	BLOWER2	BLOWER 1B ALARM REV ROTATION	CIN	BAD	1

CP	COMPOUND	DESCRIPTION	TYPE	ALARM TYPE	PRIORITY
ABST51	BLOWER2	B1B SLW SPD BEARING INNER TEMP	CIN	BAD	1
ABST51	BLOWER2	B1B SLW SPD BEARING INNER TEMP	CIN	STA	1
ABST51	BLOWER2	B1B SLW SPD BEARING INNER TEMP	CIN	BAD	1
ABST51	BLOWER2	B1B SLW SPD BEARING INNER TEMP	CIN	STA	1
ABST51	BLOWER2	B1B LO SPD BEARING OUTER TEMP	CIN	STA	1
ABST51	BLOWER2	B1B LO SPD BEARING OUTER TEMP	CIN	BAD	1
ABST51	BLOWER2	B1B LO SPD BEARING OUTER TEMP	CIN	BAD	1
ABST51	BLOWER2	B1B LO SPD BEARING OUTER TEMP	CIN	STA	1
ABST51	BLOWER2	B1B HI SPD BEARINGINNER ALM TEMP	CIN	STA	1
ABST51	BLOWER2	B1B HI SPD BEARINGINNER ALM TEMP	CIN	BAD	1
ABST51	BLOWER2	B1B HI SPD BEARINGINNER TRIP TEM	CIN	STA	1
ABST51	BLOWER2	B1B HI SPD BEARINGINNER TRIP TEM	CIN	BAD	1
ABST51	BLOWER2	B1B HI SPD BEARINGOUTER ALM TEMP	CIN	STA	1
ABST51	BLOWER2	B1B HI SPD BEARINGOUTER ALM TEMP	CIN	BAD	1
ABST51	BLOWER2	B1B HI SPD BEARINGOUTER TRIP TEM	CIN	BAD	1
ABST51	BLOWER2	B1B HI SPD BEARINGOUTER TRIP TEM	CIN	STA	1
ABST51	BLOWER2	B1B HI SPD BEARINGTHRUST ALM TEM	CIN	BAD	1
ABST51	BLOWER2	B1B HI SPD BEARINGTHRUST ALM TEM	CIN	STA	1
ABST51	BLOWER2	B1B HI SPD BEARINGTHRUST TRIP TE	CIN	STA	1
ABST51	BLOWER2	B1B HI SPD BEARINGTHRUST TRIP TE	CIN	BAD	1
ABST51	BLOWER2	B1B MTR A WINDING HI ALM TEMP	CIN	BAD	1
ABST51	BLOWER2	B1B MTR A WINDING HI ALM TEMP	CIN	STA	1
ABST51	BLOWER2	B1B MTR A WINDING HI TRIP TEMP	CIN	BAD	1
ABST51	BLOWER2	B1B MTR A WINDING HI TRIP TEMP	CIN	STA	1
ABST51	BLOWER2	B1B MTR OUTBOARD BEARING TEMP	CIN	STA	1
ABST51	BLOWER2	B1B MTR OUTBOARD BEARING TEMP	CIN	BAD	1
ABST51	BLOWER2	B1B MTR OUTBOARD BEARING TEMP	CIN	BAD	1
ABST51	BLOWER2	B1B MTR OUTBOARD BEARING TEMP	CIN	STA	1
ABST51	BLOWER2	B1B MTR OUTBOARD VELOMITER TRIP	CIN	BAD	2
ABST51	BLOWER2	B1B MTR OUTBOARD VELOMITER TRIP	CIN	STA	2
ABST51	BLOWER2	B1B MTR A WINDING HI ALM TEMP	CIN	STA	1
ABST51	BLOWER2	B1B MTR A WINDING HI ALM TEMP	CIN	BAD	1
ABST51	BLOWER2	B1B MTR A WINDING HI TRIP TEMP	CIN	BAD	1
ABST51	BLOWER2	B1B MTR A WINDING HI TRIP TEMP	CIN	STA	1
ABST51	BLOWER2	B1B MTR B WINDING HI ALM TEMP	CIN	BAD	1
ABST51	BLOWER2	B1B MTR B WINDING HI ALM TEMP	CIN	STA	1
ABST51	BLOWER2	B1B MTR B WINDING HI TRIP TEMP	CIN	STA	1
ABST51	BLOWER2	B1B MTR B WINDING HI TRIP TEMP	CIN	BAD	1
ABST51	BLOWER2	BLOWER 1B LO LO OIL SW	CIN	STA	2
ABST51	BLOWER2	BLOWER 1B LO LO OIL SW	CIN	BAD	2
ABST51	BLOWER2	BLOWER 1B LOW OIL SW	CIN	STA	2
ABST51	BLOWER2	BLOWER 1B LOW OIL SW	CIN	BAD	2
ABST51	BLOWER2	B1B MTR C WINDING TEMP	CIN	STA	1
ABST51	BLOWER2	B1B MTR C WINDING TEMP	CIN	BAD	1
ABST51	BLOWER2	B1B MTR C WINDING TEMP	CIN	STA	1
ABST51	BLOWER2	B1B MTR C WINDING TEMP	CIN	BAD	1
ABST51	BLOWER2	B1B MTR INBOARD BEARING TEMP	CIN	STA	1
ABST51	BLOWER2	B1B MTR INBOARD BEARING TEMP	CIN	BAD	1
ABST51	BLOWER2	B1B MTR INBOARD BEARING TEMP	CIN	BAD	1
ABST51	BLOWER2	B1B MTR INBOARD BEARING TEMP	CIN	STA	1
ABST51	BLOWER2	B1B HI SPD SHAFT X POSITION ALM	CIN	BAD	1
ABST51	BLOWER2	B1B HI SPD SHAFT X POSITION ALM	CIN	STA	1
ABST51	BLOWER2	B1B HI SPD SHAFT X POSITION TRI	CIN	STA	1

CP	COMPOUND	DESCRIPTION	TYPE	ALARM TYPE	PRIORITY
ABST51	BLOWER2	B1B HI SPD SHAFT X POSITION TRI	CIN	BAD	1
ABST51	BLOWER2	B1B HI SPD SHAFT Y POSITION ALM	CIN	STA	1
ABST51	BLOWER2	B1B HI SPD SHAFT Y POSITION ALM	CIN	BAD	1
ABST51	BLOWER2	B1B HI SPD SHAFT Y POSITION TRI	CIN	STA	1
ABST51	BLOWER2	B1B HI SPD SHAFT Y POSITION TRI	CIN	BAD	1
ABST51	BLOWER2	B1B HI SPD THRUST MIN POS ALM	CIN	BAD	1
ABST51	BLOWER2	B1B HI SPD THRUST MIN POS ALM	CIN	STA	1
ABST51	BLOWER2	B1B HI SPD THRUST MIN POS TRIP	CIN	STA	1
ABST51	BLOWER2	B1B HI SPD THRUST MIN POS TRIP	CIN	BAD	1
ABST51	BLOWER2	B1B HI SPD THRUST MAX POS ALARM	CIN	STA	1
ABST51	BLOWER2	B1B HI SPD THRUST MAX POS ALARM	CIN	BAD	1
ABST51	BLOWER2	B1B HI SPD THRUST MAX POS TRIP	CIN	STA	1
ABST51	BLOWER2	B1B HI SPD THRUST MAX POS TRIP	CIN	BAD	1
ABST51	BLOWER2	BLOWER 1B PRESS DIFF	CIN	BAD	1
ABST51	BLOWER2	BLOWER 1B PRESS DIFF	CIN	STA	1
ABST51	PLC_FAIL	BARSCREEN 1B PLC FAIL	CIN	STA	1
ABST51	PLC_FAIL	BARSCREEN 1C PLC FAIL	CIN	STA	1
ABST51	PLC_FAIL	BLOWER 1A PLC FAIL	CIN	STA	1
ABST51	PLC_FAIL	BLOWER 1B PLC FAIL	CIN	STA	1
ABST51	PLC_FAIL	BLOWER MCP PLC FAIL	CIN	STA	1
ABST51	PLC_FAIL	RP2 TELEMETRY FAIL	CIN	STA	1
ABST51	PLC_FAIL	SCREENING/COMP PLC FAIL	CIN	STA	5
ABST51	RP2	RP2 PRIORITY 1 ALARM	CIN	STA	2
ABST51	RP2	RP2 SYSTEM ALARM	CIN	STA	2
ABST52	CIW_DATA		CIN	STA	1
ABST52	CIW_DATA	GENERATOR RUNNING	CIN	STA	1
ABST52	CIW_DATA		CIN	STA	1
ABST52	CIW_DATA		CIN	STA	1
ABST52	CIW_DATA		CIN	STA	1
ABST52	RP1_BYPASS	RP5/RP1 COMMUNICATION FAIL	CIN	STA	1
CP6051	1_CLARIFIERS	DPC-6021 NO. 3 DRIVE FAILED	CIN	BAD	1
CP6051	1_CLARIFIERS	DPC-6021 NO. 3 DRIVE FAILED	CIN	STA	1
CP6051	1_CLARIFIERS	GK-6021 AB INLET GATE MTR FAIL	CIN	STA	1
CP6051	1_CLARIFIERS	GK-6021 AB INLET GATE MTR FAIL	CIN	BAD	1
CP6051	1_CLARIFIERS	DPC-6022 NO. 4 DRIVE FAILED	CIN	STA	1
CP6051	1_CLARIFIERS	DPC-6022 NO. 4 DRIVE FAILED	CIN	BAD	1
CP6051	1_CLARIFIERS	DPC-6021 NO. 3 70% TORQUE	CIN	STA	1
CP6051	1_CLARIFIERS	DPC-6021 NO. 3 70% TORQUE	CIN	BAD	1
CP6051	1_CLARIFIERS	DPC-6021 NO. 3 90% TORQUE	CIN	BAD	1
CP6051	1_CLARIFIERS	DPC-6021 NO. 3 90% TORQUE	CIN	STA	1
CP6051	1_CLARIFIERS	DPC-6022 NO. 4 70% TORQUE	CIN	BAD	1
CP6051	1_CLARIFIERS	DPC-6022 NO. 4 70% TORQUE	CIN	STA	1
CP6051	1_CLARIFIERS	DPC-6022 NO. 4 90% TORQUE	CIN	BAD	1
CP6051	1_CLARIFIERS	DPC-6022 NO. 4 90% TORQUE	CIN	STA	1
CP6051	1_CLARIFIERS	DPC-6021 NO. 3 RUNNING	CIN	BAD	1
CP6051	1_CLARIFIERS	DPC-6022 NO. 4 RUNNING	CIN	BAD	1
CP6051	1_CLARIFIERS	GK-6021 AB INLET IN REMOTE	CIN	BAD	1
CP6051	1_CLARIFIERS	GK-6021 AB INLET GATE OPEN	CIN	BAD	1
CP6051	1_CLARIFIERS	GK-6021 AB INLET GATE CLOSED	CIN	BAD	1
CP6051	1_SUMP_PUMP	BIOFILTER SUMP1 MOISTURE S/D	CIN	STA	1
CP6051	1_SUMP_PUMP	BIOFILTER SUMP1 MOISTURE S/D	CIN	BAD	1
CP6051	1_SUMP_PUMP	BIOFILTER SUMP2 MOISTURE S/D	CIN	STA	1
CP6051	1_SUMP_PUMP	BIOFILTER SUMP2 MOISTURE S/D	CIN	BAD	1

CP	COMPOUND	DESCRIPTION	TYPE	ALARM TYPE	PRIORITY
CP6051	1_SUMP_PUMP	PSP-6003 PMP 1 MOISTURE S/D	CIN	BAD	1
CP6051	1_SUMP_PUMP	PSP-6003 PMP 1 MOISTURE S/D	CIN	STA	1
CP6051	1_SUMP_PUMP	PSP-6004 PMP 2 MOISTURE S/D	CIN	STA	1
CP6051	1_SUMP_PUMP	PSP-6004 PMP 2 MOISTURE S/D	CIN	BAD	1
CP6051	1_SUMP_PUMP	WSP-6005 PMP 1 MOISTURE S/D	CIN	BAD	1
CP6051	1_SUMP_PUMP	WSP-6005 PMP 1 MOISTURE S/D	CIN	STA	1
CP6051	1_SUMP_PUMP	WSP-6006 PMP 2 MOISTURE S/D	CIN	STA	1
CP6051	1_SUMP_PUMP	WSP-6006 PMP 2 MOISTURE S/D	CIN	BAD	1
CP6051	1_SUMP_PUMP	PSP-6021 PMP 1 MOISTURE S/D	CIN	BAD	1
CP6051	1_SUMP_PUMP	PSP-6021 PMP 1 MOISTURE S/D	CIN	STA	1
CP6051	1_SUMP_PUMP	PSP-6022 PMP 2 MOISTURE S/D	CIN	STA	1
CP6051	1_SUMP_PUMP	PSP-6022 PMP 2 MOISTURE S/D	CIN	BAD	1
CP6051	1_SUMP_PUMP	FERRIC SUMP1 MOISTURE S/D	CIN	BAD	1
CP6051	1_SUMP_PUMP	FERRIC SUMP1 MOISTURE S/D	CIN	STA	1
CP6051	1_SUMP_PUMP	FERRIC SUMP2 MOISTURE S/D	CIN	STA	1
CP6051	1_SUMP_PUMP	FERRIC SUMP2 MOISTURE S/D	CIN	BAD	1
CP6051	1_SUMP_PUMP	PRI SLDG SUMP1 MOISTURE S/D	CIN	STA	1
CP6051	1_SUMP_PUMP	PRI SLDG SUMP1 MOISTURE S/D	CIN	BAD	1
CP6051	1_SUMP_PUMP	PRI SLDG SUMP2 MOISTURE S/D	CIN	BAD	1
CP6051	1_SUMP_PUMP	PRI SLDG SUMP2 MOISTURE S/D	CIN	STA	1
CP6051	1_SUMP_PUMP	BIOFILTER SUMP1 OVERLOAD	CIN	STA	1
CP6051	1_SUMP_PUMP	BIOFILTER SUMP1 OVERLOAD	CIN	BAD	1
CP6051	1_SUMP_PUMP	BIOFILTER SUMP2 OVERLOAD	CIN	BAD	1
CP6051	1_SUMP_PUMP	BIOFILTER SUMP2 OVERLOAD	CIN	STA	1
CP6051	1_SUMP_PUMP	PSP-6003 PMP 1 OVERLOAD	CIN	BAD	2
CP6051	1_SUMP_PUMP	PSP-6003 PMP 1 OVERLOAD	CIN	STA	2
CP6051	1_SUMP_PUMP	PSP-6004 PMP 2 OVERLOAD	CIN	BAD	2
CP6051	1_SUMP_PUMP	PSP-6004 PMP 2 OVERLOAD	CIN	STA	2
CP6051	1_SUMP_PUMP	WSP-6005 PMP 1 OVERLOAD	CIN	STA	1
CP6051	1_SUMP_PUMP	WSP-6005 PMP 1 OVERLOAD	CIN	BAD	1
CP6051	1_SUMP_PUMP	WSP-6006 PMP 2 OVERLOAD	CIN	BAD	1
CP6051	1_SUMP_PUMP	WSP-6006 PMP 2 OVERLOAD	CIN	STA	1
CP6051	1_SUMP_PUMP	PSP-6021 PMP 1 OVERLOAD	CIN	BAD	2
CP6051	1_SUMP_PUMP	PSP-6021 PMP 1 OVERLOAD	CIN	STA	1
CP6051	1_SUMP_PUMP	PSP-6022 PMP 2 OVERLOAD	CIN	STA	1
CP6051	1_SUMP_PUMP	PSP-6022 PMP 2 OVERLOAD	CIN	BAD	1
CP6051	1_SUMP_PUMP	FERRIC SUMP1 OVERLOAD	CIN	BAD	1
CP6051	1_SUMP_PUMP	FERRIC SUMP1 OVERLOAD	CIN	STA	1
CP6051	1_SUMP_PUMP	FERRIC SUMP2 OVERLOAD	CIN	BAD	1
CP6051	1_SUMP_PUMP	FERRIC SUMP2 OVERLOAD	CIN	STA	1
CP6051	1_SUMP_PUMP	PRI SLDG SUMP1 OVERLOAD	CIN	BAD	1
CP6051	1_SUMP_PUMP	PRI SLDG SUMP1 OVERLOAD	CIN	STA	1
CP6051	1_SUMP_PUMP	PRI SLDG SUMP2 OVERLOAD	CIN	STA	1
CP6051	1_SUMP_PUMP	PRI SLDG SUMP2 OVERLOAD	CIN	BAD	1
CP6051	1_SUMP_PUMP	BIOFILTER SUMP SUMP HI LEVEL	CIN	STA	1
CP6051	1_SUMP_PUMP	BIOFILTER SUMP SUMP HI LEVEL	CIN	BAD	1
CP6051	1_SUMP_PUMP	GRIT PUMP STATION SUMP HI LEVEL	CIN	STA	1
CP6051	1_SUMP_PUMP	GRIT PUMP STATION SUMP HI LEVEL	CIN	BAD	1
CP6051	1_SUMP_PUMP	SCREEN WASH/COMP SUMP HI LEVEL	CIN	STA	1
CP6051	1_SUMP_PUMP	SCREEN WASH/COMP SUMP HI LEVEL	CIN	BAD	1
CP6051	1_SUMP_PUMP	EMERG STRG BASIN SUMP HI LEVEL	CIN	BAD	2
CP6051	1_SUMP_PUMP	EMERG STRG BASIN SUMP HI LEVEL	CIN	STA	2
CP6051	1_SUMP_PUMP	PRI CHEM FCLTY SUMP HI LEVEL	CIN	STA	2

CP	COMPOUND	DESCRIPTION	TYPE	ALARM TYPE	PRIORITY
CP6051	1_SUMP_PUMP	PRI CHEM FCLTY SUMP HI LEVEL	CIN	BAD	2
CP6051	1_SUMP_PUMP	PRI SLUDGE STAT'N SUMP HI LEVEL	CIN	BAD	1
CP6051	1_SUMP_PUMP	PRI SLUDGE STAT'N SUMP HI LEVEL	CIN	STA	1
CP6051	1_SUMP_PUMP	PSP-6001 PMP 1 RUNNING	CIN	BAD	1
CP6051	1_SUMP_PUMP	PSP-6002 PMP 2 RUNNING	CIN	BAD	1
CP6051	1_SUMP_PUMP	PSP-6003 PMP 1 RUNNING	CIN	BAD	1
CP6051	1_SUMP_PUMP	PSP-6004 PMP 2 RUNNING	CIN	BAD	1
CP6051	1_SUMP_PUMP	WSP-6005 PMP 1 RUNNING	CIN	BAD	1
CP6051	1_SUMP_PUMP	WSP-6006 PMP 2 RUNNING	CIN	BAD	1
CP6051	1_SUMP_PUMP	PSP-6021 PMP 1 RUNNING	CIN	BAD	1
CP6051	1_SUMP_PUMP	PSP-6022 PMP 2 RUNNING	CIN	BAD	1
CP6051	1_SUMP_PUMP	PSP-6023 PMP 1 RUNNING	CIN	BAD	2
CP6051	1_SUMP_PUMP	PSP-6024 PMP 2 RUNNING	CIN	BAD	1
CP6051	1_SUMP_PUMP	PSP-6025 PMP 1 RUNNING	CIN	BAD	1
CP6051	1_SUMP_PUMP	PSP-6026 PMP 2 RUNNING	CIN	BAD	1
CP6051	1_SUMP_PUMP	PSP-6001 PMP 1 IN AUTO	CIN	BAD	1
CP6051	1_SUMP_PUMP	PSP-6002 PMP 2 IN AUTO	CIN	BAD	1
CP6051	1_SUMP_PUMP	PSP-6003 PMP 1 IN AUTO	CIN	BAD	1
CP6051	1_SUMP_PUMP	PSP-6004 PMP 2 IN AUTO	CIN	BAD	1
CP6051	1_SUMP_PUMP	WSP-6005 PMP 1 IN AUTO	CIN	BAD	1
CP6051	1_SUMP_PUMP	WSP-6006 PMP 2 IN AUTO	CIN	BAD	1
CP6051	1_SUMP_PUMP	PSP-6021 PMP 1 IN AUTO	CIN	BAD	1
CP6051	1_SUMP_PUMP	PSP-6022 PMP 2 IN AUTO	CIN	BAD	1
CP6051	1_SUMP_PUMP	PSP-6023 PMP 1 IN AUTO	CIN	BAD	1
CP6051	1_SUMP_PUMP	PSP-6024 PMP 2 IN AUTO	CIN	BAD	1
CP6051	1_SUMP_PUMP	PSP-6025 PMP 1 IN AUTO	CIN	BAD	1
CP6051	1_SUMP_PUMP	PSP-6026 PMP 2 IN AUTO	CIN	BAD	1
CP6051	ALARM_PAGERS	PLC5 HEARTBEAT FAILURE	CIN	STA	1
CP6051	BIOFILTERS	BIOFILTER FAN 1A OVERLOAD	CIN	STA	2
CP6051	BIOFILTERS	BIOFILTER FAN 1A OVERLOAD	CIN	BAD	2
CP6051	BIOFILTERS	BIOFILTER FAN 1B OVERLOAD	CIN	BAD	1
CP6051	BIOFILTERS	BIOFILTER FAN 1B OVERLOAD	CIN	STA	1
CP6051	BIOFILTERS	BIOFILTER FAN 1C OVERLOAD	CIN	BAD	1
CP6051	BIOFILTERS	BIOFILTER FAN 1C OVERLOAD	CIN	STA	1
CP6051	BIOFILTERS	BIOFILTER FAN 1A LOW AMPS	CIN	BAD	1
CP6051	BIOFILTERS	BIOFILTER FAN 1A LOW AMPS	CIN	STA	1
CP6051	BIOFILTERS	BIOFILTER FAN 1B LOW AMPS	CIN	STA	1
CP6051	BIOFILTERS	BIOFILTER FAN 1B LOW AMPS	CIN	BAD	1
CP6051	BIOFILTERS	BIOFILTER FAN 1C LOW AMPS	CIN	BAD	1
CP6051	BIOFILTERS	BIOFILTER FAN 1C LOW AMPS	CIN	STA	1
CP6051	BIOFILTERS	BIOFILTER FAN 1A RUNNING	CIN	BAD	1
CP6051	BIOFILTERS	BIOFILTER FAN 1B RUNNING	CIN	BAD	1
CP6051	BIOFILTERS	BIOFILTER FAN 1C RUNNING	CIN	BAD	1
CP6051	DEWATERING	GRIT WASHER 1 FAILED	CIN	BAD	1
CP6051	DEWATERING	GRIT WASHER 1 FAILED	CIN	STA	1
CP6051	DEWATERING	GRIT WASHER 2 FAILED	CIN	STA	1
CP6051	DEWATERING	GRIT WASHER 2 FAILED	CIN	BAD	1
CP6051	DEWATERING	GRIT WASHER 1 HIGH LEVEL	CIN	STA	1
CP6051	DEWATERING	GRIT WASHER 1 HIGH LEVEL	CIN	BAD	1
CP6051	DEWATERING	GRIT WASHER 2 HIGH LEVEL	CIN	BAD	1
CP6051	DEWATERING	GRIT WASHER 2 HIGH LEVEL	CIN	STA	1
CP6051	DEWATERING	GRIT WASHER 1 RUNNING	CIN	BAD	1
CP6051	DEWATERING	GRIT WASHER 2 RUNNING	CIN	BAD	1

CP	COMPOUND	DESCRIPTION	TYPE	ALARM TYPE	PRIORITY
CP6051	DEWATERING	GRIT WASHER 1 IN REMOTE	CIN	BAD	1
CP6051	DEWATERING	GRIT WASHER 2 IN REMOTE	CIN	BAD	1
CP6051	ES_PUMPS	PES-6021 PMP 1 LEAK DETECTED	CIN	BAD	1
CP6051	ES_PUMPS	PES-6021 PMP 1 LEAK DETECTED	CIN	STA	1
CP6051	ES_PUMPS	PES-6022 PMP 2 LEAK DETECTED	CIN	STA	1
CP6051	ES_PUMPS	PES-6022 PMP 2 LEAK DETECTED	CIN	BAD	1
CP6051	ES_PUMPS	PES-6023 PMP 3 LEAK DETECTED	CIN	STA	1
CP6051	ES_PUMPS	PES-6023 PMP 3 LEAK DETECTED	CIN	BAD	1
CP6051	ES_PUMPS	PES-6021 PMP 1 MOTOR FAILED	CIN	STA	1
CP6051	ES_PUMPS	PES-6021 PMP 1 MOTOR FAILED	CIN	BAD	1
CP6051	ES_PUMPS	PES-6021 PMP 1 VFD FAILED	CIN	BAD	1
CP6051	ES_PUMPS	PES-6021 PMP 1 VFD FAILED	CIN	STA	1
CP6051	ES_PUMPS	PES-6022 PMP 2 MOTOR FAILED	CIN	STA	1
CP6051	ES_PUMPS	PES-6022 PMP 2 MOTOR FAILED	CIN	BAD	1
CP6051	ES_PUMPS	PES-6022 PMP 2 VFD FAILED	CIN	STA	1
CP6051	ES_PUMPS	PES-6022 PMP 2 VFD FAILED	CIN	BAD	1
CP6051	ES_PUMPS	PES-6023 PMP 3 MOTOR FAILED	CIN	STA	1
CP6051	ES_PUMPS	PES-6023 PMP 3 MOTOR FAILED	CIN	BAD	1
CP6051	ES_PUMPS	PES-6023 PMP 3 VFD FAILED	CIN	BAD	1
CP6051	ES_PUMPS	PES-6023 PMP 3 VFD FAILED	CIN	STA	1
CP6051	ES_PUMPS	EMERGENCY STORAGE BASIN LO LEVEL	CIN	STA	2
CP6051	ES_PUMPS	EMERGENCY STORAGE BASIN LO LEVEL	CIN	BAD	2
CP6051	ES_PUMPS	EMERGENCY STORAGE BASIN HI LEVEL	CIN	STA	1
CP6051	ES_PUMPS	EMERGENCY STORAGE BASIN HI LEVEL	CIN	BAD	1
CP6051	ES_PUMPS	PES-6021 PMP 1 HIGH TEMP	CIN	STA	1
CP6051	ES_PUMPS	PES-6021 PMP 1 HIGH TEMP	CIN	BAD	1
CP6051	ES_PUMPS	PES-6022 PMP 2 HIGH TEMP	CIN	STA	1
CP6051	ES_PUMPS	PES-6022 PMP 2 HIGH TEMP	CIN	BAD	1
CP6051	ES_PUMPS	PES-6023 PMP 3 HIGH TEMP	CIN	BAD	1
CP6051	ES_PUMPS	PES-6023 PMP 3 HIGH TEMP	CIN	STA	1
CP6051	ES_PUMPS	PES-6021 PMP 1 RUNNING	CIN	BAD	1
CP6051	ES_PUMPS	PES-6022 PMP 2 RUNNING	CIN	BAD	1
CP6051	ES_PUMPS	PES-6023 PMP 3 RUNNING	CIN	BAD	1
CP6051	ES_PUMPS	PES-6021 PMP 1 IN REMOTE	CIN	BAD	1
CP6051	ES_PUMPS	PES-6022 PMP 2 IN REMOTE	CIN	BAD	1
CP6051	ES_PUMPS	PES-6023 PMP 3 IN REMOTE	CIN	BAD	1
CP6051	FE_CHLORIDE	PF-6024 PMP 4 LOW FLOW	CIN	BAD	1
CP6051	FE_CHLORIDE	PF-6024 PMP 4 LOW FLOW	CIN	STA	1
CP6051	FE_CHLORIDE	PF-6025 PMP 5 LOW FLOW	CIN	BAD	1
CP6051	FE_CHLORIDE	PF-6025 PMP 5 LOW FLOW	CIN	STA	1
CP6051	FE_CHLORIDE	TNK-6004 NO. 2A LOW LEVEL	CIN	BAD	2
CP6051	FE_CHLORIDE	TNK-6004 NO. 2A LOW LEVEL	CIN	STA	2
CP6051	FE_CHLORIDE	TNK-6004 NO. 2A HIGH LEVEL	CIN	STA	1
CP6051	FE_CHLORIDE	TNK-6004 NO. 2A HIGH LEVEL	CIN	BAD	1
CP6051	FE_CHLORIDE	PF-6024 PMP 4 HI DSCHRG PRES	CIN	BAD	1
CP6051	FE_CHLORIDE	PF-6024 PMP 4 HI DSCHRG PRES	CIN	STA	1
CP6051	FE_CHLORIDE	PF-6025 PMP 5 HI DSCHRG PRES	CIN	STA	1
CP6051	FE_CHLORIDE	PF-6025 PMP 5 HI DSCHRG PRES	CIN	BAD	1
CP6051	FE_CHLORIDE	PF-6024 PMP 4 RUNNING	CIN	BAD	1
CP6051	FE_CHLORIDE	PF-6025 PMP 5 RUNNING	CIN	BAD	1
CP6051	FE_CHLORIDE	PF-6024 PMP 4 IN REMOTE	CIN	BAD	1
CP6051	FE_CHLORIDE	PF-6025 PMP 5 IN REMOTE	CIN	BAD	1
CP6051	GRIT_PUMPS	GRIT PUMP 2 MOTOROVERLOAD	CIN	STA	1

CP	COMPOUND	DESCRIPTION	TYPE	ALARM TYPE	PRIORITY
CP6051	GRIT_PUMPS	GRIT PUMP 2 MOTOROVERLOAD	CIN	BAD	1
CP6051	GRIT_PUMPS	AXIAL FLOW PROP OVERLOAD	CIN	BAD	2
CP6051	GRIT_PUMPS	AXIAL FLOW PROP OVERLOAD	CIN	STA	2
CP6051	GRIT_PUMPS	GRIT PUMP 3 MOTOROVERLOAD	CIN	BAD	1
CP6051	GRIT_PUMPS	GRIT PUMP 3 MOTOROVERLOAD	CIN	STA	1
CP6051	GRIT_PUMPS	FLUFF WATER VALVE FAILED	CIN	BAD	1
CP6051	GRIT_PUMPS	FLUFF WATER VALVE FAILED	CIN	STA	1
CP6051	GRIT_PUMPS	FLUFF WATER VALVE FAILED	CIN	STA	2
CP6051	GRIT_PUMPS	FLUFF WATER VALVE FAILED	CIN	BAD	1
CP6051	GRIT_PUMPS	GRIT PUMP 2 SEAL WLOW FLOW	CIN	STA	1
CP6051	GRIT_PUMPS	GRIT PUMP 2 SEAL WLOW FLOW	CIN	BAD	1
CP6051	GRIT_PUMPS	GRIT PUMP 3 SEAL WLOW FLOW	CIN	STA	1
CP6051	GRIT_PUMPS	GRIT PUMP 3 SEAL WLOW FLOW	CIN	BAD	1
CP6051	GRIT_PUMPS	GRIT BASIN 1B EMER SHUTDOWN	CIN	STA	1
CP6051	GRIT_PUMPS	GRIT BASIN 1B EMER SHUTDOWN	CIN	BAD	1
CP6051	GRIT_PUMPS	GRIT PUMP 2 SUCTIOLOW PRESS	CIN	STA	1
CP6051	GRIT_PUMPS	GRIT PUMP 2 SUCTIOLOW PRESS	CIN	BAD	1
CP6051	GRIT_PUMPS	GRIT PUMP 2 DISCHAHIGH PRESSURE	CIN	BAD	1
CP6051	GRIT_PUMPS	GRIT PUMP 2 DISCHAHIGH PRESSURE	CIN	STA	1
CP6051	GRIT_PUMPS	GRIT PUMP 3 SUCTIOLOW PRESS	CIN	BAD	1
CP6051	GRIT_PUMPS	GRIT PUMP 3 SUCTIOLOW PRESS	CIN	STA	1
CP6051	GRIT_PUMPS	GRIT PUMP 3 DISCHAHIGH PRESSURE	CIN	STA	1
CP6051	GRIT_PUMPS	GRIT PUMP 3 DISCHAHIGH PRESSURE	CIN	BAD	1
CP6051	GRIT_PUMPS	GRIT PUMP 2 MOTOR HIGH TEMP	CIN	BAD	1
CP6051	GRIT_PUMPS	GRIT PUMP 2 MOTOR HIGH TEMP	CIN	STA	1
CP6051	GRIT_PUMPS	GRIT PUMP 3 MOTOR HIGH TEMP	CIN	STA	1
CP6051	GRIT_PUMPS	GRIT PUMP 3 MOTOR HIGH TEMP	CIN	BAD	1
CP6051	GRIT_PUMPS	GRIT PUMP 2 RUNNING	CIN	BAD	1
CP6051	GRIT_PUMPS	GRIT BASIN 1B RUNNING	CIN	BAD	1
CP6051	GRIT_PUMPS	GRIT PUMP 3 RUNNING	CIN	BAD	1
CP6051	GRIT_PUMPS	GRIT PUMP 2 IN REMOTE	CIN	BAD	1
CP6051	GRIT_PUMPS	GRIT PUMP 3 IN REMOTE	CIN	BAD	1
CP6051	GRIT_PUMPS	FLUFF WATER VALVE IN REMOTE	CIN	BAD	1
CP6051	GRIT_PUMPS	FLUFF WATER VALVE IN REMOTE	CIN	BAD	1
CP6051	GRIT_PUMPS	FLUFF WATER VALVE OPENED	CIN	BAD	1
CP6051	GRIT_PUMPS	FLUFF WATER VALVE OPENED	CIN	BAD	1
CP6051	GRIT_PUMPS	FLUFF WATER VALVE CLOSED	CIN	BAD	1
CP6051	GRIT_PUMPS	FLUFF WATER VALVE CLOSED	CIN	BAD	1
CP6051	HEADWORKS	BS OUTLET GATE 1A MOTOR FAILED	CIN	STA	1
CP6051	HEADWORKS	BS OUTLET GATE 1A MOTOR FAILED	CIN	BAD	1
CP6051	HEADWORKS	BS INLET GATE 1A MOTOR FAILED	CIN	BAD	1
CP6051	HEADWORKS	BS INLET GATE 1A MOTOR FAILED	CIN	STA	1
CP6051	HEADWORKS	BS INLET GATE 1B MOTOR FAILED	CIN	BAD	1
CP6051	HEADWORKS	BS INLET GATE 1B MOTOR FAILED	CIN	STA	1
CP6051	HEADWORKS	BS OUTLET GATE 1B MOTOR FAILED	CIN	BAD	1
CP6051	HEADWORKS	BS OUTLET GATE 1B MOTOR FAILED	CIN	STA	1
CP6051	HEADWORKS	BS INLET GATE 1C MOTOR FAILED	CIN	BAD	1
CP6051	HEADWORKS	BS INLET GATE 1C MOTOR FAILED	CIN	STA	1
CP6051	HEADWORKS	BS OUTLET GATE 1C MOTOR FAILED	CIN	BAD	1
CP6051	HEADWORKS	BS OUTLET GATE 1C MOTOR FAILED	CIN	STA	1
CP6051	HEADWORKS	HDWRKS SUPPLY FAN OVERLOAD	CIN	STA	1
CP6051	HEADWORKS	HDWRKS SUPPLY FAN OVERLOAD	CIN	BAD	1
CP6051	HEADWORKS	HDWRKS SUPPLY FAN MOTOR FAILED	CIN	STA	1

CP	COMPOUND	DESCRIPTION	TYPE	ALARM TYPE	PRIORITY
CP6051	HEADWORKS	HDWRKS SUPPLY FAN MOTOR FAILED	CIN	BAD	1
CP6051	HEADWORKS	HW EXHST FAN 1 OVERLOAD	CIN	STA	1
CP6051	HEADWORKS	HW EXHST FAN 1 OVERLOAD	CIN	BAD	1
CP6051	HEADWORKS	HW EXHST FAN 1 MOTOR FAILED	CIN	BAD	1
CP6051	HEADWORKS	HW EXHST FAN 1 MOTOR FAILED	CIN	STA	1
CP6051	HEADWORKS	HW EXHST FAN 2 OVERLOAD	CIN	BAD	1
CP6051	HEADWORKS	HW EXHST FAN 2 OVERLOAD	CIN	STA	1
CP6051	HEADWORKS	HW EXHST FAN 2 MOTOR FAILED	CIN	STA	1
CP6051	HEADWORKS	HW EXHST FAN 2 MOTOR FAILED	CIN	BAD	1
CP6051	HEADWORKS	BARSCREEN COMBUST GAS	CIN	STA	2
CP6051	HEADWORKS	BARSCREEN COMBUST GAS	CIN	BAD	2
CP6051	HEADWORKS	BARSCREEN INLET FAILED	CIN	STA	1
CP6051	HEADWORKS	BARSCREEN INLET FAILED	CIN	BAD	1
CP6051	HEADWORKS	BARSCREEN OUTLET FAILED	CIN	STA	1
CP6051	HEADWORKS	BARSCREEN OUTLET FAILED	CIN	BAD	1
CP6051	HEADWORKS	BARSCREEN INLET HIGH	CIN	STA	2
CP6051	HEADWORKS	BARSCREEN INLET HIGH	CIN	BAD	2
CP6051	HEADWORKS	BARSCREEN INLET HIGH-HIGH	CIN	BAD	1
CP6051	HEADWORKS	BARSCREEN INLET HIGH-HIGH	CIN	STA	1
CP6051	HEADWORKS	BARSCREEN OUTLET HIGH	CIN	STA	2
CP6051	HEADWORKS	BARSCREEN OUTLET HIGH	CIN	BAD	2
CP6051	HEADWORKS	BARSCREEN OUTLET HIGH-HIGH	CIN	BAD	1
CP6051	HEADWORKS	BARSCREEN OUTLET HIGH-HIGH	CIN	STA	1
CP6051	HEADWORKS	HDWRKS SUPPLY FAN RUNNING	CIN	BAD	2
CP6051	HEADWORKS	HW EXHST FAN 1 RUNNING	CIN	BAD	2
CP6051	HEADWORKS	HW EXHST FAN 2 RUNNING	CIN	BAD	2
CP6051	HEADWORKS	BS INLET GATE 1A IN REMOTE	CIN	BAD	1
CP6051	HEADWORKS	BS OUTLET GATE 1A IN REMOTE	CIN	BAD	1
CP6051	HEADWORKS	BS INLET GATE 1B IN REMOTE	CIN	BAD	1
CP6051	HEADWORKS	BS OUTLET GATE 1B IN REMOTE	CIN	BAD	1
CP6051	HEADWORKS	BS INLET GATE 1C IN REMOTE	CIN	BAD	1
CP6051	HEADWORKS	BS OUTLET GATE 1C IN REMOTE	CIN	BAD	1
CP6051	HEADWORKS	BS INLET GATE 1A OPENED	CIN	BAD	1
CP6051	HEADWORKS	BS OUTLET GATE 1A OPENED	CIN	BAD	1
CP6051	HEADWORKS	BS INLET GATE 1B OPENED	CIN	BAD	1
CP6051	HEADWORKS	BS OUTLET GATE 1B OPENED	CIN	BAD	1
CP6051	HEADWORKS	BS INLET GATE 1C OPENED	CIN	BAD	1
CP6051	HEADWORKS	BS OUTLET GATE 1C OPENED	CIN	BAD	1
CP6051	HEADWORKS	BS INLET GATE 1A CLOSED	CIN	BAD	1
CP6051	HEADWORKS	BS OUTLET GATE 1A CLOSED	CIN	BAD	1
CP6051	HEADWORKS	BS INLET GATE 1B CLOSED	CIN	BAD	1
CP6051	HEADWORKS	BS OUTLET GATE 1B CLOSED	CIN	BAD	1
CP6051	HEADWORKS	BS INLET GATE 1C CLOSED	CIN	BAD	1
CP6051	HEADWORKS	BS OUTLET GATE 1C CLOSED	CIN	BAD	1
CP6051	INFLUENT	IPS PMP 2 VFD FAILED	CIN	BAD	1
CP6051	INFLUENT	IPS PMP 2 VFD FAILED	CIN	STA	1
CP6051	INFLUENT	IPS PMP 2 MOTOR FAILED	CIN	STA	1
CP6051	INFLUENT	IPS PMP 2 MOTOR FAILED	CIN	BAD	1
CP6051	INFLUENT	IPS PMP 3 VFD FAILED	CIN	BAD	1
CP6051	INFLUENT	IPS PMP 3 VFD FAILED	CIN	STA	1
CP6051	INFLUENT	IPS PMP 3 MOTOR FAILED	CIN	STA	1
CP6051	INFLUENT	IPS PMP 3 MOTOR FAILED	CIN	BAD	1
CP6051	INFLUENT	IPS PMP 4 VFD FAILED	CIN	BAD	1

CP	COMPOUND	DESCRIPTION	TYPE	ALARM TYPE	PRIORITY
CP6051	INFLUENT	IPS PMP 4 VFD FAILED	CIN	STA	1
CP6051	INFLUENT	IPS PMP 4 MOTOR FAILED	CIN	STA	1
CP6051	INFLUENT	IPS PMP 4 MOTOR FAILED	CIN	BAD	1
CP6051	INFLUENT	INFLUENT PUMP STATION	CIN	STA	1
CP6051	INFLUENT	INFLUENT PUMP STATION	CIN	BAD	5
CP6051	INFLUENT	IPS WETWELL 1 FAILED	CIN	STA	1
CP6051	INFLUENT	IPS WETWELL 1 FAILED	CIN	BAD	1
CP6051	INFLUENT	IPS WETWELL 2 FAILED	CIN	STA	1
CP6051	INFLUENT	IPS WETWELL 2 FAILED	CIN	BAD	1
CP6051	INFLUENT	IPS JUNCT BOX HIGH LEVEL	CIN	BAD	1
CP6051	INFLUENT	IPS JUNCT BOX HIGH LEVEL	CIN	STA	1
CP6051	INFLUENT	IPS WETWELL 1 LOW LEVEL	CIN	STA	1
CP6051	INFLUENT	IPS WETWELL 1 LOW LEVEL	CIN	BAD	1
CP6051	INFLUENT	IPS WETWELL 1 LOW-LOW LEVEL	CIN	STA	1
CP6051	INFLUENT	IPS WETWELL 1 LOW-LOW LEVEL	CIN	BAD	1
CP6051	INFLUENT	IPS WETWELL 2 LOW LEVEL	CIN	STA	1
CP6051	INFLUENT	IPS WETWELL 2 LOW LEVEL	CIN	BAD	1
CP6051	INFLUENT	IPS WETWELL 2 LOW-LOW LEVEL	CIN	STA	2
CP6051	INFLUENT	IPS WETWELL 2 LOW-LOW LEVEL	CIN	BAD	2
CP6051	INFLUENT	IPS PMP 2 SEAL LEAK	CIN	STA	1
CP6051	INFLUENT	IPS PMP 2 SEAL LEAK	CIN	BAD	1
CP6051	INFLUENT	IPS PMP 3 SEAL LEAK	CIN	BAD	1
CP6051	INFLUENT	IPS PMP 3 SEAL LEAK	CIN	STA	1
CP6051	INFLUENT	IPS PMP 4 SEAL LEAK	CIN	STA	1
CP6051	INFLUENT	IPS PMP 4 SEAL LEAK	CIN	BAD	1
CP6051	INFLUENT	IPS PMP 2 DSCHRG HIGH PRESSURE	CIN	BAD	1
CP6051	INFLUENT	IPS PMP 2 DSCHRG HIGH PRESSURE	CIN	STA	1
CP6051	INFLUENT	IPS PMP 3 DSCHRG HIGH PRESSURE	CIN	BAD	1
CP6051	INFLUENT	IPS PMP 3 DSCHRG HIGH PRESSURE	CIN	STA	1
CP6051	INFLUENT	IPS PMP 4 DSCHRG HIGH PRESSURE	CIN	STA	1
CP6051	INFLUENT	IPS PMP 4 DSCHRG HIGH PRESSURE	CIN	BAD	1
CP6051	INFLUENT	IPS PMP 2 MOTOR HIGH TEMP	CIN	BAD	1
CP6051	INFLUENT	IPS PMP 2 MOTOR HIGH TEMP	CIN	STA	1
CP6051	INFLUENT	IPS PMP 3 MOTOR HIGH TEMP	CIN	STA	1
CP6051	INFLUENT	IPS PMP 3 MOTOR HIGH TEMP	CIN	BAD	1
CP6051	INFLUENT	IPS PMP 4 MOTOR HIGH TEMP	CIN	BAD	1
CP6051	INFLUENT	IPS PMP 4 MOTOR HIGH TEMP	CIN	STA	1
CP6051	INFLUENT	IPS PMP 2 RUNNING	CIN	BAD	1
CP6051	INFLUENT	IPS PMP 3 RUNNING	CIN	BAD	1
CP6051	INFLUENT	IPS PMP 4 RUNNING	CIN	BAD	1
CP6051	INFLUENT	IPS PMP 2 HOR IN REMOTE	CIN	BAD	1
CP6051	INFLUENT	IPS PMP 3 HOR IN REMOTE	CIN	BAD	1
CP6051	INFLUENT	IPS PMP 4 HOR IN REMOTE	CIN	BAD	1
CP6051	INFLUENT	IPS PMP 2 BACKFLOW ALARM	CIN	BAD	2
CP6051	INFLUENT	IPS PMP 2 BACKFLOW ALARM	CIN	STA	2
CP6051	INFLUENT	IPS PMP 3 BACKFLOW ALARM	CIN	BAD	2
CP6051	INFLUENT	IPS PMP 3 BACKFLOW ALARM	CIN	STA	2
CP6051	INFLUENT	IPS PMP 4 BACKFLOW ALARM	CIN	BAD	2
CP6051	INFLUENT	IPS PMP 4 BACKFLOW ALARM	CIN	STA	3
CP6051	POLYMER	VCF-6021 POLYMER MOTOR FAILED	CIN	BAD	1
CP6051	POLYMER	VCF-6021 POLYMER MOTOR FAILED	CIN	STA	1
CP6051	POLYMER	BP-6021 NO. 1A MOTOR FAILED	CIN	BAD	2
CP6051	POLYMER	BP-6021 NO. 1A MOTOR FAILED	CIN	STA	2

CP	COMPOUND	DESCRIPTION	TYPE	ALARM TYPE	PRIORITY
CP6051	POLYMER	VCF-6022 POLYMER MOTOR FAILED	CIN	BAD	1
CP6051	POLYMER	VCF-6022 POLYMER MOTOR FAILED	CIN	STA	1
CP6051	POLYMER	BP-6022 NO. 1B MOTOR FAILED	CIN	BAD	1
CP6051	POLYMER	BP-6022 NO. 1B MOTOR FAILED	CIN	STA	1
CP6051	POLYMER	BP-6021 NO. 1A RUNNING	CIN	BAD	1
CP6051	POLYMER	BP-6022 NO. 1B RUNNING	CIN	BAD	1
CP6051	POLYMER	VCF-6021 POLYMER IN REMOTE	CIN	BAD	1
CP6051	POLYMER	BP-6021 NO. 1A IN REMOTE	CIN	BAD	1
CP6051	POLYMER	VCF-6022 POLYMER IN REMOTE	CIN	BAD	1
CP6051	POLYMER	BP-6022 NO. 1B IN REMOTE	CIN	BAD	1
CP6051	POLYMER	VCF-6021 POLYMER FULLY OPENED	CIN	BAD	1
CP6051	POLYMER	VCF-6022 POLYMER FULLY OPENED	CIN	BAD	1
CP6051	POLYMER	VCF-6021 POLYMER FULLY CLOSED	CIN	BAD	1
CP6051	POLYMER	VCF-6022 POLYMER FULLY CLOSED	CIN	BAD	1
CP6051	SCREENINGS	SCREENINGS CONVYR FAILED	CIN	BAD	1
CP6051	SCREENINGS	SCREENINGS CONVYR FAILED	CIN	STA	1
CP6051	SCREENINGS	WASH WATER FEED FAILED	CIN	BAD	1
CP6051	SCREENINGS	WASH WATER FEED FAILED	CIN	STA	1
CP6051	SCREENINGS	SCREENINGS CONVYR EMER SHUTDOWN	CIN	STA	1
CP6051	SCREENINGS	SCREENINGS CONVYR EMER SHUTDOWN	CIN	BAD	1
CP6051	SCREENINGS	SCREENINGS CONVYR RUNNING	CIN	BAD	1
CP6051	SCREENINGS	SCREENINGS CONVYR IN REMOTE	CIN	BAD	1
CP6051	SCREENINGS	WASH WATER FEED IN REMOTE	CIN	BAD	1
CP6051	SCREENINGS	SCREENINGS CONVYR ZERO MOTION SW	CIN	BAD	1
CP6051	SCREENINGS	SCREENINGS CONVYR ZERO MOTION SW	CIN	STA	1
CP6051	SCREENINGS	WASH WATER FEED OPENED	CIN	BAD	1
CP6051	SCREENINGS	WASH WATER FEED CLOSED	CIN	BAD	1
CP6051	SLUDGE_PUMPS	MPS-6022 MIXER FAILED	CIN	BAD	1
CP6051	SLUDGE_PUMPS	MPS-6022 MIXER FAILED	CIN	STA	1
CP6051	SLUDGE_PUMPS	GSC-6022 GRINDER OVERLOAD	CIN	BAD	1
CP6051	SLUDGE_PUMPS	GSC-6022 GRINDER OVERLOAD	CIN	STA	1
CP6051	SLUDGE_PUMPS	PSM-6023 PMP 3 OVERLOAD	CIN	STA	1
CP6051	SLUDGE_PUMPS	PSM-6023 PMP 3 OVERLOAD	CIN	BAD	1
CP6051	SLUDGE_PUMPS	VP-6023 DSCHRG VALVE FAILED	CIN	BAD	1
CP6051	SLUDGE_PUMPS	VP-6023 DSCHRG VALVE FAILED	CIN	STA	1
CP6051	SLUDGE_PUMPS	PSM-6024 PMP 4 OVERLOAD	CIN	STA	1
CP6051	SLUDGE_PUMPS	PSM-6024 PMP 4 OVERLOAD	CIN	BAD	1
CP6051	SLUDGE_PUMPS	VPS-6024 DSCHRG VALVE FAILED	CIN	BAD	1
CP6051	SLUDGE_PUMPS	VPS-6024 DSCHRG VALVE FAILED	CIN	STA	1
CP6051	SLUDGE_PUMPS	GS-6024 GRINDER 4 OVERLOAD	CIN	BAD	1
CP6051	SLUDGE_PUMPS	GS-6024 GRINDER 4 OVERLOAD	CIN	STA	1
CP6051	SLUDGE_PUMPS	PPS-6024 PMP 4 OVERLOAD	CIN	STA	1
CP6051	SLUDGE_PUMPS	PPS-6024 PMP 4 OVERLOAD	CIN	BAD	1
CP6051	SLUDGE_PUMPS	VP-6024 DSCHRG VALVE FAILED	CIN	BAD	1
CP6051	SLUDGE_PUMPS	VP-6024 DSCHRG VALVE FAILED	CIN	STA	1
CP6051	SLUDGE_PUMPS	VPS-6025 DSCHRG VALVE FAILED	CIN	STA	1
CP6051	SLUDGE_PUMPS	VPS-6025 DSCHRG VALVE FAILED	CIN	BAD	1
CP6051	SLUDGE_PUMPS	GS-6025 GRINDER 5 OVERLOAD	CIN	BAD	1
CP6051	SLUDGE_PUMPS	GS-6025 GRINDER 5 OVERLOAD	CIN	STA	1
CP6051	SLUDGE_PUMPS	PPS-6025 PMP 5 OVERLOAD	CIN	STA	1
CP6051	SLUDGE_PUMPS	PPS-6025 PMP 5 OVERLOAD	CIN	BAD	1
CP6051	SLUDGE_PUMPS	VPS-6026 DSCHRG VALVE FAILED	CIN	STA	1
CP6051	SLUDGE_PUMPS	VPS-6026 DSCHRG VALVE FAILED	CIN	BAD	1

CP	COMPOUND	DESCRIPTION	TYPE	ALARM TYPE	PRIORITY
CP6051	SLUDGE_PUMPS	GS-6026 GRINDER 6 OVERLOAD	CIN	BAD	1
CP6051	SLUDGE_PUMPS	GS-6026 GRINDER 6 OVERLOAD	CIN	STA	1
CP6051	SLUDGE_PUMPS	PPS-6026 PMP 6 OVERLOAD	CIN	STA	1
CP6051	SLUDGE_PUMPS	PPS-6026 PMP 6 OVERLOAD	CIN	BAD	1
CP6051	SLUDGE_PUMPS	PPS-6024 PMP 4 LOW SEAL WATER	CIN	STA	1
CP6051	SLUDGE_PUMPS	PPS-6024 PMP 4 LOW SEAL WATER	CIN	BAD	1
CP6051	SLUDGE_PUMPS	PPS-6025 PMP 5 LOW SEAL WATER	CIN	BAD	1
CP6051	SLUDGE_PUMPS	PPS-6025 PMP 5 LOW SEAL WATER	CIN	STA	1
CP6051	SLUDGE_PUMPS	PPS-6026 PMP 6 LOW SEAL WATER	CIN	BAD	1
CP6051	SLUDGE_PUMPS	PPS-6026 PMP 6 LOW SEAL WATER	CIN	STA	1
CP6051	SLUDGE_PUMPS	PSM-6023 PMP 3 LOW SEAL WATER	CIN	BAD	1
CP6051	SLUDGE_PUMPS	PSM-6023 PMP 3 LOW SEAL WATER	CIN	STA	1
CP6051	SLUDGE_PUMPS	PSM-6024 PMP 4 LOW SEAL WATER	CIN	STA	1
CP6051	SLUDGE_PUMPS	PSM-6024 PMP 4 LOW SEAL WATER	CIN	BAD	1
CP6051	SLUDGE_PUMPS	PPS-6024 PMP 4 SUCTION LOW	CIN	BAD	1
CP6051	SLUDGE_PUMPS	PPS-6024 PMP 4 SUCTION LOW	CIN	STA	1
CP6051	SLUDGE_PUMPS	PPS-6024 PMP 4 HIGH PRESSURE	CIN	BAD	1
CP6051	SLUDGE_PUMPS	PPS-6024 PMP 4 HIGH PRESSURE	CIN	STA	1
CP6051	SLUDGE_PUMPS	PPS-6025 PMP 5 SUCTION LOW	CIN	STA	1
CP6051	SLUDGE_PUMPS	PPS-6025 PMP 5 SUCTION LOW	CIN	BAD	1
CP6051	SLUDGE_PUMPS	PPS-6025 PMP 5 HIGH PRESSURE	CIN	STA	1
CP6051	SLUDGE_PUMPS	PPS-6025 PMP 5 HIGH PRESSURE	CIN	BAD	1
CP6051	SLUDGE_PUMPS	PPS-6026 PMP 6 SUCTION LOW	CIN	STA	1
CP6051	SLUDGE_PUMPS	PPS-6026 PMP 6 SUCTION LOW	CIN	BAD	1
CP6051	SLUDGE_PUMPS	PPS-6026 PMP 6 HIGH PRESSURE	CIN	BAD	1
CP6051	SLUDGE_PUMPS	PPS-6026 PMP 6 HIGH PRESSURE	CIN	STA	1
CP6051	SLUDGE_PUMPS	PSM-6023 PMP 3 SUCTION LOW	CIN	STA	1
CP6051	SLUDGE_PUMPS	PSM-6023 PMP 3 SUCTION LOW	CIN	BAD	1
CP6051	SLUDGE_PUMPS	PSM-6023 PMP 3 HI DSCHRG PRES	CIN	STA	1
CP6051	SLUDGE_PUMPS	PSM-6023 PMP 3 HI DSCHRG PRES	CIN	BAD	1
CP6051	SLUDGE_PUMPS	PSM-6024 PMP 4 SUCTION LOW	CIN	BAD	1
CP6051	SLUDGE_PUMPS	PSM-6024 PMP 4 SUCTION LOW	CIN	STA	1
CP6051	SLUDGE_PUMPS	PSM-6024 PMP 4 HI DSCHRG PRES	CIN	STA	1
CP6051	SLUDGE_PUMPS	PSM-6024 PMP 4 HI DSCHRG PRES	CIN	BAD	1
CP6051	SLUDGE_PUMPS	PPS-6024 PMP 4 MTR HIGH TEMP	CIN	BAD	1
CP6051	SLUDGE_PUMPS	PPS-6024 PMP 4 MTR HIGH TEMP	CIN	STA	1
CP6051	SLUDGE_PUMPS	PPS-6025 PMP 5 MTR HIGH TEMP	CIN	STA	1
CP6051	SLUDGE_PUMPS	PPS-6025 PMP 5 MTR HIGH TEMP	CIN	BAD	1
CP6051	SLUDGE_PUMPS	PPS-6026 PMP 6 MTR HIGH TEMP	CIN	STA	1
CP6051	SLUDGE_PUMPS	PPS-6026 PMP 6 MTR HIGH TEMP	CIN	BAD	1
CP6051	SLUDGE_PUMPS	PSM-6023 PMP 3 MTR HIGH TEMP	CIN	STA	1
CP6051	SLUDGE_PUMPS	PSM-6023 PMP 3 MTR HIGH TEMP	CIN	BAD	1
CP6051	SLUDGE_PUMPS	PSM-6024 PMP 4 MTR HIGH TEMP	CIN	BAD	1
CP6051	SLUDGE_PUMPS	PSM-6024 PMP 4 MTR HIGH TEMP	CIN	STA	1
CP6051	SLUDGE_PUMPS	MPS-6022 MIXER RUNNING	CIN	BAD	1
CP6051	SLUDGE_PUMPS	GSC-6022 GRINDER RUNNING	CIN	BAD	1
CP6051	SLUDGE_PUMPS	PSM-6023 PMP 3 RUNNING	CIN	BAD	1
CP6051	SLUDGE_PUMPS	PPS-6024 PMP 4 RUNNING	CIN	BAD	1
CP6051	SLUDGE_PUMPS	GS-6024 GRINDER 4 RUNNING	CIN	BAD	1
CP6051	SLUDGE_PUMPS	PSM-6024 PMP 4 RUNNING	CIN	BAD	1
CP6051	SLUDGE_PUMPS	PPS-6025 PMP 5 RUNNING	CIN	BAD	1
CP6051	SLUDGE_PUMPS	GS-6025 GRINDER 5 RUNNING	CIN	BAD	1
CP6051	SLUDGE_PUMPS	PPS-6026 PMP 6 RUNNING	CIN	BAD	1

CP	COMPOUND	DESCRIPTION	TYPE	ALARM TYPE	PRIORITY
CP6051	SLUDGE_PUMPS	GS-6026 GRINDER 6 RUNNING	CIN	BAD	1
CP6051	SLUDGE_PUMPS	GSC-6022 GRINDER IN REMOTE	CIN	BAD	1
CP6051	SLUDGE_PUMPS	MPS-6022 MIXER IN REMOTE	CIN	BAD	1
CP6051	SLUDGE_PUMPS	VP-6023 DSCHRG IN REMOTE	CIN	BAD	1
CP6051	SLUDGE_PUMPS	PSM-6023 PMP 3 IN REMOTE	CIN	BAD	1
CP6051	SLUDGE_PUMPS	PPS-6024 PMP 4 IN REMOTE	CIN	BAD	1
CP6051	SLUDGE_PUMPS	VP-6024 DSCHRG IN REMOTE	CIN	BAD	1
CP6051	SLUDGE_PUMPS	GS-6024 GRINDER 4 IN REMOTE	CIN	BAD	1
CP6051	SLUDGE_PUMPS	PSM-6024 PMP 4 IN REMOTE	CIN	BAD	1
CP6051	SLUDGE_PUMPS	VPS-6024 DSCHRG IN REMOTE	CIN	BAD	1
CP6051	SLUDGE_PUMPS	PPS-6025 PMP 5 IN REMOTE	CIN	BAD	1
CP6051	SLUDGE_PUMPS	GS-6025 GRINDER 5 IN REMOTE	CIN	BAD	1
CP6051	SLUDGE_PUMPS	VPS-6025 DSCHRG IN REMOTE	CIN	BAD	1
CP6051	SLUDGE_PUMPS	PPS-6026 PMP 6 IN REMOTE	CIN	BAD	1
CP6051	SLUDGE_PUMPS	GS-6026 GRINDER 6 IN REMOTE	CIN	BAD	1
CP6051	SLUDGE_PUMPS	VPS-6026 DSCHRG IN REMOTE	CIN	BAD	1
CP6051	SLUDGE_PUMPS	VP-6023 DSCHRG OPENED	CIN	BAD	1
CP6051	SLUDGE_PUMPS	VPS-6024 DSCHRG FULLY OPENED	CIN	BAD	1
CP6051	SLUDGE_PUMPS	VP-6024 DSCHRG FULLY OPENED	CIN	BAD	1
CP6051	SLUDGE_PUMPS	VPS-6025 DSCHRG FULLY OPENED	CIN	BAD	1
CP6051	SLUDGE_PUMPS	VPS-6026 DSCHRG FULLY OPENED	CIN	BAD	1
CP6051	SLUDGE_PUMPS	VP-6023 DSCHRG FULLY CLOSED	CIN	BAD	1
CP6051	SLUDGE_PUMPS	VPS-6024 DSCHRG FULLY CLOSED	CIN	BAD	1
CP6051	SLUDGE_PUMPS	VP-6024 DSCHRG FULLY CLOSED	CIN	BAD	1
CP6051	SLUDGE_PUMPS	VPS-6025 DSCHRG FULLY CLOSED	CIN	BAD	1
CP6051	SLUDGE_PUMPS	VPS-6026 DSCHRG FULLY CLOSED	CIN	BAD	1
CP6051	TEST1	TEST SWICH	CIN	STA	1
CP6052	2_CLARIFIERS	PSM-6053 PMP 3 MOTOR LEAK	CIN	STA	1
CP6052	2_CLARIFIERS	PSM-6053 PMP 3 MOTOR LEAK	CIN	BAD	1
CP6052	2_CLARIFIERS	PSM-6054 PMP 4 MOTOR LEAK	CIN	STA	1
CP6052	2_CLARIFIERS	PSM-6054 PMP 4 MOTOR LEAK	CIN	BAD	1
CP6052	2_CLARIFIERS	PSM-6053 PMP 3 OVERLOAD	CIN	BAD	2
CP6052	2_CLARIFIERS	PSM-6053 PMP 3 OVERLOAD	CIN	STA	2
CP6052	2_CLARIFIERS	PSM-6054 PMP 4 OVERLOAD	CIN	STA	2
CP6052	2_CLARIFIERS	PSM-6054 PMP 4 OVERLOAD	CIN	BAD	2
CP6052	2_CLARIFIERS	DSC-6055 NO. 3A MOTOR FAILED	CIN	STA	1
CP6052	2_CLARIFIERS	DSC-6055 NO. 3A MOTOR FAILED	CIN	BAD	1
CP6052	2_CLARIFIERS	SSC-6055 NO. 3A MOTOR FAILED	CIN	BAD	1
CP6052	2_CLARIFIERS	SSC-6055 NO. 3A MOTOR FAILED	CIN	STA	1
CP6052	2_CLARIFIERS	SSC-6056 NO. 3B MOTOR FAILED	CIN	STA	1
CP6052	2_CLARIFIERS	SSC-6056 NO. 3B MOTOR FAILED	CIN	BAD	1
CP6052	2_CLARIFIERS	DSC-6056 NO. 3B MOTOR FAILED	CIN	STA	1
CP6052	2_CLARIFIERS	DSC-6056 NO. 3B MOTOR FAILED	CIN	BAD	1
CP6052	2_CLARIFIERS	SSC-6057 NO. 4A MOTOR FAILED	CIN	BAD	1
CP6052	2_CLARIFIERS	SSC-6057 NO. 4A MOTOR FAILED	CIN	STA	1
CP6052	2_CLARIFIERS	DSC-6057 NO. 4A MOTOR FAILED	CIN	STA	1
CP6052	2_CLARIFIERS	DSC-6057 NO. 4A MOTOR FAILED	CIN	BAD	1
CP6052	2_CLARIFIERS	SSC-6054 NO. 4B MOTOR FAILED	CIN	BAD	1
CP6052	2_CLARIFIERS	SSC-6054 NO. 4B MOTOR FAILED	CIN	STA	1
CP6052	2_CLARIFIERS	DSC-6058 NO. 4B MOTOR FAILED	CIN	STA	1
CP6052	2_CLARIFIERS	DSC-6058 NO. 4B MOTOR FAILED	CIN	BAD	1
CP6052	2_CLARIFIERS	SECONDARY SCUM SUMP HI LEVEL	CIN	STA	1
CP6052	2_CLARIFIERS	SECONDARY SCUM SUMP HI LEVEL	CIN	BAD	1

CP	COMPOUND	DESCRIPTION	TYPE	ALARM TYPE	PRIORITY
CP6052	2_CLARIFIERS	DSC-6055 NO. 3A 70% TORQUE	CIN	BAD	1
CP6052	2_CLARIFIERS	DSC-6055 NO. 3A 70% TORQUE	CIN	STA	1
CP6052	2_CLARIFIERS	DSC-6055 NO. 3A 90% TORQUE	CIN	STA	1
CP6052	2_CLARIFIERS	DSC-6055 NO. 3A 90% TORQUE	CIN	BAD	1
CP6052	2_CLARIFIERS	SSC-6055 NO. 3A WEIR	CIN	STA	2
CP6052	2_CLARIFIERS	SSC-6055 NO. 3A WEIR	CIN	BAD	1
CP6052	2_CLARIFIERS	SSC-6056 NO. 3B WEIR	CIN	BAD	1
CP6052	2_CLARIFIERS	SSC-6056 NO. 3B WEIR	CIN	STA	2
CP6052	2_CLARIFIERS	DSC-6056 NO. 3B 70% TORQUE	CIN	BAD	1
CP6052	2_CLARIFIERS	DSC-6056 NO. 3B 70% TORQUE	CIN	STA	1
CP6052	2_CLARIFIERS	DSC-6056 NO. 3B 90% TORQUE	CIN	BAD	1
CP6052	2_CLARIFIERS	DSC-6056 NO. 3B 90% TORQUE	CIN	STA	1
CP6052	2_CLARIFIERS	SSC-6057 NO. 4A WEIR	CIN	STA	2
CP6052	2_CLARIFIERS	SSC-6057 NO. 4A WEIR	CIN	BAD	1
CP6052	2_CLARIFIERS	DSC-6057 NO. 4A 70% TORQUE	CIN	BAD	1
CP6052	2_CLARIFIERS	DSC-6057 NO. 4A 70% TORQUE	CIN	STA	1
CP6052	2_CLARIFIERS	DSC-6057 NO. 4A 90% TORQUE	CIN	STA	1
CP6052	2_CLARIFIERS	DSC-6057 NO. 4A 90% TORQUE	CIN	BAD	1
CP6052	2_CLARIFIERS	SSC-6054 NO. 4B WEIR	CIN	BAD	1
CP6052	2_CLARIFIERS	SSC-6054 NO. 4B WEIR	CIN	STA	2
CP6052	2_CLARIFIERS	DSC-6058 NO. 4B 70% TORQUE	CIN	BAD	1
CP6052	2_CLARIFIERS	DSC-6058 NO. 4B 70% TORQUE	CIN	STA	1
CP6052	2_CLARIFIERS	DSC-6058 NO. 4B 90% TORQUE	CIN	STA	1
CP6052	2_CLARIFIERS	DSC-6058 NO. 4B 90% TORQUE	CIN	BAD	1
CP6052	2_CLARIFIERS	PSM-6053 PMP 3 RUNNING	CIN	BAD	1
CP6052	2_CLARIFIERS	PSM-6054 PMP 4 RUNNING	CIN	BAD	1
CP6052	2_CLARIFIERS	DSC-6055 NO. 3A RUNNING	CIN	BAD	1
CP6052	2_CLARIFIERS	SSC-6055 NO. 3A WEIR	CIN	BAD	1
CP6052	2_CLARIFIERS	DSC-6056 NO. 3B RUNNING	CIN	BAD	1
CP6052	2_CLARIFIERS	SSC-6056 NO. 3B WEIR	CIN	BAD	1
CP6052	2_CLARIFIERS	SSC-6057 NO. 4A WEIR	CIN	BAD	1
CP6052	2_CLARIFIERS	DSC-6057 NO. 4A RUNNING	CIN	BAD	1
CP6052	2_CLARIFIERS	SSC-6054 NO. 4B WEIR	CIN	BAD	1
CP6052	2_CLARIFIERS	DSC-6058 NO. 4B RUNNING	CIN	BAD	1
CP6052	2_CLARIFIERS	PSM-6053 PMP 3 IN AUTO	CIN	BAD	1
CP6052	2_CLARIFIERS	PSM-6054 PMP 4 IN AUTO	CIN	BAD	1
CP6052	2_SUMP_PUMP	PSP-6051 PMP 1 MOISTURE S/D	CIN	STA	1
CP6052	2_SUMP_PUMP	PSP-6051 PMP 1 MOISTURE S/D	CIN	BAD	1
CP6052	2_SUMP_PUMP	PSP-6052 PMP 2 MOISTURE S/D	CIN	BAD	1
CP6052	2_SUMP_PUMP	PSP-6052 PMP 2 MOISTURE S/D	CIN	STA	1
CP6052	2_SUMP_PUMP	RAS SUMP PUMP1 OVERLOAD	CIN	STA	1
CP6052	2_SUMP_PUMP	RAS SUMP PUMP1 OVERLOAD	CIN	BAD	1
CP6052	2_SUMP_PUMP	RAS SUMP PUMP2 OVERLOAD	CIN	BAD	1
CP6052	2_SUMP_PUMP	RAS SUMP PUMP2 OVERLOAD	CIN	STA	1
CP6052	2_SUMP_PUMP	RAS/WAS STATION SUMP HI LEVEL	CIN	STA	1
CP6052	2_SUMP_PUMP	RAS/WAS STATION SUMP HI LEVEL	CIN	BAD	1
CP6052	2_SUMP_PUMP	PSP-6051 PMP 1 RUNNING	CIN	BAD	1
CP6052	2_SUMP_PUMP	PSP-6052 PMP 2 RUNNING	CIN	BAD	1
CP6052	2_SUMP_PUMP	PSP-6051 PMP 1 IN AUTO	CIN	BAD	1
CP6052	2_SUMP_PUMP	PSP-6052 PMP 2 IN AUTO	CIN	BAD	1
CP6052	AER_BASIN	MA MIXER Z-3A1A MOTOR FAILED	CIN	BAD	1
CP6052	AER_BASIN	MA MIXER Z-3A1A MOTOR FAILED	CIN	STA	2
CP6052	AER_BASIN	MA MIXER Z-3A1B MOTOR FAILED	CIN	STA	2

CP	COMPOUND	DESCRIPTION	TYPE	ALARM TYPE	PRIORITY
CP6052	AER_BASIN	MA MIXER Z-3A1B MOTOR FAILED	CIN	BAD	1
CP6052	AER_BASIN	MA MIXER Z-3A2A MOTOR FAILED	CIN	BAD	1
CP6052	AER_BASIN	MA MIXER Z-3A2A MOTOR FAILED	CIN	STA	2
CP6052	AER_BASIN	PML PMP 3 MOTOR OVERLOAD	CIN	STA	1
CP6052	AER_BASIN	PML PMP 3 MOTOR OVERLOAD	CIN	BAD	1
CP6052	AER_BASIN	MA MIXER Z-3A2B MOTOR FAILED	CIN	STA	2
CP6052	AER_BASIN	MA MIXER Z-3A2B MOTOR FAILED	CIN	BAD	1
CP6052	AER_BASIN	PML PMP 4 MOTOR OVERLOAD	CIN	BAD	1
CP6052	AER_BASIN	PML PMP 4 MOTOR OVERLOAD	CIN	STA	1
CP6052	AER_BASIN	MA MIXER Z-3A3A MOTOR FAILED	CIN	BAD	1
CP6052	AER_BASIN	MA MIXER Z-3A3A MOTOR FAILED	CIN	STA	2
CP6052	AER_BASIN	MA MIXER Z-3A3B MOTOR FAILED	CIN	BAD	1
CP6052	AER_BASIN	MA MIXER Z-3A3B MOTOR FAILED	CIN	STA	2
CP6052	AER_BASIN	MA MIXER Z-3B1A MOTOR FAILED	CIN	BAD	1
CP6052	AER_BASIN	MA MIXER Z-3B1A MOTOR FAILED	CIN	STA	2
CP6052	AER_BASIN	MA MIXER Z-3B1B MOTOR FAILED	CIN	BAD	1
CP6052	AER_BASIN	MA MIXER Z-3B1B MOTOR FAILED	CIN	STA	2
CP6052	AER_BASIN	MA MIXER Z-3B2A MOTOR FAILED	CIN	BAD	1
CP6052	AER_BASIN	MA MIXER Z-3B2A MOTOR FAILED	CIN	STA	2
CP6052	AER_BASIN	MA MIXER Z-3B2B MOTOR FAILED	CIN	STA	2
CP6052	AER_BASIN	MA MIXER Z-3B2B MOTOR FAILED	CIN	BAD	1
CP6052	AER_BASIN	MA MIXER Z-3C1A MOTOR FAILED	CIN	BAD	1
CP6052	AER_BASIN	MA MIXER Z-3C1A MOTOR FAILED	CIN	STA	2
CP6052	AER_BASIN	MA MIXER Z-3C1B MOTOR FAILED	CIN	BAD	1
CP6052	AER_BASIN	MA MIXER Z-3C1B MOTOR FAILED	CIN	STA	2
CP6052	AER_BASIN	MA MIXER Z-3C2A MOTOR FAILED	CIN	STA	2
CP6052	AER_BASIN	MA MIXER Z-3C2A MOTOR FAILED	CIN	BAD	1
CP6052	AER_BASIN	MA MIXER Z-3C2B MOTOR FAILED	CIN	STA	2
CP6052	AER_BASIN	MA MIXER Z-3C2B MOTOR FAILED	CIN	BAD	1
CP6052	AER_BASIN	MA MIXER Z-3D1A MOTOR FAILED	CIN	STA	2
CP6052	AER_BASIN	MA MIXER Z-3D1A MOTOR FAILED	CIN	BAD	1
CP6052	AER_BASIN	MA MIXER Z-3D1B MOTOR FAILED	CIN	BAD	1
CP6052	AER_BASIN	MA MIXER Z-3D1B MOTOR FAILED	CIN	STA	2
CP6052	AER_BASIN	MA MIXER Z-4A1A MOTOR FAILED	CIN	STA	2
CP6052	AER_BASIN	MA MIXER Z-4A1A MOTOR FAILED	CIN	BAD	1
CP6052	AER_BASIN	MA MIXER Z-4A1B MOTOR FAILED	CIN	BAD	1
CP6052	AER_BASIN	MA MIXER Z-4A1B MOTOR FAILED	CIN	STA	2
CP6052	AER_BASIN	MA MIXER Z-4A2A MOTOR FAILED	CIN	STA	2
CP6052	AER_BASIN	MA MIXER Z-4A2A MOTOR FAILED	CIN	BAD	1
CP6052	AER_BASIN	MA MIXER Z-4A2B MOTOR FAILED	CIN	STA	2
CP6052	AER_BASIN	MA MIXER Z-4A2B MOTOR FAILED	CIN	BAD	1
CP6052	AER_BASIN	MA MIXER Z-4A3A MOTOR FAILED	CIN	STA	2
CP6052	AER_BASIN	MA MIXER Z-4A3A MOTOR FAILED	CIN	BAD	1
CP6052	AER_BASIN	MA MIXER Z-4A3B MOTOR FAILED	CIN	STA	1
CP6052	AER_BASIN	MA MIXER Z-4A3B MOTOR FAILED	CIN	BAD	1
CP6052	AER_BASIN	MA MIXER Z-4B1A MOTOR FAILED	CIN	BAD	1
CP6052	AER_BASIN	MA MIXER Z-4B1A MOTOR FAILED	CIN	STA	1
CP6052	AER_BASIN	MA MIXER Z-4B1B MOTOR FAILED	CIN	BAD	1
CP6052	AER_BASIN	MA MIXER Z-4B1B MOTOR FAILED	CIN	STA	1
CP6052	AER_BASIN	MA MIXER Z-4B2A MOTOR FAILED	CIN	BAD	1
CP6052	AER_BASIN	MA MIXER Z-4B2A MOTOR FAILED	CIN	STA	1
CP6052	AER_BASIN	MA MIXER Z-4B2B MOTOR FAILED	CIN	STA	1
CP6052	AER_BASIN	MA MIXER Z-4B2B MOTOR FAILED	CIN	BAD	1

CP	COMPOUND	DESCRIPTION	TYPE	ALARM TYPE	PRIORITY
CP6052	AER_BASIN	MA MIXER Z-4C1A MOTOR FAILED	CIN	STA	1
CP6052	AER_BASIN	MA MIXER Z-4C1A MOTOR FAILED	CIN	BAD	1
CP6052	AER_BASIN	MA MIXER Z-4C1B MOTOR FAILED	CIN	BAD	1
CP6052	AER_BASIN	MA MIXER Z-4C1B MOTOR FAILED	CIN	STA	1
CP6052	AER_BASIN	MA MIXER Z-4C2A MOTOR FAILED	CIN	STA	1
CP6052	AER_BASIN	MA MIXER Z-4C2A MOTOR FAILED	CIN	BAD	1
CP6052	AER_BASIN	MA MIXER Z-4C2B MOTOR FAILED	CIN	BAD	1
CP6052	AER_BASIN	MA MIXER Z-4C2B MOTOR FAILED	CIN	STA	1
CP6052	AER_BASIN	MA MIXER Z-4D1A MOTOR FAILED	CIN	STA	1
CP6052	AER_BASIN	MA MIXER Z-4D1A MOTOR FAILED	CIN	BAD	1
CP6052	AER_BASIN	MA MIXER Z-4D1B MOTOR FAILED	CIN	STA	1
CP6052	AER_BASIN	MA MIXER Z-4D1B MOTOR FAILED	CIN	BAD	1
CP6052	AER_BASIN	MA MIXER Z-3A1A MTR SEAL LEAK	CIN	STA	1
CP6052	AER_BASIN	MA MIXER Z-3A1A MTR SEAL LEAK	CIN	BAD	1
CP6052	AER_BASIN	MA MIXER Z-3A1A PROP HUB LEAK	CIN	STA	1
CP6052	AER_BASIN	MA MIXER Z-3A1A PROP HUB LEAK	CIN	BAD	1
CP6052	AER_BASIN	MA MIXER Z-3A1B MTR SEAL LEAK	CIN	BAD	1
CP6052	AER_BASIN	MA MIXER Z-3A1B MTR SEAL LEAK	CIN	STA	1
CP6052	AER_BASIN	MA MIXER Z-3A1B PROP HUB LEAK	CIN	STA	1
CP6052	AER_BASIN	MA MIXER Z-3A1B PROP HUB LEAK	CIN	BAD	1
CP6052	AER_BASIN	PML PMP 3 MOTOR CASING LEAK	CIN	BAD	1
CP6052	AER_BASIN	PML PMP 3 MOTOR CASING LEAK	CIN	STA	1
CP6052	AER_BASIN	MA MIXER Z-3A2A MTR SEAL LEAK	CIN	STA	1
CP6052	AER_BASIN	MA MIXER Z-3A2A MTR SEAL LEAK	CIN	BAD	1
CP6052	AER_BASIN	MA MIXER Z-3A2A PROP HUB LEAK	CIN	STA	1
CP6052	AER_BASIN	MA MIXER Z-3A2A PROP HUB LEAK	CIN	BAD	1
CP6052	AER_BASIN	PML PMP 4 MOTOR CASING LEAK	CIN	STA	1
CP6052	AER_BASIN	PML PMP 4 MOTOR CASING LEAK	CIN	BAD	1
CP6052	AER_BASIN	MA MIXER Z-3A2B MTR SEAL LEAK	CIN	STA	1
CP6052	AER_BASIN	MA MIXER Z-3A2B MTR SEAL LEAK	CIN	BAD	1
CP6052	AER_BASIN	MA MIXER Z-3A2B PROP HUB LEAK	CIN	STA	1
CP6052	AER_BASIN	MA MIXER Z-3A2B PROP HUB LEAK	CIN	BAD	1
CP6052	AER_BASIN	MA MIXER Z-3A3A MTR SEAL LEAK	CIN	STA	1
CP6052	AER_BASIN	MA MIXER Z-3A3A MTR SEAL LEAK	CIN	BAD	1
CP6052	AER_BASIN	MA MIXER Z-3A3A PROP HUB LEAK	CIN	STA	1
CP6052	AER_BASIN	MA MIXER Z-3A3A PROP HUB LEAK	CIN	BAD	1
CP6052	AER_BASIN	MA MIXER Z-3A3B MTR SEAL LEAK	CIN	BAD	1
CP6052	AER_BASIN	MA MIXER Z-3A3B MTR SEAL LEAK	CIN	STA	1
CP6052	AER_BASIN	MA MIXER Z-3A3B PROP HUB LEAK	CIN	STA	1
CP6052	AER_BASIN	MA MIXER Z-3A3B PROP HUB LEAK	CIN	BAD	1
CP6052	AER_BASIN	MA MIXER Z-3B1A MTR SEAL LEAK	CIN	BAD	1
CP6052	AER_BASIN	MA MIXER Z-3B1A MTR SEAL LEAK	CIN	STA	1
CP6052	AER_BASIN	MA MIXER Z-3B1A PROP HUB LEAK	CIN	STA	1
CP6052	AER_BASIN	MA MIXER Z-3B1A PROP HUB LEAK	CIN	BAD	1
CP6052	AER_BASIN	MA MIXER Z-3B1B MTR SEAL LEAK	CIN	STA	1
CP6052	AER_BASIN	MA MIXER Z-3B1B MTR SEAL LEAK	CIN	BAD	1
CP6052	AER_BASIN	MA MIXER Z-3B1B PROP HUB LEAK	CIN	STA	1
CP6052	AER_BASIN	MA MIXER Z-3B1B PROP HUB LEAK	CIN	BAD	1
CP6052	AER_BASIN	MA MIXER Z-3B2A MTR SEAL LEAK	CIN	STA	1
CP6052	AER_BASIN	MA MIXER Z-3B2A MTR SEAL LEAK	CIN	BAD	1
CP6052	AER_BASIN	MA MIXER Z-3B2A PROP HUB LEAK	CIN	BAD	1
CP6052	AER_BASIN	MA MIXER Z-3B2A PROP HUB LEAK	CIN	STA	1
CP6052	AER_BASIN	MA MIXER Z-3B2B MTR SEAL LEAK	CIN	BAD	1

CP	COMPOUND	DESCRIPTION	TYPE	ALARM TYPE	PRIORITY
CP6052	AER_BASIN	MA MIXER Z-3B2B MTR SEAL LEAK	CIN	STA	1
CP6052	AER_BASIN	MA MIXER Z-3B2B PROP HUB LEAK	CIN	STA	1
CP6052	AER_BASIN	MA MIXER Z-3B2B PROP HUB LEAK	CIN	BAD	1
CP6052	AER_BASIN	MA MIXER Z-3C1A MTR SEAL LEAK	CIN	STA	1
CP6052	AER_BASIN	MA MIXER Z-3C1A MTR SEAL LEAK	CIN	BAD	1
CP6052	AER_BASIN	MA MIXER Z-3C1A PROP HUB LEAK	CIN	BAD	1
CP6052	AER_BASIN	MA MIXER Z-3C1A PROP HUB LEAK	CIN	STA	1
CP6052	AER_BASIN	MA MIXER Z-3C1B MTR SEAL LEAK	CIN	BAD	1
CP6052	AER_BASIN	MA MIXER Z-3C1B MTR SEAL LEAK	CIN	STA	1
CP6052	AER_BASIN	MA MIXER Z-3C1B PROP HUB LEAK	CIN	BAD	1
CP6052	AER_BASIN	MA MIXER Z-3C1B PROP HUB LEAK	CIN	STA	1
CP6052	AER_BASIN	MA MIXER Z-3C2B MTR SEAL LEAK	CIN	BAD	1
CP6052	AER_BASIN	MA MIXER Z-3C2B MTR SEAL LEAK	CIN	STA	1
CP6052	AER_BASIN	MA MIXER Z-3C2A PROP HUB LEAK	CIN	BAD	1
CP6052	AER_BASIN	MA MIXER Z-3C2A PROP HUB LEAK	CIN	STA	1
CP6052	AER_BASIN	MA MIXER Z-3C2B MTR SEAL LEAK	CIN	BAD	1
CP6052	AER_BASIN	MA MIXER Z-3C2B MTR SEAL LEAK	CIN	STA	1
CP6052	AER_BASIN	MA MIXER Z-3C2B PROP HUB LEAK	CIN	STA	1
CP6052	AER_BASIN	MA MIXER Z-3C2B PROP HUB LEAK	CIN	BAD	1
CP6052	AER_BASIN	MA MIXER Z-3D1A MTR SEAL LEAK	CIN	BAD	1
CP6052	AER_BASIN	MA MIXER Z-3D1A MTR SEAL LEAK	CIN	STA	1
CP6052	AER_BASIN	MA MIXER Z-3D1A PROP HUB LEAK	CIN	BAD	1
CP6052	AER_BASIN	MA MIXER Z-3D1A PROP HUB LEAK	CIN	STA	1
CP6052	AER_BASIN	MA MIXER Z-3D1B MTR SEAL LEAK	CIN	STA	1
CP6052	AER_BASIN	MA MIXER Z-3D1B MTR SEAL LEAK	CIN	BAD	1
CP6052	AER_BASIN	MA MIXER Z-3D1B PROP HUB LEAK	CIN	STA	1
CP6052	AER_BASIN	MA MIXER Z-3D1B PROP HUB LEAK	CIN	BAD	1
CP6052	AER_BASIN	MA MIXER Z-4A1A MTR SEAL LEAK	CIN	STA	1
CP6052	AER_BASIN	MA MIXER Z-4A1A MTR SEAL LEAK	CIN	BAD	1
CP6052	AER_BASIN	MA MIXER Z-4A1A PROP HUB LEAK	CIN	STA	1
CP6052	AER_BASIN	MA MIXER Z-4A1A PROP HUB LEAK	CIN	BAD	1
CP6052	AER_BASIN	MA MIXER Z-4A1B MTR SEAL LEAK	CIN	STA	1
CP6052	AER_BASIN	MA MIXER Z-4A1B MTR SEAL LEAK	CIN	BAD	1
CP6052	AER_BASIN	MA MIXER Z-4A1B PROP HUB LEAK	CIN	BAD	1
CP6052	AER_BASIN	MA MIXER Z-4A1B PROP HUB LEAK	CIN	STA	1
CP6052	AER_BASIN	MA MIXER Z-4A2A MTR SEAL LEAK	CIN	BAD	1
CP6052	AER_BASIN	MA MIXER Z-4A2A MTR SEAL LEAK	CIN	STA	1
CP6052	AER_BASIN	MA MIXER Z-4A2A PROP HUB LEAK	CIN	BAD	1
CP6052	AER_BASIN	MA MIXER Z-4A2A PROP HUB LEAK	CIN	STA	1
CP6052	AER_BASIN	MA MIXER Z-4A2B MTR SEAL LEAK	CIN	STA	1
CP6052	AER_BASIN	MA MIXER Z-4A2B MTR SEAL LEAK	CIN	BAD	1
CP6052	AER_BASIN	MA MIXER Z-4A2B PROP HUB LEAK	CIN	STA	1
CP6052	AER_BASIN	MA MIXER Z-4A2B PROP HUB LEAK	CIN	BAD	1
CP6052	AER_BASIN	MA MIXER Z-4A3A MTR SEAL LEAK	CIN	BAD	1
CP6052	AER_BASIN	MA MIXER Z-4A3A MTR SEAL LEAK	CIN	STA	1
CP6052	AER_BASIN	MA MIXER Z-4A3A PROP HUB LEAK	CIN	BAD	1
CP6052	AER_BASIN	MA MIXER Z-4A3A PROP HUB LEAK	CIN	STA	1
CP6052	AER_BASIN	MA MIXER Z-4A3B MTR SEAL LEAK	CIN	BAD	1
CP6052	AER_BASIN	MA MIXER Z-4A3B MTR SEAL LEAK	CIN	STA	1
CP6052	AER_BASIN	MA MIXER Z-4A3B PROP HUB LEAK	CIN	STA	1
CP6052	AER_BASIN	MA MIXER Z-4A3B PROP HUB LEAK	CIN	BAD	1
CP6052	AER_BASIN	MA MIXER Z-4B1A MTR SEAL LEAK	CIN	BAD	1
CP6052	AER_BASIN	MA MIXER Z-4B1A MTR SEAL LEAK	CIN	STA	1

CP	COMPOUND	DESCRIPTION	TYPE	ALARM TYPE	PRIORITY
CP6052	AER_BASIN	MA MIXER Z-4B1A PROP HUB LEAK	CIN	BAD	1
CP6052	AER_BASIN	MA MIXER Z-4B1A PROP HUB LEAK	CIN	STA	1
CP6052	AER_BASIN	MA MIXER Z-4B1B MTR SEAL LEAK	CIN	BAD	1
CP6052	AER_BASIN	MA MIXER Z-4B1B MTR SEAL LEAK	CIN	STA	1
CP6052	AER_BASIN	MA MIXER Z-4B1B PROP HUB LEAK	CIN	STA	1
CP6052	AER_BASIN	MA MIXER Z-4B1B PROP HUB LEAK	CIN	BAD	1
CP6052	AER_BASIN	MA MIXER Z-4B2A MTR SEAL LEAK	CIN	BAD	1
CP6052	AER_BASIN	MA MIXER Z-4B2A MTR SEAL LEAK	CIN	STA	1
CP6052	AER_BASIN	MA MIXER Z-4B2A PROP HUB LEAK	CIN	BAD	1
CP6052	AER_BASIN	MA MIXER Z-4B2A PROP HUB LEAK	CIN	STA	1
CP6052	AER_BASIN	MA MIXER Z-4B2B MTR SEAL LEAK	CIN	STA	1
CP6052	AER_BASIN	MA MIXER Z-4B2B MTR SEAL LEAK	CIN	BAD	1
CP6052	AER_BASIN	MA MIXER Z-4B2B PROP HUB LEAK	CIN	BAD	1
CP6052	AER_BASIN	MA MIXER Z-4B2B PROP HUB LEAK	CIN	STA	1
CP6052	AER_BASIN	MA MIXER Z-4C1A MTR SEAL LEAK	CIN	BAD	1
CP6052	AER_BASIN	MA MIXER Z-4C1A MTR SEAL LEAK	CIN	STA	1
CP6052	AER_BASIN	MA MIXER Z-4C1A PROP HUB LEAK	CIN	BAD	1
CP6052	AER_BASIN	MA MIXER Z-4C1A PROP HUB LEAK	CIN	STA	1
CP6052	AER_BASIN	MA MIXER Z-4C1B MTR SEAL LEAK	CIN	STA	1
CP6052	AER_BASIN	MA MIXER Z-4C1B MTR SEAL LEAK	CIN	BAD	1
CP6052	AER_BASIN	MA MIXER Z-4C1B PROP HUB LEAK	CIN	BAD	1
CP6052	AER_BASIN	MA MIXER Z-4C1B PROP HUB LEAK	CIN	STA	1
CP6052	AER_BASIN	MA MIXER Z-4C2A MTR SEAL LEAK	CIN	BAD	1
CP6052	AER_BASIN	MA MIXER Z-4C2A MTR SEAL LEAK	CIN	STA	1
CP6052	AER_BASIN	MA MIXER Z-4C2A PROP HUB LEAK	CIN	BAD	1
CP6052	AER_BASIN	MA MIXER Z-4C2A PROP HUB LEAK	CIN	STA	1
CP6052	AER_BASIN	MA MIXER Z-4C2B MTR SEAL LEAK	CIN	BAD	1
CP6052	AER_BASIN	MA MIXER Z-4C2B MTR SEAL LEAK	CIN	STA	1
CP6052	AER_BASIN	MA MIXER Z-4C2B PROP HUB LEAK	CIN	STA	1
CP6052	AER_BASIN	MA MIXER Z-4C2B PROP HUB LEAK	CIN	BAD	1
CP6052	AER_BASIN	MA MIXER Z-4D1A MTR SEAL LEAK	CIN	BAD	1
CP6052	AER_BASIN	MA MIXER Z-4D1A MTR SEAL LEAK	CIN	STA	1
CP6052	AER_BASIN	MA MIXER Z-4D1A PROP HUB LEAK	CIN	STA	1
CP6052	AER_BASIN	MA MIXER Z-4D1A PROP HUB LEAK	CIN	BAD	1
CP6052	AER_BASIN	MA MIXER Z-4D1B MTR SEAL LEAK	CIN	BAD	1
CP6052	AER_BASIN	MA MIXER Z-4D1B MTR SEAL LEAK	CIN	STA	1
CP6052	AER_BASIN	MA MIXER Z-4D1B PROP HUB LEAK	CIN	BAD	1
CP6052	AER_BASIN	MA MIXER Z-4D1B PROP HUB LEAK	CIN	STA	1
CP6052	AER_BASIN	MA MIXER Z-3A1A MTR HIGH TEMP	CIN	BAD	1
CP6052	AER_BASIN	MA MIXER Z-3A1A MTR HIGH TEMP	CIN	STA	1
CP6052	AER_BASIN	MA MIXER Z-3A1B MTR HIGH TEMP	CIN	BAD	1
CP6052	AER_BASIN	MA MIXER Z-3A1B MTR HIGH TEMP	CIN	STA	1
CP6052	AER_BASIN	MA MIXER Z-3A2A MTR HIGH TEMP	CIN	BAD	1
CP6052	AER_BASIN	MA MIXER Z-3A2A MTR HIGH TEMP	CIN	STA	1
CP6052	AER_BASIN	PML PMP 3 MOTOR HIGH TEMP	CIN	BAD	1
CP6052	AER_BASIN	PML PMP 3 MOTOR HIGH TEMP	CIN	STA	1
CP6052	AER_BASIN	MA MIXER Z-3A2B MTR HIGH TEMP	CIN	STA	1
CP6052	AER_BASIN	MA MIXER Z-3A2B MTR HIGH TEMP	CIN	BAD	1
CP6052	AER_BASIN	PML PMP 4 MOTOR HIGH TEMP	CIN	STA	1
CP6052	AER_BASIN	PML PMP 4 MOTOR HIGH TEMP	CIN	BAD	1
CP6052	AER_BASIN	MA MIXER Z-3A3A MTR HIGH TEMP	CIN	BAD	1
CP6052	AER_BASIN	MA MIXER Z-3A3A MTR HIGH TEMP	CIN	STA	1
CP6052	AER_BASIN	MA MIXER Z-3A3B MTR HIGH TEMP	CIN	STA	1

CP	COMPOUND	DESCRIPTION	TYPE	ALARM TYPE	PRIORITY
CP6052	AER_BASIN	MA MIXER Z-3A3B MTR HIGH TEMP	CIN	BAD	1
CP6052	AER_BASIN	MA MIXER Z-3B1A MTR HIGH TEMP	CIN	STA	1
CP6052	AER_BASIN	MA MIXER Z-3B1A MTR HIGH TEMP	CIN	BAD	1
CP6052	AER_BASIN	MA MIXER Z-3B1B MTR HIGH TEMP	CIN	BAD	1
CP6052	AER_BASIN	MA MIXER Z-3B1B MTR HIGH TEMP	CIN	STA	1
CP6052	AER_BASIN	MA MIXER Z-3B2A MTR HIGH TEMP	CIN	BAD	1
CP6052	AER_BASIN	MA MIXER Z-3B2A MTR HIGH TEMP	CIN	STA	1
CP6052	AER_BASIN	MA MIXER Z-3B2B MTR HIGH TEMP	CIN	BAD	1
CP6052	AER_BASIN	MA MIXER Z-3B2B MTR HIGH TEMP	CIN	STA	1
CP6052	AER_BASIN	MA MIXER Z-3C1A MTR HIGH TEMP	CIN	STA	1
CP6052	AER_BASIN	MA MIXER Z-3C1A MTR HIGH TEMP	CIN	BAD	1
CP6052	AER_BASIN	MA MIXER Z-3C1B MTR HIGH TEMP	CIN	STA	1
CP6052	AER_BASIN	MA MIXER Z-3C1B MTR HIGH TEMP	CIN	BAD	1
CP6052	AER_BASIN	MA MIXER Z-3C2A MTR HIGH TEMP	CIN	BAD	1
CP6052	AER_BASIN	MA MIXER Z-3C2A MTR HIGH TEMP	CIN	STA	1
CP6052	AER_BASIN	MA MIXER Z-3C2B MTR HIGH TEMP	CIN	STA	1
CP6052	AER_BASIN	MA MIXER Z-3C2B MTR HIGH TEMP	CIN	BAD	1
CP6052	AER_BASIN	MA MIXER Z-3D1A MTR HIGH TEMP	CIN	BAD	1
CP6052	AER_BASIN	MA MIXER Z-3D1A MTR HIGH TEMP	CIN	STA	1
CP6052	AER_BASIN	MA MIXER Z-3D1B MTR HIGH TEMP	CIN	BAD	1
CP6052	AER_BASIN	MA MIXER Z-3D1B MTR HIGH TEMP	CIN	STA	1
CP6052	AER_BASIN	MA MIXER Z-4A1A MTR HIGH TEMP	CIN	STA	1
CP6052	AER_BASIN	MA MIXER Z-4A1A MTR HIGH TEMP	CIN	BAD	1
CP6052	AER_BASIN	MA MIXER Z-4A1B MTR HIGH TEMP	CIN	BAD	1
CP6052	AER_BASIN	MA MIXER Z-4A1B MTR HIGH TEMP	CIN	STA	1
CP6052	AER_BASIN	MA MIXER Z-4A2A MTR HIGH TEMP	CIN	STA	1
CP6052	AER_BASIN	MA MIXER Z-4A2A MTR HIGH TEMP	CIN	BAD	1
CP6052	AER_BASIN	MA MIXER Z-4A2B MTR HIGH TEMP	CIN	STA	1
CP6052	AER_BASIN	MA MIXER Z-4A2B MTR HIGH TEMP	CIN	BAD	1
CP6052	AER_BASIN	MA MIXER Z-4A3A MTR HIGH TEMP	CIN	BAD	1
CP6052	AER_BASIN	MA MIXER Z-4A3A MTR HIGH TEMP	CIN	STA	1
CP6052	AER_BASIN	MA MIXER Z-4A3B MTR HIGH TEMP	CIN	BAD	1
CP6052	AER_BASIN	MA MIXER Z-4A3B MTR HIGH TEMP	CIN	STA	1
CP6052	AER_BASIN	MA MIXER Z-4B1A MTR HIGH TEMP	CIN	STA	1
CP6052	AER_BASIN	MA MIXER Z-4B1A MTR HIGH TEMP	CIN	BAD	1
CP6052	AER_BASIN	MA MIXER Z-4B1B MTR HIGH TEMP	CIN	BAD	1
CP6052	AER_BASIN	MA MIXER Z-4B1B MTR HIGH TEMP	CIN	STA	1
CP6052	AER_BASIN	MA MIXER Z-4B2A MTR HIGH TEMP	CIN	STA	1
CP6052	AER_BASIN	MA MIXER Z-4B2A MTR HIGH TEMP	CIN	BAD	1
CP6052	AER_BASIN	MA MIXER Z-4B2B MTR HIGH TEMP	CIN	STA	1
CP6052	AER_BASIN	MA MIXER Z-4B2B MTR HIGH TEMP	CIN	BAD	1
CP6052	AER_BASIN	MA MIXER Z-4C1A MTR HIGH TEMP	CIN	BAD	1
CP6052	AER_BASIN	MA MIXER Z-4C1A MTR HIGH TEMP	CIN	STA	1
CP6052	AER_BASIN	MA MIXER Z-4C1B MTR HIGH TEMP	CIN	STA	1
CP6052	AER_BASIN	MA MIXER Z-4C1B MTR HIGH TEMP	CIN	BAD	1
CP6052	AER_BASIN	MA MIXER Z-4C2A MTR HIGH TEMP	CIN	STA	1
CP6052	AER_BASIN	MA MIXER Z-4C2A MTR HIGH TEMP	CIN	BAD	1
CP6052	AER_BASIN	MA MIXER Z-4C2B MTR HIGH TEMP	CIN	BAD	1
CP6052	AER_BASIN	MA MIXER Z-4C2B MTR HIGH TEMP	CIN	STA	1
CP6052	AER_BASIN	MA MIXER Z-4D1A MTR HIGH TEMP	CIN	BAD	1
CP6052	AER_BASIN	MA MIXER Z-4D1A MTR HIGH TEMP	CIN	STA	1
CP6052	AER_BASIN	MA MIXER Z-4D1B MTR HIGH TEMP	CIN	BAD	1
CP6052	AER_BASIN	MA MIXER Z-4D1B MTR HIGH TEMP	CIN	STA	1

CP	COMPOUND	DESCRIPTION	TYPE	ALARM TYPE	PRIORITY
CP6052	AER_BASIN	MA MIXER Z-3A1A RUNNING	CIN	BAD	1
CP6052	AER_BASIN	MA MIXER Z-3A1B RUNNING	CIN	BAD	1
CP6052	AER_BASIN	MA MIXER Z-3A2A RUNNING	CIN	BAD	1
CP6052	AER_BASIN	PML PMP 3 MOTOR RUNNING	CIN	BAD	1
CP6052	AER_BASIN	MA MIXER Z-3A2B RUNNING	CIN	BAD	1
CP6052	AER_BASIN	PML PMP 4 MOTOR RUNNING	CIN	BAD	1
CP6052	AER_BASIN	MA MIXER Z-3A3A RUNNING	CIN	BAD	1
CP6052	AER_BASIN	MA MIXER Z-3A3B RUNNING	CIN	BAD	1
CP6052	AER_BASIN	MA MIXER Z-3B1A RUNNING	CIN	BAD	1
CP6052	AER_BASIN	MA MIXER Z-3B1B RUNNING	CIN	BAD	1
CP6052	AER_BASIN	MA MIXER Z-3B2A RUNNING	CIN	BAD	1
CP6052	AER_BASIN	MA MIXER Z-3B2B RUNNING	CIN	BAD	1
CP6052	AER_BASIN	MA MIXER Z-3C1A RUNNING	CIN	BAD	1
CP6052	AER_BASIN	MA MIXER Z-3C1B RUNNING	CIN	BAD	1
CP6052	AER_BASIN	MA MIXER Z-3C2A RUNNING	CIN	BAD	1
CP6052	AER_BASIN	MA MIXER Z-3C2B RUNNING	CIN	BAD	1
CP6052	AER_BASIN	MA MIXER Z-3D1A RUNNING	CIN	BAD	1
CP6052	AER_BASIN	MA MIXER Z-3D1B RUNNING	CIN	BAD	1
CP6052	AER_BASIN	MA MIXER Z-4A1A RUNNING	CIN	BAD	1
CP6052	AER_BASIN	MA MIXER Z-4A1B RUNNING	CIN	BAD	1
CP6052	AER_BASIN	MA MIXER Z-4A2A RUNNING	CIN	BAD	1
CP6052	AER_BASIN	MA MIXER Z-4A2B RUNNING	CIN	BAD	1
CP6052	AER_BASIN	MA MIXER Z-4A3A RUNNING	CIN	BAD	1
CP6052	AER_BASIN	MA MIXER Z-4A3B RUNNING	CIN	BAD	1
CP6052	AER_BASIN	MA MIXER Z-4B1A RUNNING	CIN	BAD	1
CP6052	AER_BASIN	MA MIXER Z-4B1B RUNNING	CIN	BAD	1
CP6052	AER_BASIN	MA MIXER Z-4B2A RUNNING	CIN	BAD	1
CP6052	AER_BASIN	MA MIXER Z-4B2B RUNNING	CIN	BAD	1
CP6052	AER_BASIN	MA MIXER Z-4C1A RUNNING	CIN	BAD	1
CP6052	AER_BASIN	MA MIXER Z-4C1B RUNNING	CIN	BAD	1
CP6052	AER_BASIN	MA MIXER Z-4C2A RUNNING	CIN	BAD	1
CP6052	AER_BASIN	MA MIXER Z-4C2B RUNNING	CIN	BAD	1
CP6052	AER_BASIN	MA MIXER Z-4D1A RUNNING	CIN	BAD	1
CP6052	AER_BASIN	MA MIXER Z-4D1B RUNNING	CIN	BAD	1
CP6052	AER_BASIN	PML PMP 3 MOTOR IN REMOTE	CIN	BAD	1
CP6052	AER_BASIN	PML PMP 4 MOTOR IN REMOTE	CIN	BAD	1
CP6052	AERATION_AIR	VAA-6053 ZONE 3B OPENED	CIN	BAD	1
CP6052	AERATION_AIR	VAA-6054 ZONE 3C OPENED	CIN	BAD	1
CP6052	AERATION_AIR	VAA-6055 ZONE 3D OPENED	CIN	BAD	1
CP6052	AERATION_AIR	VAA-6060 ZONE 4A OPENED	CIN	BAD	1
CP6052	AERATION_AIR	VAA-6061 ZONE 4B OPENED	CIN	BAD	1
CP6052	AERATION_AIR	VAA-6062 ZONE 4C FULLY OPENED	CIN	BAD	1
CP6052	AERATION_AIR	VAA-6063 ZONE 4D FULLY OPENED	CIN	BAD	1
CP6052	AERATION_AIR	VAA-6051 HEADER IN REMOTE	CIN	BAD	1
CP6052	AERATION_AIR	VAA-6052 ZONE 3A IN REMOTE	CIN	BAD	1
CP6052	AERATION_AIR	VAA-6053 ZONE 3B IN REMOTE	CIN	BAD	1
CP6052	AERATION_AIR	VAA-6054 ZONE 3C IN REMOTE	CIN	BAD	1
CP6052	AERATION_AIR	VAA-6055 ZONE 3D IN REMOTE	CIN	BAD	1
CP6052	AERATION_AIR	VAA-6060 ZONE 4A IN REMOTE	CIN	BAD	1
CP6052	AERATION_AIR	VAA-6061 ZONE 4B IN REMOTE	CIN	BAD	1
CP6052	AERATION_AIR	VAA-6062 ZONE 4C IN REMOTE	CIN	BAD	1
CP6052	AERATION_AIR	VAA-6063 ZONE 4D IN REMOTE	CIN	BAD	1
CP6052	AERATION_AIR	VAA-6051 HEADER OPENED	CIN	BAD	1

CP	COMPOUND	DESCRIPTION	TYPE	ALARM TYPE	PRIORITY
CP6052	AERATION_AIR	VAA-6052 ZONE 3A OPENED	CIN	BAD	1
CP6052	AERATION_AIR	VAA-6051 HEADER FULLY CLOSED	CIN	BAD	1
CP6052	AERATION_AIR	VAA-6052 ZONE 3A FULLY CLOSED	CIN	BAD	1
CP6052	AERATION_AIR	VAA-6053 ZONE 3B FULLY CLOSED	CIN	BAD	1
CP6052	AERATION_AIR	VAA-6054 ZONE 3C FULLY CLOSED	CIN	BAD	1
CP6052	AERATION_AIR	VAA-6055 ZONE 3D FULLY CLOSED	CIN	BAD	1
CP6052	AERATION_AIR	VAA-6060 ZONE 4A FULLY CLOSED	CIN	BAD	1
CP6052	AERATION_AIR	VAA-6061 ZONE 4B FULLY CLOSED	CIN	BAD	1
CP6052	AERATION_AIR	VAA-6062 ZONE 4C FULLY CLOSED	CIN	BAD	1
CP6052	AERATION_AIR	VAA-6063 ZONE 4D FULLY CLOSED	CIN	BAD	1
CP6052	RAS_PUMPS	PRS-6056 PMP 6 MOTOR FAILED	CIN	STA	1
CP6052	RAS_PUMPS	PRS-6056 PMP 6 MOTOR FAILED	CIN	BAD	1
CP6052	RAS_PUMPS	PRS-6056 PMP 6 VFD FAILED	CIN	STA	1
CP6052	RAS_PUMPS	PRS-6056 PMP 6 VFD FAILED	CIN	BAD	1
CP6052	RAS_PUMPS	PRS-6057 PMP 7 MOTOR FAILED	CIN	STA	1
CP6052	RAS_PUMPS	PRS-6057 PMP 7 MOTOR FAILED	CIN	BAD	1
CP6052	RAS_PUMPS	PRS-6057 PMP 7 VFD FAILED	CIN	BAD	1
CP6052	RAS_PUMPS	PRS-6057 PMP 7 VFD FAILED	CIN	STA	1
CP6052	RAS_PUMPS	PRS-6058 PMP 8 MOTOR FAILED	CIN	STA	1
CP6052	RAS_PUMPS	PRS-6058 PMP 8 MOTOR FAILED	CIN	BAD	1
CP6052	RAS_PUMPS	PRS-6058 PMP 8 VFD FAILED	CIN	BAD	1
CP6052	RAS_PUMPS	PRS-6058 PMP 8 VFD FAILED	CIN	STA	1
CP6052	RAS_PUMPS	PRS-6069 PMP 9 MOTOR FAILED	CIN	BAD	1
CP6052	RAS_PUMPS	PRS-6069 PMP 9 MOTOR FAILED	CIN	STA	1
CP6052	RAS_PUMPS	PRS-6069 PMP 9 VFD FAILED	CIN	BAD	1
CP6052	RAS_PUMPS	PRS-6069 PMP 9 VFD FAILED	CIN	STA	1
CP6052	RAS_PUMPS	PRS-6060 PMP 10 MOTOR FAILED	CIN	STA	1
CP6052	RAS_PUMPS	PRS-6060 PMP 10 MOTOR FAILED	CIN	BAD	1
CP6052	RAS_PUMPS	PRS-6060 PMP 10 VFD FAILED	CIN	BAD	1
CP6052	RAS_PUMPS	PRS-6060 PMP 10 VFD FAILED	CIN	STA	1
CP6052	RAS_PUMPS	PRS-6056 PMP 6 SEAL WATER LOW	CIN	BAD	1
CP6052	RAS_PUMPS	PRS-6056 PMP 6 SEAL WATER LOW	CIN	STA	1
CP6052	RAS_PUMPS	PRS-6057 PMP 7 SEAL WATER LOW	CIN	BAD	1
CP6052	RAS_PUMPS	PRS-6057 PMP 7 SEAL WATER LOW	CIN	STA	1
CP6052	RAS_PUMPS	PRS-6058 PMP 8 SEAL WATER LOW	CIN	STA	1
CP6052	RAS_PUMPS	PRS-6058 PMP 8 SEAL WATER LOW	CIN	BAD	1
CP6052	RAS_PUMPS	PRS-6069 PMP 9 SEAL WATER LOW	CIN	STA	1
CP6052	RAS_PUMPS	PRS-6069 PMP 9 SEAL WATER LOW	CIN	BAD	1
CP6052	RAS_PUMPS	PRS-6060 PMP 10 SEAL WATER LO	CIN	BAD	1
CP6052	RAS_PUMPS	PRS-6060 PMP 10 SEAL WATER LO	CIN	STA	1
CP6052	RAS_PUMPS	PRS-6056 PMP 6 LOW SUCT PRESS	CIN	STA	1
CP6052	RAS_PUMPS	PRS-6056 PMP 6 LOW SUCT PRESS	CIN	BAD	1
CP6052	RAS_PUMPS	PRS-6056 PMP 6 HI DSCHRG PRES	CIN	BAD	1
CP6052	RAS_PUMPS	PRS-6056 PMP 6 HI DSCHRG PRES	CIN	STA	1
CP6052	RAS_PUMPS	PRS-6057 PMP 7 LOW SUCT PRESS	CIN	BAD	1
CP6052	RAS_PUMPS	PRS-6057 PMP 7 LOW SUCT PRESS	CIN	STA	1
CP6052	RAS_PUMPS	PRS-6057 PMP 7 HI DSCHRG PRES	CIN	BAD	1
CP6052	RAS_PUMPS	PRS-6057 PMP 7 HI DSCHRG PRES	CIN	STA	1
CP6052	RAS_PUMPS	PRS-6058 PMP 8 LOW SUCT PRESS	CIN	STA	1
CP6052	RAS_PUMPS	PRS-6058 PMP 8 LOW SUCT PRESS	CIN	BAD	1
CP6052	RAS_PUMPS	PRS-6069 PMP 9 LOW SUCT PRESS	CIN	STA	1
CP6052	RAS_PUMPS	PRS-6069 PMP 9 LOW SUCT PRESS	CIN	BAD	1
CP6052	RAS_PUMPS	PRS-6060 PMP 10 LOW SUCT PRESS	CIN	STA	1

CP	COMPOUND	DESCRIPTION	TYPE	ALARM TYPE	PRIORITY
CP6052	RAS_PUMPS	PRS-6060 PMP 10 LOW SUCT PRESS	CIN	BAD	1
CP6052	RAS_PUMPS	PRS-6058 PMP 8 HI DSCHRG PRES	CIN	BAD	1
CP6052	RAS_PUMPS	PRS-6058 PMP 8 HI DSCHRG PRES	CIN	STA	1
CP6052	RAS_PUMPS	PRS-6069 PMP 9 HI DSCHRG PRES	CIN	BAD	1
CP6052	RAS_PUMPS	PRS-6069 PMP 9 HI DSCHRG PRES	CIN	STA	1
CP6052	RAS_PUMPS	PRS-6060 PMP 10 HI DSCHRG PRES	CIN	STA	1
CP6052	RAS_PUMPS	PRS-6060 PMP 10 HI DSCHRG PRES	CIN	BAD	1
CP6052	RAS_PUMPS	PRS-6056 PMP 6 HIGH TEMP	CIN	STA	1
CP6052	RAS_PUMPS	PRS-6056 PMP 6 HIGH TEMP	CIN	BAD	1
CP6052	RAS_PUMPS	PRS-6057 PMP 7 HIGH TEMP	CIN	BAD	1
CP6052	RAS_PUMPS	PRS-6057 PMP 7 HIGH TEMP	CIN	STA	1
CP6052	RAS_PUMPS	PRS-6058 PMP 8 HIGH TEMP	CIN	BAD	1
CP6052	RAS_PUMPS	PRS-6058 PMP 8 HIGH TEMP	CIN	STA	1
CP6052	RAS_PUMPS	PRS-6069 PMP 9 HIGH TEMP	CIN	STA	1
CP6052	RAS_PUMPS	PRS-6069 PMP 9 HIGH TEMP	CIN	BAD	1
CP6052	RAS_PUMPS	PRS-6060 PMP 10 HIGH TEMP	CIN	BAD	1
CP6052	RAS_PUMPS	PRS-6060 PMP 10 HIGH TEMP	CIN	STA	1
CP6052	RAS_PUMPS	PRS-6056 PMP 6 RUNNING	CIN	BAD	1
CP6052	RAS_PUMPS	PRS-6057 PMP 7 RUNNING	CIN	BAD	1
CP6052	RAS_PUMPS	PRS-6058 PMP 8 RUNNING	CIN	BAD	1
CP6052	RAS_PUMPS	PRS-6069 PMP 9 RUNNING	CIN	BAD	1
CP6052	RAS_PUMPS	PRS-6060 PMP 10 RUNNING	CIN	BAD	1
CP6052	RAS_PUMPS	RAS TO AB NO. 3 IN REMOTE	CIN	BAD	1
CP6052	RAS_PUMPS	RAS TO AB NO. 4 IN REMOTE	CIN	BAD	1
CP6052	RAS_PUMPS	PRS-6056 PMP 6 IN REMOTE	CIN	BAD	1
CP6052	RAS_PUMPS	PRS-6057 PMP 7 IN REMOTE	CIN	BAD	1
CP6052	RAS_PUMPS	PRS-6058 PMP 8 IN REMOTE	CIN	BAD	1
CP6052	RAS_PUMPS	PRS-6069 PMP 9 IN REMOTE	CIN	BAD	1
CP6052	RAS_PUMPS	PRS-6060 PMP 10 IN REMOTE	CIN	BAD	1
CP6052	RAS_PUMPS	RAS TO AB NO. 3 FULLY OPENED	CIN	BAD	1
CP6052	RAS_PUMPS	RAS TO AB NO. 4 FULLY OPENED	CIN	BAD	1
CP6052	RAS_PUMPS	RAS TO AB NO. 3 FULLY CLOSED	CIN	BAD	1
CP6052	RAS_PUMPS	RAS TO AB NO. 4 FULLY CLOSED	CIN	BAD	1
CP6052	WAS_PUMPS	PWS-6053 PMP 3 MOTOR FAILED	CIN	BAD	1
CP6052	WAS_PUMPS	PWS-6053 PMP 3 MOTOR FAILED	CIN	STA	1
CP6052	WAS_PUMPS	PWS-6053 PMP 3 VFD FAILED	CIN	BAD	1
CP6052	WAS_PUMPS	PWS-6053 PMP 3 VFD FAILED	CIN	STA	1
CP6052	WAS_PUMPS	PWS-6054 PMP 4 MOTOR FAILED	CIN	STA	1
CP6052	WAS_PUMPS	PWS-6054 PMP 4 MOTOR FAILED	CIN	BAD	1
CP6052	WAS_PUMPS	PWS-6054 PMP 4 VFD FAILED	CIN	BAD	1
CP6052	WAS_PUMPS	PWS-6054 PMP 4 VFD FAILED	CIN	STA	1
CP6052	WAS_PUMPS	PWS-6053 PMP 3 SEAL WATER LOW	CIN	BAD	1
CP6052	WAS_PUMPS	PWS-6053 PMP 3 SEAL WATER LOW	CIN	STA	1
CP6052	WAS_PUMPS	PWS-6054 PMP 4 SEAL WATER LOW	CIN	BAD	1
CP6052	WAS_PUMPS	PWS-6054 PMP 4 SEAL WATER LOW	CIN	STA	1
CP6052	WAS_PUMPS	PWS-6053 PMP 3 LOW SUCT PRESS	CIN	BAD	1
CP6052	WAS_PUMPS	PWS-6053 PMP 3 LOW SUCT PRESS	CIN	STA	1
CP6052	WAS_PUMPS	PWS-6053 PMP 3 HI DSCHRG PRES	CIN	BAD	1
CP6052	WAS_PUMPS	PWS-6053 PMP 3 HI DSCHRG PRES	CIN	STA	1
CP6052	WAS_PUMPS	PWS-6054 PMP 4 LOW SUCT PRESS	CIN	BAD	1
CP6052	WAS_PUMPS	PWS-6054 PMP 4 LOW SUCT PRESS	CIN	STA	1
CP6052	WAS_PUMPS	PWS-6054 PMP 4 HI DSCHRG PRES	CIN	BAD	1
CP6052	WAS_PUMPS	PWS-6054 PMP 4 HI DSCHRG PRES	CIN	STA	1

CP	COMPOUND	DESCRIPTION	TYPE	ALARM TYPE	PRIORITY
CP6052	WAS_PUMPS	PWS-6053 PMP 3 HIGH TEMP	CIN	BAD	1
CP6052	WAS_PUMPS	PWS-6053 PMP 3 HIGH TEMP	CIN	STA	1
CP6052	WAS_PUMPS	PWS-6054 PMP 4 HIGH TEMP	CIN	STA	1
CP6052	WAS_PUMPS	PWS-6054 PMP 4 HIGH TEMP	CIN	BAD	1
CP6052	WAS_PUMPS	PWS-6053 PMP 3 RUNNING	CIN	BAD	1
CP6052	WAS_PUMPS	PWS-6054 PMP 4 RUNNING	CIN	BAD	1
CP6052	WAS_PUMPS	PWS-6053 PMP 3 IN REMOTE	CIN	BAD	1
CP6052	WAS_PUMPS	PWS-6054 PMP 4 IN REMOTE	CIN	BAD	1
CP6053	3_SUMP_PUMP	RAS NAOCL SUMP1 MOISTURE S/D	CIN	STA	1
CP6053	3_SUMP_PUMP	RAS NAOCL SUMP1 MOISTURE S/D	CIN	BAD	1
CP6053	3_SUMP_PUMP	RAS NAOCL SUMP2 MOISTURE S/D	CIN	BAD	1
CP6053	3_SUMP_PUMP	RAS NAOCL SUMP2 MOISTURE S/D	CIN	STA	1
CP6053	3_SUMP_PUMP	ALUM SUMP PMP1 MOISTURE S/D	CIN	BAD	2
CP6053	3_SUMP_PUMP	ALUM SUMP PMP1 MOISTURE S/D	CIN	STA	2
CP6053	3_SUMP_PUMP	ALUM SUMP PMP2 MOISTURE S/D	CIN	STA	2
CP6053	3_SUMP_PUMP	ALUM SUMP PMP2 MOISTURE S/D	CIN	BAD	2
CP6053	3_SUMP_PUMP	PSP-6405 PMP 1 MOISTURE S/D	CIN	STA	2
CP6053	3_SUMP_PUMP	PSP-6405 PMP 1 MOISTURE S/D	CIN	BAD	2
CP6053	3_SUMP_PUMP	PSP-6406 PMP 2 MOISTURE S/D	CIN	STA	1
CP6053	3_SUMP_PUMP	PSP-6406 PMP 2 MOISTURE S/D	CIN	BAD	1
CP6053	3_SUMP_PUMP	PSP-6407 PMP 1 MOISTURE S/D	CIN	STA	1
CP6053	3_SUMP_PUMP	PSP-6407 PMP 1 MOISTURE S/D	CIN	BAD	1
CP6053	3_SUMP_PUMP	PSP-6408 PMP 2 MOISTURE S/D	CIN	STA	1
CP6053	3_SUMP_PUMP	PSP-6408 PMP 2 MOISTURE S/D	CIN	BAD	1
CP6053	3_SUMP_PUMP	RAS NAOCL SUMP1 OVERLOAD	CIN	STA	2
CP6053	3_SUMP_PUMP	RAS NAOCL SUMP1 OVERLOAD	CIN	BAD	2
CP6053	3_SUMP_PUMP	RAS NAOCL SUMP2 OVERLOAD	CIN	STA	2
CP6053	3_SUMP_PUMP	RAS NAOCL SUMP2 OVERLOAD	CIN	BAD	2
CP6053	3_SUMP_PUMP	ALUM SUMP PMP1 OVERLOAD	CIN	STA	2
CP6053	3_SUMP_PUMP	ALUM SUMP PMP1 OVERLOAD	CIN	BAD	2
CP6053	3_SUMP_PUMP	ALUM SUMP PMP2 OVERLOAD	CIN	BAD	2
CP6053	3_SUMP_PUMP	ALUM SUMP PMP2 OVERLOAD	CIN	STA	2
CP6053	3_SUMP_PUMP	PSP-6405 PMP 1 OVERLOAD	CIN	BAD	3
CP6053	3_SUMP_PUMP	PSP-6405 PMP 1 OVERLOAD	CIN	STA	2
CP6053	3_SUMP_PUMP	PSP-6406 PMP 2 OVERLOAD	CIN	BAD	2
CP6053	3_SUMP_PUMP	PSP-6406 PMP 2 OVERLOAD	CIN	STA	2
CP6053	3_SUMP_PUMP	PSP-6407 PMP 1 OVERLOAD	CIN	BAD	1
CP6053	3_SUMP_PUMP	PSP-6407 PMP 1 OVERLOAD	CIN	STA	1
CP6053	3_SUMP_PUMP	PSP-6408 PMP 2 OVERLOAD	CIN	STA	1
CP6053	3_SUMP_PUMP	PSP-6408 PMP 2 OVERLOAD	CIN	BAD	1
CP6053	3_SUMP_PUMP	NAOCL STATION SUMP HI LEVEL	CIN	STA	2
CP6053	3_SUMP_PUMP	NAOCL STATION SUMP HI LEVEL	CIN	BAD	2
CP6053	3_SUMP_PUMP	POLY/ALUM STAT SUMP HI LEVEL	CIN	BAD	2
CP6053	3_SUMP_PUMP	POLY/ALUM STAT SUMP HI LEVEL	CIN	STA	2
CP6053	3_SUMP_PUMP	SODIUM BISULFITE SUMP HI LEVEL	CIN	STA	2
CP6053	3_SUMP_PUMP	SODIUM BISULFITE SUMP HI LEVEL	CIN	BAD	2
CP6053	3_SUMP_PUMP	EFFLUENT SUMP HI LEVEL	CIN	BAD	1
CP6053	3_SUMP_PUMP	EFFLUENT SUMP HI LEVEL	CIN	STA	1
CP6053	3_SUMP_PUMP	PSP-6401 PMP 1 RUNNING	CIN	BAD	2
CP6053	3_SUMP_PUMP	PSP-6402 PMP 2 RUNNING	CIN	BAD	1
CP6053	3_SUMP_PUMP	PSP-6403 PMP 1 RUNNING	CIN	BAD	2
CP6053	3_SUMP_PUMP	PSP-6404 PMP 2 RUNNING	CIN	BAD	2
CP6053	3_SUMP_PUMP	PSP-6405 PMP 1 RUNNING	CIN	BAD	2

CP	COMPOUND	DESCRIPTION	TYPE	ALARM TYPE	PRIORITY
CP6053	3_SUMP_PUMP	PSP-6406 PMP 2 RUNNING	CIN	BAD	1
CP6053	3_SUMP_PUMP	PSP-6407 PMP 1 RUNNING	CIN	BAD	1
CP6053	3_SUMP_PUMP	PSP-6408 PMP 2 RUNNING	CIN	BAD	1
CP6053	3_SUMP_PUMP	PSP-6401 PMP 1 IN AUTO	CIN	BAD	1
CP6053	3_SUMP_PUMP	PSP-6402 PMP 2 IN AUTO	CIN	BAD	1
CP6053	3_SUMP_PUMP	PSP-6403 PMP 1 IN AUTO	CIN	BAD	1
CP6053	3_SUMP_PUMP	PSP-6404 PMP 2 IN AUTO	CIN	BAD	1
CP6053	3_SUMP_PUMP	PSP-6405 PMP 1 IN AUTO	CIN	BAD	1
CP6053	3_SUMP_PUMP	PSP-6406 PMP 2 IN AUTO	CIN	BAD	1
CP6053	3_SUMP_PUMP	PSP-6407 PMP 1 IN AUTO	CIN	BAD	1
CP6053	3_SUMP_PUMP	PSP-6408 PMP 2 IN AUTO	CIN	BAD	1
CP6053	ALUM	PA-6401 PMP 1A DSCHRG FLOW LO	CIN	STA	1
CP6053	ALUM	PA-6401 PMP 1A DSCHRG FLOW LO	CIN	BAD	1
CP6053	ALUM	PA-6402 PMP 2A DSCHRG FLOW LO	CIN	STA	1
CP6053	ALUM	PA-6402 PMP 2A DSCHRG FLOW LO	CIN	BAD	1
CP6053	ALUM	TNK-6402 NO. 1A ALUM LOW	CIN	BAD	2
CP6053	ALUM	TNK-6402 NO. 1A ALUM LOW	CIN	STA	2
CP6053	ALUM	TNK-6402 NO. 1A ALUM HIGH	CIN	STA	2
CP6053	ALUM	TNK-6402 NO. 1A ALUM HIGH	CIN	BAD	2
CP6053	ALUM	PA-6401 PMP 1A HI DSCHRG PRES	CIN	BAD	1
CP6053	ALUM	PA-6401 PMP 1A HI DSCHRG PRES	CIN	STA	1
CP6053	ALUM	PA-6402 PMP 2A HI DSCHRG PRES	CIN	BAD	1
CP6053	ALUM	PA-6402 PMP 2A HI DSCHRG PRES	CIN	STA	1
CP6053	ALUM	PA-6401 PMP 1A RUNNING	CIN	BAD	1
CP6053	ALUM	PA-6402 PMP 2A RUNNING	CIN	BAD	1
CP6053	ALUM	PA-6401 PMP 1A IN REMOTE	CIN	BAD	1
CP6053	ALUM	PA-6402 PMP 2A IN REMOTE	CIN	BAD	1
CP6053	CATI_POLYMER	BP-6401 NO. 1A MOTOR FAILED	CIN	BAD	1
CP6053	CATI_POLYMER	BP-6401 NO. 1A MOTOR FAILED	CIN	STA	1
CP6053	CATI_POLYMER	BP-6402 NO. 1B MOTOR FAILED	CIN	BAD	1
CP6053	CATI_POLYMER	BP-6402 NO. 1B MOTOR FAILED	CIN	STA	1
CP6053	CATI_POLYMER	BP-6401 NO. 1A RUNNING	CIN	BAD	1
CP6053	CATI_POLYMER	BP-6402 NO. 1B RUNNING	CIN	BAD	1
CP6053	CATI_POLYMER	BP-6401 NO. 1A IN REMOTE	CIN	BAD	1
CP6053	CATI_POLYMER	BP-6402 NO. 1B IN REMOTE	CIN	BAD	1
CP6053	CL2_CONTACT	GFE-6401 GATE MOTOR FAILED	CIN	STA	1
CP6053	CL2_CONTACT	GFE-6401 GATE MOTOR FAILED	CIN	BAD	1
CP6053	CL2_CONTACT	MCD-6402 MIXER 1 MOTOR FAILED	CIN	STA	1
CP6053	CL2_CONTACT	MCD-6402 MIXER 1 MOTOR FAILED	CIN	BAD	1
CP6053	CL2_CONTACT	MCD-6403 MIXER 1 MOTOR FAILED	CIN	BAD	1
CP6053	CL2_CONTACT	MCD-6403 MIXER 1 MOTOR FAILED	CIN	STA	1
CP6053	CL2_CONTACT	WATER CHAMP FAIL/STOPPED	CIN	STA	2
CP6053	CL2_CONTACT	WATER CHAMP FAIL/STOPPED	CIN	BAD	2
CP6053	CL2_CONTACT	MCD-6402 MIXER 1 RUNNING	CIN	BAD	1
CP6053	CL2_CONTACT	MCD-6403 MIXER 1 RUNNING	CIN	BAD	1
CP6053	CL2_CONTACT	WATER CHAMP RUNNING	CIN	BAD	2
CP6053	CL2_CONTACT	GFE-6401 GATE IN REMOTE	CIN	BAD	1
CP6053	CL2_CONTACT	GFE-6401 GATE OPENED	CIN	BAD	1
CP6053	CL2_CONTACT	GFE-6401 GATE FULLY CLOSED	CIN	BAD	1
CP6053	NA_BISULFITE	PSB-6401 PMP 1A DSCHRG FLOW LO	CIN	STA	1
CP6053	NA_BISULFITE	PSB-6401 PMP 1A DSCHRG FLOW LO	CIN	BAD	1
CP6053	NA_BISULFITE	PSB-6402 PMP 2A DSCHRG FLOW LO	CIN	STA	1
CP6053	NA_BISULFITE	PSB-6402 PMP 2A DSCHRG FLOW LO	CIN	BAD	1

CP	COMPOUND	DESCRIPTION	TYPE	ALARM TYPE	PRIORITY
CP6053	NA_BISULFITE	PSB-6403 PMP 3A DSCHRG FLOW LO	CIN	BAD	1
CP6053	NA_BISULFITE	PSB-6403 PMP 3A DSCHRG FLOW LO	CIN	STA	1
CP6053	NA_BISULFITE	PSB-6404 PMP 4A DSCHRG FLOW LO	CIN	BAD	1
CP6053	NA_BISULFITE	PSB-6404 PMP 4A DSCHRG FLOW LO	CIN	STA	1
CP6053	NA_BISULFITE	TNK-6408 NO. 1A BISULFITE LOW	CIN	BAD	2
CP6053	NA_BISULFITE	TNK-6408 NO. 1A BISULFITE LOW	CIN	STA	2
CP6053	NA_BISULFITE	TNK-6408 NO. 1A BISULFITE HIGH	CIN	STA	1
CP6053	NA_BISULFITE	TNK-6408 NO. 1A BISULFITE HIGH	CIN	BAD	1
CP6053	NA_BISULFITE	TNK-6409 NO. 2A BISULFITE LOW	CIN	STA	2
CP6053	NA_BISULFITE	TNK-6409 NO. 2A BISULFITE LOW	CIN	BAD	2
CP6053	NA_BISULFITE	TNK-6409 NO. 2A BISULFITE HIGH	CIN	BAD	1
CP6053	NA_BISULFITE	TNK-6409 NO. 2A BISULFITE HIGH	CIN	STA	1
CP6053	NA_BISULFITE	PSB-6401 PMP 1A HI DSCHRG PRES	CIN	STA	1
CP6053	NA_BISULFITE	PSB-6401 PMP 1A HI DSCHRG PRES	CIN	BAD	1
CP6053	NA_BISULFITE	PSB-6402 PMP 2A HI DSCHRG PRES	CIN	STA	1
CP6053	NA_BISULFITE	PSB-6402 PMP 2A HI DSCHRG PRES	CIN	BAD	1
CP6053	NA_BISULFITE	PSB-6403 PMP 3A HI DSCHRG PRES	CIN	BAD	1
CP6053	NA_BISULFITE	PSB-6403 PMP 3A HI DSCHRG PRES	CIN	STA	1
CP6053	NA_BISULFITE	PSB-6404 PMP 4A HI DSCHRG PRES	CIN	STA	1
CP6053	NA_BISULFITE	PSB-6404 PMP 4A HI DSCHRG PRES	CIN	BAD	1
CP6053	NA_BISULFITE	PSB-6401 PMP 1A RUNNING	CIN	BAD	1
CP6053	NA_BISULFITE	PSB-6402 PMP 2A RUNNING	CIN	BAD	1
CP6053	NA_BISULFITE	PSB-6403 PMP 3A RUNNING	CIN	BAD	1
CP6053	NA_BISULFITE	PSB-6404 PMP 4A RUNNING	CIN	BAD	1
CP6053	NA_BISULFITE	PSB-6401 PMP 1A IN REMOTE	CIN	BAD	1
CP6053	NA_BISULFITE	PSB-6402 PMP 2A IN REMOTE	CIN	BAD	1
CP6053	NA_BISULFITE	PSB-6403 PMP 3A IN REMOTE	CIN	BAD	1
CP6053	NA_BISULFITE	PSB-6404 PMP 4A IN REMOTE	CIN	BAD	1
CP6053	NAOCL	PSH-6401 PMP 1A DSCHRG FLOW LO	CIN	STA	1
CP6053	NAOCL	PSH-6401 PMP 1A DSCHRG FLOW LO	CIN	BAD	1
CP6053	NAOCL	PSH-6402 PMP 2A DSCHRG FLOW LO	CIN	BAD	1
CP6053	NAOCL	PSH-6402 PMP 2A DSCHRG FLOW LO	CIN	STA	1
CP6053	NAOCL	PSH-6405 PMP 1B DSCHRG FLOW LO	CIN	BAD	1
CP6053	NAOCL	PSH-6405 PMP 1B DSCHRG FLOW LO	CIN	STA	1
CP6053	NAOCL	PSH-6406 PMP 2B DSCHRG FLOW LO	CIN	STA	1
CP6053	NAOCL	PSH-6406 PMP 2B DSCHRG FLOW LO	CIN	BAD	1
CP6053	NAOCL	PSH-6407 PMP 3B DSCHRG FLOW LO	CIN	STA	1
CP6053	NAOCL	PSH-6407 PMP 3B DSCHRG FLOW LO	CIN	BAD	1
CP6053	NAOCL	PSH-6408 PMP 4B DSCHRG FLOW LO	CIN	STA	1
CP6053	NAOCL	PSH-6408 PMP 4B DSCHRG FLOW LO	CIN	BAD	1
CP6053	NAOCL	PSH-6409 PMP 5B DSCHRG FLOW LO	CIN	STA	1
CP6053	NAOCL	PSH-6409 PMP 5B DSCHRG FLOW LO	CIN	BAD	1
CP6053	NAOCL	PSH-6412 PMP 3C DSCHRG FLOW LO	CIN	BAD	1
CP6053	NAOCL	PSH-6412 PMP 3C DSCHRG FLOW LO	CIN	STA	1
CP6053	NAOCL	PSH-6413 PMP 4C DSCHRG FLOW LO	CIN	STA	1
CP6053	NAOCL	PSH-6413 PMP 4C DSCHRG FLOW LO	CIN	BAD	1
CP6053	NAOCL	TNK-6404 NO. 1A NAOCL HIGH	CIN	BAD	1
CP6053	NAOCL	TNK-6404 NO. 1A NAOCL HIGH	CIN	STA	1
CP6053	NAOCL	TNK-6404 NO. 1A NAOCL LOW	CIN	BAD	2
CP6053	NAOCL	TNK-6404 NO. 1A NAOCL LOW	CIN	STA	2
CP6053	NAOCL	TNK-6403 NO. 2A NAOCL HIGH	CIN	STA	1
CP6053	NAOCL	TNK-6403 NO. 2A NAOCL HIGH	CIN	BAD	1
CP6053	NAOCL	TNK-6403 NO. 2A NAOCL LOW	CIN	STA	1

CP	COMPOUND	DESCRIPTION	TYPE	ALARM TYPE	PRIORITY
CP6053	NAOCL	TNK-6403 NO. 2A NAOCL LOW	CIN	BAD	1
CP6053	NAOCL	TNK-6406 NO. 1B NAOCL HIGH	CIN	STA	1
CP6053	NAOCL	TNK-6406 NO. 1B NAOCL HIGH	CIN	BAD	1
CP6053	NAOCL	TNK-6406 NO. 1B NAOCL LOW	CIN	BAD	2
CP6053	NAOCL	TNK-6406 NO. 1B NAOCL LOW	CIN	STA	2
CP6053	NAOCL	TNK-6407 NO. 2B NAOCL HIGH	CIN	BAD	1
CP6053	NAOCL	TNK-6407 NO. 2B NAOCL HIGH	CIN	STA	1
CP6053	NAOCL	TNK-6407 NO. 2B NAOCL LOW	CIN	BAD	2
CP6053	NAOCL	TNK-6407 NO. 2B NAOCL LOW	CIN	STA	2
CP6053	NAOCL	PSH-6401 PMP 1A HI DSCHRG PRES	CIN	STA	1
CP6053	NAOCL	PSH-6401 PMP 1A HI DSCHRG PRES	CIN	BAD	1
CP6053	NAOCL	PSH-6402 PMP 2A HI DSCHRG PRES	CIN	STA	1
CP6053	NAOCL	PSH-6402 PMP 2A HI DSCHRG PRES	CIN	BAD	1
CP6053	NAOCL	PSH-6405 PMP 1B HI DSCHRG PRES	CIN	BAD	1
CP6053	NAOCL	PSH-6405 PMP 1B HI DSCHRG PRES	CIN	STA	1
CP6053	NAOCL	PSH-6406 PMP 2B HI DSCHRG PRES	CIN	STA	1
CP6053	NAOCL	PSH-6406 PMP 2B HI DSCHRG PRES	CIN	BAD	1
CP6053	NAOCL	PSH-6407 PMP 3B HI DSCHRG PRES	CIN	STA	1
CP6053	NAOCL	PSH-6407 PMP 3B HI DSCHRG PRES	CIN	BAD	1
CP6053	NAOCL	PSH-6408 PMP 4B HI DSCHRG PRES	CIN	BAD	1
CP6053	NAOCL	PSH-6408 PMP 4B HI DSCHRG PRES	CIN	STA	1
CP6053	NAOCL	PSH-6409 PMP 5B HI DSCHRG PRES	CIN	BAD	1
CP6053	NAOCL	PSH-6409 PMP 5B HI DSCHRG PRES	CIN	STA	1
CP6053	NAOCL	PSH-6412 PMP 3C HI DSCHRG PRES	CIN	STA	1
CP6053	NAOCL	PSH-6412 PMP 3C HI DSCHRG PRES	CIN	BAD	1
CP6053	NAOCL	PSH-6413 PMP 4C HI DSCHRG PRES	CIN	BAD	1
CP6053	NAOCL	PSH-6413 PMP 4C HI DSCHRG PRES	CIN	STA	1
CP6053	NAOCL	PSH-6401 PMP 1A RUNNING	CIN	BAD	1
CP6053	NAOCL	PSH-6402 PMP 2A RUNNING	CIN	BAD	1
CP6053	NAOCL	PSH-6405 PMP 1B RUNNING	CIN	BAD	1
CP6053	NAOCL	PSH-6406 PMP 2B RUNNING	CIN	BAD	1
CP6053	NAOCL	PSH-6407 PMP 3B RUNNING	CIN	BAD	1
CP6053	NAOCL	PSH-6408 PMP 4B RUNNING	CIN	BAD	1
CP6053	NAOCL	PSH-6409 PMP 5B RUNNING	CIN	BAD	1
CP6053	NAOCL	PSH-6412 PMP 3C RUNNING	CIN	BAD	1
CP6053	NAOCL	PSH-6413 PMP 4C RUNNING	CIN	BAD	1
CP6053	NAOCL	PSH-6401 PMP 1A IN REMOTE	CIN	BAD	1
CP6053	NAOCL	PSH-6402 PMP 2A IN REMOTE	CIN	BAD	1
CP6053	NAOCL	PSH-6405 PMP 1B IN REMOTE	CIN	BAD	1
CP6053	NAOCL	PSH-6406 PMP 2B IN REMOTE	CIN	BAD	1
CP6053	NAOCL	PSH-6407 PMP 3B IN REMOTE	CIN	BAD	1
CP6053	NAOCL	PSH-6408 PMP 4B IN REMOTE	CIN	BAD	1
CP6053	NAOCL	PSH-6409 PMP 5B IN REMOTE	CIN	BAD	1
CP6053	NAOCL	PSH-6412 PMP 3C IN REMOTE	CIN	BAD	1
CP6053	NAOCL	PSH-6413 PMP 4C IN REMOTE	CIN	BAD	1
CP6053	TER_FILTERS	VFF-6401 FLTR 2A1 MOTOR FAILED	CIN	STA	1
CP6053	TER_FILTERS	VFF-6401 FLTR 2A1 MOTOR FAILED	CIN	BAD	1
CP6053	TER_FILTERS	PRE-6401 PMP 1 MOTOR FAILED	CIN	BAD	2
CP6053	TER_FILTERS	PRE-6401 PMP 1 MOTOR FAILED	CIN	STA	2
CP6053	TER_FILTERS	VFF-6402 FLTR 2A MOTOR FAILED	CIN	BAD	1
CP6053	TER_FILTERS	VFF-6402 FLTR 2A MOTOR FAILED	CIN	STA	1
CP6053	TER_FILTERS	PRE-6402 PMP 2 MOTOR FAILED	CIN	BAD	1
CP6053	TER_FILTERS	PRE-6402 PMP 2 MOTOR FAILED	CIN	STA	1

CP	COMPOUND	DESCRIPTION	TYPE	ALARM TYPE	PRIORITY
CP6053	TER_FILTERS	MF-6402 MIXER 2 MOTOR FAILED	CIN	STA	1
CP6053	TER_FILTERS	MF-6402 MIXER 2 MOTOR FAILED	CIN	BAD	1
CP6053	TER_FILTERS	VFF-6403 FLTR 2A3 MOTOR FAILED	CIN	BAD	1
CP6053	TER_FILTERS	VFF-6403 FLTR 2A3 MOTOR FAILED	CIN	STA	1
CP6053	TER_FILTERS	PRE-6403 PMP 3 MOTOR FAILED	CIN	STA	1
CP6053	TER_FILTERS	PRE-6403 PMP 3 MOTOR FAILED	CIN	BAD	1
CP6053	TER_FILTERS	VFF-6404 FLTR 2A4 MOTOR FAILED	CIN	STA	1
CP6053	TER_FILTERS	VFF-6404 FLTR 2A4 MOTOR FAILED	CIN	BAD	1
CP6053	TER_FILTERS	FLO-6405 NO. 2A MOTOR FAILED	CIN	BAD	1
CP6053	TER_FILTERS	FLO-6405 NO. 2A MOTOR FAILED	CIN	STA	1
CP6053	TER_FILTERS	FLO-6405 NO. 2A VFD FAILED	CIN	BAD	1
CP6053	TER_FILTERS	FLO-6405 NO. 2A VFD FAILED	CIN	STA	1
CP6053	TER_FILTERS	FLO-6406 NO. 2B MOTOR FAILED	CIN	BAD	1
CP6053	TER_FILTERS	FLO-6406 NO. 2B MOTOR FAILED	CIN	STA	1
CP6053	TER_FILTERS	FLO-6406 NO. 2B VFD FAILED	CIN	STA	1
CP6053	TER_FILTERS	FLO-6406 NO. 2B VFD FAILED	CIN	BAD	1
CP6053	TER_FILTERS	FLO-6407 NO. 2C MOTOR FAILED	CIN	BAD	1
CP6053	TER_FILTERS	FLO-6407 NO. 2C MOTOR FAILED	CIN	STA	1
CP6053	TER_FILTERS	FLO-6407 NO. 2C VFD FAILED	CIN	BAD	1
CP6053	TER_FILTERS	FLO-6407 NO. 2C VFD FAILED	CIN	STA	1
CP6053	TER_FILTERS	FLO-6408 NO. 2D MOTOR FAILED	CIN	STA	1
CP6053	TER_FILTERS	FLO-6408 NO. 2D MOTOR FAILED	CIN	BAD	1
CP6053	TER_FILTERS	FLO-6408 NO. 2D VFD FAILED	CIN	STA	1
CP6053	TER_FILTERS	FLO-6408 NO. 2D VFD FAILED	CIN	BAD	1
CP6053	TER_FILTERS	VFF-6415 FLTR 2B MOTOR FAILED	CIN	STA	1
CP6053	TER_FILTERS	VFF-6415 FLTR 2B MOTOR FAILED	CIN	BAD	1
CP6053	TER_FILTERS	VFF-6416 FLTR 2B MOTOR FAILED	CIN	STA	1
CP6053	TER_FILTERS	VFF-6416 FLTR 2B MOTOR FAILED	CIN	BAD	1
CP6053	TER_FILTERS	VFF-6417 FLTR 2B MOTOR FAILED	CIN	STA	1
CP6053	TER_FILTERS	VFF-6417 FLTR 2B MOTOR FAILED	CIN	BAD	1
CP6053	TER_FILTERS	VFF-6418 FLTR 2B MOTOR FAILED	CIN	BAD	1
CP6053	TER_FILTERS	VFF-6418 FLTR 2B MOTOR FAILED	CIN	STA	1
CP6053	TER_FILTERS	VFF-6419 FLTR 2C MOTOR FAILED	CIN	BAD	1
CP6053	TER_FILTERS	VFF-6419 FLTR 2C MOTOR FAILED	CIN	STA	1
CP6053	TER_FILTERS	VFF-6420 FLTR 2C MOTOR FAILED	CIN	BAD	1
CP6053	TER_FILTERS	VFF-6420 FLTR 2C MOTOR FAILED	CIN	STA	1
CP6053	TER_FILTERS	VFF-6421 FLTR 2C MOTOR FAILED	CIN	BAD	1
CP6053	TER_FILTERS	VFF-6421 FLTR 2C MOTOR FAILED	CIN	STA	1
CP6053	TER_FILTERS	VFF-6422 FLTR 2C MOTOR FAILED	CIN	STA	1
CP6053	TER_FILTERS	VFF-6422 FLTR 2C MOTOR FAILED	CIN	BAD	1
CP6053	TER_FILTERS	PRE-6401 PMP 1 IN REMOTE	CIN	BAD	1
CP6053	TER_FILTERS	PRE-6402 PMP 2 IN REMOTE	CIN	BAD	1
CP6053	TER_FILTERS	PRE-6403 PMP 3 IN REMOTE	CIN	BAD	1
CP6053	TER_FILTERS	FLOCCULATOR BASIN HIGH LEVEL	CIN	BAD	1
CP6053	TER_FILTERS	FLOCCULATOR BASIN HIGH LEVEL	CIN	STA	1
CP6053	TER_FILTERS	FILTER RECYCLE WETWELL LO-LO	CIN	STA	2
CP6053	TER_FILTERS	FILTER RECYCLE WETWELL LO-LO	CIN	BAD	2
CP6053	TER_FILTERS	FILTER RECYCLE WETWELL HIGH	CIN	BAD	2
CP6053	TER_FILTERS	FILTER RECYCLE WETWELL HIGH	CIN	STA	2
CP6053	TER_FILTERS	MF-6402 MIXER 2 HIGH TEMP	CIN	BAD	1
CP6053	TER_FILTERS	MF-6402 MIXER 2 HIGH TEMP	CIN	STA	1
CP6053	TER_FILTERS	PRE-6401 PMP 1 RUNNING	CIN	BAD	1
CP6053	TER_FILTERS	MF-6402 MIXER 2 RUNNING	CIN	BAD	1

CP	COMPOUND	DESCRIPTION	TYPE	ALARM TYPE	PRIORITY
CP6053	TER_FILTERS	PRE-6402 PMP 2 RUNNING	CIN	BAD	1
CP6053	TER_FILTERS	PRE-6403 PMP 3 RUNNING	CIN	BAD	1
CP6053	TER_FILTERS	FLO-6405 NO. 2A RUNNING	CIN	BAD	1
CP6053	TER_FILTERS	FLO-6406 NO. 2B RUNNING	CIN	BAD	1
CP6053	TER_FILTERS	FLO-6407 NO. 2C RUNNING	CIN	BAD	1
CP6053	TER_FILTERS	FLO-6408 NO. 2D RUNNING	CIN	BAD	1
CP6053	TER_FILTERS	VFF-6401 FLTR 2A1 IN REMOTE	CIN	BAD	1
CP6053	TER_FILTERS	VFF-6402 FLTR 2A2 IN REMOTE	CIN	BAD	1
CP6053	TER_FILTERS	VFF-6403 FLTR 2A3 IN REMOTE	CIN	BAD	1
CP6053	TER_FILTERS	VFF-6404 FLTR 2A4 IN REMOTE	CIN	BAD	1
CP6053	TER_FILTERS	FLO-6405 NO. 2A IN REMOTE	CIN	BAD	1
CP6053	TER_FILTERS	FLO-6406 NO. 2B IN REMOTE	CIN	BAD	1
CP6053	TER_FILTERS	FLO-6407 NO. 2C IN REMOTE	CIN	BAD	1
CP6053	TER_FILTERS	FLO-6408 NO. 2D IN REMOTE	CIN	BAD	1
CP6053	TER_FILTERS	VFF-6415 FLTR 2B IN REMOTE	CIN	BAD	1
CP6053	TER_FILTERS	VFF-6416 FLTR 2B IN REMOTE	CIN	BAD	1
CP6053	TER_FILTERS	VFF-6417 FLTR 2B IN REMOTE	CIN	BAD	1
CP6053	TER_FILTERS	VFF-6418 FLTR 2B IN REMOTE	CIN	BAD	1
CP6053	TER_FILTERS	VFF-6419 FLTR 2C IN REMOTE	CIN	BAD	1
CP6053	TER_FILTERS	VFF-6420 FLTR 2C IN REMOTE	CIN	BAD	1
CP6053	TER_FILTERS	VFF-6421 FLTR 2C IN REMOTE	CIN	BAD	1
CP6053	TER_FILTERS	VFF-6422 FLTR 2C IN REMOTE	CIN	BAD	1
CP6053	TER_FILTERS	VFF-6401 FLTR 2A1 FULLY OPENED	CIN	BAD	1
CP6053	TER_FILTERS	VFF-6402 FLTR 2A2 FULLY OPENED	CIN	BAD	1
CP6053	TER_FILTERS	VFF-6403 FLTR 2A3 FULLY OPENED	CIN	BAD	1
CP6053	TER_FILTERS	VFF-6404 FLTR 2A4 FULLY OPENED	CIN	BAD	1
CP6053	TER_FILTERS	VFF-6415 FLTR 2B FULLY OPENED	CIN	BAD	1
CP6053	TER_FILTERS	VFF-6416 FLTR 2B FULLY OPENED	CIN	BAD	1
CP6053	TER_FILTERS	VFF-6417 FLTR 2B FULLY OPENED	CIN	BAD	1
CP6053	TER_FILTERS	VFF-6418 FLTR 2B FULLY OPENED	CIN	BAD	1
CP6053	TER_FILTERS	VFF-6419 FLTR 2C FULLY OPENED	CIN	BAD	1
CP6053	TER_FILTERS	VFF-6420 FLTR 2C FULLY OPENED	CIN	BAD	1
CP6053	TER_FILTERS	VFF-6421 FLTR 2C FULLY OPENED	CIN	BAD	1
CP6053	TER_FILTERS	VFF-6422 FLTR 2C FULLY OPENED	CIN	BAD	1
CP6053	TER_FILTERS	VFF-6401 FLTR 2A1 FULLY CLOSED	CIN	BAD	1
CP6053	TER_FILTERS	VFF-6402 FLTR 2A2 FULLY CLOSED	CIN	BAD	1
CP6053	TER_FILTERS	VFF-6403 FLTR 2A3 FULLY CLOSED	CIN	BAD	1
CP6053	TER_FILTERS	VFF-6404 FLTR 2A4 FULLY CLOSED	CIN	BAD	1
CP6053	TER_FILTERS	VFF-6415 FLTR 2B FULLY CLOSED	CIN	BAD	1
CP6053	TER_FILTERS	VFF-6416 FLTR 2B FULLY CLOSED	CIN	BAD	1
CP6053	TER_FILTERS	VFF-6417 FLTR 2B FULLY CLOSED	CIN	BAD	1
CP6053	TER_FILTERS	VFF-6418 FLTR 2B FULLY CLOSED	CIN	BAD	1
CP6053	TER_FILTERS	VFF-6419 FLTR 2C FULLY CLOSED	CIN	BAD	1
CP6053	TER_FILTERS	VFF-6420 FLTR 2C FULLY CLOSED	CIN	BAD	1
CP6053	TER_FILTERS	VFF-6421 FLTR 2C FULLY CLOSED	CIN	BAD	1
CP6053	TER_FILTERS	VFF-6422 FLTR 2C FULLY CLOSED	CIN	BAD	1
CP6053	WATER_PUMPS	PSW-6401 PMP 1 MOTOR FAILED	CIN	BAD	1
CP6053	WATER_PUMPS	PSW-6401 PMP 1 MOTOR FAILED	CIN	STA	1
CP6053	WATER_PUMPS	PSW-6401 PMP 1 VFD FAILED	CIN	BAD	1
CP6053	WATER_PUMPS	PSW-6401 PMP 1 VFD FAILED	CIN	STA	1
CP6053	WATER_PUMPS	PSW-6402 PMP 2 MOTOR FAILED	CIN	STA	1
CP6053	WATER_PUMPS	PSW-6402 PMP 2 MOTOR FAILED	CIN	BAD	1
CP6053	WATER_PUMPS	PSW-6402 PMP 2 VFD FAILED	CIN	BAD	1

CP	COMPOUND	DESCRIPTION	TYPE	ALARM TYPE	PRIORITY
CP6053	WATER_PUMPS	PSW-6402 PMP 2 VFD FAILED	CIN	STA	1
CP6053	WATER_PUMPS	PSW-6403 PMP 3 MOTOR FAILED	CIN	STA	1
CP6053	WATER_PUMPS	PSW-6403 PMP 3 MOTOR FAILED	CIN	BAD	1
CP6053	WATER_PUMPS	PSW-6403 PMP 3 VFD FAILED	CIN	STA	1
CP6053	WATER_PUMPS	PSW-6403 PMP 3 VFD FAILED	CIN	BAD	1
CP6053	WATER_PUMPS	PSW-6404 PMP 4 MOTOR FAILED	CIN	BAD	1
CP6053	WATER_PUMPS	PSW-6404 PMP 4 MOTOR FAILED	CIN	STA	1
CP6053	WATER_PUMPS	PSW-6404 PMP 4 VFD FAILED	CIN	BAD	1
CP6053	WATER_PUMPS	PSW-6404 PMP 4 VFD FAILED	CIN	STA	1
CP6053	WATER_PUMPS	PSW-6405 PMP 5 MOTOR FAILED	CIN	STA	1
CP6053	WATER_PUMPS	PSW-6405 PMP 5 MOTOR FAILED	CIN	BAD	1
CP6053	WATER_PUMPS	PSW-6405 PMP 5 VFD FAILED	CIN	STA	1
CP6053	WATER_PUMPS	PSW-6405 PMP 5 VFD FAILED	CIN	BAD	1
CP6053	WATER_PUMPS	PUMP SERVICE WTR LOW LEVEL	CIN	STA	1
CP6053	WATER_PUMPS	PUMP SERVICE WTR LOW LEVEL	CIN	BAD	1
CP6053	WATER_PUMPS	PUMP SERVICE WTR HIGH LEVEL	CIN	BAD	1
CP6053	WATER_PUMPS	PUMP SERVICE WTR HIGH LEVEL	CIN	STA	1
CP6053	WATER_PUMPS	PSW-6401 PMP 1 RUNNING	CIN	BAD	1
CP6053	WATER_PUMPS	PSW-6402 PMP 2 RUNNING	CIN	BAD	1
CP6053	WATER_PUMPS	PSW-6403 PMP 3 RUNNING	CIN	BAD	1
CP6053	WATER_PUMPS	PSW-6404 PMP 4 RUNNING	CIN	BAD	1
CP6053	WATER_PUMPS	PSW-6405 PMP 5 RUNNING	CIN	BAD	1
CP6053	WATER_PUMPS	PSW-6401 PMP 1 IN REMOTE	CIN	BAD	1
CP6053	WATER_PUMPS	PSW-6402 PMP 2 IN REMOTE	CIN	BAD	1
CP6053	WATER_PUMPS	PSW-6403 PMP 3 IN REMOTE	CIN	BAD	1
CP6053	WATER_PUMPS	PSW-6404 PMP 4 IN REMOTE	CIN	BAD	1
CP6053	WATER_PUMPS	PSW-6405 PMP 5 IN REMOTE	CIN	BAD	1
ABST51	AB_BAR_SCRN2	BAR SCREEN 1C START/STOP	COUT	BAD	5
CP6051	FE_CHLORIDE	PF-6024 PMP 4 LOW LEVEL S/D	COUT	BAD	1
CP6051	FE_CHLORIDE	PF-6025 PMP 5 LOW LEVEL S/D	COUT	BAD	1
CP6051	GRIT_PUMPS	GRIT PUMP 2 PRESSRESET	COUT	BAD	1
CP6051	GRIT_PUMPS	GRIT PUMP 2 PRESSRESET	COUT	BAD	1
CP6051	GRIT_PUMPS	GRIT PUMP 3 PRESSRESET	COUT	BAD	1
CP6051	GRIT_PUMPS	GRIT PUMP 3 PRESSRESET	COUT	BAD	1
CP6051	INFLUENT	IPS PMP 2 PRESS RESET	COUT	BAD	1
CP6051	INFLUENT	IPS PMP 3 PRESS RESET	COUT	BAD	1
CP6051	INFLUENT	IPS PMP 4 PRESS RESET	COUT	BAD	1
CP6053	ALUM	TNK-6402 NO. 1A LO S/D JPA6401	COUT	BAD	1
CP6053	ALUM	TNK-6402 NO. 1A LO S/D JPA6402	COUT	BAD	1
ABST51	AB_BAR_SCRN1	BAR SCREEN 1B START/STOP	GDEV	BAD	1
ABST51	AB_BAR_SCRN1	BAR SCREEN 1B START/STOP	GDEV	STA	1
ABST51	AB_BAR_SCRN2	BAR SCREEN 1C START/STOP	GDEV	BAD	1
ABST51	AB_BAR_SCRN2	BAR SCREEN 1C START/STOP	GDEV	STA	1
CP6051	1_CLARIFIERS	GK-6021 AB INLET GATE CLOSED	GDEV	BAD	1
CP6051	1_CLARIFIERS	GK-6021 AB INLET GATE CLOSED	GDEV	STA	1
CP6051	DEWATERING	GRIT WASHER 1 START/STOP	GDEV	STA	2
CP6051	DEWATERING	GRIT WASHER 1 START/STOP	GDEV	BAD	2
CP6051	DEWATERING	GRIT WASHER 2 START/STOP	GDEV	BAD	2
CP6051	DEWATERING	GRIT WASHER 2 START/STOP	GDEV	STA	2
CP6051	ES_PUMPS	PES-6021 PMP 1 START/STOP	GDEV	BAD	2
CP6051	ES_PUMPS	PES-6021 PMP 1 START/STOP	GDEV	STA	2
CP6051	ES_PUMPS	PES-6022 PMP 2 START/STOP	GDEV	BAD	2
CP6051	ES_PUMPS	PES-6022 PMP 2 START/STOP	GDEV	STA	2

CP	COMPOUND	DESCRIPTION	TYPE	ALARM TYPE	PRIORITY
CP6051	ES_PUMPS	PES-6023 PMP 3 START/STOP	GDEV	STA	2
CP6051	ES_PUMPS	PES-6023 PMP 3 START/STOP	GDEV	BAD	2
CP6051	FE_CHLORIDE	PF-6024 PMP 4 START/STOP	GDEV	STA	2
CP6051	FE_CHLORIDE	PF-6024 PMP 4 START/STOP	GDEV	BAD	2
CP6051	FE_CHLORIDE	PF-6025 PMP 5 START/STOP	GDEV	BAD	2
CP6051	FE_CHLORIDE	PF-6025 PMP 5 START/STOP	GDEV	STA	2
CP6051	GRIT_PUMPS	GRIT PUMP 2 START/STOP	GDEV	BAD	2
CP6051	GRIT_PUMPS	GRIT PUMP 2 START/STOP	GDEV	STA	2
CP6051	GRIT_PUMPS	GRIT PUMP 3 START/STOP	GDEV	STA	2
CP6051	GRIT_PUMPS	GRIT PUMP 3 START/STOP	GDEV	BAD	2
CP6051	GRIT_PUMPS	FLUFF WATER VALVE	GDEV	BAD	2
CP6051	GRIT_PUMPS	FLUFF WATER VALVE	GDEV	STA	2
CP6051	GRIT_PUMPS	FLUFF WATER VALVE	GDEV	BAD	2
CP6051	GRIT_PUMPS	FLUFF WATER VALVE	GDEV	STA	2
CP6051	HEADWORKS	BS INLET GATE 1A	GDEV	STA	1
CP6051	HEADWORKS	BS INLET GATE 1A	GDEV	BAD	1
CP6051	HEADWORKS	BS OUTLET GATE 1A	GDEV	BAD	1
CP6051	HEADWORKS	BS OUTLET GATE 1A	GDEV	STA	1
CP6051	HEADWORKS	BS INLET GATE 1B	GDEV	STA	1
CP6051	HEADWORKS	BS INLET GATE 1B	GDEV	BAD	1
CP6051	HEADWORKS	BS OUTLET GATE 1B	GDEV	STA	1
CP6051	HEADWORKS	BS OUTLET GATE 1B	GDEV	BAD	1
CP6051	HEADWORKS	BS INLET GATE 1C	GDEV	STA	1
CP6051	HEADWORKS	BS INLET GATE 1C	GDEV	BAD	1
CP6051	HEADWORKS	BS OUTLET GATE 1C	GDEV	STA	1
CP6051	HEADWORKS	BS OUTLET GATE 1C	GDEV	BAD	1
CP6051	INFLUENT	IPS PMP 2 START/STOP	GDEV	STA	1
CP6051	INFLUENT	IPS PMP 2 START/STOP	GDEV	BAD	1
CP6051	INFLUENT	IPS PMP 3 START/STOP	GDEV	BAD	1
CP6051	INFLUENT	IPS PMP 3 START/STOP	GDEV	STA	1
CP6051	INFLUENT	IPS PMP 4 START/STOP	GDEV	STA	1
CP6051	INFLUENT	IPS PMP 4 START/STOP	GDEV	BAD	1
CP6051	POLYMER	BP-6021 NO. 1A START/STOP	GDEV	BAD	2
CP6051	POLYMER	BP-6021 NO. 1A START/STOP	GDEV	STA	2
CP6051	POLYMER	VCF-6021 POLYMER FULLY CLOSED	GDEV	STA	1
CP6051	POLYMER	VCF-6021 POLYMER FULLY CLOSED	GDEV	BAD	1
CP6051	POLYMER	BP-6022 NO. 1B START/STOP	GDEV	STA	1
CP6051	POLYMER	BP-6022 NO. 1B START/STOP	GDEV	BAD	1
CP6051	POLYMER	VCF-6022 POLYMER FULLY CLOSED	GDEV	STA	1
CP6051	POLYMER	VCF-6022 POLYMER FULLY CLOSED	GDEV	BAD	1
CP6051	SCREENINGS	SCREENINGS CONVYR START/STOP	GDEV	BAD	1
CP6051	SCREENINGS	SCREENINGS CONVYR START/STOP	GDEV	STA	1
CP6051	SCREENINGS	WASH WATER FEED	GDEV	STA	1
CP6051	SCREENINGS	WASH WATER FEED	GDEV	BAD	1
CP6051	SLUDGE_PUMPS	MPS-6022 MIXER START/STOP	GDEV	STA	2
CP6051	SLUDGE_PUMPS	MPS-6022 MIXER START/STOP	GDEV	BAD	2
CP6051	SLUDGE_PUMPS	GSC-6022 GRINDER START/STOP	GDEV	STA	1
CP6051	SLUDGE_PUMPS	GSC-6022 GRINDER START/STOP	GDEV	BAD	1
CP6051	SLUDGE_PUMPS	VP-6023 DSCHRG	GDEV	STA	1
CP6051	SLUDGE_PUMPS	VP-6023 DSCHRG	GDEV	BAD	1
CP6051	SLUDGE_PUMPS	PSM-6023 PMP 3 START/STOP	GDEV	STA	1
CP6051	SLUDGE_PUMPS	PSM-6023 PMP 3 START/STOP	GDEV	BAD	1
CP6051	SLUDGE_PUMPS	VPS-6024 DSCHRG	GDEV	STA	1

CP	COMPOUND	DESCRIPTION	TYPE	ALARM TYPE	PRIORITY
CP6051	SLUDGE_PUMPS	VPS-6024 DSCHRG	GDEV	BAD	1
CP6051	SLUDGE_PUMPS	PPS-6024 PMP 4 START/STOP	GDEV	BAD	1
CP6051	SLUDGE_PUMPS	PPS-6024 PMP 4 START/STOP	GDEV	STA	1
CP6051	SLUDGE_PUMPS	VP-6024 DSCHRG	GDEV	STA	1
CP6051	SLUDGE_PUMPS	VP-6024 DSCHRG	GDEV	BAD	1
CP6051	SLUDGE_PUMPS	GS-6024 GRINDER 4 START/STOP	GDEV	BAD	1
CP6051	SLUDGE_PUMPS	GS-6024 GRINDER 4 START/STOP	GDEV	STA	1
CP6051	SLUDGE_PUMPS	PSM-6024 PMP 4 START/STOP	GDEV	BAD	1
CP6051	SLUDGE_PUMPS	PSM-6024 PMP 4 START/STOP	GDEV	STA	1
CP6051	SLUDGE_PUMPS	VPS-6025 DSCHRG	GDEV	STA	1
CP6051	SLUDGE_PUMPS	VPS-6025 DSCHRG	GDEV	BAD	1
CP6051	SLUDGE_PUMPS	PPS-6025 PMP 5 START/STOP	GDEV	STA	1
CP6051	SLUDGE_PUMPS	PPS-6025 PMP 5 START/STOP	GDEV	BAD	1
CP6051	SLUDGE_PUMPS	GS-6025 GRINDER 5 START/STOP	GDEV	STA	1
CP6051	SLUDGE_PUMPS	GS-6025 GRINDER 5 START/STOP	GDEV	BAD	1
CP6051	SLUDGE_PUMPS	VPS-6026 DSCHRG FULLY CLOSED	GDEV	BAD	1
CP6051	SLUDGE_PUMPS	VPS-6026 DSCHRG FULLY CLOSED	GDEV	STA	1
CP6051	SLUDGE_PUMPS	PPS-6026 PMP 6 START/STOP	GDEV	BAD	1
CP6051	SLUDGE_PUMPS	PPS-6026 PMP 6 START/STOP	GDEV	STA	1
CP6051	SLUDGE_PUMPS	GS-6026 GRINDER 6 START/STOP	GDEV	STA	1
CP6051	SLUDGE_PUMPS	GS-6026 GRINDER 6 START/STOP	GDEV	BAD	1
CP6052	AER_BASIN	PML PMP 3 MOTOR START/STOP	GDEV	STA	1
CP6052	AER_BASIN	PML PMP 3 MOTOR START/STOP	GDEV	BAD	1
CP6052	AER_BASIN	PML PMP 4 MOTOR START/STOP	GDEV	BAD	1
CP6052	AER_BASIN	PML PMP 4 MOTOR START/STOP	GDEV	STA	1
CP6052	RAS_PUMPS	PRS-6056 PMP 6 START/STOP	GDEV	STA	2
CP6052	RAS_PUMPS	PRS-6056 PMP 6 START/STOP	GDEV	BAD	2
CP6052	RAS_PUMPS	PRS-6057 PMP 7 START/STOP	GDEV	BAD	1
CP6052	RAS_PUMPS	PRS-6057 PMP 7 START/STOP	GDEV	STA	1
CP6052	RAS_PUMPS	PRS-6058 PMP 8 START/STOP	GDEV	BAD	2
CP6052	RAS_PUMPS	PRS-6058 PMP 8 START/STOP	GDEV	STA	2
CP6052	RAS_PUMPS	PRS-6069 PMP 9 START/STOP	GDEV	BAD	1
CP6052	RAS_PUMPS	PRS-6069 PMP 9 START/STOP	GDEV	STA	1
CP6052	RAS_PUMPS	PRS-6060 PMP 10 START/STOP	GDEV	BAD	1
CP6052	RAS_PUMPS	PRS-6060 PMP 10 START/STOP	GDEV	STA	1
CP6052	WAS_PUMPS	PWS-6053 PMP 3 START/STOP	GDEV	BAD	1
CP6052	WAS_PUMPS	PWS-6053 PMP 3 START/STOP	GDEV	STA	1
CP6052	WAS_PUMPS	PWS-6054 PMP 4 START/STOP	GDEV	STA	1
CP6052	WAS_PUMPS	PWS-6054 PMP 4 START/STOP	GDEV	BAD	1
CP6053	ALUM	PA-6401 PMP 1A START/STOP	GDEV	BAD	1
CP6053	ALUM	PA-6401 PMP 1A START/STOP	GDEV	STA	1
CP6053	ALUM	PA-6402 PMP 2A START/STOP	GDEV	BAD	1
CP6053	ALUM	PA-6402 PMP 2A START/STOP	GDEV	STA	1
CP6053	CATI_POLYMER	BP-6401 NO. 1A START/STOP	GDEV	STA	2
CP6053	CATI_POLYMER	BP-6401 NO. 1A START/STOP	GDEV	BAD	2
CP6053	CATI_POLYMER	BP-6402 NO. 1B START/STOP	GDEV	STA	2
CP6053	CATI_POLYMER	BP-6402 NO. 1B START/STOP	GDEV	BAD	2
CP6053	CL2_CONTACT	GFE-6401 GATE OPENED/CLOSED	GDEV	STA	2
CP6053	CL2_CONTACT	GFE-6401 GATE OPENED/CLOSED	GDEV	BAD	2
CP6053	CL2_CONTACT	MCD-6402 MIXER 1 START/STOP	GDEV	BAD	1
CP6053	CL2_CONTACT	MCD-6402 MIXER 1 START/STOP	GDEV	STA	1
CP6053	CL2_CONTACT	MCD-6403 MIXER 1 START/STOP	GDEV	STA	1
CP6053	CL2_CONTACT	MCD-6403 MIXER 1 START/STOP	GDEV	BAD	1

CP	COMPOUND	DESCRIPTION	TYPE	ALARM TYPE	PRIORITY
CP6053	NA_BISULFITE	PSB-6401 PMP 1A START/STOP	GDEV	BAD	1
CP6053	NA_BISULFITE	PSB-6401 PMP 1A START/STOP	GDEV	STA	1
CP6053	NA_BISULFITE	PSB-6402 PMP 2A START/STOP	GDEV	STA	1
CP6053	NA_BISULFITE	PSB-6402 PMP 2A START/STOP	GDEV	BAD	1
CP6053	NA_BISULFITE	PSB-6403 PMP 3A START/STOP	GDEV	STA	1
CP6053	NA_BISULFITE	PSB-6403 PMP 3A START/STOP	GDEV	BAD	1
CP6053	NA_BISULFITE	PSB-6404 PMP 4A START/STOP	GDEV	BAD	1
CP6053	NA_BISULFITE	PSB-6404 PMP 4A START/STOP	GDEV	STA	1
CP6053	NAOCL	PSH-6401 PMP 1A START/STOP	GDEV	BAD	1
CP6053	NAOCL	PSH-6401 PMP 1A START/STOP	GDEV	STA	1
CP6053	NAOCL	PSH-6402 PMP 2A START/STOP	GDEV	BAD	1
CP6053	NAOCL	PSH-6402 PMP 2A START/STOP	GDEV	STA	1
CP6053	NAOCL	PSH-6405 PMP 1B START/STOP	GDEV	STA	1
CP6053	NAOCL	PSH-6405 PMP 1B START/STOP	GDEV	BAD	1
CP6053	NAOCL	PSH-6406 PMP 2B START/STOP	GDEV	STA	1
CP6053	NAOCL	PSH-6406 PMP 2B START/STOP	GDEV	BAD	1
CP6053	NAOCL	PSH-6407 PMP 3B START/STOP	GDEV	BAD	1
CP6053	NAOCL	PSH-6407 PMP 3B START/STOP	GDEV	STA	1
CP6053	NAOCL	PSH-6408 PMP 4B START/STOP	GDEV	BAD	1
CP6053	NAOCL	PSH-6408 PMP 4B START/STOP	GDEV	STA	1
CP6053	NAOCL	PSH-6409 PMP 5B START/STOP	GDEV	STA	1
CP6053	NAOCL	PSH-6409 PMP 5B START/STOP	GDEV	BAD	1
CP6053	NAOCL	PSH-6412 PMP 3C START/STOP	GDEV	STA	1
CP6053	NAOCL	PSH-6412 PMP 3C START/STOP	GDEV	BAD	1
CP6053	NAOCL	PSH-6413 PMP 4C START/STOP	GDEV	BAD	1
CP6053	NAOCL	PSH-6413 PMP 4C START/STOP	GDEV	STA	1
CP6053	TER_FILTERS	VFF-6401 FLTR 2A1	GDEV	STA	1
CP6053	TER_FILTERS	VFF-6401 FLTR 2A1	GDEV	BAD	1
CP6053	TER_FILTERS	PRE-6401 PMP 1 START/STOP	GDEV	BAD	2
CP6053	TER_FILTERS	PRE-6401 PMP 1 START/STOP	GDEV	STA	2
CP6053	TER_FILTERS	VFF-6402 FLTR 2A2	GDEV	BAD	1
CP6053	TER_FILTERS	VFF-6402 FLTR 2A2	GDEV	STA	1
CP6053	TER_FILTERS	PRE-6402 PMP 2 START/STOP	GDEV	STA	2
CP6053	TER_FILTERS	PRE-6402 PMP 2 START/STOP	GDEV	BAD	2
CP6053	TER_FILTERS	MF-6402 MIXER 2 START/STOP	GDEV	BAD	2
CP6053	TER_FILTERS	MF-6402 MIXER 2 START/STOP	GDEV	STA	1
CP6053	TER_FILTERS	VFF-6403 FLTR 2A3	GDEV	STA	1
CP6053	TER_FILTERS	VFF-6403 FLTR 2A3	GDEV	BAD	1
CP6053	TER_FILTERS	PRE-6403 PMP 3 START/STOP	GDEV	STA	2
CP6053	TER_FILTERS	PRE-6403 PMP 3 START/STOP	GDEV	BAD	2
CP6053	TER_FILTERS	VFF-6404 FLTR 2A4	GDEV	BAD	1
CP6053	TER_FILTERS	VFF-6404 FLTR 2A4	GDEV	STA	1
CP6053	TER_FILTERS	FLO-6405 NO. 2A START/STOP	GDEV	STA	1
CP6053	TER_FILTERS	FLO-6405 NO. 2A START/STOP	GDEV	BAD	2
CP6053	TER_FILTERS	FLO-6406 NO. 2B START/STOP	GDEV	STA	1
CP6053	TER_FILTERS	FLO-6406 NO. 2B START/STOP	GDEV	BAD	2
CP6053	TER_FILTERS	FLO-6407 NO. 2C START/STOP	GDEV	BAD	2
CP6053	TER_FILTERS	FLO-6407 NO. 2C START/STOP	GDEV	STA	1
CP6053	TER_FILTERS	FLO-6408 NO. 2D START/STOP	GDEV	BAD	2
CP6053	TER_FILTERS	FLO-6408 NO. 2D START/STOP	GDEV	STA	1
CP6053	TER_FILTERS	VFF-6415 FLTR 2B FULLY CLOSED	GDEV	STA	1
CP6053	TER_FILTERS	VFF-6415 FLTR 2B FULLY CLOSED	GDEV	BAD	1
CP6053	TER_FILTERS	VFF-6416 FLTR 2B FULLY CLOSED	GDEV	BAD	1

CP	COMPOUND	DESCRIPTION	TYPE	ALARM TYPE	PRIORITY
CP6053	TER_FILTERS	VFF-6416 FLTR 2B FULLY CLOSED	GDEV	STA	1
CP6053	TER_FILTERS	VFF-6417 FLTR 2B FULLY CLOSED	GDEV	STA	1
CP6053	TER_FILTERS	VFF-6417 FLTR 2B FULLY CLOSED	GDEV	BAD	1
CP6053	TER_FILTERS	VFF-6418 FLTR 2B FULLY CLOSED	GDEV	BAD	1
CP6053	TER_FILTERS	VFF-6418 FLTR 2B FULLY CLOSED	GDEV	STA	1
CP6053	TER_FILTERS	VFF-6419 FLTR 2C	GDEV	BAD	1
CP6053	TER_FILTERS	VFF-6419 FLTR 2C	GDEV	STA	1
CP6053	TER_FILTERS	VFF-6420 FLTR 2C	GDEV	STA	1
CP6053	TER_FILTERS	VFF-6420 FLTR 2C	GDEV	BAD	1
CP6053	TER_FILTERS	VFF-6421 FLTR 2C	GDEV	STA	1
CP6053	TER_FILTERS	VFF-6421 FLTR 2C	GDEV	BAD	1
CP6053	TER_FILTERS	VFF-6422 FLTR 2C	GDEV	BAD	1
CP6053	TER_FILTERS	VFF-6422 FLTR 2C	GDEV	STA	1
CP6053	WATER_PUMPS	PSW-6401 PMP 1 START/STOP	GDEV	STA	1
CP6053	WATER_PUMPS	PSW-6401 PMP 1 START/STOP	GDEV	BAD	1
CP6053	WATER_PUMPS	PSW-6402 PMP 2 START/STOP	GDEV	STA	1
CP6053	WATER_PUMPS	PSW-6402 PMP 2 START/STOP	GDEV	BAD	1
CP6053	WATER_PUMPS	PSW-6403 PMP 3 START/STOP	GDEV	BAD	1
CP6053	WATER_PUMPS	PSW-6403 PMP 3 START/STOP	GDEV	STA	1
CP6053	WATER_PUMPS	PSW-6404 PMP 4 START/STOP	GDEV	BAD	1
CP6053	WATER_PUMPS	PSW-6404 PMP 4 START/STOP	GDEV	STA	1
CP6053	WATER_PUMPS	PSW-6405 PMP 5 START/STOP	GDEV	STA	1
CP6053	WATER_PUMPS	PSW-6405 PMP 5 START/STOP	GDEV	BAD	1
CP6051	ES_PUMPS	EMERGENCY STORAGE BASIN	PIDA	HHA	2
CP6051	ES_PUMPS	EMERGENCY STORAGE BASIN	PIDA	HMA	2
CP6051	ES_PUMPS	EMERGENCY STORAGE BASIN	PIDA	LMA	2
CP6051	ES_PUMPS	EMERGENCY STORAGE BASIN	PIDA	LLA	2
CP6051	ES_PUMPS	EMERGENCY STORAGE BASIN	PIDA	LLA	2
CP6051	ES_PUMPS	EMERGENCY STORAGE BASIN	PIDA	HHA	2
CP6051	ES_PUMPS	EMERGENCY STORAGE BASIN	PIDA	HMA	2
CP6051	ES_PUMPS	EMERGENCY STORAGE BASIN	PIDA	LMA	2
CP6051	ES_PUMPS	EMERGENCY STORAGE BASIN	PIDA	HHA	2
CP6051	ES_PUMPS	EMERGENCY STORAGE BASIN	PIDA	HMA	2
CP6051	ES_PUMPS	EMERGENCY STORAGE BASIN	PIDA	LLA	2
CP6051	ES_PUMPS	EMERGENCY STORAGE BASIN	PIDA	LMA	2
CP6051	ES_PUMPS	EMERGENCY STORAGE BASIN	PIDA	LMA	2
CP6051	ES_PUMPS	EMERGENCY STORAGE BASIN	PIDA	LLA	2
CP6051	ES_PUMPS	EMERGENCY STORAGE BASIN	PIDA	HHA	2
CP6051	ES_PUMPS	EMERGENCY STORAGE BASIN	PIDA	HMA	2
CP6051	INFLUENT	INFLUENT PUMP STATION	PIDA	LMA	1
CP6051	INFLUENT	INFLUENT PUMP STATION	PIDA	HHA	1
CP6051	INFLUENT	INFLUENT PUMP STATION	PIDA	LLA	1
CP6051	INFLUENT	INFLUENT PUMP STATION	PIDA	HMA	1
CP6051	INFLUENT	INFLUENT PUMP STATION	PIDA	HMA	2
CP6051	INFLUENT	INFLUENT PUMP STATION	PIDA	LMA	2
CP6051	INFLUENT	INFLUENT PUMP STATION	PIDA	HHA	2
CP6051	INFLUENT	INFLUENT PUMP STATION	PIDA	LLA	2
CP6051	INFLUENT	INFLUENT PUMP STATION	PIDA	HMA	2
CP6051	INFLUENT	INFLUENT PUMP STATION	PIDA	LMA	2
CP6051	INFLUENT	INFLUENT PUMP STATION	PIDA	HHA	2
CP6051	INFLUENT	INFLUENT PUMP STATION	PIDA	LLA	2
CP6051	INFLUENT	INFLUENT PUMP STATION	PIDA	LMA	2
CP6051	INFLUENT	INFLUENT PUMP STATION	PIDA	LLA	2

CP	COMPOUND	DESCRIPTION	TYPE	ALARM TYPE	PRIORITY
CP6051	INFLUENT	INFLUENT PUMP STATION	PIDA	HHA	2
CP6051	INFLUENT	INFLUENT PUMP STATION	PIDA	HMA	2
CP6051	POLYMER	PRIMARY CHEMICAL POLYMER SYSTEM	PIDA	HHA	2
CP6051	POLYMER	PRIMARY CHEMICAL POLYMER SYSTEM	PIDA	LLA	2
CP6051	POLYMER	PRIMARY CHEMICAL POLYMER SYSTEM	PIDA	HMA	2
CP6051	POLYMER	PRIMARY CHEMICAL POLYMER SYSTEM	PIDA	LMA	2
CP6051	POLYMER	PRIMARY CHEMICAL POLYMER SYSTEM	PIDA	LLA	2
CP6051	POLYMER	PRIMARY CHEMICAL POLYMER SYSTEM	PIDA	HMA	2
CP6051	POLYMER	PRIMARY CHEMICAL POLYMER SYSTEM	PIDA	LMA	2
CP6051	POLYMER	PRIMARY CHEMICAL POLYMER SYSTEM	PIDA	HHA	2
CP6052	RAS_PUMPS	AERATION BASIN NO. 3	PIDA	LMA	2
CP6052	RAS_PUMPS	AERATION BASIN NO. 3	PIDA	HHA	2
CP6052	RAS_PUMPS	AERATION BASIN NO. 3	PIDA	LLA	2
CP6052	RAS_PUMPS	AERATION BASIN NO. 3	PIDA	HMA	2
CP6052	RAS_PUMPS	AERATION BASIN NO. 4	PIDA	LLA	2
CP6052	RAS_PUMPS	AERATION BASIN NO. 4	PIDA	HHA	2
CP6052	RAS_PUMPS	AERATION BASIN NO. 4	PIDA	LMA	2
CP6052	RAS_PUMPS	AERATION BASIN NO. 4	PIDA	HMA	2
CP6052	RAS_PUMPS	RETURN WASTE SLUDGE CONTROL	PIDA	LLA	2
CP6052	RAS_PUMPS	RETURN WASTE SLUDGE CONTROL	PIDA	HHA	2
CP6052	RAS_PUMPS	RETURN WASTE SLUDGE CONTROL	PIDA	LMA	2
CP6052	RAS_PUMPS	RETURN WASTE SLUDGE CONTROL	PIDA	HMA	2
CP6052	RAS_PUMPS	RETURN WASTE SLUDGE CONTROL	PIDA	LLA	2
CP6052	RAS_PUMPS	RETURN WASTE SLUDGE CONTROL	PIDA	LMA	2
CP6052	RAS_PUMPS	RETURN WASTE SLUDGE CONTROL	PIDA	HHA	2
CP6052	RAS_PUMPS	RETURN WASTE SLUDGE CONTROL	PIDA	HMA	2
CP6052	RAS_PUMPS	RETURN WASTE SLUDGE CONTROL	PIDA	LLA	2
CP6052	RAS_PUMPS	RETURN WASTE SLUDGE CONTROL	PIDA	HHA	2
CP6052	RAS_PUMPS	RETURN WASTE SLUDGE CONTROL	PIDA	HMA	2
CP6052	RAS_PUMPS	RETURN WASTE SLUDGE CONTROL	PIDA	LMA	2
CP6052	RAS_PUMPS	RETURN WASTE SLUDGE CONTROL	PIDA	LLA	2
CP6052	RAS_PUMPS	RETURN WASTE SLUDGE CONTROL	PIDA	HHA	2
CP6052	RAS_PUMPS	RETURN WASTE SLUDGE CONTROL	PIDA	LMA	2
CP6052	RAS_PUMPS	RETURN WASTE SLUDGE CONTROL	PIDA	HMA	2
CP6052	RAS_PUMPS	RETURN WASTE SLUDGE CONTROL	PIDA	HMA	2
CP6052	RAS_PUMPS	RETURN WASTE SLUDGE CONTROL	PIDA	LMA	2
CP6052	RAS_PUMPS	RETURN WASTE SLUDGE CONTROL	PIDA	LLA	2
CP6052	RAS_PUMPS	RETURN WASTE SLUDGE CONTROL	PIDA	HHA	2
CP6052	RAS_PUMPS	AERATION BASIN NO. 4	PIDA	LLA	2
CP6052	RAS_PUMPS	AERATION BASIN NO. 4	PIDA	HHA	2
CP6052	RAS_PUMPS	AERATION BASIN NO. 4	PIDA	LMA	2
CP6052	RAS_PUMPS	AERATION BASIN NO. 4	PIDA	HMA	2
CP6052	RAS_PUMPS	AERATION BASIN NO. 4	PIDA	LMA	2
CP6052	RAS_PUMPS	AERATION BASIN NO. 4	PIDA	LLA	2
CP6052	RAS_PUMPS	AERATION BASIN NO. 4	PIDA	HHA	2
CP6052	RAS_PUMPS	AERATION BASIN NO. 4	PIDA	HMA	2
CP6052	WAS_PUMPS	WASTE ACTIVATED SLUDGE PUMP3	PIDA	HMA	2
CP6052	WAS_PUMPS	WASTE ACTIVATED SLUDGE PUMP3	PIDA	HHA	2
CP6052	WAS_PUMPS	WASTE ACTIVATED SLUDGE PUMP3	PIDA	LLA	2
CP6052	WAS_PUMPS	WASTE ACTIVATED SLUDGE PUMP3	PIDA	LDA	1
CP6052	WAS_PUMPS	WASTE ACTIVATED SLUDGE PUMP3	PIDA	HDA	1
CP6052	WAS_PUMPS	WASTE ACTIVATED SLUDGE PUMP3	PIDA	LMA	2
CP6052	WAS_PUMPS	WASTE ACTIVATED SLUDGE PUMP4	PIDA	HHA	2

CP	COMPOUND	DESCRIPTION	TYPE	ALARM TYPE	PRIORITY
CP6052	WAS_PUMPS	WASTE ACTIVATED SLUDGE PUMP4	PIDA	LDA	1
CP6052	WAS_PUMPS	WASTE ACTIVATED SLUDGE PUMP4	PIDA	HDA	1
CP6052	WAS_PUMPS	WASTE ACTIVATED SLUDGE PUMP4	PIDA	LLA	2
CP6052	WAS_PUMPS	WASTE ACTIVATED SLUDGE PUMP4	PIDA	LMA	2
CP6052	WAS_PUMPS	WASTE ACTIVATED SLUDGE PUMP4	PIDA	HMA	2
CP6052	WAS_PUMPS	WASTE ACTIVATED SLUDGE PUMP3	PIDA	LLA	2
CP6052	WAS_PUMPS	WASTE ACTIVATED SLUDGE PUMP3	PIDA	HHA	2
CP6052	WAS_PUMPS	WASTE ACTIVATED SLUDGE PUMP3	PIDA	LMA	2
CP6052	WAS_PUMPS	WASTE ACTIVATED SLUDGE PUMP3	PIDA	HMA	2
CP6052	WAS_PUMPS	WASTE ACTIVATED SLUDGE PUMP4	PIDA	HMA	2
CP6052	WAS_PUMPS	WASTE ACTIVATED SLUDGE PUMP4	PIDA	LMA	2
CP6052	WAS_PUMPS	WASTE ACTIVATED SLUDGE PUMP4	PIDA	HHA	2
CP6052	WAS_PUMPS	WASTE ACTIVATED SLUDGE PUMP4	PIDA	LLA	2
CP6053	ALUM	TERTIARY CHEMICAL ALUM	PIDA	LMA	2
CP6053	ALUM	TERTIARY CHEMICAL ALUM	PIDA	HMA	2
CP6053	ALUM	TERTIARY CHEMICAL ALUM	PIDA	HHA	2
CP6053	ALUM	TERTIARY CHEMICAL ALUM	PIDA	LLA	2
CP6053	ALUM	TERTIARY CHEMICAL ALUM	PIDA	LLA	2
CP6053	ALUM	TERTIARY CHEMICAL ALUM	PIDA	HMA	2
CP6053	ALUM	TERTIARY CHEMICAL ALUM	PIDA	HHA	2
CP6053	ALUM	TERTIARY CHEMICAL ALUM	PIDA	LMA	2
CP6053	CATI_POLYMER	TERTIARY CHEMICAL POLYMER SYSTEM	PIDA	LLA	2
CP6053	CATI_POLYMER	TERTIARY CHEMICAL POLYMER SYSTEM	PIDA	LMA	2
CP6053	CATI_POLYMER	TERTIARY CHEMICAL POLYMER SYSTEM	PIDA	HMA	2
CP6053	CATI_POLYMER	TERTIARY CHEMICAL POLYMER SYSTEM	PIDA	HHA	2
CP6053	CATI_POLYMER	TERTIARY CHEMICAL POLYMER SYSTEM	PIDA	LMA	2
CP6053	CATI_POLYMER	TERTIARY CHEMICAL POLYMER SYSTEM	PIDA	LLA	2
CP6053	CATI_POLYMER	TERTIARY CHEMICAL POLYMER SYSTEM	PIDA	HMA	2
CP6053	CATI_POLYMER	TERTIARY CHEMICAL POLYMER SYSTEM	PIDA	HHA	2
CP6053	NAOCL	TERT CHEM NAOCL RAS FD SYS	PIDA	HMA	2
CP6053	NAOCL	TERT CHEM NAOCL RAS FD SYS	PIDA	LMA	2
CP6053	NAOCL	TERT CHEM NAOCL RAS FD SYS	PIDA	HHA	2
CP6053	NAOCL	TERT CHEM NAOCL RAS FD SYS	PIDA	LLA	2
CP6053	NAOCL	TERT CHEM NAOCL RAS FD SYS	PIDA	LMA	2
CP6053	NAOCL	TERT CHEM NAOCL RAS FD SYS	PIDA	HMA	2
CP6053	NAOCL	TERT CHEM NAOCL RAS FD SYS	PIDA	HHA	2
CP6053	NAOCL	TERT CHEM NAOCL RAS FD SYS	PIDA	LLA	2
CP6053	NAOCL	TERT CHEM NAOCL RAS FD SYS	PIDA	LMA	2
CP6053	NAOCL	TERT CHEM NAOCL RAS FD SYS	PIDA	HHA	2
CP6053	NAOCL	TERT CHEM NAOCL RAS FD SYS	PIDA	LLA	2
CP6053	NAOCL	TERT CHEM NAOCL RAS FD SYS	PIDA	HMA	2
CP6053	NAOCL	TERT CHEM NAOCL RAS FD SYS	PIDA	LLA	2
CP6053	NAOCL	TERT CHEM NAOCL RAS FD SYS	PIDA	HHA	2
CP6053	NAOCL	TERT CHEM NAOCL RAS FD SYS	PIDA	LMA	2
CP6053	NAOCL	TERT CHEM NAOCL RAS FD SYS	PIDA	HMA	2
CP6053	TEST3	EMERGENCY STORAGE BASIN	PIDA	HMA	2
CP6053	TEST3	EMERGENCY STORAGE BASIN	PIDA	HHA	1
CP6053	TEST3	EMERGENCY STORAGE BASIN	PIDA	LLA	1
CP6053	TEST3	EMERGENCY STORAGE BASIN	PIDA	LMA	2
CP6052	RAS_PUMPS	RETURN WASTE SLUDGE CONTROL	RATIO	LLA	2
CP6052	RAS_PUMPS	RETURN WASTE SLUDGE CONTROL	RATIO	HMA	2
CP6052	RAS_PUMPS	RETURN WASTE SLUDGE CONTROL	RATIO	HHA	2
CP6053	CL2_CONTACT	CL2 ANALYZER 4A	REALM	HMA	1

CP	COMPOUND	DESCRIPTION	TYPE	ALARM TYPE	PRIORITY
CP6053	CL2_CONTACT	CL2 ANALYZER 4A	REALM	LLA	2
CP6053	CL2_CONTACT	CL2 ANALYZER 4B	REALM	LMA	2
CP6053	CL2_CONTACT	CL2 ANALYZER 4B	REALM	LLA	2
CP6053	CL2_CONTACT	CL2 ANALYZER 4B	REALM	HMA	2
CP6053	NO_ALARM3	CL BASIN NO. 2 CL RESIDUAL 1A	REALM	HDA	5
CP6053	NO_ALARM3	CL BASIN NO. 2 CL RESIDUAL 1A	REALM	LDA	5
CP6053	NO_ALARM3	CL BASIN NO. 3 CL RESIDUAL 1B	REALM	HDA	5
CP6053	NO_ALARM3	CL BASIN NO. 3 CL RESIDUAL 1B	REALM	LDA	5
CP6053	NO_ALARM3	CHLORINE RESIDUAL DETECTION	REALM	HDA	5
CP6053	NO_ALARM3	CHLORINE RESIDUAL DETECTION	REALM	LDA	5
CP6053	NO_ALARM3	CL BASIN NO. 2 CL RESIDUAL 2	REALM	LDA	5
CP6053	NO_ALARM3	CL BASIN NO. 2 CL RESIDUAL 2	REALM	HDA	5
CP6053	NO_ALARM3	CL BASIN NO. 3 CL RESIDUAL 3	REALM	HDA	5
CP6053	NO_ALARM3	CL BASIN NO. 3 CL RESIDUAL 3	REALM	LDA	5
CP6053	NO_ALARM3	CL SUMP CL RESIDUAL 4A	REALM	LDA	5
CP6053	NO_ALARM3	CL SUMP CL RESIDUAL 4A	REALM	HDA	5
CP6053	NO_ALARM3	CL SUMP CL RESIDUAL 4B	REALM	HMA	5
CP6053	NO_ALARM3	CL SUMP CL RESIDUAL 4B	REALM	HDA	5
CP6053	NO_ALARM3	CL SUMP CL RESIDUAL 4B	REALM	LMA	5
CP6053	NO_ALARM3	CL SUMP CL RESIDUAL 4B	REALM	LDA	5
CP6053	WATER_PUMPS	W-3 PUMPS START/STOP	REALM	LLA	5
CP6053	WATER_PUMPS	W-3 PUMPS START/STOP	REALM	HHA	5
CP6053	WATER_PUMPS	W-3 PUMPS START/STOP	REALM	LMA	5
CP6053	WATER_PUMPS	PUMP 1 & 2 START/STOP	REALM	LMA	5
CP6053	WATER_PUMPS	PUMP 1 & 2 START/STOP	REALM	HHA	5
CP6053	WATER_PUMPS	PUMP 1 & 2 START/STOP	REALM	HMA	5
CP6053	WATER_PUMPS	PUMP 1 & 2 START/STOP	REALM	LLA	5

Appendix F

INLAND EMPIRE UTILITIES AGENCY

RECYCLED WATER DISTRIBUTION SYSTEM

Recycled Water Capital Projects Business Plan

December 2010

Legend

- Treatment Plant

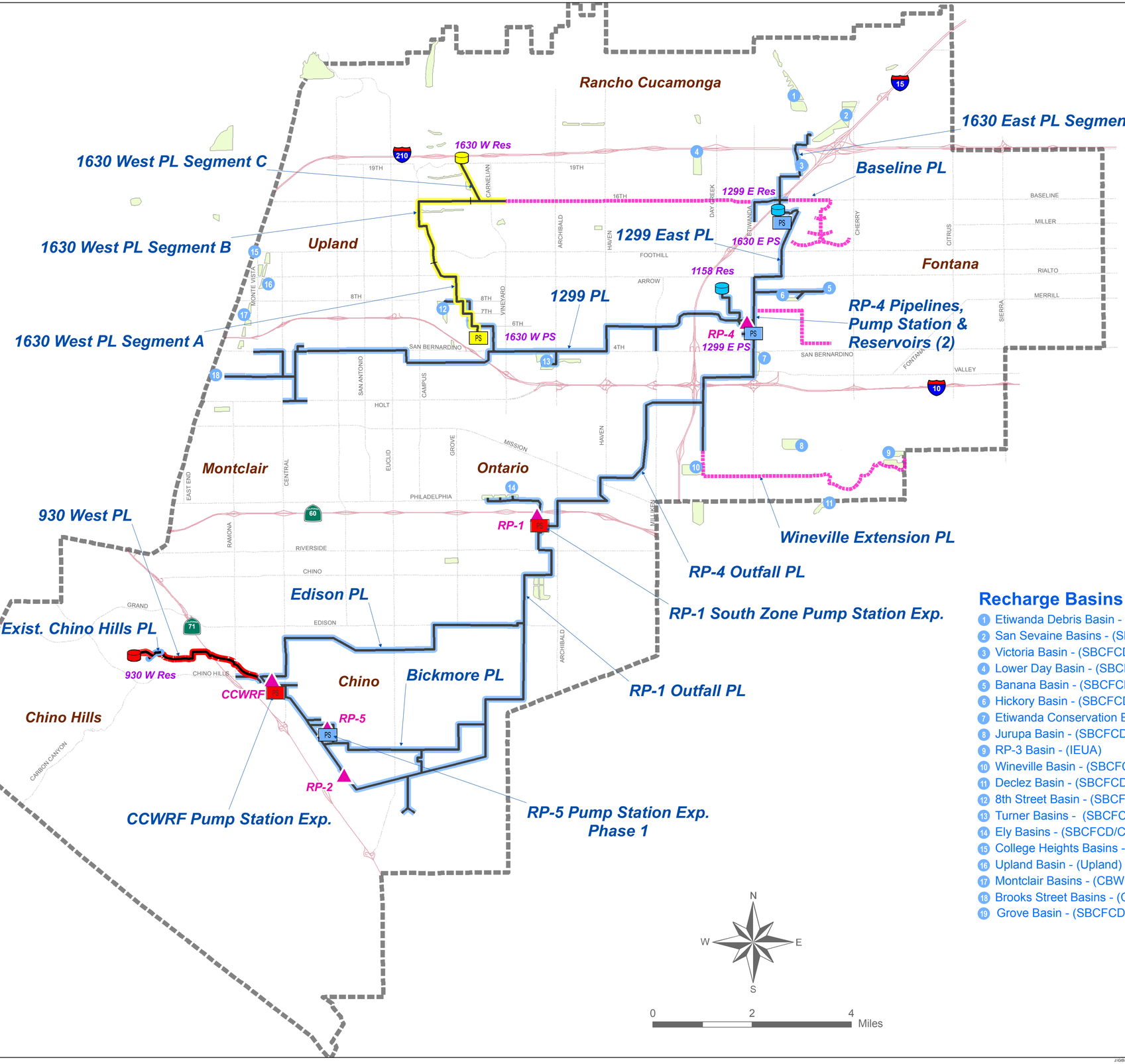
Pump Station and Reservoirs

- Bid
- Design
- Operating
- Construction
- Bid
- Design
- Construction
- Operating

Project Status Legend Key

- Planning
- Bid
- Construction
- Operating
- Design

Inland Empire Utilities Agency
A MUNICIPAL WATER DISTRICT



Recharge Basins (Owners)

1. Etiwanda Debris Basin - (SBCFCD)
2. San Sevaine Basins - (SBCFCD)
3. Victoria Basin - (SBCFCD)
4. Lower Day Basin - (SBCFCD)
5. Banana Basin - (SBCFCD)
6. Hickory Basin - (SBCFCD)
7. Etiwanda Conservation Basins - (SCE)
8. Jurupa Basin - (SBCFCD)
9. RP-3 Basin - (IEUA)
10. Wineville Basin - (SBCFCD)
11. Declez Basin - (SBCFCD)
12. 8th Street Basin - (SBCFCD)
13. Turner Basins - (SBCFCD/CBWCD)
14. Ely Basins - (SBCFCD/CBWCD)
15. College Heights Basins - (CBWCD)
16. Upland Basin - (Upland)
17. Montclair Basins - (CBWCD)
18. Brooks Street Basins - (CBWCD)
19. Grove Basin - (SBCFCD)

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