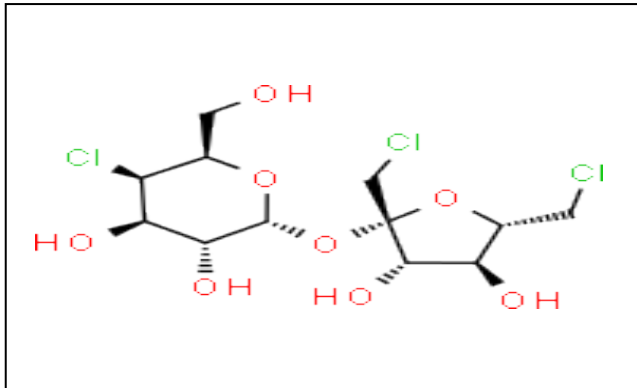


Emerging Constituents Program: Compilation of Santa Ana River Watershed Surface Water PFAS Data



Santa Ana Watershed Project Authority



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Compilation of Santa Ana River Watershed
Surface Water PFAS Data**

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Appendices

Appendix A: State Water Resources Control Board Water Code Sections 13267 AND 13383 Order for the Determination of the Presence of Per and Polyfluoroalkyl Substances at Publicly Owned Treatment Works, Order WQ 2020-0015-DWQ

Section 1: Executive Summary

"Emerging Constituents" (EC) is a phrase used to generally describe pharmaceuticals, personal care products, food additives, pesticides and other common household chemicals for which federal and State regulatory agencies have not yet established an official water quality standard. In 2009, water and wastewater agencies in the Santa Ana River region developed a voluntary program to characterize "Emerging Constituents" in samples collected from the Santa Ana River, the Colorado River aqueduct, the State Water Project, and recycled water produced by local wastewater treatment plants.¹

Commencing in June of 2010, samples were collected and analyzed each summer for four consecutive years. Results were summarized in annual reports to the Santa Ana Regional Water Quality Control Board. The purpose of this voluntary study project was to gather data needed to inform development of statewide EC monitoring requirements. The study was terminated in 2014 after the State Water Resources Control Board (SWRCB) finalized those regulations and applied them to recycled water projects.²

In December of 2018, the SWRCB revised the recycled water EC monitoring requirements.³ Two months later, water and wastewater agencies in the Santa Ana region reconvened and elected to update their prior work with a new emphasis on per- and polyfluoroalkyl substances (PFAS). In the summer of 2019, EC sampling was performed at 27 different Santa Ana River watershed sites and included analysis for 12 primary ECs along with 17 PFAS targets.⁴

In July 2020, the SWRCB issued Monitoring Order WQ 2020-0015-DWQ, included as Appendix A, requiring operators of Publicly Owned Treatment Works (POTWs) Facilities (otherwise known as wastewater treatment plants [WWTPs]) across the State to conduct sampling and analysis to determine the presence of PFAS in raw wastewater influent, treated effluent, and biosolids. Results of this monitoring effort by POTW Operators discharging into the SAR are summarized in Table 1, below.

¹ The original EC monitoring program was reviewed and endorsed by the Santa Ana Regional Water Quality Control Board in Res. No. R8-2009-0071 (Dec. 10, 2009).

² State Water Resources Control Board. Attachment A: Requirements for Monitoring Constituents of Emerging Concern for Recycled Water. Jan. 22, 2013 [SWRCB Resolution No. 2013-0003].

³ SWRCB. Amendments to the Policy for Water Quality Control for Recycled Water. Res. No. 2018-0057 (Dec. 11, 2018).

⁴ [SAWPA. 2019 Sampling Report for Emerging Constituents in the Santa Ana Region. April, 2020.](#)

Table 1: Summary of Results for PFAS Analytes Analyzed in Treated Effluent Discharges from SAR Watershed POTWs from Order 2020-0015-DWQ

Chemical Name/ Abbreviation	Freq. of Detection	Reported Range
Perfluoroalkylcarboxylic acids (PFCAs)		
Perfluorobutanoic acid (PFBA)	43 of 102 (0.42%)	ND - 85 ng/L
Perfluoropentanoic acid (PFPeA)	100 of 106 (0.94%)	ND - 86 ng/L
Perfluorohexanoic acid (PFHxA)	96 of 106 (0.91%)	ND - 110 ng/L
Perfluoroheptanoic acid (PFHpA)	11 of 106 (0.1%)	ND - 14 ng/L
Perfluorooctanoic acid (PFOA)	82 of 106 (0.77%)	ND - 38 ng/L
Perfluorononanoic acid (PFNA)	1 of 106 (0.01%)	ND - 17.8 ng/L
Perfluorodecanoic acid (PFDA)	2 of 106 (0.02%)	ND - 237 ng/L
Perfluoroundecanoic acid (PFUnDA)	1 of 106 (0.01%)	ND - 16 ng/L
Perfluorododecanoic acid (PFDoDA)	0 of 106 (0%)	ND - ng/L
Perfluorotridecanoic acid (PFTrDA)	0 of 106 (0%)	ND - ng/L
Perfluorotetradecanoic acid (PFTeDA)	0 of 106 (0%)	ND - ng/L
Perfluorohexadecanoic acid (PFHxDA)	0 of 68 (0%)	ND - ng/L
Perfluorooctadecanoic acid (PFODA)	0 of 68 (0%)	ND - ng/L
Perfluorinated sulfonic acids (PFSA)		
Perfluorobutane sulfonic acid (PFBS)	18 of 106 (0.17%)	ND - 17 ng/L
Perfluoropentane sulfonic acid (PFPeS)	0 of 106 (0%)	ND
Perfluorohexane sulfonic acid (PFHxS)	20 of 106 (0.19%)	ND - 16 ng/L
Perfluoroheptane sulfonic acid (PFHpS)	0 of 106 (0%)	ND
Perfluorooctane sulfonic acid (PFOS)	19 of 106 (0.18%)	ND - 231 ng/L
Perfluorononane sulfonic acid (PFNS)	0 of 79 (0%)	ND
Perfluorodecane sulfonic acid (PFDS)	0 of 106 (0%)	ND
Perfluorooctane Sulfonamide and Derivatives (PFOSA, FOSEs, FOSAs, and FOSAA)		
Perfluorooctanesulfonamide (PFOSA)	0 of 106 (0%)	ND
N-Ethyl perfluorooctane sulfonamide ethanol (EtFOSE)	0 of 99 (0%)	ND
N-Methyl perfluorooctane sulfonamide ethanol (MeFOSE)	0 of 99 (0%)	ND
N-Ethyl perfluorooctane sulfonamide (EtFOSA)	0 of 106 (0%)	ND
N-Methyl perfluorooctane sulfonamide (MeFOSA)	0 of 106 (0%)	ND
N-Methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	1 of 99 (0.01%)	ND - 434 ng/L
N-Ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	1 of 99 (0.01%)	ND - 145 ng/L
Fluorotelomer sulfonates (FTS)		
4:2 Fluorotelomer sulfonic acid (4:2 FTS)	0 of 106 (0%)	ND
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	5 of 106 (0.05%)	ND - 93 ng/L
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	0 of 106 (0%)	ND
10:2 Fluorotelomer sulfonic acid (10:2 FTS)	0 of 68 (0%)	ND
Fluorotelomer carboxylic acids (FTCA)		
2H,2H,3H,3H-Perfluorohexanoic acid (3:3 FTCA)	0 of 68 (0%)	ND
2H,2H,3H,3H-Perfluorooctanoic acid (5:3 FTCA)	0 of 68 (0%)	ND

2H,2H,3H,3H-Perfluorodecanoic acid (7:3 FTCA)	0 of 68 (0%)	ND
Perfluoroalkyl ether carboxylic acids (PFECA)		
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	0 of 106 (0%)	ND
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	0 of 106 (0%)	ND
Chlorinated Polyfluoroalkyl Ether Sulfonic Acids (Cl-PFESAs)		
9-Chlorohexadecafluoro-3-oxanonane-1- sulfonic acid (9-Cl-PF3ONS)	1 of 106 (0.01%)	ND - 8.8 ng/L
11-Chloroeicosafluoro-3-oxaundecane-1- sulfonic acid (11-Cl-PF3OUdS)	0 of 106 (0%)	ND
Other		
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	NA	NA
Perfluoro(2-ethoxyethane) sulfonic acid (PFEEESA)	NA	NA
Perfluoro-3-methoxypropanoic acid (PFMPA)	NA	NA
Perfluoro-4-methoxybutanoic acid (PFMBA)	NA	NA

Optional analytes are shaded gray.

ng/L = nanograms per liter ; ND = Not Detected; NA = Not Available

Section 2: Background & Purpose of Compilation

The California Environmental Protection Agency (CalEPA) and federal United States Environmental Protection Agency (USEPA) have primary legal responsibility for making the necessary risk assessments and recommending appropriate water quality standards for all chemicals including ECs. Under CalEPA, the SWRCB's Division of Drinking Water (DDW), Division of Water Quality (DWQ), and Regional Water Quality Control Boards (RWQCB) are responsible for implementing these standards in California.

In early 2009, the SWRCB adopted the Recycled Water Policy (RWP).⁵ As part of that Policy, the SWRCB convened a Blue Ribbon Panel of Experts to recommend appropriate water quality monitoring strategies for ECs in recycled water based on the best available pharmacological and toxicological information taking into consideration the fate and transport of such chemicals through advanced treatments systems and the natural environment. The Blue Ribbon Panel published their report in mid-2010.⁶ The SWRCB relied on the Panels' report to establish formal EC monitoring requirements in January of 2013 by amending the RWP.⁷

From 2010 – 2013, the SAWPA Emerging Constituents Task Force carried out a voluntary watershed sampling study for ECs, focused on POTW discharges, imported water, and SAR surface water.⁸ Results were summarized in annual reports to the Santa Ana Regional Water Quality Control Board. The monitoring program ended after 2013 with the amendment of the RWP.

Five years later, in early 2018, the Blue Ribbon Panel updated their recommendations for EC monitoring.⁹ The SWRCB revised the RWP, and the related EC monitoring requirements, later that same year.¹⁰

In addition, in mid-2014, the California Department of Health (CDPH) finalized the EC monitoring requirements for groundwater recharge projects using recycled water.¹¹ These requirements remain in effect although responsibility for the Drinking Water Program was transferred from CDPH to the SWRCB DDW in July of 2014.

⁵ SWRCB. Recycled Water Policy. Resolution No. 2009-0011 (adopted 2/3/09).

⁶ Drewes, J.E., P. Anderson, N. Denslow, A. Olivieri, D. Schlenk & S. Snyder. Monitoring Strategies for Chemicals of Emerging Concern (CECs) in Recycled Water. Final Report and Recommendations of a Science Advisory Panel convened by the State Water Resources Control Board. Sacramento, CA. June 25, 2010.

⁷ State Water Resources Control Board. Attachment A: Requirements for Monitoring Constituents of Emerging Concern for Recycled Water. Jan. 22, 2013 [SWRCB Resolution No. 2013-0003].

⁸ SAWPA. 2010-2013 Sampling Reports for Emerging Constituents in the Santa Ana Region. [2010 Sampling Report for Emerging Constituents in the Santa Ana Region. December, 2010.](#) [2011 Sampling Report for Emerging Constituents in the Santa Ana Region. December, 2011.](#) [2012 Sampling Report for Emerging Constituents in the Santa Ana Region. March, 2013.](#) [2013 Sampling Report for Emerging Constituents in the Santa Ana Region. April, 2014.](#)

⁹ Southern California Coastal Water Research Project. Monitoring Strategies for Constituents of Emerging Concern (CECs) in Recycled Water: Recommendations of a Science Advisory Panel. SCCWRP Technical Report #1032; April, 2018.

¹⁰ [SWRCB. Amendments to the Policy for Water Quality Control for Recycled Water. Res. No. 2018-0057 \(Dec. 11, 2018\).](#)

¹¹ [DPH-14-003E \(May 30, 2014\) See 22 CCR §60320.201\(c\)\(1\) et seq.](#)

In 2019, a new SAWPA EC Task Force sampling study was conducted to update the Santa Ana watershed's EC sampling program by evaluating the potential presence of past EC compounds and several new EC compounds such as PFAS. Another goal of that study was to gather data needed to assess long-term trends for some of the other ECs.

In both the 2019 sampling report and this 2021 compilation report, PFAS from POTW discharges into SAR were included. The SWRCB DDW established initial advisory drinking water Notification and Response Levels for two PFAS, perfluorooctanoic acid (PFOA) and perfluorooctane sulfonic acid (PFOS), in 2018 and then updated them in 2019 (NLs) and 2020 (RLs). Both the SWRCB DDW and USEPA have begun the process of developing enforceable drinking water standards for PFOA and PFOS.

Copies of all prior reports prepared by the EC Task Force are available for download from SAWPA's website.¹²

Section 3: 2021 Compilation Approach

In July 2020, the SWRCB issued Order WQ 2020-0015-DWQ requiring operators of Publicly Owned Treatment Works (POTWs) Facilities across the State to conduct sampling and analysis to determine the presence of PFAS. Of interest to this report are the requirements of the sampling and analysis to be conducted by POTWs discharging within the Santa Ana River Watershed as detailed in Appendix A. Attachment 3, Technical Sampling and Reporting Requirements. Additionally, this report also includes the results of in-stream surface water monitoring of the Santa Ana River conducted by OCWD in 2021, which also adhered to the SWRCB sampling and reporting requirements.

PFAS Analytes to be sampled and analyzed are include in Table 2, below.

¹² [SAWPA. 2019 Sampling Report for Emerging Constituents in the Santa Ana Region. April, 2020.](#)
April 4, 2022

Table 2: PFAS Analytes Analyzed in 2021

Chemical Name/ Abbreviation	GeoTracker PARLABEL	Required Reporting Limit for Liquids: Groundwater and Effluent (ng/L)
Perfluoroalkylcarboxylic acids (PFCAs)		
Perfluorobutanoic acid (PFBA)	PFBTA	8
Perfluoropentanoic acid (PFPeA)	PFPA	5
Perfluorohexanoic acid (PFHxA)	PFHA	5
Perfluoroheptanoic acid (PFHpA)	PFHPA	5
Perfluorooctanoic acid (PFOA)	PFOA	5
Perfluorononanoic acid (PFNA)	PFNA	5
Perfluorodecanoic acid (PFDA)	PFNDCA	5
Perfluoroundecanoic acid (PFUnDA)	PFUNDCA	5
Perfluorododecanoic acid (PFDoDA)	PFDOA	5
Perfluorotridecanoic acid (PFTrDA)	PFTRIDA	5
Perfluorotetradecanoic acid (PFTeDA)	PFTEDA	8
Perfluorohexadecanoic acid (PFHxDA)	PFHxDA	8
Perfluorooctadecanoic acid (PFODA)	PFODA	8
Perfluorinated sulfonic acids (PFSAs)		
Perfluorobutane sulfonic acid (PFBS)	PFBSA	5
Perfluoropentane sulfonic acid (PFPeS)	PFPEs	5
Perfluorohexane sulfonic acid (PFHxS)	PFHXSA	5
Perfluoroheptane sulfonic acid (PFHpS)	PFHPSA	5
Perfluorooctane sulfonic acid (PFOS)	PFOS	5
Perfluorononane sulfonic acid (PFNS)	PFNS	8
Perfluorodecane sulfonic acid (PFDS)	PFDSA	5
Perfluorooctane Sulfonamide and Derivatives (PFOSA, FOSEs, FOSAs, and FOSAAs)		
Perfluorooctanesulfonamide (PFOSA)	PFOSA	8
N-Ethyl perfluorooctane sulfonamide ethanol (EtFOSE)	ETFOSE	8
N-Methyl perfluorooctane sulfonamide ethanol (MeFOSE)	MEFOSE	8
N-Ethyl perfluorooctane sulfonamide (EtFOSA)	ETFOSA	8
N-Methyl perfluorooctane sulfonamide (MeFOSA)	MEFOSA	8
N-Methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	NMEFOSAA	20
N-Ethyl perfluorooctane sulfonamidoacetic acid (NETFOSAA)	NETFOSAA	20
Fluorotelomer sulfonates (FTS)		
4:2 Fluorotelomer sulfonic acid (4:2 FTS)	4:2FTS	20
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	6:2FTS	20
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	8:2FTS	20
10:2 Fluorotelomer sulfonic acid (10:2 FTS)	10:2FTS	8
Fluorotelomer carboxylic acids (FTCA)		
2H,2H,3H,3H-Perfluorohexanoic acid (3:3 FTCA)	3:3 FTCA	8
2H,2H,3H,3H-Perfluorooctanoic acid (5:3 FTCA)	5:3 FTCA	8

2H,2H,3H,3H-Perfluorodecanoic acid (7:3 FTCA)	7:3 FTCA	8
Perfluoroalkyl ether carboxylic acids (PFECA)		
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	HFPO-DA	20
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ADONA	8
Chlorinated Polyfluoroalkyl Ether Sulfonic Acids (CI-PFESAs)		
9-Chlorohexadecafluoro-3-oxanonane-1- sulfonic acid (9-CI-PF3ONS)	9-CI-PF3ONS	8
11-Chloroeicosafluoro-3-oxaundecane-1- sulfonic acid (11-CI-PF3OUds)	11-CI-PF3OUds	8
Other		
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	NFDHA	8
Perfluoro(2-ethoxyethane) sulfonic acid (PFEEESA)	PFEEESA	8
Perfluoro-3-methoxypropanoic acid (PFMPA)	PFMPA	8
Perfluoro-4-methoxybutanoic acid (PFMBA)	PFMBA	8

Optional analytes are shaded gray.

ng/L = nanograms per liter

Effluent samples were collected from 21 POTWs (see Figure 1 and Table 3).

Figure 1: Map of Sampling Locations for 2021 PFAS Monitoring

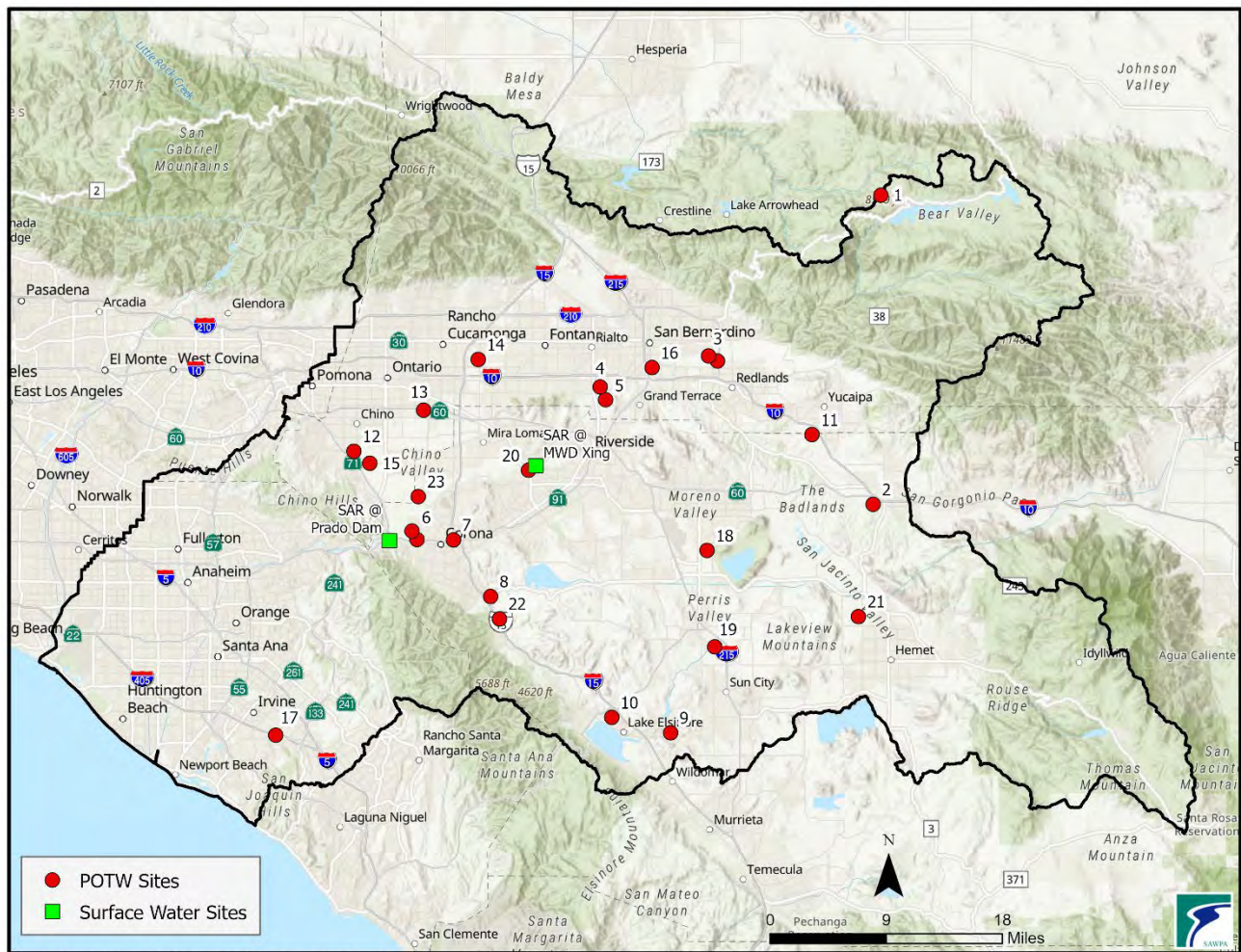


Table 3: Sampling Locations for the 2021 PFAS Monitoring

	Facility Name	Agency Name	GeoTracker Global ID	Design Flow MGD
POTW Effluent Monitoring Sites				
2	Beaumont WWTP No. 1	City of Beaumont	NPD100051636	4
1	Big Bear WWRF	Big Bear Area Regional WW Agency	WDR100027900	3.2
6	Corona WWRF #1 (discharge to creek)	City of Corona DWP	NPD100051505	11.5
6	Corona WWRF #1 (discharge to percolation ponds)	City of Corona DWP	NPD100051505	11.5
7	Corona WWRF #2	City of Corona DWP	WDR100029679	3
8	Corona WWRF #3	City of Corona DWP	NPD100051484	1
18	Moreno Valley RWRF	Eastern Municipal Water District	WDR100028673	20.8
19	Perris Valley RWRF	Eastern Municipal Water District	WDR100028677	30
21	San Jacinto Valley RWRF	Eastern Municipal Water District	WDR100028733	14.9
9	Railroad Canyon WWRF	Elsinore Valley Municipal Water Dist	WDR100028327	1.3
10	EVMWD Regional WWRF	Elsinore Valley Municipal Water Dist	NPD100051619	8
12	Carbon Canyon WWRF	Inland Empire Utilities Agency	NPD100051553	85
13	IEUA Regional Plant No. 1	Inland Empire Utilities Agency	NPD100052088	44
14	IEUA Regional Plant No. 4	Inland Empire Utilities Agency	NPD100052335	14
15	IEUA Regional Plant No. 5	Inland Empire Utilities Agency	NPD100052089	15
17	IRWD Michelson WWRF	Irvine Ranch Water District	NPD100051948	33.5
3	City of Redlands WWTF	City of Redlands	WDR100035978	12
3	City of Redlands WWTF (reclaimed effluent)	City of Redlands	WDR100035978	12
4	City of Rialto WWRF	City of Rialto	NPD100051632	11.7
20	Riverside WWRF	City of Riverside	NPD100051476	46
5	Colton/San Bernardino STP, RIX	Colton/San Bernardino RTT&WRA	NPD100051496	40
16	Margaret H Chandler WWRF	San Bernardino City Municipal Water Dept	NPD100051499	4.5
22	Temescal Valley WD WWRF	Temescal Valley Water District	NPD100051628	1.58
23	WRCRWA Regional WWRF	Western Riverside County Regional Wastewater Authority	NPD100051521	14
11	Henry N. Wochholz WWRF	Yucaipa Valley Water District	NPD100051607	8
Surface Water Monitoring Sites				
	SAR @ MWD Xing	Monitoring Conducted by Orange County Water District	NA	NA
	SAR @ Prado Dam	Monitoring Conducted by Orange County Water District	NA	NA

Site Name	Date	Perfluoroalkylcarboxylic acids (PFCA)												
		Perfluorobutanoic acid (PFBA)	Perfluoropentanoic acid (PFPeA)	Perfluorohexanoic acid (PFHxA)	Perfluoroheptanoic acid (PFHpA)	Perfluorooctanoic acid (PFOA)	Perfluorononanoic acid (PFNA)	Perfluorodecanoic acid (PFDA)	Perfluoroundecanoic acid (PFUnDA)	Perfluorododecanoic acid (PFDoDA)	Perfluorotridecanoic acid (PFTriDA)	Perfluorotetradecanoic acid (PFTeDA)	Perfluorohexadecanoic acid (PFHxDA)	Perfluorooctadecanoic acid (PFODa)
POTW Effluent Monitoring Sites														
City of Beaumont WWTP No. 1	3/9/2021	<8.0 ^{UN}	30.0	24.0	<5.0	12.0	<5.0	<5.0	<5.0	<5.0	<5.0	<8.0	NA	NA
	5/11/2021	<8.0 ^{UN}	52.0	31.0	<5.0	18.0	<5.0	<5.0	<5.0	<5.0	<5.0	<8.0	NA	NA
	9/1/2021	13.0 ^{UN}	56.0 ^{CJ,UN}	25.0 ^{CI}	<5.0	11.0	<5.0	<5.0	<5.0	<5.0	<5.0	<8.0 ^{UN}	NA	NA
Big Bear Area Regional WW Agency WWRF	12/2/2020	NA	31.0	24.0	<5.0	13.0	<5.0	<5.0	<5.0	<5.0	<5.0	<8.0	NA	NA
	2/10/2021	NA	<5.0	20.0	<5.0	9.2	<5.0	<5.0	<5.0	<5.0	<5.0	<8.0	NA	NA
	5/26/2021	<8.0 ^{UN}	44.0	41.0	<5.0	14.0	<5.0	<5.0	<5.0	<5.0	<5.0	<8.0	NA	NA
	9/15/2021	<8.0 ^{UN}	50.0 ^{CI}	31.0 ^{CI}	<5.0	14.0	<5.0	<5.0	<5.0	<5.0	<5.0	<8.0	NA	NA
City of Corona WWRF #1 (precolation ponds)	1/19/2021	<8.0	30.0	36.0	<5.0	18.0	<5.0 ^{LDX}	<5.0 ^{LDX}	<5.0	<5.0	<5.0	<8.0	NA	NA
	4/20/2021	<8.0	24.0	26.0 ^{MB}	<5.0	15.0	<5.0 ^{LDX}	<5.0 ^{LDX}	<5.0	<5.0	<5.0	<8.0	NA	NA
	7/13/2021	<8.0	19.0	29.0	<5.0	13.0	<5.0 ^{LDX}	<5.0 ^{LDX}	<5.0	<5.0	<5.0	<8.0	NA	NA
	10/6/2021	<8.0 ^{CI}	47.0 ^{CI}	44.0 ^{CI}	<5.0 ^{CI}	17.0 ^{CI}	<5.0 ^{LDX,CI}	<5.0 ^{LDX,TG,CI}	<5.0 ^{CI}	<5.0 ^{CI}	<5.0 ^{CI}	<8.0 ^{CI}	NA	NA
City of Corona WWRF #1 (creek)	1/19/2021	<8.0	30.0	34.0	<5.0	15.0	<5.0 ^{LDX}	<5.0 ^{LDX,TG}	<5.0	<5.0	<5.0	<8.0	NA	NA
	4/20/2021	<8.0	24.0	25.0 ^{MB}	<5.0	11.0	<5.0 ^{LDX}	<5.0 ^{LDX}	<5.0	<5.0	<5.0	<8.0	NA	NA
	7/13/2021	<8.0 ^{LDX}	20.0	27.0	<5.0	13.0	<5.0 ^{LDX}	<5.0 ^{LDX}	<5.0	<5.0	<5.0	<8.0	NA	NA
	10/6/2021	<8.0 ^{CI}	44.0 ^{CI}	44.0 ^{CI}	<5.0 ^{CI}	15.0 ^{CI}	<5.0 ^{LDX,CI}	<5.0 ^{LDX,CI}	<5.0 ^{CI}	<5.0 ^{CI}	<5.0 ^{CI}	<8.0 ^{CI}	NA	NA
City of Corona WWRF #2	1/19/2021	<8.0 ^{LDX}	38.0	22.0	<5.0	16.0	<5.0 ^{LDX}	<5.0 ^{LDX}	<5.0	<5.0	<5.0	<8.0	NA	NA
	4/20/2021	<8.0	33.0	25.0	<5.0	14.0	<5.0 ^{LDX}	<5.0 ^{LDX}	<5.0	<5.0	<5.0	<8.0	NA	NA
	7/13/2021	<8.0	16.0	12.0	<5.0	11.0	<5.0 ^{LDX}	<5.0 ^{LDX}	<5.0	<5.0	<5.0	<8.0	NA	NA
	10/6/2021	<8.0 ^{LDX,CI}	31.0 ^{CI}	16.0 ^{CI}	<5.0 ^{CI}	12.0 ^{CI}	<5.0 ^{LDX,CI}	<5.0 ^{LDX,CI}	<5.0 ^{CI}	<5.0 ^{CI}	<5.0 ^{CI}	<8.0 ^{CI}	NA	NA
City of Corona WWRF #3	1/19/2021	<8.0	72.0	32.0	<5.0	19.0	<5.0 ^{LDX}	<5.0 ^{LDX}	<5.0	<5.0	<5.0	<8.0	NA	NA
	4/20/2021	<8.0	82.0	44.0	5.5	38.0	<5.0 ^{LDX}	<5.0	<5.0	<5.0	<5.0	<8.0	NA	NA
	7/13/2021	8.4	49.0	22.0	<5.0	18.0	<5.0 ^{LDX}	<5.0 ^{LDX}	<5.0	<5.0	<5.0	<8.0	NA	NA
	10/6/2021	<8.0 ^{CI}	49.0 ^{CI}	25.0 ^{CI}	<5.0 ^{CI}	20.0 ^{CI}	<5.0 ^{LDX,CI}	<5.0 ^{CI}	<5.0 ^{CI}	<5.0 ^{CI}	<5.0 ^{CI}	<8.0 ^{CI}	NA	NA
EMWD Moreno Valley RWWF	11/5/2020	<8.0	23.0 ^U	33.0	<5.0	13.0 ^U	<5.0	<5.0	<5.0 ^U	<5.0	<5.0	<8.0	<8.0	<8.0
	1/14/2021	<8.0	<5.0	36.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<8.0	<8.0	<8.0
	4/15/2021	<8.0 ^{DB,GR}	31.0	80.0	<5.0 ^J	16.0	<5.0 ^J	<5.0 ^J	<5.0	<5.0	<5.0	<8.0	<8.0 ^{DB,GR}	<8.0 ^{DB,GR}
	8/5/2021	17.0	31.0	47.0	<5.0 ^J	12.0	<5.0 ^J	<5.0 ^J	<5.0	<5.0	<5.0	<8.0	<8.0	<8.0
EMWD Perris Valley RWWF	11/13/2020	<8.0	43.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<8.0	<8.0	<8.0
	1/28/2021	<8.0	38.0	35.0	<5.0	9.3	<5.0	<5.0	<5.0	<5.0	<5.0	<8.0	<8.0	<8.0
	4/28/2021	9.2	27.0	48.0	<5.0 ^J	13.0	<5.0 ^J	<5.0 ^J	<5.0	<5.0	<5.0	<8.0	<8.0	<8.0
	8/12/2021	27.0	33.0	54.0	<5.0	12.0	<5.0	<5.0	<5.0	<5.0	<5.0	<8.0	<8.0	<8.0
EMWD San Jacinto Valley RWWF	11/3/2020	22.0	19.0	18.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<8.0	<8.0	<8.0
	1/12/2021	<8.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<8.0	<8.0	<8.0
	4/13/2021	<8.0	28.0	36.0	<5.0	9.7	<5.0	<5.0 ^J	<5.0	<5.0	<5.0	<8.0	<8.0 ^{DB,GR}	<8.0 ^{DB,GR}
	8/3/2021	30.0	29.0	20.0	<5.0	7.8	<5.0	<5.0	<5.0	<5.0	<5.0	<8.0	<8.0	<8.0
EVMWD Railroad Canyon WWRF	12/16/2020	85.0	12.0 ^U	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<8.0	<8.0	<8.0
	2/17/2021	13.0 ^{DB,GR}	60.0	41.0	5.4	20.0	<5.0	<5.0	<5.0	<5.0	<5.0	<8.0	<8.0	<8.0
	5/10/2021	13.0	39.0	50.0	<5.0 ^J	19.0	<5.0 ^J	<5.0 ^J	<5.0	<5.0	<5.0	<8.0	<8.0	<8.0
	8/18/2021	41.0	63.0	74.0 ^{SN}	<5.0	22.0	<5.0	<5.0 ^J	<5.0	<5.0	<5.0	<8.0	<8.0	<8.0
EVMWD Regional WWRF	12/16/2020	<8.0	38.0	25.0 ^J	<5.0	18.0 ^J	<5.0	<5.0	<5.0	<5.0	<5.0	<8.0	<8.0	<8.0
	2/17/2021	12.0	51.0	<5.0 ^{SN}	<5.0	20.0	<5.0	<5.0	<5.0	<5.0	<5.0	<8.0	<8.0	<8.0
	5/10/2021	11.0	64.0	42.0	<5.0	15.0	<5.0	<5.0 ^{LDX}	<5.0	<5.0	<5.0	<8.0	<8.0	<8.0
	8/18/2021	23.0	34.0	110.0 ^{SN}	<5.0	16.0	<5.0	<5.0	<5.0	<5.0	<5.0	<8.0	<8.0	<8.0
IEUA Carbon Canyon WWRF	11/17/2020	<8.0	37.0	32.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<8.0	<8.0	<8.0
	1/19/2021	12.0 ^J	30.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<8.0	<8.0	<8.0
	4/13/2021	12.0	56.0	71.0	<5.0 ^J	11.0	<5.0 ^J	<5.0 ^J	<5.0	<5.0	<5.0	<8.0	<8.0	<8.0
	7/7/2021	<8.0 ^J	45.0	19.0	<5.0	10.0	<5.0	<5.0 ^J	<5.0	<5.0	<5.0	<8.0	<8.0	<8.0
IEUA Regional Plant No. 1	11/17/2020	<8.0	24.0	37.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<8.0	<8.0	<8.0
	1/19/2021	13.0 ^J	14.0 ^J	24.0 ^J	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<8.0	<8.0	<8.0
	4/13/2021	<8.0 ^J	23.0	51.0	<5.0	9.4	<5.0	<5.0	<5.0	<5.0	<5.0	<8.0	<8.0	<8.0
	7/7/2021	<8.0 ^{DB,GR,U}	33.0	40.0	<5.0	7.9	<5.0	<5.0	<5.0	<5.0	<5.0	<8.0	<8.0	<8.0
IEUA Regional Plant No. 4	11/17/2020	<8.0	53.0	36.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<8.0	<8.0	<8.0
	1/19/2021	15.0 ^J	43.0	<5.0 ^{SN}	<5.0	14.0 ^J	<5.0	<5.0	<5.0	<5.0	<5.0	<8.0	<8.0	<8.0
	4/13/2021	<8.0	44.0	55.0	<5.0	19.0	<5.0	<5.0	<5.0	<5.0	<5.0	<8.0	<8.0	<8.0
	7/7/2021	<8.0	53.0	22.0	<5.0	20.0	<5.0	<5.0	<5.0	<5.0	<5.0	<8.0	<8.0	<8.0
IEUA Regional Plant No. 5	11/17/2020	<8.0	86.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<8.0	<8.0	<8.0
	1/19/2021	12.0 ^J	31.0	43.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<8.0	<8.0	<8.0
	4/13/2021	9.6	43.0	64.0	<5.0	17.0	<5.0	<5.0	<5.0	<5.0	<5.0	<8.0	<8.0	<8.0
	7/7/2021	13.0	40.0	49.0	<5.0 ^J	13.0	<5.0	<5.0	<5.0	<5.0	<5.0	<8.0	<8.0	<8.0
IRWD Michelson WWRF	11/9/2020	<8.0	6.9	29.3	<5.0	10.0	<5.0 ^U	<5.0 ^U	<5.0 ^U	<5.0 ^U	<5.0 ^U	<8.0 ^U	NA	NA
	1/30/2021	<8.0	5.5	25.0	<5.0 ^U	9.5	<5.0 ^U	<5.0 ^U	<5.0 ^U	<5.0 ^U	<5.0 ^U	<8.0 ^U	NA	NA
	4/24/2021	<8.0	8.0	30.4	<5.0	31.8	17.8	237.0	16.0	<5.0	<5.0 ^U	<8.0 ^U	NA	NA
	7/22/2021	<8.0	10.3	30.6	<5.0	13.7	<5.0 ^U	6.9	<5.0 ^U	<5.0 ^U	<5.0 ^U	<8.0 ^U	NA	NA
City of Redlands WWTF	1/21/2021	<8.0	29.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<8.0	<8.0	<8.0
	4/15/2021	<8.0	53.0	55.0	<5.0	9.4	<5.0	<5.0 ^J	<5.0	<5.0	<5.0	<8.0	<8.0	<8.0
	7/16/2021	13.0	59.0	22.0	<5.0	9.6	<5.0	<5.0	<5.0	<5.0	<5.0	<8.0	<8.0	<8.0
	12/23/2020	<8.0	42.0	38.0	<5.0	18.0 ^J	<5.0	<5.0	<5.0	<5.0	<5.0	<8.0	<8.0	<8.0
City of Redlands (reclaimed)	1/21/2021	<8.0	30.0	28.0	<5.0	<5.0	<5.0							

Site Name	Date	Perfluorinated sulfonic acids (PFASs)							Perfluorooctane Sulfonamide and Derivatives (PFOSA, FOSEs, FOSAs, and FOSAA)							Fluorotelomer sulfonates (FTS)			
		Perfluorobutane sulfonic acid (PFBS)	Perfluoropentane sulfonic acid (PFPEs)	Perfluorohexane sulfonic acid (PFHxAs)	Perfluoroheptane sulfonic acid (PFHpS)	Perfluorooctane sulfonic acid (PFOS)	Perfluorononane sulfonic acid (PFNS)	Perfluorodecane sulfonic acid (PFDS)	Perfluorooctanesulfonamide (PFOSA)	N-Ethyl perfluorooctane sulfonamide ethanol (EtFOSE)	N-Methyl perfluorooctane sulfonamide ethanol (MeFOSE)	N-Ethyl perfluorooctane sulfonamide (EtFOSA)	N-Methyl perfluorooctane sulfonamide (MeFOSA)	N-Methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	N-Ethyl perfluorooctane sulfonamidoacetic acid (NEFOSAA)	4:2 Fluorotelomer sulfonic acid (4:2 FTS)	6:2 Fluorotelomer sulfonic acid (6:2 FTS)	8:2 Fluorotelomer sulfonic acid (8:2 FTS)	10:2 Fluorotelomer sulfonic acid (10:2 FTS)
POTW Effluent Monitoring Sites																			
City of Beaumont WWTP No. 1	3/9/2021	<5.0	<5.0	<5.0	<5.0	<5.0	<8.0	<5.0	<8.0	<8.0	<8.0	<8.0 ^{UN}	<8.0 ^{UN}	<20.0	<20.0	<20.0 ^{VCI}	<20.0 ^{VCI}	<20.0	NA
	5/11/2021	<5.0	<5.0	<5.0	<5.0	<5.0	<8.0	<5.0	<8.0	<8.0	<8.0	<8.0 ^{UN}	<8.0 ^{UN}	<20.0	<20.0	<20.0 ^{VCI}	<20.0 ^{VCI}	<20.0	NA
	9/1/2021	11.0	<5.0	<5.0	<5.0	<5.0	<8.0	<5.0	<8.0	<8.0	<8.0	<8.0 ^{GR}	<8.0 ^{GR}	<20.0	<20.0	<20.0 ^{VCI}	<20.0 ^{VCI}	<20.0	NA
Big Bear Area Regional WW Agency WWRf	12/2/2020	<5.0	<5.0	<5.0	<5.0	<5.0	<8.0	<5.0	<8.0	<8.0	<8.0	<8.0	<8.0	<20.0	<20.0	<20.0	<20.0	<20.0	NA
	2/10/2021	6.9	<5.0	5.4	<5.0	<5.0	<8.0	<5.0	<8.0	<8.0	<8.0	<8.0	<8.0	<20.0	<20.0	<20.0	<20.0	<20.0	NA
	5/26/2021	7.1	<5.0	6.0	<5.0	<5.0	<8.0	<5.0	<8.0	<8.0	<8.0	<8.0 ^{UN}	<8.0 ^{UN}	<20.0	<20.0	<20.0 ^{VCI}	<20.0 ^{VCI}	<20.0	NA
	9/15/2021	5.1	<5.0	<5.0	<5.0	<5.0	<8.0	<5.0	<8.0	<8.0	<8.0	<8.0 ^{CI}	<8.0 ^{CI}	<20.0	<20.0	<20.0 ^{VCI}	<20.0 ^{VCI}	<20.0	NA
City of Corona WWRf #1 (precolation ponds)	1/19/2021	5.0	<5.0 ^{DX}	<5.0 ^{JDX}	<5.0	<5.0	NA	<5.0	<8.0	<8.0	<8.0	<8.0	<8.0	<20.0	<20.0	<20.0	<20.0	<20.0	NA
	4/20/2021	<5.0	<5.0 ^{DX}	<5.0	<5.0	<5.0 ^{MB}	NA	<5.0	<8.0	<8.0	<8.0	<8.0	<8.0	<20.0	<20.0	<20.0	<20.0	<20.0	NA
	7/13/2021	5.2	<5.0	<5.0 ^{JDX}	<5.0	<5.0	NA	<5.0	<8.0	<8.0	<8.0	<8.0	<8.0	<20.0	<20.0	<20.0	<20.0	<20.0	NA
	10/6/2021	<5.0 ^{CI}	<5.0 ^{CI}	<5.0 ^{DX,CI}	<5.0 ^{CI}	<5.0 ^{CI}	NA	<5.0 ^{CI}	<8.0 ^{CI}	<8.0 ^{CI}	<8.0 ^{CI}	<8.0 ^{CI}	<8.0 ^{CI}	<20.0 ^{DX,CI}	<20.0 ^{CI}	<20.0 ^{CI}	<20.0 ^{DX,MB,CI}	<20.0 ^{CI}	NA
City of Corona WWRf #1 (creek)	1/19/2021	<5.0	<5.0 ^{DX}	<5.0 ^{JDX}	<5.0	<5.0	NA	<5.0	<8.0	<8.0	<8.0	<8.0	<8.0	<20.0	<20.0	<20.0	<20.0	<20.0	NA
	4/20/2021	<5.0	<5.0	<5.0 ^{JDX}	<5.0	<5.0 ^{MB}	NA	<5.0	<8.0	<8.0	<8.0	<8.0	<8.0	<20.0	<20.0	<20.0	<20.0	<20.0	NA
	7/13/2021	<5.0	<5.0	<5.0 ^{JDX}	<5.0	<5.0	NA	<5.0	<8.0	<8.0	<8.0	<8.0	<8.0	<20.0	<20.0	<20.0	<20.0	<20.0	NA
City of Corona WWRf #2	1/19/2021	<5.0 ^{CI}	<5.0 ^{DX}	<5.0 ^{JDX}	<5.0	<5.0	NA	<5.0 ^{CI}	<8.0 ^{DX,CI}	<8.0 ^{CI}	<8.0 ^{CI}	<8.0 ^{CI}	<8.0 ^{CI}	<20.0 ^{DX,TG,CI}	<20.0 ^{CI}	<20.0 ^{CI}	<20.0 ^{DX,MB,CI}	<20.0 ^{CI}	NA
	4/20/2021	<5.0	<5.0	<5.0 ^{JDX}	<5.0	<5.0	NA	<5.0	<8.0	<8.0	<8.0	<8.0	<8.0	<20.0	<20.0	<20.0	<20.0	<20.0	NA
	7/13/2021	<5.0	<5.0	<5.0 ^{JDX}	<5.0	<5.0	NA	<5.0	<8.0	<8.0	<8.0	<8.0	<8.0	<20.0	<20.0	<20.0	<20.0	<20.0	NA
	10/6/2021	<5.0 ^{CI}	<5.0 ^{CI}	<5.0 ^{DX,CI}	<5.0 ^{CI}	<5.0 ^{CI}	NA	<5.0 ^{CI}	<8.0 ^{CI}	<8.0 ^{CI}	<8.0 ^{CI}	<8.0 ^{CI}	<8.0 ^{CI}	<20.0 ^{CI}	<20.0 ^{CI}	<20.0 ^{CI}	<20.0 ^{DX,MB,CI}	<20.0 ^{CI}	NA
City of Corona WWRf #3	1/19/2021	6.4	<5.0	<5.0 ^{JDX}	<5.0	<5.0	NA	<5.0	<8.0	<8.0	<8.0	<8.0	<8.0	<20.0	<20.0	<20.0	<20.0	<20.0	NA
	4/20/2021	6.7	<5.0	<5.0 ^{JDX}	<5.0	<5.0	NA	<5.0	<8.0	<8.0	<8.0	<8.0	<8.0	<20.0	<20.0	<20.0	<20.0	<20.0	NA
	7/13/2021	6.4	<5.0	<5.0 ^{JDX}	<5.0	<5.0	NA	<5.0	<8.0	<8.0	<8.0	<8.0	<8.0	<20.0	<20.0	<20.0	<20.0	<20.0	NA
	10/6/2021	11.0 ^{CI}	<5.0 ^{CI}	6.8 ^{CI}	<5.0 ^{CI}	<5.0 ^{CI}	NA	<5.0 ^{CI}	<8.0 ^{CI}	<8.0 ^{CI}	<8.0 ^{CI}	<8.0 ^{CI}	<8.0 ^{CI}	<20.0 ^{CI}	<20.0 ^{CI}	<20.0 ^{CI}	<20.0 ^{DX,MB,CI}	<20.0 ^{CI}	NA
EMWD Moreno Valley RWRf	11/5/2020	<5.0	<5.0	<5.0	<5.0	<5.0	<8.0	<5.0	<8.0	<8.0	<8.0	<8.0	<8.0	<20.0	<20.0	<20.0	<20.0	<20.0	<8.0
	1/14/2021	<5.0 ^{SN}	<5.0	<5.0	<5.0	<5.0	<8.0	<5.0	<8.0	<8.0	<8.0	<8.0	<8.0	<20.0	<20.0	<20.0	<20.0	<20.0	<8.0
	4/15/2021	<5.0 ^{DF,SN}	<5.0	<5.0 ^{IL}	<5.0	5.0	<8.0 ^{LP}	<5.0 ^{IL}	<8.0	<8.0	<8.0	<8.0 ^{IL}	<8.0 ^{IL}	<20.0 ^{IL}	<20.0	<20.0	<20.0	<20.0	<8.0
EMWD Perris Valley RWRf	8/5/2021	<5.0 ^I	<5.0	<5.0 ^I	<5.0	<5.0	<8.0	<5.0	<8.0	<8.0	<8.0	<8.0	<8.0	<20.0	<20.0	<20.0 ^{DB,GR}	<20.0 ^{DB,GR}	<20.0	<8.0
	11/13/2020	<5.0	<5.0	<5.0	<5.0	<5.0	<8.0	<5.0	<8.0	<8.0	<8.0	<8.0	<8.0	<20.0	<20.0	<20.0	<20.0	<20.0	<8.0
	1/28/2021	<5.0 ^{SN}	<5.0	<5.0 ^I	<5.0	<5.0 ^I	<8.0	<5.0 ^{IL}	<8.0	<8.0	<8.0	<8.0	<8.0	<20.0	<20.0	<20.0	23.0	<20.0	<8.0
	4/28/2021	<5.0	<5.0	<5.0	<5.0	<5.0	<8.0	<5.0 ^{IL}	<8.0	<8.0	<8.0	<8.0	<8.0	<20.0	<20.0	<20.0	<20.0	<20.0	<8.0
EMWD San Jacinto Valley RWRf	8/12/2021	6.7 ^{SN}	<5.0	<5.0 ^I	<5.0	<5.0 ^I	<8.0	<5.0	<8.0	<8.0	<8.0	<8.0 ^{GR}	<8.0 ^{GR}	<20.0	<20.0	<20.0 ^{DB,GR}	<20.0 ^{DB,GR}	<20.0	<8.0
	11/3/2020	<5.0	<5.0	<5.0	<5.0	<5.0	<8.0	<5.0	<8.0	<8.0	<8.0	<8.0	<8.0	<20.0	<20.0	<20.0	<20.0	<20.0	<8.0
	1/12/2021	<5.0	<5.0	<5.0	<5.0	<5.0	<8.0	<5.0	<8.0	<8.0	<8.0	<8.0	<8.0	<20.0	<20.0	<20.0	<20.0	<20.0	<8.0
EVMWD Railroad Canyon WWRf	4/13/2021	<5.0 ^{DF,SN}	<5.0	<5.0 ^I	<5.0	<5.0 ^I	<8.0 ^{LP}	<5.0 ^{IL}	<8.0	<8.0	<8.0	<8.0 ^{LP}	<8.0 ^{IL}	<20.0 ^{IL}	<20.0	<20.0	20.0 ^I	<20.0	<8.0
	8/3/2021	<5.0 ^{SN}	<5.0	<5.0	<5.0	<5.0 ^I	<8.0	<5.0	<8.0	<8.0	<8.0	<8.0	<8.0	<20.0	<20.0	<20.0 ^{DB,GR}	<20.0 ^{DB,GR}	<20.0	<8.0
	12/16/2020	<5.0	<5.0	<5.0	<5.0	<5.0	<8.0	<5.0	<8.0	<8.0	<8.0	<8.0	<8.0	<20.0	<20.0	<20.0	<20.0	<20.0	<8.0
EVMWD Regional WWRf	2/17/2021	<5.0 ^{SN}	<5.0	<5.0	<5.0	<5.0	<8.0	<5.0	<8.0	<8.0	<8.0	<8.0	<8.0	<20.0	<20.0	<20.0 ^{DB,GR}	<20.0 ^{DB,GR}	<20.0	<8.0
	5/10/2021	<5.0 ^{SN}	<5.0	<5.0 ^I	<5.0	<5.0	<8.0	<5.0	<8.0	<8.0	<8.0	<8.0	<8.0	<20.0	<20.0	<20.0	<20.0	<20.0	<8.0
	8/18/2021	13.0 ^{SN}	<5.0	<5.0 ^I	<5.0	<5.0 ^I	<8.0	<5.0	<8.0	<8.0	<8.0	<8.0	<8.0	<20.0	<20.0	<20.0	<20.0	<20.0	<8.0
IEUA Carbon Canyon WWRf	12/16/2020	17.0 ^I	<5.0	<5.0	<5.0	<5.0	<8.0	<5.0	<8.0	<8.0	<8.0	<8.0	<8.0	<20.0	<20.0	<20.0	<20.0	<20.0	<8.0
	2/17/2021	<5.0 ^{SN}	<5.0	<5.0	<5.0	<5.0	<8.0	<5.0	<8.0	<8.0	<8.0	<8.0	<8.0	<20.0	<20.0	<20.0	<20.0	<20.0	<8.0
	5/10/2021	<5.0 ^{SN}	<5.0	<5.0 ^I	<5.0	<5.0	<8.0	<5.0	<8.0	<8.0	<8.0	<8.0	<8.0	<20.0	<20.0	<20.0	<20.0	<20.0	<8.0
	8/18/2021	16.0 ^{SN}	<5.0	<5.0 ^I	<5.0	<5.0 ^I	<8.0	<5.0	<8.0	<8.0	<8.0	<8.0	<8.0	<20.0	<20.0	<20.0	<20.0	<20.0	<8.0
IEUA Regional Plant No. 1	11/17/2020	<5.0	<5.0	<5.0	<5.0	<5.0	<8.0 ^{LP}	<5.0	<8.0	<8.0	<8.0	<8.0	<8.0	<20.0	<20.0	<20.0	<20.0	<20.0	<8.0
	1/19/2021	<5.0 ^{SN}	<5.0	<5.0	<5.0	<5.0 ^I	<8.0	<5.0	<8.0	<8.0	<8.0	<8.0	<8.0	<20.0	<20.0	<20.0	<20.0	<20.0	<8.0
	4/13/2021	<5.0 ^{SN}	<5.0	<5.0 ^{SN}	<5.0	<5.0 ^I	<8.0	<5.0	<8.0	<8.0	<8.0	<8.0	<8.0	<20.0	<20.0	<20.0	<20.0	<20.0	<8.0
IEUA Regional Plant No. 4	7/7/2021	<5.0 ^I	<5.0	<5.0 ^I	<5.0	<5.0 ^I	<8.0	<5.0	<8.0	<8.0	<8.0	<8.0	<8.0	<20.0	<20.0	<20.0	<20.0	<20.0	<8.0
	11/17/2020	<5.0	<5.0	<5.0	<5.0	<5.0	<8.0 ^{LP}	<5.0	<8.0	<8.0	<8.0	<8.0	<8.0	<20.0	<20.0	<20.0	<20.0	<20.0	<8.0
	1/19/2021	<5.0 ^{SN}	<5.0	<5.0	<5.0	<5.0 ^{LP}	<8.0	<5.0	<8.0	<8.0	<8.0	<8.0	<8.0	<20.0	<20.0	<20.0	<20.0	<20.0	<8.0
IEUA Regional Plant No. 5	4/13/2021	<5.0 ^{SN}	<5.0	<5.0 ^I	<5.0	<5.0	<8.0	<5.0	<8.0	<8.0	<8.0	<8.0	<8.0	<20.0	<20.0	<20.0	<20.0	<20.0	<8.0
	7/7/2021	12.0 ^{SN}	<5.0	<5.0	<5.0	<5.0 ^I	<8.0	<5.0	<8.0	<8.0	<8.0	<8.0	<8.0	<20.0	<20.0	<20.0	<20.0	<20.0	<8.0
	11/17/2020	<5.0 ^{SN}	<5.0	<5.0	<5.0	<5.0	<8.0	<5.0	<8.0	<8.0	<8.0	<8.0	<8.0	<20.0	<20.0	<20.0	<20.0	<20.0	<8.0
IRWD Michelson WWRf																			

Site Name	Date	Fluorotelomer carboxylic acids (FTCA)			Perfluoroalkyl ether carboxylic acids (PFCEA)		Chlorinated Polyfluoroalkyl Ether Sulfonic Acids (Cl-PFESAs)		Other			
		2H,2H,3H-Perfluorohexanoic acid (3:3 FTCA)	2H,2H,3H-Perfluorooctanoic acid (5:3 FTCA)	2H,2H,3H-Perfluorodecanoic acid (7:3 FTCA)	Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	9-Chlorohexadecafluoro-3-oxanonane-1- sulfonic acid (9-Cl-PF3ONS)	11-Chloroicosasfluoro-3-oxaundecane-1- sulfonic acid (11-Cl-PF30US)	Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	Perfluoro(2-ethoxyethane) sulfonic acid (PFESA)	Perfluoro-3-methoxypropanoic acid (PFMPA)	Perfluoro-4-methoxybutanoic acid (PFMBA)
POTW Effluent Monitoring Sites												
City of Beaumont WWTP No. 1	3/9/2021	NA	NA	NA	<20.0	<8.0	<8.0	<8.0	NA	NA	NA	NA
	5/11/2021	NA	NA	NA	<20.0	<8.0	<8.0	<8.0	NA	NA	NA	NA
	9/1/2021	NA	NA	NA	<20.0	<8.0	<8.0	<8.0	NA	NA	NA	NA
Big Bear Area Regional WW Agency WWRf	12/2/2020	NA	NA	NA	<20.0	<8.0	<8.0	<8.0	NA	NA	NA	NA
	2/10/2021	NA	NA	NA	<20.0	<8.0	<8.0	<8.0	NA	NA	NA	NA
	5/26/2021	NA	NA	NA	<20.0	<8.0	<8.0	<8.0	NA	NA	NA	NA
City of Corona WWRf #1 (precolation ponds)	1/19/2021	NA	NA	NA	<20.0	<8.0	<8.0	<8.0	NA	NA	NA	NA
	4/20/2021	NA	NA	NA	<20.0	<8.0	<8.0	<8.0	NA	NA	NA	NA
	7/13/2021	NA	NA	NA	<20.0	<8.0	<8.0	<8.0	NA	NA	NA	NA
	10/6/2021	NA	NA	NA	<20.0 ^{Cl}	<8.0 ^{Cl}	<8.0 ^{Cl}	<8.0 ^{Cl}	NA	NA	NA	NA
City of Corona WWRf #1 (creek)	1/19/2021	NA	NA	NA	<20.0	<8.0	<8.0	<8.0	NA	NA	NA	NA
	4/20/2021	NA	NA	NA	<20.0	<8.0	<8.0	<8.0	NA	NA	NA	NA
	7/13/2021	NA	NA	NA	<20.0 ^{Cl}	<8.0 ^{Cl}	<8.0 ^{Cl}	<8.0 ^{Cl}	NA	NA	NA	NA
City of Corona WWRf #2	1/19/2021	NA	NA	NA	<20.0	<8.0	<8.0	<8.0	NA	NA	NA	NA
	4/20/2021	NA	NA	NA	<20.0	<8.0	<8.0	<8.0	NA	NA	NA	NA
	7/13/2021	NA	NA	NA	<20.0 ^{Cl}	<8.0 ^{Cl}	<8.0 ^{Cl}	<8.0 ^{Cl}	NA	NA	NA	NA
City of Corona WWRf #3	1/19/2021	NA	NA	NA	<20.0	<8.0	<8.0	<8.0	NA	NA	NA	NA
	4/20/2021	NA	NA	NA	<20.0	<8.0	<8.0	<8.0	NA	NA	NA	NA
	7/13/2021	NA	NA	NA	<20.0 ^{Cl}	<8.0 ^{Cl}	<8.0 ^{Cl}	<8.0 ^{Cl}	NA	NA	NA	NA
EMWD Moreno Valley RWRf	11/5/2020	<8.0	<8.0	<8.0	<20.0	<8.0 ^U	<8.0 ^P	<8.0	NA	NA	NA	NA
	1/14/2021	<8.0	<8.0	<8.0	<20.0	<8.0	<8.0	<8.0	NA	NA	NA	NA
	4/15/2021	<8.0	<8.0	<8.0 ^P	<20.0	<8.0	<8.0	<8.0	NA	NA	NA	NA
EMWD Perris Valley RWRf	8/5/2021	<8.0	<8.0	<8.0	<20.0	<8.0	<8.0	<8.0	NA	NA	NA	NA
	11/13/2020	<8.0 ^U	<8.0	<8.0	<20.0	<8.0	<8.0	<8.0	NA	NA	NA	NA
	1/28/2021	<8.0 ^{SN}	<8.0 ^{SN}	<8.0	<20.0	<8.0	<8.0 ^P	<8.0	NA	NA	NA	NA
EMWD San Jacinto Valley RWRf	4/28/2021	<8.0	<8.0	<8.0	<20.0	<8.0	<8.0 ^P	<8.0 ^P	NA	NA	NA	NA
	8/12/2021	<8.0 ^{SN}	<8.0	<8.0	<20.0 ^U	<8.0	<8.0	<8.0	NA	NA	NA	NA
	11/3/2020	<8.0	<8.0	<8.0	<20.0	<8.0	<8.0	<8.0	NA	NA	NA	NA
EVMWD Railroad Canyon WWRf	1/12/2021	<8.0	<8.0	<8.0	<20.0	<8.0	<8.0	<8.0	NA	NA	NA	NA
	4/13/2021	<8.0	<8.0	<8.0 ^P	<20.0	<8.0	<8.0	<8.0	NA	NA	NA	NA
	8/3/2021	<8.0	<8.0	<8.0	<20.0 ^U	<8.0	<8.0	<8.0	NA	NA	NA	NA
EVMWD Regional WWRf	12/16/2020	<8.0	<8.0	<8.0	<20.0 ^{DB,GR}	<8.0	<8.0	<8.0	NA	NA	NA	NA
	2/17/2021	<8.0	<8.0	<8.0	<20.0	<8.0	<8.0	<8.0	NA	NA	NA	NA
	5/10/2021	<8.0 ^U	<8.0	<8.0	<20.0 ^U	<8.0	<8.0	<8.0	NA	NA	NA	NA
IEUA Carbon Canyon WWRf	8/18/2021	<8.0	<8.0	<8.0	<20.0 ^{DB,GR}	<8.0	<8.0 ^P	<8.0	NA	NA	NA	NA
	11/17/2020	<8.0	<8.0	<8.0	<20.0 ^U	<8.0	<8.0	<8.0	NA	NA	NA	NA
	1/19/2021	<8.0	<8.0	<8.0	<20.0	<8.0	<8.0	<8.0	NA	NA	NA	NA
IEUA Regional Plant No. 1	4/13/2021	<8.0	<8.0	<8.0	<20.0	<8.0	<8.0	<8.0	NA	NA	NA	NA
	7/7/2021	<8.0	<8.0	<8.0	<20.0	<8.0	<8.0	<8.0	NA	NA	NA	NA
	11/17/2020	<8.0	<8.0	<8.0	<20.0	<8.0	<8.0	<8.0	NA	NA	NA	NA
IEUA Regional Plant No. 4	1/19/2021	<8.0	<8.0	<8.0	<20.0	<8.0	<8.0	<8.0	NA	NA	NA	NA
	4/13/2021	<8.0	<8.0	<8.0	<20.0	<8.0	<8.0	<8.0	NA	NA	NA	NA
	7/7/2021	<8.0	<8.0	<8.0	<20.0	<8.0	<8.0	<8.0	NA	NA	NA	NA
IEUA Regional Plant No. 5	11/17/2020	<8.0	<8.0	<8.0	<20.0	<8.0	<8.0	<8.0	NA	NA	NA	NA
	1/19/2021	<8.0	<8.0	<8.0	<20.0	<8.0	<8.0	<8.0	NA	NA	NA	NA
	4/13/2021	<8.0	<8.0	<8.0	<20.0	<8.0	<8.0	<8.0	NA	NA	NA	NA
IRWD Michelson WWRf	7/7/2021	<8.0	<8.0	<8.0	<20.0	<8.0	<8.0	<8.0	NA	NA	NA	NA
	11/9/2020	NA	NA	NA	<20.0 ^U	<8.0 ^U	<8.0 ^U	<8.0 ^U	NA	NA	NA	NA
	1/30/2021	NA	NA	NA	<20.0 ^U	<8.0 ^U	<8.0 ^U	<8.0 ^U	NA	NA	NA	NA
City of Redlands WWTF	4/24/2021	NA	NA	NA	<20.0 ^U	<8.0 ^U	<8.0 ^U	<8.0 ^U	NA	NA	NA	NA
	7/22/2021	NA	NA	NA	<20.0 ^U	<8.0 ^U	<8.0 ^U	<8.0 ^U	NA	NA	NA	NA
	1/21/2021	<8.0	<8.0	<8.0	<20.0	<8.0	<8.0	<8.0	NA	NA	NA	NA
City of Redlands (reclaimed)	4/15/2021	<8.0	<8.0	<8.0 ^P	<20.0	<8.0	<8.0	<8.0	NA	NA	NA	NA
	7/16/2021	<8.0	<8.0	<8.0	<20.0	<8.0	<8.0	<8.0	NA	NA	NA	NA
	12/23/2020	<8.0	<8.0	<8.0	<20.0	<8.0	<8.0	<8.0	NA	NA	NA	NA
City of Rialto WWRf	1/21/2021	<8.0	<8.0	<8.0	<20.0	<8.0	<8.0	<8.0	NA	NA	NA	NA
	4/15/2021	<8.0	<8.0	<8.0 ^P	<20.0	<8.0	<8.0	<8.0	NA	NA	NA	NA
	7/16/2021	<8.0	<8.0	<8.0	<20.0	<8.0	<8.0	<8.0	NA	NA	NA	NA
City of Riverside WWRf	12/23/2020	<8.0	<8.0	<8.0	<20.0	<8.0	<8.0	<8.0	NA	NA	NA	NA
	3/4/2021	<8.0 ^{NISm}	<8.0 ^{NISm}	<8.0 ^{NISm}	<20.0	<8.0 ^{NISm}	<8.0	<8.0	NA	NA	NA	NA
	6/17/2021	<8.0	<8.0	<8.0	<20.0	<8.0	<8.0	<8.0	NA	NA	NA	NA
City of San Bernardino Margaret H Chandler WWRf	9/10/2021	<8.0	<8.0	<8.0	<20.0	<8.0	<8.0	<8.0	NA	NA	NA	NA
	10/29/2020	<8.0	<8.0	<8.0	<20.0	<8.0	<8.0	<8.0	NA	NA	NA	NA
	10/29/2020	<8.0	<8.0	<8.0	<20.0	<8.0	<8.0	<8.0	NA	NA	NA	NA
Colton/San Bernadino STP, RIX	1/13/2021	<8.0	<8.0	<8.0	<20.0	<8.0	<8.0	<8.0	NA	NA	NA	NA
	4/7/2021	<8.0	<8.0	<8.0	<20.0	<8.0	<8.0	<8.0	NA	NA	NA	NA
	7/22/2021	<8.0 ^U	<8.0	<8.0	<20.0	<8.0	<8.0	<8.0	NA	NA	NA	NA
Temescal Valley WD WWRf	3/29/2021	<8.0	<8.0	<8.0	<20.0	<8.0	<8.0	<8.0	NA	NA	NA	NA
	5/5/2021	<8.0 ^U	<8.0	<8.0	<20.0 ^U	<8.0	<8.0	<8.0	NA	NA	NA	NA
	7/7/2021	<8.0	<8.0 ^U	<8.0	<20.0	<8.0	<8.0	<8.0	NA	NA	NA	NA
WRCRWA Regional WWRf	10/6/2021	<8.0	<8.0	<8.0	<20.0 ^{DB,GR}	<8.0	<8.0	<8.0	NA	NA	NA	NA
	3/29/2021	<8.0	<8.0	<8.0	<20.0	<8.0	<8.0	<8.0	NA	NA	NA	NA
	5/5/2021	<8.0 ^U	<8.0	<8.0	<20.0 ^U	<8.0	<8.0	<8.0	NA	NA	NA	NA
YVWD Henry N. Wochholz WWRf	7/7/2021	<8.0	<8.0 ^U	<8.0	<20.0	<8.0	<8.0	<8.0	NA	NA	NA	NA
	10/6/2021	<8.0	<8.0	<8.0	<20.0 ^{DB,GR}	<8.0	<8.0	<8.0	NA	NA	NA	NA
	12/22/2020	<8.0	<8.0	<8.0	<20.0	<8.0	<8.0	<8.0	NA	NA	NA	NA
SAR @ MWD Xing	2/24/2021	<8.0	<8.0 ^{SN}	<8.0	<20.0	<8.0	<8.0	<8.0	NA	NA	NA	NA
	6/9/2021	<8.0	<8.0	<8.0	<20.0	<8.0	<8.0	<8.0	NA	NA	NA	NA
	8/24/2021	<8.0	<8.0	<8.0	<20.0	<8.0	<8.0	<8.0	NA	NA	NA	NA
SAR @ Prado Dam	10/27/2020	<8.0	<8.0	<8.0	<20.0	<8.0	8.8 ^U	<8.0	NA	NA	NA	NA
	2/23/2021	<8.0	<8.0 ^{SN}	<8.0	<20.0	<8.0	<8.0	<8.0	NA	NA	NA	NA
	6/9/2021	<8.0	<8.0	<8.0	<20.0	<8.0	<8.0 ^U	<8.0	NA	NA	NA	NA
SAR @ MWD Xing	9/15/2021	<8.0	<8.0	<8.0	<20.0	<8.0	<8.0	<8.0	NA	NA	NA	NA
	11/12/2020	NA	NA	NA	<20.0	<8.0	<8.0	<8.0	NA	NA	NA	NA
	2/26/2021	NA	NA	NA	<20.0	<8.0	<8.0	<8.0	NA	NA	NA	NA
SAR @ Prado Dam	5/14/2021	NA	NA	NA	<20.0	<8.0	<8.0	<8.0	NA	NA	NA	NA
	9/30/2021	NA	NA	NA	<20.0	<8.0	<8.0	<8.0	NA	NA	NA	NA
	6/24/2021	NA	NA	NA	<20.0	<8.0	<8.0					

Geotracker laboratory codes

CODE	DESCRIPTION
CI	See narrative
CJ	Analyte concentration is in excess of the instrument calibration
CL	Initial analysis within holding time but required dilution
DB	QA results outside of acceptance limits due to matrix effects
DF	Reporting limits elevated due to matrix interferences
DX	Value < lowest standard (MQL), but > than MDL
EU	LCS is outside of acceptance limits. MS/DMS are accept., no corr.
GR	Internal standard recovery is outside method recovery limit
IJ	Calibrtn. verif. recov. above method CL for this analyte
IL	RPD exceeds laboratory control limit
J	EPA Flag - Estimated value
LP	LCS rec.above meth. control limits. Analyte ND. Data not impacted
MB	Analyte present in the method blank
SN	See narrative and/or special notes.
TG	Ion Ratio outside of limits, value is estimated maximum possible concentration (EMPC).
U	EPA Flag - Compound was analyzed for, but was not detected
UN	Data Unavailable
VQI	Val. Qual.: QA/QC protocols not met for internal standard

Babcock laboratory codes

NISm	Due to matrix interference, the internal standard recovery for this sample did not meet laboratory acceptance criteria.
NCALhND	Calibration Verification recovery was above the method control limit for this analyte. Analyte not detected, therefore data not impacted.
NRPDc	The RPD value for the LCS/LCSD did not meet laboratory acceptance criteria.
N_qualND	Observed response did not meet qualitative criteria for confirmation
Nqual	The reported result is qualitative. Due to matrix interference, the sample cannot be accurately quantitated.
N_J	Result is estimated based on qualitative criteria
N_J+	Result is estimated and biased high based on qualitative criteria
N_J-	Result is estimated and biased low based on qualitative criteria

Eurofins laboratory codes

*+	LCS and/or LCSD is outside acceptance limits, high biased
I2	Value is EMPC (estimated maximum possible concentration)

Section 6: Discussion

Table 5 includes numerous footnotes referencing the "data qualifiers" reported by the laboratories. These exceptions document the difficulties encountered when attempting to identify and quantify organic chemicals at such extremely low concentrations in challenging wastewater matrices.

Such results could be caused by sample contamination, analytical interference or laboratory error. There is no way to know for certain based on the information available. Therefore, great care must be exercised when interpreting and reporting results based on such methods.

The EPA has not yet published recommended water quality criteria for any of the PFAS compounds evaluated as part of the 2021 PFAS Study.¹³ Nor has the SWRCB or the Santa Ana Regional Water Quality Control Board established water quality objectives for any of these compounds. However, EPA has published Drinking Water Advisories and/or California's Office of Environmental Health Hazard Assessment (OEHHA) has published [Public Health Goals](#) and [Notification Levels](#) for some of these chemicals.¹⁴ The SWRCB has also established initial advisory drinking water [Notification Levels](#) and Response Levels for PFAS, perfluorooctanoic acid (PFOA) and perfluorooctane sulfonic acid (PFOS), in 2018 and then updated them in 2019 (NLs) and 2020 (RLs).¹⁵ EPA's Advisories, OEHHA's Public Health Goals, and the SWRCBs Notification/Response Levels are all intended to apply to drinking water not treated municipal wastewater.

The SWRCB maintains an on-line database summarizing the relevant regulatory thresholds and other State and federal water quality for all regulated and some unregulated (e.g., ECs) compounds. To access this database, and obtain more detailed information on a wide range of specific chemical compounds, readers may click on the following link:

[SWRCB Water Quality Goal Search App](#)

¹³ EPA develops and recommends water quality criteria, for specific pollutants, pursuant to §304(a) of the Clean Water Act. States commonly rely on these recommended criteria to establish water quality standards (also called "water quality objectives" in California) to protect designated beneficial uses in lakes and streams.

¹⁴ For example, in November of 2016, EPA published a [Drinking Water Health Advisory](#) recommending that the combined concentration of 70 ng/L would provide a "margin of protection for all Americans throughout their life from the adverse health effects resulting from exposure to PFOA and PFOS in drinking water." (EPA-800-F-16-003)

¹⁵ For example, In February of 2020, the State Water Board lowered the [Response Level for PFOA to 10 ng/L and the Response Level for PFOS to 40 ng/L](#). Previously, the Response Level was 70 ng/L for the combined total concentration of PFOA and PFOS. [OEHHA is in the process of developing Public Health Goals for PFAS compounds.](#)

Please direct all comments and questions to:

Mr. Mark Norton, P.E.
Water Resources and Planning Manager

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Phone: (951) 354-4221
Email: mnorton@sawpa.org

Members of SAWPA's Emerging Constituents Task Force (2022)

Eastern Municipal Water District	City of Beaumont
Inland Empire Utilities Agency	City of Redlands
Orange County Water District	City of Corona
San Bernardino Valley Mun. Water Dist.	City of Rialto
Western Municipal Water District	City of Riverside
Irvine Ranch Water District	Yucaipa Valley Water District
Metropolitan Water District of So. Calif.	Temescal Valley Water District
San Geronio Pass Water Agency	Jurupa Community Services District
Elsinore Valley Municipal Water District	San Bernardino & Colton (RIX JPA)

Appendix A:

State Water Resources Control Board

**Water Code Sections 13267 AND 13383 Order for the
Determination of the Presence of Per and Polyfluoroalkyl
Substances at Publicly Owned Treatment Works**

Order WQ 2020-0015-D

State Water Resources Control Board

WATER CODE SECTIONS 13267 AND 13383 ORDER FOR THE DETERMINATION OF THE PRESENCE OF PER- AND POLYFLUOROALKYL SUBSTANCES AT PUBLICLY OWNED TREATMENT WORKS

ORDER WQ 2020-0015-DWQ

Pursuant to Water Code sections 13267 and 13383, the State Water Resources Control Board (State Water Board) requires you to submit information as described herein. Failure to comply with this Order may subject you to civil liability of up to \$10,000 per day for each day in which the violation occurs.

Publicly owned treatment works (POTWs) are potentially significant receivers of per- and polyfluoroalkyl substances (PFAS) and have the potential to discharge these wastes to the environment. Potential discharges include, but are not limited to, wastewater effluent to surface waters and/or percolation basins, biosolids, and reverse osmosis concentrate/retentate from some treatment facilities. **Attachment 1** presents a conceptual model of PFAS emissions from a POTW (Interstate Technical Regulatory Council (ITRC), Per-and Polyfluoroalkyl Substances, March 2020). Your agency has been identified as owning or operating one or more POTWs in California that have a design capacity at or exceeding one million gallons per day (mgd), which is the scope of this Order. Additional orders may be issued in the future for facilities with less than an average dry weather design flow of 1 mgd capacity. **Attachment 2** presents a list of agencies and facilities required to comply with under this Order.

This Order requires completion of the following tasks:

1. Conduct sampling and analysis for each POTW listed in **Attachment 2** and submit the results of the sampling according to the requirements found in **Attachment 3**, Technical Sampling and Reporting Requirements.
2. Complete the questionnaire in **Attachment 3 (Sections C.3 and D)** for each of the POTWs listed in **Attachment 2**. The information required by the questionnaire shall be submitted electronically.

I. FINDINGS

A. WHAT ARE PFAS?

PFAS are a family of more than 5,000 man-made and mostly unregulated chemicals that have been produced since the mid-1900s. They are mobile, persistent, and bioaccumulative. They are resistant to degradation in the environment and when degradation occurs, it often results in the formation of other PFAS compounds. The PFAS compounds have very different physical and chemical properties. Currently, the key classes of concern are perfluoroalkyl sulfonic acids such as the long-chain perfluorooctanesulfonate (PFOS) and perfluorooctanoic acid (PFOA).

PFAS are manufactured globally and have been used in the production of a wide range of industrial and household products. Discharges to sewer systems from these sources, including disposal of landfill leachate and firefighting foam, results in PFAS in the influent to POTWs. Typical POTW treatment systems are not designed to remove PFAS. Therefore, the discharge from POTWs, especially those with industrial inputs, are possible contributors of PFAS to the environment. The Water Boards issued investigative Orders to airports, landfills, and plating shops pursuant to Water Code section 13267 to determine the presence of PFAS in wells proximal to those facilities. Those facilities can be contributors of PFAS to a POTW. (ITRC, History and Use of Per- and Polyfluoroalkyl Substances (PFAS) Fact Sheet, November 2017).

PFAS are also found in many products such as dental floss, non-stick cookware, food packaging materials, non-stick products (e.g., Teflon™), waterproof and water repellent textiles, water repellent furniture, carpet, polishes, waxes, paints, cleaning products, medical garments, and fire-fighting foams (aqueous film-forming foams; AFFF). PFAS are used in the aerospace, automotive, chemical, electronics, metal coatings and plating, and textiles industries due to their friction-reducing characteristics. PFAS have the potential to enter the waste stream from many different sources. Potential firefighting sources of PFAS include airports and aviation facilities, military bases and training centers, petroleum refineries and terminals, and petrochemical production facilities. Non-industrial PFAS sources include waste disposal facilities, wastewater treatment plant operations, and biosolids application to land. More information on PFAS chemicals can be found at the [United States Environmental Protection Agency \(U.S. EPA\) website \(www.epa.gov/pfas\)](https://www.epa.gov/pfas). Additional information about PFAS can be found at the State Water Board's PFAS website at <https://www.waterboards.ca.gov/pfas/>.

PFAS are extremely persistent in the environment and highly mobile in water. People can be exposed to PFAS through food, food packaging, consumer products, house dust, and drinking water. Since these chemicals have been used in an array of consumer products, scientists have found PFOA and PFOS and other PFAS compounds in the blood of nearly all people tested. Exposure through drinking water

has become an increasing concern due to the tendency of PFAS to accumulate in groundwater.

Based on current available peer-reviewed studies on laboratory animals and epidemiological evidence in human populations, the U.S. EPA released the following statement:

“These studies indicate that exposure to PFOA and PFOS over certain levels may result in adverse health effects, including developmental effects to fetuses during pregnancy or to breastfed infants (e.g., low birth weight, accelerated puberty, skeletal variations), cancer (e.g., testicular, kidney), liver effects (e.g., tissue damage), immune effects (e.g., antibody production and immunity), thyroid effects and other effects (e.g., cholesterol changes).”

Please see [U.S. EPA Technical Note](http://www.epa.gov/sites/production/files/2017-12/documents/ffrrofactsheet_contaminants_pfos_pfoa_11-20-17_508_0.pdf) (www.epa.gov/sites/production/files/2017-12/documents/ffrrofactsheet_contaminants_pfos_pfoa_11-20-17_508_0.pdf) for more information.

B. WHICH PFAS MUST BE ANALYZED?

The Water Boards are concerned about all PFAS that exist in the environment. Due to analytical limitations, the focus of this Order is on 31 PFAS analytes listed in **Attachment 3**. The PFAS analyte list is not exhaustive but is intended to serve as a minimum requirement for sampling pursuant to this Order. Some laboratories may be capable of analyzing additional PFAS that are not included on the list.

C. WHY IS THE WATER BOARD REQUIRING THIS SAMPLING AND ANALYSIS?

The State Water Board and the Regional Water Boards are charged with the protection of the beneficial uses of water in California, including water used or that could potentially be used as drinking water. If PFAS-bearing wastes were discharged into the wastewater collection system, then it is likely that PFAS were discharged from the POTS in the effluent (including brine) and biosolids. The discharge of effluent may pose a threat to water quality if the effluent was discharged directly to surface waters or allowed to percolate to groundwater. PFAS in effluent discharges entering receiving waters also have the potential to bioaccumulate in aquatic food webs. Land application of biosolids may pose a threat to water quality by constituents percolating to groundwater or through water (such as irrigation water or storm water) carrying constituents to surface waters. The activities included in this Order are part of a statewide effort to 1) evaluate PFAS groundwater and surface water impacts and 2) conduct a preliminary investigation of the mass loading of PFAS into the POTW and then leaving the POTW in different media (treated wastewater, brine, biosolids). The State Water Board intends to direct other dischargers identified as potential PFAS sources in the state to perform PFAS testing. The State Water Board and the Regional Water Boards will evaluate the data collected to make informed decisions in implementing appropriate regulatory action.

D. WHAT LEVELS ARE A PUBLIC HEALTH CONCERN?

In May 2016, the U.S. EPA established drinking water Health Advisory Levels of 70 parts per trillion (ppt) (0.07 micrograms per liter (µg/L)) for PFOA and PFOS, individually or combined. These concentrations are now considered a preliminary remediation goal. The U.S. EPA *Draft Interim Recommendations to Address Groundwater Contaminated with Perfluorooctanoic Acid and Perfluorooctane Sulfonate* released in April 2019 suggested setting a remedial screening level at 40 ppt for PFOA and PFOS (individually). For more information on these advisories see the [U.S. EPA PFAS website](http://www.epa.gov/pfas) (www.epa.gov/pfas).

In August 2019, the State Water Board lowered the drinking water notification levels for PFOS and PFOA to 6.5 ppt and 5.1 ppt, respectively. In February 2020, the State Water Board lowered the response levels for PFOA and PFOS from 70 ppt combined to 10 ppt for PFOA and 40 ppt for PFOS based on a running four quarter average. More information on notification levels for PFAS compounds can be found on the State Water Board's Division of Drinking Water [PFOA and PFOS website](https://www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/PFOA_PFOS.html) (https://www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/PFOA_PFOS.html).

Water Code section 106.3 indicates it is the policy of the State of California that every human being has the right to safe, clean, affordable, and accessible water adequate for human consumption, cooking, and sanitary purposes. This Order promotes that policy by directing investigations to determine the presence of PFAS in and near waters that could be used for drinking water purposes.

II. WATER CODE SECTIONS 13267 AND 13383 ORDER FOR TECHNICAL OR MONITORING REPORTS

Water Code section 13267(b), authorizes the regional water boards to “require any person who has discharged, discharges, or is suspected of having discharged or discharging, or who proposes to discharge waste within its region... or is suspected of having discharged or discharging, or who proposes to discharge, waste outside of its region that could affect the quality of water within its region shall furnish, under penalty of perjury, technical or monitoring reports which the regional board requires... In requiring those reports, the regional board shall provide the person with a written explanation with regard to the need for the reports and shall identify the evidence that supports requiring that person to provide the reports.”

Water Code section 13267(f) authorizes the State Water Board to require this information if it consults with the Regional Water Boards and determines that it will not duplicate the efforts of the Regional Water Boards. The State Water Board has consulted with the Regional Water Boards and made this determination.

Water Code section 13383(a) authorizes the Water Boards to “establish monitoring, inspection, entry, reporting, and recordkeeping requirements... for any person who discharges, or proposes to discharge, to navigable waters, any person who introduces pollutants into a publicly owned treatment works, any person who owns or operates, or proposes to own or operate, a publicly owned treatment works or other treatment works treating domestic sewage, or any person who uses or disposes, or proposes to use or dispose, of sewage sludge.” Section 13383(b) continues, “the state board or the regional boards may require any person subject to this section to establish and maintain monitoring equipment or methods, including, where appropriate, biological monitoring methods, sample effluent as prescribed, and provide other information as may be reasonably required.”

The release of PFAS into the environment or the disposal of wastes containing PFAS constitutes a discharge of waste as defined in Water Code section 13050(d). The discharge of wastewater containing PFAS to a sanitary sewer system constitutes the introduction of pollutants into a POTW as described in Water Code sections 13383 and 13373, and Clean Water Act section 502.

Pursuant to Water Code sections 13267 and 13383, **you are hereby ordered to submit the reports identified in Attachment 3.**¹ Additional information regarding requirements for submitting reports under these sections of the Water Code is included as **Attachment 4**. Any requests for extensions must be submitted to the Regional Water Board identified in the cover letter of this Order for approval by the Executive Officer.

III. COST AND BENEFIT OF TECHNICAL OR MONITORING REPORTS

Water Code section 13267(b) specifies that the burden, including costs, of these reports must bear a reasonable relationship to the State Water Board’s need for the reports and the benefits to be obtained from the reports. The total cost of conducting the sampling and preparing the reports required by this Order is estimated to be in the range of \$5,000 to \$25,000 for sampling and reporting.

The cost of the reports bears a reasonable relationship to the benefit to be gained because, in terms of public health and environmental harm, contamination of groundwater and surface water must be identified before corrective action can be taken, if appropriate. As described further in this Order and in **Attachment 3**, the recipients of this Order are likely discharging PFAS, which EPA has determined may cause adverse health effects.

¹ Monitoring and reporting for groundwater and discharges to land are required pursuant to Water Code section 13267. Monitoring and reporting for discharges to surface water are required pursuant to Water Code section 13383.

IV. CALIFORNIA ENVIRONMENTAL QUALITY ACT

The issuance of this Order is an action to protect the environment and is categorically exempt from the provisions of the California Environmental Quality Act pursuant to sections 15304 and 15308, Chapter 3, Title 14 of the California Code of Regulations.

V. PENALTIES

Water Code section 13268 provides that failure to submit the required groundwater monitoring/reporting information by the specified compliance date, or falsifying any information provided therein, is a misdemeanor and may subject you to administrative civil liability of up to \$5,000 for each day of violation.

Water Code section 13385 provides that failure to comply with surface water monitoring/reporting information may result in administrative civil liability of up to \$10,000 for each day of violation. Please be advised that compliance with this Order is not a substitute for compliance with other applicable laws.

Therefore, pursuant to Water Code sections 13267 and 13383, you are hereby ordered to:

1. Complete the questionnaire in **Attachment 3 (Sections C.3 and D)** for each of the POTWs listed in **Attachment 2** for which your agency is identified as the responsible agency. The questionnaire shall be completed by the responsible agency and submitted **no later than the submittal of the second quarter analytical results from the treatment system sampling**. The information required by the questionnaire shall be submitted electronically using the form accessed through Geotracker and required supplemental information should be submitted electronically in a pdf format to the same website as the questionnaire.
2. Conduct sampling and analysis for each POTW listed in **Attachment 2** for which your agency is identified as the responsible agency and submit sampling results according to the requirements found in **Attachment 3**, as outlined below.
 - For POTWs with an existing groundwater monitoring and reporting program under an order issued by the State or Regional Board, submit **within 60-days prior to conducting the first groundwater monitoring event** the rationale and location of proposed groundwater monitoring wells for a one-time sampling event (refer to **Attachment 3, Section 3.b** for specific details).

- Analytical results from the treatment system and groundwater sampling events shall be uploaded into the Water Board's GeoTracker system **within 30 days of receiving the laboratory analytical report.**
- One monitoring report summarizing the treatment system and groundwater monitoring shall be uploaded into the Water Board's GeoTracker system **no later than 60 days following the receipt of the last analytical laboratory report.**

Perjury Statement

Pursuant to Water Code section 13267(b)(1), the State Water Board requires you to include the following perjury statement, signed by a duly authorized representative, in all reports submitted pursuant to this Order:

"I, Eileen Sobeck, certify under penalty of law that this document and all attachments were prepared by me, or under my direction or supervision, and the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant civil penalties for submitting false information."

July 9, 2020

Date



EILEEN SOBECK, Executive Director

ATTACHMENTS:

Attachment 1 – Conceptual Site Model for Per and Polyfluoroalkyl Substances at POTWs

Attachment 2 – List of Facilities

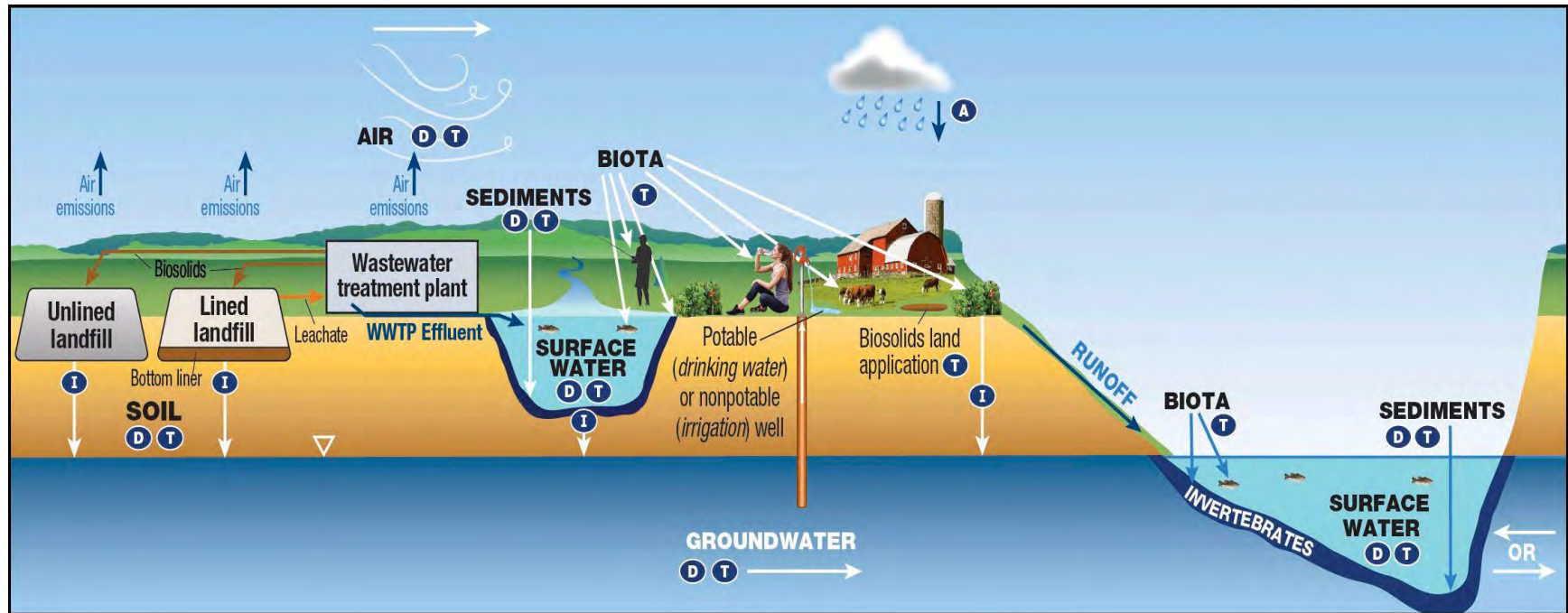
Attachment 3 - Technical Sampling and Reporting Requirements

Attachment 4 – Fact Sheet – Requirements for Submitting Reports under Section 13267 and 13383 of the Water Code

ATTACHMENT 1

Conceptual Site Model for Per and Polyfluorakyl Substances at POTWs

WATER CODE SECTION 13267/13383 ORDER FOR THE
DETERMINATION OF THE PRESENCE OF PER- AND POLYFLUOROALKYL SUBSTANCES



KEY A Atmospheric Deposition D Diffusion/Dispersion/Advection I Infiltration T Transformation of precursors (abiotic/biotic)

From Interstate Technical Regulatory Council, Per-and Polyfluoroalkyl Substances, March 2020

ATTACHMENT 2 - LIST OF FACILITIES
 WATER CODE SECTION 13267/13383 ORDER FOR THE
 DETERMINATION OF THE PRESENCE OF PER-AND POLYFLUOROALKYL SUBSTANCES AT PUBLICLY OWNED TREATMENT WORKS (POTWs)

Facility ID	Region #	Regional Board	Facility Name	Agency Name	Address	City	Zip	County	Reg Measure ID	WDID	GeoTracker Global ID	Design Flow MGD
255703	1	North Coast	Santa Rosa Laguna Subregional WRF	Santa Rosa City Dept of Public Works	4300 Llano Road	Santa Rosa	95407	Sonoma	378138	1B83099OSON	NPD100051903	21.34
229922	1	North Coast	Healdsburg City WWTP	Healdsburg City	340 Foreman Lane	Healdsburg	95448	Sonoma	399916	1B82046OSON	NPD100051474	1.4
240093	1	North Coast	McKinleyville WWTP	McKinleyville CSD	675 Hiller Road	McKinleyville	95521	Humboldt	402457	1B82084OHUM	NPD100051511	1.61
225055	1	North Coast	Fort Bragg City WWTP	Fort Bragg City	281 Jere Melo Street	Fort Bragg	95437	Mendocino	430202	1B84083OMEN	NPD100051533	1
268960	1	North Coast	Ukiah City WWTP	Ukiah City	300 Treatment Plant Road	Ukiah	95482	Mendocino	413425	1B84029OMEN	NPD100051538	3.01
272790	1	North Coast	Windsor Town WWTP	Windsor Water District	8400 Windsor Road	Windsor	95492	Sonoma	382410	1B82037OSON	NPD100051545	2.25
216106	1	North Coast	Crescent City WWTP	Crescent City	210 Battery Street	Crescent City	95531	Del Norte	404228	1A84006ODN	NPD100051548	1.86
206164	1	North Coast	Arcata City WWTF	Arcata City	600 South G Street	Arcata	95521	Humboldt	321411	1B82114OHUM	NPD100051550	2.3
272646	1	North Coast	Willits City WWTP	Willits City	300 North Lenore Street	Willits	95490	Mendocino	400116	1B80078OMEN	NPD100051569	1.3
214888	1	North Coast	Cloverdale City WWTP	Cloverdale City	700 Asti Road	Cloverdale	95425	Sonoma	425653	1B84032OSON	NPD100051574	1
225089	1	North Coast	Fortuna City WWTP	Fortuna City	180 Dinsmore	Fortuna	95540	Humboldt	401784	1B83135OHUM	WDR100028457	1.5
223010	1	North Coast	Eureka City Elk River WWTP	Eureka City	4301 Hilfiker Lane	Eureka	95501	Humboldt	405560	1B82151OHUM	WDR100028634	5.24
274538	1	North Coast	Yreka City WWTP	Yreka City	856 North Main Street	Yreka	96897	Siskiyou	132393	1A84073OSIS	WDR100036290	1.4
212858	3	Central Coast	Cambria Community Services District WWTP	Cambria Community Services District	1316 Tamsom Dr, Ste 201	Cambria	93428	San Luis Obispo	131132	3 400102001	WDR100029268	1.5
248519	3	Central Coast	Pismo Beach WWTP	Pismo Beach City	550 Frady Ln	Pismo Beach	93449	San Luis Obispo	403753	3 400106001	NPD100051481	1.9
213281	3	Central Coast	Carmel Area WWTP	Carmel Area Wastewater District	3945 Rio Road	Carmel	93922	Monterey	396646	3 270101001	NPD100051489	3
237315	3	Central Coast	Lompoc Regional WRP	Lompoc City	West 1801 Central Avenue	Lompoc	93436	Santa Barbara	383021	3 420105001	NPD100051494	5
241740	3	Central Coast	Monterey One Water Regional WWTP	Monterey One Water	14811 Del Monte Boulevard	Marina	93933	Monterey	429636	3 270118002	NPD100051504	29.6
257887	3	Central Coast	South San Luis Obispo SD WWTP	South San Luis Obispo CSD	1600 Aloha Place	Oceano	93445	San Luis Obispo	430003	3 400111001	NPD100051517	3.3
213332	3	Central Coast	Carpinteria SD WWTP	Carpinteria SD	5351 Sixth Street	Carpinteria	93013	Santa Barbara	418040	3 420101001	NPD100051525	2
241479	3	Central Coast	Morro Bay/Cayucos WWTP	Morro Bay SD	160 Atascadero Road	Morro Bay	93442	San Luis Obispo	418033	3 400103001	NPD100051541	2.36
256011	3	Central Coast	Scotts Valley WWTP	Scotts Valley City	700 Lundy Lane	Scotts Valley	95066	Santa Cruz	389665	3 440103001	NPD100051555	1.5
241288	3	Central Coast	Montecito SD WWTP	Montecito Sanitary District	1042 Monte Cristo Lane	Santa Barbara	93108	Santa Barbara	388741	3 420107001	NPD100051564	1.5

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Facility ID	Region #	Regional Board	Facility Name	Agency Name	Address	City	Zip	County	Reg Measure ID	WDID	GeoTracker Global ID	Design Flow MGD
247750	3	Central Coast	Paso Robles WWTP	City of El Paso de Robles	3400 Sulphur Springs Rd	Paso Robles	93446	San Luis Obispo	379360	3 400105001	NPD100051576	4.9
255380	3	Central Coast	San Luis Obispo WWTP	San Luis Obispo City	35 Prado Road	San Luis Obispo	93401	San Luis Obispo	399576	3 400107001	NPD100051582	5.1
227568	3	Central Coast	Goleta SD WWTP	Goleta SD	1 Moffett Place	Goleta	93117	Santa Barbara	418037	3 420102001	NPD100051597	7.64
271872	3	Central Coast	Watsonville WWTP	Watsonville City	401 Panabaker Lane	Watsonville	95077	Santa Cruz	396491	3 440104001	NPD100051609	12
222443	3	Central Coast	El Estero Water Resource Center NPDES	Santa Barbara City PWD	520 East Yanonali Street	Santa Barbara	93103	Santa Barbara	374330	3 420108001	NPD100051624	11
255632	3	Central Coast	Santa Cruz WWTP	Santa Cruz City	110 California Street	Santa Cruz	95060	Santa Cruz	418035	3 440102001	NPD100051630	17
206653	3	Central Coast	Atascadero WWTP	Atascadero City	8005 Gabarda	Atascadero	93422	San Luis Obispo	142083	3 400100001	WDR100026749	2.39
255678	3	Central Coast	City of Santa Maria WWTP	City of Santa Maria	601 Black Road	Santa Maria	93458	Santa Barbara	373327	3 420109001	WDR100029526	9.5
235021	3	Central Coast	King City Domestic WWTF	King City	212 South Vanderhurst Ave	Salinas	93930	Monterey	144671	3 270106001	WDR100030085	1.2
236124	3	Central Coast	Laguna County Sanitation District WWRF	Laguna Sanitation	620 West Foster Rd	Santa Maria	93455	Santa Barbara	383007	3 420104001	WDR100030531	3.7
227893	3	Central Coast	City of Greenfield WWTP	Greenfield City	599 El Camino Real	Greenfield	93960	Monterey	131446	3 270105001	WDR100031387	1
230555	3	Central Coast	Hollister Domestic WWTP	Hollister City	2690 San Juan Road	Hollister	95023	San Benito	359247	3 350100001	WDR100031912	4.5
227602	3	Central Coast	City of Gonzales WWTP	Gonzales City	P.O. Box 647, 147 Fourth Street	Gonzales	93926	Monterey	302168	3 270104001	WDR100032021	1.3
731257	3	Central Coast	Pajaro Valley WMA and City of Watsonville WRF	Pajaro Valley Water Management Agency	401 Panabaker Lane	Watsonville	95076	Santa Cruz	359226	3 441208240	WDR100032411	7.7
256483	3	Central Coast	Soledad Sewage Treatment Plant	Soledad City	34520 Morisoli Rd	Soledad	93960	Monterey	349587	3 270113001	WDR100034559	5.5
257687	3	Central Coast	Solvang WWTP	Solvang City	1644 Oak Street	Solvang	93463	Santa Barbara	336192	3 420110001	WDR100034624	1.5
256039	3	Central Coast	SCRWA WWTP	South County Regional WW Authority	900 Southside Dr	Gilroy	95020	Santa Clara	418038	3 430100001	WDR100034880	7.5
222442	3	Central Coast	El Estero Reclamation Facility	Santa Barbara City PWD	402 East Mason St	Santa Barbara	93101	Santa Barbara	147037	3 420108005	WDR100035708	1.6
822816	3	Central Coast	Los Osos Water Recycling Facility	San Luis Obispo CSA #9 Los Osos WTP	2300 Los Osos Valley Road	Los Osos	93402	San Luis Obispo	379559	3 400910371	WDR100039574	1.2
650554	4	Los Angeles	Santa Paula WRF	Santa Paula City	920 Corporation Street	Santa Paula	93060	Ventura	403136	4A560108002	WDR100000849	4.2
231693	4	Los Angeles	Hill Canyon WWTP	Thousand Oaks City	9600 Santa Rosa Road	Camarillo	93012	Ventura	395353	4A560112001	NPD100051993	14

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271054	4	Los Angeles	Ventura WRF	Ventura City	1400 Spinnaker Drive	Ventura	93002	Ventura	387812	4A560107001	WDR100000656	14
267130	4	Los Angeles	Terminal Island Water Reclamation Plant	Los Angeles City Bureau of Sanitation	445 Ferry Street	San Pedro	90731	Los Angeles	399400	4B190106005	NPD100051952	30
246616	4	Los Angeles	Ojai Valley WWTP	Ojai Valley Sanitary District	6363 North Ventura Avenue	Ventura	93001	Ventura	424638	4A560104001	NPD100051520	3
208276	4	Los Angeles	Avalon WWTF	Avalon City	123 Pebbly Beach Road	Avalon	90704	Los Angeles	424707	4B190100001	NPD100051640	1.2
234156	4	Los Angeles	Joint Water Pollution Control Plant	County Sanitation Districts of Los Angeles County	24501 South Figueroa Street	Carson	90745	Los Angeles	416544	4B190107013	NPD100051648	400
212135	4	Los Angeles	Burbank WRP	Burbank City DPW	740 North Lake Street	Burbank	91502	Los Angeles	403428	4B190101001	WDR100000132	12.5
216832	4	Los Angeles	Camrosa Water Reclamation Facility	Camrosa Water District	1900 South Lewis Road	Camarillo	93012	Ventura	400018	4A560106003	WDR100000191	1.5
246946	4	Los Angeles	Oxnard Wastewater Treatment Plant	Oxnard City Wastewater Division	6001 Perkins Rd	Oxnard	93033	Ventura	369637	4A560105001	WDR100000408	31.7
261253	4	Los Angeles	Simi Valley WQCP	Simi Valley City	600 West Los Angeles Avenue	Simi Valley	93065	Ventura	133824	4A560110001	WDR100000869	12.5
266940	4	Los Angeles	Tapia WRF	Las Virgenes MWD	731 Malibu Canyon Road	Calabasas	91302	Los Angeles	135049	4B190104001	WDR100001039	12
260156	4	Los Angeles	San Jose Creek Water Reclamation Plant	County Sanitation Districts of Los Angeles County	1965 South Workman Mill Road	Whittier	90601	Los Angeles	133828	4B190107020	WDR100001083	100
260494	4	Los Angeles	Saugus Water Reclamation Plant	Santa Clarita Valley SD of Los Angeles Cnty	26200 Springbrook Avenue	Santa Clarita	91350	Los Angeles	133827	4A190107021	WDR100001085	6.5
270849	4	Los Angeles	Valencia WRP	Santa Clarita Valley SD of Los Angeles Cnty	28185 The Old Road	Valencia	91355	Los Angeles	133826	4A190107023	WDR100001103	21.6
267571	4	Los Angeles	Donald C. Tillman WWRP	Los Angeles City Bureau of Sanitation	6100 Woodley Avenue	Van Nuys	91406	Los Angeles	323039, 412169	4B190106004	WDR100001153	80
232063	4	Los Angeles	Hyperion WWTP	Los Angeles City Bureau of Sanitation	12000 Vista del Mar Boulevard	Playa del Rey	90293	Los Angeles	384601	4B190106002	WDR100001158	450
235738	4	Los Angeles	Los Angeles - Glendale WWRP	Los Angeles City Bureau of Sanitation	4600 Colorado Boulevard	Los Angeles	90039	Los Angeles	323041	4B190106001	WDR100001164	20
243377	4	Los Angeles	Moorpark WWTP - WRR	Ventura County Special Districts	9550 Los Angeles Avenue	Moorpark	93021	Ventura	131554	4A560103003	WDR100001453	1.5
225881	4	Los Angeles	Fillmore WWTP and Wastewater Recycling Plant	Fillmore City	250 Central Avenue	Fillmore	93015	Ventura	417130	4A560101001	WDR100001584	1.33
235826	4	Los Angeles	Whittier Narrows Water Reclamation Plant	County Sanitation Districts of Los Angeles County	301 North Rosemead Boulevard	El Monte	91733	Los Angeles	408201	4B190107016	WDR100001741	15

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Facility ID	Region #	Regional Board	Facility Name	Agency Name	Address	City	Zip	County	Reg Measure ID	WDID	GeoTracker Global ID	Design Flow MGD
238562	4	Los Angeles	Long Beach WRP	County Sanitation Districts of Los Angeles County	7400 East Willow Street	Long Beach	90815	Los Angeles	133825	4B190107014	WDR100001744	25
238646	4	Los Angeles	Los Coyotes WRP	County Sanitation Districts of Los Angeles County	16515 Piuma Avenue	Cerritos	90703	Los Angeles	133829	4B190107015	WDR100001745	37.5
250700	4	Los Angeles	Pomona Water Reclamation Plant	County Sanitation Districts of Los Angeles County	295 Humane Way	Pomona	91766	Los Angeles	134831	4B190107019	WDR100001746	15
216719	4	Los Angeles	Camarillo WRP	Camarillo Sanitary District	150 East Howard Road	Camarillo	93012	Ventura	393691	4A560100001	WDR100014340	7.25
273142	5F	Central Valley (Fresno)	Kern Sanitation Authority WWTF	Kern Sanitation Authority	4101 Kimber Ave	Bakersfield	93307	Kern	144791	5D150105001	WDR100030946	7
273143	5F	Central Valley (Fresno)	North of River WWTF	North of River SD #1	28970 7th Standard Road	Shafter	93264	Kern	333653	5C15NC00090	WDR100032991	7.5
214899	5F	Central Valley (Fresno)	Clovis WWTF	Clovis City	9700 East Ashlan Avenue	Clovis	93619	Fresno	429278	5C10NP00012	NPD100051487	2.8
214652	5F	Central Valley (Fresno)	Merced WWTF	Merced City	10260 Gove Road	Merced	95340	Merced	397512	5C240108001	NPD100051529	12
222491	5F	Central Valley (Fresno)	El Portal WWTF	USDI National Park Service Yosemite National Park	5083 Foresta Road, #BLDG 750	El Portal	95318	Mariposa	434880	5C220701002	NPD100051602	1
273166	5F	Central Valley (Fresno)	Cutler-Orosi WWTF	Cutler-Orosi JT Powers WW Authority	40401 Road 120	Cutler	93615	Tulare	420796	5D540132001	NPD100051611	1.5
747519	5F	Central Valley (Fresno)	Atwater Regional WWTF	Atwater City	530 South Bert Crane Road	Atwater	95340	Merced	422026	5B24NP00017	WDR100026784	6
273104	5F	Central Valley (Fresno)	Arvin WWTF	Arvin City	2401 El Camino Real	Arvin	93203	Kern	147823	5D150107001	WDR100026819	1.45
273208	5F	Central Valley (Fresno)	Bakersfield WWTP #2	Bakersfield City	1700 E Planz Road	Bakersfield	93307	Kern	332777	5D150100001	WDR100027078	25
273209	5F	Central Valley (Fresno)	Bakersfield WWTP #3	Bakersfield City	6901 McCutchen Road	Bakersfield	93313	Kern	343591	5D150100002	WDR100027080	16
273160	5F	Central Valley (Fresno)	Avenal WWTF	Avenal City	1 Effluent Wy	Avenal	93204	Kings	142310	5D160101001	WDR100027879	1
273115	5F	Central Valley (Fresno)	Fresno Regional WWTF	Fresno City Department of Public Utilities	5607 W Jensen Ave	Fresno	93706	Fresno	427699	5D100105001	WDR100028344	88
273109	5F	Central Valley (Fresno)	Delano WWTF	Delano City	1107 Lytle Ave	Delano	93215	Kern	375255	5D150102001	WDR100028422	7.2
273112	5F	Central Valley (Fresno)	Exeter WWTF	Exeter City	1906 West Meyers	Exeter	93221	Tulare	131464	5D540103001	WDR100028696	1.07
273110	5F	Central Valley (Fresno)	Dinuba WWTF	Dinuba City	6675 Ave 412	Dinuba	93618	Tulare	145349	5D540101001	WDR100028781	3

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273113	5F	Central Valley (Fresno)	Farmersville WWTF	Farmersville City	909 W Visalia Rd	Farmersville	93223	Tulare	144651	5D540117001	WDR100029004	1.25
273106	5F	Central Valley (Fresno)	Chowchilla WWTF	Chowchilla City	130 S Second Street	Chowchilla	93610	Madera	144724	5C200100001	WDR100029289	2
273108	5F	Central Valley (Fresno)	Corcoran WWTF	Corcoran City	832 Whitley Avenue	Corcoran	93212	Kings	144786	5D160102001	WDR100029670	1.45
233460	5F	Central Valley (Fresno)	Jamestown Sanitary District WWTF	Jamestown SD	17600 Highway 108	Jamestown	95327	Tuolumne	142343	5C550101001	WDR100030064	1.01
273174	5F	Central Valley (Fresno)	Lamont WWTF	Lamont PUD	6525 East Bear Mountain Road	Lamont	93307	Kern	385516	5D150108001	WDR100030159	2
273123	5F	Central Valley (Fresno)	Madera WWTF	Madera City	13048 Rd 21 1/2	Madera	93637	Madera	145289	5C200101001	WDR100030305	7
201068	5F	Central Valley (Fresno)	Madera County #2 - Bass Lake WWTF	Madera County Public Works Department - Special Districts	40601 Rd 274	Bass Lake	93604	Madera	142311	5C200102001	WDR100030311	1
234841	5F	Central Valley (Fresno)	Kerman WWTF	Kerman City	15485 W. Church Ave	Kerman	93630	Fresno	331380	5D100108001	WDR100030774	1.2
273121	5F	Central Valley (Fresno)	Lindsay WWTF	Lindsay City	23611 Road 196	Lindsay	93247	Tulare	145554	5D540105001	WDR100030805	1.24
273122	5F	Central Valley (Fresno)	Los Banos WWTF	Los Banos City	411 Madison Ave	Los Banos	93635	Merced	145424	5C240107001	WDR100030875	4.9
220469	5F	Central Valley (Fresno)	Livingston Domestic WWTF	Livingston City	7160 North Gallo Road	Livingston	95334	Merced	331392	5C240106002	WDR100030927	1.18
273119	5F	Central Valley (Fresno)	Huron WWTF	Huron City	P.O. Box 339, 36311 S Lassen Ave	Huron	93234	Fresno	328068	5D100107001	WDR100031282	1
273116	5F	Central Valley (Fresno)	Gustine WWTF	Gustine City	26501 Carnation Road	Gustine	95322	Merced	145495	5C240103002	WDR100031700	1.4
273118	5F	Central Valley (Fresno)	Hanford WWTF	Hanford City	10555 Houston	Hanford	93230	Kings	148388	5D160103001	WDR100031904	8
273127	5F	Central Valley (Fresno)	Orange Cove WWTF	Orange Cove City	633 Sixth Street	Orange Cove	93646	Fresno	132495	5D100110001	WDR100032590	1
273128	5F	Central Valley (Fresno)	Parlier WWTF	Parlier City	1101 East Parlier Avenue	Parlier	93648	Fresno	145326	5D100118001	WDR100032734	2
273130	5F	Central Valley (Fresno)	Porterville WWTF	Porterville City	555 Prospect	Porterville	93257	Tulare	344805	5D540107001	WDR100032998	8
273125	5F	Central Valley (Fresno)	McFarland WWTF	McFarland City	401 W. Kern Ave	Mcfarland	93250	Kern	330608	5D150109001	WDR100033647	1.55
273126	5F	Central Valley (Fresno)	Mendota WWTF	Mendota City	643 Quince Street	Mendota	93640	Fresno	330730	5D100109001	WDR100033840	1.28
214665	5F	Central Valley (Fresno)	Taft WWTF	Taft City	1120 E Ash Street	Taft	93268	Kern	351981	5C15NC00095	WDR100034221	1.5

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817457	5F	Central Valley (Fresno)	Tesoro Viejo Wastewater Treatment Plant	Tesoro Viejo Master Mutual Water Company	2042 Second Street	Madera	93636	Madera	402537	5B20NC00105	WDR100034356	1
273133	5F	Central Valley (Fresno)	Sanger WWTF	Sanger City	1700 7th Street	Sanger	93657	Fresno	394866	5D100115001	WDR100035646	2.9
273187	5F	Central Valley (Fresno)	Selma-Kingsburg-Fowler CSD WWTF	Selma-Kings-Fowler CSD	11301 East Conejo Ave	Kingsburg	93631	Fresno	131438	5D100104001	WDR100035855	8
273131	5F	Central Valley (Fresno)	Reedley WWTF	Reedley City	1701 West Huntsman	Reedley	93654	Fresno	333271	5C10NC00167	WDR100036052	5
273140	5F	Central Valley (Fresno)	Woodlake WWTF	Woodlake City	811 South Valencia Boulevard	Woodlake	93286	Tulare	371066	5D540114001	WDR100036550	1.38
273196	5F	Central Valley (Fresno)	Wasco WWTF	Wasco City	746 8th Street	Wasco	93280	Kern	131603	5D150117001	WDR100036562	1.95
273138	5F	Central Valley (Fresno)	Visalia WWTF	Visalia City	7579 Ave 288	Visalia	93277	Tulare	409518	5D540113001	WDR100036941	18
273137	5F	Central Valley (Fresno)	Tulare WWTF	Tulare City	1875 South West Street	Tulare	93274	Tulare	367947	5D540110001	WDR100037264	16
257763	5F	Central Valley (Fresno)	Sonora Regional WWTF	Tuolumne Utilities District	1400 Southgate	Sonora	95370	Tuolumne	141783	5C550106004	WDR100037396	2.6
273180	5F	Central Valley (Fresno)	Malaga CWD WWTF	Malaga CWD	3601 S Maple Ave	Fresno	93725	Fresno	387532	5D100124001	WDR100047360	1.2
246203	5R	Central Valley (Redding)	Orland WWTP	Orland City	6917 Co Rd 200	Orland	95963	Glenn	350817	5A110100001	NPD100051994	2.1
214802	5R	Central Valley (Redding)	Clear Creek WWTP	Redding City	2220 Metz Road	Anderson	96007	Shasta	412195	5A450103001	NPD100051480	8.8
246251	5R	Central Valley (Redding)	Sewerage Commission Oroville Region WWTP	Sewerage Commission Oroville Region	2880 South 5th Avenue	Oroville	95965	Butte	397468	5A040106001	NPD100051498	6.5
215750	5R	Central Valley (Redding)	City of Corning WWTP	Corning City	25010 Gardiner Ferry Road	Corning	96021	Tehama	399898	5A520100001	NPD100051506	1.4
252119	5R	Central Valley (Redding)	Red Bluff WW Reclamation Plant	Red Bluff City	700 Messer Drive	Red Bluff	96080	Tehama	421692	5A520101001	NPD100051519	2.5
256627	5R	Central Valley (Redding)	Shasta Lake WWTF	Shasta Lake City	3700 Tibbits Road	Shasta Lake	96019	Shasta	395785	5A450105001	NPD100051534	1.3
271805	5R	Central Valley (Redding)	Chico Water Pollution Control Plant	Chico City	4827 Chico River Road	Chico	95927	Butte	397469	5A040102001	NPD100051547	12
258676	5R	Central Valley (Redding)	Stillwater WWTF	Redding City	6475 Airport Road	Anderson	96007	Shasta	422002	5A450103004	NPD100051563	3.4
205741	5R	Central Valley (Redding)	Anderson WPCP	Anderson City	3701 Rupert Road	Anderson	96007	Shasta	429568	5A450100001	NPD100051592	2
272704	5R	Central Valley (Redding)	Willows Wastewater Treatment Plant	Willows City	1600 South Tehama	Willows	95988	Glenn	410961	5A110101001	NPD100051605	1.2

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846487	5R	Central Valley (Redding)	American Valley WWTP	American Valley CSD	900 Spanish Creek Road	Quincy	95971	Plumas	407661	5A320103001	NPD100051644	1.6
254981	5S	Central Valley (Sacramento)	Sacramento Regional WWTP	Sacramento Regional CSD	8521 Laguna Station Road	Elk Grove	95758	Sacramento	405960	5A340108002	NPD100051477	181
215236	5S	Central Valley (Sacramento)	Sac City Combined WW Collection/TRT Sys	Sacramento City	1395 35th Avenue	Sacramento	95822	Sacramento	400866	5A340114001	NPD100051478	48.18
219223	5S	Central Valley (Sacramento)	City of Davis WWTP	Davis City	45400 County Road 28H	Davis	95776	Yolo	428211	5A570100001	NPD100051486	7.5
214647	5S	Central Valley (Sacramento)	Live Oak City WWTP	Live Oak City	3450 Treatment Road	Live Oak	95953	Sutter	407656	5A510100001	NPD100051495	1.4
220315	5S	Central Valley (Sacramento)	Discovery Bay WWTP	Town of Discovery Bay CSD	1800 Willow Lake Road	Discovery Bay	94514	Contra Costa	396976	5B070105003	NPD100051501	2.1
268926	5S	Central Valley (Sacramento)	UC Davis Main WWTP	UC Davis	1140 Old Davis Road	Davis	95620	Solano	399193	5A570800001	NPD100051502	3.6
241146	5S	Central Valley (Sacramento)	City of Modesto WQCF	Modesto City	1221 Sutter Avenue	Modesto	95351	Stanislaus	413899	5C500102001	NPD100051510	14.9
206733	5S	Central Valley (Sacramento)	Auburn WWTP	Auburn City	10441 Ophir Road	Auburn	95603	Placer	407662	5A31NP00042	NPD100051528	1.67
266439	5S	Central Valley (Sacramento)	Northwest WWTF	Rio Vista City	3000 Airport Road	Rio Vista	94571	Solano	404089	5A480108001	NPD100051536	1
229595	5S	Central Valley (Sacramento)	Hangtown Creek WRF	Placerville City	2300 Coolwater Creek Road	Placerville	95667	El Dorado	395004	5A090100001	NPD100051540	2.3
258739	5S	Central Valley (Sacramento)	Stockton Regional WW Control Facility	Stockton City	2500 Navy Drive	Stockton	95206	San Joaquin	396967	5B390107001	NPD100051560	55
227818	5S	Central Valley (Sacramento)	Grass Valley City WWTP	Grass Valley City	556 C Freeman Lane	Grass Valley	95949	Nevada	405024	5A290100001	NPD100051580	2.78
266737	5S	Central Valley (Sacramento)	Turlock Regional Water Quality Control Facility	Turlock City	901 South Walnut Road	Turlock	95380	Stanislaus	400734	5C500108001	NPD100051583	20
248706	5S	Central Valley (Sacramento)	Pleasant Grove WWTP	Roseville City	5051 Westpark Drive	Roseville	95747	Placer	432817	5A310106007	NPD100051587	12
245949	5S	Central Valley (Sacramento)	Olivehurst WWTP	Olivehurst PUD	3908 Mary Avenue	Olivehurst	95961	Yuba	405016	5A580102001	NPD100051589	3
210322	5S	Central Valley (Sacramento)	Brentwood WWTP	Brentwood City	2251 Elkins Way	Brentwood	94513	Contra Costa	430031	5B070101001	NPD100051591	5
274556	5S	Central Valley (Sacramento)	Yuba City WWTF	Yuba City	302 Burns Drive	Yuba City	95991	Sutter	428768	5A510101001	NPD100051606	10.5
222057	5S	Central Valley (Sacramento)	Easterly WWTP	Vacaville City DPW	6040 Vaca Station Road	Elmira	95687	Solano	433231	5A480105002	NPD100051608	15
219398	5S	Central Valley (Sacramento)	Deer Creek WWTP	El Dorado Irrigation District	1565 Deer Creek Road	Cameron Park	95682	El Dorado	433255	5B090102001	NPD100051610	3.6
237060	5S	Central Valley (Sacramento)	Linda County Water District WWTP	Linda Cnty Water District	909 Myrna Avenue	Marysville	95901	Yuba	415997	5A580100002	NPD100051617	5

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222434	5S	Central Valley (Sacramento)	El Dorado Hills WWTP	El Dorado Irrigation District	4625 Latrobe Road	El Dorado Hills	95762	El Dorado	425238	5B090102005	NPD100051618	4
255180	5S	Central Valley (Sacramento)	San Andreas SD WWTP	San Andreas SD	675 Gold Oak Road	San Andreas	95249	Calaveras	425799	5B050103001	NPD100051626	1.5
222916	5S	Central Valley (Sacramento)	Escalon Treatment Plant	Escalon City	25100 West River Road	Escalon	95320	San Joaquin	140412	5B390101001	WDR100028561	3.4
220396	5S	Central Valley (Sacramento)	Dixon WWTF	Dixon City PWD	6915 Pedrick Road	Dixon	95620	Solano	394601	5A480101001	WDR100028790	1.92
214812	5S	Central Valley (Sacramento)	Clearlake Oaks Co WTR Dis WWTP	Clearlake Oaks Cnty Water Dist	13705 Jensen Road	Clearlake Oaks	95423	Lake	147062	5A170100002	WDR100029656	2.1
213947	5S	Central Valley (Sacramento)	Ceres WWTP	Ceres City	4200 Morgan	Ceres	95307	Stanislaus	141185	5C500100001	WDR100029962	1.8
271781	5S	Central Valley (Sacramento)	City of Lathrop Consolidated Treatment Facility	Lathrop City	18800 Christopher Way	Lathrop	95330	San Joaquin	395597	5B391076001	WDR100030293	1.55
257927	5S	Central Valley (Sacramento)	Southeast Regional WW System	Lake Cnty	2485 Old Hwy 53	Clearlake	95422	Lake	146234	5A170102002	WDR100030715	6.1
238365	5S	Central Valley (Sacramento)	Lincoln City WWTF	Lincoln City	1245 Fiddymont Road	Lincoln	95648	Placer	428207	5A31NP00011	WDR100030795	8.4
272444	5S	Central Valley (Sacramento)	White Slough Water Pollution Control Facility	Lodi City	12751 North Thornton Road	Lodi	95242	San Joaquin	333528, 428201	5B390103002	WDR100030994	8.5
230812	5S	Central Valley (Sacramento)	Hughson WWTF	Hughson City	6700 Leedom Road	Hughson	95326	Stanislaus	383599	5C500101002	WDR100031107	1.8
226690	5S	Central Valley (Sacramento)	Galt WWTP & Reclamation Facility	Galt City	10059 Twin Cities Road	Galt	95632	Sacramento	404159	5B340101001	WDR100031184	3
232656	5S	Central Valley (Sacramento)	Ironhouse WWTF	Ironhouse Sanitary District	450 Walnut Meadows Drive	Oakley	94561	Contra Costa	428157	5B07NP00013	WDR100031539	4.3
245602	5S	Central Valley (Sacramento)	Oakdale WWTF	Oakdale City	9700 Liberini	Oakdale	95361	Stanislaus	385669	5C500104001	WDR100032130	2.45
247782	5S	Central Valley (Sacramento)	City of Patterson WQCF	Patterson City	14901 Poplar Avenue	Patterson	95363	Stanislaus	425768	5B50NC00002	WDR100032803	2.25
244250	5S	Central Valley (Sacramento)	City of Newman Wastewater Treatment Facility	Newman City	2600 Hill Ferry Road	Newman	95360	Stanislaus	420963	5C500103001	WDR100033379	1.69
239729	5S	Central Valley (Sacramento)	Marysville WWTP	Marysville City	526 C Street	Marysville	95901	Yuba	148426	5A580101001	WDR100033389	1.7
266223	5S	Central Valley (Sacramento)	Tracy WWTP	Tracy City	3900 Holly Drive	Tracy	95304	San Joaquin	416413	5B390108001	WDR100033942	10.8
252782	5S	Central Valley (Sacramento)	Ripon Industrial & Domestic TP	Ripon City	259 N. Wilma Ave	Ripon	95366	San Joaquin	140988	5B390105001	WDR100035427	2.34
255081	5S	Central Valley (Sacramento)	Salida WWTP	Salida Sanitary District	6200 Pirrone Road	Salida	95368	Stanislaus	142003	5C500107001	WDR100035503	2.29
252871	5S	Central Valley (Sacramento)	Riverbank WWTP	Riverbank City	23865 South Santa Fe Road	Riverbank	95367	San Joaquin	141726	5C500106002	WDR100035552	7.5

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220768	5S	Central Valley (Sacramento)	Dry Creek WWTP	Roseville City	1800 Booth Road	Roseville	95747	Placer	426201	5A310106001	WDR100035995	18
271836	5S	Central Valley (Sacramento)	Waterford WWTP	Waterford City	335 South Western Avenue	Waterford	95386	Stanislaus	140995	5C500113001	WDR100036083	1
272960	5S	Central Valley (Sacramento)	Woodland Water Pollution Control Facility	Woodland City	42929 County Road 24	Woodland	95776	Yolo	398643	5A570105001	WDR100039486	10.4
239343	5S	Central Valley (Sacramento)	City of Manteca WW Quality Control Facility	Manteca City	2450 West Yosemite Avenue	Manteca	95337	San Joaquin	400860, 432653	5B390104001	WDR100045342	9.87
241598	5S	Central Valley (Sacramento)	Mountain House WWTP	Mountain House CSD	17103 West Bethany Road	Mountain House	95391	San Joaquin	416414	5B391078003	WDR100046414	3
204475	6	Lahontan	Adelanto WWTP	Adelanto Public Utility Authority	19101 Jonathan Street P.O. Box 771	Adelanto	92301	San Bernardino	392758	6B369805001	WDR100026851	4
209662	6	Lahontan	Bishop Sewage Treatment Plant	Bishop City	377 W. Line Street	Bishop	93514	Inyo	148110	6B140101001	WDR100027094	1.6
259230	6	Lahontan	STPUD Wastewater Treatment Plant	South Tahoe PUD	1275 Meadow Crest Drive	South Lake Tahoe	96150	El Dorado	132539, 375578	6A021008003	WDR100034185	7.7
262840	6	Lahontan	Martis Valley Water Reclamation Plant	Tahoe-Truckee Sanitation Agency	13720 Butterfield Drive	Truckee	96161	Nevada	131270	6A290011000	WDR100034937	9.6
761913	6	Lahontan	VVWRA Sub-Regional Plant-Apple Valley	Victor Valley Wastewater Reclamation Authority	21012 Oteo Road	Apple Valley	92307	San Bernardino	377321	6B360907006	WDR100036875	1
761903	6	Lahontan	VVWRA- Sub-Regional Plant-Hesperia	Victor Valley Wastewater Reclamation Authority	14269 Mojave St	Hesperia	92345	San Bernardino	377320	6B360907005	WDR100036876	1
270419	6	Lahontan	Victor Valley Wastewater Reclamation Authority WTP	Victor Valley Wastewater Reclamation Authority	20111 Shay Road	Victorville	92394	San Bernardino	400390	6B360109001	WDR100036878	18
747480	6	Lahontan	SCLA Central WWTP-Victorville Water Dist	Victorville City	14343 Civic Center Drive	Victorville	92392	San Bernardino	394630	6B360911001	WDR100036880	2.5
236378	6	Lahontan	Lancaster Water Reclamation Plant	Los Angeles County Sanitation District 14	1865 West Avenue D	Lancaster	93534	Los Angeles	132044	6B190107017	WDR100030189	18
247448	6	Lahontan	Palmdale Water Reclamation Plant	Los Angeles County Sanitation District 20	39300 30th Street E and Avenue P	Palmdale	93550	Los Angeles	382094	6B190107069	WDR100030237	15
239283	6	Lahontan	Mammoth CWD STP	Mammoth Water District	1315 Meridian Blvd	Mammoth Lakes	93546	Mono	145892, 434236	6B260103001	WDR100033952	2.2
208769	6	Lahontan	Barstow WTF Mojave River Bed	Barstow City	2200 E Riverside Drive	Barstow	92311	San Bernardino	427492	6B360101001	WDR100027318	4.5
252695	6	Lahontan	Ridgecrest	Ridgecrest City	Pole Line Road and N. Knox Road	China Lake	93555	Kern	140415	6B150116001	WDR100035359	3.6

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Facility ID	Region #	Regional Board	Facility Name	Agency Name	Address	City	Zip	County	Reg Measure ID	WDID	GeoTracker Global ID	Design Flow MGD
236181	6	Lahontan	Lake Arrowhead CSD WTFS	Lake Arrowhead Community Services District	P.O. Box 700	Lake Arrowhead	92352	San Bernardino	367835	6B360107001	WDR100030590	4
253293	6	Lahontan	Rosamond WTF (Ponds)	Rosamond CSD	875 Patterson Road	Rosamond	93560	Kern	425543	6B150112001	WDR100035936	1.27
230011	6	Lahontan	Helendale Silverlakes STP	Helendale CSD	Wild Road and Helendale Road	Helendale	92342	San Bernardino	403017	6B361111001	WDR100031398	1.2
212648	6	Lahontan	California City WTF	City of California City	10835 Nelson Dr.	California City	93595	Kern	148046	6B150118001	WDR100029631	1.5
234123	6	Lahontan	June Lake PUD STP	June Lake PUD	45125 Highway 395	June Lake	93529	Mono	146152	6B260101002	WDR100030395	1
259689	6	Lahontan	Susanville CSD	Susanville Consol SD	476-200 Paul Bunyan Road	Susanville	96130	Lassen	350221	6A181554001	NPD100051561	2
214933	7	Colorado River	Coachella SD WWTP	Coachella SD	87075 Avenue 54	Coachella	92236	Riverside	400532	7A330104012	WDR100029782	2.4
232297	7	Colorado River	Imperial City WWTP	Imperial City	701 East 14th Street	Imperial	92251	Imperial	402991	7A130106011	NPD100051493	1.4
210272	7	Colorado River	Brawley City WWTP	Brawley City	5015 Best Road	Brawley	92227	Imperial	399799	7A130100011	NPD100051507	6
270096	7	Colorado River	Valley SD WWTP	Valley Sanitary District	45500 Van Buren Street	Indio	92201	Riverside	401332	7A330122021	NPD100051522	8.5
222407	7	Colorado River	El Centro City WWTP	El Centro City	2255 La Brucherie Road	El Centro	92243	Imperial	396224, 429474	7A130103011	NPD100051524	8
216446	7	Colorado River	Coachella Valley WD WWTP	Coachella Valley WD	63-002 Filmore Street	Thermal	92274	Riverside	413411	7A330105091	NPD100051575	7
212739	7	Colorado River	Calipatria City WWTP	Calipatria City	106 Lindsey Road	Calipatria	92233	Imperial	402048	7A130102041	NPD100051642	1.7
208668	7	Colorado River	City of Banning WWTP	Banning City	2242 East Charles Street	Banning	92220	Riverside	407229	7A330100015	WDR100027202	3.6
209847	7	Colorado River	Blythe Regional WW Reclamation Facilities	Blythe City	15901 South Broadway	Blythe	92225	Riverside	407226	7B330102012	WDR100027223	2.4
208930	7	Colorado River	BB Reg WWA-Lucerne Vly	Big Bear Area Regional WW Agency	122 Palomino Drive	Big Bear City	92314	San Bernardino	407233	7A360100011	WDR100027897	3.2
247435	7	Colorado River	Palm Springs WWTF	Palm Springs City	4375 Mesquite Avenue	Palm Springs	92264	Riverside	391803	7A330114012	WDR100032535	16.5
204870	7	Colorado River	Alan Horton WWTP	Mission Springs Water District	14601 Verbena	Desert Hot Springs	92240	Riverside	395089	7A330109012	WDR100033271	1
247419	7	Colorado River	Palm Desert WRP #10	Coachella Valley WD	43-000 Cook Street	Palm Springs	92211	Riverside	420073	7A330105012	WDR100029854	18
216445	7	Colorado River	CVWD Improv Dist #58	Coachella Valley WD	85-995 Avenue 52 P.O. Box 1058	Coachella	92236	Riverside	382776	7A330105071	WDR100029790	5
212589	7	Colorado River Basin	City of Calexico WWTP	Calexico City	298 East Road	Calexico	92231	Imperial	427929	7A130101011	NPD100051615	4.3

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Facility ID	Region #	Regional Board	Facility Name	Agency Name	Address	City	Zip	County	Reg Measure ID	WDID	GeoTracker Global ID	Design Flow MGD
244080	7	Colorado River Basin	Needles WWTP	Needles City	516 Broadway	Needles	92363	San Bernardino	400298	7B360110014	WDR100033504	1.2
259156	8	Santa Ana	Michelson WWRF	Irvine Ranch Water District	3512 Michelson Drive	Irvine	92612	Orange	402182	8 302006002	NPD100051948	33.5
259209	8	Santa Ana	Perris Valley RWRF	Eastern Municipal Water District	1301 Case Road	Perris	92570	Riverside	354386	8 332783001	WDR100028677	30
259193	8	Santa Ana	San Jacinto Valley RWRF	Eastern Municipal Water District	770 North Sanderson	San Jacinto	92582	Riverside	354386	8 332783001	WDR100028733	14.9
758392	8	Santa Ana	OCS D Plant 1	Orange CSD	10844 Ellis Ave	Fountain Valley	92708	Orange	386791	8 300110002	NPD100052063	332
259158	8	Santa Ana	OCS D Plant 2	Orange CSD	22212 Brookhurst St	Huntington Beach	92646	Orange	386791	8 300110002	NPD100051862	332
259150	8	Santa Ana	Riverside City WWRF	Riverside City	5950 Acorn Street	Riverside	92504	Riverside	376054	8 330117003	NPD100051476	46
259178	8	Santa Ana	Colton/San Bernardino STP, RIX	Colton/San Bernardino RTT&WRA	1990 Agua Mansa Road	Colton	92324	San Bernardino	392658	8 362375001	NPD100051496	40
259220	8	Santa Ana	Margaret H Chandler WWRF	San Bernardino City Municipal Water Dept	399 Chandler Place	San Bernardino	92408	San Bernardino	418662	8 360114003	NPD100051499	4.5
259171	8	Santa Ana	Corona WWRF #1	Corona City DWP	2205 Railroad Street	Corona	92880	Riverside	388613	8 330108001	NPD100051505	11.5
259205	8	Santa Ana	WRCRWA Regional WWRF	Western Riverside County Regional Wastewater Authority	14634 River Rd	Corona	92880	Riverside	396787	8 332353001	NPD100051521	14
259184	8	Santa Ana	IEUA Carbon Canyon WWRF	Inland Empire Utilities Agency	14950 Telephone Avenue	Chino	91708	San Bernardino	394393	8 362918001	NPD100051553	85
259161	8	Santa Ana	Henry N. Wochholz WWRF	Yucaipa Valley Water District	880 W County Line Ln	Calimesa	92320	San Bernardino	380760	8 362222001	NPD100051607	8
259214	8	Santa Ana	EVMWD Regional WWRF	Elsinore Valley Municipal Water Dist	14980 Strickland Road	Lake Elsinore	92531	Riverside	371955	8 330112001	NPD100051619	8
259216	8	Santa Ana	Temescal Valley WD WWRF	Temescal Valley Water District	22646 Temescal Canyon Road	Corona	92883	Riverside	388621	8 332253001	NPD100051628	1.58
259149	8	Santa Ana	Rialto WWRF	Rialto City	501 East Santa Ana Avenue	Bloomington	92316	San Bernardino	381374	8 360112001	NPD100051632	11.7
259170	8	Santa Ana	Beaumont WWTP No. 1	Beaumont City	715 West 4th Street	Beaumont	92301	Riverside	387658	8 330101001	NPD100051636	4
259181	8	Santa Ana	Big Bear WWRF	Big Bear Area Regional WW Agency	122 Palomino Drive	Big Bear	92314	San Bernardino	297017	8 360108001	WDR100027900	3.2
271777	8	Santa Ana	El Toro Water Dist WWRF	El Toro Water District	23542 Moulton Parkway	Laguna Hills	92653	Orange	402417	8 303652001	WDR100028257	6
259210	8	Santa Ana	EVMWD Railroad Canyon WWRF	Elsinore Valley Municipal Water Dist	29182 Railroad Canyon Road	Lake Elsinore	92532	Riverside	140802	8 332122003	WDR100028327	1.3

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Facility ID	Region #	Regional Board	Facility Name	Agency Name	Address	City	Zip	County	Reg Measure ID	WDID	GeoTracker Global ID	Design Flow MGD
259203	8	Santa Ana	Moreno Valley RWRP	Eastern Municipal Water District	17140 Kitching Street	Moreno Valley	92551	Riverside	354386	8 332783001	WDR100028673	20.8
259173	8	Santa Ana	Corona WWRF #2	Corona City DWP	650 Harrison Street	Corona	92879	Riverside	374041	8 332181001	WDR100029679	3
643085	8	Santa Ana	Lytle Creek North WWTP	San Bernardino Cnty Special Districts	18100 Institution Road	San Bernardino	92321	San Bernardino	334494	8 362899001	WDR100035823	1.75
259148	8	Santa Ana	Redlands WWRF	Redlands City	1950 Nevada Street	Redlands	92373	San Bernardino	144066	8 360111001	WDR100035978	12
259160	8	Santa Ana	Running Springs WWTP	Running Springs Water Dist	3400 Sewer Plant Road	Running Springs	92382	San Bernardino	138550	8 360113001	WDR100036054	1
259174	8	Santa Ana	Corona WWRF #3	Corona City DWP	3997 Temescal Canyon Road	Corona	92883	Riverside	395382	8 332476001	NPD100051484	1
259165	8	Santa Ana	IEUA Regional Plant No. 1	Inland Empire Utilities Agency	2450 Philadelphia Street	Ontario	91761	San Bernardino	394393	8 362918001	NPD100052088	44
742794	8	Santa Ana	IEUA Regional Plant No. 4	Inland Empire Utilities Agency	12811 Sixth Street	Rancho Cucamonga	91729	San Bernardino	394393	8 362918001	NPD100052335	14
259169	8	Santa Ana	IEUA Regional Plant No. 5	Inland Empire Utilities Agency	6068 Kimball Avenue	Chino	91710	San Bernardino	394393	8 362918001	NPD100052089	15
257520	9	San Diego	SMWD Oso Creek WRP	SOCWA-Recycled Water Use	27204 La Paz Rd	Mission Viejo	92692	Orange	142903	9 000000541	WDR100035188	6
262995	9	San Diego	TCWD Goren WTP	SOCWA-Recycled Water Use	Live Oak Canyon Road	Trabuco Canyon	92679	Orange	142903	9 000000541	NPD100051995	6
262996	9	San Diego	TCWD Robinson Ranch WRF	SOCWA-Recycled Water Use	21397 Heritage Rd	Trabuco Canyon	92679	Orange	142903	9 000000541	WDR100035245	6
229726	9	San Diego	HARRF DISCH to San Elijo Ocean Outfall	Escondido City	1521 Hale Avenue	Escondido	92029	San Diego	420777	9 000000031	WDR100028566	18
236019	9	San Diego	La Salina WWTP, Oceanside Ocean Outfall	Oceanside City	1330 South Tait Street	Oceanside	92054	San Diego	377272	9 000000146	NPD100052059	22.6
255392	9	San Diego	San Luis Rey Water Reclamation Facility	Oceanside City	3950 North River Road	Oceanside	92058	San Diego	377272	9 000000146	WDR100032206	22.6
237396	9	San Diego	IRWD Los Alisos WRP	SOCWA-Aliso Creek Ocean O/F	15600 Sand Canyon Avenue	Irvine	92618	Orange	384629	9 000000117	NPD100051948	34.37
241053	9	San Diego	SOCWA Regional TP	SOCWA-Aliso Creek Ocean O/F	29201 La Paz Rd	Laguna Niguel	92677	Orange	384629	9 000000117	WDR100035244	34.37
236649	9	San Diego	Latham WWP	SOCWA-San Juan Creek Ocean O/F	34152 Del Obispo	Dana Point	92629	Orange	384618	9 000000175	NPD100051861	38.78
257518	9	San Diego	SMWD-Chiquita WRP	SOCWA-San Juan Creek Ocean O/F	28793 Ortega Highway	San Juan Capistrano	92675	Orange	384618	9 000000175	WDR100035190	38.78
269989	9	San Diego	Vallecitos WD Meadowlark WRP	Encina Wastewater Authority	7941 Corintia Street	Carlsbad	92009	San Diego	425154	9 000000030	NPD100052061	48
263145	9	San Diego	Temecula Valley RWRP	Eastern Municipal Water District	42565 Avenida Alvarado	Temecula	92590	Riverside	354386	8 332783001	WDR100028741	22.4

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Facility ID	Region #	Regional Board	Facility Name	Agency Name	Address	City	Zip	County	Reg Measure ID	WDID	GeoTracker Global ID	Design Flow MGD
257821	9	San Diego	South Bay International WTP	IBWC-US & Mexico Section	2995 Clearwater Way	San Diego	92154	San Diego	397052	9 000000732	NPD100051492	25
248796	9	San Diego	Point Loma WWTP & Ocean Outfall	San Diego City Metropolitan Wastewater Dept (Public Utilities)	1902 Gatchell Road	San Diego	92106	San Diego	414988	9 000000275	NPD100051514	240
224137	9	San Diego	Fallbrook Water Reclamation Plant	Fallbrook Public Utility District	1425 South Alturas Street	Fallbrook	92028	San Diego	401760	9 000000115	WDR100028880	2.7
222758	9	San Diego	Encina WRCPF	Encina Wastewater Authority	6200 Avenida Encinas	Carlsbad	92009	San Diego	425154	9 000000030	NPD100052058	7
213270	9	San Diego	Carlsbad WRF	Carlsbad MWD	6200 Avenida Encinas	Carlsbad	92009	San Diego	408361, 425154	9 000000929	WDR100029522	48
202611	9	San Diego	4-S Ranch WRF	Olivenhain Municipal Water District	16595 Dove Canyon Road	San Diego	92127	San Diego	401754	9 000000371	WDR100032324	1.6
247351	9	San Diego	Ray Stoyer Water Recycling Facility	Padre Dam Municipal Water District	12001 North Fanita Parkway	Santee	92071	San Diego	142902	9 000000542	WDR100032406	2
251548	9	San Diego	Ralph W Chapman WRF	Otay MWD	11901 Singer Lane	Spring Valley	91978	San Diego	401763	9 000000217	WDR100032712	1.3
255265	9	San Diego	San Elijo Water Reclamation Facility	San Elijo Joint Powers	2695 Manchester Avenue	Encinitas	92007	San Diego	147513	9 000000125	WDR100035075	5.25
241054	9	San Diego	3A Treatment Plant	SOCWA-Recycled Water Use	26801 Camino Capistrano	Laguna Niguel	92677	Orange	142903	9 000000541	WDR100035186	6
257850	9	San Diego	SOCWA Coastal TP	SOCWA-Recycled Water Use	28303 Alicia Pkwy	Laguna Niguel	92677	Orange	402976	9 000000541	WDR100035192	6
255218	9	San Diego	City of San Clemente WRP	SOCWA-San Juan Creek Ocean O/F	380 Avenida Pico	San Clemente	92672	Orange	402929	9 000000175	WDR100035884	38.78
244506	9	San Diego	North City WRP	San Diego City Metropolitan Wastewater Dept (Public Utilities)	4949 Eastgate Mall	San Diego	92121	San Diego	402158	9 000000730	WDR100035946	60
257831	9	San Diego	South Bay WRP	San Diego City Metropolitan Wastewater Dept (Public Utilities)	2411 Dairy Mart Road	San Diego	92154	San Diego	148190	9 000000900	WDR100035948	15
255679	9	San Diego	Santa Maria WWTP	Ramona MWD	260 Sawday Street	Ramona	92065	San Diego	404699	9 000000077	WDR100037620	1.35

ATTACHMENT 3

TECHNICAL SAMPLING AND REPORTING REQUIREMENTS

WATER CODE SECTION 13267/13383 ORDER FOR THE DETERMINATION OF THE PRESENCE OF PER-AND POLYFLUOROALKYL SUBSTANCES AT PUBLICLY OWNED TREATMENT WORKS (POTWs)

Content:

- A. Justification*
- B. Sampling and Analysis Requirements*
- C. Reporting Requirements*

California Water Code Section 13267b (1) requires a written explanation of the need for reports and the evidence that supports requiring the reports. This justification is provided in Section A. The technical requirements for this Order include Sampling and Analysis (Section B) and Reporting (Section C). Section B describes the general sampling and analysis requirements with specifics about the types and frequency of sample collection for the POTW and groundwater monitoring wells. Groundwater monitoring well sampling is only required for those POTWs with an existing groundwater monitoring program approved by the Regional Board. Section C describes the reports required for the submittal of completed sampling and analysis conducted pursuant to Section B, below. Section D requires a questionnaire to be completed for each POTW by the responsible agency. The completed questionnaire provides various information about the processes of the POTW, including wastewater and biosolids – commonly associated with the presence of PFAS at POTWs, based on recent studies across the US and the world.

A. JUSTIFICATION

Studies being conducted across the nation are linking consumer and industrial use of PFAS-containing materials, including disposal of landfill leachate and firefighting foam, to PFAS results in the influent and effluent discharge at POTWs. Two examples are provided below based on a January 2020 POTW study in Vermont and a 2014 study performed in the San Francisco (SF) Bay Area in California.

The State of Vermont's recently published January 2020 results¹ indicate widespread presence of PFAS at their POTWs. Sampling and analysis were performed from 1) landfill leachate at four landfills and 2) POTW influent, effluent, and sludge, and septage at 30 POTWs. Some of the key take-aways from this report are:

¹ 2020. Poly- and Perfluoroalkyl Substances at Wastewater Treatment Facilities and Landfill Leachate – [2019 Summary Report](https://dec.vermont.gov/sites/dec/files/wmp/SolidWaste/Documents/02.03.20_PFAS%20in%20LF%20and%20WWTF%20Final%20Report.pdf). Weston & Sampson. January 30.
(https://dec.vermont.gov/sites/dec/files/wmp/SolidWaste/Documents/02.03.20_PFAS%20in%20LF%20and%20WWTF%20Final%20Report.pdf)

- PFAS are present in all landfill leachate (correlates to data being reported from statewide PFAS Orders sent to California landfills in March 2019)
- PFAS are also present in all POTW influent, effluent, and sludge tested.
- Reductions in PFAS concentrations between influent and effluent samples implies sorption to sludges may be occurring.
- Concentrations of PFAS “replacement” compounds exceed the concentrations of the original compounds of PFOA and PFOS.
- Correlations between leachate and sludges (includes biosolids) were challenged by analytical method limitations and collection of uniform percent solid samples.

In California, wastewater effluent samples were collected from eight POTWs in 2009 and 2014 that discharge into the SF Bay². All samples contained PFAS among the 20 compounds analyzed. The study summarized that PFAS concentrations were about the same in the effluent since the 2009 sampling efforts except for two POTWs where the effluent concentrations were significantly higher since 2009 suggesting recent contributions from PFAS in the POTW’s influent.

B. SAMPLING AND ANALYSIS REQUIREMENTS

1. General Sampling and Analysis Requirements

- a. Samples and measurements taken as required herein shall be representative of the volume and nature of the monitored discharge per their existing monitoring and reporting program. All samples shall be taken at the monitoring locations specified below and, unless otherwise specified, before the monitored flow joins or is diluted by any other waste stream, body of water, or substance.
- b. Samples of the influent and effluent from the treatment system shall be a 24-hour composite for each sample. When using a composite sampler, information on the type of tubing used must be provided. Fluoropolymer tubing, parts, valves, and other parts should be avoided. Preferable materials include high-density, polyethylene (HDPE), polypropylene, silicone, stainless steel, nylon, PVC, and acetate. Equipment that contains fluoropolymer parts can be used if those parts are internal to the equipment and does not contact the sample. If a composite sampler is used that has fluoropolymer parts, then an equipment blank sample must be collected for each composite sampler used and analyzed for PFAS to determine the potential contribution by the sampler of fluoropolymers in the sample.
- c. For POTWs that also sample effluent after advanced treatment to meet a Surface Water Source Augmentation Project (SWSAP) (California Code of Regulations Title 22 Sections 60320.300 through 60320.330), the sample location specified in

² 2016. Poly- and perfluoroalkyl substances in wastewater: Significance of unknown precursors, manufacturing shifts, and likely AFFF impacts. Erika F. Houtz, Rebecca Sutton, June-Soo Park, Margaret Sedlak. Water Research, Volume 95, 15 May 2016, Pages 142-149.

this Order can be the same location of the representative sample collected of the recycled municipal wastewater in the SWSAP.

- d. Influent samples shall be taken from locations prior to primary settling, which include but are not limited to the headworks of the inlet to the grit chamber or prior to any biological treatment. Samples shall be collected at such a point and in such a manner to ensure a representative sample of influent containing all wastes accepted by the facility prior to any treatment.
- e. Effluent samples shall be taken following completion of all treatment processes and prior to mixing with the receiving waters. (i.e., surface water, groundwater, or ocean). Samples shall be collected at such a point and in such a manner to ensure a representative sample of the discharge. For POTWs that also sample effluent per Title 22 requirements, the effluent sample mentioned in this Order may be taken at the same location.

If, following completion of treatment, the effluent is placed into storage pond(s) and not discharged into receiving waters, , then the effluent sample shall be collected from the treatment system discharge following completion of treatment and prior to the entering the effluent storage pond(s).

- f. Sample of the reverse osmosis concentrate/retentate shall be collected via grab sample method and must be representative of the volume and nature of the discharge.
- g. Appropriate flow measurement devices and methods consistent with accepted scientific practices shall be selected and used to ensure the accuracy and reliability of measurements of the volume of monitored discharges. All monitoring instruments and devices used by the responsible agency to fulfill the prescribed monitoring program shall be properly maintained and calibrated as necessary, at least yearly, to ensure their continued accuracy. All flow measurement devices shall be calibrated at least once per year to ensure continued accuracy of the devices.
- h. Sampling for biosolids after all treatment processes have been completed shall be made either prior to or post biosolids harvesting for dewatering and disposal/reuse. Samples may be collected from biosolids storage ponds, biosolids drying beds, post-processing storage piles or other similar points after processing and prior to disposal/reuse. When reporting the data, the concentrations of PFAS in the sample as provided to the laboratory and the percent moisture shall be reported. Also include the class of biosolids sampled in the report. A representative whole sample aliquot (both fractions) will be collected, analyzed by the laboratory, and reported in nanograms per kilogram.
- i. Sample results from liquid samples shall be reported in units of nanograms per liter (ng/L). Sample results for biosolids shall be reported in units of nanograms per kilogram (ng/kg).

- j. Monitoring results shall be reported at intervals and in a manner specified below in Section C.2 and C.3.
- k. A laboratory providing sample analyses must hold a valid certificate of accreditation from the State of California Environmental Laboratory Accreditation Program (ELAP) for the analytes selected in Table 1 in compliance with Department of Defense (DoD) Table B-15 of Quality Systems Manual (QSM), dated 2017, version 5.1 or later. The laboratory must be capable of achieving the quality control/quality assurance requirements specified in Table B-15 of the DoD QSM, version 5.1 or later. The DoD QSM can be found at: <https://denix.osd.mil/edqw/documents/> as well as on the State Water Board's PFAS informational website: <https://www.waterboards.ca.gov/pfas/background.html/>.

A list of laboratories that are accredited by ELAP can be found on the State Water Board's PFAS webpage: <https://www.waterboards.ca.gov/pfas/>.

Analytical reporting limits for sample matrices can be found on the Water Board's PFAS webpage: <https://www.waterboards.ca.gov/pfas/> (under non-drinking water tab, then Documents folder).

- l. PFAS sample collection protocol shall follow the guidance located at: https://www.waterboards.ca.gov/pfas/docs/march_pfas_sampling_guidelines.pdf.
- m. Collection of biosolid samples shall follow U.S. EPA's Sampling Procedures and Protocols for the National Sewage Sludge Survey located at: https://www.epa.gov/sites/production/files/2015-04/documents/nsss1988_sampling_procedures.pdf

2. Treatment System Sampling Locations and Frequencies

- a. For POTWs with average dry weather design flows of five mgd or greater:
 - i. Sampling shall commence with the Fourth Quarter 2020 sampling period (October-December 2020).
 - ii. Sampling and analysis for PFAS of the POTW influent, effluent, and reverse osmosis concentrate/retentate shall occur quarterly for a one-year period.
 - iii. Biosolids shall be sampled to determine its PFAS and moisture content quarterly for a one-year period.
- b. For POTWs with average dry weather design flows less than five mgd, but greater than or equal to one mgd:
 - i. Sampling shall commence with the Fourth Quarter 2020 sampling period (October-December 2020).

- ii. Sampling and analysis for PFAS of the POTW influent, effluent, and reverse osmosis concentrate/retentate shall occur quarterly for a one-year period.
- iii. Biosolids shall be sampled to determine its PFAS and moisture content once during the first year of this Order.

3. Groundwater Monitoring Well Sampling and Analysis

- a. One-time groundwater monitoring for PFAS is required for POTWs with existing groundwater monitoring and reporting programs under an order (e.g., monitoring and reporting program) issued by the State or Regional Board.
- b. Within **60-days prior to conducting the first groundwater monitoring event**, the responsible agency shall provide to the appropriate Regional Water Board the following information:
 - i. A figure of the groundwater monitoring well network, groundwater flow direction, and indicate of the monitoring wells proposed to be sampled.
 - ii. Rationale for the selection of the groundwater monitoring wells to be used for representative sampling for PFAS. A minimum of three wells in the upper water bearing zone shall be selected.
 - i. After the Regional Board approves the PFAS groundwater monitoring proposal, monitoring shall commence during the next groundwater monitoring period as specified in the POTWs existing groundwater monitoring and reporting program but **no sooner than the Fourth Quarter 2020 sampling period (October-December 2020)**.
 - ii. The PFAS analytes mentioned in Section B.1.j will be analyzed from the samples collected from selected groundwater monitoring wells once within the first year of implementation of this order.
- c. The collection of samples shall comply with the standard operating procedures for sample collection established for the existing groundwater monitoring program (including the field parameters and general chemistry parameters in Table 2 of this Attachment) and supplemented by the PFAS-specific adjustments required under Section B.1.i.

C. REPORTING REQUIREMENTS

1. General Reporting Requirements

- a. All documentation, including but not limited to, the groundwater monitoring proposal, reports (treatment sampling and analysis and/or groundwater analysis)

and analytical reports must be uploaded into GeoTracker via the Electronic Submittal of Information (ESI) Portal, as stipulated by California State law (California Code of Regulations Title 23, Division 3, Chapter 30). The groundwater monitoring proposal and final report must be submitted in a searchable portable document format (pdf) with transmittal letter, text, tables, figures, laboratory analytical data, and appendices (one PDF for the entire report) as well as analytical data in electronic data deliverable (EDD) format.

Instructions on how to log into GeoTracker and upload reports and documents into the ESI portal is available at:

https://www.waterboards.ca.gov/ust/electronic_submittal/index.html. Step by step instructions are provided in the ESI Guide for Responsible Parties under the "Getting Started" section of this webpage.

GeoTracker Help Desk assistance can be found on the ESI homepage (www.waterboards.ca.gov/water_issues/programs/ust/electronic_submittal).

Note: The EDD requirement includes all analytical data, sampling location information, monitoring well information (e.g. latitudes, longitudes, elevations, and depth to water, well construction information, site maps, and boring logs).

- b. The report must provide a description of the sampling activities, summary of the analytical results, copy of the chain of custody, and a copy of the laboratory analytical results.
- c. In the monitoring report, the responsible agency must certify that the sampling for PFAS was conducted according to the guidance documents in Section B.1.l and B.1.m. If deviations from the guidance occurred, details on those deviations need to be included in the report.
- d. The responsible agency must acknowledge compliance with the guidance documents listed in Section B.1.l and B.1.m, and if not, provide rationale for any variations in the report.

2. Monitoring Report for the Treatment System Sampling and Groundwater Sampling Analysis Results

- a. Analytical results from the treatment system sampling and groundwater sampling event will be uploaded within **30 days** of receiving laboratory analytical report into GeoTracker's ESI portal.
- b. One monitoring report for the treatment system and groundwater monitoring shall be submitted into GeoTracker's ESI portal no later than **60 days** following the receipt of the last analytical laboratory report.

- c. The monitoring report shall include text describing the sampling locations utilized and a figure of the facility with locations of the influent and effluent samples (include locations of representative sampling points (e.g. sampling points for more than one influent or effluent line)), groundwater monitoring wells, biosolids samples, brine line samples (if applicable), and flow measurement devices (mentioned in Section B.1.d).
- d. The report shall include all reported data (analytical results, flow measurements, groundwater monitoring well measurements (if applicable) in a tabular format.
- e. The report shall include all laboratory analysis sheets, including quality assurance/quality control information for which sample analyses were performed.
- f. The report shall include a description of any variations in sampling from what was provided to the Regional Water Board as part of Section C.3.b.

3. POTW Informational Questionnaire

- a. A link to an Adobe Acrobat-fillable questionnaire will be sent via email to the responsible agency when the Order is issued. The format of the questionnaire and instructions on how to complete the questionnaire is provided in **Section D**.
- b. The questionnaire shall be completed by the responsible agency and submitted **no later than the submittal of the second quarter analytical results** from the treatment system sampling.
- c. The responsible agency shall upload the completed questionnaire and attachments requested in the questionnaire as separate ESI files in GeoTracker using the responsible party's GeoTracker Global ID number (Attachment 2).
- d. Instructions on how to log into GeoTracker is available at: https://www.waterboards.ca.gov/ust/electronic_submittal/index.html. Step by step instructions are provided in the *ESI Guide for Responsible Parties* under the "Getting Started" section of this webpage.

GeoTracker Help Desk assistance can be found on the ESI homepage at: www.waterboards.ca.gov/water_issues/programs/ust/electronic_submittal.

- e. The minimum information identified below is included in the questionnaire. The questionnaire spreadsheet will be pre-populated with information since the responsible agency has already submitted the same information to the State Water Board (those items are shown in bracket [] form).
 - i. Waste Discharger Identification (WDID) Number [WDID].
 - ii. GeoTracker Global ID.

- iii. Name of Responsible Agency [AGENCY NAME].
- iv. Address of Responsible Agency.
- v. Name of POTW [FACILITY NAME].
- vi. Address of POTW [FACILITY ADDRESS/PLACE ADDRESS].
- vii. Mailing address of POTW.
- viii. Name and title of POTW Point of Contact.
- ix. POTW Point of Contact phone number.
- x. POTW Point of Contact email address.
- xi. Current average annual flow (mgd).
- xii. Average flow during June-Sept 2019 (mgd).
- xiii. Types of wastewaters (e.g. industrial, domestic) received and estimated percentages of total flow (mgd) based on calendar year 2019.
- xiv. If wastewaters are received from industrial sources, provide a list of industry types contributing flow to the POTW and estimated percentage of flow for each type for the calendar year of 2019. Provide for each industrial type if the flow is continuous, periodic, and/or non-routine.
- xv. Any storage basins (non-percolation) in use? If so, how many, any unlined, how many with leak detections systems, and their frequency of use.
- xvi. Plans to recycle water to Title 22 standards within the next 5 years.
- xvii. Amount of sewage sludge and biosolids (by class type) produced in the calendar year of 2019.
- xviii. Disposal options used for sewage sludge and biosolids and estimate volume percentage for the calendar year of 2019.
- xix. Landfill leachate accepted at the facility and if so, provide the name of landfill, years accepted, and estimated volumes for the past 5 years.
- xx. Reverse osmosis concentrate/retentate produced at the facility and if so, the volume produced in 2019 and annual average produced for the past 5 years.
- xxi. PFAS sampling prior to this Order, PFAS sampling been performed in compliance with an Order/Permit/Monitoring Reporting Program and submitted to a Regional Water Quality Control Board, and PFAS sampling been performed for internal/informal testing by others for research.

Section D. POTW Online Questionnaire and Instructions

1. This questionnaire will need to be filled out on **Adobe Acrobat** Software. This will ensure that your responses are correctly recorded. Please install this software prior to starting the questionnaire.

1. A free download of the Adobe Acrobat Reader software is available at the following link from Adobe's official website: <https://acrobat.adobe.com/us/en/acrobat/pdf-reader.html>. You can also fill this form out with Adobe Acrobat Pro DC software.
2. You will receive this questionnaire as an attachment in an email from PFAS@waterboards.ca.gov. Download and save the file locally to your computer and open with Adobe Acrobat software. The questionnaire will also be available in GeoTracker to your GeoTracker Account using your GeoTracker Global ID.
3. Fill out the questionnaire using Adobe Acrobat. Please type your answers into the fillable spaces as provided in the questionnaire and **save** it. You can print this file for your records.
4. **Upload the completed questionnaire and any associated attachments (if necessary) using the following instructions into GeoTracker.**
 1. Go to the GeoTracker ESI login page:
<https://geotracker.waterboards.ca.gov/esi/login.asp>
 - i. If you do not have an account, you can create one by clicking on the "Password Request" link.
 2. If you already have upload access to your facility record, please skip to step 7. If not, please continue to step 3.
 3. Once you are in your account, please go to the "Facility Management" section and click "Request Additional Facilities".



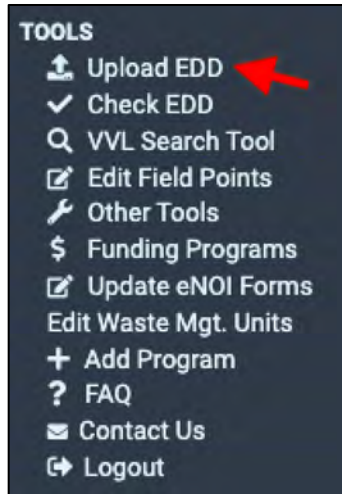
4. In the Global ID box, please type in the Global ID for the site and click the Search button. You can also search by facility name or address, but Global ID tends to be more reliable.

Global ID	Facility Name	Status	Street Name	City	County		
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="button" value="Search"/>	<input type="button" value="Reset"/>

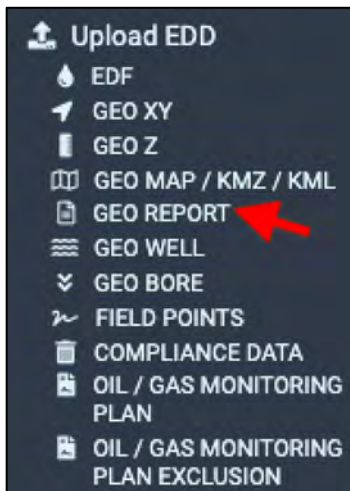
5. Select the box next to the Global ID for the site and click the "Request Checked Facilities" button.



6. Once your request has been approved, you should be able to upload the document.
7. Go to the "Tools" section and click on "Upload EDD".



8. Click on "GEO_REPORT".



9. Locate and click on the name of the facility listed in the middle of the page.

10. Fill out the electronic form and upload the file.

REPORT TITLE
<input type="text"/>
REPORT TYPE
<input type="text"/>
REPORT DATE - Enter the actual date (m/d/yyyy) of the written report being uploaded
<input type="text" value="6/30/2020"/>
FILE - PDFS ARE LIMITED TO 400MB
<input type="button" value="Choose File"/> No file chosen
Please link your report to a submitted EDF file below. If there is no EDF file associated with this report, please ignore this section.
NO EDFS HAVE BEEN UPLOADED TO THIS FACILITY
<input type="checkbox"/> IS YOUR FILE LESS THAN 400MB IN SIZE?
<input type="button" value="Upload File"/>

i. Note for "Report Title"

1. For the Questionnaire, title the file with the format "[*Name of POTW*]_Questionnaire".

For example, if the name of the facility is California Wastewater Treatment Plant, your file name should be "California Wastewater Treatment Plant_Questionnaire".

2. For the Questionnaire attachments, title the file with the format "[*Name of POTW*]_QuestionnaireAttachment_[*Question #*]

For example, if the name of the facility is California Wastewater Treatment Plant and the attachment is associated with Question #8, your file name should be "California Wastewater Treatment Plant_QuestionnaireAttachment_Question 8".

ii. Note for "Report Type"

1. For uploading the completed Questionnaire, select "POTW Questionnaire", which is located under the "Other" section.
2. For the Attachments to the Questionnaire, select "POTW Questionnaire Attachment" which is located under the "Other" section.

5. If you have any further questions or need assistance, please email PFAS@waterboards.ca.gov.

PER- AND POLY-FLUOROALKYL SUBSTANCES (PFAS) – GENERAL INFORMATION	
POTW-specific State Water Board ID #s	
Waste Discharger Identification (WDID) Number:	
GeoTracker Global ID:	
Responsible Agency Information	
Name of Responsible Agency:	
Address of Responsible Agency:	
City:	
County:	
State:	
Zip:	
POTW Information	
Name of POTW:	
Address of POTW:	
City:	
County:	
State:	
Zip:	
POTW Mailing Address:	
POTW Point of Contact Name:	
POTW POC Title:	
POTW POC Phone Number:	
POTW POC Email Address:	
Annual Average Flow (365-day calendar year)	
1(a). What is the current's average annual flow at the facility? _____ MGD	
1(b). What was the average flow during June-September 2019 at the facility? _____ MGD	

If you need more space, please provide by attachment and upload to GeoTracker. Please refer to instructions at the end of this document for instructions on how to upload this attachment.

2(c). Wastewater Inflow and Volume Percentages Comments

Treated Wastewater Storage Basins

3(a). Does your facility utilize storage basins (non-percolation) for treated wastewater? If yes, how many?

- YES How many? _____
- NO

3(b). If yes to 3(a), how many basins are unlined?

How many? _____

Are there leak detections systems installed?

- YES How many basins? _____
- NO How many basins? _____

3(c). If yes to 3(a), what is the frequency of use?

- Continuous How many basins? _____
- Periodically How many basins? _____
- Non-routine How many basins? _____

3(d). Treated Wastewater Storage Basins Comments

Recycled/Reclaimed Wastewater

4. Are you planning to recycle water to Title 22 standards within the next 5 years?

- Yes
- No
- Other (Please Specify) _____

Sewage Sludge and Biosolids

5(a). What is the amount of sewage sludge and biosolids (by class type) produced in the calendar year of 2019?

Type	Amount Produced in Calendar Year 2019
Sewage Sludge – Any solid, semi-solid, or liquid residue generated during the treatment of domestic sewage in a municipal wastewater treatment facility. It includes solids removed or used during primary, secondary, or advanced wastewater treatment processes. It does not include grit or screening material generated during preliminary treatment of domestic sewage at a municipal wastewater treatment facility. Sewage sludge does not include biosolids that meet the criteria in Table 1 of 40 Code of Federal Regulations section 503.13.	_____ dry metric tons
Class A – Biosolids meeting the vector attraction, and meeting pollution concentration limits specified in 40 CFR Part 503 and pathogen reduction standards specified in 40 CFR Part 503.32(a).	_____ dry metric tons
Class A EQ (Exceptional Quality) – Biosolids which meet metals standards, Class A pathogen reduction standards, and vector attraction reduction standards contained in 40 CFR Part 503.13(3), 40 CFR Part 503.32(a), and 40 CFR Part 503.33(b)(1-8), respectively.	_____ dry metric tons
Class B – Biosolids which meet the vector attraction and meeting pollution concentration limits specified in 40 CFR Part 503 and pathogen reduction standards specified in 40 CFR Part 503.32(b).	_____ dry metric tons

- **Vector attraction reduction requirement for Class A, Class A EQ, and Class B:** One of the vector attraction reduction requirements in CFR Part 503.33 (b)(1) through (b)(10) shall be met.

- **Pollution concentration for Class A and Class B:** Biosolids that do not meet pollutant concentration limits in 40 CFR Part 503.13 (Table 3), but meet the ceiling limits in 40 CFR Part 503.13 (Table 1), can only be applied until the amount of metals on the site have accumulated up to the cumulative limits in 40 CFR Part 503.13 (Table 2).

5(b). What are the disposal options for sewage sludge and biosolids that were used at your facility and estimate volume percentage for the calendar year of 2019?

Note: The POTW may not know the final disposition of biosolids if sent to a composting facility for further treatment. It is not necessary to determine the final disposition after it leaves the POTW to complete the table below.

Disposal Options	Sewage Sludge - Estimated Volume Percentage for 2019	Biosolids – Estimated Volume Percentage for 2019
Agricultural land application		
Composting Facilities		
Forest lands		
Incineration		
Landfill Alternative Daily or Final Cover		
Landfill Disposal		
Mine reclamation sites		
Public distribution		
Use on Public lands		
Onsite dedicated land disposal		
Onsite long term storage		
Sent for further treatment (end use not for compost)		
Other (please fill in):		

5(c). Sewage Sludge and Biosolids Comments

Landfill Leachate		
6(a). Has your facility accepted landfill leachate? <input type="checkbox"/> YES <input type="checkbox"/> NO		
6(b). If yes to 6(a)., please use the table below to provide the name of landfill, years accepted, and estimated volumes for the past 5 years.		
Landfill Name	Years Accepted	Estimated Volumes per year (gallons per 365-day period)
1.	_____ to _____	_____ gallons/year
2.	_____ to _____	_____ gallons/year
3.	_____ to _____	_____ gallons/year
4.	_____ to _____	_____ gallons/year
5.	_____ to _____	_____ gallons/year
<i>If you need more space, please provide by attachment and upload to GeoTracker. Please refer to instructions at the end of this document for instructions on how to upload this attachment.</i>		
6(c). Landfill Leachate Comments 		
Reverse Osmosis Concentrate/Retentate		
7(a). Does your facility produce reverse osmosis concentrate/retentate? <input type="checkbox"/> YES <input type="checkbox"/> NO		

7(b). If yes to 7(a), what is the volume of reverse osmosis concentrate/retentate produced in 2019 and annual average produced for the past 5 years?

_____ gallons in 2019

_____ gallons/year for the past 5 years

Note: Report volumes that are received directly at the coastal outfalls (not into the headworks) should be excluded.

PFAS Sampling

8(a). Has your facility performed PFAS sampling of influent, effluent, reverse osmosis concentrate/retentate, or biosolids prior to receiving this Order?

- YES
- NO

8(b). If yes to 8(a)., was this sampling performed in compliance with an Order/Permit/Monitoring Reporting Program and submitted to a Regional Water Quality Board?

- YES
- NO

8(c). Has PFAS sampling been performed at your facility by others for research?

- YES
- NO

If yes, please provide by attachment and upload to GeoTracker. Please refer to instructions at the end of this document for instructions on how to upload this attachment.

8(d). Has your facility performed PFAS sampling for internal/informal testing?

- YES
- NO

If yes, please provide by attachment and upload to GeoTracker. Please refer to instructions at the end of this document for instructions on how to upload this attachment.

8(e). Has your facility been supplied with data or information that you possess concerning PFAS sampling conducted of samples collected for your facility's influent or effluent flow standards?

- YES
- NO

If yes, please provide by attachment and upload to GeoTracker. Please refer to instructions at the end of this document for instructions on how to upload this attachment.

CERTIFICATION

I, _____, certify under penalty of law that this document and all attachments were prepared by me, or under my direction or supervision, and the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant civil penalties for submitting false information.

Contact Person: _____ Title: _____

Email Address: _____ Phone Number: _____

Chief Operator: _____ Title: _____

Email Address: _____ Phone Number: _____

Date: _____

Use this space to provide any further explanations for your questionnaire, if needed:

**TABLE 1
PFAS ANALYTES SUBJECT TO ANALYSIS
AND THEIR RESPECTIVE REPORTING LIMITS**

Chemical Name/ Abbreviation	GeoTracker PARLABEL	Fluorinated Alkane Carbon Chain Length*	Chemical Abstracts Service (CAS) No.	Required Reporting Limit for Liquids: Groundwater and Effluent (ng/L)	Required Reporting Limit for Solid: Soil/ Biosolids (µg/kg)
Perfluoroalkylcarboxylic acids (PFCAs)					
Perfluorobutanoic acid (PFBA)	PFBTA	C4	375-22-4	8.0	2.0
Perfluoropentanoic acid (PFPeA)	PFPA	C5	2706-90-3	5.0	1.0
Perfluorohexanoic acid (PFHxA)	PFHA	C6	307-24-4	5.0	1.0
Perfluoroheptanoic acid (PFHpA)	PFHPA	C7	375-85-9	5.0	1.0
Perfluorooctanoic acid (PFOA)	PFOA	C8	335-67-1	5.0	1.0
Perfluorononanoic acid (PFNA)	PFNA	C9	375-95-1	5.0	1.0
Perfluorodecanoic acid (PFDA)	PFNDCA	C10	335-76-2	5.0	1.0
Perfluoroundecanoic acid (PFUnDA)	PFUNDCA	C11	2058-94-8	5.0	1.0
Perfluorododecanoic acid (PFDoDA)	PFDOA	C12	307-55-1	5.0	1.0
Perfluorotridecanoic acid (PFTrDA)	PFTRIDA	C13	72629-94-8	5.0	1.0
Perfluorotetradecanoic acid (PFTeDA)	PFTEDA	C14	376-06-7	8.0	2.0
Perfluorohexadecanoic acid (PFHxDA)	PFHxDA	C16	67905-19-5	8.0	2.0
Perfluorooctadecanoic acid (PFODA)	PFODA	C18	16517-11-6	8.0	2.0
Perfluorinated sulfonic acids (PFSA)					
Perfluorobutane sulfonic acid (PFBS)	PFBSA	C4	375-73-5	5.0	1.0
Perfluoropentane sulfonic acid (PFPeS)	PFPeS	C5	2706-91-4	5.0	2.0
Perfluorohexane sulfonic acid (PFHxS)	PFHXSA	C6	355-46-4	5.0	1.0
Perfluoroheptane sulfonic acid (PFHpS)	PFHPSA	C7	375-92-8	5.0	1.0
Perfluorooctane sulfonic acid (PFOS)	PFOS	C8	1763-23-1	5.0	1.0
Perfluorononane sulfonic acid (PFNS)	PFNS	C9	474511-07-4	8.0	5.0

Chemical Name/ Abbreviation	GeoTracker PARLABEL	Fluorinated Alkane Carbon Chain Length*	Chemical Abstracts Service (CAS) No.	Required Reporting Limit for Liquids: Groundwater and Effluent (ng/L)	Required Reporting Limit for Solid: Soil/ Biosolids (µg/kg)
Perfluorodecane sulfonic acid (PFDS)	PFDSA	C10	335-77-3	5.0	1.0
Perfluorooctane Sulfonamide and Derivatives (PFOSA, FOSEs, FOSAs, and FOSAAs)					
Perfluorooctanesulfonamide (PFOSA)	PFOSA	C8	754-91-6	8.0	1.0
N-Ethyl perfluorooctane sulfonamide ethanol (EtFOSE)	ETFOSE	C8 Precursor	1691-99-2	8.0	2.0
N-Methyl perfluorooctane sulfonamide ethanol (MeFOSE)	MEFOSE	C8 Precursor	24448-09-7	8.0	2.0
N-Ethyl perfluorooctane sulfonamide (EtFOSA)	ETFOSA	C8 Precursor	4151-50-2	8.0	2.0
N-Methyl perfluorooctane sulfonamide (MeFOSA)	MEFOSA	C8 Precursor	31506-32-8	8.0	2.0
N-Methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	NMEFOSAA	C8 Precursor	2355-31-9	20.0	2.0
N-Ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	NETFOSAA	C8 Precursor	2991-50-6	20.0	2.0
Fluorotelomer sulfonates (FTS)					
4:2 Fluorotelomer sulfonic acid (4:2 FTS)	4:2FTS	C4* Precursor	757124-72-4	20.0	2.0
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	6:2FTS	C6* Precursor	27619-97-2	20.0	2.0
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	8:2FTS	C8* Precursor	39108-34-4	20.0	2.0
10:2 Fluorotelomer sulfonic acid (10:2 FTS)	10:2FTS	C10* Precursor	120226-60-0	8.0	2.0
Fluorotelomer carboxylic acids (FTCA)					
2H,2H,3H,3H-Perfluorohexanoic acid (3:3 FTCA)	3:3 FTCA	C4* Precursor	356-02-5	8.0	5.0
2H,2H,3H,3H-Perfluorooctanoic acid (5:3 FTCA)	5:3 FTCA	C6* Precursor	914637-49-3	8.0	5.0
2H,2H,3H,3H-Perfluorodecanoic acid (7:3 FTCA)	7:3 FTCA	C8* Precursor	812-70-4	8.0	5.0

Chemical Name/ Abbreviation	GeoTracker PARLABEL	Fluorinated Alkane Carbon Chain Length*	Chemical Abstracts Service (CAS) No.	Required Reporting Limit for Liquids: Groundwater and Effluent (ng/L)	Required Reporting Limit for Solid: Soil/ Biosolids (µg/kg)
Perfluoroalkyl ether carboxylic acids (PFECA)					
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	HFPO-DA	--	13252-13-6	20.0	5.0
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ADONA	--	919005-14-4	8.0	5.0
Chlorinated Polyfluoroalkyl Ether Sulfonic Acids (CI-PFESAs)					
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-CI-PF3ONS)	9-CI-PF3ONS	--	756426-58-1	8.0	5.0
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-CI-PF3OUdS)	11-CI-PF3OUdS	--	763051-92-9	8.0	5.0
Other					
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	NFDHA	C5	151772-58-6	8.0	5.0
Perfluoro(2-ethoxyethane) sulfonic acid (PFEESA)	PFEESA	--	113507-82-7	8.0	5.0
Perfluoro-3-methoxypropanoic acid (PFMPA)	PFMPA	C4	377-73-1	8.0	5.0
Perfluoro-4-methoxybutanoic acid (PFMBA)	PFMBA	C5	863090-89-5	8.0	5.0

Optional analytes are shaded gray.

ng/L = nanograms per liter

µg/kg = micrograms per kilogram

* = and shorter carbon chain length terminal degradation products

-- = carbon chain length shorthand naming conventions not currently defined for PFECAs and PFESAs

TABLE 2

Field Parameters and General Chemistry for Groundwater

Parameter	Units
Field Parameters	
Depth to Groundwater	Feet, bgs
Temperature	Degrees C
Electrical Conductivity	µmhos/cm
pH	pH units
Turbidity	NTU
General Chemistry	
Total Dissolved Solids	mg/L

Notes:

bgs – below ground surface

C – Celsius

µmhos/cm – micromhos per centimeter

NTU – nephelometric turbidity units

mg/L – milligrams per Liter

State Water Resources Control Board

ATTACHMENT 4

Fact Sheet – Requirements for Submitting Reports Under Section 13267 and 13383 of the Water Code

What does it mean when the Regional Water Board or the State Water Board (jointly referred to as the Water Boards) require a technical report?

Section 13267ⁱ of the Water Code provides that “...the regional board may require that any person who has discharged, discharges, or who is suspected of having discharged or discharging, or who proposes to discharge waste...that could affect the quality of waters...shall furnish, under penalty of perjury, technical or monitoring program reports which the regional board requires.” Additionally, the state water board may carry out the authority granted to a regional board pursuant to Section 13267 if, after consulting with the regional board, the state board determines that it will not duplicate the efforts of the regional board.

Water Code section 13383 provides that the state board or a regional board may establish monitoring and reporting requirements for any person who discharges, or proposes to discharge, to navigable waters, any person who introduces pollutants into a publicly owned treatment works, any person who owns or operates, or proposes to own or operate, a publicly owned treatment works or other treatment works treating domestic sewage, or any person who uses or disposes, or proposes to use or dispose, of sewage sludge.

This requirement for a technical report seems to mean that I am guilty of something, or at least responsible for cleaning something up. What if that is not so?

The requirement for a technical report is a tool the Water Boards use to investigate water quality issues or problems. The information provided can be used by the Regional Water Board to clarify whether a given party has responsibility.

Are there limits to what the Water Boards can ask for?

Yes. Under Section 13267 the information required must relate to an actual or suspected or proposed discharge of waste (including discharges of waste where the initial discharge occurred many years ago), and the burden of compliance must bear a reasonable relationship to the need for the report and the benefits obtained. The Water Boards are required to explain the reasons for its request.

What if I can provide the information, but not by the date specified?

A time extension may be given for good cause. Your request should be promptly submitted in writing, giving reasons.

Are there penalties if I don't comply?

Depending on the situation, the Water Boards can impose a fine of up to \$10,000 per day, and a court can impose fines of up to \$25,000 per day as well as criminal penalties pursuant to Water Code section 13268. A person who submits false information or fails to comply with a requirement to submit a technical report may be found guilty of a misdemeanor. For some reports, submission of false information may be a felony.

Do I have to use a consultant or attorney to comply?

There is no legal requirement for this, but as a practical matter, in most cases the specialized nature of the information required makes use of a consultant and/or attorney is advisable.

If I have more questions, whom do I ask?

Requirements for technical reports include the name, telephone number, and email address of the Regional Water Board staff contact.

ⁱ All code sections referenced herein can be found by going to www.leginfo.legislature.ca.gov.