California Regional Water Quality Control Board
Santa Ana Region

October 30, 2015

ITEM: ***8**

SUBJECT: Issuance of Waste Discharge Requirements and Master Reclamation Permit for the Inland Empire Utilities Agency's Regional Water Recycling Facilities, Surface Water Discharges and Recycled Water Use, Order No. R8-2015-0036, NPDES No. CA8000409, San Bernardino County

DISCUSSION:

See attached Fact Sheet

RECOMMENDATIONS:

Adopt Order No. R8-2015-0036, NPDES No. CA8000409 as presented.

COMMENT SOLICITATION:

Comments were solicited from the discharger and the following agencies:

U.S. Environmental Protection Agency (WTR-5) – Peter Kozelka, Ph.D
U.S. Army District, Los Angeles, Corps of Engineers - Regulatory Branch
U.S. Fish and Wildlife Service, Carlsbad – Christine Medak, c_medak@fws.gov
State Water Resources Control Board, Office of the Chief Counsel – David Rice
State Water Resources Control Board, Division of Water Quality – Phil Isorena
State Department of Fish and Wildlife, Ontario – Gabe Quillman, gabriele.quillman@wildlife.ca.gov
State Water Resources Control Board, Division of Drinking Water – Sean F. McCarthy
State Department of Water Resources, Glendale – Charles Keene, chuckk@water.ca.gov
Santa Ana Watershed Project Authority – Celeste Cantu
Santa Ana River Dischargers Association – Ed Filadelfia
Orange County Water District – Jason Dadakis
Southern California Association of Governments – Hasan Ikhrata
San Bernardino County Transportation/Flood Control District – Naresh Varma
San Bernardino County Environmental Health Services – Michael Wetzel, micheal.wetzel@dph.sb.county.gov
City of Chino, Public Works Department – Jose Alire, jalire@cityofchino.org
City of Chino Hills - Public Works Department – Nadeem Majaj, nmajaj@chinohills.org
City of Fontana – Chuck Hays, chays@fontana.org
City of Montclair – Nicole Greene, ngreene@cityofmontclair.org
City of Ontario – Scott Burton, sburton@ci.ontario.ca.us
City of Upland – Rosemary Hoerning, rhoerning@ci.upland.ca.us
Cucamonga Valley Water District – Martin Zvirbulis, GM@cvwdwater.com
Inland Empire Waterkeeper – Lee Reeder
Orange County Coastkeeper - Garry Brown
Lawyers for Clean Water – Daniel Cooper
Natural Resources Defense Council – David Beckman

STATE OF CALIFORNIA

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ORDER NO. R8-2015-0036
NPDES NO. CA8000409

WASTE DISCHARGE REQUIREMENTS AND MASTER RECLAMATION PERMIT 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 Recycling Facility (CCWRF)
Facility Address	2662 East Walnut 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 discharges by Inland Empire Utilities Agency (IEUA) from the discharge points identified below are 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
DP-001	Tertiary treated effluent from RP-1	33°56'39"N	117°38'34"W	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
DP-002	Tertiary treated effluent from RP-1&RP-4	34°01'31"N	117°33'56"W	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
DP-003	Tertiary treated effluent from RP-5	33°57'44"N	117°40'41"W	Reach 1B of Chino Creek, a tributary to Reach 3 of Santa Ana River
DP-004	Tertiary treated effluent from CCWRF	33°58'56"N	117°41'48"W	Reach 2 of Chino Creek, a tributary to Reach 3 of Santa Ana River
DP-005	Recycled water from RP-1	34°01'29"N	117°35'57"W	Use area overlying Chino North "Max Benefit" GMZ (or Chino 1, 2, and 3 "Antidegradation" GMZs – see Fact Sheet)
DP-006	Recycled water from RP-4	34°04'59"N	117°31'35"W	
DP-007	Recycled water from RP-5	33°57'51"N	117°40'24"W	
DP-008	Recycled water from CCWRF	33°58'47"N	117°41'37"W	
S-001	Storm water from RP-1	34°01'36"N	117°35'59"W	Storm water runoff to Reach 1 of Cucamonga Creek
S-002	Storm water from RP-1	34°01'28"N	117°35'58"W	Storm water runoff to Reach 1 of Cucamonga Creek
S-003	Storm water from RP-2	33°57'10"N	117°40'10"W	Storm water runoff to Reach 1B of Chino Creek

Table 3. Administrative Information

This Order was adopted by the Regional Water Quality Control Board on:	October 30, 2015
This Order shall become effective on:	November 1, 2015
This Order shall expire on:	October 31, 2020
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:	May 2, 2020

IT IS HEREBY ORDERED, that this Order supersedes and rescinds Order No. R8-2009-0021 as amended by Orders No. R8-2010-0008 and Order No. R8-2013-0005, 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 is hereby authorized to discharge treated wastewater storm water in accordance with the terms and conditions specified in this Order and the Discharger shall comply with the requirements in this Order.

I, Kurt V Berchtold, Executive Officer, do hereby certify that this Order with all attachments is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, Santa Ana Region, on October 30, 2015.

Kurt V. Berchtold, Executive Officer

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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	2662 East Walnut 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	Sylvie Lee, Manager of Planning and Environmental Resources, (909) 993-1646			
Authorized Person to Sign and Submit Reports	Sylvie Lee, Manager of Planning and Environmental Resources, (909) 993-1646			
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	85 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)	12 mgd

II. FINDINGS

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

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 National Pollutant Discharge Elimination System (NPDES) permit for point source discharges from these Facilities to surface waters. This Order also serves as Waste Discharge Requirements (WDRs) pursuant to article 4, chapter 4, Division 7 of the California Water Code (commencing with section 13260) and as a master reclamation permit pursuant to Section 13523.1 of Article 4, Chapter 7, Division 7 of the California Water Code.

B. 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.

C. 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.

D. Self-Regenerating Water Softeners. The Basin Plan Amendment noted in Finding H, below, includes a salt and nutrient management plan for this region and a requirement that IEUA implement a salinity management program including the regulation of new and existing residential self-regenerating water softeners to the extent allowed by law. The salt and nutrient management plan was based on evidence in the record demonstrating that managing salinity inputs in this manner would ensure attainment of water quality objectives and protection of beneficial uses.

The control of residential use of self-regenerating water softeners will contribute to the achievement of the water quality objectives approved in the Basin Plan Amendment. This finding is based on evidence in the record demonstrating that salinity input from residential use of self-regenerating water softeners is a significant source of controllable

TDS within IEUA's sewer system and that significant adverse regional economic impacts will result if residential use of self-regenerating water softeners is not controlled.

E. 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.

F. 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.

III. DISCHARGE PROHIBITIONS

A. The 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, unless otherwise authorized by a separate action of the Regional Water Board or its Executive Officer.

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

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 Discharger 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 Monitoring and Reporting Program (MRP, Attachment E):

Table 5. 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	--	--	--
For DP-001 + DP-002 (RP-1+RP-4)	lbs/day	9,674	14,512			
For DP-003 (RP-5)	lbs/day	2,502	3,753			
For DP-004 (CCWRF)	lbs/day	2,002	3,002			
Total Suspended Solids	mg/L	20	30	--	--	--
For DP-001 + DP-002 (RP-1+RP-4)	lbs/day	9,674	14,512			
For DP-003 (RP-5)	lbs/day	2,502	3,753			
For DP-004 (CCWRF)	lbs/day	2,002	3,002			
Ammonia-Nitrogen	mg/L	4.5	--	--	--	--
Total Chlorine Residual[1]	mg/L					0.1

Note: Mass Rate = (Design flow in mgd from Table 4) (concentration in mg/L) (8.34)

(2) DP-002 with compliance measured at Monitoring Location M-002A, as described in the attached MRP:

Table 6. Effluent Limitations Applicable at DP-002 only

Parameter	Units	Effluent Limitations		
		Average Monthly	Average Weekly	Maximum Daily
Total Recoverable Lead	µg/L	8	--	15
Total Recoverable Cadmium	µg/L	1		2
Total Recoverable Copper	µg/L	14		20
Total Recoverable Zinc	µg/L	120		150

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

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

Table 7. Effluent Limitations Applicable at DP-003 only

Parameter	Units	Effluent Limitations		
		Average Monthly	Average Weekly	Maximum Daily
2,3,7,8-TCDD (Dioxin)	µg/L	0.000000014	--	0.000000028
Chlorodibromomethane	µg/L	34	--	68

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

Table 8. Effluent Limitations Applicable at DP-004 only

Parameter	Units	Effluent Limitations		
		Average Monthly	Average Weekly	Maximum Daily
Total Recoverable Copper	µg/L	11	--	17
Chlorodibromomethane	µg/L	34		68
Dichlorobromomethane	µg/L	46		67

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, shall be the effluent limit for TDS:.

(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[2], 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[3]. 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

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

[3] *See Section VII.L. - Compliance Determination.*

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.

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[5], based on peak dry weather design flow[6;] shall be provided[7].

(b) When a disinfection process combined with the filtration process is utilized, the combined process shall demonstrate[8] inactivation and/or removal of 99.999 percent of the plaque-forming units of F-specific bacteriophage MS-2[9], 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)

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

5 *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.*

6 *"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.*

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

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

9 *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).*

(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[10].

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[11] 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

3. Toxicity Requirements/Discharge Specifications

a. There shall be no acute or chronic toxicity in the discharge nor shall the discharge cause any acute or chronic toxicity in the receiving waters. 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 testing.

b. The Discharger shall implement the accelerated testing 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[12] 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 M-002, M-003 and M-004, respectively, as described in the attached MRP.

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

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

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

a. Numeric Effluent Limitations

Table 9. 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)

(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[13].

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.

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

a. Physical/Biological Limitations:

Table 10. 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 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.

(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 11. 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[14] 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.
(d) A chlorine disinfection process following filtration that provides a CT (the product of total chlorine residual and modal contact time[15] 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[16] 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.

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

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

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

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;
(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 State Water Resources Control Board's (SWRCB's) Division of Drinking Water (DDW) grants final approval for such use. The Discharger shall provide the Regional Water Board with a copy of the SWRCB's DDW 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 SWRCB's DDW, 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 SWRCB's DDW 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 or to any surface waterbodies that could affect surface water quality standards.

D. Storm Water Discharge Specifications – S-001, S-002 and S-003

1. Storm water[17] discharges shall maintain compliance with the following effluent limitations at S-001, S-002 and S-003 with compliance measured at monitoring locations STORM-001, STORM-002 and STORM-003 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.

    c. Contain a hazardous substance equal to or in excess of a reportable quantity listed in 40 CFR sections 110.6, 117.21 and/or 40 CFR Part 302.6

    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. Storm water discharges from the Facilities shall comply with the Stormwater Requirements in Attachment J and K.

3. The Dischargers shall implement BMPs that comply with the BAT/BCT requirements of this Order to reduce or prevent discharges of pollutants in their storm water discharge in a manner that reflects best industry practice considering technological availability and economic practicability and achievability.

4. The Discharger must update and implement the Storm Water Pollution Prevention Plan for RP-1 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.

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[17] *Storm water means storm water runoff and surface runoff and drainage.*

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. 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 or by email to info8@waterboards.ca.gov 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 with the details discussed above with the next self-monitoring report.

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

   c. 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.

   d. 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.

   e. 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.

   f. 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.

g. 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.

h. 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.

i. 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.

j. 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.

k. 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.

l. 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.

m. 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 December 15, 2015, 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.

(5) 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. Sanitary Sewer Systems Requirements: The Discharger's sanitary sewer system is part of the system that is subject to this Order. As such, the Discharger must properly operate and maintain its sanitary sewer 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 Statewide General Waste Discharge Requirements for Sanitary Sewer Systems, Order No. 2006-0003 DWQ (General Order), as amended by Order No. WQ 2008-0002-EXEC and Order No. WQ 2013-0058-EXEC, contains requirements for operation and maintenance of sanitary sewer systems and for

reporting and mitigating sanitary sewer overflows. While the Discharger must comply with both the General Order and this Order, the General Order 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 the General Order.

b. Sludge Treatment and 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 California Department of Resources Recycling and Recovery'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 and local government ordinances, including permitting requirements and technical standards included in 40 CFR 503, which include pollutant, pathogen reduction, and vector attraction reduction requirements for the use or disposal practice selected..
(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. The Discharger must submit a detailed use or disposal plan to this Regional Water Board and EPA Regional Administrator for review and approval prior to changing the use or disposal practice.
(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.
(5) If biosolids are used for land application, including composting, the Discharger must monitor for the pollutants included in Table 1 of 40 CFR Section 503.13 at the frequencies specified in 40 CFR 503.16, which is determined by the amount (tonnage) of biosolids that is land applied or bagged/containerized for distribution, and demonstrate pollutant (40 CFR 503.13), pathogen and vector (40 CFR 503.15) attraction reductions that are specified for land application. In addition, if the biosolids are disposed at a landfill, the Discharger must conduct a paint filter test on a representative biosolids sample to determine if the biosolids are suitable for this type of disposal. The monitoring results must be submitted to EPA Region 9 at the specified reporting frequency and format. The monitoring report must include details regarding the biosolids sample type (composite or grab) and monitoring location.
(6) If the Discharger proposes to receive hauled-in anaerobically digestible material for injection into anaerobic digester, prior to initiation of the hauling, the Discharger shall notify this Regional Water Board and develop and implement standard operating procedures (SOPs) for this activity. The SOPs shall address material handling, including unloading, screening, or other processing prior to anaerobic digestion; transportation; spill prevention; and spill response. In addition, the SOPs shall address avoidance of the

introduction of materials that could cause interference, pass-through, or upset of the treatment processes; avoidance of prohibited material, vector control, odor control, operation and maintenance, and the disposition of any solid waste segregated from introduction to the digester. The Discharger shall provide training to its staff on the SOPs and shall maintain records for a minimum of three years for each load received, describing the hauler, waste type, and quantity received. Also, the Discharger shall maintain records for a minimum of three years for the disposition, location, and quantity of cumulative pre-digestion-segregated solid waste hauled off-site.

c. Pretreatment Program

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

(2) The Discharger shall be primarily 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.

(3) The Discharger's pretreatment program shall contain provisions ensuring that the POTW[18] EPA approved pretreatment program for the regional contracting agencies[19] (RCAs), which are not directly overseen by the Discharger, are effectively implemented and enforced. The Discharger shall update as necessary the appropriate contractual agreements with the RCAs. The contractual agreements shall give the Discharger the authority to implement and enforce its approved pretreatment program within the sewer service areas of the treatment Facilities. 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 the RCAs. Also, if a RCA has an EPA approved pretreatment program for any portion of the service area of the treatment facilities, which are not directly overseen by the Discharger, the RCA's pretreatment program shall be equivalent and as stringent as the Discharger's pretreatment program. In the event that any agency discharging to Discharger's facilities 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.

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

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

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

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

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

(5) 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.

(6) 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.

(7) The Discharger shall operate the wastewater collection system under a comprehensive industrial pretreatment and pollutant control program for the

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[18] *Publicly owned treatment works.*

[19] *Member agencies and sewering agencies discharging wastewater into the Facilities.*

control of discharge of toxic wastes from point sources. If the California State Water Resources Control Board's Division of Drinking Water 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 for the use of 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)[20] 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)[21] the Discharger shall not be deemed out of compliance.

P. Non-Priority Pollutants.

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[20] *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.*

[21] *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.*

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.

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.

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[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

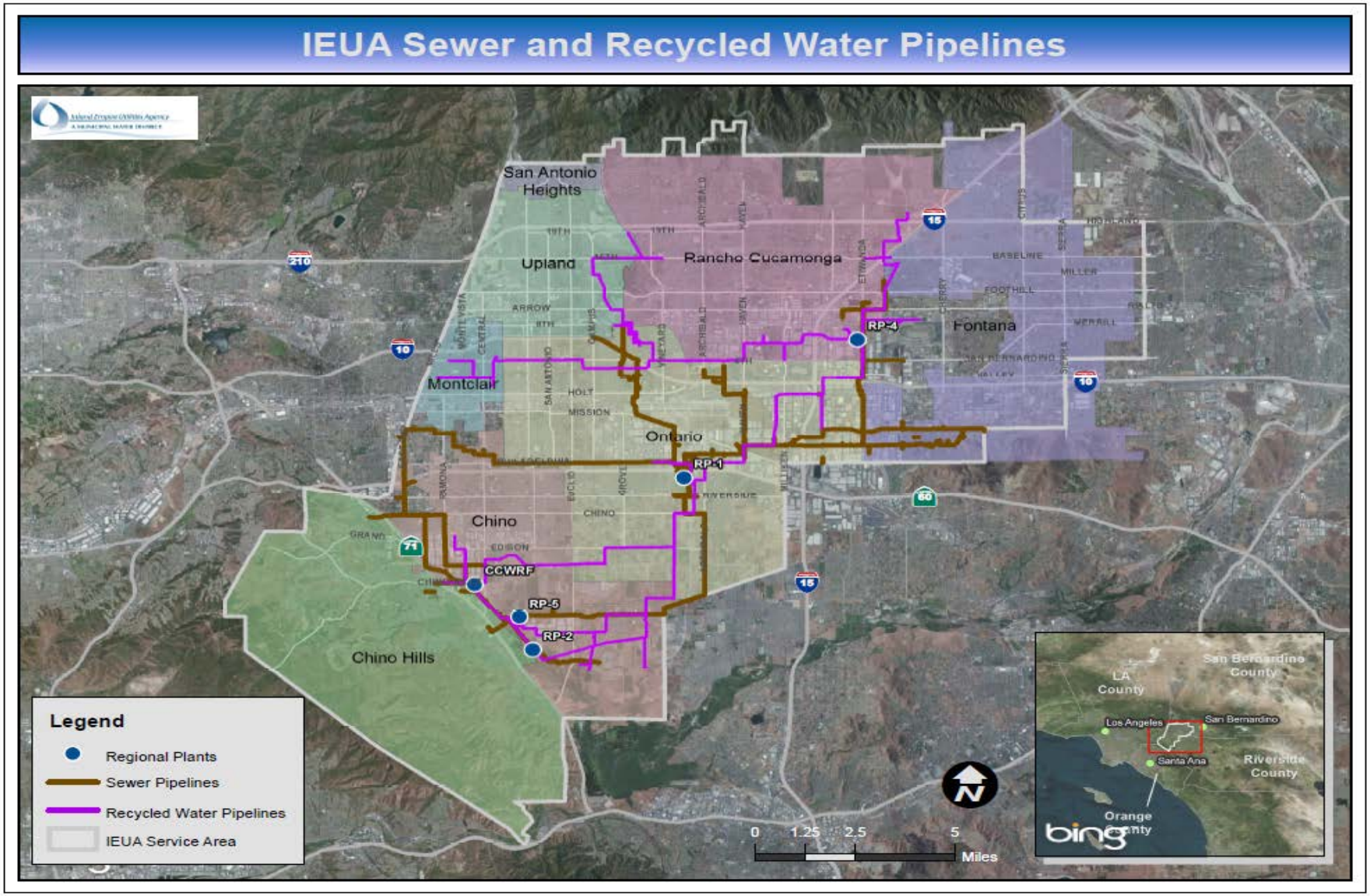
n is the number of samples.

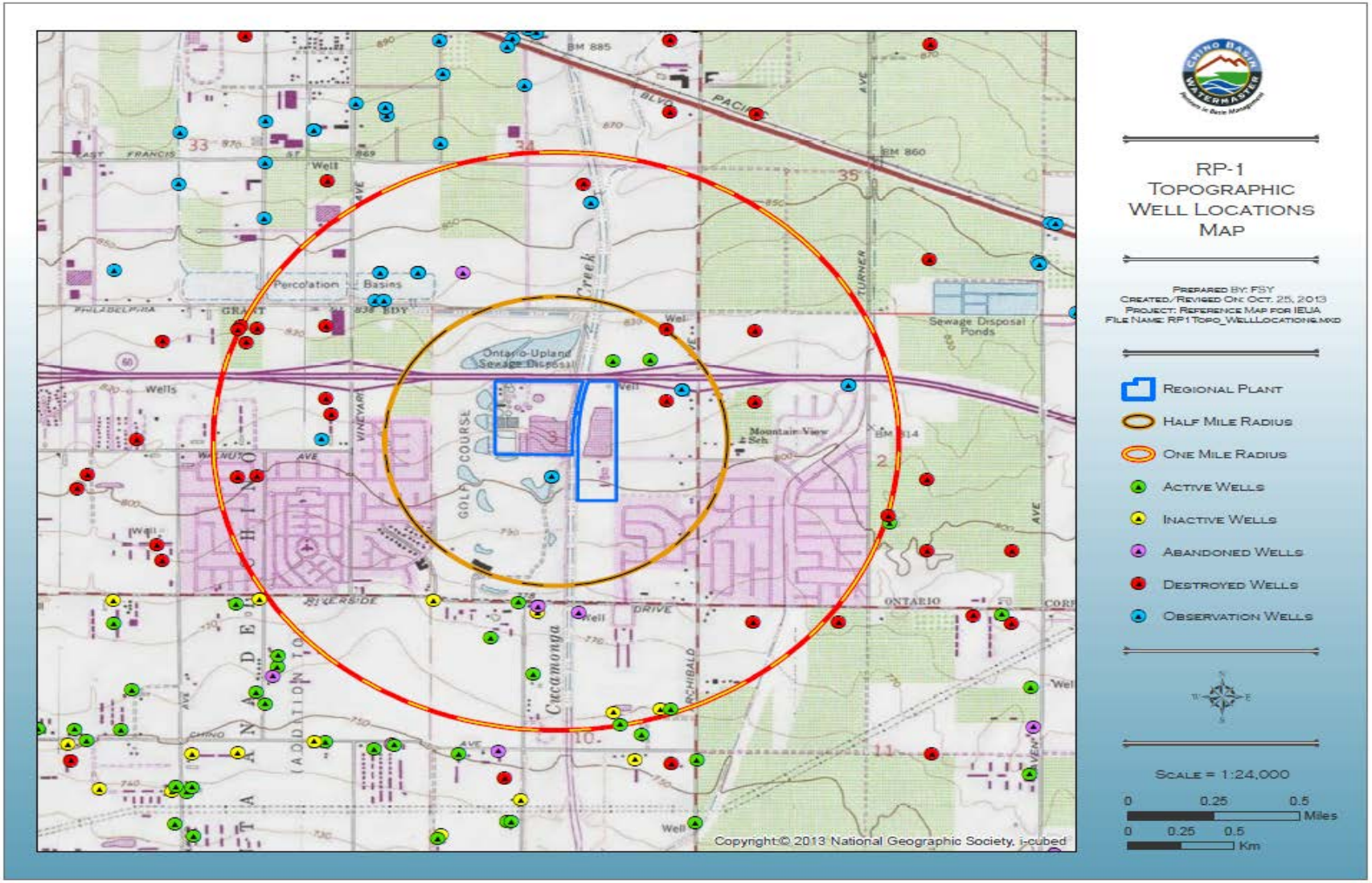
Toxicity Reduction Evaluation (TRE) is a study conducted in a step-wise process designed to identify the causative agents of effluent or ambient toxicity, isolate the sources of toxicity, evaluate the effectiveness of toxicity control options, and then confirm the reduction in toxicity. The first steps 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.

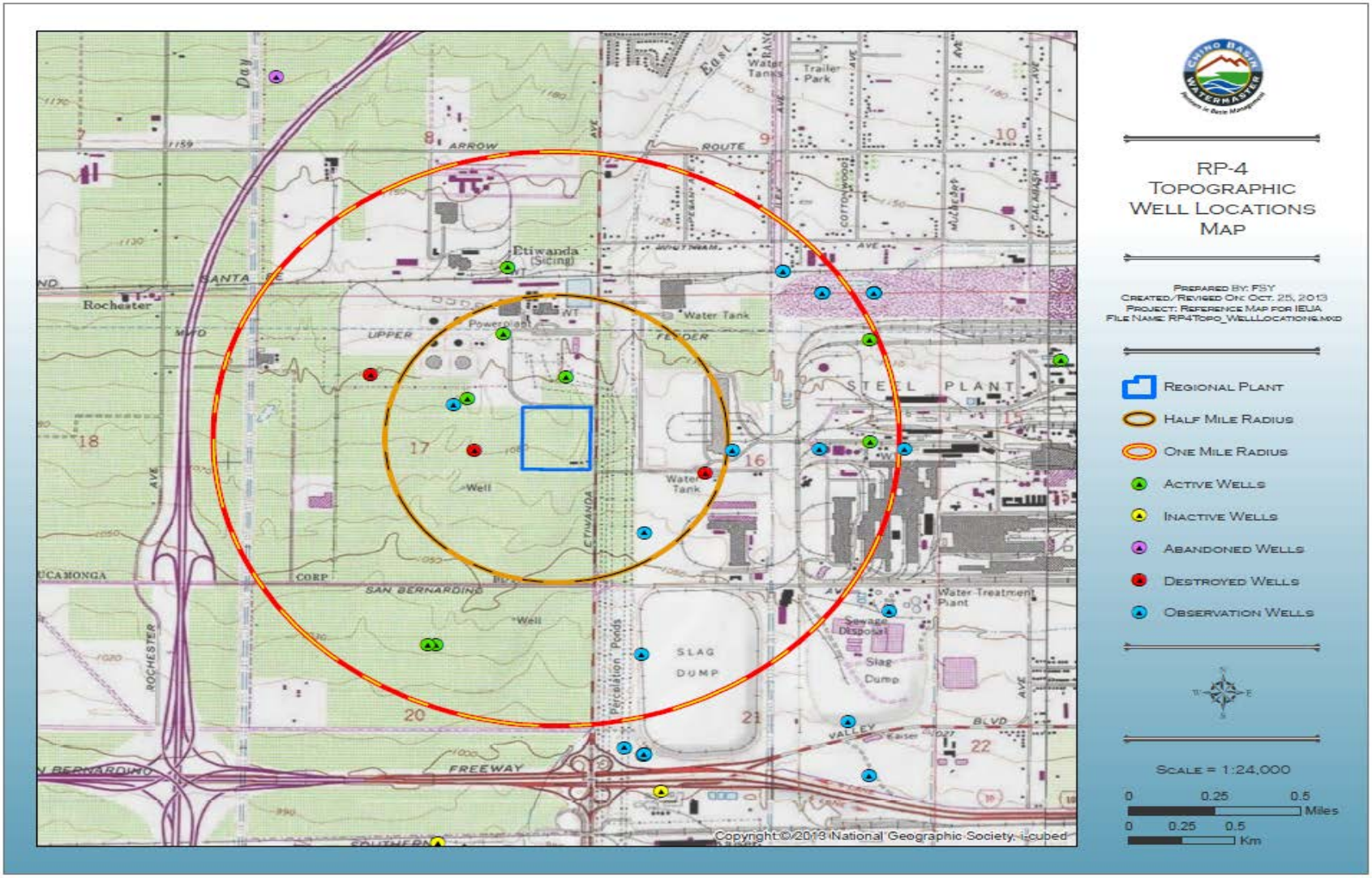
12-Month Running Average Effluent Limitation (12-MRAEL): the highest allowable average of monthly discharges over last twelve months, calculated as the sum of all monthly discharges measured during last twelve months divided by the number of monthly discharges measured during that time period.

ATTACHMENT B – LOCATION

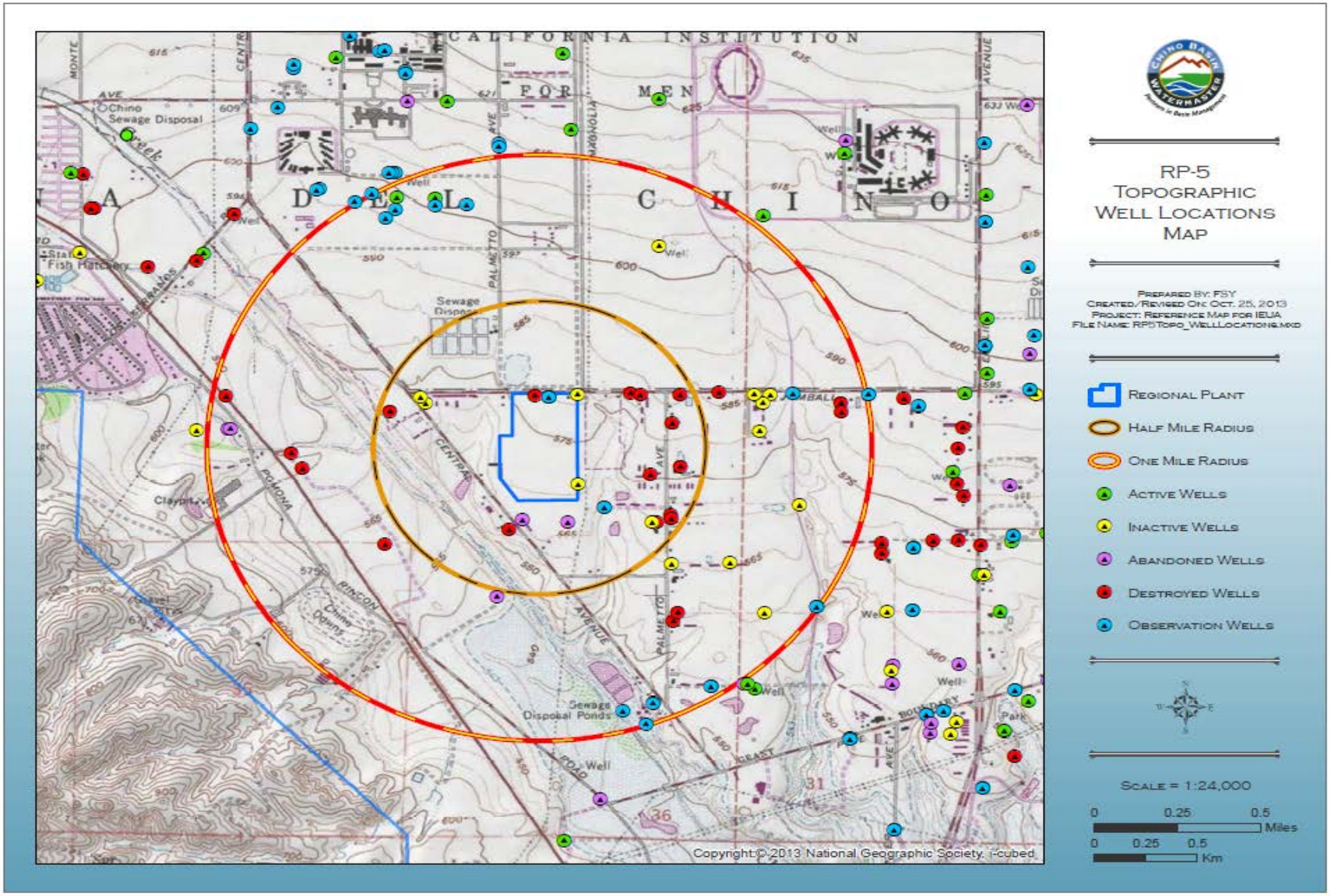




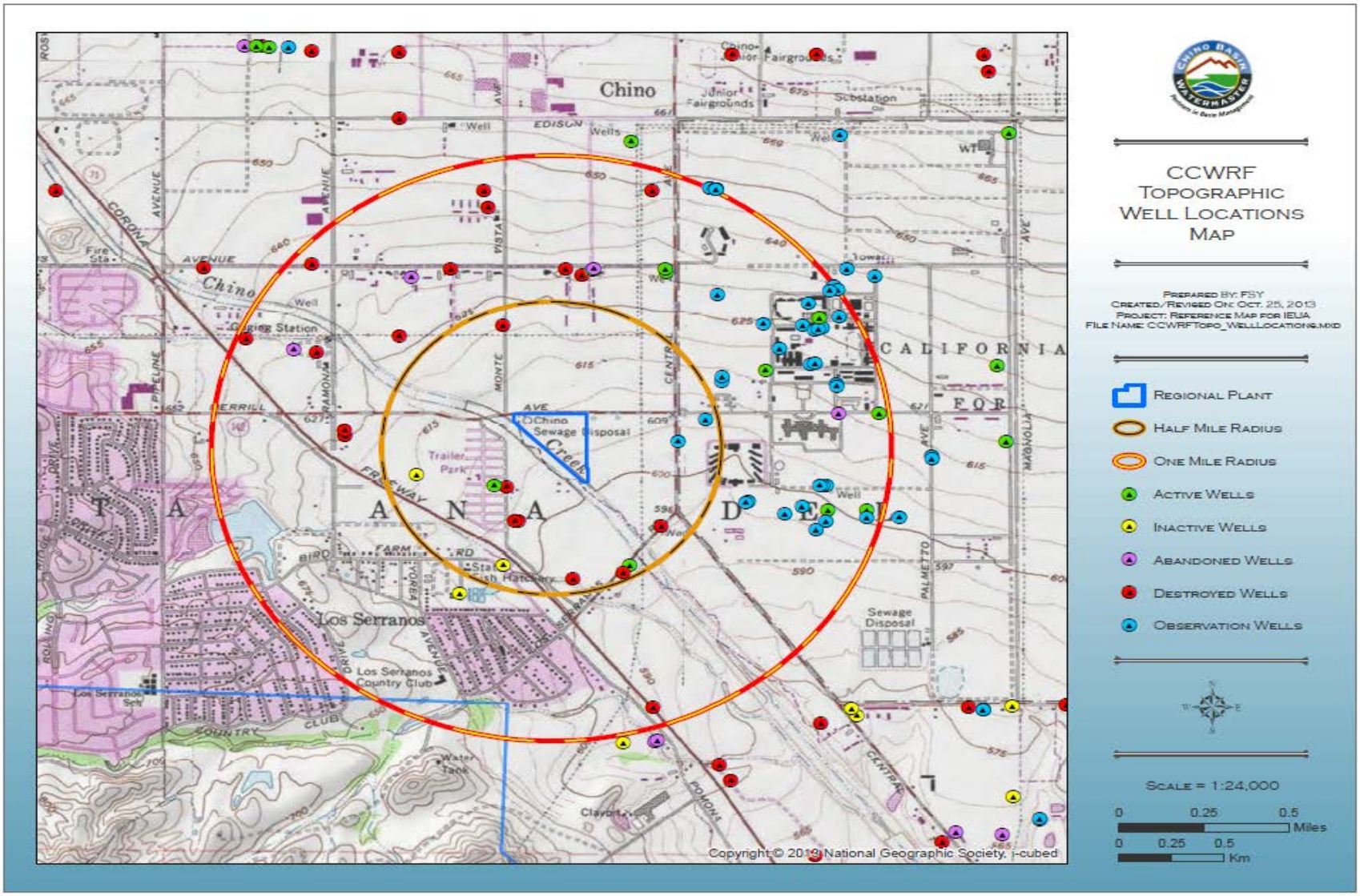
RP-1 LOCATION MAP



RP-4 LOCATION MAP



RP-5 LOCATION MAP



CCWRF LOCATION MAP

ATTACHMENT C – FIGURE 1

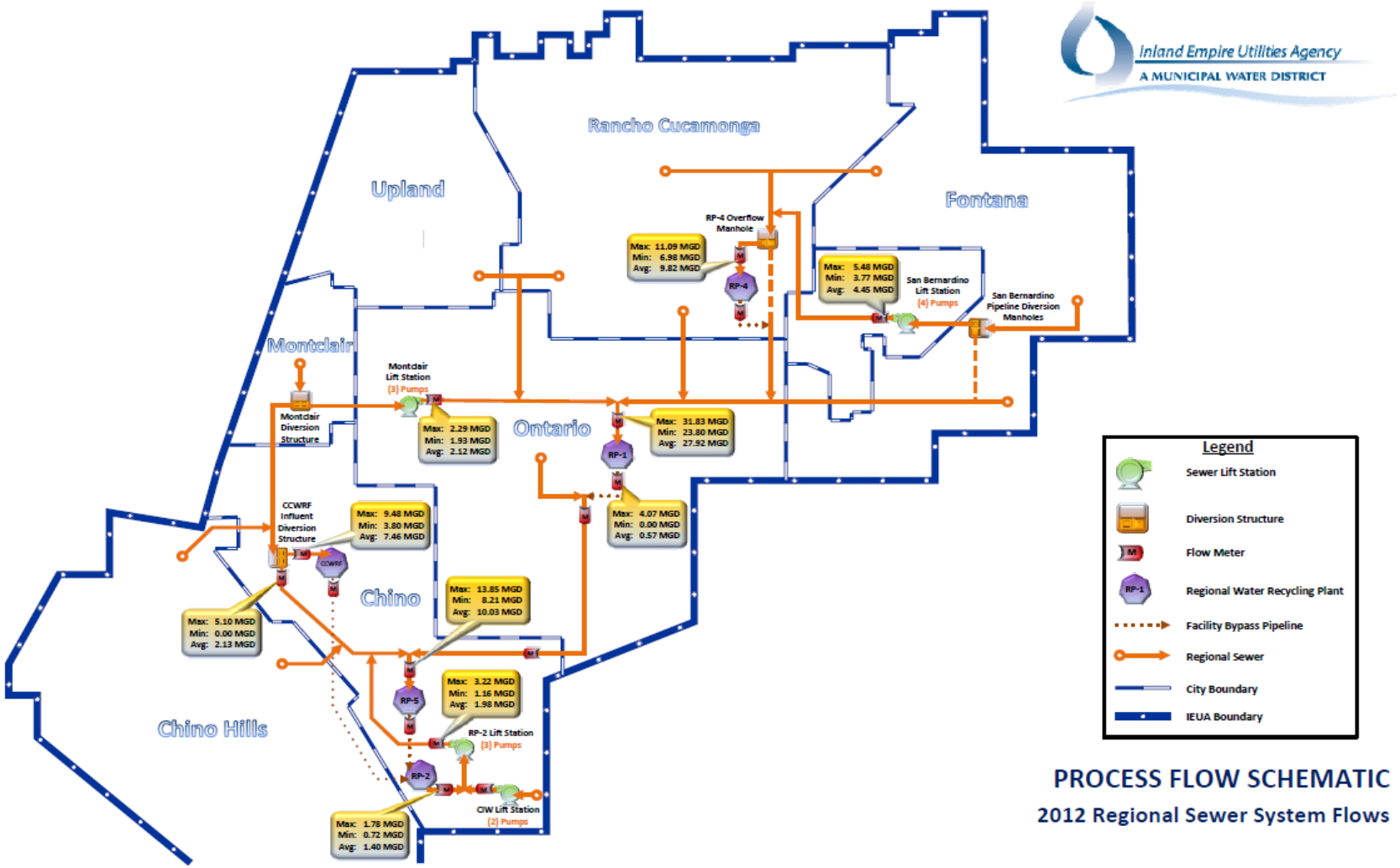


FIGURE - 2

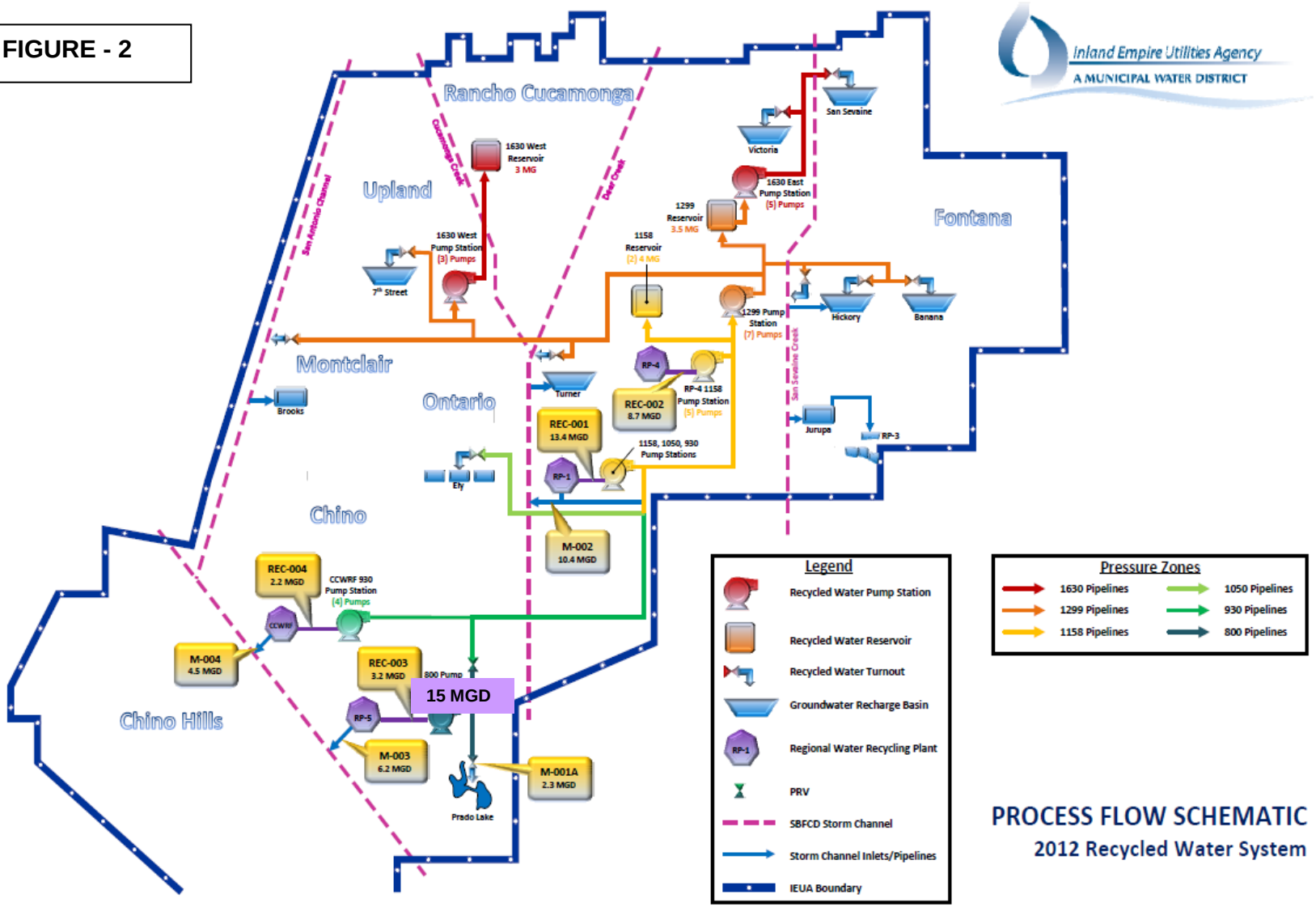

Inland Empire Utilities Agency
A MUNICIPAL WATER DISTRICT
Rancho Cucamonga
Upland
Montclair
Ontario
Chino
Chino Hills
Fontana
San Antonio Channel
Cucamonga Creek
Deer Creek
San Sevaine Creek
1630 West Reservoir 3 MG
1630 West Pump Station (3) Pumps
7th Street
Brooks
Ely
Turner
Victoria
San Sevaine
1630 East Pump Station (5) Pumps
1299 Reservoir 3.5 MG
1158 Reservoir (2) 4 MG
1299 Pump Station (7) Pumps
Hickory
Banana
Jurupa
RP-3
RP-4
RP-4 1158 Pump Station (5) Pumps
REC-002 8.7 MGD
REC-001 13.4 MGD
RP-1
1158, 1050, 930 Pump Stations
M-002 10.4 MGD
REC-004 2.2 MGD
CCWRF 930 Pump Station (4) Pumps
CCWRF
M-004 4.5 MGD
REC-003 3.2 MGD
800 Pump
15 MGD
RP-5
M-003 6.2 MGD
M-001A 2.3 MGD
Prado Lake
Legend
Recycled Water Pump Station
Recycled Water Reservoir
Recycled Water Turnout
Groundwater Recharge Basin
Regional Water Recycling Plant
PRV
SBFCD Storm Channel
Storm Channel Inlets/Pipelines
IEUA Boundary
Pressure Zones
1630 Pipelines
1299 Pipelines
1158 Pipelines
1050 Pipelines
930 Pipelines
800 Pipelines
PROCESS FLOW SCHEMATIC
2012 Recycled Water System

FIGURE - 3

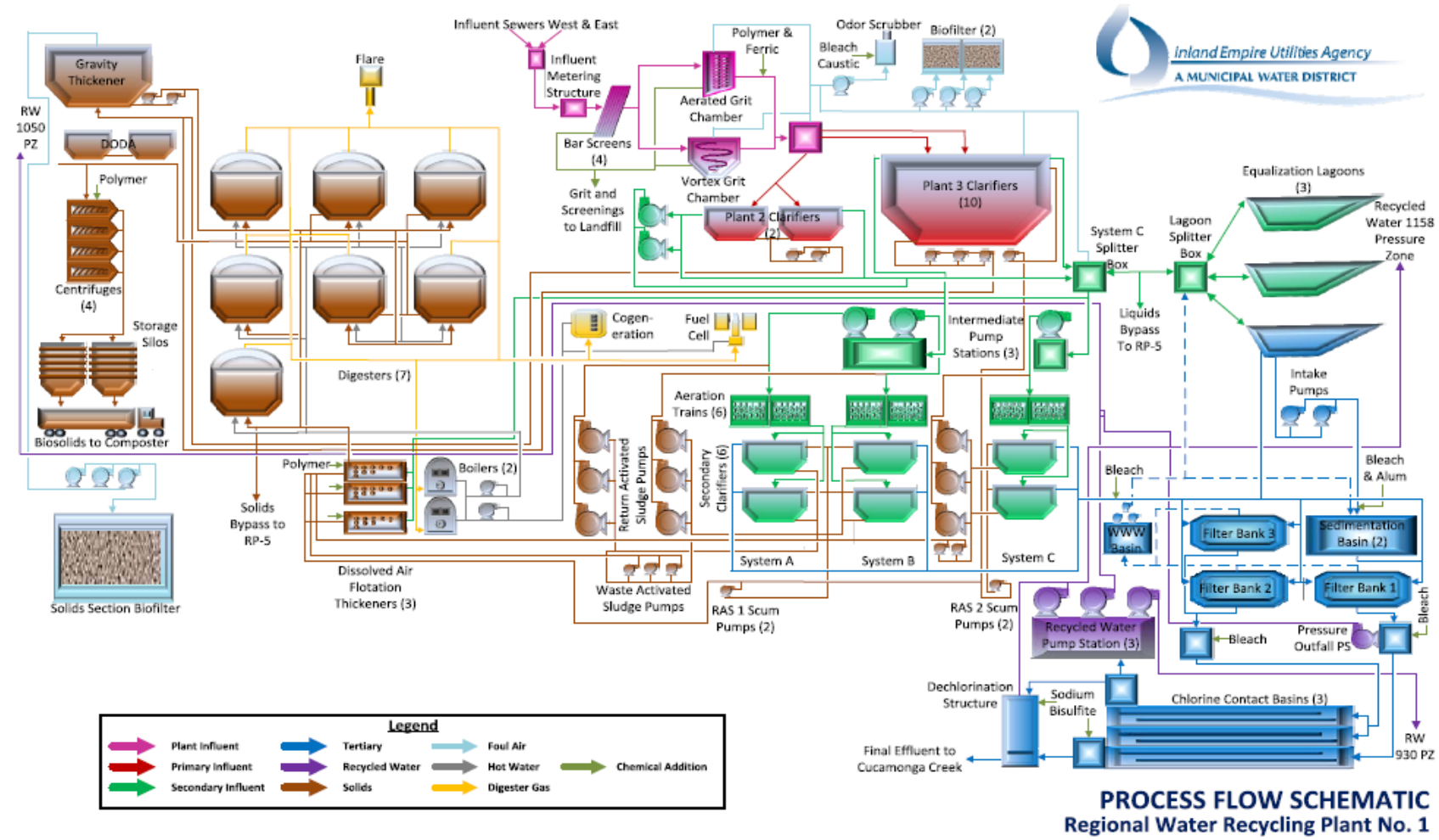

Inland Empire Utilities Agency
A MUNICIPAL WATER DISTRICT
Influent Sewers West & East
Influent Metering Structure
Bar Screens (4)
Grit and Screenings to Landfill
Aerated Grit Chamber
Vortex Grit Chamber
Polymer & Ferric
Odor Scrubber
Bleach Caustic
Biofilter (2)
Plant 2 Clarifiers (2)
Plant 3 Clarifiers (10)
Flare
Gravity Thickener
RW 1050 PZ
DDDA
Polymer
Centrifuges (4)
Storage Silos
Biosolids to Composter
Solids Section Biofilter
Digesters (7)
Cogen-eration
Fuel Cell
Intermediate Pump Stations (3)
System C Splitter Box
Lagoon Splitter Box
Equalization Lagoons (3)
Recycled Water 1158 Pressure Zone
Liquids Bypass To RP-5
Intake Pumps
Aeration Trains (6)
Return Activated Sludge Pumps
Secondary Clarifiers (6)
Polymer
Boilers (2)
Solids Bypass to RP-5
Dissolved Air Flotation Thickeners (3)
Waste Activated Sludge Pumps
RAS 1 Scum Pumps (2)
RAS 2 Scum Pumps (2)
System A
System B
System C
Bleach
Bleach & Alum
WWW Basin
Filter Bank 3
Sedimentation Basin (2)
Filter Bank 2
Filter Bank 1
Bleach
Recycled Water Pump Station (3)
Bleach
Pressure Outfall PS
Dechlorination Structure
Sodium Bisulfite
Chlorine Contact Basins (3)
Final Effluent to Cucamonga Creek
RW 930 PZ
Legend
Plant Influent
Primary Influent
Secondary Influent
Tertiary
Recycled Water
Solids
Foul Air
Hot Water
Digester Gas
Chemical Addition
PROCESS FLOW SCHEMATIC
Regional Water Recycling Plant No. 1

FIGURE - 4

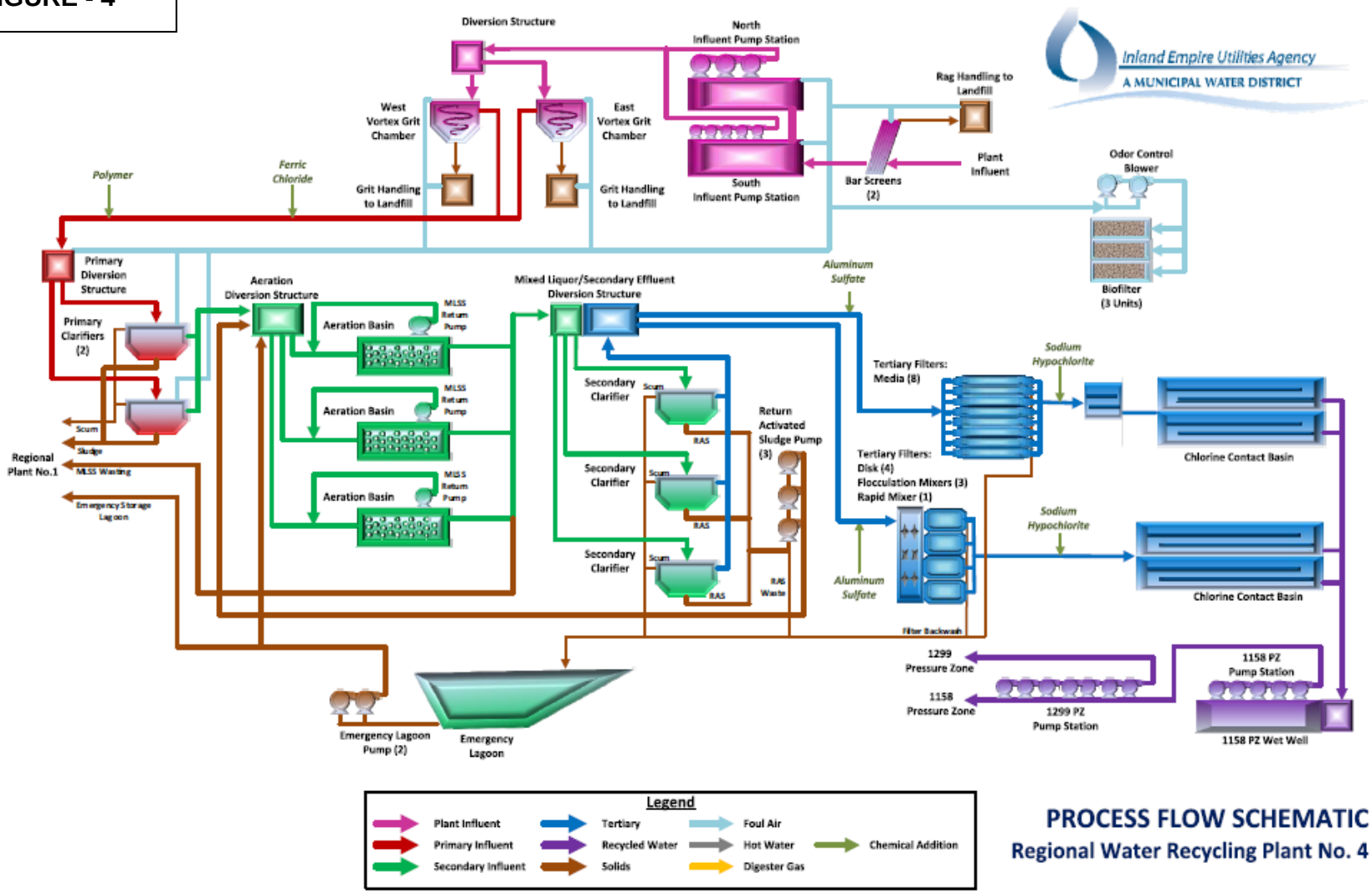

Inland Empire Utilities Agency
A MUNICIPAL WATER DISTRICT
Diversion Structure
North Influent Pump Station
West Vortex Grit Chamber
East Vortex Grit Chamber
Grit Handling to Landfill
Grit Handling to Landfill
South Influent Pump Station
Rag Handling to Landfill
Bar Screens (2)
Plant Influent
Odor Control Blower
Biofilter (3 Units)
Polymer
Ferric Chloride
Primary Diversion Structure
Primary Clarifiers (2)
Aeration Diversion Structure
Aeration Basin
Aeration Basin
Aeration Basin
MLSS Return Pump
Mixed Liquor/Secondary Effluent Diversion Structure
Secondary Clarifier
Secondary Clarifier
Secondary Clarifier
Scum
RAS
RAS Waste
Return Activated Sludge Pump (3)
Aluminum Sulfate
Tertiary Filters: Media (8)
Sodium Hypochlorite
Chlorine Contact Basin
Tertiary Filters: Disk (4) Flocculation Mixers (3) Rapid Mixer (1)
Sodium Hypochlorite
Chlorine Contact Basin
Aluminum Sulfate
Filter Backwash
Regional Plant No.1
Scum
Sludge
MLSS Wasting
Emergency Storage Lagoon
1299 Pressure Zone
1158 Pressure Zone
1299 PZ Pump Station
1158 PZ Pump Station
1158 PZ Wet Well
Emergency Lagoon Pump (2)
Emergency Lagoon
Legend
Plant Influent
Primary Influent
Secondary Influent
Tertiary
Recycled Water
Solids
Foul Air
Hot Water
Digester Gas
Chemical Addition
PROCESS FLOW SCHEMATIC
Regional Water Recycling Plant No. 4

FIGURE - 5

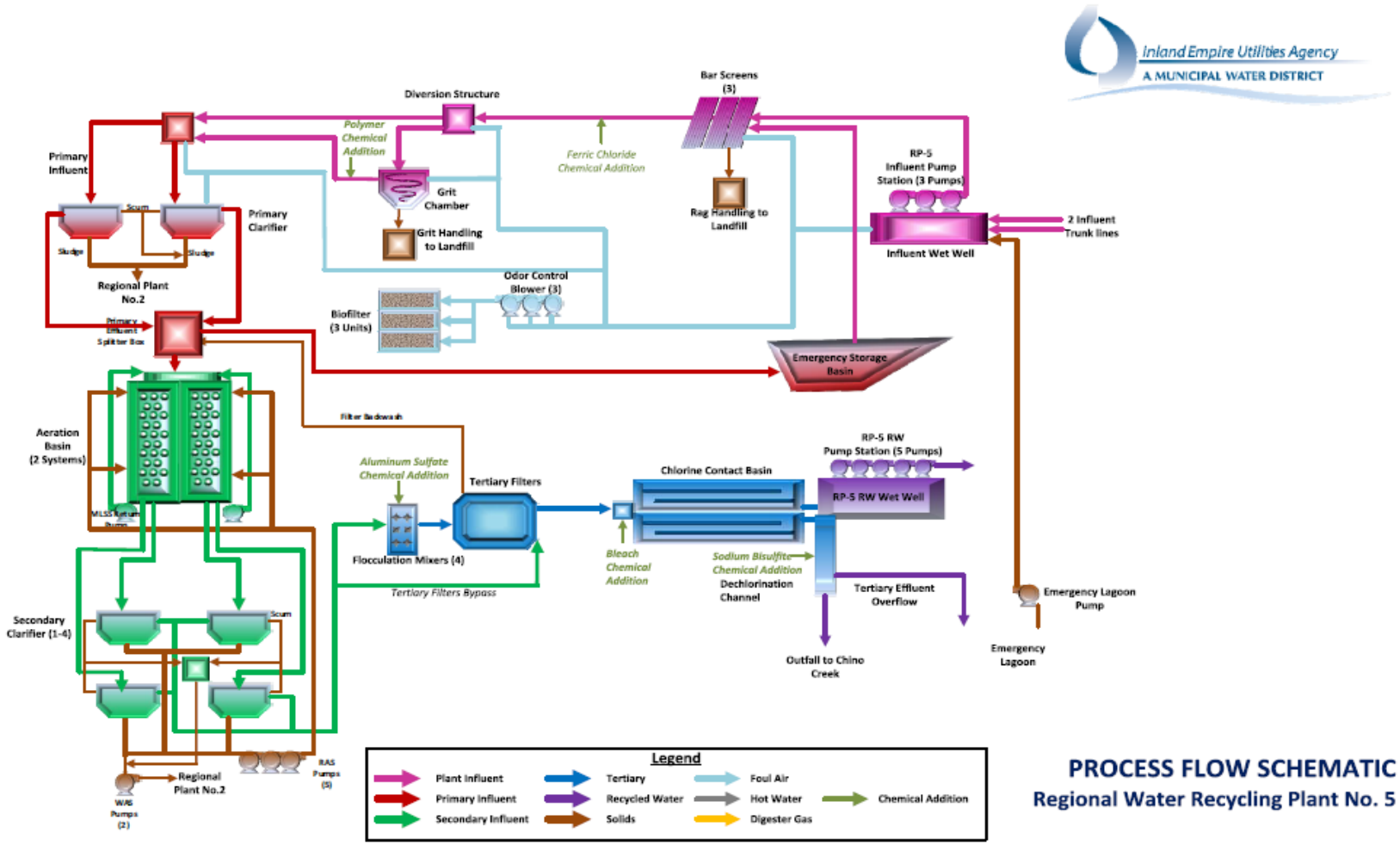
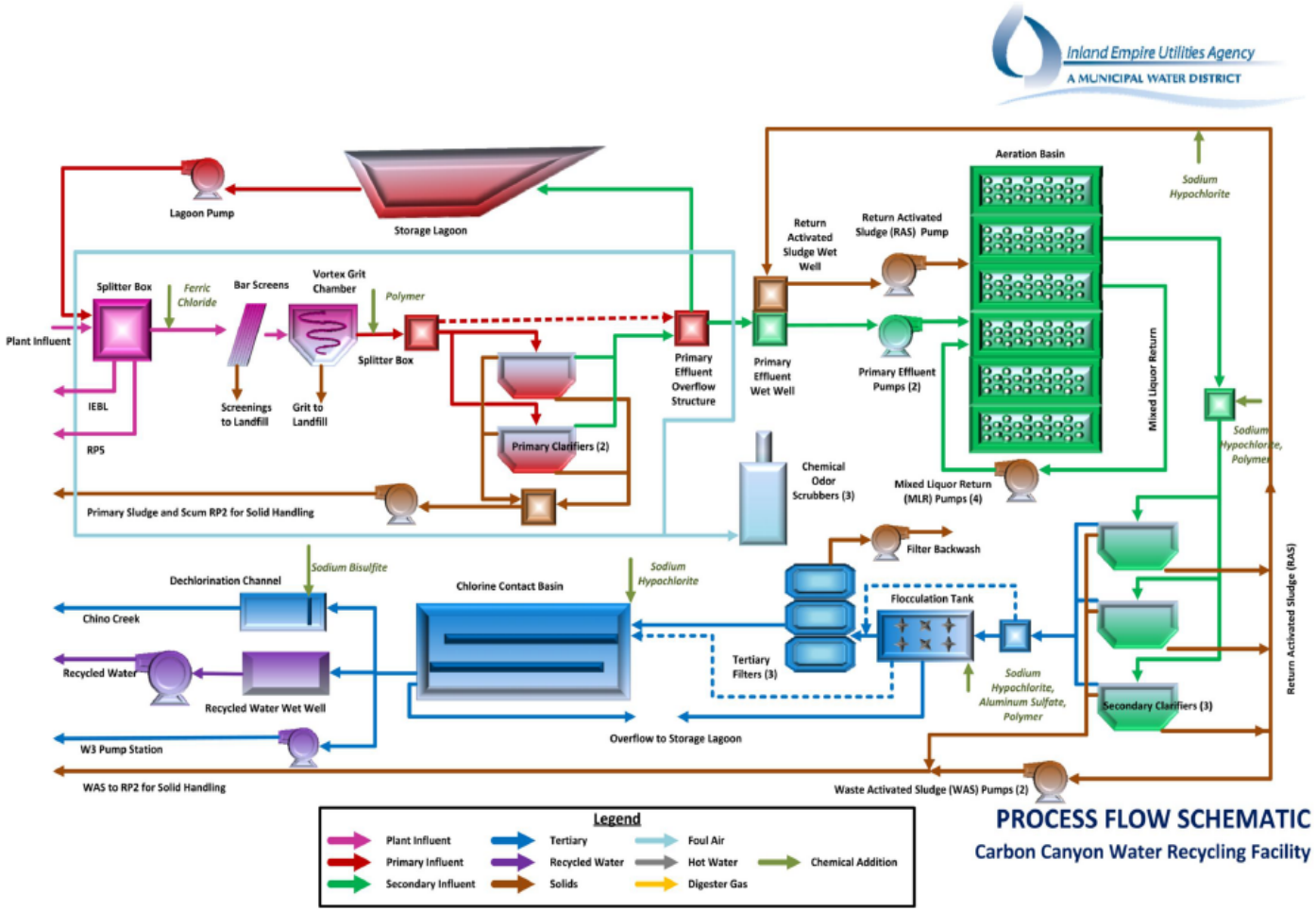

Inland Empire Utilities Agency
A MUNICIPAL WATER DISTRICT
Bar Screens (3)
Diversion Structure
Polymer Chemical Addition
Ferric Chloride Chemical Addition
Primary Influent
Grit Chamber
Grit Handling to Landfill
Rag Handling to Landfill
RP-5 Influent Pump Station (3 Pumps)
2 Influent Trunk lines
Influent Wet Well
Primary Clarifier
Scum
Sludge
Regional Plant No.2
Odor Control Blower (3)
Biofilter (3 Units)
Primary Effluent Splitter Box
Emergency Storage Basin
Filter Backwash
Aeration Basin (2 Systems)
Aluminum Sulfate Chemical Addition
Tertiary Filters
Chlorine Contact Basin
RP-5 RW Pump Station (5 Pumps)
RP-5 RW Wet Well
Flocculation Mixers (4)
Tertiary Filters Bypass
Bleach Chemical Addition
Sodium Bisulfite Chemical Addition
Dechlorination Channel
Tertiary Effluent Overflow
Emergency Lagoon Pump
Emergency Lagoon
Outfall to Chino Creek
Secondary Clarifier (1-4)
Regional Plant No.2
RAS Pumps (5)
WAS Pumps (2)
Legend
Plant Influent
Primary Influent
Secondary Influent
Tertiary
Recycled Water
Solids
Foul Air
Hot Water
Digester Gas
Chemical Addition
PROCESS FLOW SCHEMATIC
Regional Water Recycling Plant No. 5

FIGURE - 6


Inland Empire Utilities Agency
A MUNICIPAL WATER DISTRICT
Lagoon Pump
Storage Lagoon
Aeration Basin
Sodium Hypochlorite
Return Activated Sludge Wet Well
Return Activated Sludge (RAS) Pump
Splitter Box
Ferric Chloride
Bar Screens
Vortex Grit Chamber
Polymer
Plant Influent
Splitter Box
Primary Effluent Overflow Structure
Primary Effluent Wet Well
Primary Effluent Pumps (2)
Mixed Liquor Return
IEBL
Screenings to Landfill
Grit to Landfill
Primary Clarifiers (2)
RPS
Sodium Hypochlorite, Polymer
Chemical Odor Scrubbers (3)
Mixed Liquor Return (MLR) Pumps (4)
Primary Sludge and Scum RP2 for Solid Handling
Filter Backwash
Sodium Bisulfite
Dechlorination Channel
Chlorine Contact Basin
Sodium Hypochlorite
Flocculation Tank
Chino Creek
Tertiary Filters (3)
Recycled Water
Recycled Water Wet Well
Sodium Hypochlorite, Aluminum Sulfate, Polymer
Secondary Clarifiers (3)
Return Activated Sludge (RAS)
W3 Pump Station
Overflow to Storage Lagoon
WAS to RP2 for Solid Handling
Waste Activated Sludge (WAS) Pumps (2)
Legend
Plant Influent
Primary Influent
Secondary Influent
Tertiary
Recycled Water
Solids
Foul Air
Hot Water
Digester Gas
Chemical Addition
PROCESS FLOW SCHEMATIC
Carbon Canyon Water Recycling Facility

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 must be conducted according to test procedures approved under 40 C.F.R. part 136 for the analyses of pollutants unless another method is required under 40 C.F.R. subchapters N or O. Monitoring must be conducted according to sufficiently sensitive test procedures (i.e., methods) approved under 40 C.F.R. part 136 for the analysis of pollutants or pollutant parameters or required under 40 C.F.R. chapter 1, subchapter N or O. For the purposes of this paragraph, a method is sufficiently sensitive when:

1. The method minimum level (ML) is at or below the level of the effluent limitation established in the permit for the measured pollutant or pollutant parameter, and, either the method ML is at or below the level of the applicable water quality criterion for the measured pollutant or pollutant parameter or the method ML is above the applicable water quality criterion, but the amount of the pollutant or pollutant parameter in a facility's discharge is high enough that the method detects and quantifies the level of the pollutant or pollutant parameter in the discharge; or

2. The method has the lowest ML of the analytical methods approved under 40 C.F.R. part 136 or required under 40 C.F.R. chapter 1, subchapter N or O for the measured pollutant or pollutant parameter.

In the case of pollutants for which there are no approved methods under 40 C.F.R. part 136 or otherwise required under 40 C.F.R. subchapters N or O, monitoring must be conducted according to a test procedure specified in this Order for such pollutants. Monitoring for sludge use or disposal must be conducted according to test procedures under Part 136, unless otherwise specified in Part 503 unless other test procedures have been specified in this Order. (40 C.F.R. §§ 122.21(e)(3), 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 (MRP)

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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 State 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 "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 "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 State Water Resources Control Board’s Division of Drinking Water 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;
    j. Copies of all reports required by this Order; and,
    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
2016	January
2017	April
2018	July
2019	October
2020	January

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
Influent	M-INF 1A	RP-1 influent line, before Headworks	34°01'48"N, 117°36'07"W
Influent	M-INF 1B	RP-4 influent line, before Headworks	34°05'09"N, 117°31'28"W
DP-001	M-001A	RP-1 effluent Outfall to Prado Park Lake	33°56'39"N, 117°38'34"W
DP-001	M-001B	At the RP-1splitter box	34°01'29"N, 117°35'57"W
DP-002	M-002A	RP-1 and RP-4 Effluent outfall to Reach 1 of Cucamonga Creek	34°01'31"N, 117°35'56"W
DP-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
Influent	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
Influent	M-INF 3B	RP-5 Influent Pump Station	33°57'38"N, 117°40'16"W
Influent	M-INF 3C	RP-2 Recycle Flow	33°57'29"N, 117°40'23"W
Influent	M-INF 3D	RP-2 Lift Station	33°57.08”N, 117°40’00”W
DP-003	M-003	RP-5 Effluent to Reach 2 of Chino Creek	33°57’44”N, 117°40’41”W
Influent	M-INF 4	Influent sampling at CCWRF	33°58’56”N, 117°41’48”W
DP-004	M-004	CCWRF Effluent to Reach 2 of Chino Creek	33°58’47”N, 117°41’39”W
DP-005	REC-001	RP-1 Effluent to recycled water use area, same as M-001B	34°01'29"N, 117°35'57"W
DP-006	REC-002	RP-4 Effluent to recycled water use area	34°04’59”N, 117°31’35”W
DP-007	REC-003	RP-5 Effluent to recycled water use area - Same as M-003	33°57’44”N, 117°40’41”W
DP-008	REC-004	CCWRF Effluent to recycled water use area – Same as M-004	33°58’47”N, 117°41’39”W
DP-002	R-002U	Cucamonga Creek within 100 feet upstream of the DP-002	34°01'29"N, 117°35'58"W
DP-002	R-002D	Cucamonga Creek within 500 feet downstream of DP-002 after mixing	34°00'43"N, 117°35'59"W
DP-003	R-003U	Chino Creek within 500 feet downstream of DP-004 and upstream of DP-003	33º58’46”N, 117º41’39”W
DP-003	R-003D	Chino Creek within 4,000 feet downstream of DP-003 (by the RP-2 site)	33º57’14”N, 117º40’14”W
DP-004	R-004U	Chino Creek within 100 feet upstream of DP 004	33º58’47”N, 117º41’40”W
DP-004	R-004D	Chino Creek within 500 feet downstream of DP-004 (same as R-003U)	33º58’46”N, 117º41’39”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
S-003	STORM-003	Storm water runoff from RP-2	33°57'10"N, 117°40'10"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	Quarterly	"

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

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	Annual	“
Chloride	mg/L	Composite	Annual	“
Fluoride	mg/L	Composite	Annual	“
Sodium	mg/L	Composite	Annual	“
Sulfate	mg/L	Composite	Annual	“
Arsenic	µg/L	Composite	Quarterly	See Section I.A.2. thru 4,above, of this MRP
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	See Sections I.A.2., I.A.3., above of this MRP
2,3,7,8-TCDD (Dioxins/Furans TEQs)[3]	µg/L	Composite	Monthly (See III.A.3)	See Section I.A.2 &3,. above, EPA Method 1613B for all 17 CDDs/CDFs, 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	“

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

3 *Applies at M-INF 3B & 3D and quarterly for M-INF 4 and annually for other influent monitoring points. The 2,3,7,8-TCDD (TEQs) concentration is the sum of the TEQ concentrations of the 17 CDDs/CDFs detected and calculated by using the 2005 WHO TEFs.*

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.*

3. The Discharger is required to conduct monthly monitoring for 2,3,7,8-TCDD (TEQs) at M-INF 3B and 3D for one year. After one year (12 consecutive monthly sampling events) the monitoring frequency for 2,3,7,8-TCDD (TEQs) shall change to quarterly. For M-INF 4 the Discharger is required to conduct quarterly monitoring for 2,3,7,8-TCDD (TEQs) and after one year (four consecutive quarterly sampling events) the Discharger may reduce the frequency of monitoring for 2,3,7,8-TCDD (TEQs) from quarterly to semi-annual upon approval by the Regional Water Board's Executive Officer or designee. The reported 2,3,7,8-TCDD concentration shall be the sum of the dioxin toxicity equivalence (TEQ) concentrations of the 17 chlorinated dibenzo-p-dioxins (CDDs) and chlorinated dibenzofurans (CDFs) detected and calculated with the use of the 2005 World Health Organization (WHO) dioxin toxicity equivalence factors (TEFs).

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	Grab	Daily	See Section I.A.2., 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.*

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
	100 ml[11]			this MRP
CT	mg-minutes/L	Recorder	Continuous[12]	--
Total Organic Carbon (TOC)	mg/L	Composite	Daily	See Section I.A.2. above, of this MRP
BOD_5[13]	mg/L	Composite	Daily	See Section I.A.2. above, of this MRP
Total Suspended Solids	mg/L	Composite	Daily	See Section I.A.2. above
Ammonia-Nitrogen	mg/L	Grab	Weekly	See Section I.A.2. above, of this MRP
Temperature	°C	Grab	Weekly	--
Total Dissolved Solids[14]	mg/L	Composite	Monthly	See Section I.A.2. above
Total Inorganic Nitrogen	mg/L	Composite	Monthly	See Section I.A.2. above
Total Nitrogen	mg/L	Composite	Monthly	See Section I.A.2. above
Cyanide, free[15]	µg/L	Grab	Quarterly (See IV.A.3., below)	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.4. 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.2. above
Bicarbonate	mg/L	Composite	Annual	See Section I.A.2. above, of this MRP
Boron	mg/L	Composite	Annual	See Section I.A.2. above
Calcium	mg/L	Composite	Annual	See Section I.A.2. above
Carbonate	mg/L	Composite	Annual	See Section I.A.2. above
Chloride	mg/L	Composite	Annual	See Section I.A.2. above

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.*

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
Fluoride	mg/L	Composite	Annual	See Section I.A.2. above, of this MRP
Magnesium	mg/L	Composite	Annual	See Section I.A.2. above
Sodium	mg/L	Composite	Annual	See Section I.A.2. above
Sulfate	mg/L	Composite	Annual	See Section I.A.2. above
Total Recoverable Cadmium	µg/L	Composite	Monthly	See Sections I.A.2., I.A.4., above of this MRP and RL 0.5 µg/L
Chromium (VI) or Total Chromium[17]	µg/L	Composite	Quarterly	See Sections I.A.2., I.A.4. 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.4. above of this MRP and RL 2 µg/L
Total Recoverable Mercury	µg/L	Composite	Quarterly	See Sections I.A.2., I.A.4. above of this MRP and RL 0.05 µg/L
Total Recoverable Selenium	µg/L	Composite	Quarterly (See IV.A.3., below)	See Sections I.A.2., I.A.4. above of this MRP and RL 2 µg/L
Total Recoverable Silver	µg/L	Composite	Quarterly	See Sections I.A.2., I.A.4., above of this MRP and RL 1 µg/L
Total Recoverable Zinc	µg/L	Composite	Monthly	See Sections I.A.2., I.A.4., above of this MRP
Bis (2-ethylhexyl) phthalate	µg/L	Grab	Quarterly (See IV.A.3., below)	See Sections I.A.2., I.A.4., above of this MRP
Bromodichloromethane[18]	µg/L	Grab	Monthly	See Sections I.A.2., I.A.4., above of this MRP, ML 5 µg/L
Chlorodibromomethane[19]	µg/L	Grab	Monthly	See Sections I.A.2., I.A.4., above of this MRP, ML 5 µg/L
Aluminum	mg/L	Composite	Quarterly	See Section I.A.2 & 4. above
Antimony	mg/L	Composite	Quarterly	See Sections I.A.2., I.A.4., above of this MRP
Arsenic	µg/L	Composite	Quarterly (See IV.A.3., below)	See Section I.A.2 & 4. above
Barium	µg/L	Composite	Quarterly (See IV.A.3., below)	See Section I.A.2 & 4. above
Cobalt	µg/L	Composite	Quarterly (See IV.A.3., below)	See Section I.A.2 & 4. above,
Total Recoverable Nickel	µg/L	Composite	Quarterly (See	See Section I.A.2 & 4. above,

[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] *Monthly basis at M-003 and M-004 and quarterly basis at M-001B and M-002A.*

[19] *Monthly basis at M-003 and M-004 and quarterly basis at M-001B and M-002A.*

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
			IV.A.3., below)	
2,3,7,8-TCDD (Dioxins/Furans TEQs)[20]	µg/L	Composite	Monthly (See IV.A.5., below)	See Section I.A.2. above, EPA Method 1613B for all 17 CDDs/CDFs, -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., 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., above of this MRP

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., 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[21] 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

[20] *Applies at M-003 and quarterly for M-004 and annually for M-001B and M-002A. The 2,3,7,8-TCDD (TEQs) concentration is the sum of TEQ concentrations of the 17 CDDs/CDFs detected and calculated by using the 2005 WHO TEFs.*

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

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. For M-004 the Discharger is required to conduct quarterly monitoring for 2,3,7,8-TCDD (TEQs) and after one year (four consecutive quarterly sampling events) the Discharger may reduce the frequency of monitoring for 2,3,7,8-TCDD (TEQs) from quarterly to semi-annual upon approval by the Regional Water Board's Executive Officer or designee. The reported 2,3,7,8-TCDD concentration shall be the sum of the dioxin toxicity equivalence (TEQ) concentrations of the 17 chlorinated dibenzo-p-dioxins (CDDs) and chlorinated dibenzofurans (CDFs) detected and calculated with the use of the 2005 World Health Organization (WHO) dioxin toxicity equivalence factors (TEFs).

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:

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.2., above, of this MRP
Total Dissolved Solids	mg/L	Grab	when discharging	"
Coliform Organisms	MPN per 100 ml[22]	Grab	Daily (when discharging)	See Sections I.A.2., above of this MRP
Suspended Solids	mg/L	Grab	Daily (when discharging)	See Sections I.A.2., above of this MRP
Total Hardness	mg/L	Grab	When discharging	See Section I.A.2., above, of this MRP
EPA Priority Pollutants	µg/L	Grab	Annually[23] (See IV.A.3., above)	See Sections I.A.2., above of this MRP

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

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

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.

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 significantly 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[24], 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.

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

[24] *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.*

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[25]	NTU	Recorder	Continuous	--
CT	mg-minutes/L	Recorder	Continuous[26]	--
Coliform Organisms	MPN per 100 mL	Grab	Daily	See Section I.A.2., above, of this MRP
BOD_5	mg/L	Composite	Daily	See Section I.A.2., above, of this MRP
Total Suspended Solids	mg/L	Composite	Daily	See Section I.A.2., above, of this MRP
TDS	mg/L	Composite	Monthly	See Section I.A.2., above, of this MRP

B. Monitoring Recycled Water 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

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

[26] *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.*

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.

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 treated 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. If biosolids are used for land application, including composting, the Discharger must monitor for the pollutants included in Table 1 of 40 CFR Section 503.13 at the frequencies specified in 40 CFR 503.16, which is determined by the amount (tonnage) of biosolids that is land applied or bagged/containerized for distribution, and demonstrate pollutant (40 CFR 503.13), pathogen and vector (40 CFR 503.15) attraction reductions that are specified for land application. In addition, if the biosolids are disposed at a landfill, the Discharger must conduct a paint filter test on a representative biosolids sample to determine if the biosolids are suitable for this type of disposal. The monitoring results must be submitted to EPA Region 9 at the

specified reporting frequency and format. The monitoring report must include details regarding the biosolids sample type (composite or grab) and monitoring location.

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. Storm Water Monitoring

The Discharger shall monitor discharges at Discharge Points S-001, S-002 and S-003 (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[27] 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.

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:

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

(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)[28], 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.

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.

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

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[29] (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:
   a. The Discharger shall conduct effluent monitoring for priority pollutants, with effluent limits in this Order, by using sufficiently sensitive methods as defined in Section III.B. of Attachment D of this Order. The Discharger may select a test method from Attachment H or any other method described in 40 CFR part 136 or approved by U.S. EPA (such as the 1600 series) if authorized by the Regional Water Board, unless a particular method and/or minimum level (ML) is required in the MRP. However, the Discharger must require its testing laboratory to calibrate the analytical system down to the minimum level (ML)[30] that corresponds to the selected method and the ML must be below the effluent limitation. If no ML value is below the effluent limitation, then the lowest ML value and its associated analytical method 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.

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[29] *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.*

[30] *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.*

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)[31], 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 use sufficiently sensitive methods and may select a test method from Attachment H or any other method described in 40 CFR part 136 or approved by U.S. EPA (such as the 1600 series) if authorized by the Regional Water Board, unless a particular method and/or minimum level (ML) is required in the MRP. Also, the Discharger shall require its testing laboratory to quantify constituent concentrations to the lowest achievable ML and MDL that corresponds to the selected method and the ML must be equal or lower that the trigger concentration value listed in Attachment I of this Order. In situations where the priority pollutant trigger concentration value, as specified for that pollutant in Attachment I, is below the ML 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.

5. For non-priority pollutants monitoring, all analytical data shall be reported with method detection limits, as determined by the procedure found in the current edition of 40 CFR 136.

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.

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[31] *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 the current edition of 40 CFR 136, Appendix B.*

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 10 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. The Discharger shall submit Self-Monitoring Reports (SMRs) electronically using the State Water Board's California Integrated Water Quality System (CIWQS) Program Web site (http://www.waterboards.ca.gov/ciwqs/index.html). 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. 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 11 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
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 on September 30

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

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.

   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 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.

6. By April 1 of each year, the Discharger shall submit an annual report through CIWQS, as an attachment, 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. The Discharger shall electronically submit DMRs using the State Water Board's California Integrated Water Quality System (CIWQS) Program Web site (http://www.waterboards.ca.gov/ciwqs/index.html). The CIWQS Web site will provide additional directions for SMR submittal in the event there will be service interruption for electronic submittal.

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.

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

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 Recycling 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		Sylvie Lee, Manager of Planning and Environmental Resources, (909) 993-1646			
Authorized Person to Sign and Submit Reports		Sylvie Lee, Manager of Planning and Environmental Resources, (909) 993-1646			
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		85 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))	12 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 Regional Water Recycling Plants No. 1, 4, and 5 and the Carbon Canyon Water Recycling Facility (CCWRF), appurtenant structures[1], sewer pipeline system, and recycled water distribution system (hereinafter Facilities). The 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 1A, 1B 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 currently regulated pursuant to waste discharge and producer/user water reclamation requirements Order No. R8-2009-0021, as amended by Order No. R8-2010-0008 and Order No. R8-2013-0005. The terms and conditions of the current Order remain in effect until new Waste Discharge Requirements and NPDES permit are adopted pursuant to this Order.

C. The Discharger filed a report of waste discharge and submitted an application for renewal of Waste Discharge Requirements (WDRs) and National Pollutant Discharge Elimination System (NPDES) permit on December 26, 2013. This permit will continue to regulate the discharges from the Facilities to surface waters and will also regulate recycled water use. Each one of the Facilities was inspected as follows: 1) RP-1 on March 17, 2015; 2) RP-4 on March 18, 2015; 3) RP-5 on February 23, 2015; and 4) CCWRF on February 19, 2015. The RP-2 location, which is used as a solids handling facility for RP-5 and CCWRF, was inspected on March 20, 2015. The inspections were conducted to observe operations, collect additional data to develop permit limitations and conditions, and verify compliance.

II. FACILITY DESCRIPTION

A. Description of Wastewater and Biosolids Treatment or Controls

1. Discharger and Service Area

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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.*

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 details). 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 2. Summary of Service Areas & Population Served

Facility	Population Served	Cities/Agency Served
RP-1 & RP-4	560,500	Chino, Fontana, Montclair, Upland, Ontario, Cucamonga Valley Water District, and some unincorporated areas
RP-5	104,400	Chino, Chino Hills, and Ontario; Montclair and Upland via CCWRF
CCWRF	148,700	Chino, Chino Hills, Montclair, Upland, and some unincorporated areas

Attachment B provides a location map, sewer and recycled water pipelines, service area, and well locations for each of the treatment plants.

Attachment C provides the IEUA system-wide influent flow interrelationship diagram, IEUA system-wide water recycling distribution system and treatment flow schematic for each of the facilities.

2. Design Characteristics and Biosolids Treatment

The treatment processes at each Facility are tabulated as follows:

Table 3. 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	Fine-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, 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)	12
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 centrifuge dewatering. Centrifuge concentrate 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.	

3. Recycled Water Uses

The Discharger delivers tertiary treated wastewater through the regional recycled water system at various locations for recycled water 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 33.6 mgd in 2014. 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. The 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. This Order (R8-2015-0036) 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. Storm Water Discharge points

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

Also, storm water flows generated on site at RP- 2 are normally fully contained within the site and the old outfall valve that leads to Chino Creek is normally closed. However, during severe rain storm events, Chino Creek, which is adjacent to RP-2, may rise and flood part of the RP-2 site by the outfall valve location and cause storm water runoff from RP-2 to come into contact with Chino Creek's flood waters. Under these circumstances, a discharge of storm water occurs from RP-2 to Chino Creek. Storm water may be discharged from RP-2 to Reach 1B of Chino Creek through S-003.

Storm water 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. The tertiary treated wastewater effluent from the Facilities is discharged either into Reaches 1A, 1B and 2 of Chino Creek, Reach 1 of Cucamonga Creek, and Prado Park Lake, which are 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 4. Summary of Discharge Points and Receiving Waters

Discharge Point	Latitude	Longitude	Discharging Facility	Effluent Description and Receiving Water	Flow (MGD) & Frequency
001	33°56'39"N	117°38'34"W	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	2.4 mgd 3-year average 2011 – 2013 Continuous discharge
002	34°1'31"N	117°33'56"W	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	9.5 mgd 3-year average Continuous discharge
003	33°57'44"N	117°40'41"W	RP-5	Reach 1B of Chino Creek, a tributary to Reach 3 of Santa Ana River	5.6 mgd 3-year average Continuous discharge
004	33°58'56"N	117°41'48"W	CCWRF	Reach 2 of Chino Creek, a tributary to Reach 3 of Santa Ana River	4.5 mgd 3-year average Continuous discharge

Table 4. Summary of Discharge Points and Receiving Waters

Discharge Point	Latitude	Longitude	Discharging Facility	Effluent Description and Receiving Water	Flow (MGD) & Frequency
005	34°01’29”N	117°35’57”W	RP-1	Recycled water use in areas overlying Chino North “Max Benefit” GMZ	14.3 mgd 3-year average - intermittent
006	34°04’59”N	117°31’35”W	RP-4	Recycled water use in areas overlying Chino North “Max Benefit” GMZ	8.2 mgd 3-year average 2011 – 2013 intermittent
007	33°57'51"N	117°40'24"W	RP-5	Recycled water use in areas overlying Chino North “Max Benefit” GMZ	3.7 MGD 3-year average - intermittent
008	33°58’47”N	117°41’37”W	CCWRF	Recycled water use in areas overlying Chino North “Max Benefit” GMZ	2.0 mgd 3-year average - intermittent
S-001	34°01'36"N	117°35'59"W	RP-1	Storm water runoff to Reach 1 of Cucamonga Creek	Varies during storm event
S-002	34°01'28"N	117°35'58"W	RP-1	Storm water runoff to Reach 1 of Cucamonga Creek	Varies during storm event
S-003	33°57'10"N	117°40'10"W	RP-2	Storm water runoff to Reach 1B of Chino 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. R8-2009-0021 for discharges from RP-1 & RP-4 at Discharge Point 001 and DP-002 and representative monitoring data from January 2010 to May 2015 are as follows:

Table 5. RP-1 Historic Effluent Limitations and Monitoring Data at M-001A and M-001B

Parameter (units)	Effluent Limitation			Monitoring Data (From January 2010 to May 2015)			
	Average Monthly	Average Weekly	Maximum Daily	Highest Average Monthly Discharge	Highest Average Weekly Discharge	Highest Daily Discharge	Highest 12-Month Average
Flow (mgd)				4.7		10.8	Avg: 3.5
pH Daily Average (SU)			Range 6.5-8.5			Range 6.5-8.4	
BOD5 (mg/L)	20	30		<2	<2		
Suspended Solids (mg/L)	20	30		<2	<2		
Coliform Organisms (MPN/100 mL)	23 (1/mo.)	2.2	240		2	13	
Ammonia-Nitrogen (mg/L)	4.5			0.2			

Table 5. RP-1 Historic Effluent Limitations and Monitoring Data at M-001A and M-001B

Parameter (units)	Effluent Limitation			Monitoring Data (From January 2010 to May 2015)			
	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[2]			564			524 combined M-001 and M-002
Total Hardness (mg/L)					minimum 128		
Toxicity, TUc				1.7 Reproductio n			
TIN[3] (mg/L)	12-M, 8 agency-wide						7.3 Note: combined RP-1 and RP-4
Arsenic(µg/L)				<2		<2	
Cadmium(µg/L)				<0.25		<0.25	
Total recoverable Chromium (VI) (µg/L)				2.2		2.2	
Copper (µg/L)				4.7		4.7	
Free Cyanide (µg/L)	4.2		8.5	3		3	
Lead (µg/L)				<0.5		<0.5	
Mercury (µg/L)				<0.05		<0.05	
Nickel (µg/L)				11		11	
Total recoverable Selenium (µg/L)	4.1		8.2	<2		<2	
Silver (µg/L)				0.51		0.51	
Zinc (µg/L)				34		31	
Bis(2-Ethylhexyl) Phthalate (µg/L)	5.9		11.9	<2		<2	
Dichlorobromomethane (µg/L)				36		39	
Chlorodibromomethane (µg/L)				9		11	
Turbidity, NTU	Avg. daily: ≤2	≥5 for no more than 72 minutes	Instant. Max. ≥10			1.9	

2 *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*

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

Table 6. RP-1 & RP-4 Historic Effluent Limitations and Monitoring Data at M-002A and M-002B

Parameter (units)	Effluent Limitation			Monitoring Data (From January 2010 to May 2015)			
	Average Monthly	Average Weekly	Maximum Daily	Highest Average Monthly Discharge	Highest Average Weekly Discharge	Highest Daily Discharge	Highest 12-Month Average
Flow (mgd)				34.1		48.7	Avg: 15.6
pH Daily Average (SU)			Range 6.5-8.5			Range 6.5-8.1	
BOD5 (mg/L)	20	30		<2	<2		
Suspended Solids (mg/L)	20	30		<2	<2		
Coliform Organisms (MPN/100 mL)	23 (1/mo.)	2.2	240		2	4	
Ammonia-Nitrogen (mg/L)	4.5			<0.2			
Total Residual Chlorine (mg/L)			0.1 instant. Max			0.0	
TDS (mg/L)	12-M, 550 agency-wide			564			524 Note: combined RP-1 and RP-4
Total Hardness (mg/L)					minimum 129		
Toxicity, TUc				1.7 Reproduction			
TIN (mg/L)	12-M, 8 agency-wide						7.3 combined M-001 and M-002 only
Arsenic(µg/L)				<2		<2	
Cadmium(µg/L)				<0.25		<0.25	
Total recoverable Chromium (VI) (µg/L)				1.6		1.6	
Copper (µg/L)				4.6		4.6	
Free Cyanide (µg/L)	4.2		8.5	4		4	
Lead (µg/L)				<0.5		<0.5	
Mercury (µg/L)				<0.05		<0.05	
Nickel (µg/L)				4		4	
Total recoverable Selenium (µg/L)	4.1		8.2	<2		<2	
Silver (µg/L)				<0.25		<0.25	
Zinc (µg/L)				34		34	
Bis(2-Ethylhexyl) Phthalate (µg/L)	5.9		11.9	<2		<2	
Dichlorobromo Methane (µg/L)				33		38	
Chlorodibromo Methane (µg/L)				9		9	

2. Effluent limitations/Discharge Specifications contained in the previous Order No. R8-2009-0021 for discharges from RP-5 at Discharge Point 003 and representative monitoring data during the previous permit term are as follows:

Table 7. RP-5 Historic Effluent Limitations and Monitoring Data at M-003

Parameter (units)	Effluent Limitation			Monitoring Data (From January 2010 to May 2015)			
	Average Monthly	Average Weekly	Maximum Daily	Highest Average Monthly Discharge	Highest Average Weekly Discharge	Highest Daily Discharge	Highest 12-Month Average
Flow (mgd)				10.8		15.2	Avg: 7.2
pH Daily Average (SU)			Range 6.5-8.5			Range 6.5-8.2	
BOD5 (mg/L)	20	30		<2	<2		
Suspended Solids (mg/L)	20	30		3	7		
Coliform Organisms (MPN/100 mL)	23 (1/mo.)	2.2	240		2	75	
Ammonia-Nitrogen (mg/L)	4.5			2.3			
Total Residual Chlorine (mg/L)			0.1 Instant. Max.			0.0	
TDS (mg/L)	12-M, 550 agency-wide			585			570
Total Hardness (mg/L)					minimum 131		
Toxicity, TUc				1.4 Reproduction			
TIN (mg/L)	12-M, 8 agency-wide						6.8
Arsenic (µg/L)				2		2	
Cadmium (µg/L)				0.80		0.80	
Total recoverable Chromium (VI) (µg/L)				1.7		1.7	
Copper (µg/L)				9.6		9.6	
Free Cyanide (µg/L)	4.6		7.3	4		4	
Lead (µg/L)				2.1		2.1	
Mercury (µg/L)				<0.05		<0.05	
Nickel (µg/L)				6		6	
Total recoverable Selenium (µg/L)				<2		<2	
Silver (µg/L)				<0.25		<0.25	
Zinc (µg/L)				58		58	
Bis(2-Ethylhexyl) Phthalate (µg/L)				<2		<2	
Bromodichloro Methane (µg/L)	46		92	40		40	
Chlorodibromo Methane (µg/L)				22		22	
2,3,7,8-TCDD (Dioxin), (µg/L)						4.2E-08	

3. Effluent limitations/Discharge Specifications contained in the previous Order No. R8-2009-0021 for discharges from CCWRF at Discharge Point 004 and representative monitoring data during the previous permit term are as follows:

Table 8. CCWRF Historic Effluent Limitations and Monitoring Data at M-004

Parameter (units)	Effluent Limitation			Monitoring Data (From January 2010 to May 2015)			
	Average Monthly	Average Weekly	Maximum Daily	Highest Average Monthly Discharge	Highest Average Weekly Discharge	Highest Daily Discharge	Highest 12-Month Average
Flow (mgd)	11.4			9.8		11.9	Avg: 6.3
pH Daily Average (SU)			Range 6.5-8.5			Range 6.5-8.5	
BOD5 (mg/L)	20	30		<2	<2		
Suspended Solids (mg/L)	20	30		2	<2		
Coliform Organisms (MPN/100 mL)	23 (1/mo.)	2.2	240		7	23	
Ammonia-Nitrogen (mg/L)	4.5			<0.4			
Total Residual Chlorine (mg/L)			0.1 instant. Max			0.0	
TDS (mg/L)	12M, 550 agency-wide			619			588
Total Hardness (mg/L)					minimum 154		
Toxicity, TUc				1.3 Reproduction			
TIN (mg/L)	12M, 8						5.0
Arsenic(µg/L)				2		2	
Cadmium(µg/L)				<0.25		<0.25	
Total recoverable Chromium (VI) (µg/L)				1.8		2.4	
Copper (µg/L)				12.4		14.3	
Free Cyanide (µg/L)	4.3		8.5	4		4	
Lead (µg/L)				<0.5		<0.5	
Mercury (µg/L)				<0.05		<0.05	
Nickel (µg/L)				12		12	
Total recoverable Selenium (µg/L)				2		2	
Silver (µg/L)				0.34		0.34	
Zinc (µg/L)				101		101	

Table 8. CCWRF Historic Effluent Limitations and Monitoring Data at M-004

Parameter (units)	Effluent Limitation			Monitoring Data (From January 2010 to May 2015)			
	Average Monthly	Average Weekly	Maximum Daily	Highest Average Monthly Discharge	Highest Average Weekly Discharge	Highest Daily Discharge	Highest 12-Month Average
Bis(2-Ethylhexyl) Phthalate(µg/L)	5.9		11.9	2		2	
Bromodichloro Methane (µg/L)				53		53	
Chlorodibromo Methane (µg/L)				60		60	
2,3,7,8-TCDD (Dioxin) (µg/L)				<1.83E-07		<1.83E-07	

D. Compliance Summary

Based on a review of effluent monitoring data submitted by the Discharger for the period from January 2010 through May 2015, the following Table shows the compliance summary for each Facility:

Table 9. Compliance Status RP-1, RP-5 and CCWRF

Date	Plant	Parameter	Value	Permit Limit	Reason for Violation	Corrective Measures
01/2010, 03/2010, 10/2011, 02/2012, 03/2012, 06/2014 thru 09/2014, 11/2014, 12/2014, 01/2015	RP-1 (001)	CTOX Reproduction	1.1 TUc to >1.7 TUc	1.0 TUc	During the 2014 exceedances, IEUA was testing a new step-feed configuration to promote denitrification and experienced aeration system failures in their activated sludge process.	Accelerated testing was implemented until the two-month median met the trigger limit value of 1.0 TUc. Consistent toxicity was not experienced to warrant a TRE/TIE and only IITRE was conducted. Also, once the repair work of the aeration system of the activated sludge process was completed or step-feeding configuration testing ended the toxicity ceased.
04/2010, 09/2011, 10/2011, 12/2011, 02/2012, 08/2013, 09/2014, 07/2014	RP-1 (002)	CTOX Reproduction	1.1 TUc to >1.7 TUc	1.0 TUc	During the 2014 exceedances, IEUA was testing a new step-feed configuration to promote denitrification and experienced aeration system failures in their	Accelerated testing was implemented until the two-month median met the trigger limit value of 1.0 TUc. Consistent toxicity was not experienced to warrant a full TRE/TIE and only IITRE was conducted. Also, once the repair work of the aeration system of

Table 9. Compliance Status RP-1, RP-5 and CCWRF

Date	Plant	Parameter	Value	Permit Limit	Reason for Violation	Corrective Measures
					activated sludge process.	the activated sludge process was completed or step-feeding configuration testing ended the toxicity ceased.
06/2011, 10/2011	RP-5 (003)	CTOX Reproduction	1.1 TUc to 1.4 TUc	1.0 TUc	Discharger did not report a cause.	Accelerated testing was implemented until the two-month median met the trigger limit value of 1.0 TUc. Consistent toxicity was not experienced and only IITRE was conducted.
03/2010, 06/2013, 05/2015	CCWRF (004)	CTOX Reproduction	1.1 TUc to >1.7 TUc	1.0 TUc		
12/13/12 thru 12/21/12	CCWRF (004)	Total Coliform	7 MPN/ 100mL	<2.2 MPN/ 100mL as 7-day median weekly average	Discharger alleged effluent sample contamination.	Staff retrained in sample collection and handling techniques

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) and as a master reclamation permit pursuant to Section 13523.1 of Article 4, Chapter 7, Division 7 of the California Water Code. This Order, as a master reclamation permit, includes Producer/User Reclamation 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 existing Facilities that discharge 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 all waterbodies. 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, including Reach 3 of the Santa Ana River.

   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 10. 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.

Table 10. Basin Plan Beneficial Uses

Discharge Point	Receiving Water	Beneficial Uses
		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 & S-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 & S-003	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.
001, 002, 003, 004, 005, 006, 007, 008, S-001, S-002 & S-003	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[4] section 122.44(l) prohibit backsliding in NPDES permits. These anti-backsliding provisions require that effluent limitations in a reissued permit must be at least as stringent as those in the previous permit, with some exceptions in which limitations may be relaxed. All effluent limitations in this Order are at least as stringent as the effluent limitations in the previous Orders for each Facility, except for free cyanide (at all discharge points), total recoverable selenium (at DP-001 & DP-002), bis(2-ethylhexyl) phthalate (at DP-001, DP-002, & DP-004), and dichlorobromomethane (at DP-003) as discussed in Sections IV.C.3 and IV.E.1 of this Fact Sheet. An effluent limit is not included for certain constituents if the reasonable potential analysis for the constituent indicated that there was no potential for the constituent to be present in

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

the discharge. See Section IV.E.1 of this Fact Sheet for a complete explanation of how the anti-backsliding requirements have been met in this Order.

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. The 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 2010 CWA 303(d) list due to nutrients resulting principally from agricultural and dairy runoff during storm events. Reaches 1 & 2 of Chino Creek are also listed due to pathogen indicators, also resulting principally from dairy runoff during storm events. Reach 1 of Cucamonga Creek is listed for cadmium (Cd), lead (Pb), copper (Cu), zinc (Zn), and pathogen indicators, for which sources are unknown at this time. Santa Ana River, Reach 3 is also listed for Cu, Pb, and pathogen indicators. Total maximum daily loads (TMDLs) have not been developed specifically for these waterbodies and for the constituents that impact them.

To address the pathogen indicators and nutrient impact to these waterbodies, 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's wasteload allocation for total inorganic nitrogen (8 mg/L) for surface water discharges. Although TMDLs have not been developed for the metal constituents that impact the receiving water quality of Reach 1 of Cucamonga Creek, water quality based effluent limits have been developed for Cu, Zn, Cd, and Pb for DP-002 and are included in this Order.

E. Other Plans, Polices and Regulations-Not Applicable

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 Order No. R8-2009-0021, as amended by Orders No. R8-2010-0008 and R8-2013-0005, 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, which are summarized in Table 11, below.

Table 11. 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
pH	6.0 (instantaneous minimum)	9.0 (instantaneous maximum)	

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, removal rate, and pH. These effluent limitations, except for pH, have been set for secondary treated wastewater discharges at Discharge Points (DPs) 002, 003, and 004 under 20:1 dilution conditions and are summarized in Table 12, below.

Table 12. Summary of Technology-Based Effluent Limits for Secondary Effluent Discharges Under 20:1 Dilution Conditions at DPs 002, 003 and 004

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
pH (S.U.)*	≥6.5	≤8.5	

Note: * = Basin Plan objectives that are more stringent than the secondary treatment regulations.

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 into the lake under 20:1 dilution is not allowed. For tertiary treated wastewater discharges, the BOD_5 and TSS concentration limits are based on Best Professional Judgment (BPJ) and are summarized in Section IV.D. of this Fact Sheet.

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 waters 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 Chino Creek and Mill Creek.
Hydrogen Ion (pH)	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 as per the Basin Plan.
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 the beneficial uses of surface and groundwaters. The TDS limit for surface water discharges is based on the Basin Plan wasteload allocation for the Discharger of 550 mg/L[5] for flows up to 80 mgd. TDS limits for recycled water use are based on Basin Plan objectives for the impacted groundwater management zones.
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 Basin Plan wasteload allocation of 8.0 mg/L for flows up to 80 mgd.
Total Chlorine Residual	Wastewater disinfection with chlorine usually produces chlorine residual. Chlorine and its reaction products are toxic to aquatic life.

5 *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. For discharges to surface waters, the TDS and TIN wasteload allocations are not contingent on "maximum benefit" objectives or implementation of certain management plans.*

Table 13. Applicable Basin Plan Surface Water Quality Objectives

Constituents	Basis for Limitations
	To protect aquatic life, the chlorine residual in wastewater discharged to inland surface waters is limited to 0.1 mg/L per the Basin Plan.

(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 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 Water Resources Control Board's (SWRCB's) Division of Drinking Water (DDW) has determined that this degree of virus removal is necessary to protect the health of people using these impoundments for water contact recreation. The SWRCB's DDW 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[6]" 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 SWRCB's DDW regarding the applicability of the process design standards (specifically filter rates, CT, and modal contact) for discharges of waste to flowing streams. SWRCB's DDW 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 effluent hardness measurements from each plant, is used to facilitate the

6 *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.*

determination of compliance.

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 for all the parameters applicable for all the Facilities by reviewing the monitoring data submitted by the Discharger for all discharge points to surface waters in accordance with the SIP. Based on the RPA conducted for all parameters applicable to the discharges to surface waters from the Facilities, there's no reasonable potential to cause an excursion above applicable pollutant criteria or objectives for most of the constituents that the Discharger is required to monitor for, except for the following:

Discharge Point 002 (DP-002 to Cucamonga Creek): Total recoverable copper (Cu), zinc (Zn), cadmium (Cd), and lead (Pb) have reasonable potential to contribute to an excursion above applicable pollutant criteria or objectives, for the receiving water, due to the 303(d) listing of Reach 1 of Cucamonga Creek for these four metal constituents and WQBELs are included in this Order. Site specific objectives (SSO) have been developed for Cu, Cd, and Pb for Reach 2, 3, 4 of the Santa Ana River and the perennial portions of some of its tributaries, which include Chino Creek, Cucamonga/Mill Creek, Temescal Creek, and creeks in the Riverside Narrows area. The SSOs for Pb, Cu, and Cd are derived from equations that are hardness dependent and are included in the Basin Plan. Where applicable, the SSO for each metal constituent was used as the criterion continuous concentration (CCC) for freshwater aquatic life's chronic criteria for comparison against effluent and receiving water data for RPA and development of WQBELs. For Zn, CTR criteria was used for comparison against effluent and receiving water data for RPA and development of WQBELs.

New WQBELs are included in this Order for these constituents that were found to have RPA at this discharge point and Order No. R8-2009-0021 does not include limits for these four parameters. Also, The RPA determined that there's no reasonable potential to cause an excursion above applicable pollutant criteria or objectives for total recoverable selenium, bis(2-ethylhexyl) phthalate, and free cyanide at DP-001 and DP-002. Order No. R8-2009-0021 does include WQBELs for these parameters; however, based on the current RPA findings the effluent limits for these parameters are not continued in this Order (see Attachment M for detailed RPAs).

Discharge Point 003 (DP-003 to Chino Creek): 2,3,7,8-TCDD (Dioxin) and chlorodibromomethane were determined to have reasonable potential to cause an excursion above applicable pollutant criteria or objectives. New WQBELs are included in this Order for these constituents that were found to have RPA at this discharge point and Order No. R8-2009-0021 does not include limits for these parameters. The RPA determined that there's no reasonable potential to cause an

excursion above applicable pollutant criteria or objectives for free cyanide and dichlorobromomethane at DP-003. Order No. R8-2009-0021 does include WQBELs for these parameters; however, based on the current RPA findings the effluent limits for these parameters are not continued in this Order (see Attachment M for detailed RPAs).

Discharge Point 004 (DP-004 to Chino Creek): Dichlorobromomethane and chlorodibromomethane were determined to have reasonable potential to cause an excursion above applicable pollutant criteria or objectives. Also, Cu was found to have reasonable potential to contribute to an excursion above applicable pollutant criteria or objectives for the receiving water. The Basin Plan's SSO for Cu, for Chino Creek, was used as the criterion continuous concentration (CCC) for freshwater aquatic life's chronic criteria for comparison against effluent and receiving water data for RPA and development of WQBELs. New WQBELs are included in this Order for these constituents found to have RPA at this discharge point and Order No. R8-2009-0021 does not include limits for these parameters. The RPA determined that there's no reasonable potential to cause an excursion above applicable pollutant criteria or objectives for bis(2-ethylhexyl) phthalate and free cyanide at DP-004. Order No. R8-2009-0021 does include WQBELs for these parameters; however, based on the current RPA findings the effluent limits for these parameters are not continued in this Order (see Attachment M for detailed RPAs).

This Order requires the Discharger to conduct quarterly monitoring for total recoverable selenium, bis(2-ethylhexyl) phthalate, dichlorobromomethane (monthly for DP-003 and DP-004) , and free cyanide at all discharge points and monthly monitoring if the concentration detected during the quarterly monitoring is greater than the concentration specified for that pollutant in Attachment I - Triggers for Monitoring Priority Pollutants (see Section IV.A.3 of Attachment E, MRP).

The following summary tables show the RPA study results for relevant parameters 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 Summary - Comparing DP-001 Effluent Data (MEC) with WQOs

Parameter	unit	Effluent MEC[7]	CTR-Fresh water			Basin Plan	RPA
		Fresh water	CMC/CCC	WQO	Human Health Organisms Only	WQO	
Cyanide, Free*	µg/L	3	22/5.2				No
Bis(2-ethylhexyl) Phthalate*	µg/L	<2			5.9		No
Total recoverable selenium*	µg/L	<2	CCC = 5.0				No

Notes: Lowest effluent hardness of 128 mg/l was used to calculate metals criteria that are hardness dependent.
* = Parameter with effluent limits included in Order No. R8-2009-0021.

[7] *MEC, CMC, CCC are defined in Attachment A.*

Table 15. RP-1 & RP-4 Summary - Comparing DP-002 Effluent (MEC) and Receiving Water (RW) 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	4	22/5.2				No
Bis(2-ethylhexyl) Phthalate*	µg/L	<2			5.9		No
Total recoverable selenium*	µg/L	<2	CCC = 5.0				No
Total recoverable lead	µg/L	$<0.5_{MEC}/<0.5_{RW}$	$9.3_{eff}/4.4_{RW}$ CCC only			$9.3_{eff}/4.4_{RW}$ SSO CCC based	Yes, 303(d) listing
Total recoverable cadmium	µg/L	$<0.25_{MEC}/<0.25_{RW}$	$1.4_{eff}/0.9_{RW}$ CCC only			$1.4_{eff}/0.9_{RW}$ SSO CCC based	Yes, 303(d) listing
Total recoverable copper	µg/L	$4.6_{MEC}/10.2_{RW}$	$14.7_{eff}/8.9_{RW}$ CCC only			$14.7_{eff}/8.9_{RW}$ SSO CCC based	Yes, 303(d) listing
Total recoverable zinc	µg/L	$34_{MEC}/102_{RW}$	91/91 (RW criteria)				Yes, 303(d) listing

Notes: Lowest effluent and receiving water hardness of 129 mg/l and 72 mg/L, respectively, were used to calculate metals criteria that are hardness dependent.
SSO = Site specific objective derived from hardness dependent equations included in Basin Plan.
eff = CCC derived by applying the lowest hardness of the effluent.
* = Parameter with effluent limits included in Order No. R8-2009-0021.

Table 16. RP-5 - Comparing DP-003 Effluent (MEC) and Receiving Water (RW) 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	4	22/5.2				No
2,3,7,8-TCDD (equivalents)	µg/L	0.000000042			0.000000014		Yes
Dichlorobromomethane*	µg/L	40			46		No
Chlorodibromomethane	µg/L	$20_{MEC}/36_{RW}$			34		Yes, exceeded HH criteria in RW

Notes: Lowest effluent hardness of 131 mg/l was used to calculate metals criteria that are hardness dependent.
* = Parameter with effluent limits included in Order No. R8-2009-0021.

Table 17. CCWRF - Comparing DP-004 Effluent (MEC) and Receiving Water (RW) 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	4	22/5.2				No
Bis(2-ethylhexyl) Phthalate*	µg/L	2			5.9		No
Dichlorobromomethane	µg/L	53			46		Yes
Chlorodibromomethane	µg/L	60			34		Yes
Total recoverable copper	µg/L	$14.3_{MEC}/9.8_{RW}$	$17_{eff}/8.5_{RW}$ CCC only			$17_{eff}/8.5_{RW}$ SSO CCC based	Yes, exceeds RW's SSO CCC
2,3,7,8-TCDD (equivalents)	µg/L	<0.00000018			0.000000014		No

Notes: Lowest effluent and receiving water hardness of 154 mg/l and 68 mg/L, respectively, were used to calculate metals criteria that are hardness dependent.
SSO = Site specific objective derived from hardness dependent equations included in Basin Plan.
eff = CCC derived by applying the lowest hardness of the effluent.
* = Parameter with effluent limits included in Order No. R8-2009-0021.

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 surface water discharges.

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 17, 18 and 19. The criteria calculation is based on CTR criteria for freshwater.

The calculated coefficients of variation (CVs) for data sets of total recoverable copper, total recoverable zinc, Dichlorobromomethane, Chlorodibromomethane, are based on standard deviation, number of samples and mean of the data set. Also, the following total-hardness (as $CaCO_3$) dependent formulas (included in the Basin Plan) were used to calculate SSOs applied to the effluent and receiving water:

SSO for Cadmium:
Cd SSO = $\mathbf{0.85}\{e^{[0.7852*ln(TH)-3.490]}\}$

SSO for Copper:
Cu SSO = $\mathbf{0.85}\{e^{[0.8545*ln(TH)-1.465]}\}$

SSO for Lead:
Pb SSO = $\mathbf{0.25}\{e^{[1.273*ln(TH)-3.958]}\}$

The SSOs for cadmium and copper use the hardness-dependent formulas for calculating the objective (national criteria), corrected by the dissolved-to-total (metal) ratio. The SSO for lead is recalculated using the hardness-dependent formula, corrected by the dissolved-to-total ratio. Although the resulting SSOs are expressed as the dissolved form of the metal, we did not apply the ratio and use the total recoverable metal portion of the formula for RPA and WQBELs calculations. For Zn, the total recoverable metal portion of the CTR criteria was used for the development of WQBELs.

Table 18. Calculation of Effluent Limits at DP-002

				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 or SSO		Acute LTA	Chronic LTA		MDEL	AMEL	MDEL	AMEL	MDEL	AMEL
Total recoverable lead* (µg/L)		9.3			4.91	***4.91***	15	8			**15**	**8**
Total recoverable cadmium* (µg/L)		1.4			0.74	***0.74***	2	1			**2**	**1**
				CV = 0.30								
				Acute M	Chronic M		MDEL multiplier	AMEL multiplier	MDEL/AMEL Mult.			
				0.52	0.71		**1.91**	**1.27**	**1.5**			
Total recoverable copper* (µg/L)		15			10.69	***10.69***	20	14			**20**	**14**
				CV = 0.16								
				Acute M	Chronic M		MDEL multiplier	AMEL multiplier	MDEL/AMEL Mult.			
				0.70	0.84		**1.42**	**1.13**	**1.25**			
Total recoverable zinc (µg/L)	150	150		105.7	125.4	***105.7***	150	120			**150**	**120**

Note: * = SSO used for CCC per Basin Plan

Table 19. Calculation of Effluent Limits at DP-003

Chlorodibromomethane (µg/L)			34						68.3	34.0	**68**	**34**
2,3,7,8-TCDD equivalents (µg/L)			0.000000014						2.8E-08	1.4E-08	**2.8E-08**	**1.4E-08**

Table 20. Calculation of Effluent Limits at DP-004

Constituent	CMC	CCC		Acute LTA	Chronic LTA	LTA	MDEL	AMEL	MDEL	AMEL	MDEL	AMEL
				CV =0.36		*LTA*			MDEL	AMEL	MDEL	AMEL
				Acute M	Chronic M		MDEL multiplier	AMEL multiplier	MDEL/AMEL Mult.			
				0.47	0.67		**2.13**	**1.32**	**1.61**			
Total recoverable copper* (µg/L)		17		8.0	11.38	***8.0***	17	11			**17**	**11**
				CV = 0.59			**3.06**	**1.54**	**1.99**			
Chlorodibromomethane (µg/L)			34						67.5	34	**68**	**34**
				CV = 0.27			**1.80**	**1.24**	**1.45**			
Dichlorobromomethane (µg/L)			46						66.9	46	**67**	**46**

Note: * = SSO used for CCC per Basin Plan

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 five years (2010-2014) indicated that the monthly trigger of 1 TUc had been exceeded intermittently without showing a consistent pattern of effluent toxicity that warranted a TRE/TIE.

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, however, the 85% removal rate requirement for BOD and TSS is applied in this Order.

Table 21. Tertiary Effluent BOD_5 and TSS Limits

Constituent	Average Weekly	Average Monthly
Biochemical Oxygen Demand	30 mg/L	20 mg/L
For DP-001 + DP-002 (RP-1+RP-4)	14,512 lbs/day	9,674 lbs/day
For DP-003 (RP-5)	3,753 lbs/day	2,502 lbs/day
For DP-004 (CCWRF)	3,002 lbs/day	2,002 lbs/day
Suspended Solids	30 mg/L	20 mg/L
For DP-001 + DP-002 (RP-1+RP-4)	14,512 lbs/day	9,674 lbs/day
For DP-003 (RP-5)	3,753 lbs/day	2,502 lbs/day
For DP-004 (CCWRF)	3,002 lbs/day	2,002 lbs/day

Note: Mass Rate = (Design flow in mgd from Table 1) (concentration in mg/L) (8.34)

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 the previous Order except for free cyanide, total recoverable selenium, bis(2-ethylhexyl) phthalate, and dichlorobromomethane (at DP-003). This order does not contain effluent limits for free cyanide, total recoverable selenium, bis(2-ethylhexyl) phthalate and Dichlorobromomethane (DP-003). Section 402(o)(2)(A), Anti-Backsliding General Prohibition Exceptions, states that, “A permit with respect to which paragraph (1) applies may be renewed, reissued, or modified to contain a less stringent effluent limitation applicable to a pollutant if…material and substantial alterations or additions to the permitted facility occurred after permit issuance which justify the application of a less stringent effluent limitation.”

The reasonable potential analysis conducted using effluent data for the past five years and five months (January 2010 through May 2015) does not show an exceedance of applicable water quality criteria for free cyanide, total recoverable selenium, bis(2-ethylhexyl) phthalate, and Dichlorobromomethane (at DP-003) (see Section IV.C.3.). IEUA has replaced the USEPA approved ligand addition based free cyanide analytical method. Currently the Discharger uses another USEPA approved method for free cyanide determination that eliminates the interference from sodium hydroxide that was used as a sample preservative. Also, IEUA has consistently eliminated the use of plastic tubing in their automatic sampler systems that is phthalate free, thus eliminating false positives of bis(2-ethylhexyl) phthalate. Furthermore, efforts by IEUA's source control has decreased the loading of selenium and bis(2-ethylhexyl) phthalate entering their wastewater treatment plants and major process control improvements have likely reduced the formation of dichlorobromomethane at RP-5 (DP-003). These substantial alterations or additions completed by IEUA on their Facilities meet the criteria of Section 402(o)(2)(A) of the CWA. Based on these findings, Regional Water Board staff is not proposing to include effluent limits for free cyanide, total recoverable selenium, bis(2-ethylhexyl) phthalate and dichlorobromomethane (at DP-003) in this Order. All other effluent limitations in this Order are at least as stringent as the effluent limitations in the previous order. Therefore, this Order conforms to the anti-backsliding requirements of the CWA.

2. Satisfaction of Antidegradation Policy

The discharges addressed in this Order are existing discharges regulated under Order No. R8-2009-0021. The limitations in this Order adhere to maximum benefit considerations for the Chino North GWMZ that are part of the Basin Plan and are established at levels that assure no degradation of groundwater will occur as the result of recycled water use. The effluent limitations in this Order are at least as stringent as those specified in the prior Order, except for free cyanide, total recoverable selenium, bis(2-ethylhexyl) phthalate and Dichlorobromomethane (DP-003); for which the reasonable potential analysis conducted using effluent data for the past five years and five months (January 2010 through May 2015) does not show an exceedance of applicable water quality criteria. 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 contained in 40 CFR 131.12.

3. Stringency of Requirements for Individual Pollutants

This Order contains technology-based effluent limitations and WQBELs for individual pollutants. Technology-based effluent limitations consist of restrictions on biochemical oxygen demand (BOD_5), total suspended solids (TSS), and percent removal rate that have been set for secondary treated wastewater discharges at Discharge Points (DPs) 002, 003, and 004 under 20:1 dilution conditions, which

implement the minimum, applicable federal technology-based requirements for POTWs. However, for tertiary treated wastewater, the BOD_5 and TSS concentration limits are based on Best Professional Judgment and are more stringent than the federal technology-based secondary treatment standards specified for BOD_5 and TSS concentration limits, however, the 85% removal rate requirement for BOD and TSS is applied. Also, effluent limitations consisting of restrictions on pH, total coliform density, total chlorine residual, ammonia, total inorganic nitrogen and turbidity, which are more stringent than federal technology-based limitations are necessary to implement the Basin Plan objectives. Discharge Point 002 through 004 WQBELs consisting of restrictions on total recoverable Cu, Zn, Cd, and Pb (for DP-002), 2,3,7,8-TCDD equivalents and Chlorodibromomethane (for DP-003), and total recoverable Cu, Dichlorobromomethane and Chlorodibromomethane (for DP-004) are more stringent than federal technology-based limitations and are necessary to meet State water quality standards in the CTR-SIP (See Sections III.C.2 and C.3 of this Fact Sheet for details). All effluent limitations are discussed in this Fact Sheet. Collectively, the restrictions on individual pollutants in this Order are no 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 (See Sections III.C.2 and C.3 of this Fact Sheet for details). 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 (See Sections III.C.1 of this Fact Sheet for details).

4. Summary of Final Effluent Limitations

Table 22. 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	--	--	--	BPJ
Total Suspended Solids	mg/L	20	30	--	--	--	BPJ
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
Total recoverable lead at DP-002	µg/L	8		15			CTR, BP SSO,303 (d) listing

Table 22. Summary of Water Quality-Based Effluent Limits at all DPs

Parameter	Units	Effluent Limitations					Basis
		Average Monthly	Average Weekly	Max Daily	Instant. Max.	Range	
Total recoverable cadmium at DP-002	µg/L	1		2			CTR, BP SSO,303 (d) listing
Total recoverable copper at DP-002	µg/L	14		20			CTR, BP SSO,303 (d) listing
Total recoverable copper at DP-004	µg/L	11		17			CTR, BP SSO
Total recoverable zinc at DP-002	µg/L	120		150			CTR, 303(d) listing
Chlorodibromomethane at DP-003 & DP-004	µg/L	34		68			CTR
2,3,7,8-TCDD at DP-003	pg/L	1.4E-08		2.8E-08			CTR
Dichlorobromomethane At DP 004	µg/L	46		67			CTR

Note: BPJ = Best professional judgment; BP = Basin Plan; CTR = California Toxics Rule

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 California State Water Resources Control Board (SWRCB's) Division of Drinking Water (DDW) 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 SWRCB's DDW pursuant to California Water Code Section 13521.

2. Reclamation specifications in the proposed Order are based on 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. This Order

includes 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 Basin Plan (and shown in Attachment L of this Order) are satisfied by the Discharger and the Chino Basin Watermaster, the TDS discharges from the combined effluent 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 the maximum benefit commitments are not satisfied, then the Chino 1, 2 and 3 "antidegradation" management zones and their respective TDS objectives will be applicable. 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 23. 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 used for irrigation, no nitrogen limit is established for the effluent, since nitrogen is anticipated to be used by plants and should not affect water quality.

I. Storm Water Discharge Requirements

On April 1, 2014, the State Board adopted the General Industrial Storm Water Permit, Order No. 2014-0057-DWQ, NPDES No. CAS000001. This General Permit implements the Final Regulations (40 CFR 122, 123, and 124) for storm water runoff published on November 16, 1990 by USEPA in compliance with Section 402(p) of the Clean Water Act.

Industrial facilities, including POTW sites, are required to obtain NPDES Permits for storm water discharges. The Discharger is required to comply with the State Water Resources Control Board Order No. 2014-0057-DWQ, except that it is not required to file a Notice of Intent with this Regional Water Board or the State Water Board for coverage under Order No. 2014-0057-DWQ. Accordingly, this Order incorporates

requirements for the discharges of storm water from RP-1 and RP-2[8] to surface waters based on those specified in Order No. 2014-0057-DWQ, or any amendments thereto.

1. Attachments J & K show the requirements for implementing a storm water pollution prevention plan and discharge monitoring and reporting program.

2. This Order includes Numeric Action Levels (NALs) for constituents of concern that, if exceeded, may trigger the development and implementation of an exceedance response action (ERA) evaluation by the Discharger. Details regarding applicable NALs and compliance with the NALs and ERAs are included in attachment K of this Order.

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

The Discharger is required to implement the Maximum Benefit programs to protect groundwater management zones impacted by the discharge.

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 Order No. R8-2009-0021, with some 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.

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8 *Storm water discharges from the Discharger's other Facilities are treated onsite (see II. B. 2, above).*

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). The Discharger is required to comply with the monitoring and reporting program 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. R8-2009-0021, with some 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) is an indicator of 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 1.0 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 waters. Requirements are based on the Basin Plan.

2. Groundwater

There are other approved groundwater monitoring programs to monitor groundwater quality.

E. Other Monitoring Requirements

1. **Water Supply Monitoring** - The Discharger is required to collect a sample from each water supply source 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** - 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 monitoring requirements that are consistent with the federal regulations contained in 40 CFR 503.13, 503.15 and 503.16. See Section IX.A of Attachment E.

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 total 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 (See Section VI.C.5.c of this Order and Section IX.D. of Attachment E for further requirements on pretreatment monitoring).

c. The State Water Board issued the Statewide General Waste Discharge Requirements for Sanitary Sewer Systems, Water Quality Order No. 2006-0003-DWQ (General Order) on May 2, 2006, as amended by Order No. WQ 2008-0002-EXEC and Order No. WQ 2013-0058-EXEC. 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. See Section VI.K.2 of this Fact Sheet, Section VI.C.5.b of this Order and Section IX.A of Attachment E for further requirements on biosolids monitoring.

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 and publication in a local newspaper.

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 Julio Lara 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 October 9, 2015.

Julio Lara
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: October 30, 2015
Time: 9:00 A.M.
Location: City of Loma Linda
25541 Barton Road
Loma Linda, CA 92354

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. Please call August Carter for an appointment to review the files or for copying the documents (951-782-7961 or august.carter@waterboards.ca.gov).

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 Julio Lara at (951) 782-4901.

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 by dioxins TEQs)	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.

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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***	***6***		38	Tetratchloroethylene	4.43
2	***Arsenic***	***10***		*39*	***Toluene***	***150***
3	***Beryllium***	***4***		*40*	***1,2,-Trans-dichloroethylene***	***10***
4	Cadmium	0.45		*41*	***1,1,1-Trichloroethane***	***200***
5a	Chromium III	125		42	***1,1,2-Trichloroethane***	***5***
5b	Chromium VI	5.5		*43*	***Trichloroethylene***	***5***
6	Copper	7.5		*44*	***Vinyl Chloride***	***0.5***
7	Lead	4.7		45	2-Chlorophenol	200
8	Mercury	0.026		46	2,4-Dichlorophenol	395
9	Nickel	33		47	2,4-Dimethylphenol	1150
10	Selenium	2.5		48	2-Methy-4,6-Dinitrophenol	383
11	Silver	2.0		49	2,4-Dinitrophenol	7000
12	***Thallium***	***2***		50	2-Nitrophenol	--
13	Zinc	75		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	80		58	Anthracene	55,000
21	***Carbon Tetrachloride***	***0.5***		59	Benzidine	0.00027
22	***Chlorobenzene***	***70***		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) fluoranthene	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 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 State Water Resources Control Board's Division of Drinking Water maximum contaminant levels (MCLs) or Notification Level. Notification Level based trigger is underlined.
3. For hardness dependent metals, the hardness value used is 128 mg/L as the minimum value of effluent flows and for pentachlorophenol, the pH value used is 7.8 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			CONSTITUENT	µg/L
1	***Antimony***	***6***		38	Tetratchloroethylene	4.43
2	***Arsenic***	***10***		***39***	***Toluene***	***150***
3	***Beryllium***	***4***		***40***	***1,2,-Trans-dichloroethylene***	***10***
4	Cadmium	0.7		***41***	***1,1,1-Trichloroethane***	***200***
5a	Chromium III	130		42	***1,1,2-Trichloroethane***	***5***
5b	Chromium VI	5.5		***43***	***Trichloroethylene***	***5***
6	Copper	7.5		***44***	***Vinyl Chloride***	***0.5***
7	Lead	4.7		45	2-Chlorophenol	200
8	Mercury	0.026		46	2,4-Dichlorophenol	395
9	Nickel	33		47	2,4-Dimethylphenol	1150
10	Selenium	2.5		48	2-Methy-4,6-Dinitrophenol	383
11	Silver	3.2		49	2,4-Dinitrophenol	7000
12	***Thallium***	***2***		50	2-Nitrophenol	--
13	Zinc	75		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	80		58	Anthracene	55,000
21	***Carbon Tetrachloride***	***0.5***		59	Benzidine	0.00027
22	***Chlorobenzene***	***70***		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 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 State Water Resources Control Board's Division of Drinking Water maximum contaminant levels (MCLs) or Notification Level. Notification Level based trigger is underlined.
6. For hardness dependent metals, the minimum hardness value of 131 mg/L is used and for pentachlorophenol, the pH value used is 7.8 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			CONSTITUENT	µg/L
1	***Antimony***	***6***		38	Tetratchloroethylene	4.43
2	***Arsenic***	***10***		*39*	***Toluene***	***150***
3	***Beryllium***	***4***		*40*	***1,2,-Trans-dichloroethylene***	***10***
4	Cadmium	0.8		*41*	***1,1,1-Trichloroethane***	***200***
5a	Chromium III	149		42	***1,1,2-Trichloroethane***	***5***
5b	Chromium VI	5.5		*43*	***Trichloroethylene***	***5***
6	Copper	8.5		*44*	***Vinyl Chloride***	***0.5***
7	Lead	6		45	2-Chlorophenol	200
8	Mercury	0.026		46	2,4-Dichlorophenol	395
9	Nickel	38		47	2,4-Dimethylphenol	1150
10	Selenium	2.5		48	2-Methy-4,6-Dinitrophenol	383
11	Silver	4.3		49	2,4-Dinitrophenol	7000
12	***Thallium***	***2***		50	2-Nitrophenol	--
13	Zinc	87		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	80		58	Anthracene	55,000
21	***Carbon Tetrachloride***	***0.5***		59	Benzidine	0.00027
22	***Chlorobenzene***	***70***		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 DP004--Continued

	CONSTITUENT	µg/L
76	1,3-Dichlorobenzene	1,300
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80	Dimethyl phthalate	1,450,000
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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 State Water Resources Control Board's Division of Drinking Water maximum contaminant levels (MCLs) or Notification Level. Notification Level based trigger is underlined.
9. For hardness dependent metals, the minimum hardness value of 154 mg/L is used and for pentachlorophenol, the pH value used is 7.8 standard units.

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

ATTACHMENT J – STORM WATER POLLUTION PREVENTION PLAN (SWPPP)

Storm water flows generated on-site at RP-1 are collected and pumped in 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. Also, storm water flows generated on site at RP-2 are normally fully contained within the site and the old outfall valve that leads to Chino Creek is normally closed. However, during severe rain storm events, Chino Creek, which is adjacent to RP-2, may rise and flood part of the RP-2 site by the outfall valve location and cause storm water runoff from RP-2 to come into contact with Chino Creek's flood waters. Under these circumstances, a discharge of storm water occurs from RP-2 to Chino Creek. Storm water may be discharged from RP-2 to Reach 1B of Chino Creek through S-003.

Storm water 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. Also, storm water flows generated on-site at RP-5 and CCWRF plant are collected and pumped to the liquid process stream for treatment. This Order designates three storm water discharge monitoring points as STORM-001, STORM-002 and STORM-003, which are detailed in Table 2 of Attachment E of this Order.

A. SWPPP Elements

By November 18, 2015, the Discharger shall update the site-specific Storm Water Pollution Prevention Plan (SWPPP) for the Facility. The updated SWPPP shall contain the following elements:

1. Facility name and contact information;
2. Site map;
3. List of industrial materials;
4. Description of potential pollution sources;
5. Assessment of potential pollutant sources;
6. Minimum Best Management Practices (BMPs);
7. Advanced BMPs, if applicable;
8. Monitoring implementation plan;
9. Annual Comprehensive Facility Compliance Evaluation (Annual Evaluation); and,

10. The date that the SWPPP was initially prepared and the date of each SWPPP amendment, if applicable.

B. SWPPP Implementation and Revisions

The Discharger shall implement the updated SWPPP for the Facility by November 18, 2015. The Discharger shall also revise the SWPPP whenever necessary.

C. SWPPP Performance Standards

1. The Discharger shall ensure a SWPPP is prepared to:

   a. Identify and evaluate all sources of pollutants that may affect the quality of storm water discharges;

   b. Identify and describe the minimum BMPs (see Section H.1 below) and any advanced BMPs (see Section H.2 below) implemented to reduce or prevent pollutants in storm water discharges; and,

   c. Identify and describe conditions or circumstances which may require future revisions to be made to the SWPPP.

2. The Discharger shall update its SWPPP in accordance with all applicable SWPPP requirements of this Attachment. A copy of the SWPPP shall be maintained at the Facility.

D. Planning and Organization

1. Pollution Prevention Team

   The Discharger must have a Pollution Prevention Team established and responsible for assisting with the implementation of the requirements in this Attachment. The Discharger shall include in the SWPPP detailed information about its Pollution Prevention Team including:

   a. The positions within the Facility organization (collectively, team members) who assist in implementing the SWPPP;

   b. The responsibilities, duties, and activities of each of the team members; and,

   c. The procedures to identify alternate team members to implement the SWPPP when the regularly assigned team members are temporarily unavailable (due to vacation, illness, out of town business, or other absences).

2. Other Requirements and Existing Facility Plans

   a. The Discharger shall ensure its SWPPP is developed, implemented, and revised as necessary to be consistent with any applicable municipal, state, and federal requirements that pertain to the requirements in this Order.

   b. The Discharger may include in its SWPPP the specific elements of existing plans, procedures, or regulatory compliance documents that contain storm water-related BMPs or otherwise relate to the requirements of this Order.

   c. The Discharger shall properly reference the original sources for any elements of existing plans, procedures, or regulatory compliance documents included as part of their SWPPP and shall maintain a copy of the documents at the Facility as part of the SWPPP.

   d. The Discharger shall document in its SWPPP the Facility's scheduled operating hours. Scheduled Facility operating hours that would be considered irregular (temporary, intermittent, seasonal, weather dependent, etc.) shall also be documented in the SWPPP.

E. Site Map

1. The Discharger shall prepare a site map that includes notes, legends, a north arrow, and other data as appropriate to ensure the map is clear, legible and understandable.

2. The Discharger may provide the required information on multiple site maps.

3. The Discharger shall include the following information on the site map:

   a. The Facility boundary, storm water drainage areas within the Facility boundary, and portions of any drainage area impacted by discharges from surrounding areas. Include the flow direction of each drainage area, on-facility surface water bodies, areas of soil erosion, and location(s) of nearby water bodies (such as rivers, lakes, wetlands, etc.) or municipal storm drain inlets that may receive the Facility's storm water discharges;

   b. Locations of storm water collection and conveyance systems, associated discharge locations, and direction of flow. Include any sample locations if different than the identified discharge locations;

   c. Locations and descriptions of structural control measures[1] that affect storm water discharges, and/or run-on;

[1] Examples of structural control measures are catch basins, berms, detention ponds, secondary containment, oil/water separators, diversion barriers, etc.

d. Identification of all impervious areas of the Facility, including paved areas, buildings, covered storage areas, or other roofed structures;

e. Locations where materials are directly exposed to precipitation and the locations where identified significant spills or leaks (see Section G.1.d below) have occurred; and

f. Areas of industrial activity subject to this Order. Identify all industrial 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 material reuse areas, and other areas of industrial activity that may have potential pollutant sources.

F. List of Industrial Materials

The Discharger shall ensure the SWPPP includes a list of industrial materials handled at the Facility, and the locations where each material is stored, received, shipped, and handled, as well as the typical quantities and handling frequency.

G. Potential Pollutant Sources

1. Description of Potential Pollutant Sources

a. Industrial Processes

The Discharger shall ensure the SWPPP describes each industrial process including: manufacturing, cleaning, maintenance, recycling, disposal, and any other activities related to the process. The type, characteristics, and approximate quantity of industrial materials used in or resulting from the process shall be included. Areas protected by containment structures and the corresponding containment capacity shall be identified and described.

b. Material Handling and Storage Areas

The Discharger shall ensure the SWPPP describes each material handling and storage area, including: the type, characteristics, and quantity of industrial materials handled or stored; the shipping, receiving, and loading procedures; the spill or leak prevention and response procedures; and the areas protected by containment structures and the corresponding containment capacity.

c. Dust and Particulate Generating Activities

The Discharger shall ensure the SWPPP describes all industrial activities that generate a significant amount of dust or particulate that may be deposited within the Facility boundaries. The SWPPP shall describe such industrial

activities, including the discharge locations, the source type, and the characteristics of the dust or particulate pollutant.

d. Significant Spills and Leaks

The Discharger shall:

i. Evaluate the Facility for areas where spills and leaks can likely occur;

ii. Ensure the SWPPP includes:

a) A list of any industrial materials that have spilled or leaked in significant quantities and have discharged from the Facility's storm water conveyance system within the previous five-year period;

b) A list of any toxic chemicals identified in 40 Code of Federal Regulations section 302 that have been discharged from the facilities' storm water conveyance system as reported on the United States Environmental Protection Agency (USEPA) Form R, as well as oil and hazardous substances in excess of reportable quantities (40 CFR sections 110, 117, and 302) that have discharged from the Facility's storm water conveyance system within the previous five-year period;

c) A list of any industrial materials that have spilled or leaked in significant quantities and had the potential to be discharged from the Facility's storm water conveyance system within the previous five-year period; and,

iii. Ensure that for each discharge or potential discharge listed above the SWPPP includes the location, characteristics, and approximate quantity of the materials spilled or leaked; approximate quantity of the materials discharged from the Facility's storm water conveyance system; the cleanup or remedial actions that have occurred or are planned; the approximate remaining quantity of materials that have the potential to be discharged; and the preventive measures taken to ensure spills or leaks of the material do not reoccur.

e. Non Storm Water Discharges (NSWDs)

The Discharger shall:

i. Ensure the SWPPP includes an evaluation of the Facility that identifies all NSWDs, sources, and drainage areas;

ii. Ensure the SWPPP includes an evaluation of all drains (inlets and outlets) that identifies connections to the storm water conveyance system;

iii. Ensure the SWPPP includes a description of how all unauthorized NSWDs have been eliminated; and,

iv. Ensure all NSWDs are described in the SWPPP. This description shall include the source, quantity, frequency, and characteristics of the NSWDs, associated drainage area, and whether it is an authorized or unauthorized NSWD.

f. Erodible Surfaces

The Discharger shall ensure the SWPPP includes a description of the Facility locations where soil erosion may be caused by industrial activity, contact with storm water, authorized and unauthorized NSWDs, or run-on from areas surrounding the Facility.

2. Assessment of Potential Pollutant Sources

a. The Discharger shall ensure that the SWPPP includes a narrative assessment of all areas of industrial activity with potential industrial pollutant sources. At a minimum, the assessment shall include:

i. The areas of the Facility with likely sources of pollutants in industrial storm water discharges and authorized NSWDs;

ii. The pollutants likely to be present in industrial storm water discharges and authorized NSWDs;

iii. The approximate quantity, physical characteristics (e.g., liquid, powder, solid, etc.), and locations of each industrial material handled, produced, stored, recycled, or disposed;

iv. The degree to which the pollutants associated with those materials may be exposed to, and mobilized by contact with, storm water;

v. The direct and indirect pathways by which pollutants may be exposed to storm water or authorized NSWDs;

vi. All sampling, visual observation, and inspection records;

vii. The effectiveness of existing BMPs to reduce or prevent pollutants in industrial storm water discharges and authorized NSWDs;

viii. The estimated effectiveness of implementing, to the extent feasible, minimum BMPs to reduce or prevent pollutants in industrial storm water discharges and authorized NSWDs; and,

b. Based upon the assessment above, the Discharger shall identify in the SWPPP any areas of the Facility where the minimum BMPs described in subsection H.1 below will not adequately reduce or prevent pollutants in storm water discharges in compliance with the storm water discharge specifications of this Order. Dischargers shall identify any advanced BMPs, as described in subsection H.2 below, for those areas. Please see Table A of this attachment for an assessment example pertaining to a vehicle and equipment fueling area.

H. Best Management Practices (BMPs)

1. Minimum BMPs

The Discharger shall, to the extent feasible, implement and maintain all of the following minimum BMPs to reduce or prevent pollutants in storm water discharges.[2]

a. Good Housekeeping

The Discharger shall:

i. Observe all outdoor areas associated with industrial activity; including storm water discharge locations, drainage areas, conveyance systems, waste handling/disposal areas, and perimeter areas impacted by off-facility materials or storm water run-on to determine housekeeping needs. Any identified debris, waste, spills, tracked materials, or leaked materials shall be cleaned and disposed of properly;

ii. Minimize or prevent material tracking;

iii. Minimize dust generated from industrial materials or activities;

iv. Ensure that all Facility areas impacted by rinse/wash waters are cleaned as soon as possible;

v. Cover all stored industrial materials that can be readily mobilized by contact with storm water;

vi. Contain all stored non-solid industrial materials or wastes (e.g., particulates, powders, shredded paper, etc.) that can be transported or dispersed by the wind or contact with storm water;

vii. Prevent disposal of any rinse/wash waters or industrial materials into the storm water conveyance system;

[2] For the purposes of this Order, the requirement to implement BMPs “to the extent feasible” requires the Discharger to select, design, install and implement BMPs that reduce or prevent discharges of pollutants in the storm water discharge in a manner that reflects best industry practice considering technological availability and economic practicability and achievability.

viii. Minimize storm water discharges from non-industrial areas (e.g., storm water flows from employee parking area) that contact industrial areas of the Facility; and,

ix. Minimize authorized NSWDs from non-industrial areas (e.g., potable water, fire hydrant testing, etc.) that contact industrial areas of the Facility.

b. Preventive Maintenance

The Discharger shall:

i. Identify all equipment and systems used outdoors that may spill or leak pollutants;

ii. Observe the identified equipment and systems to detect leaks, or identify conditions that may result in the development of leaks;

iii. Establish an appropriate schedule for maintenance of identified equipment and systems; and,

iv. Establish procedures for prompt maintenance and repair of equipment, and maintenance of systems when conditions exist that may result in the development of spills or leaks.

c. Spill and Leak Prevention and Response

The Discharger shall:

i. Establish procedures and/or controls to minimize spills and leaks;

ii. Develop and implement spill and leak response procedures to prevent industrial materials from discharging through the storm water conveyance system. Spilled or leaked industrial materials shall be cleaned promptly and disposed of properly;

iii. Identify and describe all necessary and appropriate spill and leak response equipment, location(s) of spill and leak response equipment, and spill or leak response equipment maintenance procedures; and,

iv. Identify and train appropriate spill and leak response personnel.

d. Material Handling and Waste Management

The Discharger shall:

i. Prevent or minimize handling of industrial materials or wastes that can be readily mobilized by contact with storm water during a storm event;

ii. Contain all stored non-solid industrial materials or wastes (e.g., particulates, powders, shredded paper, etc.) that can be transported or dispersed by the wind or contact with storm water;

iii. Cover industrial waste disposal containers and industrial material storage containers that contain industrial materials when not in use;

iv. Divert run-on and storm water generated from within the Facility away from all stockpiled materials;

v. Clean all spills of industrial materials or wastes that occur during handling in accordance with the spill response procedures (see Section H.1.c above); and,

vi. Observe and clean as appropriate, any outdoor material or waste handling equipment or containers that can be contaminated by contact with industrial materials or wastes.

e. Erosion and Sediment Controls

For each erodible surface Facility location identified in the SWPPP (see Section G.1.f above), the Discharger shall:

i. Implement effective wind erosion controls;

ii. Provide effective stabilization for inactive areas, finished slopes, and other erodible areas prior to a forecasted storm event;

iii. Maintain effective perimeter controls and stabilize all site entrances and exits to sufficiently control discharges of erodible materials from discharging or being tracked off the site;

iv. Divert run-on and storm water generated from within the Facility away from all erodible materials; and,

v. If sediment basins are implemented, ensure compliance with the design storm standards as described in Section H.5 below.

f. Employee Training Program

The Discharger shall:

i. Ensure that all team members implementing the various compliance activities of this Order are properly trained to implement the requirements of this Attachment, including but not limited to: BMP implementation, BMP effectiveness evaluations, visual observations, and monitoring activities. If a Discharger enters Level 1 status, appropriate team members shall be trained by a QISP;

ii. Prepare or acquire appropriate training manuals or training materials;

iii. Identify which personnel need to be trained, their responsibilities, and the type of training they shall receive;

iv. Provide a training schedule; and,

v. Maintain documentation of all completed training classes and the personnel that received training in the SWPPP.

g. Quality Assurance and Record Keeping

The Discharger shall:

i. Develop and implement management procedures to ensure that appropriate staff implements all elements of the SWPPP, including the Monitoring Implementation Plan;

ii. Develop a method of tracking and recording the implementation of BMPs identified in the SWPPP; and

iii. Maintain the BMP implementation records, training records, and records related to any spills and clean-up related response activities for a minimum of five (5) years.

2. Advanced BMPs

a. In addition to the minimum BMPs described in Section H.1 above, the Discharger shall, to the extent feasible, implement and maintain any advanced BMPs identified in Section G.2.b, necessary to reduce or prevent discharges of pollutants in its storm water discharge in a manner that is required to comply with the effluent limitations established for this Order.

b. Advanced BMPs may include one or more of the following BMPs:

i. Exposure Minimization BMPs

These include storm resistant shelters (either permanent or temporary) that prevent the contact of storm water with the identified industrial materials or area(s) of industrial activity.

ii. Storm Water Containment and Discharge Reduction BMPs

These include BMPs that divert, infiltrate, reuse, contain, retain, or reduce the volume of storm water runoff. Dischargers are encouraged to utilize BMPs that infiltrate or reuse storm water where feasible.

iii. Treatment Control BMPs

This is the implementation of one or more mechanical, chemical, biologic, or any other treatment technology that will meet the treatment design standard.

iv. Other Advanced BMPs

Any additional BMPs not described in subsections b.i through iii above that are necessary to meet the effluent limitations of this Order.

3. BMP Descriptions

a. The Discharger shall ensure that the SWPPP identifies each BMP being implemented at the Facility, including:

i. The pollutant(s) that the BMP is designed to reduce or prevent in industrial storm water discharges;

ii. The frequency, time(s) of day, or conditions when the BMP is scheduled for implementation;

iii. The locations within each area of industrial activity or industrial pollutant source where the BMP shall be implemented;

iv. The individual and/or position responsible for implementing the BMP;

v. The procedures, including maintenance procedures, and/or instructions to implement the BMP effectively;

vi. The equipment and tools necessary to implement the BMP effectively; and,

vii. The BMPs that may require more frequent visual observations beyond the monthly visual observations.

b. The Discharger shall identify any BMPs described in subsection a above that are implemented in lieu of any of the minimum or applicable advanced BMPs.

4. BMP Summary Table

The Discharger shall prepare a table summarizing each identified area of industrial activity, the associated industrial pollutant sources, the industrial pollutants, and the BMPs being implemented.

5. Design Storm Standards for Treatment Control BMPs

All new treatment control BMPs employed by the Discharger to comply with Section H.2 Advanced BMPs and new sediment basins installed after the effective date of this order shall be designed to comply with design storm standards in this Section, except as provided in an Industrial Activity BMP Demonstration (Section C.4.b.i. of Attachment K). A Factor of Safety shall be incorporated into the design of all treatment control BMPs to ensure that storm water is sufficiently treated throughout the life of the treatment control BMPs. The design storm standards for treatment control BMPs are as follows:

a. Volume-based BMPs: The Discharger, at a minimum, shall calculate[3] the volume to be treated using one of the following methods:

    i. The volume of runoff produced from an 85th percentile 24-hour storm event, as determined from local, historical rainfall records;

    ii. The volume of runoff produced by the 85th percentile 24-hour storm event, determined as the maximized capture runoff volume for the facility, from the formula recommended in the Water Environment Federation's Manual of Practice;[4] or,

    iii. The volume of annual runoff required to achieve 80% or more treatment, determined in accordance with the methodology set forth in the latest edition of California Stormwater Best Management Practices Handbook[5], using local, historical rainfall records.

b. Flow-based BMPs: The Discharger shall calculate the flow needed to be treated using one of the following methods:

    i. The maximum flow rate of runoff produced from a rainfall intensity of at least 0.2 inches per hour for each hour of a storm event;

    ii. The maximum flow rate of runoff produced by the 85th percentile hourly rainfall intensity, as determined from local historical rainfall records, multiplied by a factor of two; or,

    iii. The maximum flow rate of runoff, as determined using local historical rainfall records, that achieves approximately the same reduction in total pollutant loads as would be achieved by treatment of the 85th percentile hourly rainfall intensity multiplied by a factor of two.

[3] All hydrologic calculations shall be certified by a California licensed professional engineer in accordance with the Professional Engineers Act (Bus. & Prof. Code § 6700, et seq).

[4] Water Environment Federation (WEF). Manual of Practice No. 23/ ASCE Manual of Practice No. 87, cited in chapter 5 (1998 Edition) and Cited in Chapter 3 (2012 Edition) .

[5] California Stormwater Quality Association. Stormwater Best Management Practice New Development and Redevelopment Handbook. < http://www.casqa.org/ >. [as of July 3, 2013].

TABLE A: Five Phases for Developing and Implementing an Industrial Storm Water Pollution Prevention Plan (SWPPP)

PLANNING AND ORGANIZATION

*Form Pollution Prevention Team
*Review other Facility plans

ASSESSMENT

*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 risk

Best Management Practice (BMP) IDENTIFICATION

*Identify minimum required BMPs
*Identify any advanced BMPs

IMPLEMENTATION

*Train employees for the Pollution Prevention Team
*Implement BMPs
*Collect and review records

EVALUATION / MONITORING

*Conduct annual Facility evaluation (Annual Evaluation)
*Review monitoring information
*Evaluate BMPs
*Review and revise SWPPP

TABLE B: Example - Assessment of Potential Industrial Pollution Sources and Corresponding BMPs Summary

Area	Activity	Pollutant Source	Industrial Pollutant	BMPs
Vehicle and Equipment Fueling	Fueling	Spills and leaks during delivery	Fuel oil	-Use spill and overflow protection
		Spills caused by topping off fuel tanks	Fuel oil	-Train employees on proper fueling, cleanup, and spill response techniques
		Hosing or washing down fuel area	Fuel oil	-Use dry cleanup methods rather than hosing down area -Implement proper spill prevention control program
		Leaking storage tanks	Fuel oil	-Inspect fueling areas regularly to detect problems
		Rainfall running off fueling area, and rainfall running onto and off fueling area	Fuel oil	-Minimize run-on of storm water into the fueling area, cover fueling area

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ATTACHMENT K – STORM WATER MONITORING AND REPORTING REQUIREMENTS

Storm water flows generated on-site at RP-1 are collected and pumped in 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. Also, storm water flows generated on site at RP- 2 are normally fully contained within the site and the old outfall valve that leads to Chino Creek is normally closed. However, during severe rain storm events, Chino Creek, which is adjacent to RP-2, may rise and flood part of the RP-2 site by the outfall valve location and cause storm water runoff from RP-2 to come into contact with Chino Creek's flood waters. Under these circumstances, a discharge of storm water occurs from RP-2 to Chino Creek. Storm water may be discharged from RP-2 to Reach 1B of Chino Creek through S-003.

Storm water 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. Also, storm water flows generated on-site at RP-5 and CCWRF plant are collected and pumped to the liquid process stream for treatment. This Order designates three storm water discharge monitoring points as STORM-001, STORM-002 and STORM-003, which are detailed in Table 2 of Attachment E of this Order.

A. MONITORING IMPLEMENTATION PLAN

The Discharger shall prepare a Monitoring Implementation Plan in accordance with the requirements of this Attachment. The Monitoring Implementation Plan shall be included in the SWPPP and shall include the following items:

1. An identification of team members assigned to conduct the monitoring requirements;

2. A description of the following:

   a. Discharge locations;

   b. Visual observation procedures; and,

   c. Visual observation response procedures related to monthly visual observations and sampling event visual observations.

3. Justifications for any of the following that is applicable to the facility:

   a. Alternative discharge locations in accordance with Section B.3.c.;

   b. Representative Sampling Reduction in accordance with Section B.3.d.; or,

c. Qualified Combined Samples in accordance with Section B.3.e.

4. Procedures for field instrument calibration instructions, including calibration intervals specified by the manufacturer; and,

5. An example Chain of Custody form used when handling and shipping water quality samples to the lab.

B. MONITORING

1. Visual Observations

a. Monthly Visual Observations

i. At least once per calendar month, the Discharger shall visually observe each drainage area for the following:

a) The presence or indications of prior, current, or potential unauthorized NSWDs and their sources;

b) Authorized NSWDs (as defined in Section IV of the Statewide Industrial General Permit Order No. 2014-0057-DWQ), sources, and associated BMPs to ensure compliance with Section IV.B.3 of the Statewide Industrial General Permit Order No. 2014-0057-DWQ; and,

c) Outdoor industrial equipment and storage areas, outdoor industrial activities areas, BMPs, and all other potential source of industrial pollutants.

ii. The monthly visual observations shall be conducted during daylight hours of scheduled facility operating hours and on days without precipitation.

iii. The Discharger shall provide an explanation in the Annual Report for uncompleted monthly visual observations.

b. Sampling Event Visual Observations

Sampling event visual observations shall be conducted at the same time sampling occurs at a discharge location. At each discharge location where a sample is obtained, the Discharger shall observe the discharge of storm water associated with industrial activity.

i. The Discharger shall ensure that visual observations of storm water discharged from containment sources (e.g. secondary containment or storage ponds) are conducted at the time that the discharge is sampled.

ii. Any Discharger employing volume-based or flow-based treatment BMPs shall sample any bypass that occurs while the visual observations and sampling of storm water discharges are conducted.

iii. The Discharger shall visually observe and record the presence or absence of floating and suspended materials, oil and grease, discolorations, turbidity, odors, trash/debris, and source(s) of any discharged pollutants.

iv. In the event that a discharge location is not visually observed during the sampling event, the Discharger shall record which discharge locations were not observed during sampling or that there was no discharge from the discharge location.

v. The Discharger shall provide an explanation in the Annual Report for uncompleted sampling event visual observations.

c. Visual Observation Records

The Discharger shall maintain records of all visual observations. Records shall include the date, approximate time, locations observed, presence and probable source of any observed pollutants, name of person(s) that conducted the observations, and any response actions and/or additional SWPPP revisions necessary in response to the visual observations.

d. The Discharger shall revise BMPs as necessary when the visual observations indicate pollutant sources have not been adequately addressed in the SWPPP.

2. Sampling and Analysis

a. A Qualifying Storm Event (QSE) is a precipitation event that:

i. Produces a discharge for at least one drainage area; and,

ii. Is preceded by 48 hours with no discharge from any drainage area.

b. The Discharger shall collect and analyze storm water samples from two (2) QSEs within the first half of each reporting year (July 1 to December 31), and two (2) QSEs within the second half of each reporting year (January 1 to June 30).

c. Except as provided in Section B.3.d. (Representative Sampling Reduction), samples shall be collected from each drainage area at all discharge locations. The samples must be:

i. Representative of storm water associated with industrial activities and any commingled authorized NSWDs; or,

ii. Associated with the discharge of contained storm water.

d. Samples from each discharge location shall be collected within four (4) hours of:

   i. The start of the discharge; or,

   ii. The start of facility operations if the QSE occurs within the previous 12-hour period (e.g., for storms with discharges that begin during the night for facilities with day-time operating hours). Sample collection is required during scheduled facility operating hours and when sampling conditions are safe in accordance with Section B.3.f.i.b).

e. The Discharger shall analyze all collected samples for the following parameters:

   i. Total suspended solids (TSS) and oil and grease (O&G);

   ii. pH (see Section B.3.b.);

   iii. Additional parameters identified by the Discharger on a facility-specific basis that serve as indicators of the presence of all industrial pollutants identified in the pollutant source assessment (Section G.2. of Attachment J of this Order). These additional parameters may be modified (added or removed) in accordance with any updated SWPPP pollutant source assessment; and

   iv. Additional parameters required by the Regional Water Board.

f. The Discharger shall ensure that the collection, preservation and handling of all storm water samples are in accordance with Attachment E of this Order.

g. The Discharger shall select corresponding Numeric Action Levels (NALs), analytical test methods, and reporting units from the list provided in Table 1 below. Dischargers may propose an analytical test method for any parameter or pollutant that does not have an analytical test method specified in Table 1. Dischargers may also propose analytical test methods with substantially similar or more stringent method detection limits than existing approved analytical test methods.

h. Samples from different discharge locations shall not be combined or composited except as allowed in Section B.3.e. (Qualified Combined Samples).

i. The Discharger shall ensure that all laboratory analyses are conducted according to Attachment E of this Order.

j. Sampling Analysis Reporting

i. The Discharger shall submit all sampling and analytical results for all individual or Qualified Combined Samples via CIWQS within 30 days of obtaining all results for each sampling event.

ii. The Discharger shall provide the method detection limit when an analytical result from samples taken is reported by the laboratory as a “non-detect" or less than the method detection limit. A value of zero shall not be reported.

iii. The Discharger shall provide the analytical result from samples taken that is reported by the laboratory as below the minimum level (often referred to as the reporting limit) but above the method detection limit.

Table 1 Parameter NAL Values, Test Methods, and Reporting Units

Parameter	Units	Annual NAL	Instantaneous Maximum NAL	Required Test Method
pH	pH units	N/A	≥6.5 and ≤8.5	See Section B.3.b.
Total Suspended Solids (TSS)	mg/l	100	400	SM 2540-D
Oil & Grease (O&G), Total	mg/L	15	25	EPA 1664A
Total Recoverable Zinc*	mg/l	0.26	N/A	EPA 200.8
Total Recoverable Copper*	mg/l	0.0332	N/A	EPA 200.8
Total Recoverable Lead*	mg/l	0.262	N/A	EPA 200.8
Total Recoverable Cadmium*	mg/l	0.0053	N/A	EPA 200.8

Note: * = The concentration of this metal is hardness dependent and the NAL is the highest value by USEPA based on their hardness table in the 2008 MSGP.

3. Methods and Exceptions

a. The Discharger shall comply with the monitoring methods in this Order.

b. pH Methods

i. The Discharger shall analyze for pH using methods in accordance with 40 Code of Federal Regulations 136 or use a calibrated portable instrument for pH.

ii. Dischargers using a calibrated portable instrument for pH shall ensure that all field measurements are conducted in accordance with the accompanying manufacturer’s instructions.

c. Alternative Discharge Locations

i. The Discharger is required to identify, when practicable, alternative discharge locations for any discharge locations identified in accordance with Section B.2.c. if the facility's discharge locations are:

a) Affected by storm water run-on from surrounding areas that cannot be controlled; and/or,

b) Difficult to observe or sample (e.g. submerged discharge outlets, dangerous discharge location accessibility).

ii. The Discharger shall submit and certify to this Regional Water Board any alternative discharge location or revisions to the alternative discharge locations in the Monitoring Implementation Plan.

d. Representative Sampling Reduction

i. The Discharger may reduce the number of locations to be sampled in each drainage area (e.g., roofs with multiple downspouts, loading/unloading areas with multiple storm drains) if the industrial activities, BMPs, and physical characteristics (grade, surface materials, etc.) of the drainage area for each location to be sampled are substantially similar to one another. To qualify for the Representative Sampling Reduction, the Discharger shall provide a Representative Sampling Reduction justification in the Monitoring Implementation Plan section of the SWPPP.

ii. The Representative Sampling Reduction justification shall include:

a) Identification and description of each drainage area and corresponding discharge location(s);

b) A description of the industrial activities that occur throughout the drainage area;

c) A description of the BMPs implemented in the drainage area;

d) A description of the physical characteristics of the drainage area;

e) A rationale that demonstrates that the industrial activities and physical characteristics of the drainage area(s) are substantially similar; and,

f) An identification of the discharge location(s) selected for representative sampling, and rationale demonstrating that the selected location(s) to be sampled are representative of the discharge from the entire drainage area.

iii. A Discharger that satisfies the conditions of subsection d.ii.a) through e) above shall submit and certify to this Regional Water Board the revisions to the

Monitoring Implementation Plan that includes the Representative Sampling Reduction justification.

iv. Upon submittal of the Representative Sampling Reduction justification, the Discharger may reduce the number of locations to be sampled in accordance with the Representative Sampling Reduction justification. The Regional Water Board may reject the Representative Sampling Reduction justification and/or request additional supporting documentation. In such instances, the Discharger is ineligible for the Representative Sampling Reduction until the Regional Water Board approves the Representative Sampling Reduction justification.

e. Qualified Combined Samples

i. The Discharger may authorize an analytical laboratory to combine samples of equal volume from as many as four (4) discharge locations if the industrial activities, BMPs, and physical characteristics (grade, surface materials, etc.) within each of the drainage areas are substantially similar to one another.

ii. The Qualified Combined Samples justification shall include:

a) Identification and description of each drainage area and corresponding discharge locations;

b) A description of the BMPs implemented in the drainage area;

c) A description of the industrial activities that occur throughout the drainage area;

d) A description of the physical characteristics of the drainage area; and,

e) A rationale that demonstrates that the industrial activities and physical characteristics of the drainage area(s) are substantially similar.

iii. A Discharger that satisfies the conditions of subsection e.ii.a) through d) above shall submit and certify to this Regional Water Board the revisions to the Monitoring Implementation Plan that includes the Qualified Combined Samples justification.

iv. Upon submittal of the Qualified Combined Samples justification revisions in the Monitoring Implementation Plan, the Discharger may authorize the lab to combine samples of equal volume from as many as four (4) drainage areas. The Regional Water Board may reject the Qualified Combined Samples justification and/or request additional supporting documentation. In such instances, the Discharger is ineligible for the Qualified Combined Samples justification until the Regional Water Board approves the Qualified Combined Samples justification.

v. Regional Water Board approval is necessary to combine samples from more than four (4) discharge locations.

f. Sample Collection and Visual Observation Exceptions

i. Sample collection and visual observations are not required under the following conditions:

a) During dangerous weather conditions such as flooding or electrical storms; or,

b) Outside of scheduled facility operating hours. The Discharger is not precluded from collecting samples or conducting visual observations outside of scheduled facility operating hours.

ii. In the event that samples are not collected, or visual observations are not conducted in accordance with Section B.2.d. due to these exceptions, an explanation shall be included in the Annual Report.

iii. Sample collection is not required for drainage areas with no exposure to industrial activities and materials in accordance with the definitions in Section F.

g. Sampling Frequency Reduction Certification

i. Dischargers are eligible to reduce the number of QSEs sampled each reporting year in accordance with the following requirements:

a) Results from four (4) consecutive QSEs that were sampled (QSEs may be from different reporting years) did not exceed any NALs as defined in Section C.1.; and

b) The Discharger is in full compliance with the requirements of this Order and has updated, certified and submitted to this Regional Water Board all documents, data, and reports required by this Order during the time period in which samples were collected.

ii. The Regional Water Board may notify the Discharger that it may not reduce the number of QSEs sampled each reporting year if the Discharger is subject to an enforcement action.

iii. An eligible Discharger shall certify to this Regional Water Board that it meets the conditions in subsection g.i. above.

iv. Upon Sampling Frequency Reduction certification, the Discharger shall collect and analyze samples from one (1) QSE within the first half of

each reporting year (July 1 to December 31), and one (1) QSE within the second half of each reporting year (January 1 to June 30). All other monitoring, sampling, and reporting requirements remain in effect.

v. A Discharger may reduce sampling per the Sampling Frequency Reduction certification unless notified by the Regional Water Board that: (1) the Sampling Frequency Reduction certification has been rejected or (2) additional supporting documentation must be submitted. In such instances, a Discharger is ineligible for the Sampling Frequency Reduction until the Regional Water Board provides Sampling Frequency Reduction certification approval. Revised Sampling Frequency Reduction certifications shall be certified and submitted to this Regional Water Board by the Discharger.

vi. A Discharger loses its Sampling Frequency Reduction certification if a NAL exceedance occurs (Section C.1.).

C. EXCEEDANCE RESPONSE ACTIONS (ERAs)

1. NALs and NAL Exceedances

The Discharger shall perform sampling, analysis and reporting in accordance with the requirements of this attachment (K) and shall compare the results to the two types of NAL values in Table 2 to determine whether either type of NAL has been exceeded for each applicable parameter. The two types of potential NAL exceedances are as follows:

a. Annual NAL exceedance: The Discharger shall determine the average concentration for each parameter using the results of all the sampling and analytical results for the entire facility for the reporting year (i.e., all "effluent" data). The Discharger shall compare the average concentration for each parameter to the corresponding annual NAL values in Table 1. For Dischargers using composite sampling or flow-weighted measurements in accordance with standard practices, the average concentrations shall be calculated in accordance with the U.S. EPA's NPDES Storm Water Sampling Guidance Document[6]. An annual NAL exceedance occurs when the average of all the analytical results for a parameter from samples taken within a reporting year exceeds the annual NAL value for that parameter listed in Table 1; and,

b. Instantaneous maximum NAL exceedance: The Discharger shall compare all sampling and analytical results from each distinct sample (individual or combined as authorized by B.3.e) to the corresponding instantaneous maximum NAL values in Table 1. An instantaneous maximum NAL exceedance occurs when two (2) or more analytical results from samples taken for any single parameter within a reporting year exceed the instantaneous maximum NAL value (for TSS and O&G) or are outside of the instantaneous maximum NAL range for pH.

[6] U.S. EPA. NPDES Storm Water Sampling Guidance Document. <http://www.epa.gov/npdes/pubs/owm0093.pdf >. [as of February 4, 2014]

2. Baseline Status

On the effective date of this Order, the Discharger has a Baseline status for all parameters.

3. Level 1 Status

The Discharger's Baseline status for any given parameter shall change to Level 1 status if sampling results indicate an NAL exceedance for that same parameter. Level 1 status will commence on July 1 following the reporting year during which the exceedance(s) occurred[7].

a. Level 1 ERA Evaluation

i. By October 1 following commencement of Level 1 status for any parameter with sampling results indicating an NAL exceedance, the Discharger shall:

ii. Complete an evaluation, with the assistance of a Qualified Industrial Storm Water Practitioner (QISP), of the industrial pollutant sources at the facility that are or may be related to the NAL exceedance(s); and,

iii. Identify in the evaluation the corresponding BMPs in the SWPPP and any additional BMPs and SWPPP revisions necessary to prevent future NAL exceedances and to comply with the requirements of this Order. Although the evaluation may focus on the drainage areas where the NAL exceedance(s) occurred, all drainage areas shall be evaluated.

b. Level 1 ERA Report

i. Based upon the above evaluation, the Discharger shall, as soon as practicable but no later than January 1 following commencement of Level 1 status :

a) Revise the SWPPP as necessary and implement any additional BMPs identified in the evaluation;

b) Certify and submit to this Regional Water Board a Level 1 ERA Report prepared by a QISP that includes the following:

1) A summary of the Level 1 ERA Evaluation required in subsection 3.a. above; and,

2) A detailed description of the SWPPP revisions and any additional BMPs for each parameter that exceeded an NAL.

c) Certify and submit to this Regional Water Board the QISP's identification number, name, and contact information (telephone number, e-mail address).

[7] For all sampling results reported before June 30th of the preceding reporting year. If sample results indicating an NAL exceedance are submitted after June 30th, the Discharger will change status once those results have been reported.

ii. A Discharger's Level 1 status for a parameter will return to Baseline status once a Level 1 ERA report has been completed, all identified additional BMPs have been implemented, and results from four (4) consecutive QSEs that were sampled subsequent to BMP implementation indicate no additional NAL exceedances for that parameter.

c. NAL Exceedances Prior to Implementation of Level 1 Status BMPs.

Prior to the implementation of an additional BMP identified in the Level 1 ERA Evaluation or October 1, whichever comes first, sampling results for any parameter(s) being addressed by that additional BMP will not be included in the calculations of annual average or instantaneous NAL exceedances.

4. Level 2 Status

A Discharger's Level 1 status for any given parameter shall change to Level 2 status if sampling results indicate an NAL exceedance for that same parameter while the Discharger is in Level 1. Level 2 status will commence on July 1 following the reporting year during which the NAL exceedance(s) occurred[8].

a. Level 2 ERA Action Plan

i. Dischargers with Level 2 status shall certify and submit to this Regional Water Board a Level 2 ERA Action Plan prepared by a QISP that addresses each new Level 2 NAL exceedance by January 1 following the reporting year during which the NAL exceedance(s) occurred. For each new Level 2 NAL exceedance, the Level 2 Action Plan will identify which of the demonstrations in subsection 4.b.i through iii the Discharger has selected to perform. A new Level 2 NAL exceedance is any Level 2 NAL exceedance for 1) a new parameter in any drainage area, or 2) the same parameter that is being addressed in an existing Level 2 ERA Action Plan in a different drainage area.

ii. The Discharger shall certify and submit to this Regional Water Board the QISP's identification number, name, and contact information (telephone number, e-mail address) if this information has changed since previous certifications.

iii. The Level 2 ERA Action Plan shall at a minimum address the drainage areas with corresponding Level 2 NAL exceedances.

iv. All elements of the Level 2 ERA Action Plan shall be implemented as soon as practicable and completed no later than 1 year after submitting the Level 2 ERA Action Plan.

v. The Level 2 ERA Action Plan shall include a schedule and a detailed description of the tasks required to complete the Discharger's selected demonstration(s) as described below in Section 4.b.i through iii.

[8] For all sampling results reported before June 30th of the preceding reporting year. If sample results indicating an NAL exceedance are submitted after June 30th, the Discharger will change status upon the date those results have been reported into CIWQS.

b. Level 2 ERA Technical Report

On January 1 of the reporting year following the submittal of the Level 2 ERA Action Plan, a Discharger with Level 2 status shall certify and submit a Level 2 ERA Technical Report prepared by a QISP that includes one or more of the following demonstrations:

i. Industrial Activity BMPs Demonstration

This shall include the following requirements, as applicable:

a) Shall include a description of the industrial pollutant sources and corresponding industrial pollutants that are or may be related to the NAL exceedance(s);

b) Shall include an evaluation of all pollutant sources associated with industrial activity that are or may be related to the NAL exceedance(s);

c) Where all of the Discharger's implemented BMPs, including additional BMPs identified in the Level 2 ERA Action Plan, achieve compliance with storm water discharge specification of this Order and are expected to eliminate future NAL exceedance(s), the Discharger shall provide a description and analysis of all implemented BMPs;

d) In cases where all of the Discharger's implemented BMPs, including additional BMPs identified in the Level 2 ERA Action Plan, achieve compliance with the storm water discharge specification of this Order but are not expected to eliminate future NAL exceedance(s), the Discharger shall provide, in addition to a description and analysis of all implemented BMPs:

1) An evaluation of any additional BMPs that would reduce or prevent NAL exceedances;

2) Estimated costs of the additional BMPs evaluated; and,

3) An analysis describing the basis for the selection of BMPs implemented in lieu of the additional BMPs evaluated but not implemented.

e) The description and analysis of BMPs required in subsection i.c) above shall specifically address the drainage areas where the NAL exceedance(s) responsible for the Discharger's Level 2 status occurred, although any additional Level 2 ERA Action Plan BMPs may be implemented for all drainage areas; and,

f) If an alternative design storm standard for treatment control BMPs (in lieu of the design storm standard for treatment control BMPs in Section H.5 of Attachment J of this Order will achieve compliance with the storm water discharge specification of this Order, the Discharger shall provide an analysis describing the basis for the selection of the alternative design storm standard.

ii. Non-Industrial Pollutant Source Demonstration

This shall include:

a) A statement that the Discharger has determined that the exceedance of the NAL is attributable solely to the presence of non-industrial pollutant sources. (The pollutant may also be present due to industrial activities, in which case the Discharger must demonstrate that the pollutant contribution from the industrial activities by itself does not result in an NAL exceedance.) The sources shall be identified as either run-on from adjacent properties, aerial deposition from man-made sources, or as generated by on-site non-industrial sources;

b) A statement that the Discharger has identified and evaluated all potential pollutant sources that may have commingled with storm water associated with the Discharger's industrial activity and may be contributing to the NAL exceedance;

c) A description of any on-site industrial pollutant sources and corresponding industrial pollutants that are contributing to the NAL exceedance;

d) An assessment of the relative contributions of the pollutant from (1) storm water run-on to the facility from adjacent properties or non-industrial portions of the Discharger's property or from aerial deposition and (2) the storm water associated with the Discharger's industrial activity;

e) A summary of all existing BMPs for that parameter; and,

f) An evaluation of all on-site/off-site analytical monitoring data demonstrating that the NAL exceedances are caused by pollutants in storm water run-on to the facility from adjacent properties or non-industrial portions of the Discharger's property or from aerial deposition.

iii. Natural Background Pollutant Source Demonstration

This shall include:

a) A statement that the Discharger has determined that the NAL exceedance is attributable solely to the presence of the pollutant in the natural background that has not been disturbed by industrial activities. (The pollutant may also be present due to industrial activities, in which case the Discharger must demonstrate that the pollutant contribution from the industrial activities by itself does not result in an NAL exceedance);

b) A summary of all data previously collected by the Discharger, or other identified data collectors, that describes the levels of natural background pollutants in the storm water discharge;

c) A summary of any research and published literature that relates the pollutants evaluated at the facility as part of the Natural Background Source Demonstration;

d) Map showing the reference site location in relation to facility along with available land cover information;

e) Reference site and test site elevation;

f) Available geology and soil information for reference and test sites;

g) Photographs showing site vegetation;

h) Site reconnaissance survey data regarding presence of roads, outfalls, or other human-made structures; and,

i) Records from relevant state or federal agencies indicating no known mining, forestry, or other human activities upstream of the proposed reference site.

c. Level 2 ERA Technical Report Submittal

i. The Discharger shall certify and submit to this Regional Water Board the Level 2 ERA Technical Report described in Section 4.b above.

ii. The Regional Water Board will review the submitted Level 2 ERA Technical Reports. Upon review of a Level 2 ERA Technical Report, the Regional Water Board may reject the Level 2 ERA Technical Report and direct the Discharger to take further action(s) to comply with this Order.

iii. Dischargers with Level 2 status who have submitted the Level 2 ERA Technical Report are only required to annually update the Level 2 ERA Technical Report based upon additional NAL exceedances of the same parameter and same drainage area (if the original Level 2 ERA Technical Report contained an Industrial Activity BMP Demonstration and the implemented BMPs were expected to eliminate future NAL exceedances in accordance with Section 4.b.i.b), facility operational changes, pollutant source(s) changes, and/or information that becomes available via compliance activities (monthly visual observations, sampling results, annual evaluation, etc.). The Level 2 ERA Technical Report shall be prepared by a QISP and be certified and submitted via CIWQS by the Discharger with each Annual Report as an attachment. If there are no changes prompting an update of the Level 2 ERA Technical Report, as specified above, the Discharger will provide this certification in the Annual Report that there have been no changes warranting re-submittal of the Level 2 ERA Technical Report.

iv. Dischargers are not precluded from submitting a Level 2 ERA Action Plan or ERA Technical Report prior to entering Level 2 status if information is available to adequately prepare the report and perform the demonstrations described above. A Discharger who chooses to submit a Level 2 ERA Action Plan or ERA Technical Report prior to entering Level 2 status will automatically be placed in Level 2 in accordance to the Level 2 ERA schedule.

d. Eligibility for Returning to Baseline Status

i. Dischargers with Level 2 status who submit an Industrial Activity BMPs Demonstration in accordance with subsection b.i.a) through c) above and have implemented BMPs to prevent future NAL exceedance(s) for the Level 2 parameter(s) shall return to baseline status for that parameter, if results from four (4) subsequent consecutive QSEs sampled indicate no additional NAL exceedance(s) for that parameter(s). If future NAL exceedances occur for the same parameter(s), the Discharger's Baseline status will return to Level 2 status on July 1 in the subsequent reporting year during which the NAL exceedance(s) occurred. These Dischargers shall update the Level 2 ERA Technical Report as required above in Section 4.c.iii.

ii. Dischargers are ineligible to return to baseline status if they submit any of the following:

a) A industrial activity BMP demonstration in accordance with subsection b.i.d) above;

b) An non-industrial pollutant source demonstration; or,

c) A natural background pollutant source demonstration.

e. Level 2 ERA Implementation Extension

i. Dischargers that need additional time to submit the Level 2 ERA Technical Report shall be automatically granted a single time extension for up to six (6) months upon submitting the following items to this Regional Water Board, as applicable:

a) Reasons for the time extension;

b) A revised Level 2 ERA Action Plan including a schedule and a detailed description of the necessary tasks still to be performed to complete the Level 2 ERA Technical Report; and

c) A description of any additional temporary BMPs that will be implemented while permanent BMPs are being constructed.

ii. The Regional Water Boards will review Level 2 ERA Implementation Extensions for completeness and adequacy. Requests for extensions that total more than six (6) months are not granted unless approved in writing by the Water Boards. The Water Boards may (1) reject or revise the time allowed to complete Level 2 ERA Implementation Extensions, (2) identify additional tasks necessary to complete the Level 2 ERA Technical Report, and/or (3) require the Discharger to implement additional temporary BMPs.

D. ANNUAL COMPREHENSIVE FACILITY COMPLIANCE EVALUATION (ANNUAL EVALUATION)

The Discharger shall conduct one Annual Evaluation for each reporting year (July 1 to June 30). If the Discharger conducts an Annual Evaluation fewer than eight (8) months, or more than sixteen (16) months, after it conducts the previous Annual Evaluation, it shall document the justification for doing so. The Discharger shall revise the SWPPP, as

appropriate, and implement the revisions within 90 days of the Annual Evaluation. At a minimum, Annual Evaluations shall consist of:

1. A review of all sampling, visual observation, and inspection records conducted during the previous reporting year;

2. An inspection of all areas of industrial activity and associated potential pollutant sources for evidence of, or the potential for, pollutants entering the storm water conveyance system;

3. An inspection of all drainage areas previously identified as having no exposure to industrial activities and materials in accordance with the definitions in Section F;

4. An inspection of equipment needed to implement the BMPs;

5. An inspection of any BMPs;

6. A review and effectiveness assessment of all BMPs for each area of industrial activity and associated potential pollutant sources to determine if the BMPs are properly designed, implemented, and are effective in reducing and preventing pollutants in industrial storm water discharges and authorized NSWDs; and,

7. An assessment of any other factors needed to comply with the requirements in Section E.2.

E. ANNUAL REPORT

1. The Discharger shall certify and submit via CIWQS an Annual Report no later than July 15th following each reporting year.

2. The Discharger shall include in the Annual Report:

   a. A Compliance Checklist that indicates whether the Discharger complies with, and has addressed all applicable requirements of this Order;

   b. An explanation for any non-compliance of requirements within the reporting year, as indicated in the Compliance Checklist;

   c. An identification, including page numbers and/or sections, of all revisions made to the SWPPP within the reporting year; and,

   d. The date(s) of the Annual Evaluation.

F. CONDITIONAL EXCLUSION - NO EXPOSURE CERTIFICATION (NEC)

1. Discharges composed entirely of storm water that has not been exposed to industrial activity are not industrial storm water discharges. Dischargers are conditionally excluded from complying with the SWPPP and monitoring requirements of this Order if all of the following conditions are met:

a. There is no exposure of Industrial Materials and Activities to rain, snow, snowmelt, and/or runoff;

b. All unauthorized NSWDs have been eliminated and all authorized NSWDs meet the conditions of Section IV of the Statewide Industrial General Permit Order No. 2014-0057-DWQ;

c. The Discharger has certified and submitted to this Regional Water Board a NEC; and,

d. The Discharger has satisfied all other requirements of this Section.

2. NEC Specific Definitions

a. No Exposure - all Industrial Materials and Activities are protected by a Storm-Resistant Shelter to prevent all exposure to rain, snow, snowmelt, and/or runoff.

b. Industrial Materials and Activities - includes, but is not limited to, industrial material handling activities or equipment, machinery, raw materials, intermediate products, by-products, final products, and waste products.

c. Material Handling Activities - includes the storage, loading and unloading, transportation, or conveyance of any industrial raw material, intermediate product, final product, or waste product.

d. Sealed - banded or otherwise secured, and without operational taps or valves.

e. Storm-Resistant Shelters - includes completely roofed and walled buildings or structures. Also includes structures with only a top cover supported by permanent supports but with no side coverings, provided material within the structure is not subject to wind dispersion (sawdust, powders, etc.), or track- out, and there is no storm water discharged from within the structure that comes into contact with any materials.

3. NEC Qualifications

To qualify for an NEC, a Discharger shall:

a. Except as provided in subsection 4 below, provide a Storm-Resistant Shelter to protect Industrial Materials and Activities from exposure to rain, snow, snowmelt, run-on, and runoff;

b. Inspect and evaluate the facility annually to determine that storm water exposed to industrial materials or equipment has not and will not be discharged to waters of the United States. Evaluation records shall be maintained for five (5) years in accordance with Section I.A.8. of Attachment E of this Order;

c. Register for NEC coverage by certifying that there are no discharges of storm water contaminated by exposure to Industrial Materials and Activities from areas of the

facility subject to this Order, and certify that all unauthorized NSWDs have been eliminated and all authorized NSWDs meet the applicable conditions of Section IV of the Statewide Industrial General Permit Order No. 2014-0057-DWQ (Authorized NSWDs); and,

d. Submit a NEC to this Regional Water Board by October 1, 2015.

4. NEC Industrial Materials and Activities - Storm-Resistant Shelter Not Required

To qualify for NEC coverage, a Storm-Resistant Shelter is not required for the following:

a. Drums, barrels, tanks, and similar containers that are tightly Sealed, provided those containers are not deteriorated, do not contain residual industrial materials on the outside surfaces, and do not leak;

b. Adequately maintained vehicles used in material handling;

c. Final products, other than products that would be mobilized in storm water discharge (e.g., rock salt);

d. Any Industrial Materials and Activities that are protected by a temporary shelter for a period of no more than ninety (90) days due to facility construction or remodeling; and,

e. Any Industrial Materials and Activities that are protected within a secondary containment structure that will not discharge storm water to waters of the United States.

5. NEC Limitations

a. NEC coverage is available on a facility-wide basis only, not for individual outfalls. If a facility has industrial storm water discharges from one or more drainage areas that require coverage, the Discharger shall register for coverage for the entire facility through the Regional Water Board. Any drainage areas on that facility that would otherwise qualify for NEC coverage may be specially addressed in the facility SWPPP by including an NEC Checklist and a certification statement demonstrating that those drainage areas of the facility have been evaluated; and that none of the Industrial Materials or Activities listed in subsection 3 above are, or will be in the foreseeable future, exposed to precipitation.

b. If circumstances change and Industrial Materials and Activities become exposed to rain, snow, snowmelt, and/or runoff, the conditions for this exclusion shall no longer apply. In such cases, the Discharger may be subject to enforcement for discharging without a permit. A Discharger with NEC coverage that anticipates changes in circumstances should notify this Regional Water Board and adhere to all storm water requirements of this Order at least seven (7) days before anticipated exposure.

c. The Regional Water Board may deny NEC coverage and require the Discharge to comply with all storm water requirements of this Order:

   i. Storm water is exposed to Industrial Materials and Activities; and/or

   ii. The discharge has a reasonable potential to cause or contribute to an exceedance of an applicable water quality standards.

6. NEC Report Required for Initial NEC Coverage

The Discharger shall submit to this Regional Water Board the a report for NEC coverage to document the applicability of the conditional exclusion:

a. The NEC form, which includes:

   i. The legal name, postal address, telephone number, and e-mail address of the Discharger;

   ii. The facility business name and physical mailing address, the county name, and a description of the facility location if the facility does not have a physical mailing address; and,

   iii. Certification by the Discharger that the NEC report submitted is correct and true and the conditions of no exposure have been met.

b. An NEC Checklist prepared by the Discharger demonstrating that the facility has been evaluated; and that none of the following industrial materials or activities are, or will be in the foreseeable future, exposed to precipitation:

   i. Using, storing or cleaning industrial machinery or equipment, and areas where residuals from using, storing or cleaning industrial machinery or equipment remain and are exposed;

   ii. Materials or residuals on the ground or in storm water inlets from spills/leaks;

   iii. Materials or products from past industrial activity;

   iv. Material handling equipment (except adequately maintained vehicles);

   v. Materials or products during loading/unloading or transporting activities;

   vi. Materials or products stored outdoors (except final products intended for outside use, e.g., new cars, where exposure to storm water does not result in the discharge of pollutants);

   vii. Materials contained in open, deteriorated or leaking storage drums, barrels, tanks, and similar containers;

viii. Materials or products handled/stored on roads or railways owned or maintained by the Discharger;

ix. Waste material (except waste in covered, non-leaking containers, e.g., dumpsters);

x. Application or disposal of processed wastewater (unless already covered by an NPDES permit); and,

xi. Particulate matter or visible deposits of residuals from roof stacks/vents evident in the storm water outflow.

c. Site Map (see Attachment J of this Order).

7. Requirements for Annual NEC Coverage Recertification

By October 1 of each reporting year beginning in 2015, any Discharger who has previously registered for NEC coverage shall either submit and certify a NEC demonstrating that the facility has been evaluated, and that none of the Industrial Materials or Activities listed above are, or will be in the foreseeable future, exposed to precipitation, or comply with all storm water requirements of this Order.

8. NEC Certification Statement

All NEC certifications and re-certifications shall include the following certification statement:

I certify under penalty of law that I have read and understand the eligibility requirements for claiming a condition of 'no exposure' and obtaining an exclusion from NPDES storm water permitting; and that there are no discharges of storm water contaminated by exposure to industrial activities or materials from the industrial facility identified in this document (except as allowed in subsection C above). I understand that I am obligated to submit a no exposure certification form annually to the State Water Board and, if requested, to the operator of the local Municipal Separate Storm Sewer System (MS4) into which this facility discharges (where applicable). I understand that I must allow the Water Board staff, or MS4 operator where the discharge is into the local MS4, to perform inspections to confirm the condition of no exposure and to make such inspection reports publicly available upon request. I understand that I must obtain coverage under an NPDES permit prior to any point source discharge of storm water from the facility. 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 gathered and evaluated the information submitted. Based upon my inquiry of the person or persons who manage the system, or those persons directly involved in gathering the information, the information submitted is to the best of my knowledge and belief true, accurate and complete. I am aware there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

G. TRAINING QUALIFICATIONS

1. General

   a. A Qualified Industrial Storm Water Practitioner (QISP) is a person (either the Discharger or a person designated by the Discharger) who has completed a State Water Board-sponsored or approved QISP training course[9], and has registered as a QISP via SMARTS. Upon completed registration the State Water Board will issue a QISP identification number.

   b. The Executive Director of the State Water Board or an Executive Officer of a Regional Water Board may rescind any QISP's registration if it is found that the QISP has repeatedly demonstrated an inadequate level of performance in completing the QISP requirements in this General Permit. An individual whose QISP registration has been rescinded may request that the State Water Board review the rescission. Any request for review must be received by the State Water Board no later than 30 days of the date that the individual received written notice of the rescission.

   c. Dischargers with Level 1 status shall:

      i. Designate a person to be the facility's QISP and ensure that this person has attended and satisfactorily completed the State Water Board-sponsored or approved QISP training course.

      ii. Ensure that the facility's designated QISP provides sufficient training to the appropriate team members assigned to perform activities required by this General Permit.

[9] A specialized self-guided State Water Board-sponsored registration and training program will be available as an option for CPBELSG licensed professional civil, mechanical, industrial, and chemical engineers and professional geologists by the effective date of this General Permit.

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

RPA for Free Cyanide for DP-001

Effluent Free Cyanide Concentrations at Monitoring Location M-001B (µg/L)

															Existing ELs		CTR Criteria		
Year/Month	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Avg	MEC	AMEL	MDEL	CMC	CCC	CTR Criteria Exceeded?
2010	<2	3	<2	<2	<2	2	3	<2	<2	<2	<2	<2	<2	3.0	4.2	8.5	22	5.2	No
2011	<2	<2	<2	<2	4	<2	<2	<2	<2	<2	2	<2	<2	4.0	4.2	8.5	22	5.2	No
2012	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	4.2	8.5	22	5.2	No
2013	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	4.2	8.5	22	5.2	No
2014	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	4.2	8.5	22	5.2	No
2015	<2	<2	<2	<2	<2								<2	<2	4.2	8.5	22	5.2	No

RPA for Free Cyanide for DP-002

Effluent Free Cyanide Concentrations at Monitoring Location M-002A (µg/L)

															Existing ELs		CTR Criteria		
Year/Month	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Avg	MEC	AMEL	MDEL	CMC	CCC	CTR Criteria Exceeded?
2010	3	4	<2	<2	<2	3	2	<2	<2	<2	<2	<2	<2	4.0	4.2	8.5	22	5.2	No
2011	<2	2	2	3	3	3	<2	<2	<2	<2	<2	<2	<2	3.0	4.2	8.5	22	5.2	No
2012	<2	3	<2	3	<2	3	<2	2	3	<2	<2	<2	<2	3.0	4.2	8.5	22	5.2	No
2013	<2	<2	<2	<2	3	<2	<2	2	<2	<2	<2	<2	<2	3.0	4.2	8.5	22	5.2	No
2014	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	4.2	8.5	22	5.2	No
2015	<2	<2	<2	<2	<2								<2	<2	4.2	8.5	22	5.2	No

RPA for Free Cyanide for DP-003

Effluent Free Cyanide Concentrations at Monitoring Location M-003 (µg/L)

															Existing ELs		CTR Criteria		
Year/Month	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Avg	MEC	AMEL	MDEL	CMC	CCC	CTR Criteria Exceeded?
2010	3	4	<2	3	<2	2	2	<2	ND	<2	<2	<2	<2	4.0	4.6	7.3	22	5.2	No
2011	<2	3	<2	<2	3	<2	ND	ND	ND	<2	<2	<2	<2	3.0	4.6	7.3	22	5.2	No
2012	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	4.6	7.3	22	5.2	No
2013	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	4.6	7.3	22	5.2	No
2014	<2	<2	<2	<2	<2	<2	<2	ND	ND	ND	<2	<2	<2	<2	4.6	7.3	22	5.2	No
2015	<2	<2	<2	<2	<2								<2	<2	4.6	7.3	22	5.2	No

Note: ND= No Discharge

RPA for Free Cyanide for DP-004

Effluent Free Cyanide Concentrations at Monitoring Location M-004 (µg/L)

															Existing ELs		CTR Criteria		
Year/Month	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Avg	MEC	AMEL	MDEL	CMC	CCC	CTR Criteria Exceeded?
2010	3	3	<2	<2	<2	4	2	<2	2	<2	<2	<2	<2	4.0	4.3	8.5	22	5.2	No
2011	2	2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	2.0	4.3	8.5	22	5.2	No
2012	<2	<2	<2	<2	<2	<2	<2	<2	3	<2	<2	<2	<2	3.0	4.3	8.5	22	5.2	No
2013	<2	<2	<2	<2	<2	<2	<2	ND	ND	<2	<2	<2	<2	<2	4.3	8.5	22	5.2	No
2014	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	4.3	8.5	22	5.2	No
2015	<2	<2	<2	<2	<2								<2	<2	4.3	8.5	22	5.2	No

Note: ND= No Discharge

RPA for Total Recoverable Selenium for DP-001

Effluent Total Recoverable Selenium Concentrations at Monitoring Location M-001B (µg/L)

															Existing ELs		CTR Criteria		
Year/Month	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Avg	MEC	AMEL	MDEL	CMC	CCC	CTR Criteria Exceeded?
2010	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	4.1	8.2	NA	5	No
2011	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	4.1	8.2	NA	5	No
2012	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	4.1	8.2	NA	5	No
2013	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	4.1	8.2	NA	5	No
2014	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	4.1	8.2	NA	5	No
2015	<2	<2	<2	<2	<2								<2	<2	4.1	8.2	NA	5	No

Note: NA= Not Available.

RPA for Total Recoverable Selenium for DP-002

Effluent Total Recoverable Selenium Concentrations at Monitoring Location M-002A (µg/L)

															Existing ELs		CTR Criteria		
Year/Month	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Avg	MEC	AMEL	MDEL	CMC	CCC	CTR Criteria Exceeded?
2010	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	4.1	8.2	NA	5	No
2011	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	4.1	8.2	NA	5	No
2012	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	4.1	8.2	NA	5	No
2013	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	4.1	8.2	NA	5	No
2014	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	4.1	8.2	NA	5	No
2015	<2	<2	<2	<2	<2								<2	<2	4.1	8.2	NA	5	No

Note: NA= Not Available.

RPA for Dichlorobromomethane for DP-003

Effluent Dichlorobromomethane at Monitoring Location M-003 (µg/L)

															Existing ELs		CTR Criteria		
Year/Month	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Avg	MEC	AMEL	MDEL	HH H_2O + org	HH organisms	CTR Criteria Exceeded?
2010	17	19	18	19	18	20	22	23	ND	27	27	20	21	27	46	92	N/A	46	No
2011	17	17	18	23	22	20	ND	ND	ND	25	17	13	19	25	46	92	N/A	46	No
2012	11	14	18	15	16	21	23	36	40	36	32	36	25	40	46	92	N/A	46	No
2013	15	22	18	22	22	28	28	23	20	25	30	21	23	30	46	92	N/A	46	No
2014	27	22	18	22	30	26	36	ND	ND	ND	21	25	25	36	46	92	N/A	46	No
2015	28	20	22	23	25								24	28	46	92	N/A	46	No

Note: ND= No Discharge N/A = Not Apllicable.

RPA for Bis(2-Ethylhexyl) Phthalate for DP-001

Effluent Bis(2-Ethylhexyl) Phthalate Concentrations at Monitoring Location M-001B (µg/L)

															Existing ELs		CTR Criteria		
Year/Month	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Avg	MEC	AMEL	MDEL	HH H_2O + org	HH organisms	CTR Criteria Exceeded?
2010	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	5.9	11.9	N/A	5.9	No
2011	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	5.9	11.9	N/A	5.9	No
2012	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	5.9	11.9	N/A	5.9	No
2013	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	5.9	11.9	N/A	5.9	No
2014	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	5.9	11.9	N/A	5.9	No
2015	<2	<2	<2	<2	<2								<2	<2	5.9	11.9	N/A	5.9	No

Note: N/A= Not Applicable.

RPA for Bis(2-Ethylhexyl) Phthalate for DP-002

Effluent Bis(2-Ethylhexyl) Phthalate Concentrations at Monitoring Location M-002A (µg/L)

															Existing ELs		CTR Criteria		
Year/Month	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Avg	MEC	AMEL	MDEL	HH H_2O + org	HH organisms	CTR Criteria Exceeded?
2010	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	5.9	11.9	N/A	5.9	No
2011	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	5.9	11.9	N/A	5.9	No
2012	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	5.9	11.9	N/A	5.9	No
2013	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	5.9	11.9	N/A	5.9	No
2014	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	5.9	11.9	N/A	5.9	No
2015	<2	<2	<2	<2	<2								<2	<2	5.9	11.9	N/A	5.9	No

Note: N/A= Not Applicable.

RPA for Bis(2-Ethylhexyl) Phthalate for DP-004

Effluent Bis(2-Ethylhexyl) Phthalate Concentrations at Monitoring Location M-004 (µg/L)

															Existing ELs		CTR Criteria		
Year/Month	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Avg	MEC	AMEL	MDEL	HH H_2O + org	HH organisms	CTR Criteria Exceeded?
2010	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	5.9	11.9	N/A	5.9	No
2011	<2	<2	<2	4	<2	<2	<2	<2	<2	<2	<2	<2	<2	4.0	5.9	11.9	N/A	5.9	No
2012	<2	<2	<2	2	<2	<2	<2	<2	<2	<2	<2	<2	<2	2.0	5.9	11.9	N/A	5.9	No
2013	<2	<2	<2	<2	<2	<2	<2	ND	ND	<2	<2	<2	<2	<2	5.9	11.9	N/A	5.9	No
2014	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	5.9	11.9	N/A	5.9	No
2015	<2	<2	<2	<2	<2								<2	<2	5.9	11.9	N/A	5.9	No

Note: ND= No Discharge N/A = Not Apllicable.

STATE OF CALIFORNIA

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ORDER NO. R8-2015-0036
NPDES NO. CA8000409

WASTE DISCHARGE REQUIREMENTS AND MASTER RECLAMATION PERMIT
FOR
INLAND EMPIRE UTILITIES AGENCY
REGIONAL WATER RECYCLING FACILITIES
SURFACE WATER DISCHARGES AND RECYCLED WATER USE

RESPONSE TO COMMENTS

PARTIES THAT PROVIDED COMMENTS:

- Inland Empire Utilities Agency (IEUA), and
- United States Environmental Protection Agency (USEPA), Region 9.

Comments made by IEUA: IEUA provided several comments and requests through email messages, proposed tracked changes in the draft Order, Attachment E, Attachment F, and Attachment G thru I, and orally during a meeting held at this Regional Water Board office on September 10, 2015. Copies of emails and meeting notes are attached to this document. Most of the comments and requests made by IEUA that were incorporated in to the draft Order and attachments require no further clarification, except for the following:

IEUA Comment: During the meeting held at the Regional Water Board office, IEUA requested that Regional Water Board staff disregard most of the effluent analytical data for 2,3,7,8-TCDD that was not 2,3,7,8-TCDD compound- specific and that was derived from dioxin toxicity equivalence (TEQ) concentrations procedure for the other 16 chlorinated dibenzo-p-dioxins (CDDs) and chlorinated dibenzofurans (CDFs) that are part of the suite of compounds that can be detected/quantified when using EPA Method 1613B. IEUA staff stated that since their current order (Order R8-2009-0021) did not explicitly require IEUA to monitor for 2,3,7,8-TCDD by quantifying the dioxin TEQ

concentrations for all 17 CDDs/CDFs that are detected (EPA Method 1316B TEQs) and, therefore, the analytical data submitted by IEUA based on the results from EPA Method 1613B TEQs should not be considered for conducting reasonable potential analysis (RPA) for 2,3,7,8-TCDD (for the purposes of draft Order R8-2015-0036).

Response: Regional Water Board staff clarified that when the existing Order No. R8-2009-0021 was drafted in 2009, the RPA conducted for 2,3,7,8-TCDD was done based on analytical data derived from the use of EPA Method 1613B TEQs and not for 2,3,7,8-TCDD alone. In addition, the RPA conducted in 2009 for Order No. 2009-0021 using TEQs for all 17 CDDs/CDFs did show an exceedance of applicable water quality criteria at DP-003 and DP-004, however, since the water quality criteria exceedance was caused by a single detected concentration value over the course of the permit cycle, Regional Water Board staff, with the agreement from USEPA staff, decided that no reasonable potential existed and to require quarterly effluent monitoring instead of including effluent limits for 2,3,7,8-TCDD in Order No. R8-2009-0021. It was the understanding then, that the influent and effluent monitoring for 2,3,7,8-TCDD was to be done using EPA Method 1613B TEQs for the new permit cycle. Although Order No. 2009-0021 did not require explicitly the use of EPA Method 1613B TEQs, it was intended to be a continuing monitoring requirement carried over from the previous order. IEUA ratified this understanding by conducting effluent monitoring for 2,3,7,8-TCDD by using EPA Method 1613B TEQs and submitting the data for several years. However, by the end of 2013, IEUA decided to monitor for 2,3,7,8-TCDD specifically and discontinued the use of EPA Method 1613B TEQs without consulting Regional Water Board staff. Regional Water Board staff considers that the data submitted by IEUA while using EPA Method 1613B TEQs is part of the administrative record for IEUA and a legitimate and valid source of effluent water quality data that can be used to conduct a RPA for 2,3,7,8-TCDD.

IEUA Comment:: IEUA requested the elimination of the effluent limits for 2,3,7,8-TCDD (TEQs) for Discharge Point 003, which is the outfall for Regional Water Recycling Plant No. 5 (RP-5), claiming that the laboratory results from the analysis of the effluent sample collected during January 2013 are not valid due to the detection of a dioxin compound in the laboratory method blank that was run during the day of the analysis of the effluent sample.

Response: Since the copy of the analytical report sheet (provided by IEUA) of the laboratory method blank shows the detection of total tetra-dioxins at a concentration of 7.16 pg/L and the analytical report for the January 2013 effluent sample shows the detection of octa-chlorinated dibenzofuran (OCDF) at a concentration of 140 pg/L, Regional Water Board staff concludes that the dioxin compound detected in the method blank is not the same compound detected in the effluent sample and, therefore, cannot be compared. The OCDF concentration detected in the effluent sample collected during January 2013 is qualified as valid for the calculation of the corresponding 2,3,7,8-TCDD TEQ concentration and its subsequent use for RPA purposes.

IEUA Comment: IEUA requested the elimination of the effluent limits for 2,3,7,8-TCDD (TEQs) for Discharge Point 004, which is the outfall for Carbon Canyon Water Recycling Facility (CCWRF), claiming that the laboratory results for the analysis of the effluent sample collected during July 2010 are all non-detect and that there was a typo error on the 2010 annual report that show the detection of 2,3,7,8-TCDD at a concentration of 0.183 pg/L. IEUA staff provided a copy of the analytical report sheets for the analysis of the effluent sample collected on July 28, 2010, which indeed show non-detect values for all 17 CDDs/CDFs.

Response: Based on our review of the analytical report submitted by IEUA, Regional Water Board staff determined that 2,3,7,8-TCDD (TEQs) has not been detected in the effluent at DP-004 during the current permit cycle and there's no reasonable potential for exceeding applicable water quality criteria. Regional Water Board staff agreed to remove the proposed effluent limits for 2,3,7,8-TCDD (TEQs) for DP-004 from the draft of Order No. R8-2015-0036.

Comments made by USEPA, Region 9: USEPA received a pre-release draft of Order No. R8-2015-0036 and comments were received from USEPA through email transmittal. Regional Water Board staff addressed USEPA's comments by making pertinent changes to the draft Order and by sending to USEPA staff a copy of the RPA template spreadsheet for each discharge point from IEUA's regional water recycling plants. On August 31, 2015 Regional Water Board staff officially released the draft of Order No. R8-2015-0036 for public comment and USEPA, Region 9, was sent a copy through email transmittal. The official released draft included the changes made to address USEPA comments. Also, Regional Water Board staff sent an email on October 13, 2015, to USEPA staff with additional information regarding changes made to the order based on comments made by IEUA. USEPA staff has not forwarded any other comments through the 30-day comment period and thus far. Copies of emails regarding USEPA comments and our responses are attached to this document.