2018

IEUA FY 2017-2018 Recycled Water Annual Report

Water Smart
Thinking in Terms of Tomorrow

Inland Empire Utilities Agency
A MUNICIPAL WATER DISTRICT


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A MUNICIPAL WATER DISTRICT

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INTRODUCTION

The 2017/18 Recycled Water Annual Report for the Inland Empire Utilities Agency (IEUA) recycled water program provides annual delivery data by IEUA retail member agencies, by usage types, and by customers. The 2017/18 report is for IEUA's fiscal year, which runs from July 2017 to June 2018. The report summarizes the program history, describes recent construction, and gives an overview of the IEUA treatment plants. IEUA provides wastewater treatment for its seven member agencies: the Cities of Chino, Chino Hills, Fontana, Montclair, Ontario, and Upland and Cucamonga Valley Water District. Recycled water from the treatment process is generated and delivered to its retail water agencies for use in the IEUA service area.

IEUA owns and operates five wastewater recycling facilities that serve over 875,000 people. Figure 1 shows the IEUA service area, its member agencies, and the locations of IEUA's treatment plants. Of the five plants, four produce tertiary-treated, Title 22-quality recycled water. Of the treatment plants, RP-2 does not have any liquid treatment processes, and as such does not produce any recycled water. The general layout and capacities of the water recycling plants are discussed in the last section of the report. Appendices A and B contain the recycled water effluent monitoring data and recycled water compliance data, respectively, for the 2017 calendar year for the four recycled water facilities.

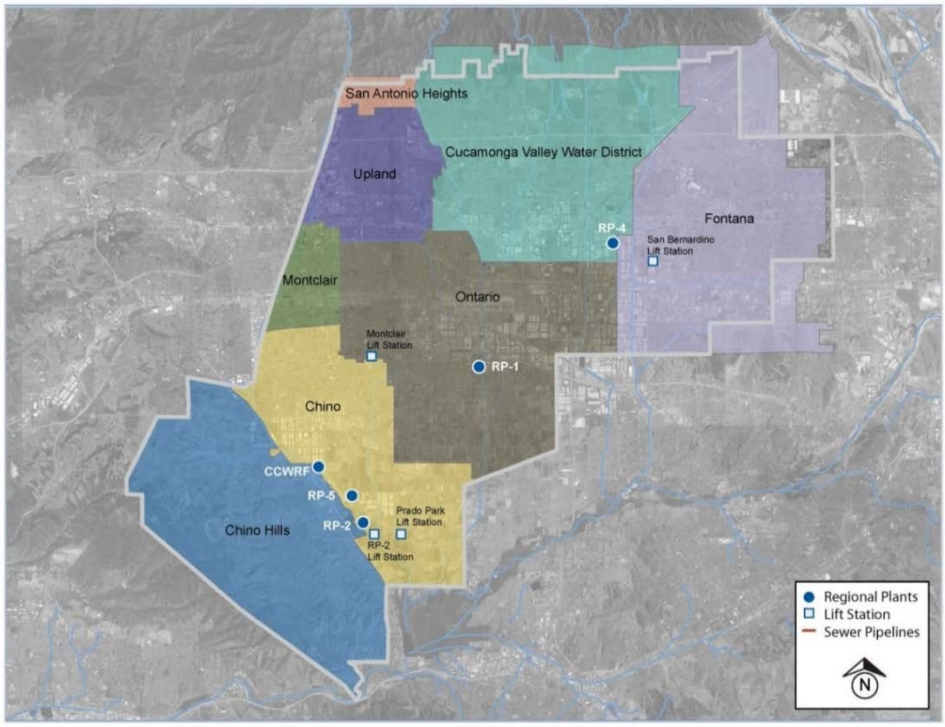

Figure 1 - IEUA Service Area

DEMANDS

During 2017/18, the average recycled water supply from IEUA's facilities was approximately 47.5 million gallons per day (MGD), or 53,225 acre-feet per year (AFY). Recycled water groundwater recharge usage was 13,510 AFY and recycled water direct usage was 21,132 AFY. Total recycled water demands during 2017/18 were 34,642 acre-feet (AF), an increase by 3.7% from the previous fiscal year. Recycled water recharge was down 3% and direct use was up 8.5%. The recycled water delivery volumes of direct use and groundwater recharge can vary seasonally and annually based on a variety of factors (e.g. the rainfall intensity, rainfall duration, and recharge basin maintenance activities). Figure 2 shows IEUA's historical direct use and groundwater recharge of recycled water for the past 10 years.

Recycled water demands for the combined direct use and recharge purposes were approximately 65 percent of the available supply. During the peak demand summer months (July through September), the total recycled water demand was approximately 85 percent of the available supply.

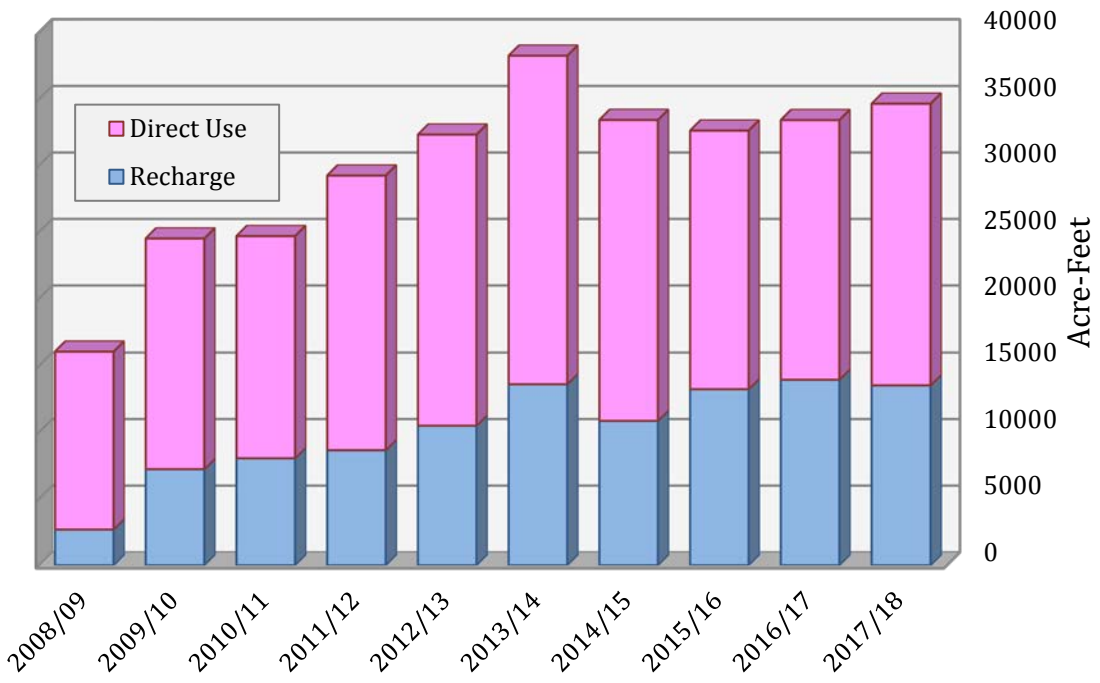

Figure 2 – Historical Recycled Water Direct Use and Groundwater Recharge

DEMANDS BY USE TYPE

Delivered recycled water was beneficially reused for a variety of applications including landscape irrigation, agricultural irrigation, industrial process water, groundwater recharge and construction. Table 1 and Figure 3 show the 2017/18 recycled water demand by use type.

Table 1 – Recycled Water Demand by Use Type for 2017/18

Type of Use	Demand (AF)	Percent of Demand
Recharge	13,510	39%
Agriculture	8,976	26%
Landscape	10,138	29%
Industrial	1,271	4%
Construction	746	2%
Total Demand	34,642	100%

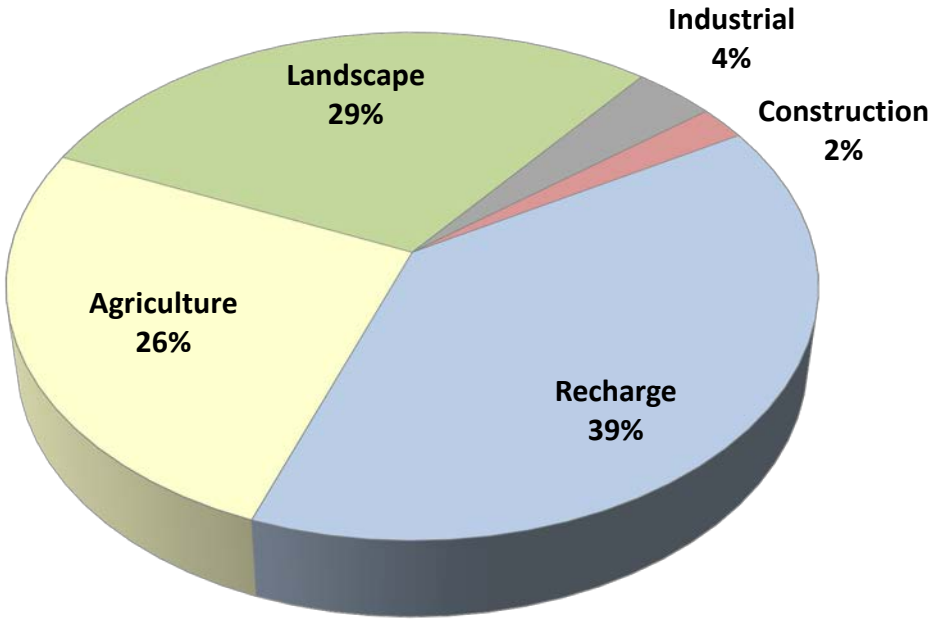

Figure 3 – Recycled Water Demand by Use Type for 2017/18

RETAIL DEMANDS

IEUA is the wholesale recycled water provider to its member agencies, which in turn are retail agencies that directly serve their customers. IEUA member agencies which served recycled water in 2017/18 include:

- City of Chino,
- City of Chino Hills,
- City of Ontario,
- Cucamonga Valley Water District (CVWD),
- Montclair (through MVWD),
- Fontana (through FWC), and
- City of Upland

Monte Vista Water District (MVWD) and Fontana Water Company (FWC) are the water retailers in the Cities of Montclair and Fontana, respectively, but are not IEUA member agencies. MVWD and FWC retail recycled water obtained from their overlying cities which are IEUA member agencies. San Bernardino County is currently a direct use customer of IEUA based on long standing historical contracts.

Table 2 show the recycled water demand by agency. Each agency's total includes its direct use and its allocation from IEUA for recycled water groundwater recharge based on IEUA's Regional Sewage Service Contract.

Table 2 –Recycled Water Demand by Agency for 2017/18

Retail Agency	Direct Use (AF)	Recharge Allocation (AF)	Agency Total (AF)
Chino	6,481	0	6,481
Chino Hills	1,857	1,360	3,217
CVWD	1,262	3,802	5,064
Fontana/FWC	158	2,943	3,100
Montclair/MVWD	318	657	975
Ontario	9,653	3,315	12,968
Upland	695	1,434	2,129
IEUA	448	0	448
San Bernardino County	261	0	261
Subtotal	**21,132**	**13,510**	**34,642**

Chino exceeded Base Entitlement per Resolution 2016-6-17

CUSTOMERS DEMANDS

Appendix C lists the recycled water direct use customers of each retail agency and their demands for the fiscal year. Table 3 lists the top ten largest direct reuse customer sites for the fiscal year (excluding groundwater recharge sites). During 2017/18, seventy-five (75) new connections were made to the recycled water system with a total new demand estimated at 305 AFY. Connected new demand is the anticipated annual usage based on land size and previous potable water usage history.

Table 3 –Top 10 Recycled Water Customers for 2017/18

Customer	Use (AF)	Type of Use	Retailer
Cleveland Farm	3,466	Agricultural	Ontario
GH Dairy	1,192	Agricultural	Ontario
New Indy Ontario	881	Industrial	Upland
Cal Poly Pomona	841	Agricultural	Chino
Superior Sod	795	Agricultural	Chino
Murai Farm	744	Agricultural	Ontario
Weststeyn Dairy	733	Agricultural	Chino
Whispering Lakes Golf Course	729	Landscape	Ontario
Los Serranos Golf Course	468	Landscape	Chino Hills
Upland Hills Country Club	394	Landscape	Upland
Subtotal	**10,244**		

ECONOMIC AND ENVIRONMENTAL IMPACTS

The 34,642 AF of recycled water used during the fiscal year is the equivalent of the water supply for roughly 45,221 homes. The use of recycled water reduces the need to pump State Water Project water over the Tehachapi Mountains, an equivalent net energy demand reduction of 2,657 kilowatt-hours (kWh) per AF, and an overall reduction of approximately 79 percent in carbon dioxide emissions.

IEUA's wholesale recycled water rate to its member agencies for 2017/18 was $470/AF for direct usage and $530/AF for recharge.

HISTORY

Early water recycling efforts in the 1970s by IEUA involved irrigation at the Whispering Lakes Golf Course adjacent to RP-1 in Ontario and at the El Prado Park and Golf Course in Chino. In the 1980s, recycled water continued to be an integral part of IEUA planning with implementation of the CCWRF and RP-4 recycling plants. These two recycling plants were sited specifically at higher elevations to reduce recycling plants water pumping costs. A backbone recycled water distribution system was installed in Chino and Chino Hills from CCWRF in 1997 and was initially operated by IEUA under Ordinance No. 63. This system was later turned over to the City of Chino and the City of Chino Hills and forms the core of the recycled water distribution network operated by these two cities.

The first major regional pipeline was constructed in 1995 and served the dual purpose of a regional recycled water distribution pipeline and an outfall allowing RP-4 effluent to be discharged with RP-1 effluent into Cucamonga Creek. The RP-4 outfall was designed as a pressurized system so that water could be pumped up from RP-1 to RP-4 as well as flow down in the opposite direction from RP-4 to RP-1 and the creek outfall.

In 1999, IEUA began groundwater recharge with recycled water at Ely Basin. The initial Ely Basin project was followed by the Chino Basin Watermaster's (CBWM) development of the Optimum Basin Management Program (OBMP) and the region's efforts (including IEUA's) to implement the OBMP. In 2000, the OBMP identified recycled water use as a critical component in drought-proofing and maintaining the region's economic growth. With imported water rates increasing and long-term supply reliability declining, the region committed to aggressively and proactively address regional impacts. The OBMP set the path for the development of a regional recycled water distribution system and a Recycled Water Implementation Plan.

The use of recycled water presented several advantages to IEUA and its member agencies: it is one of the most significant unused local water supplies; it is reliable during drought and climate change conditions; and it requires significantly less energy than imported water to deliver to customers thus reduces greenhouse gas emissions. IEUA in partnership with its member agencies and CBWM invested approximately $625 million since 2000 to increase the availability of local water supplies through water recycling, conservation, recharge improvements, the MWD groundwater storage and recovery project, the Chino Desalter, and other water management programs.

In 2002, IEUA Board of Directors adopted Ordinance No. 75, the Mandatory Use Ordinance, to establish incentives and encourage recycled water use from the regional distributions system. Also in 2002, the CBWM, Chino Basin Water Conservation District (CBWCD), San Bernardino

County Flood Control District (SBCFCD) and IEUA joined forces to greatly expand groundwater recharge capacity through the Chino Basin Facilities Improvement Program.

In 2005, IEUA was permitted by the Regional Water Quality Control Board to operate its recycled water groundwater recharge programs at five additional recharge basins (Banana, Hickory, Etiwanda Conservation Ponds, Declez, RP3, and Turner basins). In 2007, IEUA was permitted to operate its recycled water groundwater recharge program at seven more recharge sites (Brooks, 8th Street, Victoria, Lower Day, San Sevaine, Etiwanda Spreading Grounds (later reconfigured as the Etiwanda Debris Basin) and Ely Basins. The 2007 permit was amended in 2009 to modify how IEUA tracks diluent water and recycled water blending, which effectively increased IEUA's ability to recharge using recycled water.

In November 2007, IEUA and its member agencies unanimously adopted the Three Year Recycled Water Business Plan. IEUA and its member agencies committed to implementing the plan, which laid out a focused and cost-effective approach to rapidly increase the availability and use of recycled water within IEUA's service area.

Based on the series of regional decisions since 2000, over $350 million was invested into the implementation of a robust Recycled Water Program. The region has achieved program success by leveraging heavily on grant funding and loans. With unanimous regional support, annual recycled water use grew from approximately 5,000 AF in 2004/05 to 38,251 AF in FY 2013/14. Over the past four fiscal years, recycled water demand has fallen slightly and was 34,642 AF in 2017/18 and has been primarily driven by land use conversion from agriculture to urban.

TREATMENT PLANTS

IEUA owns and operates five regional water recycling facilities: RP-1, RP-2, RP-4, RP-5, and CCWRF. Of the treatment plants, RP-2 does not have any liquid treatment processes, and as such does not produce any recycled water. The combined treatment capacity of the remaining four plants is approximately 85 MGD. With the proposes plant expansion of RP-5, an additional 15 MGD average capacity will be achieved which will increase the combined treatment capacity to approximately 100 MGD.

APPENDIX A

RECYCLED WATER

EFFLUENT MONITORING DATA

FOR CALENDAR YEAR 2017

RP-1 (M-001A* & M-001B) Effluent Monitoring Data **Table No. 3a**

	Flow			EC			pH			BOD_5				TSS				TOC			TDS			TIN			TN			NH_3-N (grab)		
	Avg	Min	Max	Avg	Min	Max	Avg	Min	Max	Avg	Min	Max	Avg Dis	Avg	Min	Max	Avg Dis	Avg	Min	Max	Avg	Min	Max	Avg	Min	Max	Avg	Min	Max	Avg	Min	Max
Date	MGD			µmhos/cm			unit			mg/L			%	mg/L			%	mg/L			mg/L			mg/L			mg/L			mg/L		
Limit>>>							6.5 -8.5			20			15	20			15													4.5		
Jan-17	3.0	2.4	3.6	964	779	1,117	7.0	6.7	7.1	<2	<2	<2	0.5	<2	<2	<2	0.5	5.7	4.7	7.0	501	492	512	6.7	4.6	9.4	8.4	7.3	10.5	<0.1	<0.1	<0.1
Feb-17	2.3	0.0	3.1	1,066	882	1,224	7.1	6.9	7.7	<2	<2	<2	0.5	<2	<2	2	0.5	6.4	5.2	7.4	520	514	526	7.7	5.8	10.3	9.0	7.9	9.9	<0.1	<0.1	<0.1
Mar-17	0.0	0.0	0.0				7.2	7.1	7.3	<2	<2	<2	0.4	<2	<2	<2	0.5	6.0	5.4	6.8				5.7	4.3	6.9	7.4	6.6	8.6	<0.1	<0.1	<0.1
Apr-17	0.1	0.0	1.2	983	879	1,075	7.1	7.0	7.3	<2	<2	<2	0.4	<2	<2	<2	0.4	6.3	5.8	6.6				5.4	2.7	8.5	6.3	5.0	7.5	<0.1	<0.1	<0.1
May-17	0.0	0.0	0.0				7.2	6.6	7.2	<2	<2	<2	0.5	<2	<2	<2	0.4	5.9	5.2	6.4				6.4	3.3	10.3	7.6	4.7	10.3	<0.1	<0.1	<0.1
Jun-17	2.6	0.0	4.1	903	856	1,120	7.2	7.1	7.3	<2	<2	2	0.4	<2	<2	<2	0.4	5.8	5.4	6.2	520	520	520	5.6	2.8	8.1	5.9	4.4	6.7	<0.1	<0.1	<0.1
Jul-17	2.6	0.0	5.4	790	598	915	7.1	6.7	7.3	<2	<2	<2	0.4	<2	<2	3	0.5	5.6	5.2	5.9	502	458	530	7.6	2.8	10.9	7.9	3.7	10.6	<0.1	<0.1	<0.1
Aug-17	2.5	1.7	5.7	823	588	1,004	7.1	6.9	7.2	<2	<2	<2	0.5	<2	<2	<2	0.5	5.5	5.2	5.8	509	490	518	6.4	4.9	9.1	6.1	5.2	6.6	<0.1	<0.1	<0.1
Sep-17	3.5	2.0	7.0	703	517	978	7.0	6.5	7.2	<2	<2	<2	0.6	<2	<2	<2	0.6	5.7	5.1	6.2	497	490	510	6.1	4.7	7.5	6.8	5.9	8.2	<0.1	<0.1	<0.1
Oct-17	3.2	2.9	6.0	758	458	1,787	6.9	6.6	7.1	<2	<2	<2	0.6	<2	<2	<2	0.6	5.3	5.1	7.1	486	470	500	6.4	4.2	8.3	6.8	6.1	8.3	<0.1	<0.1	<0.1
Nov-17	2.8	1.0	5.0	745	720	771	6.8	6.7	7.0	<2	<2	<2	0.5	<2	<2	<2	0.5	5.5	5.1	6.1	475	468	484	8.3	6.4	12.1	8.6	7.7	9.6	<0.1	<0.1	<0.1
Dec-17	4.2	0.0	5.1	754	655	1,003	6.9	6.8	7.3	<2	<2	<2	0.5	<2	<2	<2	0.5	5.9	5.4	6.5	471	436	508	7.2	4.9	11.7	8.2	6.2	11.7	<0.3	<0.1	1.0
Avg	**2.2**	**0.8**	**3.9**	**849**	**693**	**1,099**	**7.1**	**6.8**	**7.2**	**<2**	**<2**	**<2**	**0.5**	**<2**	**<2**	**<2**	**0.5**	**5.8**	**5.2**	**6.5**	**498**	**482**	**512**	**6.6**	**4.3**	**9.4**	**7.4**	**5.9**	**9.0**	**<0.1**	**<0.1**	**<0.2**
Min	**0.0**	**0.0**	**0.0**	**703**	**458**	**771**	**6.8**	**6.5**	**7.0**	**<2**	**<2**	**<2**	**0.4**	**<2**	**<2**	**<2**	**0.4**	**5.3**	**4.7**	**5.8**	**471**	**436**	**484**	**5.4**	**2.7**	**6.9**	**5.9**	**3.7**	**6.6**	**<0.1**	**<0.1**	**<0.1**
Max	**4.2**	**2.9**	**7.0**	**1,066**	**882**	**1,787**	**7.2**	**7.1**	**7.7**	**<2**	**<2**	**2**	**0.6**	**<2**	**<2**	**3**	**0.6**	**6.4**	**5.8**	**7.4**	**520**	**520**	**530**	**8.3**	**6.4**	**12.1**	**9.0**	**7.9**	**11.7**	**<0.3**	**<0.1**	**1.0**

***M-001A is the compliance point for continuous monitoring parameters, TDS, and toxicity.**

RP-1/RP-4 (M-002A) Effluent Monitoring Data **Table No. 3b**

	Flow			EC			pH			BOD_5				TSS				TOC			TDS			TIN			TN			NH_3-N (grab)		
	Avg	Min	Max	Avg	Min	Max	Avg	Min	Max	Avg	Min	Max	Avg Dis	Avg	Min	Max	Avg Dis	Avg	Min	Max	Avg	Min	Max	Avg	Min	Max	Avg	Min	Max	Avg	Min	Max
Date	MGD			µmhos/cm			unit			mg/L			%	mg/L			%	mg/L			mg/L			mg/L			mg/L			mg/L		
Limit>>>							6.5 -8.5			20			15	20			15													4.5		
Jan-17	28.4	19.6	39.2	834	807	870	7.1	6.6	7.6	<2	<2	2	0.5	<2	<2	<2	0.5	5.5	4.5	6.6	493	474	510	6.6	4.5	9.4	7.6	7.6	7.6	<0.1	<0.1	<0.1
Feb-17	24.4	15.1	35.1	739	680	812	6.9	6.7	7.0	<2	<2	<2	0.5	<2	<2	<2	0.5	6.2	5.0	7.0	480	456	508	7.4	5.9	10.2	9.2	9.2	9.2	<0.1	<0.1	<0.1
Mar-17	5.1	0.8	14.3	744	691	830	7.0	6.7	7.1	<2	<2	<2	0.4	<2	<2	<2	0.5	5.7	5.2	6.6	479	466	496	5.5	4.2	6.7	8.3	8.3	8.3	<0.1	<0.1	<0.1
Apr-17	3.0	1.0	15.9	779	718	828	6.9	6.7	7.1	<2	<2	<2	0.4	<2	<2	<2	0.5	6.0	5.6	6.3	488	476	494	5.4	2.4	8.7	7.4	7.4	7.4	<0.1	<0.1	<0.1
May-17	2.0	0.3	6.6	711	659	764	6.9	6.6	7.1	<2	<2	<2	0.5	<2	<2	<2	0.5	5.7	5.1	6.2	477	470	486	5.7	3.0	9.6	6.2	6.2	6.2	<0.1	<0.1	<0.1
Jun-17	0.6	0.0	7.7	734	693	780	6.9	6.6	7.1	<2	<2	2	0.5	<2	<2	<2	0.5	5.5	5.1	5.8	504	488	518	5.0	2.3	8.6	5.2	5.2	5.2	<0.1	<0.1	<0.1
Jul-17	0.5	0.0	3.3	755	692	835	6.9	6.6	7.1	<2	<2	<2	0.4	<2	<2	<2	0.5	5.2	4.9	5.5	483	454	506	6.8	2.3	9.9	4.6	4.6	4.6	<0.1	<0.1	<0.1
Aug-17	2.5	0.0	8.3	712	671	767	6.9	6.5	7.0	<2	<2	2	0.5	<2	<2	<2	0.5	5.2	4.8	5.5	459	438	484	5.5	4.0	7.3	6.1	6.1	6.1	<0.1	<0.1	<0.1
Sep-17	3.3	0.1	7.3	692	654	729	6.9	6.5	7.1	<2	<2	<2	0.6	<2	<2	<2	0.6	5.4	4.8	6.1	456	438	466	5.5	3.5	8.0	5.5	5.5	5.5	<0.1	<0.1	<0.1
Oct-17	3.6	0.1	8.6	835	671	964	6.9	6.5	7.0	<2	<2	<2	0.6	<2	<2	<2	0.6	5.0	4.8	5.3	439	428	454	6.1	4.2	9.0	7.9	7.9	7.9	<0.1	<0.1	<0.1
Nov-17	7.8	2.1	11.8	718	680	753	6.8	6.6	7.0	<2	<2	<2	0.5	<2	<2	<2	0.5	5.2	4.7	5.6	459	448	470	6.3	4.4	10.2	6.0	6.0	6.0	<0.1	<0.1	0.1
Dec-17	4.9	0.1	10.2	708	632	845	6.8	6.5	7.3	<2	<2	<2	0.5	<2	<2	<2	0.5	5.6	4.8	6.4	462	446	488	7.5	5.9	11.5	7.7	7.7	7.7	<0.1	<0.1	<0.1
Avg	**7.2**	**3.3**	**14.0**	**747**	**687**	**815**	**6.9**	**6.6**	**7.1**	**<2**	**<2**	**<2**	**0.5**	**<2**	**<2**	**<2**	**0.5**	**5.5**	**4.9**	**6.1**	**473**	**457**	**490**	**6.1**	**3.9**	**9.1**	**6.8**	**6.8**	**6.8**	**<0.1**	**<0.1**	**<0.1**
Min	**0.5**	**0.0**	**3.3**	**692**	**632**	**729**	**6.8**	**6.5**	**7.0**	**<2**	**<2**	**<2**	**0.4**	**<2**	**<2**	**<2**	**0.5**	**5.0**	**4.5**	**5.3**	**439**	**428**	**454**	**5.0**	**2.3**	**6.7**	**4.6**	**4.6**	**4.6**	**<0.1**	**<0.1**	**<0.1**
Max	**28.4**	**19.6**	**39.2**	**835**	**807**	**964**	**7.1**	**6.7**	**7.6**	**<2**	**<2**	**2**	**0.6**	**<2**	**<2**	**<2**	**0.6**	**6.2**	**5.6**	**7.0**	**504**	**488**	**518**	**7.5**	**5.9**	**11.5**	**9.2**	**9.2**	**9.2**	**<0.1**	**<0.1**	**0.1**

RP-5 (M-003) Effluent Monitoring Data — **Table No. 3c**

	Flow			EC			pH			BOD_5				TSS				TOC			TDS			TIN			TN			NH_3-N (grab)		
	Avg	Min	Max	Avg	Min	Max	Avg	Min	Max	Avg	Min	Max	Avg Dis	Avg	Min	Max	Avg Dis	Avg	Min	Max	Avg	Min	Max	Avg	Min	Max	Avg	Min	Max	Avg	Min	Max
Date	MGD			µmhos/cm			unit			mg/L			%	mg/L			%	mg/L			mg/L			mg/L			mg/L			mg/L		
Limit>>>							6.5 -8.5			20			15	20			15													4.5		
Jan-17	5.5	3.7	8.5	993	870	1,113	6.8	6.7	7.0	<2	<2	<2	0.5	<2	<2	2	0.5	5.1	4.6	6.0	513	504	520	6.2	4.0	8.7	8.0	8.0	8.0	<0.1	<0.1	<0.1
Feb-17	4.7	2.9	6.6	1,051	1,000	1,142	6.9	6.8	7.1	<2	<2	2	0.4	<2	<2	2	0.4	5.5	5.2	6.0	542	536	550	6.3	5.0	7.2	7.3	7.3	7.3	<0.1	<0.1	0.2
Mar-17	5.7	4.7	7.6	1,098	885	1,233	7.0	6.7	7.1	<2	<2	<2	0.4	<2	<2	2	0.5	5.7	5.1	6.2	523	510	532	5.2	4.0	6.9	6.8	6.8	6.8	<0.1	<0.1	<0.1
Apr-17	3.7	1.4	5.9	936	881	1,096	6.9	6.6	7.1	<2	<2	2	0.5	<2	<2	3	0.6	5.6	5.0	6.5	515	504	526	6.5	5.5	7.8	7.3	7.3	7.3	<0.1	<0.1	<0.1
May-17	3.3	1.8	4.9	1,043	908	1,104	6.9	6.7	7.1	<2	<2	<2	0.7	<2	<2	3	0.9	5.1	4.6	5.8	520	516	522	7.0	6.0	8.3	8.0	8.0	8.0	<0.1	<0.1	<0.1
Jun-17	1.5	0.0	3.2	1,176	1,057	1,308	7.0	6.7	7.4	<2	<2	<2	0.4	<2	<2	4	0.4	5.4	4.8	6.7	539	496	576	6.4	4.9	7.7	7.3	7.3	7.3	<0.1	<0.1	<0.1
Jul-17	0.4	0.0	1.6	1,198	1,141	1,268	7.2	6.7	7.5	<2	<2	3	0.5	<2	<2	4	0.7	4.8	4.5	5.7	538	536	540	6.8	5.6	7.8	6.8	6.8	6.8	<0.1	<0.1	<0.1
Aug-17	0.0	0.0	0.0	1,154	1,069	1,188	7.2	7.0	7.4	<2	<2	<2	0.6	<2	<2	<2	0.6	4.6	4.4	5.0				6.1	5.1	7.8						
Sep-17	0.7	0.0	2.2	1,148	1,113	1,203	7.1	6.6	7.4	<2	<2	<2	0.6	<2	<2	2	0.5	4.7	4.0	5.7	515	506	524	5.9	5.2	6.9	5.7	5.7	5.7	<0.1	<0.1	<0.1
Oct-17	2.5	1.2	4.6	1,159	1,120	1,186	7.0	6.7	7.2	<2	<2	<2	0.6	<2	<2	6	0.6	4.4	4.0	4.8	500	488	514	6.1	5.3	7.3	5.4	5.4	5.4	<0.1	<0.1	<0.1
Nov-17	4.1	1.9	7.4	1,096	1,058	1,131	7.0	6.9	7.3	<2	<2	2	0.5	<2	<2	5	0.6	4.7	4.1	5.3	493	482	518	5.9	4.6	7.0	6.5	6.5	6.5	<0.1	<0.1	<0.1
Dec-17	3.0	1.3	5.8	1,037	1,003	1,109	6.9	6.7	7.1	<2	<2	<2	0.6	<4	<2	23	0.6	4.8	4.3	5.3	470	440	486	6.1	4.6	8.0	7.1	7.1	7.1	<0.1	<0.1	<0.1
Avg	**2.9**	**1.6**	**4.9**	**1,091**	**1,009**	**1,173**	**7.0**	**6.7**	**7.2**	**<2**	**<2**	**<2**	**0.5**	**<2**	**<2**	**5**	**0.6**	**5.0**	**4.5**	**5.7**	**515**	**502**	**528**	**6.2**	**5.0**	**7.6**	**6.9**	**6.9**	**6.9**	**<0.1**	**<0.1**	**<0.1**
Min	**0.0**	**0.0**	**0.0**	**936**	**870**	**1,096**	**6.8**	**6.6**	**7.0**	**<2**	**<2**	**<2**	**0.4**	**<2**	**<2**	**<2**	**0.4**	**4.4**	**4.0**	**4.8**	**470**	**440**	**486**	**5.2**	**4.0**	**6.9**	**5.4**	**5.4**	**5.4**	**<0.1**	**<0.1**	**<0.1**
Max	**5.7**	**4.7**	**8.5**	**1,198**	**1,141**	**1,308**	**7.2**	**7.0**	**7.5**	**<2**	**<2**	**3**	**0.7**	**<4**	**<2**	**23**	**0.9**	**5.7**	**5.2**	**6.7**	**542**	**536**	**576**	**7.0**	**6.0**	**8.7**	**8.0**	**8.0**	**8.0**	**<0.1**	**<0.1**	**0.2**

***Lab EC data used**

CCWRF (M-004) Effluent Monitoring Data — **Table No. 3d**

	Flow			EC			pH			BOD_5				TSS				TOC			TDS			TIN			TN			NH_3-N (grab)		
	Avg	Min	Max	Avg	Min	Max	Avg	Min	Max	Avg	Min	Max	Avg Dis	Avg	Min	Max	Avg Dis	Avg	Min	Max	Avg	Min	Max	Avg	Min	Max	Avg	Min	Max	Avg	Min	Max
Date	MGD			µmhos/cm			unit			mg/L			%	mg/L			%	mg/L			mg/L			mg/L			mg/L			mg/L		
Limit>>>							6.5 -8.5			20			15	20			15													4.5		
Jan-17	8.0	3.5	11.0	893	787	948	6.9	6.7	7.0	<2	<2	<2	0.6	<2	<2	3	0.8	5.2	4.5	5.7	505	464	532	6.3	4.6	11.8	8.4	8.4	8.4	<0.1	<0.1	<0.1
Feb-17	8.1	6.6	9.6	900	846	940	7.0	6.7	7.1	<2	<2	<2	0.5	<2	<2	5	0.6	5.5	5.1	5.9	518	508	524	4.7	3.6	6.5	5.7	5.7	5.7	<0.1	<0.1	<0.1
Mar-17	6.0	4.0	8.0	851	821	888	7.0	6.7	7.1	<2	<2	<2	0.5	<2	<2	3	0.6	5.5	4.8	6.3	495	486	508	5.1	3.6	5.8	6.7	6.7	6.7	<0.1	<0.1	<0.1
Apr-17	2.1	1.0	6.1	882	854	915	6.9	6.5	7.1	<2	<2	2	0.6	3	<2	10	1.5	5.7	5.2	7.7	508	498	518	5.2	3.6	6.1	4.9	4.9	4.9	<0.1	<0.1	<0.1
May-17	2.6	0.5	5.2	853	727	949	6.9	6.6	7.1	<2	<2	3	0.8	<2	<2	4	2.0	5.3	4.6	6.1	509	496	520	4.1	2.8	5.2	5.7	5.7	5.7	<0.1	<0.1	<0.1
Jun-17	1.0	0.6	1.3	831	749	911	6.8	6.6	7.0	<2	<2	<2	0.4	<2	<2	<2	0.8	5.8	5.4	6.2	503	496	512	4.6	3.9	5.5	5.3	5.3	5.3	0.2	<0.1	0.3
Jul-17	1.4	0.3	3.5	873	713	956	6.8	6.5	7.7	<2	<2	<2	0.2	<2	<2	3	0.3	6.0	5.5	6.4	485	382	550	5.3	3.9	6.8	6.6	6.6	6.6	<0.1	<0.1	<0.1
Aug-17	0.0	0.0	0.0	838	800	919	7.2	7.0	7.3	<2	<2	<2	0.4	<2	<2	<2	0.4	6.7	5.8	7.6				5.8	5.0	7.6						
Sep-17	0.0	0.0	0.0	818	790	875	7.2	7.1	7.3	<2	<2	<2	0.4	<2	<2	<2	0.5	5.9	5.5	6.9				5.7	5.1	6.7						
Oct-17	1.4	0.0	2.2	859	806	890	6.9	6.7	7.2	<2	<2	<2	0.5	<2	<2	<2	0.5	5.5	4.3	6.0	497	464	526	5.6	4.5	7.0	6.0	6.0	6.0	<0.1	<0.1	<0.1
Nov-17	1.6	0.8	3.4	850	805	894	6.9	6.6	7.1	<2	<2	<2	0.5	<2	<2	<2	0.5	5.3	5.0	5.6	511	476	540	5.4	3.6	6.3	6.3	6.3	6.3	<0.1	<0.1	<0.1
Dec-17	1.8	1.0	4.6	840	801	889	6.8	6.6	7.0	<2	<2	2	0.4	<2	<2	<2	0.4	5.7	4.9	6.6	472	460	482	5.5	4.8	7.8	5.8	5.8	5.8	<0.1	<0.1	<0.1
Avg	**2.8**	**1.5**	**4.6**	**857**	**792**	**915**	**6.9**	**6.7**	**7.2**	**<2**	**<2**	**<2**	**0.5**	**<2**	**<2**	**3**	**0.7**	**5.7**	**5.0**	**6.4**	**500**	**473**	**521**	**5.3**	**4.1**	**6.9**	**6.1**	**6.1**	**6.1**	**<0.1**	**<0.1**	**<0.1**
Min	**0.0**	**0.0**	**0.0**	**818**	**713**	**875**	**6.8**	**6.5**	**7.0**	**<2**	**<2**	**<2**	**0.2**	**<2**	**<2**	**<2**	**0.3**	**5.2**	**4.3**	**5.6**	**472**	**382**	**482**	**4.1**	**2.8**	**5.2**	**4.9**	**4.9**	**4.9**	**<0.1**	**<0.1**	**<0.1**
Max	**8.1**	**6.6**	**11.0**	**900**	**854**	**956**	**7.2**	**7.1**	**7.7**	**<2**	**<2**	**3**	**0.8**	**3**	**<2**	**10**	**2.0**	**6.7**	**5.8**	**7.7**	**518**	**508**	**550**	**6.3**	**5.1**	**11.8**	**8.4**	**8.4**	**8.4**	**0.2**	**<0.1**	**0.3**

RP-1 (M-001A) Effluent Monthly Toxicity Data **Table No. 4a**

			CHRONIC TOXICITY - SURVIVAL (*Ceriodaphnia Dubia*)			CHRONIC TOXICITY - REPRODUCTION (*Ceriodaphnia dubia*)			
START DATE		END DATE	NOEC	TUc	2-Mo Median TUc	NOEC	TUc	2-Mo Median TUc	IC_{25}
01/08/17	thru	01/13/17	100	1.0	1.0	100	1.0	1.0	100
02/05/17	thru	02/09/17	100	1.0	1.0	100	1.0	1.0	100
					No Discharge During March 2017				
					No Discharge During April 2017*				
					No Discharge During May 2017				
06/22/17**	thru	06/28/17	100	1.0	1.0	100	1.0	1.0	100
07/16/17	thru	07/22/17	100	1.0	1.0	100	1.0	1.0	100
08/07/17	thru	08/13/17	100	1.0	1.0	100	1.0	1.0	100
09/02/17	thru	09/09/17	100	1.0	1.0	100	1.0	1.0	100
09/30/17	thru	10/07/17	100	1.0	1.0	100	1.0	1.0	100
11/04/17	thru	11/10/17	100	1.0	1.0	100	1.0	1.0	100
12/02/17	thru	12/08/17	100	1.0	1.0	100	1.0	1.0	100

*Discharge during the month of April 2017 was not a long enough duration to run a bioassay.

RP-1 (M-002A) Effluent Monthly Toxicity Data **Table No. 4b**

			CHRONIC TOXICITY - SURVIVAL (*Ceriodaphnia Dubia*)			CHRONIC TOXICITY - REPRODUCTION (*Ceriodaphnia dubia*)			
START DATE		END DATE	NOEC	TUc	2-Mo Median TUc	NOEC	TUc	2-Mo Median TUc	IC_{25}
01/01/17	thru	01/06/17	100	1.0	1.0	100	1.0	1.0	100
02/12/17	thru	02/16/17	100	1.0	1.0	100	1.0	1.0	100
03/05/17	thru	03/10/17	100	1.0	1.0	100	1.0	1.0	100
04/02/17	thru	04/06/17	100	1.0	1.0	100	1.0	1.0	100
05/29/17**	thru	06/02/17	100	1.0	1.0	100	1.0	1.0	100
06/22/17**	thru	06/28/17	100	1.0	1.0	100	1.0	1.0	100
07/08/17	thru	07/14/17	100	1.0	1.0	100	1.0	1.0	100
08/12/17	thru	08/19/17	100	1.0	1.0	100	1.0	1.0	100
09/16/17	thru	09/21/17	100	1.0	1.0	100	1.0	1.0	100
09/30/17	thru	10/07/17	100	1.0	1.0	100	1.0	1.0	100
11/04/17	thru	11/10/17	100	1.0	1.0	100	1.0	1.0	100
12/02/17	thru	12/08/17	100	1.0	1.0	100	1.0	1.0	100

** MBC Laboratory

RP-5 (M-003) Effluent Monthly Toxicity Data **Table No. 4c**

			CHRONIC TOXICITY - SURVIVAL (*Ceriodaphnia Dubia*)			CHRONIC TOXICITY - REPRODUCTION (*Ceriodaphnia dubia*)			
START DATE		END DATE	NOEC	TUc	2-Mo Median TUc	NOEC	TUc	2-Mo Median TUc	IC_{25}
01/01/17	thru	01/06/17	100	1.0	1.0	100	1.0	1.0	100
02/12/17	thru	02/16/17	100	1.0	1.0	100	1.0	1.0	100
03/05/17	thru	03/10/17	100	1.0	1.0	100	1.0	1.0	100
04/02/17	thru	04/06/17	100	1.0	1.0	100	1.0	1.0	100
05/29/17*	thru	06/02/17	100	1.0	1.0	100	1.0	1.0	100
06/22/17*	thru	06/28/17	100	1.0	1.0	100	1.0	1.0	100
07/16/17	thru	07/24/17	100	1.0	1.0	100	1.0	1.0	100
					No Discharge During August 2017				
09/23/17	thru	09/29/17	100	1.0	1.0	100	1.0	1.0	100
10/22/17	thru	10/28/17	100	1.0	1.0	100	1.0	1.0	100
11/11/17	thru	11/16/17	100	1.0	1.0	100	1.0	1.0	100
12/09/17	thru	12/15/17	100	1.0	1.0	100	1.0	1.0	100

CCWRF (M-004) Effluent Monthly Toxicity Data **Table No. 4d**

			CHRONIC TOXICITY - SURVIVAL (*Ceriodaphnia Dubia*)			CHRONIC TOXICITY - REPRODUCTION (*Ceriodaphnia dubia*)			
START DATE		END DATE	NOEC	TUc	2-Mo Median TUc	NOEC	TUc	2-Mo Median TUc	IC_{25}
01/15/17	thru	01/20/17	100	1.0	1.0	100	1.0	1.0	100
02/19/17	thru	02/23/17	100	1.0	1.0	100	1.0	1.0	100
03/12/17	thru	03/16/17	100	1.0	1.0	100	1.0	1.0	100
04/16/17	thru	04/21/17	100	1.0	1.0	100	1.0	1.0	100
05/29/17*	thru	06/02/17	100	1.0	1.0	100	1.0	1.0	100
06/22/17*	thru	06/28/17	100	1.0	1.0	100	1.0	1.0	100
07/08/17	thru	07/14/17	100	1.0	1.0	100	1.0	1.0	100
					No Discharge During August 2017				
					No Discharge During September 2017				
10/07/17	thru	10/15/17	100	1.0	1.0	100	1.0	1.0	100
11/18/17	thru	11/24/17	100	1.0	1.0	100	1.0	1.0	100
12/23/17	thru	12/29/17	100	1.0	1.0	100	1.0	1.0	100

* MBC Laboratory

RP-1 (M-001A & M-001B) & RP-1/RP-4 (M-002A) Effluent Monitoring and Coliform Data — **Table No. 5a**

	001 Turbidity		002 Turbidity		001 Temp		002 Temp		001 Daily Coliform		001 7-day Median		002 Daily Coliform*		002 7-day Median		001 FLR	001 DT	001 CT	002 FLR	002 DT	002 CT
	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Max	Min	Min	Max	Min	Min
Date	NTU		NTU		°C		°C		MPN / 100 mL								gpm/ft^2	min	mg-min/L	gpm/ft^3	min	mg-min/L
Jan-17	0.6	0.8	0.5	0.7	21.9	23.1	19.4	24.8	<4	86	<1	<1	<4	86	<1	<1	4	148	660	4	111	632
Feb-17	0.7	1.0	0.6	0.8	22.7	23.2	23.2	23.8	<1	6	<1	<1	<1	6	<1	<1	4	101	712	4	111	709
Mar-17	0.6	0.7	0.4	0.6			24.5	25.4	<2	46	<1	<1	<2	46	<1	<1	3	147	714	3	142	760
Apr-17	0.6	0.8	0.5	0.7	25.0	25.7	26.0	27.0	<1	2	<1	<1	<1	2	<1	<1	3	163	808	3	133	755
May-17	0.5	0.7	0.5	0.8			27.0	27.8	<1	2	<1	<1	<1	2	<1	<1	3	169	726	3	145	682
Jun-17	0.5	0.7	0.5	0.6	28.4	29.5	29.0	30.4	<1	3	<1	<1	<1	3	<1	<1	3	155	708	3	141	641
Jul-17	0.5	0.6	0.4	1.2	29.9	30.3	30.7	31.2	<1	1	<1	<1	<1	1	<1	<1	3	157	722	3	136	685
Aug-17	0.5	0.7	0.4	0.6	30.1	30.8	30.0	30.8	<1	1	<1	<1	<1	1	<1	<1	3	146	592	3	139	543
Sep-17	0.4	0.6	0.4	0.7	29.4	30.8	29.5	30.9	<1	1	<1	<1	<1	1	<1	<1	3	144	539	3	154	574
Oct-17	0.4	0.5	0.4	2.0	28.0	28.8	27.9	28.6	<1	2	<1	<1	<1	2	<1	<1	3	159	579	3	169	527
Nov-17	0.5	0.7	0.5	0.7	26.5	27.3	26.2	27.1	<1	2	<1	<2	<1	2	<1	<2	3	92	457	3	178	532
Dec-17	0.6	0.7	0.5	0.7	24.2	25.7	23.3	25.3	<1	1	<1	1	<1	1	<1	1	3	164	569	3	202	854
Avg	**0.5**	**0.7**	**0.5**	**0.9**	**26.6**	**27.5**	**26.4**	**27.8**	**<1**	**13**	**<1**	**<1**	**<1**	**13**	**<1**	**<1**	**3**	**145**	**642**	**3**	**147**	**658**
Min	**0.4**	**0.5**	**0.4**	**0.6**	**21.9**	**23.1**	**19.4**	**23.8**	**<1**	**1**	**<1**	**<1**	**<1**	**1**	**<1**	**<1**	**3**	**92**	**457**	**3**	**111**	**527**
Max	**0.7**	**1.0**	**0.6**	**2.0**	**30.1**	**30.8**	**30.7**	**31.2**	**<4**	**86**	**<1**	**<2**	**<4**	**86**	**<1**	**<2**	**4**	**169**	**808**	**4**	**202**	**854**

Requirements for disinfected tertiary-treated recycled water Title 22 Compliance: Min: 450 mg/L-min CT & 90 min DT

*Beginning August 2009, 002 effluent coliform compliance point at M-001B (splitter box).

RP-5 (M-003) & CCWRF (M-004) Effluent Monitoring and Coliform Data — **Table No. 5b**

	003 Turbidity		004 Turbidity		003 Temp		004 Temp		003 Daily Coliform		003 7-day Median		004 Daily Coliform		004 7-day Median		003 FLR	003 DT	003 CT	004 FLR	004 DT	004 CT
	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Max	Min	Min	Max	Min	Min
Date	NTU		NTU		°C		°C		MPN / 100 mL								gpm/ft^2	min	mg-min/L	gpm/ft^3	min	mg-min/L
Jan-17	0.8	1.0	0.6	1.0	21.6	23.0	19.8	21.2	<1	3	<1	<1	<1	8	<1	<1	3	123	515	2	110	462
Feb-17	0.8	1.0	0.9	1.3	22.6	22.9	20.9	22.0	<1	1	<1	<1	<1	1	<1	<1	3	154	480	2	104	490
Mar-17	1.0	1.2	0.6	0.9	24.3	25.2	21.7	24.0	<1	<1	<1	<1	<1	1	<1	<1	3	161	501	3	118	484
Apr-17	1.0	1.4	0.6	0.7	24.8	25.8	20.8	23.6	<1	2	<1	<1	<1	10	<1	<1	3	164	485	3	129	492
May-17	0.9	1.7	0.8	1.2	24.6	24.8	23.0	24.8	<2	20	<1	<1	<1	1	<1	<1	3	147	489	3	118	487
Jun-17	0.6	1.4	0.7	1.0	24.4	24.8	25.7	27.6	<9	165.8	<1	1	<1	1	<1	<1	3	162	485	3	126	479
Jul-17	0.6	0.9	0.7	1.0	24.6	24.7	28.8	30.4	<1	1	<1	<1	<57	1732.9	<1	<1	3	148	543	3	121	560
Aug-17	1.0	1.1	1.0	1.4					<79.1	>2419.6	<1	<1	<2	19.9	<1	<1	3	188	493	2	112	475
Sep-17	0.9	1.4	0.6	0.9	24.7	24.8			<1	1	<1	<1	<1	4.1	<1	<1	3	156	576	2	110	531
Oct-17	0.7	0.8	0.7	1.0	25.6	27.1	26.1	27.0	<1	1	<1	<1	<1	3.1	<1	<1	4	137	500	2	123	552
Nov-17	0.7	1.1	0.4	0.5	25.1	26.6	24.9	25.8	<2	31.8	<1	<2	<1	2	<1	<2	4	137	496	2	132	535
Dec-17	0.7	1.1	0.5	0.7	24.5	24.8	19.0	22.1	<1	1	<1	<1	<1	1	<1	<1	3	99	491	2	128	508
Avg	**0.8**	**1.2**	**0.7**	**1.0**	**24.2**	**25.0**	**23.1**	**24.9**	**<8**	**221**	**<1**	**<1**	**<6**	**149**	**<1**	**<1**	**3**	**148**	**501**	**2**	**119**	**505**
Min	**0.6**	**0.8**	**0.4**	**0.5**	**21.6**	**22.9**	**19.0**	**21.2**	**<1**	**<1**	**<1**	**<1**	**<1**	**1**	**<1**	**<1**	**3**	**99**	**480**	**2**	**104**	**462**
Max	**1.0**	**1.7**	**1.0**	**1.4**	**25.6**	**27.1**	**28.8**	**30.4**	**79**	**2,420**	**<1**	**<2**	**57**	**1,733**	**<1**	**<2**	**4**	**188**	**576**	**3**	**132**	**560**

Requirements for disinfected tertiary-treated recycled water Title 22 Compliance: Min: 450 mg/L-min CT & 90 min DT

RP-1 (M-001A) & RP-1/RP-4 (M-002A) Effluent and Receiving Water (R-002U & R-002D) Data **Table No. 6a**

	M-001A Cl_2 Residual*		M-002A Cl2 Residual*		Upstream Cucamonga Creek (R-002U)										Downstream Cucamonga Creek (R-002D)							
					DO		Temp		pH		TDS	TIN	Total Hardness	TSS	DO		Temp		pH		Total Hardness	TSS
	Avg	Max	Avg	Max	Avg	Min	Avg	Max	Min	Max	Avg	Avg	Avg	Avg	Avg	Min	Avg	Max	Min	Max	Avg	Avg
Date	mg/L				mg/L		°C		unit		mg/L	mg/L	mg/L	mg/L	mg/L		°C		unit		mg/L	mg/L
Jan-17	0.0	0.0	0.0	0.0	13.7	11.6	8.9	12.1	8.4	9.4	454	0.6	125	9	8.7	8.2	18.9	21.7	7.6	7.8	149	1
Feb-17	0.0	0.0	0.0	4.9	13.3	12.8	13.1	15.5	9.1	9.4	374	0.1			8.8	8.4	21.2	22.3	7.4	7.8		
Mar-17			0.0	0.0	12.7	10.2	13.7	17.6	9.2	9.7	144	0.1			9.7	9.3	19.0	20.1	7.8	8.3		
Apr-17	0.0	0.0	0.0	0.0	11.3	10.4	15.9	20.8	8.9	9.7	312	<0.2	148	4	9.9	8.5	19.9	22.1	8.2	8.6	151	2
May-17	0.0	0.0	0.0	0.0	10.8	9.9	19.0	22.2	8.8	9.9	578	<0.2			9.5	8.8	21.1	22.4	8.0	8.7		
Jun-17	0.0	0.0	0.0	0.0	10.5	10.3	19.7	22.4	9.3	9.7	350	0.1			8.9	8.5	21.2	23.2	8.4	8.7		
Jul-17	0.0	0.0	0.0	0.0	11.2	10.3	22.3	23.3	9.2	9.7	590	<0.2	239	12	9.0	8.6	22.9	23.4	8.4	8.6	154	23
Aug-17	0.0	0.0	0.0	0.0	10.4	9.2	22.6	25.2	9.2	9.6	516	1.6			9.3	8.4	24.3	26.3	8.4	8.7		
Sep-17	0.0	0.0	0.0	0.0	10.6	10.1	19.6	22.6	9.0	9.6	402	1.9			9.1	8.8	23.7	25.9	8.2	8.5		
Oct-17	0.0	0.0	0.0	0.0	10.6	9.6	16.5	18.5	9.0	9.5	308	0.1	153	<10	9.0	7.7	21.0	22.7	8.2	8.5	127	<10
Nov-17	0.0	0.0	0.0	0.0	13.3	12.1	14.3	15.6	9.6	10.1	316	0.9			9.5	8.8	21.0	23.3	8.1	8.7		
Dec-17	0.0	0.0	0.0	0.0	13.0	12.4	8.4	9.1	9.1	9.4	240	1.5			10.9	10.1	14.6	17.2	8.2	8.5		
Avg	**0.0**	**0.0**	**0.0**	**0.4**	**11.8**	**10.7**	**16.2**	**18.7**	**9.1**	**9.6**	**382**	**0.6**	**166**	**9**	**9.4**	**8.7**	**20.7**	**22.6**	**8.1**	**8.5**	**145**	**9**
Min	**0.0**	**0.0**	**0.0**	**0.0**	**10.4**	**9.2**	**8.4**	**9.1**	**8.4**	**9.4**	**144**	**0.1**	**125**	**4**	**8.7**	**7.7**	**14.6**	**17.2**	**7.4**	**7.8**	**127**	**1**
Max	**0.0**	**0.0**	**0.0**	**4.9**	**13.7**	**12.8**	**22.6**	**25.2**	**9.6**	**10.1**	**590**	**1.9**	**239**	**12**	**10.9**	**10.1**	**24.3**	**26.3**	**8.4**	**8.7**	**154**	**23**

RP-5 (M-003) & CCWRF (M-004) Effluent and Receiving Water (R-003U, R-003D, & R-004U) Data **Table No. 6b**

	M-003 Cl_2 Residual*		M-004 Cl2 Residual*		Upstream Chino Creek (R-003U)										Downstream Chino Creek (R-003D)								Upstream Chino Creek (R-004U)									
					DO		Temp		pH		TDS	TIN	Total Hardness	TSS	DO		Temp		pH		Total Hardness	TSS	DO		Temp		pH		TDS	TIN	Total Hardness	TSS
	Avg	Max	Avg	Max	Avg	Min	Avg	Max	Min	Max	Avg	Avg	Avg	Avg	Avg	Min	Avg	Max	Min	Max	Avg	Avg	Avg	Min	Avg	Max	Min	Max	Avg	Avg	Avg	Avg
Date	mg/L				mg/L		°C		unit		mg/L	mg/L	mg/L	mg/L	mg/L		°C		unit		mg/L	mg/L	mg/L		°C		unit		mg/L	mg/L	mg/L	mg/L
Jan-17	0.0	0.0	0.0	0.0	10.8	6.2	17.5	22.6	7.8	8.6	508	9.1	151	34	8.4	7.9	17.6	18.3	7.2	7.4	259	4	13.0	10.3	11.7	17.3	8.4	10.9	904	3.0	525	11
Feb-17	0.0	0.0	0.0	0.0	9.7	7.1	21.0	22.8	7.6	8.4	520	4.4			8.4	7.8	20.2	20.7	7.3	7.6			15.3	11.9	15.1	22.5	8.7	9.9	1076	3.8		
Mar-17	0.0	0.0	0.0	0.0	9.7	8.4	21.8	24.5	7.1	8.3	554	2.8			7.7	7.1	22.5	24.0	7.3	7.8			13.1	11.6	17.5	26.3	8.4	9.2	810	0.8		
Apr-17	0.0	0.0	0.0	0.0	12.5	8.3	20.5	25.4	7.3	9.0	674	4.0	312	6	7.8	6.7	22.9	24.0	7.1	7.6	285	3	13.2	11.9	19.0	28.6	8.6	8.9	964	1.4	544	108
May-17	0.0	0.0	0.0	0.0	10.7	9.2	22.4	24.9	6.4	8.6	522	4.7			7.8	7.4	25.7	26.6	7.3	7.4			14.0	12.8	17.5	20.7	6.4	8.9	966	1.2		
Jun-17	0.0	0.0	0.0	0.0	10.1	5.3	25.2	28.7	6.7	8.7	530	6.7			6.6	5.6	24.5	27.2	7.4	7.6			11.7	8.3	25.0	31.6	6.7	9.9	1040	1.0		
Jul-17	0.0	0.0	0.0	0.0	14.5	8.4	29.1	30.0	6.7	8.9	496	3.9	122	20	6.6	5.8	24.1	24.5	7.3	8.3	355	13	14.1	13.0	29.1	32.0	5.6	9.7	862	<0.2	347	34
Aug-17																							9.8	8.2	22.3	25.3	8.0	9.2	654	5.7		
Sep-17	0.0	0.0			11.3	7.0	25.5	27.0	7.9	8.8	504				6.3	6.0	23.4	23.7	7.0	7.8			10.6	8.8	18.5	20.5	8.2	9.3	740	1.1		
Oct-17	0.0	0.0	0.0	0.0	11.3	7.0	25.5	27.0	7.9	8.8	504	6.3	148	<4	6.4	6.0	23.3	27.6	7.4	7.6	322	7	9.4	3.7	21.7	25.8	7.8	9.5	694	2.0	383	3
Nov-17	0.0	0.0	0.0	0.0	10.7	5.9	23.8	25.2	6.1	8.3	506	7.1			7.1	6.9	20.9	22.5	7.6	7.8			11.1	8.4	20.4	24.7	5.4	9.0	792	1.6		
Dec-17	0.0	0.0	0.0	0.0	11.1	7.1	19.8	20.9	7.1	7.7	506	4.8			7.6	7.2	20.0	21.1	7.1	7.8			13.9	10.3	9.7	10.6	8.2	8.6	854	<0.2		
Avg	**0.0**	**0.0**	**0.0**	**0.0**	**11.1**	**7.3**	**22.9**	**25.4**	**7.1**	**8.6**	**529**	**5.4**	**183**	**16**	**7.3**	**6.8**	**22.3**	**23.7**	**7.3**	**7.7**	**305**	**7**	**12.4**	**9.9**	**19.0**	**23.8**	**7.5**	**9.4**	**863**	**1.8**	**450**	**39**
Min	**0.0**	**0.0**	**0.0**	**0.0**	**9.7**	**5.3**	**17.5**	**20.9**	**6.1**	**7.7**	**496**	**2.8**	**122**	**4**	**6.3**	**5.6**	**17.6**	**18.3**	**7.0**	**7.4**	**259**	**3**	**9.4**	**3.7**	**9.7**	**10.6**	**5.4**	**8.6**	**654**	**<0.2**	**347**	**3**
Max	**0.0**	**0.0**	**0.0**	**0.0**	**14.5**	**9.2**	**29.1**	**30.0**	**7.9**	**9.0**	**674**	**9.1**	**312**	**34**	**8.4**	**7.9**	**25.7**	**27.6**	**7.6**	**8.3**	**355**	**13**	**15.3**	**13.0**	**29.1**	**32.0**	**8.7**	**10.9**	**1,076**	**5.7**	**544**	**108**

* A chlorine residual of 0.0 mg/L signifies a positive sodium bisulfite residual and a negative chlorine residual.

RP-1 (REC-001) & RP-4 (REC-002) Recycled Water Data **Table No. 7a**

	REC-001											REC-002										
	Flow	pH	Turbidity	CT	Daily Coliform		7-day Median		BOD	TSS	TDS	Flow	pH	Turbidity	CT	Daily Coliform		7-day Median		BOD	TSS	TDS
	Avg	Avg	Avg	Min	Avg	Max	Avg	Max	Avg	Avg	Avg	Avg	Avg	Avg	Min	Avg	Max	Avg	Max	Avg	Avg	Avg
Date	mgd	unit	NTU	mg-min/L	MPN / 100 mL				mg/L			mgd	unit	NTU	mg-min/L	MPN / 100 mL				mg/L		
Jan-17	1.1	7.0	0.6	660	<4	86	<1	<1	<2	<2	477	6.1	6.9	0.4	921	<1	<1	<1	<1	<2	<2	481
Feb-17	2.1	7.1	0.7	712	<1	6	<1	<1	<2	<2	463	6.6	7.0	0.5	905	<1	<1	<1	<1	<2	<2	444
Mar-17	16.6	7.2	0.6	714	<2	46	<1	<1	<2	<2	456	9.3	6.9	0.5	627	<1	1	<1	<1	<2	<2	426
Apr-17	17.2	7.1	0.6	808	<1	2	<1	<1	<2	<2	471	9.7	6.9	0.5	645	<1	<1	<1	<1	<2	<2	412
May-17	18.4	7.2	0.5	726	<1	2	<1	<1	<2	<2	464	10.0	7.0	0.5	758	<1	<1	<1	<1	<2	<2	406
Jun-17	19.6	7.2	0.5	708	<1	3	<1	<1	<2	<2	465	10.1	7.1	0.4	767	<1	<1	<1	<1	<2	<2	403
Jul-17	21.0	7.1	0.5	722	<1	1	<1	<1	<2	<2	448	9.7	7.0	0.4	929	<1	<1	<1	<1	<2	<2	386
Aug-17	20.2	7.1	0.5	592	<1	1	<1	<1	<2	<2	433	9.7	6.9	0.6	702	<1	1	<1	<1	<2	<2	407
Sep-17	18.6	7.0	0.4	539	<1	1	<1	<1	<2	<2	424	9.5	6.9	0.6	772	<1	5	<1	<1	<2	<2	406
Oct-17	18.4	6.9	0.4	579	<1	2	<1	<1	<2	<2	408	10.0	6.8	0.5	695	<1	<1	<1	<1	<2	<2	384
Nov-17	14.9	6.8	0.5	457	<1	2	<1	<2	<2	<2	444	8.6	6.8	0.6	941	<1	<2	<1	<2	<2	<2	384
Dec-17	16.7	6.9	0.6	569	<1	1	<1	1	<2	<2	445	9.9	6.8	0.5	863	<1	<1	<1	<1	<2	<2	401
Avg	**15.4**	**7.1**	**0.5**	**659**	**<1**	**13**	**<1**	**<1**	**<2**	**<2**	**450**	**9.1**	**6.9**	**0.5**	**796**	**<1**	**<1**	**<1**	**<1**	**<2**	**<2**	**412**
Min	**1.1**	**6.8**	**0.4**	**457**	**<1**	**1**	**<1**	**<1**	**<2**	**<2**	**408**	**6.1**	**6.8**	**0.4**	**627**	**<1**	**<1**	**<1**	**<1**	**<2**	**<2**	**384**
Max	**21.0**	**7.2**	**0.7**	**808**	**<4**	**86**	**<1**	**<2**	**<2**	**<2**	**477**	**10.1**	**7.1**	**0.6**	**941**	**<1**	**5**	**<1**	**<2**	**<2**	**<2**	**481**

RP-5 (REC-003) & CCWRF (REC-004) Recycled Water Data **Table No. 7b**

	REC-003											REC-004										
	Flow	pH	Turbidity	CT	Daily Coliform		7-day Median		BOD	TSS	TDS	Flow	pH	Turbidity	CT	Daily Coliform		7-day Median		BOD	TSS	TDS
	Avg	Avg	Avg	Min	Avg	Max	Avg	Max	Avg	Avg	Avg	Avg	Avg	Avg	Min	Avg	Max	Avg	Max	Avg	Avg	Avg
Date	mgd	unit	NTU	mg-min/L	MPN / 100 mL				mg/L			mgd	unit	NTU	mg-min/L	MPN / 100 mL				mg/L		
Jan-17	1.1	6.8	0.8	515	<1	3	<1	<1	<2	<2	491	0.8	6.9	0.6	462	<1	8	<1	<1	<2	<2	485
Feb-17	1.1	6.9	0.8	480	<1	1	<1	<1	<2	<2	523	0.5	7.0	0.9	490	<1	1	<1	<1	<2	<2	499
Mar-17	2.4	7.0	1.0	501	<1	<1	<1	<1	<2	<2	506	1.3	7.0	0.6	484	<1	1	<1	<1	<2	<2	483
Apr-17	5.0	6.9	1.0	485	<1	2	<1	<1	<2	<2	488	5.3	6.9	0.6	492	<1	10	<1	<1	<2	3	482
May-17	5.7	6.9	0.9	489	2	20	<1	<1	<2	<2	491	5.1	6.9	0.8	487	<1	1	<1	<1	<2	<2	482
Jun-17	4.7	7.0	0.6	485	9	166	<1	1	<2	<2	501	7.0	6.8	0.7	479	<1	1	<1	<1	<2	<2	457
Jul-17	5.8	7.2	0.6	543	<1	1	<1	<1	<2	<2	492	6.1	6.8	0.7	560	57	1733	<1	<1	<2	<2	458
Aug-17	5.8	7.2	1.0	493	79	2420	<1	<1	<2	<2	501	7.9	7.2	1.0	475	<2	20	<1	<1	<2	<2	466
Sep-17	4.5	7.1	0.9	576	<1	1	<1	<1	<2	<2	469	7.6	7.2	0.6	531	<1	4	<1	<1	<2	<2	462
Oct-17	2.8	7.0	0.7	500	<1	1	<1	<1	<2	<2	477	6.0	6.9	0.7	552	<1	3	<1	<1	<2	<2	456
Nov-17	3.0	7.0	0.7	496	2	32	<1	<2	<2	<2	476	4.7	6.9	0.4	535	<1	2	<1	<2	<2	<2	474
Dec-17	1.5	6.9	0.7	491	<1	1	<1	<1	<2	<4	466	5.7	6.8	0.5	508	<1	1	<1	<1	<2	<2	457
Avg	**3.6**	**7.0**	**0.8**	**498**	**<8**	**221**	**<1**	**<1**	**<2**	**<2**	**490**	**4.8**	**6.9**	**0.7**	**502**	**<6**	**149**	**<1**	**<1**	**<2**	**<2**	**472**
Min	**1.1**	**6.8**	**0.6**	**480**	**<1**	**<1**	**<1**	**<1**	**<2**	**<2**	**466**	**0.5**	**6.8**	**0.4**	**462**	**<1**	**1**	**<1**	**<1**	**<2**	**<2**	**456**
Max	**5.8**	**7.2**	**1.0**	**543**	**79**	**2,420**	**<1**	**<2**	**<2**	**<4**	**523**	**7.9**	**7.2**	**1.0**	**560**	**57**	**1,733**	**<1**	**<2**	**<2**	**3**	**499**

RP-1 (M-001B) Effluent Monthly Inorganic & Organic Data — **Table No. 8a**

	Total Hardness	HCO_3^{2-}	B	Ca	CO_3^{2-}	Cl	F	Mg	Na	SO_4	Cd, TR	Cr, Total	Cu, TR	Pb, TR	Hg, TR	Se, TR	Ag, TR	Zn, TR	Chlorodi-bromomethane	Bromodi-chloromethane	2,3,7,8-TCDD
Date	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	pg/L
Limits																					
Jan-17	150	148	0.2	44	0	112	0.3	10	90	51	<0.25	0.6	5	<0.5	<0.05	<2	<0.25	27	4	25	
Feb-17	155	133	0.2	46	0	103	0.3	10	96	51	<0.25	<0.5	5	<0.5	<0.05	<2	<0.25	41			
Mar-17	141	134	0.2	42	0	96	0.3	8	83	44	<0.25	<0.5	8	<0.5	<0.05	<2	<0.25	32			
Apr-17	151	144	0.2	46	0	105	0.3	9	88	47	<0.25	0.5	4	<0.5	<0.05	<2	<0.25	27	2	11	0.0
May-17	144	146	0.2	44	0	105	0.3	9	87	41	<0.25	<0.5	4	<0.5	<0.05	<2	<0.25	25			
Jun-17	136	146	0.2	42	0	99	0.3	8	81	39	<0.25	<0.5	4	<0.5	<0.05	<2	<0.25	23			
Jul-17	145	149	0.2	44	0	115	0.2	9	96	39	<0.25	<0.5	4	<0.5	<0.05	<2	<0.25	24	2	14	
Aug-17	122	119	0.2	37	0	104	0.2	7	79	43	<0.25	<0.5	4	<0.5	<0.05	<2	<0.25	28			
Sep-17	123	117	0.2	36	0	104	0.2	8	82	42	<0.25	<0.5	5	<0.5	<0.05	<2	<0.25	27			
Oct-17	119	108	0.2	25	0	100	0.2	8	83	42	<0.25	<0.5	5	<0.5	<0.05	<2	<0.25	29	2	15	
Nov-17	123	113	0.2	35	0	107	0.2	9	84	47	<0.25	<0.5	4	<0.5	<0.05	<2	<0.25	24			
Dec-17	134	129	0.2	39	0	108	0.3	9	85	46	<0.25	<0.5	4	<0.5	<0.05	<2	<0.25	24			
Avg	**137**	**132**	**0.2**	**40**	**0**	**105**	**0.3**	**9**	**86**	**44**	**<0.25**	**<0.5**	**4**	**<0.5**	**<0.05**	**<2**	**<0.25**	**28**	**3**	**16**	**0.0**
Min	**119**	**108**	**0.2**	**25**	**0**	**96**	**0.2**	**7**	**79**	**39**	**<0.25**	**<0.5**	**4**	**<0.5**	**<0.05**	**<2**	**<0.25**	**23**	**2**	**11**	**0.0**
Max	**155**	**149**	**0.2**	**46**	**0**	**115**	**0.3**	**10**	**96**	**51**	**<0.25**	**0.6**	**8**	**<0.5**	**<0.05**	**<2**	**<0.25**	**41**	**4**	**25**	**0.0**

RP-1/RP-4 (M-002A) Effluent Monthly Inorganic & Organic Data — **Table No. 8b**

	Total Hardness	HCO_3^{2-}	B	Ca	CO_3^{2-}	Cl	F	Mg	Na	SO_4	Cd, TR	Cr, Total	Cu, TR	Pb, TR	Hg, TR	Se, TR	Ag, TR	Zn, TR	Chlorodi-bromomethane	Bromodi-chloromethane	2,3,7,8-TCDD
Date	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	pg/L
Limits											1 mo avg; 2 max daily		14 mo avg; 20 max daily	8 mo avg; 15 max daily				120 mo avg; 150 max daily			
Jan-17	151	139	0.2	45	0	113	0.2	10	97	68	<0.25	0.6	5	<0.5	<0.05	<2	<0.25	27	3	15	
Feb-17	153	126	0.2	45	0	101	0.3	10	97	65	<0.25	0.6	5	<0.5	<0.05	<2	<0.25	40			
Mar-17	143	126	0.2	43	0	99	0.3	9	89	61	<0.25	0.5	8	<0.5	<0.05	<2	<0.25	32			
Apr-17	149	128	0.2	45	0	103	0.2	9	93	74	<0.25	0.5	4	<0.5	<0.05	<2	<0.25	26	2	11	0.0
May-17	141	146	0.2	43	0	104	0.2	8	91	57	<0.25	<0.5	4	<0.5	<0.05	<2	<0.25	24			
Jun-17	134	131	0.2	41	0	98	0.3	8	91	79	<0.25	<0.5	4	<0.5	<0.05	<2	<0.25	20			
Jul-17	138	138	0.2	42	0	113	0.2	8	103	75	<0.25	<0.5	6	<0.5	<0.05	<2	<0.25	47	<1	13	
Aug-17	125	104	0.2	38	0	104	0.2	7	90	74	<0.25	<0.5	4	<0.5	<0.05	<2	<0.25	28			
Sep-17	119	110	0.2	35	0	105	0.2	8	84	61	<0.25	<0.5	5	<0.5	<0.05	<2	<0.25	28			
Oct-17	120	99	0.2	26	0	102	0.2	8	93	68	<0.25	<0.5	5	<0.5	<0.05	<2	<0.25	31	2	13	
Nov-17	129	113	0.2	38	0	109	0.2	9	95	60	<0.25	<0.5	4	<0.5	<0.05	<2	<0.25	24			
Dec-17	135	117	0.2	39	0	111	0.2	9	92	70	<0.25	<0.5	4	<0.5	<0.05	<2	<0.25	24			
Avg	**137**	**123**	**0.2**	**40**	**0**	**105**	**0.2**	**8**	**93**	**68**	**<0.25**	**<0.5**	**5**	**<0.5**	**<0.05**	**<2**	**<0.25**	**29**	**2**	**13**	**0.0**
Min	**119**	**99**	**0.2**	**26**	**0**	**98**	**0.2**	**7**	**84**	**57**	**<0.25**	**<0.5**	**4**	**<0.5**	**<0.05**	**<2**	**<0.25**	**20**	**1**	**11**	**0.0**
Max	**153**	**146**	**0.2**	**45**	**0**	**113**	**0.3**	**10**	**103**	**79**	**<0.25**	**0.6**	**8**	**<0.5**	**<0.05**	**<2**	**<0.25**	**47**	**3**	**15**	**0.0**

*Free Cyanide is analyzed using ASTM-D7237 for analysis of aquatic free cyanide in accordance with R8-2016-0036

RP-5 (M-003) Effluent Monthly Inorganic Data — **Table No. 8c**

	Total Hardness	HCO_3^{2-}	B	Ca	CO_3^{2-}	Cl	F	Mg	Na	SO_4	Cd, TR	Cr, Total	Cu, TR	Pb, TR	Hg, TR	Se, TR	Ag, TR	Zn, TR	Chlorodi-bromomethane	Bromodi-chloromethane	2,3,7,8-TCDD
Date	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	pg/L
Limits																			34 mo avg; 68 max daily		0.014 mo avg; 0.028 max
Jan-17	175	127	0.2	52	0	129	0.1	11	83	56	0.55	0.7	8	<0.5	<0.05	<2	<0.25	49	2	14	0.0
Feb-17	184	134	0.2	53	0	127	0.1	12	89	62	<0.25	0.8	7	<0.5	<0.05	<2	<0.25	43	2	16	0.0
Mar-17	182	143	0.2	55	0	137	0.1	11	90	57	<0.25	0.6	6	<0.5	<0.05	<2	<0.25	43	9	28	0.0
Apr-17	173	122	0.3	50	0	123	0.2	12	95	57	<0.25	0.7	10	<0.5	<0.05	<2	<0.25	49	4	16	0.0
May-17	172	132	0.2	50	0	124	0.2	11	88	55	<0.25	<0.5	5	<0.5	<0.05	<2	<0.25	35	4	20	0.0
Jun-17	164	126	0.2	49	0	119	0.2	10	87	60	<0.25	0.5	5	<0.5	<0.05	<2	<0.25	29	6	32	0.0
Jul-17	183	110	0.2	53	0	129	0.2	12	104	79	<0.25	<0.5	4	<0.5	<0.05	<2	<0.25	21	6	30	0.0
Aug-17																					
Sep-17	175	129	0.2	53	0	132	0.2	10	98	64	<0.25	0.6	6	<0.5	<0.05	<2	<0.25	43	3	19	0.0
Oct-17	176	119	0.2	52	0	132	0.1	11	98	71	<0.25	0.5	7	<0.5	<0.05	<2	<0.25	46	2	14	0.0
Nov-17	164	164	0.2	47	0	130	0.2	11	90	63	<0.25	1.4	11	<0.5	<0.05	<2	0.29	55	4	15	0.0
Dec-17	150	107	0.2	44	0	121	0.1	10	90	59	<0.25	<0.5	7	<0.5	<0.05	<2	<0.25	37	3	13	0.0
Avg	**172**	**129**	**0.2**	**51**	**0**	**128**	**0.2**	**11**	**92**	**62**	**<0.28**	**0.7**	**7**	**<0.5**	**<0.05**	**<2**	**<0.25**	**41**	**4**	**20**	**0.0**
Min	**150**	**107**	**0.2**	**44**	**0**	**119**	**0.1**	**10**	**83**	**55**	**<0.25**	**<0.5**	**4**	**<0.5**	**<0.05**	**<2**	**<0.25**	**21**	**2**	**13**	**0.0**
Max	**184**	**164**	**0.3**	**55**	**0**	**137**	**0.2**	**12**	**104**	**79**	**0.55**	**1.4**	**11**	**<0.5**	**<0.05**	**<2**	**0.29**	**55**	**9**	**32**	**0.0**

CCWRF (M-004) Effluent Monthly Inorganic Data — **Table No. 8d**

	Total Hardness	HCO_3^{2-}	B	Ca	CO_3^{2-}	Cl	F	Mg	Na	SO_4	Cd, TR	Cr, Total	Cu, TR	Pb, TR	Hg, TR	Se, TR	Ag, TR	Zn, TR	Chlorodi-bromomethane	Bromodi-chloromethane	2,3,7,8-TCDD
Date	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	pg/L
Limits																			34 mo avg; 68 max daily	46 mo avg; 67 max daily	
Jan-17	156	128	0.2	48	0	112	0.2	9	92	68	<0.25	0.9	8	<0.5	<0.05	<2	<0.25	58	3	16	0.0
Feb-17	170	136	0.2	52	0	113	0.2	10	96	71	<0.25	1.0	7	<0.5	<0.05	2	<0.25	64	62	43	
Mar-17	164	129	0.2	49	0	121	0.2	10	94	67	<0.25	0.7	11	<0.5	<0.05	<2	<0.25	59	55	51	
Apr-17	156	129	0.2	47	0	118	0.2	9	97	69	<0.25	0.7	6	<0.5	<0.05	<2	<0.25	39	32	45	0.0
May-17	153	125	0.2	46	0	122	0.1	10	96	78	<0.25	0.8	7	<0.5	<0.05	<2	<0.25	48	35	42	
Jun-17	131	99	0.2	40	0	117	0.2	8	103	104	<0.25	0.7	6	<0.5	<0.05	<2	<0.25	50	6	25	
Jul-17	133	102	0.2	39	0	111	0.2	9	113	100	<0.25	0.7	6	<0.5	<0.05	<2	<0.25	54	36	51	0.0
Aug-17																					
Sep-17																					
Oct-17	136	109	0.2	40	0	127	<0.1	9	96	99	<0.25	0.6	7	<0.5	<0.05	<2	<0.25	62	2	16	0.0
Nov-17	145	104	0.2	41	0	128	0.2	10	108	88	<0.25	<0.5	6	<0.5	<0.05	<2	<0.25	48	4	12	
Dec-17	129	110	0.3	36	0	121	0.1	10	98	76	<0.25	0.6	6	<0.5	<0.05	<2	<0.25	55	4	12	
Avg	**147**	**117**	**0.2**	**44**	**0**	**119**	**0.2**	**9**	**99**	**82**	**<0.25**	**0.7**	**7**	**<0.5**	**<0.05**	**<2**	**<0.25**	**54**	**24**	**31**	**0.0**
Min	**129**	**99**	**0.2**	**36**	**0**	**111**	**0.1**	**8**	**92**	**67**	**<0.25**	**<0.5**	**6**	**<0.5**	**<0.05**	**<2**	**<0.25**	**39**	**2**	**12**	**0.0**
Max	**170**	**136**	**0.3**	**52**	**0**	**128**	**0.2**	**10**	**113**	**104**	**<0.25**	**1.0**	**11**	**<0.5**	**<0.05**	**2**	**<0.25**	**64**	**62**	**51**	**0.0**

*Free Cyanide is analyzed using ASTM-D7237 for analysis of aquatic free cyanide in accordance with R8-2015-0036

RP-1 (M-001B) Effluent Quarterly Data — **Table No. 9a**

Date	Al, TR µg/L	Sb, TR µg/L	As, TR µg/L	Ba, TR µg/L	Co, TR µg/L	Ni, TR µg/L
Jan-17	41	<1	<2	15	<1	3
Feb-17	43	<1	<2	13	<1	3
Mar-17	58	<1	<2	14	<1	3
Apr-17	128	<1	<2	15	<1	3
May-17	61	<1	<2	17	<1	3
Jun-17	88	<1	<2	15	<1	3
Jul-17	79	<1	<2	21	<1	3
Aug-17	124	<1	<2	13	<1	3
Sep-17	140	<1	<2	13	<1	3
Oct-17	120	<1	<2	14	<1	3
Nov-17	120	<1	<2	13	<1	3
Dec-17	124	<1	<2	11	<1	3
Avg	**94**	**<1**	**<2**	**15**	**<1**	**3**
Min	**41**	**<1**	**<2**	**11**	**<1**	**3**
Max	**140**	**<1**	**<2**	**21**	**<1**	**3**

RP-1/RP-4 (M-002A) Effluent Quarterly Data — **Table No. 9b**

	Al, TR µg/L	Sb, TR µg/L	As, TR µg/L	Ba, TR µg/L	Co, TR µg/L	Ni, TR µg/L
41	<1	<2	16	<1	3
42	<1	<2	13	<1	3
54	<1	<2	13	<1	3
111	<1	<2	15	<1	3
59	<1	<2	16	<1	3
91	<1	<2	14	<1	3
<25	<1	<2	21	<1	3
126	<1	<2	13	<1	3
137	<1	<2	13	<1	3
113	<1	<2	14	<1	3
123	<1	<2	12	<1	3
110	<1	<2	11	<1	3
86	**<1**	**<2**	**14**	**<1**	**3**
<25	**<1**	**<2**	**11**	**<1**	**3**
137	**<1**	**<2**	**21**	**<1**	**3**

RP-5 (M-003) Effluent Quarterly Data — **Table No. 9c**

Date	Al, TR µg/L	Sb, TR µg/L	As, TR µg/L	Ba, TR µg/L	Co, TR µg/L	Ni, TR µg/L
Jan-17	<25	<1	<2	34	<1	3
Feb-17	<25	<1	<2	19	<1	3
Mar-17	<25	<1	<2	20	<1	3
Apr-17	<25	<1	<2	23	<1	3
May-17	<25	<1	<2	21	<1	3
Jun-17	48	<1	<2	20	<1	3
Jul-17	68	<1	<2	21	<1	3
Aug-17						
Sep-17	<25	<1	<2	30	<1	3
Oct-17	<25	<1	<2	24	<1	3
Nov-17	146	<1	<2	27	<1	3
Dec-17	<25	<1	<2	19	<1	3
Avg	**<42**	**<1**	**<2**	**23**	**<1**	**3**
Min	**<25**	**<1**	**<2**	**19**	**<1**	**3**
Max	**146**	**<1**	**<2**	**34**	**<1**	**3**

CCWRF (M-004) Effluent Quarterly Data — **Table No. 9d**

	Al, TR µg/L	Sb, TR µg/L	As, TR µg/L	Ba, TR µg/L	Co, TR µg/L	Ni, TR µg/L
45	<1	<2	14	<1	2
99	<1	<2	17	<1	3
51	<1	<2	20	<1	3
152	<1	<2	15	<1	3
63	<1	<2	12	<1	3
67	<1	<2	12	<1	3
61	<1	<2	12	<1	3
72	<1	<2	15	<1	3
36	<1	<2	9	<1	2
74	<1	<2	11	<1	3
72	**<1**	**<2**	**14**	**<1**	**3**
36	**<1**	**<2**	**9**	**<1**	**2**
152	**<1**	**<2**	**20**	**<1**	**3**

Table No. 10

	Flow				TIN								Agency-wide TIN				
	DP 001	DP 002	DP 003	DP 004	M-001B		M-002A		RP5		CC		Discharge		Limit		**12-MRA**
Mo-Yr													flow wt.	total	flow wt.	total	flow-wt.
	MGD				mg/L	lbs/day	mg/L	lbs/day	mg/L	lbs/day	mg/L	lbs/day	mg/L	lbs/day	mg/L	lbs/day	mg/L
Jan-17	3.0	28.4	5.5	8.0	6.7	1,720	6.6	1,550	6.2	280	6.3	420	6.5	2,420	8	5,338	6.0
Feb-17	2.3	24.4	4.7	8.1	7.7	1,650	7.4	1,500	6.3	250	4.7	320	6.7	2,220	8	5,338	6.0
Mar-17	0.0	5.1	5.7	6.0	5.7	240	5.5	240	5.2	250	5.1	250	5.3	740	8	5,338	5.9
Apr-17	0.1	3.0	3.7	2.1	5.4	140	5.4	130	6.5	200	5.2	90	5.8	430	8	5,338	6.0
May-17	0.0	2.0	3.3	2.6	6.4	90	5.7	90	7.0	190	4.1	90	5.7	370	8	5,338	6.0
Jun-17	2.6	0.6	1.5	1.0	5.6	150	5.0	30	6.4	80	4.6	40	5.5	270	8	5,338	6.0
Jul-17	2.6	0.5	0.4	1.4	7.6	190	6.8	30	6.8	30	5.3	60	6.8	280	8	5,338	6.0
Aug-17	2.5	2.5	0.0	0.0	6.4	250	5.5	110	6.1	0	5.8	0	6.0	250	8	5,338	6.0
Sep-17	3.5	3.3	0.7	0.0	6.1	180	5.5	150	5.9	40	5.7	0	5.8	370	8	5,338	5.9
Oct-17	3.2	3.6	2.5	1.4	6.4	170	6.1	180	6.1	130	5.6	60	6.1	540	8	5,338	6.0
Nov-17	2.8	7.8	4.1	1.6	8.3	200	6.3	410	5.9	200	5.4	70	6.5	880	8	5,338	6.0
Dec-17	4.2	4.9	3.0	1.8	7.2	250	7.5	300	6.1	150	5.5	80	6.8	780	8	5,338	6.1
12-Mo Avg	2.2	7.2	2.9	2.8	6.6	440	6.1	390	6.2	150	5.3	120	6.1	800	8	5,338	**6.0**
Min	0.0	0.5	0.0	0.0	5.4	90	5.0	30	5.2	0	4.1	0	5.3	250	8	5,338	**5.9**
Max	4.2	28.4	5.7	8.1	8.3	1,720	7.5	1,550	7.0	280	6.3	420	6.8	2,420	8	5,338	**6.1**

Agency-wide TDS 12-Month Running Averages **Table No. 11**

	Flows								Total Dissolved Solids (TDS)								Agency-wide TDS				
	001 [1]	RP-1 RW	002	RP-4 RW	RP-5	RP-5 RW	CC	CC RW	001	RP-1 RW [2]	002	RP-4 RW	RP-5	RP-5 RW [2]	CC	CC RW [2]	Discharge		Limit		12-MRA
Mo-Yr	MGD								mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	flow wt. mg/L	total lbs/day	flow wt. mg/L	total lbs/day	flow wt. mg/L
Jan-17	3.0	1.1	28.4	6.1	5.5	1.1	8.0	0.8	501	477	493	481	513	491	505	485	495	252,020	550	366,960	504
Feb-17	2.3	2.1	24.4	6.6	4.7	1.1	8.1	0.5	520	463	480	444	542	523	518	499	489	235,680	550	366,960	503
Mar-17	0.0	16.6	5.1	9.3	5.7	2.4	6.0	1.3	NA	456	479	426	523	506	495	483	469	200,790	550	366,960	499
Apr-17	0.1	17.2	3.0	9.7	3.7	5.0	2.1	5.3	NA	471	488	412	515	488	508	482	468	167,440	550	366,960	495
May-17	0.0	18.4	2.0	10.0	3.3	5.7	2.6	5.1	NA	464	477	406	520	491	509	482	464	172,090	550	366,960	491
Jun-17	2.6	19.6	0.6	10.1	1.5	4.7	1.0	7.0	520	465	504	403	539	501	503	457	461	158,270	550	366,960	486
Jul-17	2.6	21.0	0.5	9.7	0.4	5.8	1.4	6.1	502	448	483	386	538	492	485	458	447	158,960	550	366,960	480
Aug-17	2.5	20.2	2.5	9.7	0.0	5.8	0.0	7.9	509	433	459	407	NA	501	NA	466	446	150,060	550	366,960	476
Sep-17	3.5	18.6	3.3	9.5	0.7	4.5	0.0	7.6	497	424	456	406	515	469	NA	462	440	145,780	550	366,960	471
Oct-17	3.2	18.4	3.6	10.0	2.5	2.8	1.4	6.0	486	408	439	384	500	477	497	456	428	153,260	550	366,960	466
Nov-17	2.8	14.9	7.8	8.6	4.1	3.0	1.6	4.7	475	444	459	417	493	476	511	474	455	167,960	550	366,960	463
Dec-17	4.2	16.7	4.9	9.9	3.0	1.5	1.8	5.7	471	445	462	401	470	466	472	457	444	161,550	550	366,960	459
Avg	**2.2**	**15.4**	**7.2**	**9.1**	**2.9**	**3.6**	**2.8**	**4.8**	**498**	**450**	**473**	**414**	**515**	**490**	**500**	**472**	**459**	**176,990**	**550**	**366,960**	**483**
Min	**0.0**	**1.1**	**0.5**	**6.1**	**0.0**	**1.1**	**0.0**	**0.5**	**471**	**408**	**439**	**384**	**470**	**466**	**472**	**456**	**428**	**145,780**	**550**	**366,960**	**459**
Max	**4.2**	**21.0**	**28.4**	**10.1**	**5.7**	**5.8**	**8.1**	**7.9**	**520**	**477**	**504**	**481**	**542**	**523**	**518**	**499**	**495**	**252,020**	**550**	**366,960**	**504**

NOTES: [1] Prior to April 2010, 001 effluent flow included recycled water flow.

[2] Flow and TDS added to flow-weight for RP-1, RP-5, and CCWRF recycled water (May 2010)

NA: Not Analyzed, due to no discharge

APPENDIX B

RECYCLED WATER

COMPLIANCE DATA

FOR CALENDAR YEAR 2017

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RP-1 (M-001B) Effluent Remaining Priority Pollutants

Table 18a

RP-1 (M-001B) Effluent Remaining Priority Pollutant Metals & CN, µg/L

Constituent	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Max.
Antimony (Sb)	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Arsenic (As)	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	**<2**
Beryllium (Be)	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**<0.5**
Cadmium (Cd)	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	**<0.25**
Chromium (Cr)	0.6	<0.5	<0.5	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**0.6**
Copper (Cu)	4.6	5.0	7.7	3.6	3.5	3.5	3.5	3.7	4.6	4.9	3.9	4.3	**7.7**
Lead (Pb)	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**<0.5**
Mercury (Hg)	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	**<0.05**
Nickel (Ni)	3.0	2.9	2.7	2.9	2.7	3.3	3.0	3.2	3.1	3.0	2.8	3.2	**3.3**
Selenium (Se)	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	**<2**
Silver (Ag)	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	**<0.25**
Thallium (Tl)	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	**<1**
Zinc (Zn)	27	41	32	27	25	23	24	28	27	29	24	24	**41**
CN, Aquatic Free	<2			<2			<2			<2			**<2**

RP-1 (M-001B) Effluent Volatile Organics (EPA Methods 624, 601/602), µg/L

1,1,1-Trichloroethane				<1									**<1**
1,1,2,2-Tetrachloroethane				<0.5									**<0.5**
1,1,2-Trichloroethane				<1									**<1**
1,1-Dichloroethane				<0.5									**<0.5**
1,1-Dichloroethene				<1									**<1**
1,2-Dichlorobenzene				<1									**<1**
1,2-Dichloroethane				<0.5									**<0.5**
1,2-Dichloropropane				<0.5									**<0.5**
1,3-Dichlorobenzene				<1									**<1**
1,4-Dichlorobenzene				<1									**<1**
2-Chloroethyl vinyl ether				<1									**<1**
Benzene				<1									**<1**
Bromodichloromethane	25			11			14			15			**25**
Bromoform	<1			<1			<1			<1			**<1**
Bromomethane				<1									**<1**
Carbon tetrachloride				<0.5									**<0.5**
Chlorobenzene				<1									**<1**
Chloroethane				<1									**<1**
Chloroform	113			60			61			62			**113**
Chloromethane				<1									**<1**
cis-1,3-Dichloropropene				<0.5									**<0.5**
Dibromochloromethane	4			2			2			2			**4**
Ethylbenzene				<1									**<1**
Methylene chloride				1									**1**
Tetrachloroethene				<1									**<1**
Toluene				<1									**<1**
trans-1,2-Dichloroethene				<0.5									**<0.5**
trans-1,3-Dichloropropene				<0.5									**<0.5**
Trichloroethene				<1									**<1**
Trichlorofluoromethane				<2									**<2**
Vinyl chloride				<0.5									**<0.5**
Acrolein				<2									**<2**
Acrylonitrile				<0.25									**<0.25**

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RP-1 (M-001B) Effluent Remaining Priority Pollutants

Table 18b

RP-1 (M-001B) Effluent Base/Neutral and Acid Extractibles (EPA Method 625), µg/L

Constituent	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Max.
1,2,4-Trichlorobenzene				<1									<1
1,2-Dichlorobenzene				<1									<1
1,3-Dichlorobenzene				<1									<1
1,4-Dichlorobenzene				<1									<1
2,4,6-Trichlorophenol				<1									<1
2,4-Dichlorophenol				<2									<2
2,4-Dimethylphenol				<1									<1
2,4-Dinitrophenol				<3									<3
2,4-Dinitrotoluene				<1									<1
2,6-Dinitrotoluene				<2									<2
2-Chloronaphthalene				<1									<1
2-Chlorophenol				<1									<1
2-Methyl-4,6-dinitrophenol				<2									<2
2-Nitrophenol				<1									<1
3,3-Dichlorobenzidine				<5									<5
4-Bromophenyl phenyl ether				<1									<1
4-Chloro-3-methylphenol				<1									<1
4-Chlorophenyl phenyl ether				<1									<1
4-Nitrophenol				<3									<3
Acenaphthene				<1									<1
Acenaphthylene				<1									<1
Anthracene				<1									<1
Azobenzene				<1									<1
Benzidine				<5									<5
Benzo(a)anthracene				<5									<5
Benzo(a)pyrene				<1									<1
Benzo(b)fluoranthene				<1									<1
Benzo(g,h,i)perylene				<2									<2
Benzo(k)fluoranthene				<1									<1
Bis(2-chloroethoxy)methane				<2									<2
Bis(2-chloroethyl)ether				<1									<1
Bis(2-chloroisopropyl)ether				<1									<1
Bis(2-ethylhexyl)phthalate	<2			<2			<2			<2			<2
Butyl benzyl phthalate				<1									<1
Chrysene				<1									<1
Dibenzo(a,h)anthracene				<1									<1
Diethyl phthalate				<2									<2
Dimethyl phthalate				<1									<1
Di-n-butyl phthalate				<1									<1
Di-n-octyl phthalate				<1									<1
Fluoranthene				<1									<1
Fluorene				<1									<1
Hexachlorobenzene				<1									<1
Hexachlorobutadiene				<1									<1
Hexachlorocyclopentadiene				<5									<5
Hexachloroethane				<1									<1
Indeno(1,2,3-cd)pyrene				<2									<2
Isophorone				<1									<1
Naphthalene				<1									<1
Nitrobenzene				<1									<1
N-Nitrosodimethylamine				<1									<1
N-Nitroso-di-n-propylamine				<1									<1
N-Nitrosodiphenylamine				<1									<1
Pentachlorophenol				<2									<2
Phenanthrene				<1									<1
Phenol				<1									<1
Pyrene				<1									<1

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RP-1 (M-001B) Effluent Remaining Priority Pollutants

Table 18c

RP-1 (M-001B) Effluent Pesticides (EPA Method 608), µg/L

Constituent	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Max.
4,4-DDD				<0.006									**<0.006**
4,4-DDE				<0.006									**<0.006**
4,4-DDT				<0.008									**<0.008**
Aldrin				<0.004									**<0.004**
Alpha-BHC				<0.008									**<0.008**
Beta-BHC				<0.005									**<0.005**
Delta-BHC				<0.007									**<0.007**
Dieldrin				<0.006									**<0.006**
Endosulfan I				<0.01									**<0.01**
Endosulfan II				<0.007									**<0.007**
Endosulfan Sulfate				<0.009									**<0.009**
Endrin				<0.009									**<0.009**
Endrin aldehyde				<0.006									**<0.006**
Gamma-BHC				<0.01									**<0.01**
Heptachlor				<0.006									**<0.006**
Heptachlor epoxide				<0.007									**<0.007**
Chlordane				<0.1									**<0.1**
PCB-1016				<0.5									**<0.5**
PCB-1221				<0.5									**<0.5**
PCB-1232				<0.5									**<0.5**
PCB-1242				<0.5									**<0.5**
PCB-1248				<0.5									**<0.5**
PCB-1254				<0.5									**<0.5**
PCB-1260				<0.5									**<0.5**
Toxaphene				<0.5									**<0.5**
RP-1 (M-001B) Effluent Dioxins & Furans, pg/L (reported values based on detection limit)													
PCDD/PCDF Congeners*				0.0									**0.0**

*TEQ is calculated based on congener concentrations below the reporting limit (RL) set to zero

RP-1/RP-4 (M-002A) Effluent Volatile Organics (EPA Methods 624, 601/602), µg/L

1,1,1-Trichloroethane				<1									**<1**
1,1,2,2-Tetrachloroethane				<0.5									**<0.5**
1,1,2-Trichloroethane				<1									**<1**
1,1-Dichloroethane				<0.5									**<0.5**
1,1-Dichloroethene				<1									**<1**
1,2-Dichlorobenzene				<1									**<1**
1,2-Dichloroethane				<0.5									**<0.5**
1,2-Dichloropropane				<0.5									**<0.5**
1,3-Dichlorobenzene				<1									**<1**
1,4-Dichlorobenzene				<1									**<1**
2-Chloroethyl vinyl ether				<1									**<1**
Benzene				<1									**<1**
Bromodichloromethane	15			11			13			13			**15**
Bromoform	<1			<1			<1			<1			**<1**
Bromomethane				<1									**<1**
Carbon tetrachloride				<0.5									**<0.5**
Chlorobenzene				<1									**<1**
Chloroethane				<1									**<1**
Chloroform	70			78			72			66			**78**
Chloromethane				<1									**<1**
cis-1,3-Dichloropropene				<0.5									**<0.5**
Dibromochloromethane	3			2			<1			2			**3**
Ethylbenzene				<1									**<1**
Methylene chloride				1									**1**
Tetrachloroethene				<1									**<1**
Toluene				<1									**<1**
trans-1,2-Dichloroethene				<0.5									**<0.5**
trans-1,3-Dichloropropene				<0.5									**<0.5**
Trichloroethene				<1									**<1**
Trichlorofluoromethane				<2									**<2**
Vinyl chloride				<0.5									**<0.5**
Acrolein				<2									**<2**
Acrylonitrile				<0.25									**<0.25**

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RP-1/RP-4 (M-002A) Effluent Remaining Priority Pollutants

Table 19b

RP-1/RP-4 (M-002A) Effluent Base/Neutral and Acid Extractibles (EPA Method 625), µg/L

Constituent	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Max.
1,2,4-Trichlorobenzene				<1									<1
1,2-Dichlorobenzene				<1									<1
1,3-Dichlorobenzene				<1									<1
1,4-Dichlorobenzene				<1									<1
2,4,6-Trichlorophenol				<1									<1
2,4-Dichlorophenol				<2									<2
2,4-Dimethylphenol				<1									<1
2,4-Dinitrophenol				<3									<3
2,4-Dinitrotoluene				<1									<1
2,6-Dinitrotoluene				<2									<2
2-Chloronaphthalene				<1									<1
2-Chlorophenol				<1									<1
2-Methyl-4,6-dinitrophenol				<2									<2
2-Nitrophenol				<1									<1
3,3-Dichlorobenzidine				<5									<5
4-Bromophenyl phenyl ether				<1									<1
4-Chloro-3-methylphenol				<1									<1
4-Chlorophenyl phenyl ether				<1									<1
4-Nitrophenol				<3									<3
Acenaphthene				<1									<1
Acenaphthylene				<1									<1
Anthracene				<1									<1
Azobenzene				<1									<1
Benzidine				<5									<5
Benzo(a)anthracene				<5									<5
Benzo(a)pyrene				<1									<1
Benzo(b)fluoranthene				<1									<1
Benzo(g,h,i)perylene				<2									<2
Benzo(k)fluoranthene				<1									<1
Bis(2-chloroethoxy)methane				<2									<2
Bis(2-chloroethyl)ether				<1									<1
Bis(2-chloroisopropyl)ether				<1									<1
Bis(2-ethylhexyl)phthalate	<2			<2			<2			<2			<2
Butyl benzyl phthalate				<1									<1
Chrysene				<1									<1
Dibenzo(a,h)anthracene				<1									<1
Diethyl phthalate				<2									<2
Dimethyl phthalate				<1									<1
Di-n-butyl phthalate				<1									<1
Di-n-octyl phthalate				<1									<1
Fluoranthene				<1									<1
Fluorene				<1									<1
Hexachlorobenzene				<1									<1
Hexachlorobutadiene				<1									<1
Hexachlorocyclopentadiene				<5									<5
Hexachloroethane				<1									<1
Indeno(1,2,3-cd)pyrene				<2									<2
Isophorone				<1									<1
Naphthalene				<1									<1
Nitrobenzene				<1									<1
N-Nitrosodimethylamine				<1									<1
N-Nitroso-di-n-propylamine				<1									<1
N-Nitrosodiphenylamine				<1									<1
Pentachlorophenol				<2									<2
Phenanthrene				<1									<1
Phenol				<1									<1
Pyrene				<1									<1

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RP-1/RP-4 (M-002A) Effluent Remaining Priority Pollutants

Table 19c

RP-1/RP-4 (M-002A) Effluent Pesticides (EPA Method 608), µg/L													Annual
Constituent	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec**	**Max.**
4,4-DDD				<0.006									**<0.006**
4,4-DDE				<0.006									**<0.006**
4,4-DDT				<0.008									**<0.008**
Aldrin				<0.004									**<0.004**
Alpha-BHC				<0.008									**<0.008**
Beta-BHC				<0.005									**<0.005**
Delta-BHC				<0.007									**<0.007**
Dieldrin				<0.006									**<0.006**
Endosulfan I				<0.01									**<0.01**
Endosulfan II				<0.007									**<0.007**
Endosulfan Sulfate				<0.009									**<0.009**
Endrin				<0.009									**<0.009**
Endrin aldehyde				<0.006									**<0.006**
Gamma-BHC				<0.01									**<0.01**
Heptachlor				<0.006									**<0.006**
Heptachlor epoxide				<0.007									**<0.007**
Chlordane				<0.1									**<0.1**
PCB-1016				<0.5									**<0.5**
PCB-1221				<0.5									**<0.5**
PCB-1232				<0.5									**<0.5**
PCB-1242				<0.5									**<0.5**
PCB-1248				<0.5									**<0.5**
PCB-1254				<0.5									**<0.5**
PCB-1260				<0.5									**<0.5**
Toxaphene				<0.5									**<0.5**
RP-1/RP-4 (M-002A) Effluent Dioxins & Furans, pg/L (reported values based on detection limit)													
PCDD/PCDF Congeners*				0.00									**0.0**

*TEQ is calculated based on congener concentrations below the reporting limit (RL) set to zero

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RP-5 (M-003) Effluent Remaining Priority Pollutants

Table 20a

RP-5 (M-003) Effluent Remaining Priority Pollutant Metals & CN, µg/L

Constituent	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Max.
Antimony (Sb)	<1	<1	<1	<1	<1	<1	<1		<1	<1	<1	<1	<1.0
Arsenic (As)	<2	<2	<2	<2	<2	<2	<2		<2	<2	<2	<2	**<2**
Beryllium (Be)	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5	<0.5	<0.5	<0.5	**<0.5**
Cadmium (Cd)	0.55	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25		<0.25	<0.25	<0.25	<0.25	**0.55**
Chromium (Cr)	0.7	0.8	0.6	0.7	<0.5	0.5	<0.5		0.6	0.5	1.4	<0.5	**1.4**
Copper (Cu)	7.6	6.5	5.7	10.1	5.0	4.9	3.5		6.3	6.9	11.2	6.9	**11.2**
Lead (Pb)	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5	<0.5	<0.5	<0.5	**<0.5**
Mercury (Hg)	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05		<0.05	<0.05	<0.05	<0.05	**<0.05**
Nickel (Ni)	2.7	3.4	3.4	3.0	3.1	3.0	3.0		3.1	3.0	2.9	2.7	**3.4**
Selenium (Se)	<2	<2	<2	<2	<2	<2	<2		<2	<2	<2	<2	**<2**
Silver (Ag)	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25		<0.25	<0.25	0.29	<0.25	**0.29**
Thallium (Tl)	<1	<1	<1	<1	<1	<1	<1		<1	<1	<1	<1	**<1**
Zinc (Zn)	49	43	43	49	35	29	21		43	46	55	37	**55**
CN, Aquatic Free	<2			<2					<2	<2			**<2**

RP-5 (M-003) Effluent Volatile Organics (EPA Methods 624, 601/602), µg/L

1,1,1-Trichloroethane				<1									**<1**
1,1,2,2-Tetrachloroethane				<0.5									**<0.5**
1,1,2-Trichloroethane				<1									**<1**
1,1-Dichloroethane				<0.5									**<0.5**
1,1-Dichloroethene				<1									**<1**
1,2-Dichlorobenzene				<1									**<1**
1,2-Dichloroethane				<0.5									**<0.5**
1,2-Dichloropropane				<0.5									**<0.5**
1,3-Dichlorobenzene				<1									**<1**
1,4-Dichlorobenzene				<1									**<1**
2-Chloroethyl vinyl ether				<1									**<1**
Benzene				<1									**<1**
Bromodichloromethane	14	16	28	16	20	32	30		19	14	15	13	**32**
Bromoform	<1	<1	<1	<1	<1	<1	<1		<1	<1	<1	<1	**<1**
Bromomethane				<1									**<1**
Carbon tetrachloride				<0.5									**<0.5**
Chlorobenzene				<1									**<1**
Chloroethane				<1									**<1**
Chloroform	72	71	62	67	72	122	69		78	72	71	83	**122**
Chloromethane				<1									**<1**
cis-1,3-Dichloropropene				<0.5									**<0.5**
Dibromochloromethane	2	2	9	4	4	6	6		3	2	4	3	**9**
Ethylbenzene				<1									**<1**
Methylene chloride				<1									**<1**
Tetrachloroethene				<1									**<1**
Toluene				<1									**<1**
trans-1,2-Dichloroethene				<0.5									**<0.5**
trans-1,3-Dichloropropene				<0.5									**<0.5**
Trichloroethene				<1									**<1**
Trichlorofluoromethane				<2									**<2**
Vinyl chloride				<0.5									**<0.5**
Acrolein				<2									**<2**
Acrylonitrile				0.26									**0.26**

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RP-5 (M-003) Effluent Remaining Priority Pollutants

Table 20b

RP-5 (M-003) Effluent Base/Neutral and Acid Extractibles (EPA Method 625), µg/L

Constituent	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Max.
1,2,4-Trichlorobenzene				<1									<1
1,2-Dichlorobenzene				<1									<1
1,3-Dichlorobenzene				<1									<1
1,4-Dichlorobenzene				<1									<1
2,4,6-Trichlorophenol				<1									<1
2,4-Dichlorophenol				<2									<2
2,4-Dimethylphenol				<1									<1
2,4-Dinitrophenol				<3									<3
2,4-Dinitrotoluene				<1									<1
2,6-Dinitrotoluene				<2									<2
2-Chloronaphthalene				<1									<1
2-Chlorophenol				<1									<1
2-Methyl-4,6-dinitrophenol				<2									<2
2-Nitrophenol				<1									<1
3,3-Dichlorobenzidine				<5									<5
4-Bromophenyl phenyl ether				<1									<1
4-Chloro-3-methylphenol				<1									<1
4-Chlorophenyl phenyl ether				<1									<1
4-Nitrophenol				<3									<3
Acenaphthene				<1									<1
Acenaphthylene				<1									<1
Anthracene				<1									<1
Azobenzene				<1									<1
Benzidine				<5									<5
Benzo(a)anthracene				<5									<5
Benzo(a)pyrene				<1									<1
Benzo(b)fluoranthene				<1									<1
Benzo(g,h,i)perylene				<2									<2
Benzo(k)fluoranthene				<1									<1
Bis(2-chloroethoxy)methane				<2									<2
Bis(2-chloroethyl)ether				<1									<1
Bis(2-chloroisopropyl)ether				<1									<1
Bis(2-ethylhexyl)phthalate	<2			<2			<2			<2			<2
Butyl benzyl phthalate				<1									<1
Chrysene				<1									<1
Dibenzo(a,h)anthracene				<1									<1
Diethyl phthalate				<2									<2
Dimethyl phthalate				<1									<1
Di-n-butyl phthalate				<1									<1
Di-n-octyl phthalate				<1									<1
Fluoranthene				<1									<1
Fluorene				<1									<1
Hexachlorobenzene				<1									<1
Hexachlorobutadiene				<1									<1
Hexachlorocyclopentadiene				<5									<5
Hexachloroethane				<1									<1
Indeno(1,2,3-cd)pyrene				<2									<2
Isophorone				<1									<1
Naphthalene				<1									<1
Nitrobenzene				<1									<1
N-Nitrosodimethylamine				<1									<1
N-Nitroso-di-n-propylamine				<1									<1
N-Nitrosodiphenylamine				<1									<1
Pentachlorophenol				<2									<2
Phenanthrene				<1									<1
Phenol				<1									<1
Pyrene				<1									<1

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RP-5 (M-003) Effluent Remaining Priority Pollutants

Table 20c

RP-5 (M-003) Effluent Pesticides (EPA Method 608), µg/L

Constituent	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Max.
4,4-DDD				<0.006									**<0.006**
4,4-DDE				<0.006									**<0.006**
4,4-DDT				<0.008									**<0.008**
Aldrin				<0.004									**<0.004**
Alpha-BHC				<0.008									**<0.008**
Beta-BHC				<0.005									**<0.005**
Delta-BHC				<0.007									**<0.007**
Dieldrin				<0.006									**<0.006**
Endosulfan I				<0.01									**<0.01**
Endosulfan II				<0.007									**<0.007**
Endosulfan Sulfate				<0.009									**<0.009**
Endrin				<0.009									**<0.009**
Endrin aldehyde				<0.006									**<0.006**
Gamma-BHC				<0.01									**<0.01**
Heptachlor				<0.006									**<0.006**
Heptachlor epoxide				<0.007									**<0.007**
Chlordane				<0.1									**<0.1**
PCB-1016				<0.5									**<0.5**
PCB-1221				<0.5									**<0.5**
PCB-1232				<0.5									**<0.5**
PCB-1242				<0.5									**<0.5**
PCB-1248				<0.5									**<0.5**
PCB-1254				<0.5									**<0.5**
PCB-1260				<0.5									**<0.5**
Toxaphene				<0.5									**<0.5**
RP-5 (M-003) Effluent Dioxins & Furans, pg/L (reported values based on detection limit)													
PCDD/PCDF Congeners*	0.0	0.0	0.0	0.0	0.0	0.0	0.0	ND	0.0	0.0	0.0	0.0	**0.0**

*TEQ is calculated based on congener concentrations below the reporting limit (RL) set to zero

ND: No Discharge

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CCWRF (M-004) Effluent Remaining Priority Pollutants

Table 21a

CCWRF (M-004) Effluent Remaining Priority Pollutant Metals & CN, µg/L

Constituent	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Max.
Antimony (Sb)	<1	<1	<1	<1	<1	<1	<1			<1	<1	<1	<1.0
Arsenic (As)	<2	<2	<2	<2	<2	<2	<2			<2	<2	<2	**<2**
Beryllium (Be)	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5			<0.5	<0.5	<0.5	**<0.5**
Cadmium (Cd)	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25			<0.25	<0.25	<0.25	**<0.25**
Chromium (Cr)	0.9	1.0	0.7	0.7	0.8	0.7	0.7			0.6	<0.5	0.6	**1.0**
Copper (Cu)	7.8	6.5	10.6	5.9	6.9	6.4	6.0			7.4	6.1	6.1	**10.6**
Lead (Pb)	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5			<0.5	<0.5	<0.5	**<0.5**
Mercury (Hg)	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05			<0.05	<0.05	<0.05	**<0.05**
Nickel (Ni)	2.3	2.7	2.5	2.9	2.9	2.9	3.0			2.9	2.4	2.6	**3.0**
Selenium (Se)	<2	2.0	<2	<2	<2	<2	<2			<2	<2	<2	**2**
Silver (Ag)	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25			<0.25	<0.25	<0.25	**<0.25**
Thallium (Tl)	<1	<1	<1	<1	<1	<1	<1			<1	<1	<1	**<1**
Zinc (Zn)	58	64	59	39	48	50	54			62	48	55	**64**
CN, Aquatic Free	2			<2			<2			<2			**2**

CCWRF (M-004) Effluent Volatile Organics (EPA Methods 624, 601/602), µg/L

1,1,1-Trichloroethane				<1									**<1**
1,1,2,2-Tetrachloroethane				<0.5									**<0.5**
1,1,2-Trichloroethane				<1									**<1**
1,1-Dichloroethane				<0.5									**<0.5**
1,1-Dichloroethene				<1									**<1**
1,2-Dichlorobenzene				<1									**<1**
1,2-Dichloroethane				<0.5									**<0.5**
1,2-Dichloropropane				<0.5									**<0.5**
1,3-Dichlorobenzene				<1									**<1**
1,4-Dichlorobenzene				<1									**<1**
2-Chloroethyl vinyl ether				<1									**<1**
Benzene				<1									**<1**
Bromodichloromethane	16	43	51	45	42	25	51			16	12	12	**51**
Bromoform	<1	29	13	3	5	<1	4			<1	<1	<1	**29**
Bromomethane				<1									**<1**
Carbon tetrachloride				<0.5									**<0.5**
Chlorobenzene				<1									**<1**
Chloroethane				<1									**<1**
Chloroform	58	26	31	46	36	77	50			87	42	57	**87**
Chloromethane				<1									**<1**
cis-1,3-Dichloropropene				<0.5									**<0.5**
Dibromochloromethane	3	62	55	32	35	6	36			2	4	4	**62**
Ethylbenzene				<1									**<1**
Methylene chloride				<1									**<1**
Tetrachloroethene				<1									**<1**
Toluene				<1									**<1**
trans-1,2-Dichloroethene				<0.5									**<0.5**
trans-1,3-Dichloropropene				<0.5									**<0.5**
Trichloroethene				<1									**<1**
Trichlorofluoromethane				<2									**<2**
Vinyl chloride				<0.5									**<0.5**
Acrolein				<2									**<2**
Acrylonitrile				<0.25									**<0.25**

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CCWRF (M-004) Effluent Remaining Priority Pollutants

Table 21b

CCWRF (M-004) Effluent Base/Neutral and Acid Extractibles (EPA Method 625), µg/L

Constituent	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Max.
1,2,4-Trichlorobenzene				<1									<1
1,2-Dichlorobenzene				<1									<1
1,3-Dichlorobenzene				<1									<1
1,4-Dichlorobenzene				<1									<1
2,4,6-Trichlorophenol				<1									<1
2,4-Dichlorophenol				<2									<2
2,4-Dimethylphenol				<1									<1
2,4-Dinitrophenol				<3									<3
2,4-Dinitrotoluene				<1									<1
2,6-Dinitrotoluene				<2									<2
2-Chloronaphthalene				<1									<1
2-Chlorophenol				<1									<1
2-Methyl-4,6-dinitrophenol				<2									<2
2-Nitrophenol				<1									<1
3,3-Dichlorobenzidine				<5									<5
4-Bromophenyl phenyl ether				<1									<1
4-Chloro-3-methylphenol				<1									<1
4-Chlorophenyl phenyl ether				<1									<1
4-Nitrophenol				<3									<3
Acenaphthene				<1									<1
Acenaphthylene				<1									<1
Anthracene				<1									<1
Azobenzene				<1									<1
Benzidine				<5									<5
Benzo(a)anthracene				<5									<5
Benzo(a)pyrene				<1									<1
Benzo(b)fluoranthene				<1									<1
Benzo(g,h,i)perylene				<2									<2
Benzo(k)fluoranthene				<1									<1
Bis(2-chloroethoxy)methane				<2									<2
Bis(2-chloroethyl)ether				<1									<1
Bis(2-chloroisopropyl)ether				<1									<1
Bis(2-ethylhexyl)phthalate	<2			<2			<2			<2			<2
Butyl benzyl phthalate				<1									<1
Chrysene				<1									<1
Dibenzo(a,h)anthracene				<1									<1
Diethyl phthalate				<2									<2
Dimethyl phthalate				<1									<1
Di-n-butyl phthalate				<1									<1
Di-n-octyl phthalate				<1									<1
Fluoranthene				<1									<1
Fluorene				<1									<1
Hexachlorobenzene				<1									<1
Hexachlorobutadiene				<1									<1
Hexachlorocyclopentadiene				<5									<5
Hexachloroethane				<1									<1
Indeno(1,2,3-cd)pyrene				<2									<2
Isophorone				<1									<1
Naphthalene				<1									<1
Nitrobenzene				<1									<1
N-Nitrosodimethylamine				<1									<1
N-Nitroso-di-n-propylamine				<1									<1
N-Nitrosodiphenylamine				<1									<1
Pentachlorophenol				<2									<2
Phenanthrene				<1									<1
Phenol				<1									<1
Pyrene				<1									<1

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CCWRF (M-004) Effluent Remaining Priority Pollutants

Table 21c

CCWRF (M-004) Effluent Pesticides (EPA Method 608), µg/L

Constituent	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Max.
4,4-DDD				<0.006									**<0.006**
4,4-DDE				<0.006									**<0.006**
4,4-DDT				<0.008									**<0.008**
Aldrin				<0.004									**<0.004**
Alpha-BHC				<0.008									**<0.008**
Beta-BHC				<0.005									**<0.005**
Delta-BHC				<0.007									**<0.007**
Dieldrin				<0.006									**<0.006**
Endosulfan I				<0.01									**<0.01**
Endosulfan II				<0.007									**<0.007**
Endosulfan Sulfate				<0.009									**<0.009**
Endrin				<0.009									**<0.009**
Endrin aldehyde				<0.006									**<0.006**
Gamma-BHC				<0.01									**<0.01**
Heptachlor				<0.006									**<0.006**
Heptachlor epoxide				<0.007									**<0.007**
Chlordane				<0.1									**<0.1**
PCB-1016				<0.5									**<0.5**
PCB-1221				<0.5									**<0.5**
PCB-1232				<0.5									**<0.5**
PCB-1242				<0.5									**<0.5**
PCB-1248				<0.5									**<0.5**
PCB-1254				<0.5									**<0.5**
PCB-1260				<0.5									**<0.5**
Toxaphene				<0.5									**<0.5**
CCWRF (M-004) Effluent Dioxins & Furans, pg/L (reported values based on detection limit)													
PCDD/PCDF Congeners*	0.0			0.0			0.0			0.0			**0.0**

*TEQ is calculated based on congener concentrations below the reporting limit (RL) set to zero